BIND VIEW®
Insight at Work

User Guide

NETinventory®

Policy Compliance | Vulnerability Management | Directory Administration & Migration

BIND VIEW
Insight at Work

NETinventory® *v8.00*

And

NETinventory-RMS®
NETinventory Console®
NETrc®

User Guide

BindView Corporation · 5151 San Felipe, Suite 2500 · Houston, TX 77056

COPYRIGHT

TRADEMARK NOTES

July 2004

:

THIRD-PARTY COPYRIGHTS

This product includes software developed and copyrighted by the following persons or groups:

Some portions of the text are copyrighted by Funk Software, Inc. ©2003-2004 Funk Software, Inc.

Contents

Information Resources 15
About BindView Corporation 16
Online Documents 16
Using PDF Files 16
User Guides 16
Release Notes 17
Online Help 17
Typestyle Conventions 17
Alert Statements 17
Contacting BindView 18

Section 1: NETinventory 19
Setting up and Using NETinventory 19

1 Overview 21
What is NETinventory? 22
NETinventory Architecture 22
NETinventory Console 23
Master Server 24
Audit Server 25
Login Server 25
Audit Agents 26
Installing and Setting Up NETinventory 28
What Happens During an Audit? 28
About NETinventory Scoping 29

2 New Enterprise Installation 31
Overview 32
NETinventory Server Components 32
Master Server 32
Audit Server 32
Login Server 33
Installing the New Enterprise 33
Audit Agents and Windows NT Servers 43
Where to Go From Here 44

3 Setting Up NETinventory Console Components 45
Introduction 46

Console Setup 46
Opening the Console Setup Dialog 46
Setting the Enterprise Configuration 48
Setting the Reporting Configuration 49
Live vs Rolled Up Data 49
Setting the Default Scope 52
Configuration and Default Scope Interactions 52
Selecting a Default Scope 56

4 Setting Up NETinventory Auditing 59

Overview 60
Configuring Node Settings 62
Setting Up System Configuration Detection 63
Alerts 66
Configuring Software Detection 69
Configuring Tracked Files 72
Configuring Tracked Environment Variables 80
Configuring Tracked Drivers and Services 81
Configuring Audit Agent User Interaction 83
Alert Defaults and Global Alert Settings 88
Configuring Run Files 90
Configuring Standalone Audits 92

5 Setting Up NETinventory Server Components 101

Server Setup Panels 102
Master Server Settings 102
Master Server and Data Rollup 102
Master Server and NETinventory-RMS Snap-in 103
Master Server Roles 103
Master Server SQL Settings 104
Updating the Master Server 112
Controlling Synchronization 122
Master Server Performance Tuning 124
Audit Server Settings 125
Creating a New Audit Server 126
Removing an Audit Server 134
Changing Audit Server Protocol Settings 136
Setting Audit Server Restrictions 137
Setting Audit Server Tuning Options 138
Login Server Settings 139
Running the Audit Agent when Logging In 139

Modifying Login Server Settings 140
Creating a New Login Server 141
Audit Agents and Windows NT Servers 147
Audit Agents and NetWare Login Scripts 147
Removing a Login Server 148
Site Configuration 149
Audit Server Assignment Rules 151
Modifying Audit Server Assignment Rules 152
Account Configuration 156

6 Setting Up The NETinventory Inventory Database 159

Overview 160
Year 2000 Identification 161
Software Lists 163
Master Software 163
Custom Software 166
Unknown Software 171
Category Information 175
Vendor Information 177
Manufacturer Information 179
Hardware Product Information 181
Maintenance Types 184
BIOS Identification 186

7 Node Management 189

Overview 190
Opening the Node Manager 190
Information Available Through the Node Manager 191
NETinventory Status Panel 192
Moving and Deleting Nodes 192
Node Comments 193
Hardware and Software Inventory Information 195
Software Asset Information 195
Hardware Assets Information 197
Managing Node Alerts 201
Managing Tracked Files 204
Viewing the Contents of a Tracked File 205
Using the File Download History 209
Customizing Audits for Nodes 210
Controlling the Tests the Audit Agent Performs 210

Setting a Custom Audit Interval 212
Taking Control with NETrc 215
Assigning a Profile to a Node 215
Removing NETrc Host Software from a Node 216
Using the NETinventory Node Viewer 216

8 NETinventory Control Panel 219

Using the NETinventory Service Manager Control Panel 220
The Master Server Tab 220
The Audit Server Tab 222
The Database Engine Tab 222
TCP/IP Ports 224

Section 2: NETinventory-RMS 225

Using NETinventory with the BindView RMS Console 225

9 Configuring the NETinventory Snap-in for BindView RMS 227

Overview 228
System Requirements 228
Configuring Master Server SQL Rollup 229
Configuring NETinventory-RMS 231

10 Using the NETinventory Snap-in for BindView RMS 243

Understanding Queries 244
Pre-Defined Reports 244
Query Components 244
Creating a Query 245
Selecting a Data Source 245
Adding Fields 246
Adding Filters 247
Adding Sorts 249
Adding Scopes 250
Saving a Query Definition 253
Running Queries 254
Rerunning Queries from the Grid Toolbar 256
Monitoring the Status of Processed Queries 256
Baselining 257
Creating a Delta Dataset 258
Exporting 260
Exporting Prerequisites 261
Export File Format Types 261
Exporting to a Disk File 262
Exporting to an Exchange Mailbox 263
Saving Export Settings 264

Creating Task Lists 266
Running Task Lists 269
Creating Schedules 270
Charting 276
Creating a Series Chart 276

Section 3: NETinventory Console 279
Using the NETinventory Console to Create Queries 279

11 Console and Desktop 281
The NETinventory Console User Interface 282
User Interface Terms Defined 282
The NETinventory Console Desktop 283
Item Definitions 283
NETinventory Console Snap-in Modules 284
NETinventory 284
NETrc 284

12 Grid, Graph, and Schedule Item Basics 285
Item Definition 286
Properties of an Item 286
Queries and the Query Builder 286
Grid Item Defined 288
Components of a Grid Item 288
Graph Item Defined 289
Components of a Graph Item 289
Graph Setup 289
Schedule Item Defined 290
Components of a Schedule 291

13 Creating and Changing Items 293
Creating a New Grid or Graph Item 294
Data Source 294
Field Specification 295
Filter Specification 296
Sort Specification 297
Scope 298
Save the New Grid or Graph Item 298
Changing Existing Grid or Graph Items 300
Creating a New Schedule Item 301
Changing Existing Schedule Items 306
Sharing Items Between Desktops 306
Sending/Receiving References to Report Items 307

Copying Items 310
Exporting and Importing Items 310

14 Printing an Item 315

Customizing a Grid Report 316
Using the Printer/Page Settings Tab 316
Using the Spreadsheet Style Options Tab 317
Using the Form Style Options Tab 319
Using the Report Header Tab 320
Using the Report Footer Tab 322
Customizing a Graph Item 323
Using the Type Tab 324
Using the Layout Tab 326
Using the Data Point Tab from Graph Setup 327
Print a Graph 328
Advanced Graph Options 328
Filtering Out “Special Values” in Graphs 328
Rotating, Copying, and Pasting Graphs 328
Hints for Making Better Graphs 328

15 Exporting Grid Data 329

Exporting Grid Data 330
Managing Export Devices 333

16 Configuring NETinventory Console Users 337

User Desktop 338
BV Admin Account 338
Changing Account Passwords 340
Console Default Configuration Settings 341
Default Grid Settings 341
Default Data Format Settings 343
Default Toolbar Settings 344
Default E-mail Settings 345
Managing Licenses 346

Section 4: NETrc 349

Setting up and Using the NETrc Module 349

17 Overview 351

What is NETrc? 352
NETinventory Console and NETrc 352
NETrc and NETinventory 352
NETrc Architecture 352

NETrc Console Components 352
NETrc Master 353
NETrc Host 353
NETrc Profiles 353
Connections 353
Installing NETrc 354
Setting Up NETrc 354
NETrc System Requirements 354
NETrc Host Requirements 354
Network Requirements 355
Display Requirements 355
Color 355
Resolution 355

18 Setting Up NETrc 357

NETrc Setup 358
Setting the Default NETrc Profile 358
Configuring the NETrc Master Settings 359
Configuring Advanced Master Settings 363
Configuring NETrc Host Profiles 364
Configuring Host Protocol Settings 366
Configuring Host Access Settings 366
Configuring Host Security Settings 369
Configuring NETrc Licenses 370
Removing the NETrc Host 373
Removing Host Components Automatically 373
Removing Host Components Manually 374

19 Using NETrc 377

Taking Control with NETrc 378
Assigning a Profile to a Node 381
Removing the NETrc Host Software from a Node 381
Using NETrc Master 381
Menu and Toolbar Commands 382
The Connection Menu 382
The Edit Menu 383
The View Menu 383
The Options Menu 385
The Goto Menu 389
Remote Control 389
Controlling the Remote Host 390
File Transfer 390
Displaying File Information 392

Selecting Files and Folders 392
Manipulating Files and Folders 393
Remote Printing 394

Appendix A Uninstalling NETinventory 395

Overview 396
Uninstalling the Servers 396
Removing the NETinventory SQL Database 396
Uninstalling Login Servers 397
Uninstalling Audit Servers 397
Uninstalling the Master Server 398
Removing the NETinventory Service Manager Control Panel 398
Uninstalling NETinventory-RMS 399
Uninstalling the NETinventory Console 399

Index 401

Information Resources

In This Section

About BindView Corporation 16
Online Documents 16
Typestyle Conventions 17
Alert Statements 17
Contacting BindView 18

About BindView Corporation

BindView Corporation is a leading provider of proactive business policy, IT security and directory management software worldwide. BindView solutions and services enable customers to centralize and automate policy compliance, vulnerability management, directory administration and migration across the entire organization. With BindView insight at work™, customers benefit from reduced risk and improved operational efficiencies with a verifiable return on investment. More than 20 million licenses have shipped to 5,000 companies worldwide, spanning all major business segments and the public sector.

Online Documents

Documentation is provided in the following electronic formats on the BindView product CD:

- Adobe® Acrobat® PDF files
- HTML Release Notes files
- Online help

Using PDF Files

With Adobe Acrobat PDF files, you can navigate through a document quickly and perform full-text searches. In addition, the PDF files can be viewed online, distributed to multiple users electronically, or printed.

You must have Adobe® Reader® installed to read the PDF files.

To view PDF files, double-click PDF files to open them, and then move through the document by clicking topic headings in the left pane or green hypertext links in the text. To print copies, click **Print** from the **File** menu.

Installing Adobe Reader

Adobe Reader installation programs for common operating systems are available for a free download from the Adobe Web site at *www.adobe.com*.

User Guides

The Docs directory on the BindView product CD contains copies of the user guides and other documentation in the PDF format.

The *NETinventory User Guide* contains information about NETinventory v8.00 and about the BindView RMS Console and Information Server v8.00. If you upgrade the BindView RMS Console and Information Server, the *BindView RMS Console and Information Server User Guide* included with the update will contain information about the new version of the Console.

Release Notes

If the autorun function is enabled, a Readme HTML file for your BindView product is accessible under the Documentation menu of the BindView setup menu when you insert your CD. You also can select to view this file after the installation is completed, or by browsing to the Release Notes directory in the root directory for your program:

```
C:\Program Files\BindView\RMS\Release Notes
```

Online Help

Comprehensive help is available from the Help menu on the BindView RMS Console and the BindView RMS Web Console. Additionally, you can access help by clicking the **Help** button in any dialog, by right-clicking an item and selecting **Help** from the action menu, or by pressing **F1** in any dialog.

Typestyle Conventions

The following conventions are observed throughout this guide:

- **Bold** text is used to designate file and folder names, dialog titles, names of buttons, icons, and menus, and terms that are objects of a user selection.
- *Italic* text is used for word emphasis, defined terms, and manual titles.
- Monospace text (`Courier`) is used to show literal text as you would enter it, or as it would appear onscreen.

Alert Statements

The alerting statements are Notes, Cautions, and Warnings. These statements are formatted in the following style:

Note: Information that is incidental to the main text flow, or to an important point or tip provided in addition to the previous statement or instruction.

Caution: Advises of machine or data error that could occur should the user fail to take or avoid a specified action.

Warning: Requires immediate action by the user to prevent actual loss of data or where an action is irreversible, or when physical damage to the machine or devices is possible.

Contacting BindView

BindView has sales and support offices around the world. For information on contacting BindView, please refer to the information below or to the BindView Web site: ***www.bindview.com***

For Technical Support: ***www.bindview.com/support***

Technical Support is available Monday through Friday from 7:00 a.m. to 7:00 p.m. Central Time. Normal working hours for all other departments are 9:00 a.m. to 6:00 p.m.

Phone		
Sales and Customer Service	U.S. and Canada	800-813-5869
	Outside N. America	713-561-4000
Technical Support	U.S. and Canada	800-813-5867
	Outside N. America	713-561-4000
Training/Professional Service	U.S. and Canada	800-749-8439
	Outside N. America	713-561-4000

Fax	All Areas	713-561-1000

E-mail	
Sales	sales@bindview.com
Training	edu@bindview.com
Documentation	docs@bindview.com

Other	
FTP Site	ftp://ftp.bindview.com
Internet	www.bindview.com
Postal Mail	BindView 5151 San Felipe, Suite 2500 Houston, TX 77056

Section 1: NETinventory

Setting up and Using NETinventory

1 Overview

In This Chapter

What is NETinventory? 22
NETinventory Architecture 22
- NETinventory Console 23
- Master Server 24
- Audit Server 25
- Login Server 25
- Audit Agents 26

Installing and Setting Up NETinventory 28
What Happens During an Audit? 28
About NETinventory Scoping 29

What is NETinventory?

NETinventory audits and manages information about hardware and software on PC workstations on networks with Windows NT®, Windows® 2000, Windows Server™ 2003, and NetWare® servers.

You do not need dedicated machines to perform PC audits. Audits are performed when a program called an Audit Agent is run from the network server. You can set up login scripts or policies so that the Audit Agent runs automatically when the user logs in to the enterprise network.

Audits can capture information about the hardware and software configuration of any node that logs into Windows NT, Windows 2000, Windows Server 2003, or NetWare 4.x, 5.x, or 6.x servers on your enterprise network. The node can use DOS, Windows 3.x, Windows 95, Windows 98, Windows Me®, Windows NT, Windows 2000, Windows XP®, or Windows Server™ 2003.

Once the data has been captured, you can use the NETinventory Console or the BindView RMS Console with the NETinventory Snap-in to access, analyze, report on, and manage node information across your network enterprise.

In addition to the basic equipment check, any number of audits for hardware and software can be configured. Each audit has a separate audit interval that controls when the audit is performed. An administrator can customize audits to perform required tasks or actions either on a regularly scheduled basis, or in response to specific problems.

With NETinventory you can:

- *Access* information about node resources throughout your enterprise network across a heterogeneous mixture of network and client operating systems.
- *Analyze* the information that NETinventory gathers in various ways, using the NETinventory Console or BindView RMS Console.
- *Report* on your enterprise network information.
- *Manage* your enterprise network information. Use NETinventory to gather network information to perform management tasks, and keep track of hardware and software information for each node on your network.

NETinventory Architecture

NETinventory consists of several components deployed on servers throughout your enterprise network. The major components are:

- NETinventory console
- NETinventory snap-in for the BindView RMS Console
- Master Server (hosted by a Windows NT, Windows 2000 Server, or Windows Server 2003 machine)
- Audit Server (hosted by a Windows NT, Windows 2000, Windows Server 2003, or NetWare machine)
- Login Server (hosted by a Windows NT, Windows 2000, Windows Server 2003, or NetWare machine)

- Audit Agents

NETinventory Console

All of the NETinventory configuration and control features are accessed using the NETinventory Console user interface.

The NETinventory user interface, seen from the NETinventory Console, consists of the following elements:

- NETinventory Setup Navigator - manages setup from the NETinventory Console
- NETinventory Reports - Grids, Graphs, and Schedules to help you use NETinventory to report on your enterprise
- NETinventory Node Manager - allows you to focus on detailed information about a particular node.

Fig. 1 shows the NETinventory Console desktop.

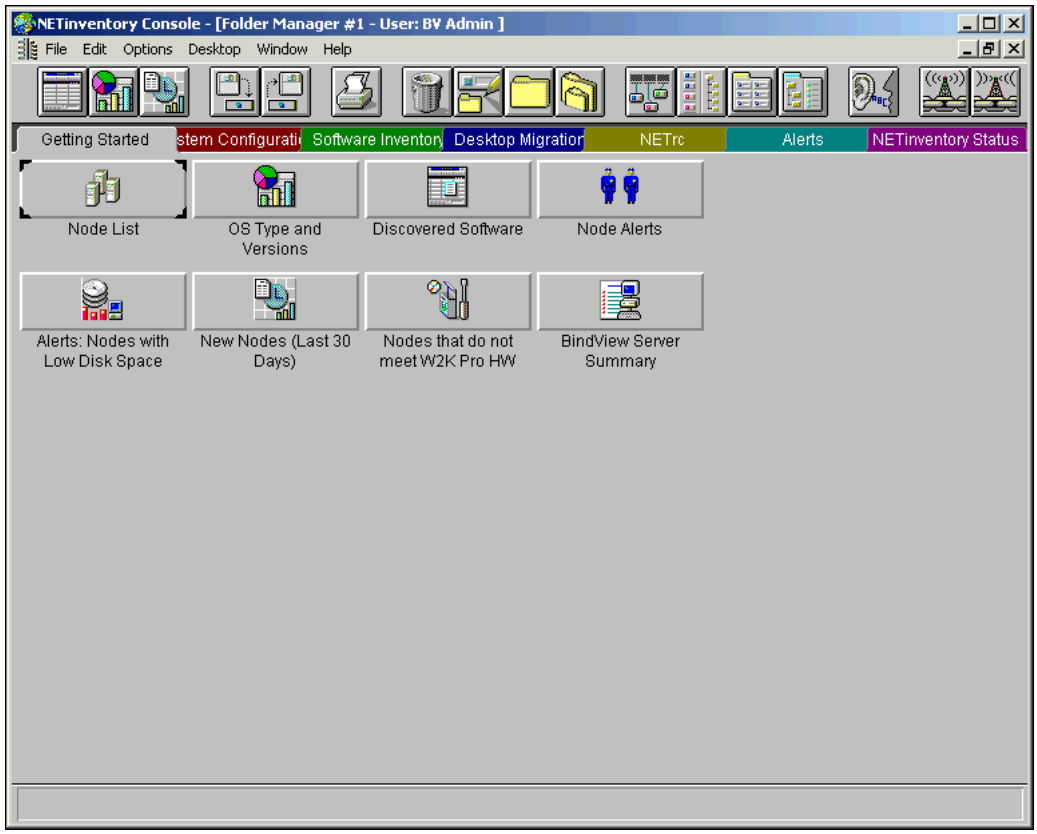


Fig. 1 NETinventory Console

NETinventory Snap-in for BindView RMS Console

If you have the BindView RMS® Console, you can use the NETinventory snap-in for the BindView RMS Console (NETinventory-RMS snap-in) to access NETinventory Audit Data that has been copied to a SQL database on the NETinventory Master Server. The NETinventory-RMS snap-in allows you to use the same tools to report on NETinventory data that you use for other BindView RMS Console snap-ins.

Master Server

The Master Server is a service that runs on Windows NT, Windows 2000, or Windows Server 2003 machines, together with the master set of audit and server preferences and the databases used by NETinventory. These databases are set up automatically during the Master Server installation process. Your enterprise network will have only one Master Server to synchronize and coordinate the work of all the other NETinventory servers on your network.

The NETinventory Master Server performs the following roles:

- Maintains the node-to-Audit Server relationship required for auditing. By maintaining a synchronized list of node-to-Audit Server relationships, NETinventory prevents storing duplicate audit records for any node, even if that node is moved from one logical point to another within your network.
- Synchronizes information stored in all the Audit Server databases. This information determines when audits will occur, and what auditing preferences will be used.
- Maintains NETinventory SQL databases for use by NETinventory Snap-in for the BindView RMS Console if SQL rollup is activated.
- Helps to ensure that all NETinventory components on Audit and Login Servers are kept up-to-date.

A Windows NT, Windows 2000, or Windows Server 2003 machine that is acting as the Master Server can also act as an Audit Server, a Login Server, or both at the same time.

Master Server Requirements

The machine which will host the Master Server must meet these requirements:

- Pentium® II 300 MHz, 128 MB RAM
- 285 MB of free disk space (Microsoft Windows NT 4.0); 235 MB of free disk space (Windows 2000 or Windows Server 2003)
- Microsoft Windows NT 4.0 SP6a (Server or Workstation), Windows 2000 (Server or Professional), or Windows Server 2003 installed
- Internet Explorer 5.5 or later
- MDAC 2.6 or later is required for SQL rollup

If you will be using the NETinventory Snap-in for the BindView RMS Console, you will roll up NETinventory to a SQL database. The machine that hosts the SQL database must have Microsoft SQL Server™ (7.0 or later) or Microsoft SQL Server Desktop Engine (MSDE) (7.0 or 2000). The machine hosting the Microsoft SQL Server can be the Master Server or any other server.

MSDE data storage is suitable for networks with up to 10,000 nodes. If you have more nodes, you should use Microsoft SQL Server to store the NETinventory SQL Database. In addition, if you will have more than 4 clients (BindView Information Servers or SQL Clients) accessing the NETinventory data, you should use Microsoft SQL Server.

Refer to the diagrams in Fig. 2 on page 27 and Fig. 3 on page 27 to see how the various NETinventory components interact.

Audit Server

An Audit Server is a service that runs on a Windows NT, Windows 2000, or Windows Server 2003 machine, or an NLM that runs on a NetWare 4.x, 5.x or 6.x server, together with a copy of the set of audit preferences and databases. The preferences and databases are set up automatically during the Audit Server installation process, and are kept synchronized on all Audit Servers by the Master Server.

An Audit Server performs the following roles:

- Stores audit information for audited nodes.
- Supplies audit information to the NETinventory Console when queries are run.
- Supplies audit information that is “rolled up” to a SQL database maintained by the Master Server for access by the NETinventory-RMS snap-in.
- Directs Audit Agents on individual nodes to the correct Audit Server to store node Audit data. When an Audit Server is performing this activity, it is referred to as a *Dispatch Server*.
- Passes auditing preferences to an Audit Agent during an audit.

You should deploy at least one Audit Server for each functional group in your enterprise. You should deploy at least one Audit Server per 2000-3000 audited nodes. Audited nodes should always be connected by fast (LAN-speed) links to their Audit Server. A Windows NT, Windows 2000, or Windows Server 2003 machine that is acting as an Audit Server can also host the network’s Master Server or a Login Server, or both, at the same time. A NetWare server acting as an Audit Server can also host a Login Server.

Audit Server Requirements

- Pentium II 300 MHz, 128 MB RAM
- 285 MB of free disk space (Microsoft Windows NT 4.0); 235 MB of free disk space (Windows 2000 or Windows Server 2003)
- Microsoft Windows NT 4.0 SP6a (Server or Workstation), Windows 2000 (Server or Professional), Windows Server 2003, or NetWare 4.1 or later installed
- Internet Explorer 5.5 or later (on Windows computers)
- 150 kilobytes disk space per audited node for the Audit Server database. Database files can grow over time to as much as 1 megabyte or more per audited workstation for audit records.

Refer to the diagrams in Fig. 2 on page 27 and Fig. 3 on page 27 to see how the various NETinventory components interact.

Login Server

The Login Server should be deployed on every NetWare 4.x, 5.x, 6.x and Windows NT 3.51, 4.0, Windows 2000 server, or Windows Server 2003 machine where users in your network regularly log in.

A Login Server performs the following roles:

- Stores the Audit Agents for nodes to execute. Since Audit Agents are deployed on Login Servers, you do not need to install any

software on the nodes that are audited. This makes upgrades simpler and less time-consuming.

- Runs the appropriate Audit Agent for a node's operating system. You should add or modify Windows NT policies or the appropriate Windows or NetWare login script(s) to run the Audit Agent when users log in to the server.
- Instructs Audit Agents to connect to one of two Audit Servers designated as "dispatch" Audit Servers for that Login Server. The Audit Server then connects the node to the Audit Server that stores the workstation Audit data.

A Windows NT, Windows 2000, or Windows Server 2003 machine that is acting as a Login Server can also act as the network's Master Server or an Audit Server, or both at the same time. A NetWare server acting as a Login Server can also host an Audit Server.

Login Server Requirements

- 15 MB of free disk space for program files on the Login server(s).
- Microsoft Windows NT 4.0 SP6a (Server or Workstation), Windows 2000 (Server or Professional), Windows Server 2003, or NetWare 4.1 or later installed

Refer to the diagrams in Fig. 2 on page 27 and Fig. 3 on page 27 to see how the various NETinventory components interact.

Audit Agents

Audit Agents are programs that gather the hardware and software information from nodes.

`BVAUDIT.EXE` will launch either the DOS-based Audit Agent or the 32-bit Audit Agent automatically. Audit Agents pass the information collected back to the node's Audit Server, then they quit. Audit Agents do not stay resident in memory after gathering the data. Refer to the diagrams in Fig. 2 and Fig. 3 on page 27 to see how the NETinventory components interact.

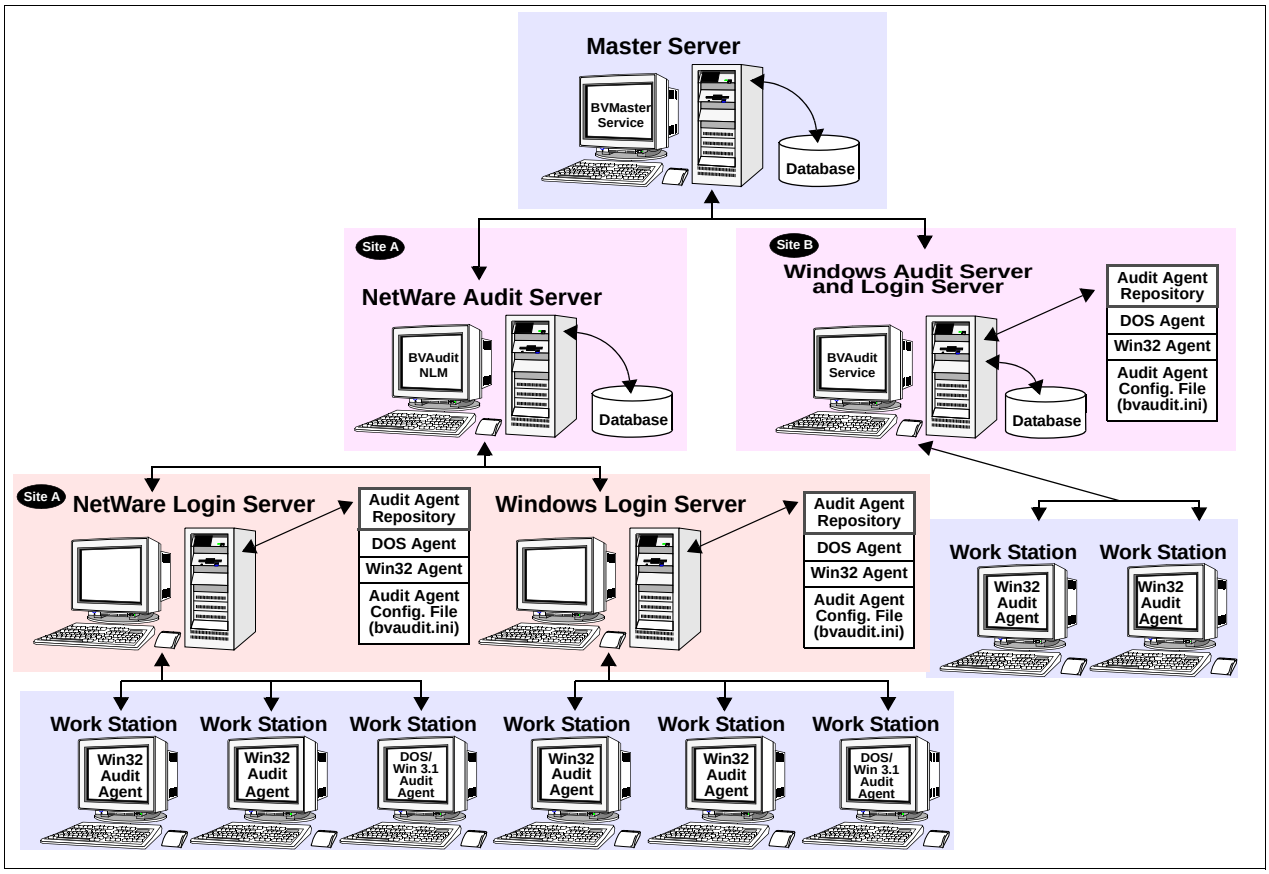


Fig. 2 Multi-Server NETinventory Installation

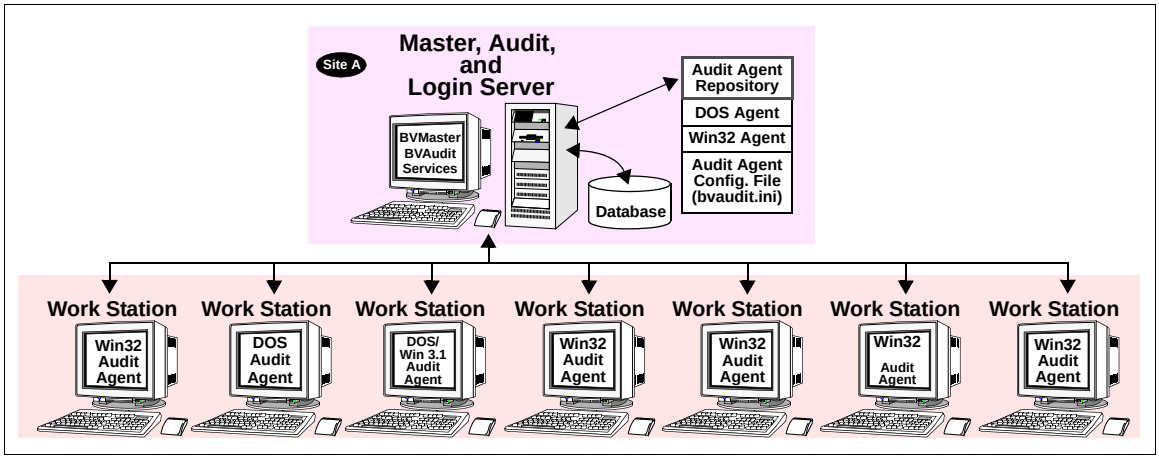


Fig. 3 Single-Server NETinventory Installation

Installing and Setting Up NETinventory

Once you have installed the NETinventory (described in the *Getting Started Guide*) you can open the NETinventory Console and use the NETinventory Setup Navigator to create a New Enterprise Installation. After the New Enterprise Installation is complete, you can configure your Master Server to roll up the audit data to a SQL database and then configure the NETinventory-RMS snap-in to access the data.

The New Enterprise Installation Wizard guides you through the steps to deploy a Master Server, at least one Audit Server, and at least one Login Server. This is the minimum requirement for using NETinventory to gather network data from nodes on your enterprise network. Refer to Chapter 2, “New Enterprise Installation,” on page 31 for detailed information.

It is important for you to determine how you want to deploy additional NETinventory servers within your network to optimize it for your particular enterprise configuration. In most cases, you should install the Login Server components on all of your authenticating Windows NT, Windows 2000, Windows Server 2003, and NetWare servers. You install the Audit Server components on a single Windows NT, Windows 2000, Windows Server 2003, or NetWare server within each functional group in your enterprise, taking care that all nodes the server will audit are connected to it by fast (LAN-speed) links. Finally, you need a single Master Server for your entire enterprise.

For information about creating additional Audit Servers, refer to “Creating a New Audit Server” on page 126. For information about creating additional Login Servers, refer to “Creating a New Login Server” on page 141.

Once you complete the New Enterprise Installation, you configure the Audit Agent Preferences, Server Preferences, and Inventory Database in order to customize NETinventory to your enterprise’s unique needs. For more information see:

- NETinventory Audit Agent Preferences (Chapter 4 on page 59)
- NETinventory Server component Preferences (Chapter 5 on page 101)
- NETinventory Inventory Database Settings (Chapter 6 on page 159)

What Happens During an Audit?

When a workstation logs into a NETinventory Login Server, the Windows policy or Windows or NetWare login script starts the NETinventory Audit Agent from the Login Server.

As soon as it begins execution, the Audit Agent connects to the dispatch Audit Server or the alternate dispatch Audit Server.

The dispatch Audit Server checks its database to see if the workstation has been audited previously. If it has, then it is dispatched to the Audit Server where its audit information is stored.

If the node has never been audited, the dispatch Audit Server assigns the node to an Audit Server based on rules you set up.

For audits to take place as quickly as possible, the primary dispatch Audit Server should also be the server responsible for maintaining the node's audit information. You control this by carefully planning and setting up Audit Server Assignment rules. "Audit Server Assignment Rules" on page 151 has detailed instructions for setting up Audit Server Assignment rules.

Once the node connects to its Audit Server, then the Audit Server determines if an audit should be performed. If an audit is scheduled to be performed, the Audit Server sends the audit preferences to the Audit Agent.

The Audit Agent performs the audit, then returns the audit information to the Audit Server, which stores the information in its database.

The audit information is then available to the NETinventory Console for viewing when a Query is run.

If you have configured the Master Server to roll up data to a SQL database for use by the NETinventory-RMS snap-in, the Master Server will collect all new data from the Audit Server the next time the Master Server synchronizes the Enterprise Network.

About NETinventory Scoping

With scoping, you can limit the data displayed in a Grid or Graph by restricting the information sources for the Query. Limiting the Scope of a Query to those sources you know to contain relevant information reduces network traffic and speeds processing of the Query. Whenever possible, you should limit the Scope of a Grid or Graph's Query to relevant data sources.

In NETinventory, you can limit the Scope of a Query to a single Audit Server or some sub-set of the Audit Servers in your enterprise network.

You can set a default Query Scope that is used when you create a new Grid or Graph, unless you explicitly choose a different Scope when creating the query. For information about setting the default Query Scope and the relationships between the Reporting Configuration and Scope settings, refer to "Configuration and Default Scope Interactions" on page 52.

Note: Only queries created in the NETinventory console can scope to individual Audit Servers.

2 New Enterprise Installation

In This Chapter

Overview 32
NETinventory Server Components 32
Installing the New Enterprise 33
Where to Go From Here 44

Overview

Before you can perform a New Enterprise Installation, you must install NETinventory. For more information on installing the NETinventory, please see the *Getting Started Guide.*

Once you have installed NETinventory, you can:

- Begin using NETinventory immediately to view data provided in the sample database if you installed the sample data. By default, NETinventory is configured to report on data stored in the sample database.
- Deploy and configure the NETinventory server components within your enterprise and begin data collection from your enterprise network.

In the New Enterprise Installation, you deploy a single Master Server, Audit Server and Login Server on a Windows NT, Windows 2000, or Windows Server 2003 machine within your enterprise. This chapter covers specific concerns as you prepare to set up NETinventory, and describes how to deploy the components required for NETinventory.

NETinventory Server Components

Once you have installed NETinventory, you can run the NETinventory Console and begin the NETinventory setup process.

You use the NETinventory New Enterprise Installation wizard to deploy and run a single Master, Audit and Login Server.

The installation described in this chapter is the simplest of NETinventory installations. For information on planning and installing in more complex situations, please refer to Chapter 5 on page 101.

Master Server

To set up the NETinventory Console for NETinventory you select a single Windows NT server, Windows 2000 server, or Windows Server 2003 machine within your enterprise to act as the network's *Master Server* and install the Master Server service on it. For this New Enterprise Installation, the same server will also host an Audit Server and Login Server.

The Master Server synchronizes the distributed databases maintained by the NETinventory components. Your NETinventory installation will have *only one* Master Server.

Audit Server

The Audit Server stores audit data collected from the workstations on your enterprise network when the run the Audit Agent. You may wish to install a separate Audit Server for specific network segments, or you may choose to install Audit Servers based on department functions or other groupings. The number of workstations a single Audit Server can audit depends on a number of factors, including the network load, the load on the server, the speed of the network itself, and how extensive the audit is. As a rule of thumb, you should allot one Audit Server for every 2000-

3000 workstations that will be audited. You can then add or delete Audit Servers based on your network's situation.

For information on using additional Audit Servers, including NetWare based Audit Servers, see "Creating a New Audit Server" on page 126.

Login Server

NETinventory Login Servers are servers designated as hosts for the NETinventory Audit Agent and the Agent's preference files. Login Servers do not run any NETinventory services or NLMs.

Audit Agents are small executable files that run on workstations when they log in to the network. The Audit Agent connects to the workstation's Audit Server and performs the actual work of auditing the workstation. In order for the Audit Agent to run automatically when the user logs in, you will need to add a command to the server's Policies or to login scripts, as discussed in "Audit Agents and Windows NT Servers" on page 43.

You must set up at least one Login Server. While you must have at least one Login Server, normally every server that workstations routinely log in to should be designated as a Login Server.

Installing the New Enterprise

This section leads you through each step of the installation process for a new NETinventory enterprise.

▶ ***To set up a new enterprise***

1. Run the NETinventory Console.
2. Select **Options>NETinventory Setup** from the NETinventory Console menu bar.

   The **NETinventory Setup Navigator** appears.

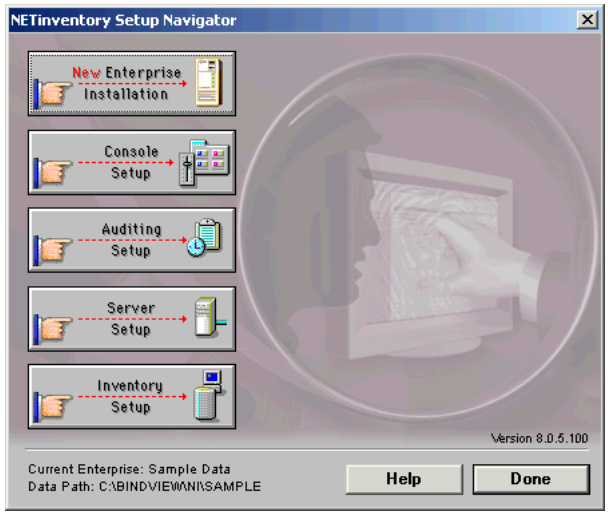


Fig. 4 NETinventory Setup Navigator

3. Click **New Enterprise Installation**.

The **Install New Enterprise** panel appears.

Fig. 5 Install New Enterprise Panel

The **Install New Enterprise** panel allows you to choose between a guided process and "Expert Mode." If you choose to use Expert Mode, the New Enterprise Installation Wizard will use a single panel to prompt you to enter all of the information needed to create your new NETinventory Enterprise.

To use Expert Mode, select the **Expert Mode** box in the **New Enterprise** panel. To use normal mode, leave the box unselected.

Caution: If you choose to use Expert Mode, the New Enterprise Installation Wizard will not validate the information you supply until it tries to create the new server.

---

4 Click **Next** in the **Install New Enterprise** panel to begin installing the Master Server.

No matter which mode you choose, the **Insert CD** panel appears.

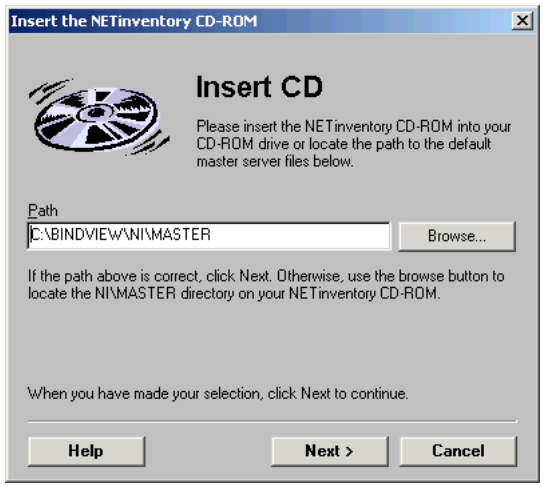


Fig. 6 Insert CD Panel

The path is the location on the hard disk where the NETinventory files were installed. Normally, you should be able to use this set of files. To choose a different set of files, click **Browse**. The **Locate the SITEDFLT Directory** dialog appears. Locate the BINDVIEW directory, then locate the `\NI\master\` directory and select it.

5 Once you have selected the directory, click **OK**.

6 Once you have selected the `\NI\master\` directory in the BINDVIEW directory or on the CD-ROM, click **Next** on the **Insert CD** panel.

7 If you have not yet installed any NETinventory licenses, the **Install Licenses** panel appears.

Fig. 7 Install Licenses Panel

8 Click **Add** or **Add from Disk** and add your NETinventory Licenses to the License database. Until you have installed the

NETinventory licences, you cannot install the Master Server. Click **Next** to continue.

Installing Using Expert Mode

If you chose to use Expert Mode, the **Master Server Expert** panel appears. You should generally not use Expert Mode unless directed by BindView Technical Support, since no validation is done of the information you enter. You will prevent the NETinventory Enterprise from installing properly if you enter invalid information.

Fig. 8 Master Server Expert Panel

9 Enter the Server Name, and a valid Admin Account and Password combination for NETinventory to use to create and maintain the server. You should enter the Admin Account in one of these formats:

```
Domain\User Name
Machine Name\User Name
User Name
```

The User name you supply should be a Domain Admin or a Local Admin for the machine which will host the servers. You may wish to create a special NETinventory account in your domain for the exclusive use of NETinventory. If you enter just the user name, it must be a user name and password on the machine where the Master Server is being created.

Enter a valid share and a path on the share where NETinventory should install the Master, Audit, and Login Server files. Finally, if the server is not a Domain Controller, unselect the **Agents in NETLOGON**.

Create the share NETinventory should use with normal Windows Administration tools. The usual path for NETinventory is `\BVEMS`.

Click **Next** to continue. Turn to Step 13 on page 39 to proceed.

Installing Without Using Expert Mode

If you chose not to use Expert Mode, the **Select Server** panel appears.

Fig. 9 Select Server Panel

10 Use the **Select Server** panel to specify which server on your enterprise network should host the Master Server. Normally, you should have one of the domain's Domain Controllers (DC) host the Master Server. If you prefer, any Windows NT, Windows 2000, or Windows Server 2003 machine in the domain can host the Master Server. The main requirements for the machine hosting the Master Server are that the machine be running and available at all times, and that it have good connectivity to other servers in all your domains when it needs to Synchronize Audit and Login servers.

Type the name of the machine which should host the Master Server or click **Browse** and use the network browser to locate the machine.

After selecting the machine to host the Master Server, click **Next** to continue.

NETinventory will check the server's status and then the **Admin Account** panel will appear.

Fig. 10 Admin Account Panel

11 Type a **Login** name and **Password** the Enterprise Console should use to access the machine. You should enter the Admin Account in one of these formats:

```
Domain\User Name
Machine Name\User Name
User Name
```

The User name you supply should be a Domain Admin or a Local Admin for the machine which will host the servers. You may wish to create a special NETinventory account in your domain for the exclusive use of NETinventory. If you enter just the user name, it must be a user name and password on the machine where the Master Server is being created.

12 Click **Next** in the **Admin Account** panel.

The **Database Path** panel appears.

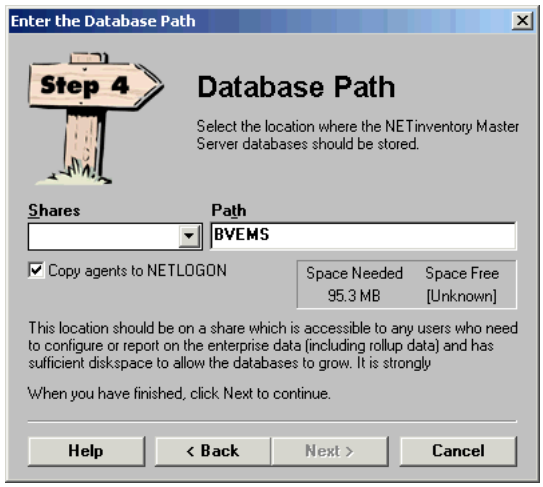


Fig. 11 Database Path Panel

This panel specifies where the Master Server and Audit Server database files are stored. Select an existing share from the **Shares** drop-down list. Every user who needs to report on the data collected by NETinventory using the NETinventory console must have access to the share. Consider creating a new share specifically for NETinventory to store data in.

If the server is a Domain Controller, you can have the Login Server files copied to the server's NETLOGON share. To do so, leave the **Copy agents to NETLOGON** box selected. If the server is not a Domain Controller, you should unselect the box.

Every user audited by NETinventory should be able to execute the Audit Agent. The NETLOGON share is best for storing Audit Agent files since all users have read access to it by default and can execute login scripts from that location. If you changed your server's settings to prohibit read access to the NETLOGON share, create another share that all users will have read access to and use it to store the Audit Agent files.

For information on using Login Scripts or Policies to run the Audit Agents when users log in to the Login Server, please see "Audit Agents and Windows NT Servers" on page 43, once the New Enterprise Installation wizard is complete.

Click **Next** to continue. The **Protocol Selection** panel appears.

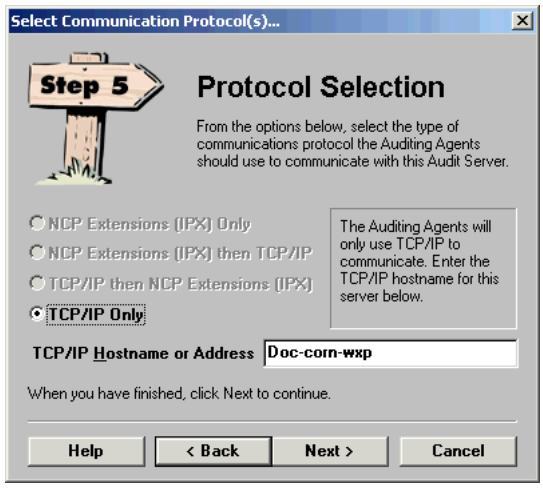


Fig. 12 Protocol Selection Panel

13 The **Protocol Selection** panel sets the communications protocol the NETinventory Audit Agents on your network should use to communicate with this Audit Server. In addition, you can set the TCP/IP Hostname or Address of the Audit Server.

On NetWare-based Audit Servers, you can use IPX or TCP/IP. On Windows-based Audit Servers, you must use TCP/IP.

Enter the TCP/IP hostname or address of the machine in the **TCP/IP Hostname or Address** box, then click **Next**. The **Reporting Account** panel appears.

Fig. 13 Reporting Account Panel

The reporting account is optional.

When you enter a reporting account, the reporting account credentials will be used to access the Audit Server files if the NETinventory Console user's own credentials do not allow access to the Audit Server files. If you don't enter a reporting account and the user's credentials don't allow access to the file, the user will be prompted to log in to the Audit Server manually.

By using the Reporting Account, users who do not have direct access to the directory used by NETinventory to store data can perform queries and process reports.

14 To enter a reporting account, enter a user name and password combination. Enter the user name in one of these formats:

```
Domain\User Name
Machine Name\User Name
```

Click **Next** to continue. The **Automatic Install** panel appears.

Fig. 14 Automatic Install Panel

Setting up the NETinventory Audit and Login Server databases and settings can take time. You can choose to have the NETinventory Master Server copy the needed files automatically during a routine synchronization. Automatic installation greatly speeds the process of creating multiple Audit Servers.

Since this is the only Audit and Login Server you are creating now, you should have the NETinventory Console finish the installation immediately.

15 To complete the installation immediately, select **No** and click **Next** to continue. The **Summary** panel appears.

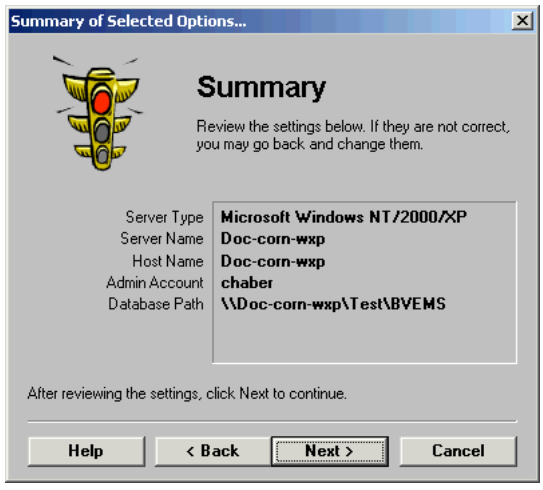


Fig. 15 Summary Panel

This panel summarizes the Master Server settings you have selected.

16 If all of the settings are correct, click **Next** in the **Summary** panel to install the NETinventory Master, Audit, and Login Server on the computer you selected. If you need to make a

change, click **Back** to return to the page with the incorrect information, make the change, then click **Next** to return to the Summary panel.

The New Enterprise Installation wizard installs the needed files.

Fig. 16 Installing Master Server Panel

When the wizard has finished copying files to the Login Server, the installation is complete, and the **New Enterprise** panel appears.

Fig. 17 New Enterprise Panel

17 Click **Finish**.

The NETinventory Console will prompt you to configure SQL storage for data rolled up from the NETinventory enterprise. Rolling up data to SQL storage allows you to use the NETinventory snap-in for the BindView RMS Console to retrieve NETinventory data.

18 To launch the SQL Settings wizard, click **Yes**, and the SQL Settings wizard will appear. For information on configuring SQL

data rollup, please see “Master Server SQL Settings” on page 104.

Fig. 18 NETinventory Setup Navigator Dialog

Now that you have successfully completed the New Enterprise Installation, you should configure the Windows policies or login scripts on the new Login Server to automatically trigger audits when users log in.

Audit Agents and Windows NT Servers

For a node to be audited, the node must run the Audit Agent, which does the actual work of auditing. You must configure your Login Servers to run the Audit Agent when users log in.

If per-user login scripts are enabled in your Windows-hosted Login Server’s User Manager, you should add the command `bvaudit.exe` to users’ login scripts. This process is easiest if multiple users share login scripts. If each user has a different login script, or if login scripts are not enabled, you can use policies to start the Audit Agent.

System or group policies can be used to start the Audit Agent. For complete information on using System and Group policies, please consult your Windows documentation.

To use policies, make sure that the directory replicator service is set up as specified in the Windows Server documentation. Then, use the System Policy Editor on a Domain Controller (DC) to add the Audit Agent’s Universal Naming Convention (UNC) path to the Default User’s Startup folder. After this is done, whenever a user logs into the domain, the Audit Agent will run. If a user only logs in to the local workstation without accessing network resources, the Agent will not run.

Finally, if you prefer, you can add the command to run the Audit Agent to the node itself. On a DOS or Windows 3.1 node, add it to the node’s AUTOEXEC.BAT file. On a Windows 95, Windows 98, Windows Millennium Edition, Windows NT, Windows 2000, Windows XP, or Windows Server 2003 node, add the Audit Agent to the

Startup folder in the Start menu (or in the Program Manager on Windows NT 3.51).

Note: If you add the command to start the Audit Agent to a batch file, you must use the full UNC path for the command. That is, the path should be in the form:
`\\server-name\path\bvaudit.exe`,
with your network's Login Server name and the path on that login server.

To prevent the icon from appearing in the Start menu, you can use the Windows Policy Editor to add it to the Startup group without an icon appearing. Adding the command to run the Audit Agent to the node itself sacrifices the ability to do centralized maintenance should your Login Server change in the future.

Where to Go From Here

After a Master Server, Audit Server, and Login Server have been successfully installed on the enterprise network, you can begin using NETinventory with the default settings. If you wish, you can make changes to the default NETinventory setup to customize it to your network's needs. Use this table to help you find the information you need.

Table 1 Where To Go From Here

To learn about...	go to...
Configuring the NETinventory Audit Agent	"Setting Up NETinventory Auditing" on page 59
Configuring the NETinventory Servers	"Setting Up NETinventory Server Components" on page 101
Setting up Additional Audit Servers	"Creating a New Audit Server" on page 126
Setting up Additional Login Servers	"Creating a New Login Server" on page 141
Configuring the NETinventory Master Server Databases	"Setting Up The NETinventory Inventory Database" on page 159
Using the NETinventory Node Manager to get information about individual nodes	"Node Management" on page 189
Configuring NETrc	*NETrc User Guide*
Using NETinventory as part of the NETinventory Console	*NETinventory Console User Guide*
Creating Grids, Graphs, and Schedules to retrieve NETinventory information	*NETinventory Console User Guide*

3 Setting Up NETinventory Console Components

In This Chapter

Introduction 46
Console Setup 46
- Opening the Console Setup Dialog 46
- Setting the Enterprise Configuration 48
- Setting the Reporting Configuration 49
- Setting the Default Scope 52
- Configuration and Default Scope Interactions 52
- Selecting a Default Scope 56

Introduction

Before you can configure the data source that NETinventory will report on, you need to install NETinventory and a NETinventory Master Server, and at least one Audit Server and Login Server installed on your network. For information on deploying these NETinventory components, review “New Enterprise Installation” on page 31.

Console Setup

You can set the NETinventory *Enterprise Configuration*, ***Reporting Configuration***, and *Default Scope*. These settings work together to set limits on how much data is returned by queries of the NETinventory audit information stored on your Audit Servers.

The *Enterprise Configuration* determines whether NETinventory queries a live, working enterprise on your network or a static sample database. It also provides some information about the enterprise.

The *Reporting Configuration* determines whether NETinventory uses live data from the network or rolled up data stored on the Master Server. The Reporting Configuration can be set to a Master Server (and all the Audit Servers associated with it), to a single Audit Server, or to data rolled up to the Master Server on the enterprise.

The *Default Scope* is the subset of the Reporting Configuration which the NETinventory Console reports on when processing queries. Put another way, the Default Scope indicates, “of all the items in the Reporting Configuration, include only these items” in the query. If the default scope is not an appropriate choice for an individual query, you can override the default scope while defining the query. The custom scope you create can be more inclusive or more restrictive than the default scope. Please see the *NETinventory Console User Guide* for detailed information about building queries.

Opening the Console Setup Dialog

The Enterprise Configuration, the Reporting Configuration, and the Default Scope are set using the **Console Setup** dialog in the NETinventory Options.

To open the **Console Setup** dialog, run the NETinventory Console and choose **Options>NETinventory Setup** to open the **NETinventory Setup Navigator**.

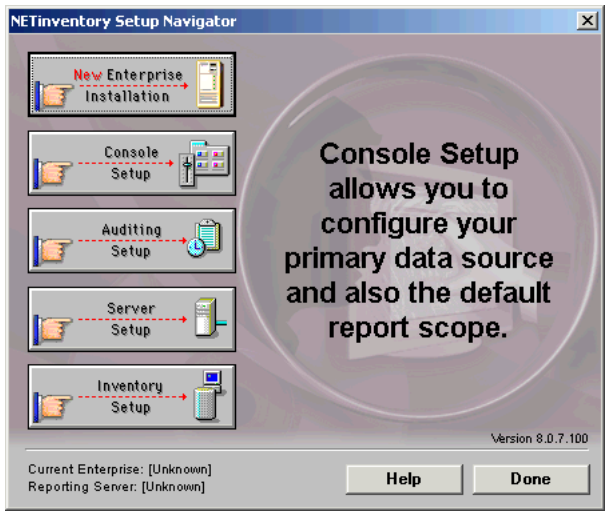


Fig. 19 NETinventory Setup Navigator

Click **Console Setup**. The **Reporting Setup** dialog appears. In this example, a live enterprise is selected as the **Enterprise Configuration**. You can also select a Sample Enterprise as your default Enterprise. If you have not yet installed an enterprise, the Sample Enterprise will be selected.

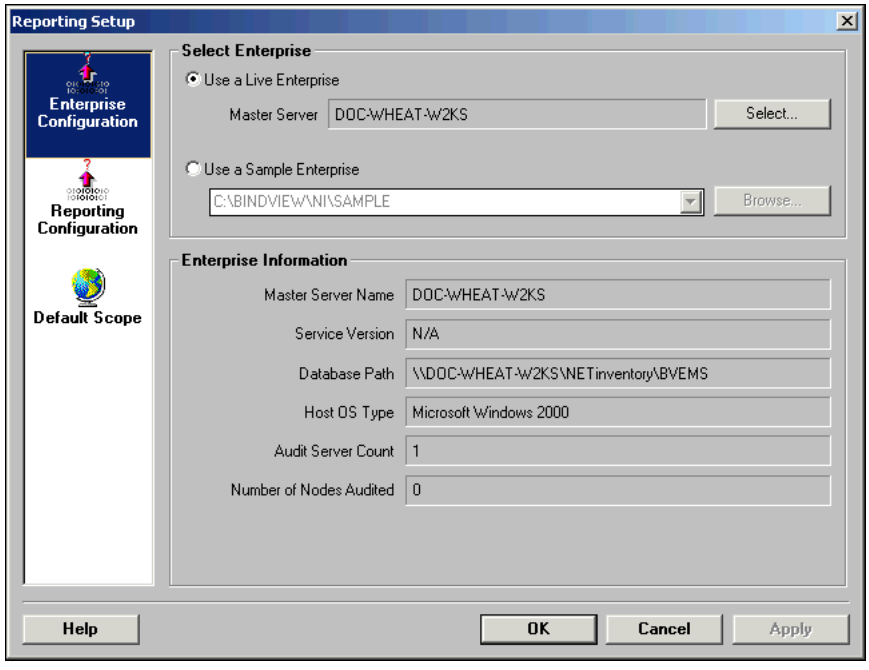


Fig. 20 Enterprise Configuration Panel

Setting the Enterprise Configuration

The Enterprise Configuration controls where data in NETinventory reports originates. To control what portion of the data from the selected enterprise appears in reports, you also set the Reporting Configuration. (See "Setting the Reporting Configuration" on page 49.

By default, the NETinventory Console installation process sets the Enterprise Configuration to the sample data, either on the NETinventory Console CD-ROM or on your hard disk (if you chose to install it during the installation process). As part of the creation of a New Enterprise Installation, NETinventory changes the Enterprise Configuration to the new Live Enterprise automatically.

▶ *To set the Enterprise Configuration*

1 Open the **NETinventory Console Setup** dialog and make sure that the **Enterprise Configuration** panel is selected.

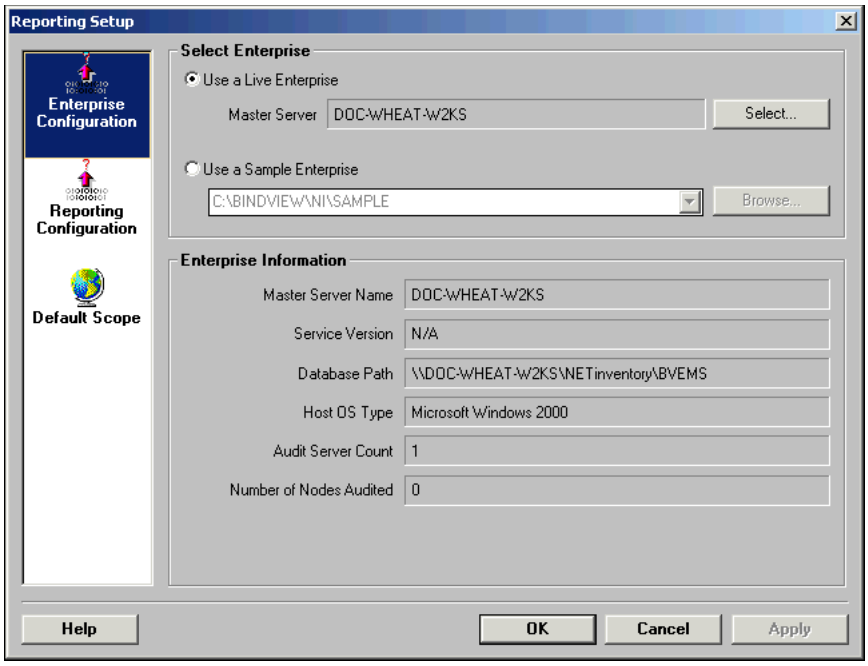


Fig. 21 Enterprise Configuration Panel

2 The top part of the panel is used to set the Enterprise Configuration. The lower portion displays information about the currently selected enterprise. You may set the Enterprise to either a live, running enterprise or a static Sample Enterprise.

3 Choose the **Use a Live Enterprise** option to select a live enterprise on your network. If the name of the Master Server on the enterprise does not appear in the **Master Server** field,

click **Select** and the **Select NETinventory Enterprise** dialog appears.

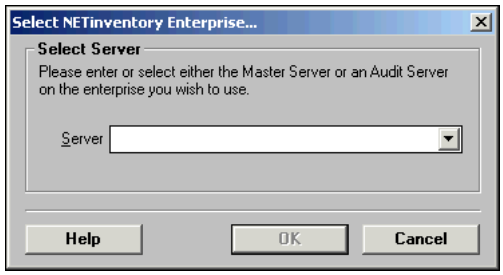


Fig. 22 Select NETinventory Enterprise Dialog

4 Type the name of the Master Server or any Audit Server that is part of the enterprise you are trying to connect with.

Note: You must have rights to the directory where the Master or Audit Server software is stored on the server in order to connect.

5 To use a sample enterprise, select the **Use a Sample Enterprise** option in the Enterprise Configuration panel. Type the path to the sample data file or click the **Browse** button to the right of the field to locate the NETinventory Sample Data directory.

Note: The Sample Data is static, and cannot be changed from within the NETinventory Node Manager or by any of the ActiveAdmin® editors.

6 To save the changes without closing the dialog, click **Apply**. To save the changes and close the Console Setup dialog, click **OK**. To close the dialog without saving the changes, click **Cancel**.

The lower area of the panel includes information about the currently selected enterprise, including the name of the Master Server on the enterprise, the version of the NETinventory software the Master Server is running, the operating system type the Master Server is running, and other essential information.

Setting the Reporting Configuration

The Reporting Data Source controls whether the NETinventory Console will use live data collected in real-time from your enterprise or will use rolled up data from the Master Server to fulfill NETinventory queries.

Live vs Rolled Up Data

The advantage of using rolled up data is speed. If you have a large, complex enterprise network tied together with slow links, queries will be processed much faster by using rolled up data stored on the Master Server. When you turn rollup on, the Master Server replicates some of the information stored on Audit Servers in

databases on the Master Server during each synchronization. When a query containing fields stored on the Master Server is processed, the NETinventory Console contacts the Master Server for the needed data.

The disadvantage of using rolled up data is that the data is not updated in real time. The information must first be collected by the Audit Server, then transferred to the Master Server during synchronization. Furthermore, during any synchronization, data will only be retrieved from 10% of the Audit Servers. Thus, some data will be as old as 10 synchronizations. If you change your settings so that there are long intervals between synchronizations, this data will be older, and might be out-of-date.

With synchronization settings left at the defaults, all data in the rollup databases will be refreshed every day.

In addition, turning on data rollup results in higher network traffic, since a subset of the data from each audit is transmitted twice: once from the Audit Agent to the Audit Server, and once from the Audit Server to the Master Server. Only Audit Servers which have Data Rollup enabled will have their data rolled up to the Master Server. Turn on data rollup for an Audit Server using the **Tuning Options** button on the **Audit Server Setup** panel of the **Server Setup** dialog.

Only some of the audit data is rolled up to the Master Server. Information about the hardware and software configuration of nodes is rolled up. (Specifically, only information in the Hardware Assets and Software data sources is rolled up.) For all other data sources, the rollup settings do not apply. NETinventory must collect the query information directly from the Audit Servers.

▶ *To set the NETinventory Reporting Data Source*

1 Open the **Reporting Setup** dialog and select the **Reporting Configuration** panel.

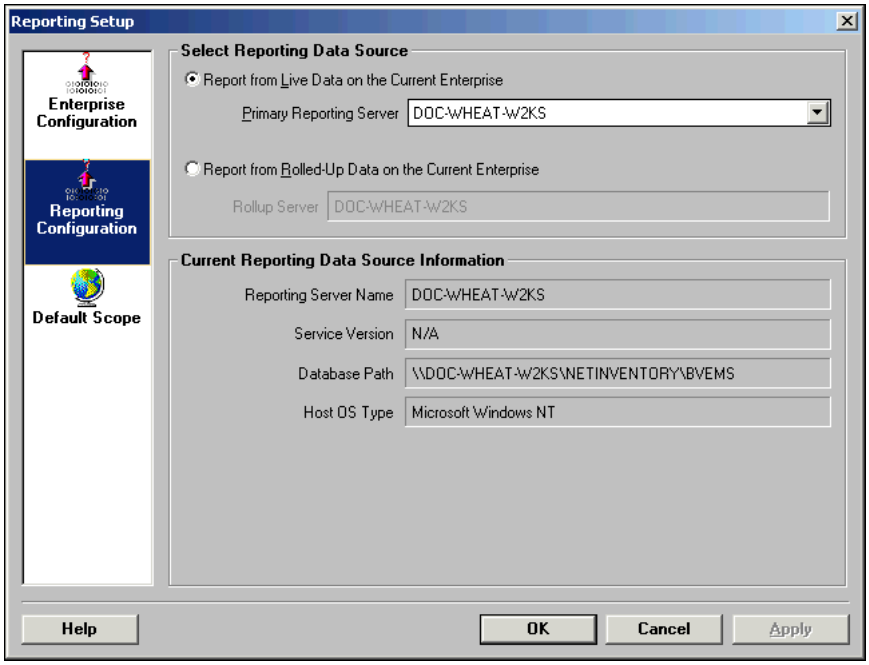


Fig. 23 Reporting Configuration Panel

2 In the **Select Reporting Data Source** area, choose **Report from Live Data on the Current Enterprise** to report on live data. Select the name of a Master or Audit Server on the enterprise from the **Primary Reporting Server** drop-down list.

3 Select **Report from Rolled-Up Data on the Current Enterprise** to use rolled up information. The name of the Master Server which hosts the rollup data appears in the **Rollup Server** box.

4 To save the changes without closing the dialog, click **Apply**. To save the changes and close the Console Setup dialog, click **OK**. To close the dialog without saving the changes, click **Cancel**.

Setting the Default Scope

The Default Scope limits the data which the NETinventory Console retrieves out of that maximum possible. Instead of using all of the available servers when processing queries, only a specified subset is used.

Scoping allows you to control the amount of data received by the Console when processing a query. The amount of data sent to the console over the network influences the speed at which queries are processed, the load on network bandwidth, and the relevance of results generated by a query.

In other words, scoping allows you to limit the extent of the question that the NETinventory Console asks. Rather than querying every Audit Server on your Enterprise Network and then discarding the irrelevant portions, limiting the scope only queries relevant servers. By limiting the scope, you limit the information transmitted and speed up query processing.

No matter what you set the default scope to, you can override it for any query and use whatever scope is appropriate.

When defining the default scope, you have the following choices:

- All Audit Servers in the NETinventory server database
- Currently connected Audit Servers
- Specified Sites
- Specified Audit Servers

Configuration and Default Scope Interactions

The default scope affects which servers on your enterprise network will be queried for information when a query is processed. For more information on these interactions, see Table 2, “Data Path/Scope Interactions,” on page 53.

Table 2 Data Path/Scope Interactions

If the Enterprise Configuration is...	and the Default Scope is...	Then...	...is/are
Live Enterprise	All Audit Servers in the NETinventory server database	All Audit Servers	Included
	Currently Connected Audit Servers	Each Audit Server connected to the console workstation	Included
		Each Audit Server *not* connected to the console workstation	Excluded
	Specified Sites	All Audit Servers included in the sites specified in the default scope	Included
		All Audit Servers *not* included in the sites specified in the scope	Excluded
	Specified Audit Servers	Each specified Audit Server	Included
		Each Audit Server *not* specified	Excluded
Sample Enterprise	All Cases		Sample Data defined in Enterprise Configuration

In addition to the cases defined above, when a Master Server is selected in the Enterprise Configuration panel, the Reporting Configuration allows you to control whether Live data or Rolled Up Data is used. The Reporting Configuration panel is omitted from the table above.

Default Scope is All Audit Servers

If you are using **All Audit Servers in the NETinventory server database** as the default scope option, the console will use all the Audit Servers known to the Master Server (Fig. 24).

For any Enterprise Network, there is only one Master Server. As a consequence, no Audit Servers can exist without being known to the Master Server.

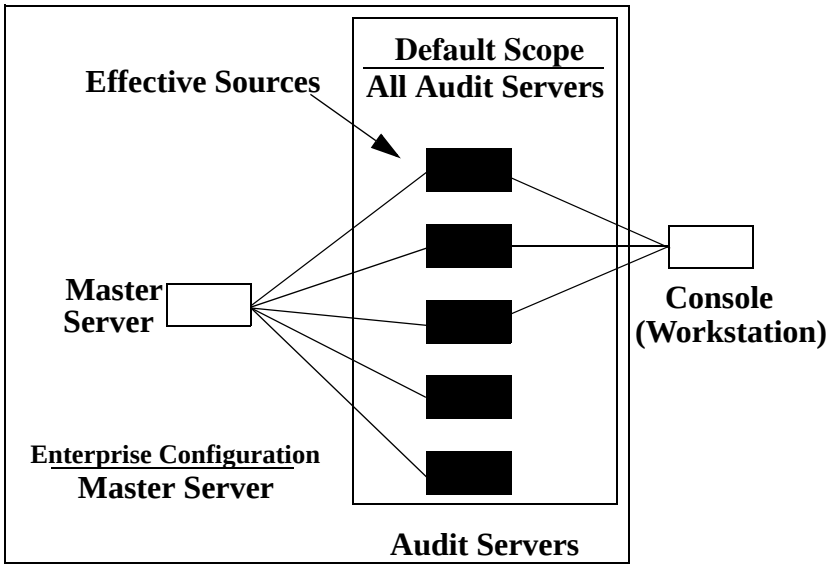


Fig. 24 Effective sources when you use Master Server as the enterprise configuration and all Audit Servers as the scope.

Default Scope is Currently Connected Audit Servers

If you are using **Currently connected Audit Servers** as the default scope option, the console will access the Audit Servers found on all the servers to which the workstation is currently connected. A console is connected to an Audit Server when its workstation is logged in to the server or it has at least one drive mapped to that Audit Server (Fig. 25).

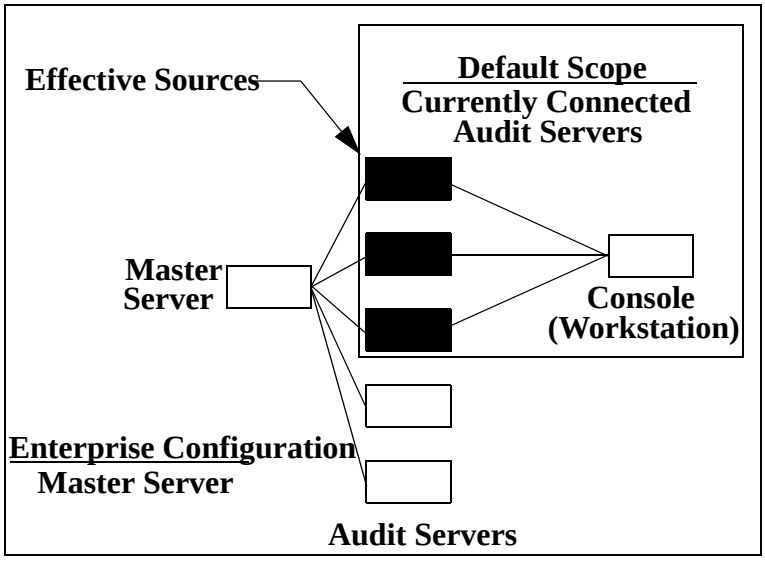


Fig. 25 Effective sources when you use Master Server as the enterprise configuration and Currently Connected Audit Servers as the scope.

Default Scope is Specified Sites

If you are using **Specified Sites** as the default scope option, the console will see those Audit Servers which are part of the site (Fig. 26).

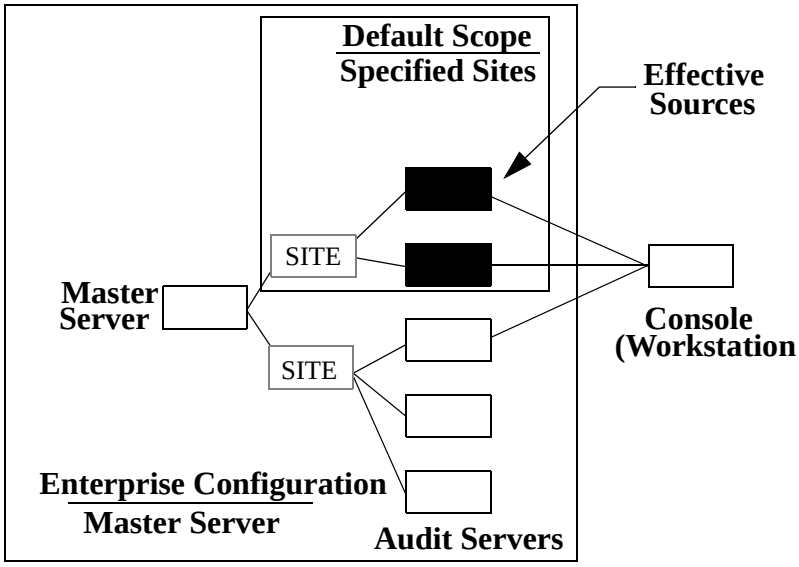


Fig. 26 Effective sources when you use Master Server as the enterprise configuration and specified sites as the scope.

Default Scope is Specified Audit Servers

If you are using **Specified Audit Servers** as the default scope option you can select which of the Audit Servers in the Master Server's database of servers should be included in the default scope (Fig. 27).

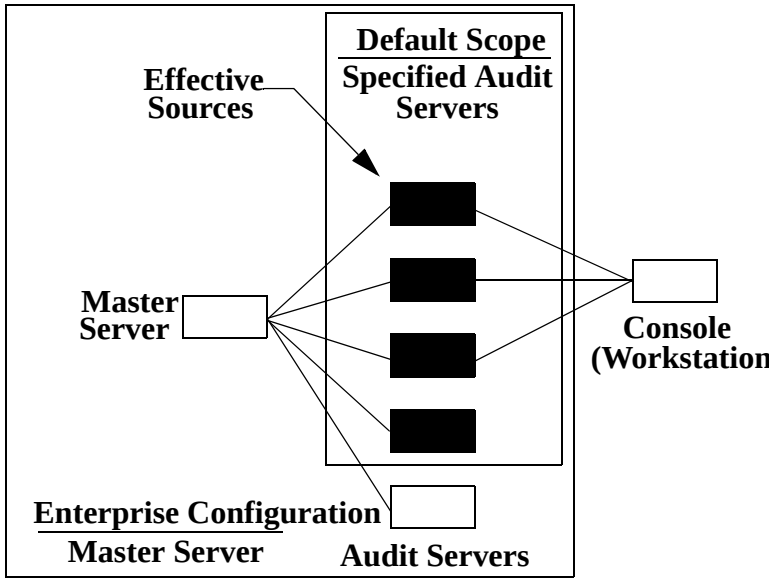


Fig. 27 Effective sources when you use Master Server as the enterprise configuration and specified Audit Servers as the scope.

Selecting a Default Scope

When you set the default scope, don't forget to consider the interactions between the enterprise configuration and the default scope.

▶ ***To set a Default Scope***

1 Open the **Reporting Setup** dialog and select the **Default Scope** panel on the left side of the dialog. The **Default Scope** panel appears.

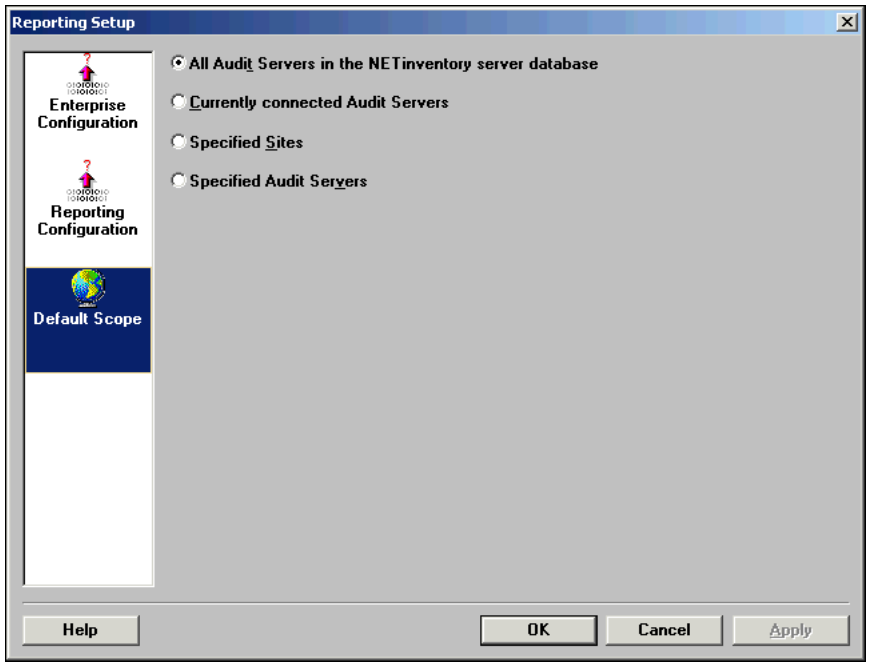


Fig. 28 Default Scope Panel

2 Select the default scope to use. If you choose **Specified Sites** or **Specified Audit Servers**, you will need to supply additional information.

3 If you choose **Specified Sites** or **Specified Audit Servers**, you need to specify which sites or audit servers should be included. Fig. 29 shows **Specified Sites** selected and Fig. 30 shows **Specified Audit Servers** selected.

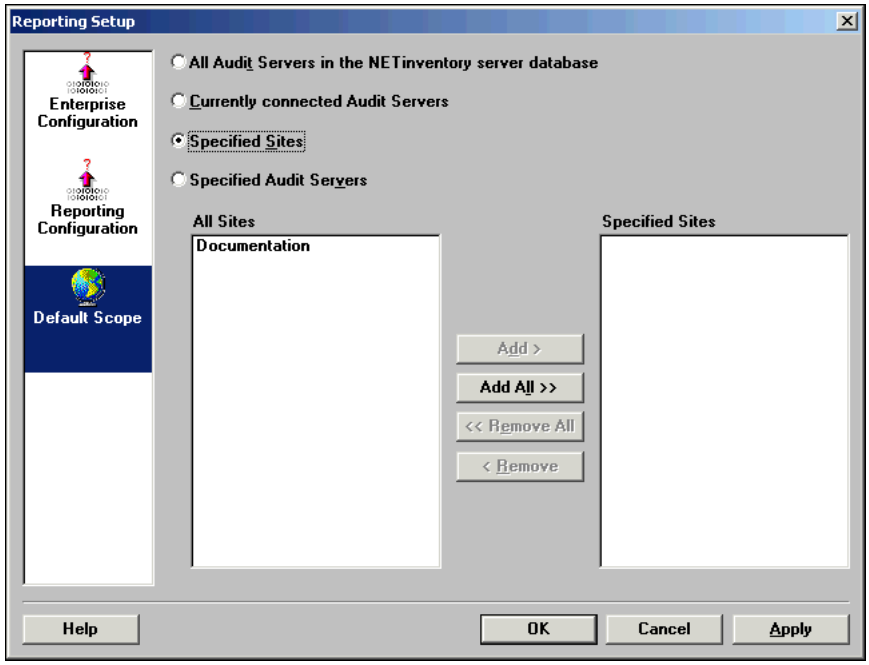


Fig. 29 Specified Sites Picker

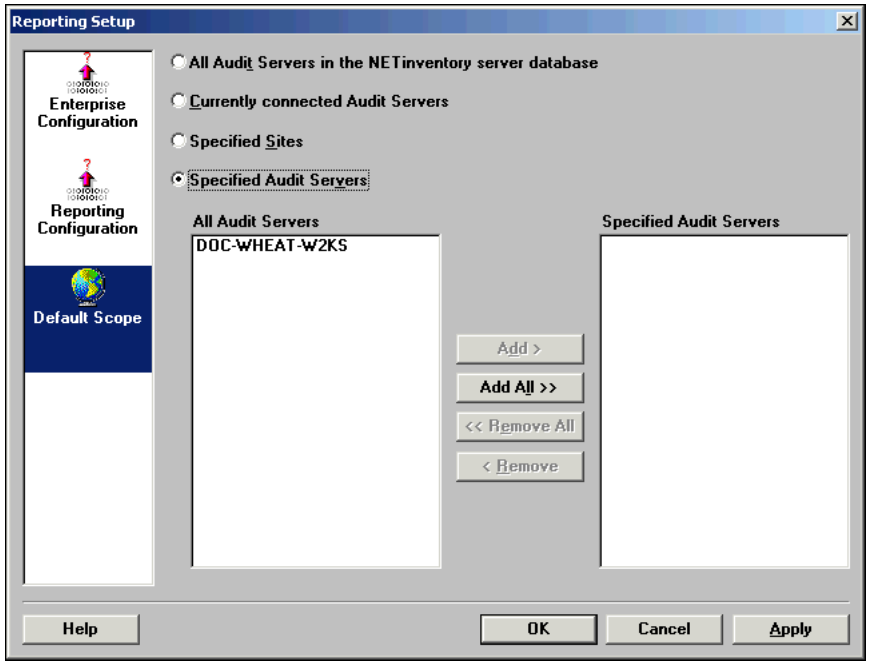


Fig. 30 Specified Audit Servers Picker

4 Use the **Add>, Add All>>, <<Remove All, and <Remove** buttons to move the Sites or Audit Servers you wish to include in the scope from the **All Sites/All Audit Servers** box to the **Specified Sites/Specified Audit Servers** box.

5 To save the changes without closing the dialog, click **Apply**. To save the changes and close the Console Setup dialog, click **OK**. To close the dialog without saving the changes, click **Cancel**.

4 Setting Up NETinventory Auditing

In This Chapter

Overview 60
Configuring Node Settings 62
Setting Up System Configuration Detection 63
Alerts 66
Configuring Software Detection 69
Configuring Tracked Files 72
Configuring Tracked Environment Variables 80
Configuring Tracked Drivers and Services 81
Configuring Audit Agent User Interaction 83
Alert Defaults and Global Alert Settings 88
Configuring Run Files 90
Configuring Standalone Audits 92

Overview

NETinventory audits nodes by running an Audit Agent on a node. The Login Server is normally configured to run Audit Agent when nodes The Audit Agent is stored on the Login Server. The Audit Agent is generally launched using NetWare or Windows login scripts or Windows system policies when the node logs in or authenticates to a server that has been set up as a NETinventory Login Server.

Although the Audit Agent runs on individual workstations, the options and preferences the Agent uses are set using the NETinventory Console. When you set preferences for audits, the NETinventory Console saves the preferences to the Master Server. The Master Server updates the preference files for all Audit Servers during the next scheduled or manual synchronization. After synchronization, the next time the Audit Agent connects to the Audit Server and performs an audit, the updated preferences are used.

Preference changes do not take effect immediately. The preferences used by the Audit Agent will not change until the changes are sent to Audit Servers by a synchronization. When changes are made to Audit settings, the NETinventory Console prompts to synchronize immediately to reduce this delay.

Even after synchronization, a node will not be audited and node data will not be updated using the new settings until it runs the Audit Agent from a Login Server. When audit preferences are set up, careful planning of the kinds of information to gather will improve the performance of the NETinventory installation.

If the Audit Agent is not collecting the information being sought, make changes to your Auditing Setup to collect the correct information, but keep in mind that it may take time to obtain updated results as nodes are audited.

▶ *To access Audit Settings*

1 Open the NETinventory Setup Navigator by choosing **Options>NETinventory Setup** in the NETinventory Console. The **NETinventory Setup Navigator** appears.

Fig. 31 NETinventory Setup Navigator

2 Click **Auditing Setup**. The **Node Settings** panel appears.

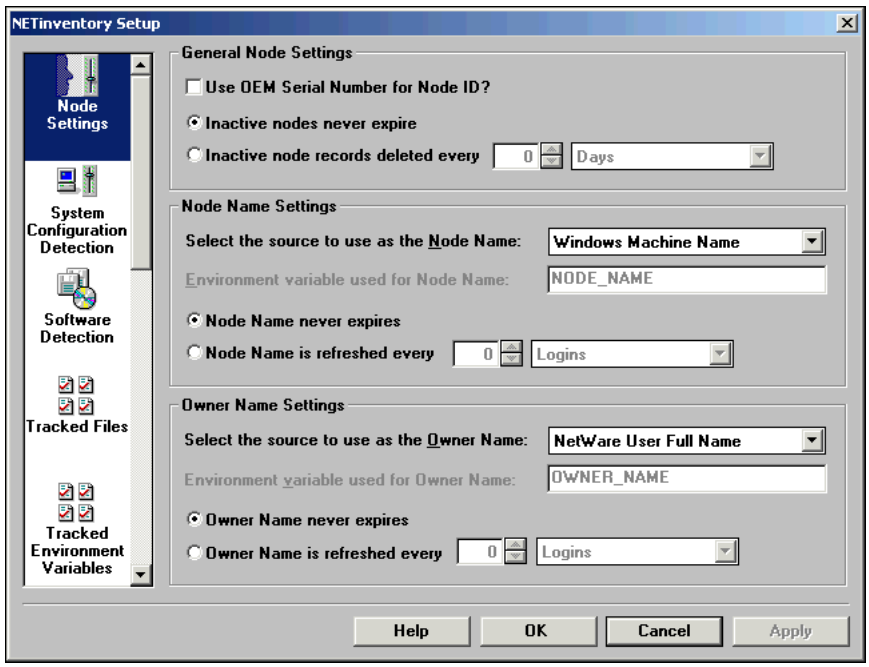


Fig. 32 Node Settings Panel

Use the panels in the **Auditing Setup** dialog to control the information the NETinventory Audit Agent collects from audited nodes.

Configuring Node Settings

The **Node Settings** Panel configures the Node Name, Owner Name, and the Node ID for newly audited nodes. In addition, the **Node Settings** panel controls how often the Node Name and Owner Name are updated for existing nodes.

▶ *To configure General Node Settings*

The General Node Settings determine when inactive node records are deleted and whether or not the computer's OEM Serial Number is used to determine Node ID.

1. To use the OEM Serial Number to determine the Node ID, select the **Use OEM Serial Number for Node ID** box.

   When **Use OEM Serial Number for Node ID** is checked, the Audit Agent will use the Serial Number set by the motherboard manufacturer to identify nodes. Some older machines lack an OEM Serial Number, and some manufacturers do not assign unique Serial Numbers—instead, they assign the same serial number to more than one machine.

   If you have **Use OEM Serial Number for Node ID** enabled and your nodes do not use unique serial numbers, the Audit Agent will not be able to identify nodes correctly. Before deciding to **Use OEM Serial Number for Node ID** for your entire network, allow a sample set of nodes to be audited and check their OEM Serial Numbers using a NETinventory report. If duplicate serial numbers appear, do not select **Use OEM Serial Number for Node ID**.

2. To prevent inactive nodes from being deleted, select **Inactive nodes never expire**. To remove inactive nodes from the database automatically after a time, select **Inactive node records deleted every** and enter a number and unit that NETinventory should wait before purging inactive nodes.

▶ *To choose default names for new nodes*

Every node has two names assigned to it in the NETinventory databases:

- Node Name – Normally applies to the node itself
- Owner Name – Normally applies to the person who controls the node

These settings apply when a new name is created or when a name is refreshed.

1. Choose a source for the **Node Name** from the **Select source to use as the Node Name** list. If **Custom Environment Variable** is selected, supply the name of the environment variable to use.
2. Choose a source for the **Owner Name** from the **Select source to use as the Owner Name** list. If **Custom Environment Variable** is selected, supply the name of the environment variable to use.

3 Choose how often the NETinventory Audit Agent updates the Node Name and Owner Name by setting the number and the units the Audit Agent should wait between intervals for each in the **Node Name is refreshed every** and **Owner Name is refreshed every** fields.

4 To save the changes without closing the dialog, click **Apply**. To save the changes and close the Console Setup dialog, click **OK**. To close the dialog without saving the changes, click **Cancel**.

Setting Up System Configuration Detection

The **System Configuration Detection** panel controls the information the NETinventory Audit Agent collects about node configurations. It also configures how often nodes are audited and which tests the NETinventory Audit Agent performs. Last, it is used to configure the alert levels NETinventory sets when specified conditions are detected.

Note: NETinventory uses the built-in Desktop Management Interface (DMI) to collect some information about nodes. Most computers built since 2000 store their DMI information in a way that requires local administrator access to collect. If the currently-logged in user is not a Local or Domain Admin on a computer when the Audit Agent runs, DMI information will not be collected. All other NETinventory information will be collected.

▶ *To set up System Configuration Detection*

Open the **NETinventory Audit Setup** dialog and select the **System Configuration Detection** icon. The **System Configuration Detection** panel appears.

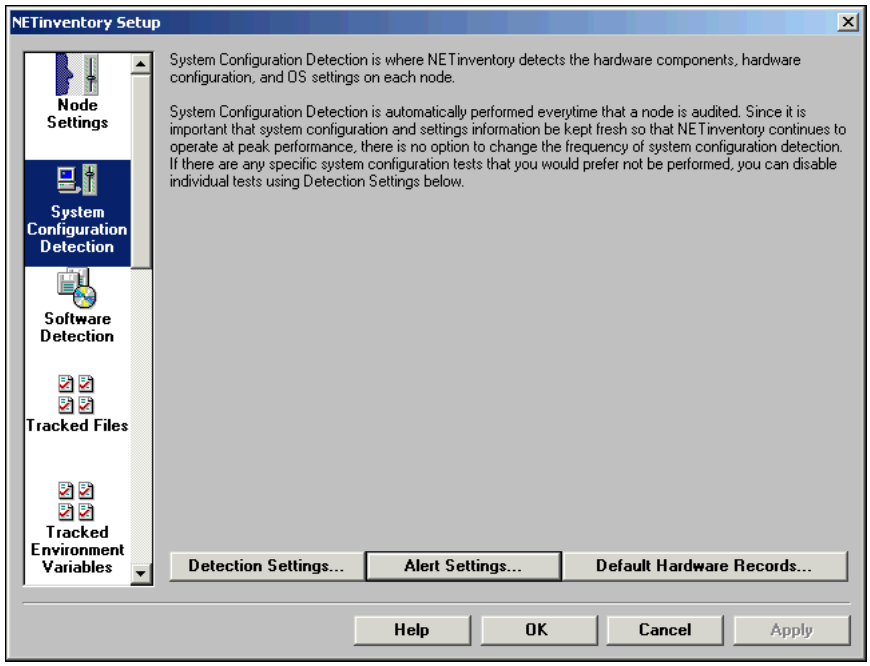


Fig. 33 System Configuration Detection Settings Panel

▶ *To configure System Configuration Detection Settings*

The NETinventory Audit Agent can be configured to ignore certain classes of hardware configuration tests if a test causes problems. You can almost always enable all tests, since the tests almost never cause problems. Auditing does not go perceptibly faster with tests disabled—each test takes very little time.

1 Open the **System Configuration Detection** panel and click the **Detection Settings** button. The **System Configuration Detection Settings** dialog is displayed.

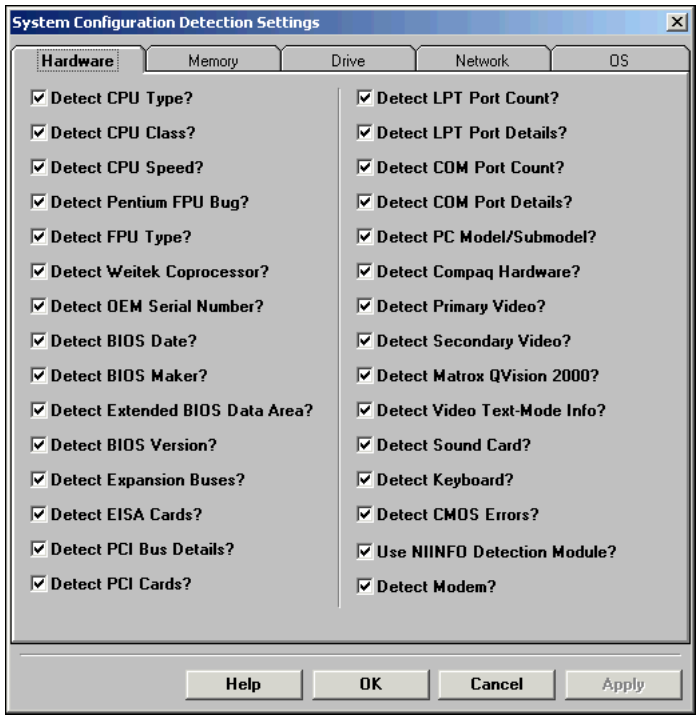


Fig. 34 System Configuration Detection Settings Dialog

2 The dialog is divided into five tabs that group the tests. You can select a test to enable it, or unselect to disable it.

If you disable a test, it will not be performed on any of the nodes on your network.

Under certain circumstances, particular tests can cause problems with a particular node. When problems occur on a particular node, the NETinventory Audit Agent will automatically disable the test on that node only. Refer to "Controlling the Tests the Audit Agent Performs" on page 210 for information on configuring tests for individual nodes. System Configuration Detection Settings control testing on all nodes.

▶ *To configure Default Hardware Records*

NETinventory cannot detect everything that you might wish to record about nodes—information such as serial numbers, places of purchase, warranty records, and so on cannot be detected. NETinventory allows you to keep an inventory database with this information for each node. When a node is first audited, the records you specify are created in each node's inventory database. For information on using the hardware assets for each node, see "Hardware Assets Information" on page 197.

The items in the hardware assets database vary greatly from organization to organization. The NETinventory Administrator must

determine which pieces of hardware are classified as individual components, and which are parts of another component. For example, you must decide if a motherboard, power supply, and RAM chips be considered as three separate assets, or as a single asset—a computer.

Use Default Hardware Records to select which components to include. The Node Manager is used to add additional components to a single node's record manually. See "Hardware Assets Information" on page 197 for more information on managing the Hardware Assets for each node.

1 Open the **System Configuration Detection** panel and click **Default Hardware Records**. The **Default Hardware Asset Records** dialog appears.

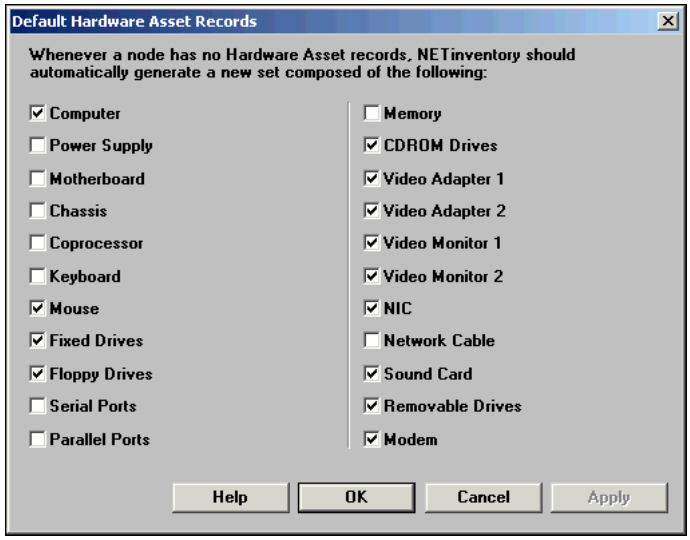


Fig. 35 Default Hardware Asset Records Dialog

2 Select the hardware items to include in default hardware asset records.

3 Click **OK** to save the changes and close the dialog.

Alerts

NETinventory Alerts are "flags" the Audit Agent can set to warn of potential trouble or of changes to nodes on the Enterprise Network.

Every alert is assigned to a level. Levels group alerts of similar importance. Alert levels range from 0 to 20. The lower the alert level value, the more serious the alert, except that Level 0 means to generate no alert.

Some alerts should only occur one time, no matter how often the condition is detected; other alerts should always be generated, even if the alert condition is ongoing. You can set the threshold for repeating alerts. Alerts with values lower than the threshold will be generated again whenever the condition that caused them is detected. Alerts with values above the threshold will only generate a

single alert if the condition recurs and the first alert has not been acknowledged.

When an alert is generated, the alert and any supporting information is added to the Audit Server's database for the node.

There are two ways to examine alerts:

- Create a query that generates a grid and use the Node Manager to examine each node and view the node's alerts. This approach allows you to examine all of the alerts associated with a node in detail, making it difficult to quickly see which alerts are most important so that you can correct the conditions which caused them.
- Create a query for all nodes with alerts that have not been acknowledged. You can sort the resulting grid on the priority level of alerts so that the most serious alerts are listed first. Use the Node Manager to view each alert and acknowledge it. See the *NETinventory Console User Guide* for more information on using the Query Builder, Grids, and Schedules.

When you create alerts, keep in mind your site's configuration and what potential problems your network might encounter. For each alert condition, decide when an alert is warranted and the alert level called for.

You can choose to have an *Alert Action* taken on the node when the alert is generated. When the alert is generated, the Audit Agent will execute a specified command line on the node. There is a different command line for each Operating System the Agent runs on.

▶ *To set up System Configuration Alerts*

NETinventory System Configuration Alerts generate alerts when the Audit Agent detects conditions related to node hardware and software configuration.

1 Open the **System Configuration Detection** panel and click **Alert Settings**. The **System Configuration Alert Settings** dialog appears.

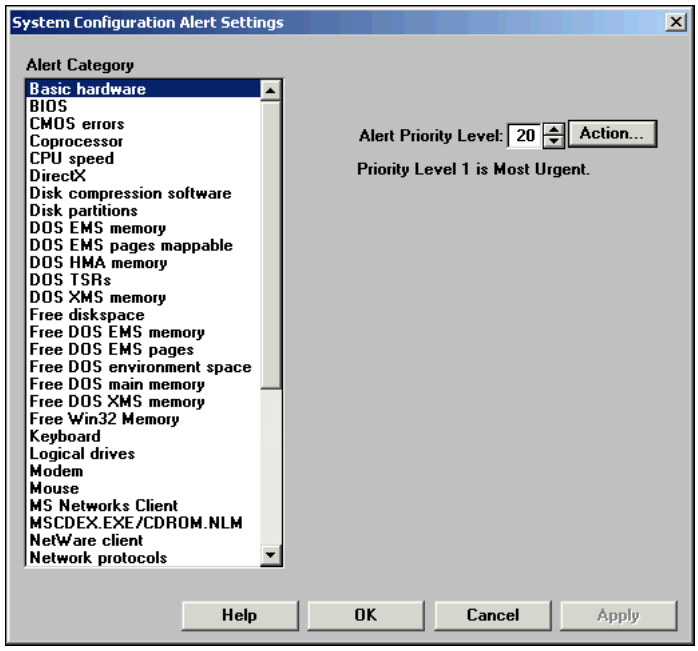


Fig. 36 System Configuration Alert Settings Dialog

2 To configure an alert condition, select it and set the alert level the Audit Agent should set.

Some items also can generate an alert based on the percentage change in an item since a prior audit.

Other items can generate an alert if an item's value is below a threshold value.

Alert levels range from 0 to 20. Lower alert level values are more serious. Level 0 means to generate no alert.

▶ *To configure an action taken when an alert is generated*

1 To set an action which should be taken when an alert is generated, click the **Action** button. The **Alert Actions** dialog appears.

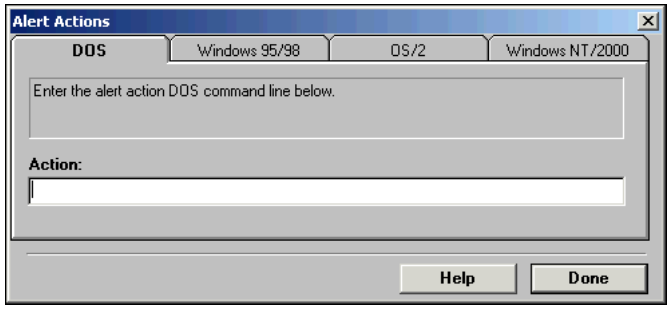


Fig. 37 Alert Actions Dialog

2 For each operating system, enter a command line the Audit Agent will execute on the node when it generates an alert.

You do not have to enter an action for each operating system. Blank actions are skipped. The command line will be executed by the node just as if it were typed at a command prompt.

3 Click **Done** to save the changes and close the dialog.

Configuring Software Detection

The **Software Detection** panel controls the information collected about software on audited nodes. It also determines how often software audits are performed, and which files are included and excluded from searches. Finally, you can set alert levels generated when software categories are detected.

▶ *To configure Software Detection*

1 Open **NETinventory Audit Setup** dialog and select the **Software Detection** icon. The **Software Detection** panel appears.

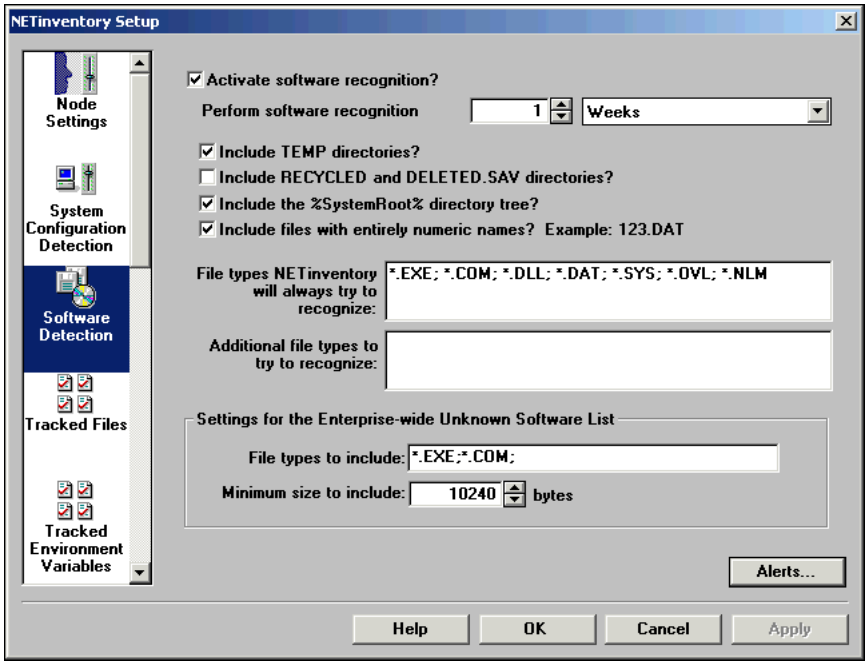


Fig. 38 Software Detection Panel

2 Select the **Activate software recognition** box to audit the software on nodes at the interval in the **Perform software recognition** field.

Note: The Audit Agent will only run when users log in to a Login Server. Setting the audit interval to “1 hour” means that if more than one hour has elapsed since a node last logged in, the node will be audited. It does not mean that nodes will be audited every hour.

It takes longer to perform a software audit than to perform the hardware audits. Software Detection is activated, deactivated, and timed separately from hardware audits. Since software audits take more time, consider making software audits occur less frequently than the other audit components.

▶ *To control which files are seen as software*

Administrators can specify which files the NETinventory Audit Agent treats as part of software packages and which files are ignored. The middle of the **Software Detection** panel contains file specifications that control which files are treated as software and which are not.

The Master Software list requires that certain items always be considered part of software packages. These file types are found in the read-only **File types NETinventory will always try to recognize** field.

If you add Custom Software which relies on the presence of a file that is not one of the standard types, add the custom type or types to the **Additional file types to try to recognize** list.

To add a custom file type, type its extension in the field. Separate file extensions with a semicolon (;). File types should be added in UPPERCASE letters only.

In addition, you control which types of files NETinventory will add to the list of unknown software in the **Settings for the Enterprise-wide Unknown Software List** section. To include a file type, add its specification to the **File types to include** list and separate each file type specification with semicolons. Exclude files smaller than a particular size by setting the **Minimum size to include** field.

▶ *To configure Software Detection Alerts*

The NETinventory Audit Agent can generate alerts based on detected software.

You can choose to generate an alert when software in a specified category is added, deleted, updated, or moved. Refer to page 66 for more information on alerts. You can also choose to generate an alert based on the category of the software the Audit Agent detects. Categories are assigned to software in the Master and Custom Software Lists. For more detailed information about setting up and using categories, refer to Chapter 6 on page 159.

1 Open the **Software Detection** panel and click **Alerts**. The **Software Alert Settings** dialog appears.

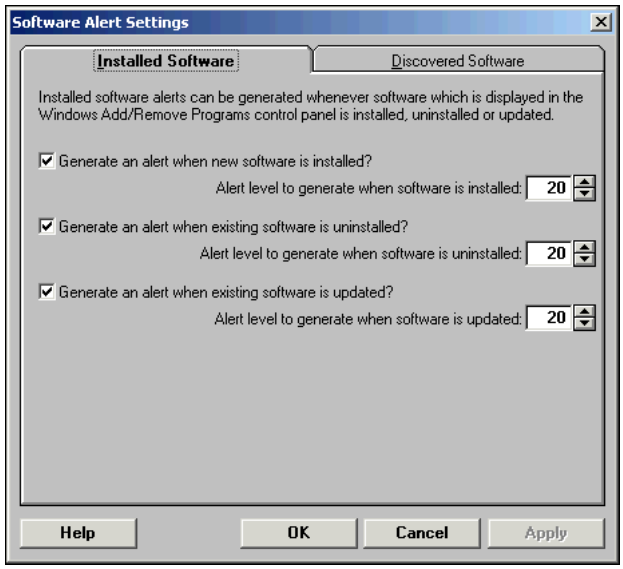


Fig. 39 Software Alert Settings Dialog - Installed Software Tab

2 Select the appropriate boxes to generate an alert when new software is installed or when existing software is uninstalled or updated. You can set a unique alert level for each condition.

3 Select the **Discovered Software** tab to set alerts for a particular category.

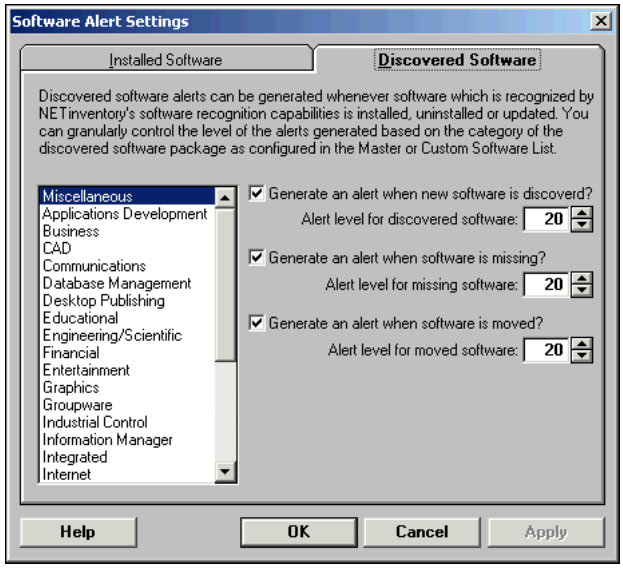


Fig. 40 Software Alert Settings Dialog - Discovered Software Tab

4 Select the category from the list and set an alert level to generate when software in that category is discovered, missing, or moved.

5 Click **OK** to close the dialog and save changes or click **Cancel** to close the window without saving changes.

Configuring Tracked Files

NETinventory can track crucial system files such as AUTOEXEC.BAT. When files are found, you can search their contents for particular text strings. You can save the contents of the file to the Audit Server for later use. Use this to store snapshots of critical batch and configuration files (e.g., *.BAT, *.CFG, *.INI) on the Audit Server automatically. When changes to these files cause problems you can use the Audit Agent to transmit a known good version of the file to the node and force the node to restart.

Create as many Tracked File searches as you wish. The interval, audit file specifications, and alert settings are configured independently for each file audit.

▶ *To configure tracked files*

1 Open the **NETinventory Audit Setup** dialog and select the **Tracked Files** icon. The **Tracked Files** panel appears.

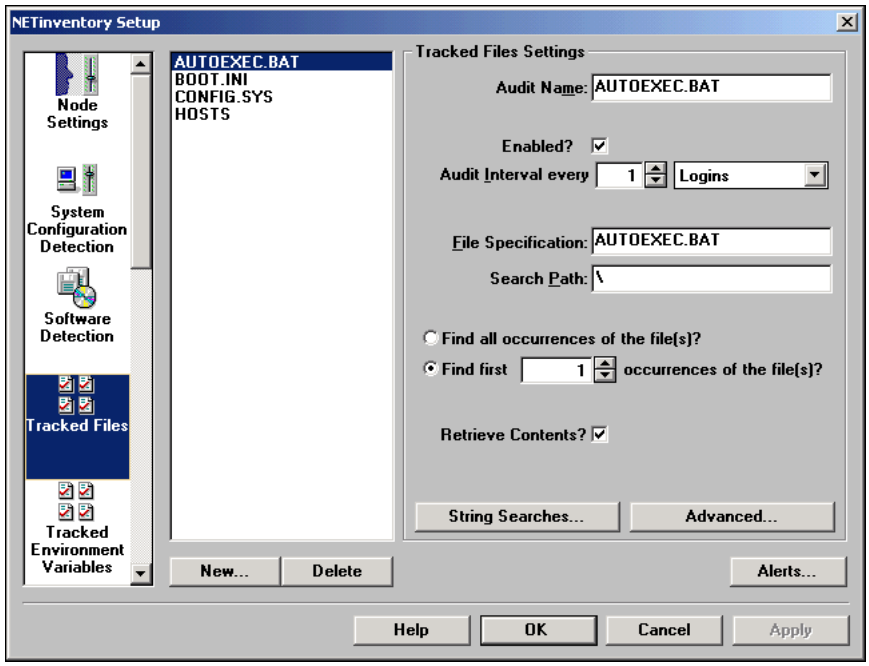


Fig. 41 Tracked Files Panel

2 Select an existing tracked file search from the list on the left side of the panel. Click **New** to create a new tracked file audit. If you create a new audit, the **Tracked File** dialog appears.

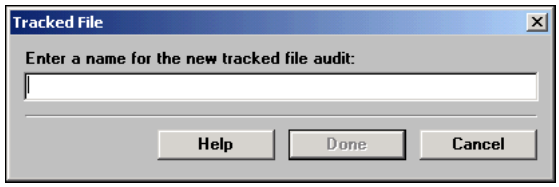


Fig. 42 Tracked File Dialog

Enter the name of the new tracked file audit and click **Done** to create it.

A tracked file audit's name does not have to be the same as the name of the file the audit should search for. The new tracked file audit will be created.

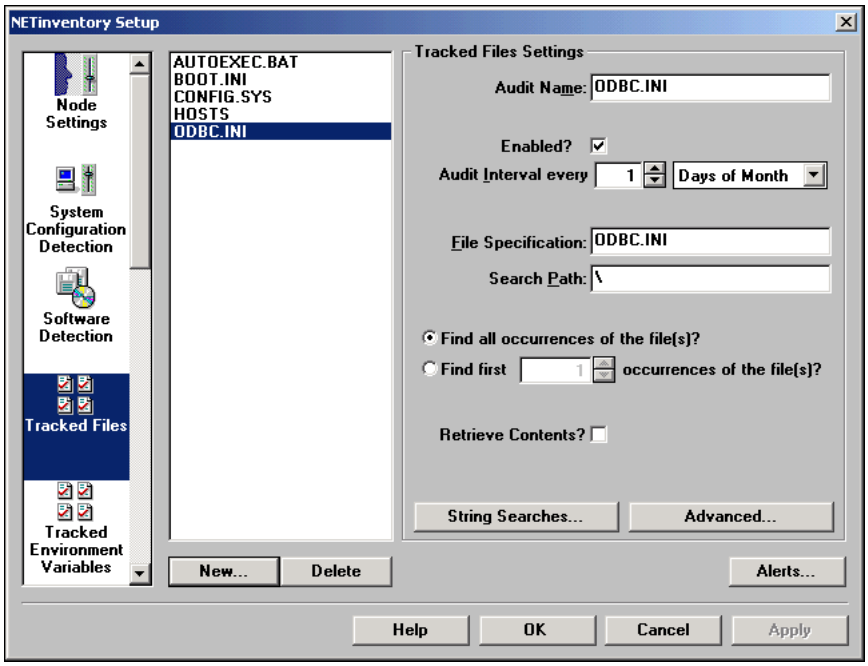


Fig. 43 Tracked File Panel

3 On the right side of the panel, set the audit interval. Each file audit has a different interval. The files tracked by some audits change more often than others, and their audits should be performed more frequently.

4 Enter the specification for the file. For some files, you enter the file's full name, including the extension; for others, you can use wildcards. The **File Specification** accepts normal DOS wildcards for file names.

You can enter a search path that the Audit Agent should use to restrict its search. Entering a search path restricts the locations the Audit Agent searches for the file, speeding the search and limiting the returned files. Any search path you enter should

not include a drive letter. To limit which drives are searched, click the **Advanced** button.

5 Select the maximum number of matches the file audit should find. Even without using wild cards in your search, more than one file can be found by your search, and limiting the number of matches allows you to set limits on how much time the Audit Agent spends searching.

6 To retrieve the contents of the file to the Audit Server for storage, select the **Retrieve Contents** box.

▶ *To configure file audit alerts*

File audits can generate alerts when the files being sought are found, are not found, are changed, or when more files than the maximum you specify are found.

1 In the **NETinventory Audit Setup** dialog, click the **Alerts** button. The **Tracked File Alerts** dialog appears.

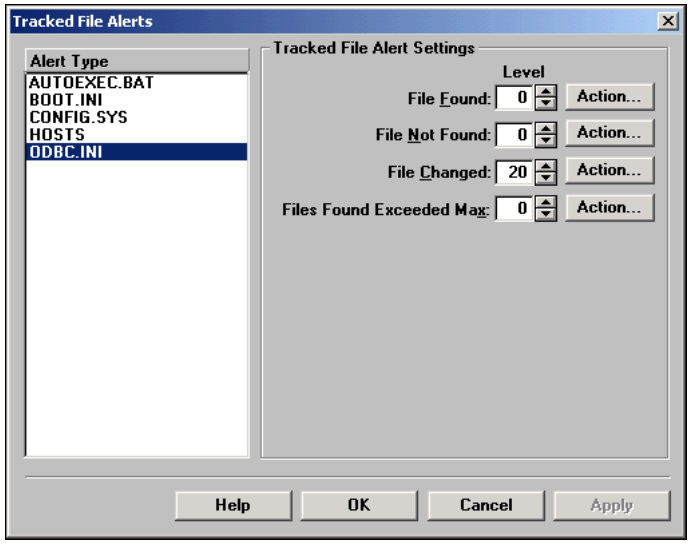


Fig. 44 Tracked File Alerts Dialog

2 Select the file audit alerts to configure. The Audit Agent can generate an alert level when the file is found, when the file is not found, when it is changed since the last audit, or when more than the maximum number of allowed files are found.

Each alert condition can also cause an action to be performed on the node. Click the **Action** to configure Alert Actions. For more information on Alert Actions, please see "To configure an action taken when an alert is generated" on page 68.

3 Click **OK** to close the dialog and save changes or click **Cancel** to close the dialog without saving the changes.

▶ *To search for a string inside a tracked file*

The NETinventory Audit Agent can search inside a tracked file for a string. String searches can generate an alert based on the results of the search. The Audit Agent can also retrieve a value associated

with the string. Tracked files can have any number of string searches. Only files found by the audit will be searched.

1 Select the Tracked File audit to search and click **String Searches**. The **String Search** dialog appears.

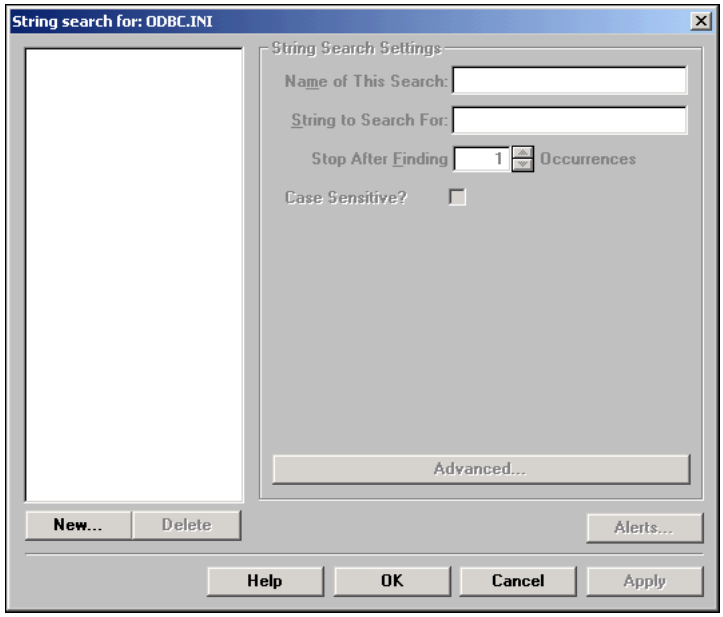


Fig. 45 String Search Dialog

2 If the String Search exists, select its name from the list. Click **New** to create a new String Search. The **String Name** dialog appears.

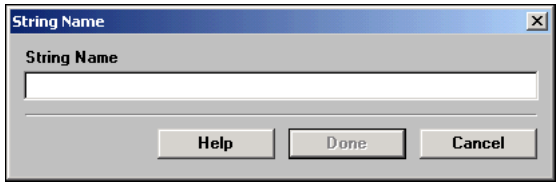


Fig. 46 String Name Dialog

Type a name for the string search. The name does not need to match the string the Audit Agent should find.

The new string search appears in the list of string searches.

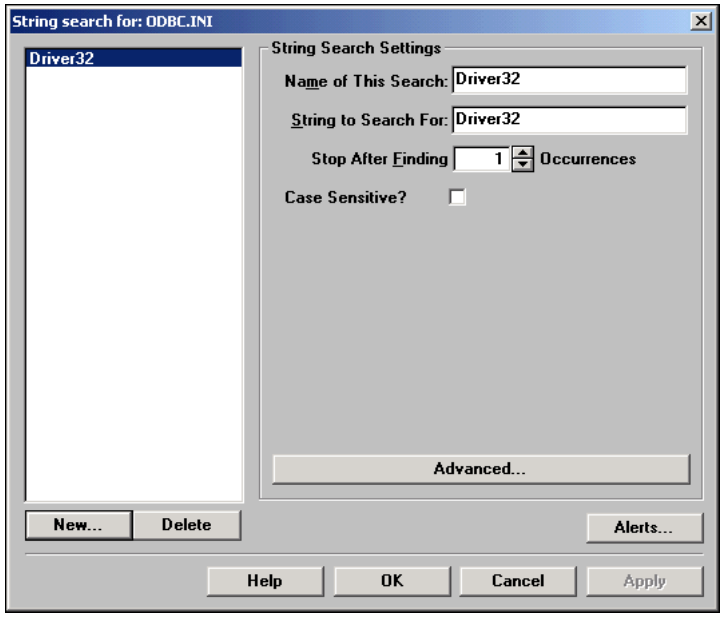


Fig. 47 String Search Dialog

3 Enter the string inside the file the search should find.

4 Select how many matches the String Search should find. If you want the search to be case sensitive (that is, to distinguish between “A” and “a”), select the **Case Sensitive Search** check box.

The Audit Agent can find special characters in the strings. See Table 3.

Table 3 Special Characters in Search Strings

Character String	Finds
<WS>	White space – one or more spaces, returns or tabs following a character
<CR>	Carriage Return
<EL>	End of Line
<BL>	Beginning of Line
<FF>	Form Feed
<BS>	Back Space
<SP>	Space
<TAB>	Tab
<BELL>	Control-G

▶ *To configure advanced string search parameters*

1 Select a String Search and click **Advanced**. The **Advanced String Search Settings** dialog appears.

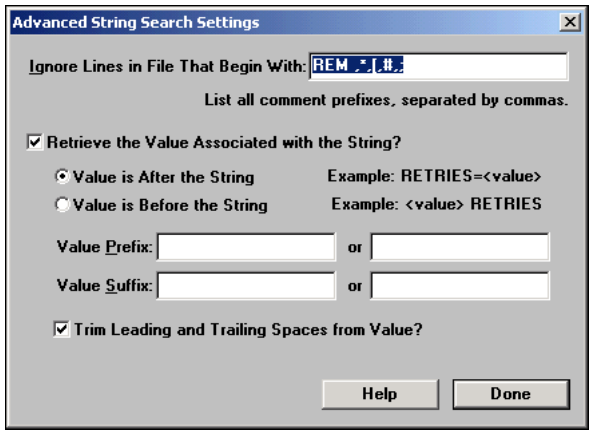


Fig. 48 Advanced String Search Settings Dialog

2 Some lines in the found file are comments and should not be searched for the string. Edit the **Comment Prefixes** field to define characters that begin comment lines. Items in the field are separated with commas (,). By default, the field contains the most common comment markers. You can delete them if you choose.

3 When **Retrieve the Value Associated with the String** is selected, Audit Agent will use the specifications you provide to collect a value associated with the string for storage. Use this ability to audit and store values in a configuration file. See Table 3, “Special Characters in Search Strings” for information on the special characters you can use in the value prefix and suffix boxes.

4 Select **Trim Leading and Trailing Spaces from Value** to delete extraneous spaces.

5 Click **OK** to close the dialog and save changes or click **Cancel** to close the dialog without saving the changes.

▶ *To configure string search alerts*

String Searches can generate alerts when strings are found, are not found, are changed, or when more than the maximum number of occurrences you specify are found.

1 Open the **NETinventory String Search** dialog and click the **Alerts** button. The **Tracked File String Search Alerts** dialog appears.

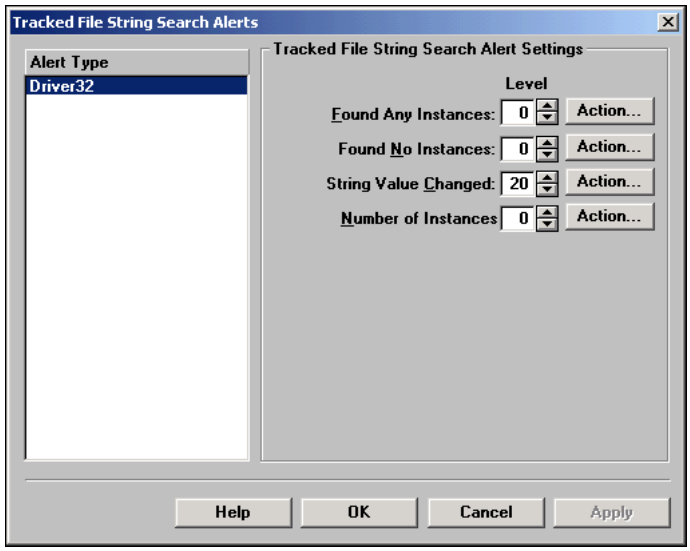


Fig. 49 Tracked File String Search Alerts Dialog

2 Select a String Search. You can set alert levels generated when the selected audit finds a string, fails to find a string, finds a changed string, or finds more than the maximum number of allowed strings.

Each alert condition can also cause an action to be performed on the node. Click the **Action** to configure Alert Actions. For more information on Alert Actions, please see "To configure an action taken when an alert is generated" on page 68.

3 Click **OK** to close the dialog and save changes, or click **Cancel** to close the dialog without saving the changes.

▶ *To configure advanced tracked file settings*

Advanced Tracked File Settings allow you to limit the search in various ways. Each Tracked File Audit has unique Advanced Tracked File Settings. You can limit searches based on:

- Number of subdirectories searched for matching files
- Range of possible dates for the file
- Range of possible sizes for the file
- Drives searched for the file

You can also specify the probable type of the file, since only certain types of files can be transmitted to the Audit Server for storage.

1 Open **NETinventory Tracked Files** panel and click the **Advanced** button. The **Advanced Tracked File Settings** dialog appears.

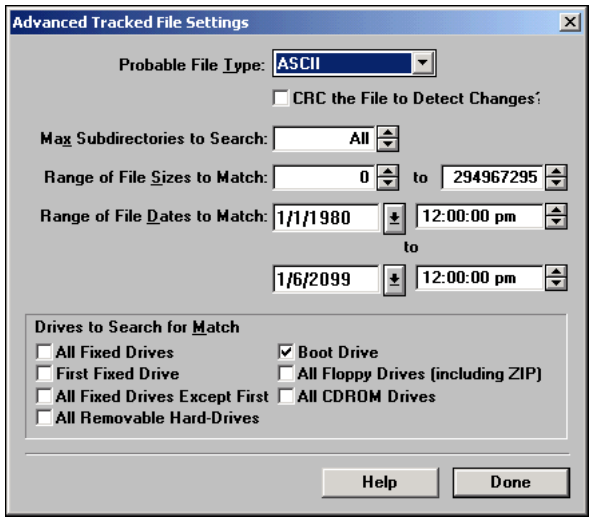


Fig. 50 Advanced Tracked File Settings Dialog

2 Select the probable type of the file from the drop-down list.

An ASCII file is one readable by most humans (e.g., a batch (*.BAT) or configuration (*.INI or *.CFG) file). A binary file contains only program code, and is usually not human-readable (e.g., *.EXE, *.COM, or *.DLL files). Binary files require less space in the NETinventory database, but cannot be edited and sent back to the node, although they can be saved to disk.

3 To use a CRC (checksum) to determine if the file has changed since the last audit, select the **CRC the File to Detect Changes** check box. If a CRC is not used, the file's size and date will be compared to the database to determine if it has changed.

4 To limit the audit to a finite number of the subdirectories of the directory specified in the search path, enter a value in the **Max Subdirectories to Search** field. A zero (0) means to search all subdirectories. Limiting the subdirectories speeds the audit.

5 To limit the found files by size or date, enter the appropriate values into the **Range of File Sizes to Match** and **Range of File Dates to Match** fields.

6 Use the check boxes in **Drives to Search for Match** to limit the search to a subset of available drives. Choices are additive: **First Local Fixed Disk** and **All But First Fixed Disk** have the same meaning as **All Local Fixed Disks** when both are chosen.

7 Click **OK** to close the **Advanced Tracked File Settings** dialog and save changes or click **Cancel** to close the dialog without saving the changes.

Configuring Tracked Environment Variables

NETinventory can track the values of Environment variables and NetWare Server SET variables. You search for Environment Variables and Server SET Variables in the same way.

Create as many tracked environment variable searches as you wish. The search parameters and alert settings are configured independently for each file audit. Every search is performed each time the Audit Agent runs on a node.

▶ *To configure Tracked Environment Variables*

1 Open the **NETinventory Audit Setup** dialog and select the **Tracked Environment Variables** icon. The **Tracked Environment Variables** panel appears.

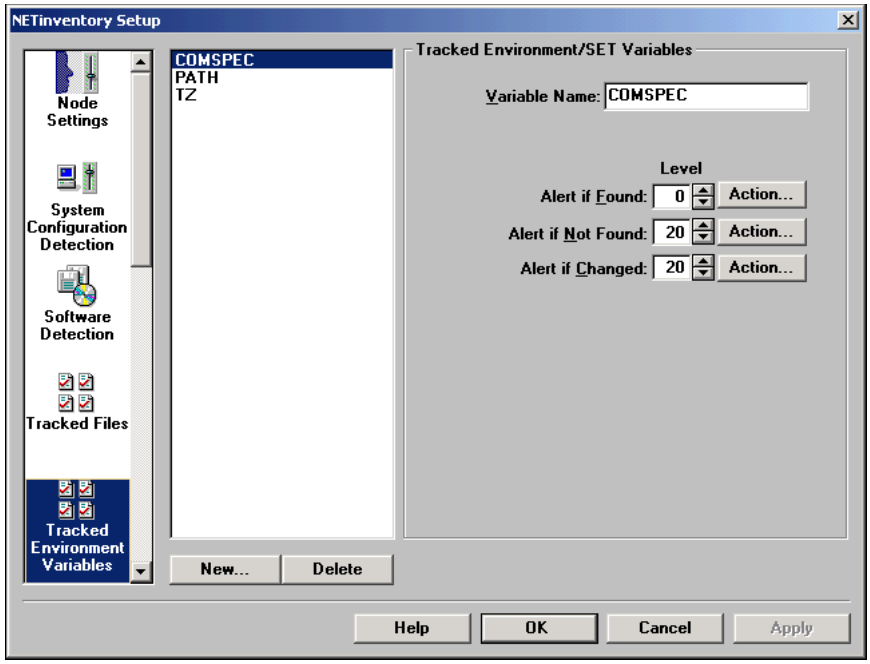


Fig. 51 Tracked Environment Variables Panel

2 Select an existing tracked environment variable on the left side of the panel. Click **New** to create a new tracked environment variable audit. The **Tracked Environment Variables** dialog appears.

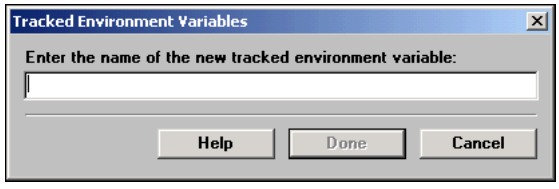


Fig. 52 Tracked Environment Variables Dialog

Type a name for the tracked environment variable search. The name does not need to match the variable the Audit Agent should find.

The new audit appears in the list of searches.

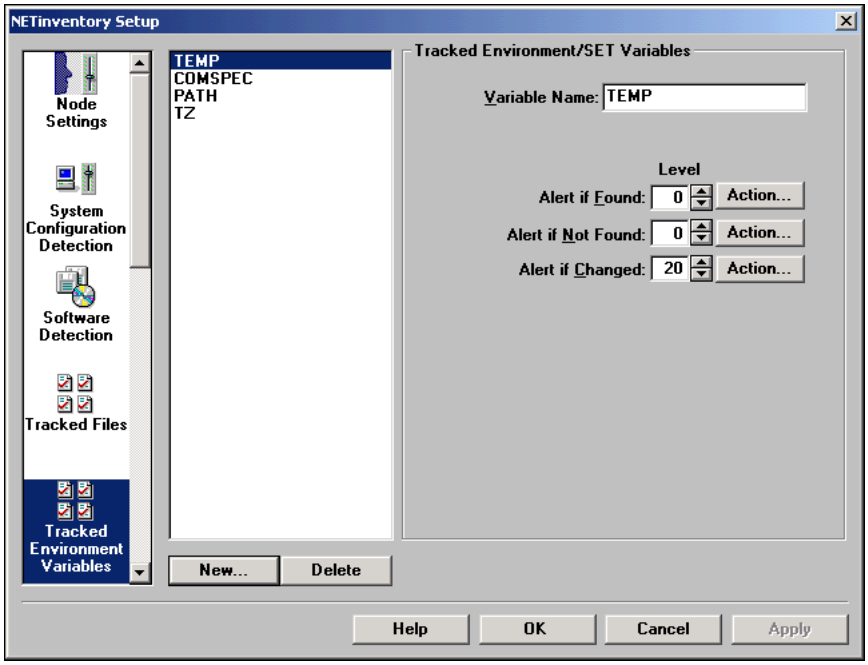


Fig. 53 Tracked Environment Variables Panel

3 Enter the specification for the variable in the **Variable Name** field.

The **Variable Name** field accepts normal DOS wildcards for names.

4 Select the alert level generated when the variable is found, not found, or when the variable's value changes.

Each alert condition can also cause an action to be performed on the node. Click the **Action** to configure Alert Actions. For more information on Alert Actions, please see "To configure an action taken when an alert is generated" on page 68.

5 Click **OK** to close the dialog and save changes, or click **Cancel** to close the dialog without saving the changes.

Configuring Tracked Drivers and Services

NETinventory can track Drivers and Services on Windows machines and NetWare NLMs. You search for Drivers, Services, and NLMs in the same way.

Create as many Driver and Service searches as you wish. The search parameters and alert settings are configured independently for each file audit. Every search is performed each time the Audit Agent runs on a node.

▶ *To configure Tracked Drivers and Services*

1 Open **NETinventory Audit Setup** dialog and select the **Tracked Drivers and Services** icon. The **Tracked Drivers and Services** panel appears.

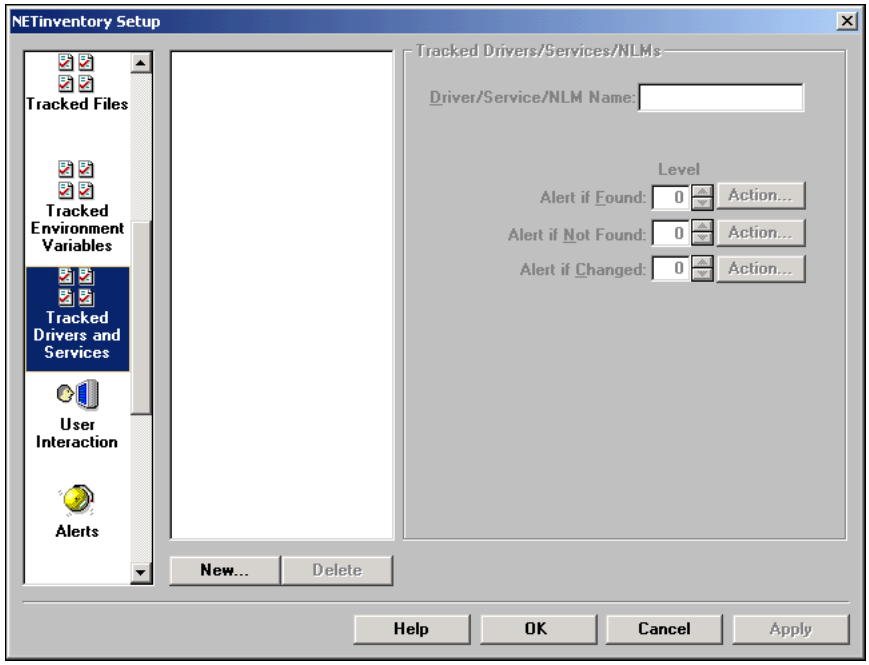


Fig. 54 Tracked Drivers and Services Panel

2 The NETinventory Audit Agent searches for drivers, services, and NLMs by name. Select an existing search on the left side of the panel to change it. Click **New** to create a new search. The **Tracked Drivers and Services** dialog appears.

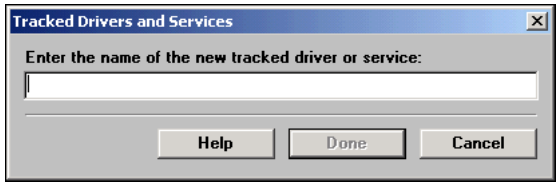


Fig. 55 Tracked Drivers and Services Dialog

3 Enter the name of the driver, service, or NLM the Audit Agent should search for and click **Done**. The new search appears in the Tracked Drivers and Services Panel.

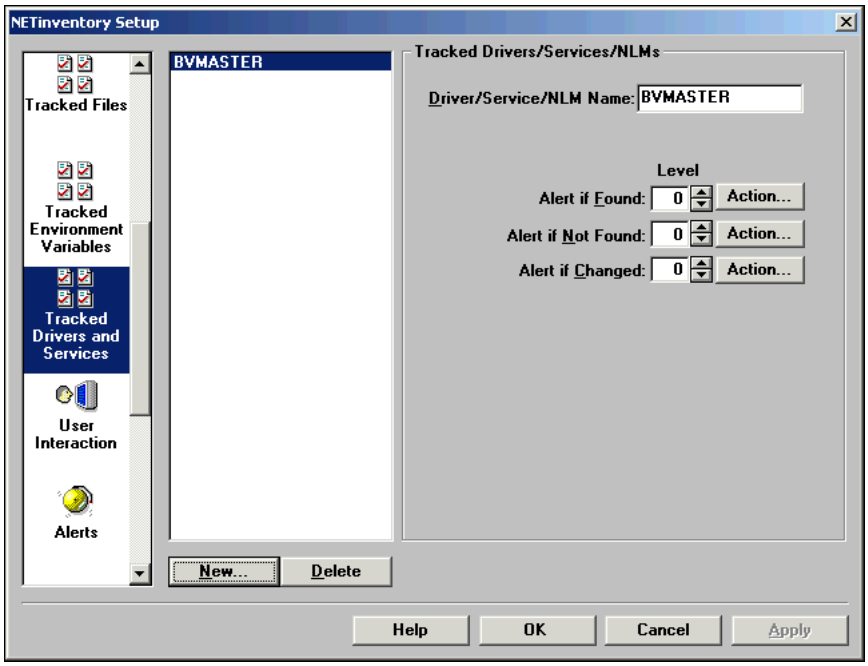


Fig. 56 Tracked Drivers and Services Panel

4 Select the alert level generated when the driver, service, or NLM is found, not found, or changes.

Each alert condition can also cause an action to be performed on the node. Click the **Action** to configure Alert Actions.

5 Click **OK** to close the dialog and save changes or click **Cancel** to close the dialog without saving the changes.

Configuring Audit Agent User Interaction

You can control many aspects of the NETinventory Audit Agent's interaction with users. The Audit Agent can scan the node for a particular environment variable or ask the user to provide information directly. You can control the status messages the Agent displays while auditing the node. Finally, you can suppress Audit Agent status messages entirely if you choose.

▶ *To configure user defined fields*

There are twelve user-defined fields you can configure to retrieve information from nodes or from users. Any field can be filled by the value of an environment variable, or by prompting the user with a question. The Audit Agent can attempt to fill the value with an environment variable and prompt the user for information only if the variable cannot be found.

1 Open the **NETinventory Audit Setup** dialog and select the **User Interaction** icon. The **User Interaction** panel appears. Select the **Custom Fields** tab.

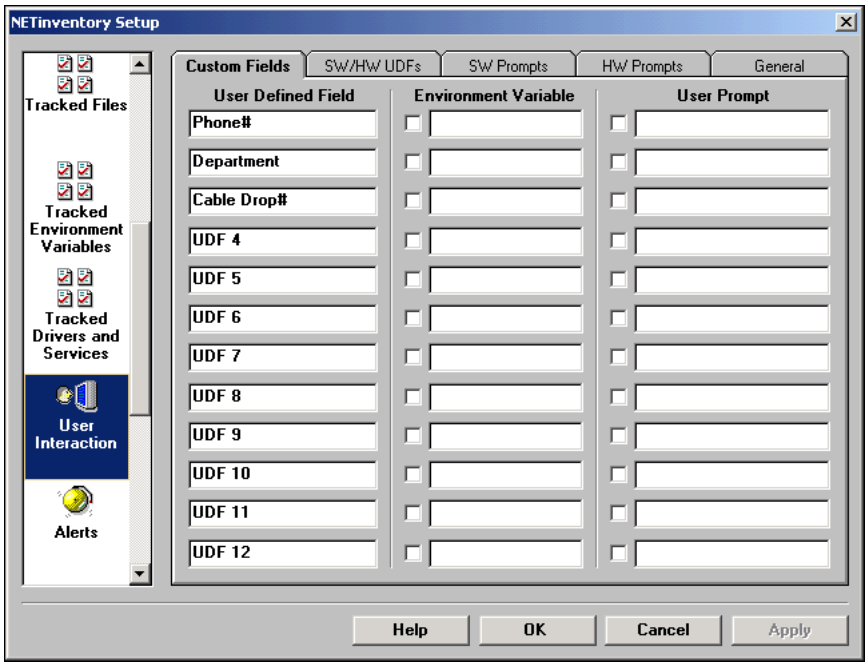


Fig. 57 User Interaction Panel - Custom Fields Tab

The left column contains the names of the fields. These names are used to help you remember the information they contain. When you create a grid using these fields, the original names appear in the grid.

2 If the Audit Agent should attempt to fill the field with information from an Environment Variable, select the box in the **Environment Variable** column on the appropriate row and enter the name of the variable.

3 If the Audit Agent should prompt the user of the node being audited for information, select the box in the **User Prompt** column on the appropriate row and enter the text the Audit Agent should display to prompt the user (e.g., “Please enter your phone number”).

Note: When both the **Environment Variable** and **User Prompt** columns are checked for a field, the Agent will first search for the value of the environment variable. If the variable cannot be found, the Agent will prompt the user for the information.

When the Agent prompts the user for information, it will also display the user’s answers and ask for confirmation that they are correct. If no answer is supplied in a preset period of time, the Agent will ignore the prompt and any responses and continue with the audit.

▶ *To configure software and hardware user defined fields*

You can set the names of the fields in the Software and Hardware Asset pages of the Node Manager. To edit the names of these fields, open the **User Interaction** panel and select the **SW/HW UDFs** tab.

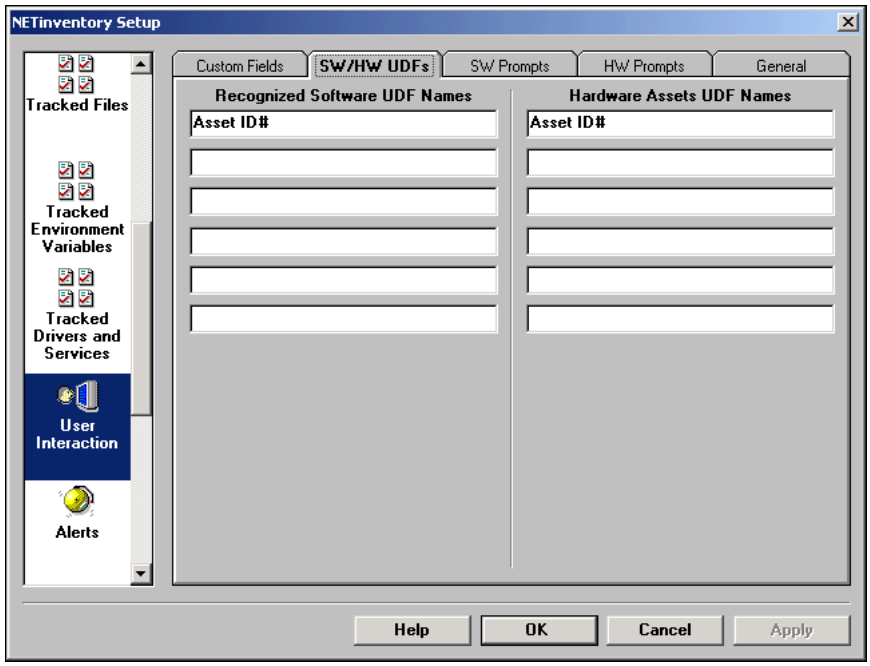


Fig. 58 User Interaction Panel - SW/HW UDFs Tab

▶ *To configure software and hardware prompts*

You can control the status messages the NETinventory Audit Agent displays while performing an audit. To configure either the Software or Hardware Audit Prompts, open the **User Interaction** panel and

select the **SW Prompts** or **HW Prompts** tabs. You can edit the prompts for any field (see Fig. 59, 60).

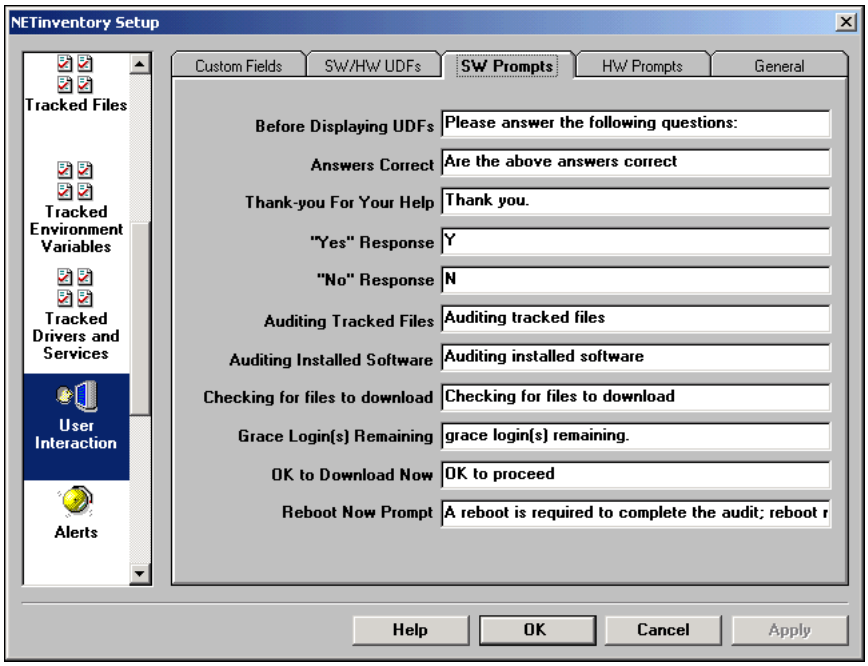


Fig. 59 User Interaction Panel—SW Prompts Tab

If the “Reboot Now Prompt” on the Software Prompts tab is left blank, users will not be asked for permission to reboot the computer after a file download. Instead, the reboot will happen automatically when needed. If a message is in the field, the user will be able to delay the reboot, although they may not be able refuse the download which is causing the reboot.

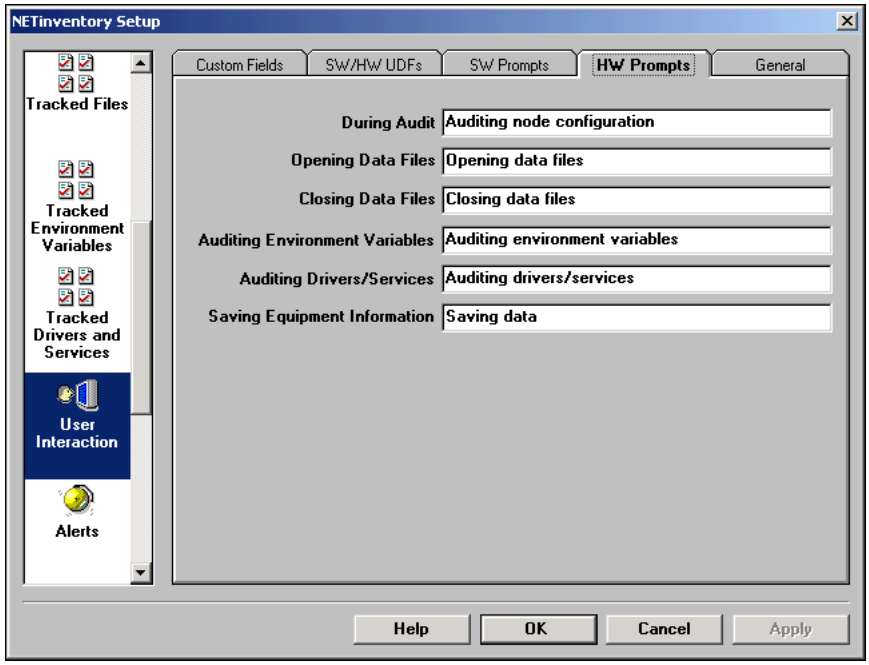


Fig. 60 User Interaction Panel—HW Prompts Tab

▶ *To configure general user interaction settings*

You can use the **General** tab of user interaction settings to control whether and how the user sees the Audit Agent while an Audit is being performed. You can also use it to force the information in User Defined Fields to be collected again.

1 Open the **User Interaction** panel and select the General tab.

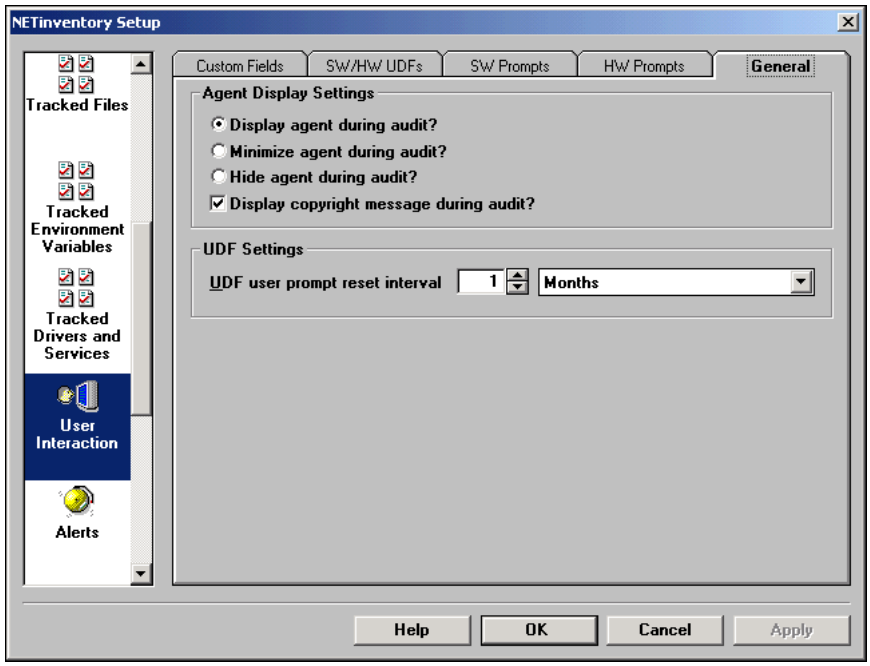


Fig. 61 User Interaction Panel - General Tab

2 When **Display agent during audit** is selected, the Audit Agent appears in a window while an Audit is being performed, whether or not user interaction is called for.

When **Minimize agent during audit** is selected, the Audit Agent appears as a minimized application while it is running unless user interaction is required. If the user must respond to UDF prompts, the Audit Agent window appears.

When **Hide agent during audit** is selected, the Audit Agent will not appear at all unless user interaction is required.

3 Uncheck **Display copyright message during audit** and the Audit Agent will not display its copyright message when it executes.

4 The **UDF user prompt reset interval** specifies how long User Defined Fields which prompt the user are valid before the Audit Agent requests the information from the user again. If the User Defined Field is filled with an environment variable, it is checked during each audit.

Alert Defaults and Global Alert Settings

Alert Defaults help speed up the process of creating new Device Driver, Environment Variable, File Audit String Search and File Audit alerts by setting default alert levels. It is not essential to configure alert defaults. Once default settings are in place, you will only need to make changes for special cases.

Global Alert Settings allow you to set an expiration date to automatically delete old alerts. In addition, you can set a threshold for alerts that will always be generated when they occur.

▶ *To configure alert defaults*

1 Open the **NETinventory Audit Setup** dialog and select the **Alerts** icon. The **Alerts** panel appears.

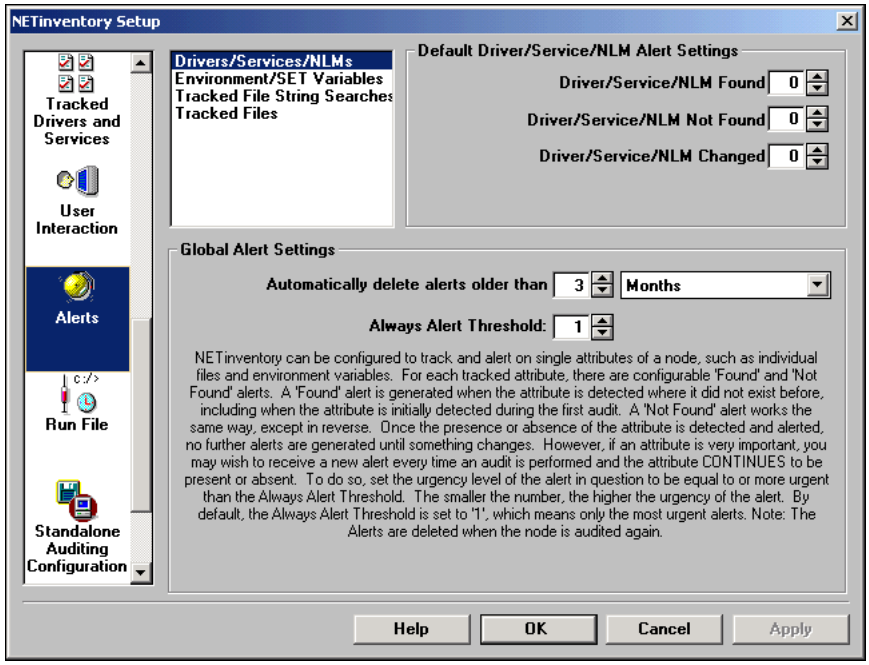


Fig. 62 Alerts Panel

2 You can configure the Default Alert settings for the Drivers/Services/NLMs, Environment/SET Variables, Tracked File String Searches, or Tracked Files. Select the appropriate item in the list and set the defaults in the area on the right. Table 4 contains information on the default alerts you can set.

Table 4 Alert Default Options

Item Name	You Can Configure
Drivers/Services/NLMs	Driver/Service/NLM Found, Driver/Service/NLM Not Found, Driver/Service/NLM Changed
Environment/SET Variables	Variable Found, Variable Not Found, Variable Changed
Tracked File String Searches	String Found, String Not Found, Value Changed, Number of Instances Changed
Tracked Files	File Found, File Not Found, File Changed, Files Found Exceeded Maximum

3 Some alerts are less important and you only want to be notified of them the first time they occur. When they occur again, the alerts should not be generated again. Other alerts are more serious, and if the conditions that caused them persist, the Audit Agent should continue to generate alerts until the condition is corrected. Use the **Always Alert Threshold** field to control which alerts are generated when they recur.

4 You can also choose to automatically delete old alerts. Use the **Automatically delete alerts older than** field to specify when old alerts are deleted.

Configuring Run Files

The Audit Agent can run other programs on the nodes on your network when performing an audit. You could use this ability to run a virus scanner while auditing a workstation, then later use a File Audit search to retrieve the results of the scan from a text log file. You can also use Run Files to run other types of diagnostic programs such as ScanDisk.

Create as many Run Files entries as you wish. The commands to execute are configured independently for each Run File. You can select how often Run Files are executed on audited nodes. To set a program to be run, you must first create a command line that NETinventory should use to run the program on each operating system where the Audit Agent runs. For each Run File, there are separate command lines executed for DOS and Windows 3.1, Windows 95, Windows 98 and Windows Millennium Edition, and Windows NT, Windows 2000, Windows XP, and Windows Server 2003.

▶ ***To configure run files***

1 Open the **NETinventory Audit Setup** dialog and select the **Run File** icon. The **Run File** panel appears.

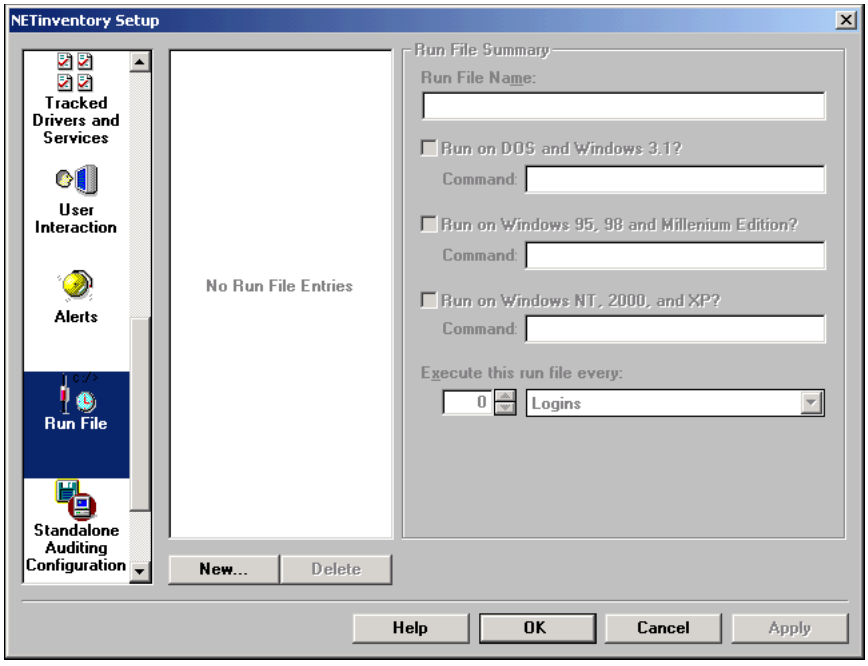


Fig. 63 Run File Panel

2 Select an existing Run File from the list of Run Files. Click **New** to create a new Run File. The **New Run File** dialog appears.

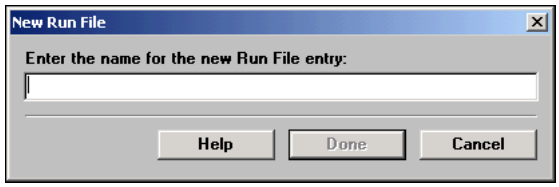


Fig. 64 New Run File Dialog

Type a name for the run file. The name does not need to match the command that the Audit Agent will execute.

The new run file appears in the list.

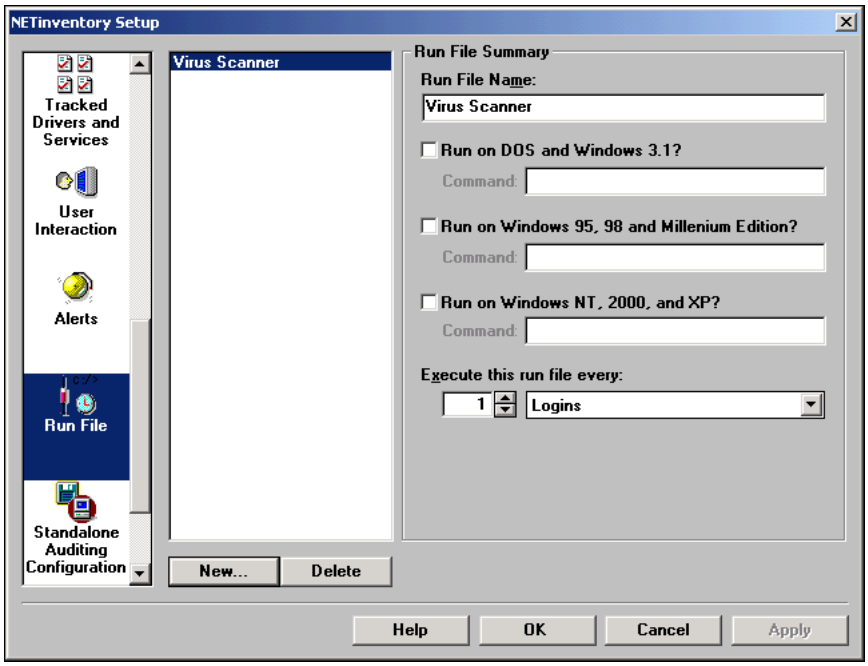


Fig. 65 Run File Panel

3 Select the box for each operating system the command should run on, and enter a command line the Audit Agent will execute on that operating system. Any unselected operating systems will be skipped.

4 Use the **Execute this run file every** item to control how often the Run file is executed.

5 Click **OK** to close the dialog and save changes or click **Cancel** to close the dialog without saving the changes.

Configuring Standalone Audits

The standard NETinventory Audit Agent only audits nodes connected to the network. To include nodes not on your network (e.g., machines disconnected from the network for security reasons or off-site machines) NETinventory creates *Standalone Auditing Disks*. You can take these disks to the nodes and audit them, storing the audit results on a floppy or other removable disk. Later, you can include the data collected by the standalone agent into the NETinventory Audit Server databases. Other than differences in the way they are audited, Standalone Nodes are identical to other audit types.

▶ *To create a standalone auditing disk*

1 Open the **NETinventory Setup** dialog. Click the **Standalone Auditing Configuration** icon. The **Standalone Auditing Configuration** panel appears.

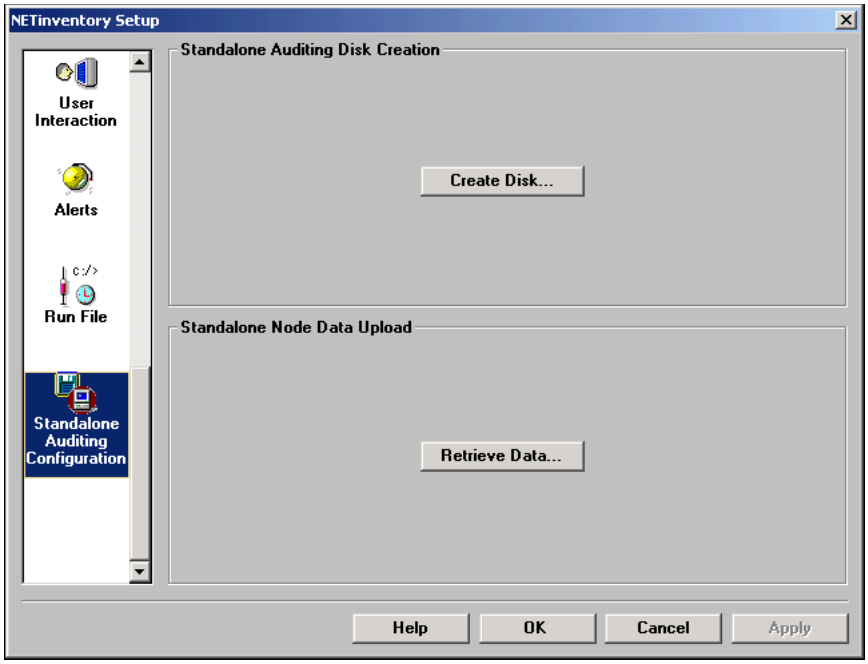


Fig. 66 Standalone Auditing Configuration Panel

2 Click **Create Disk** to start the **Create Standalone Auditing Disk** wizard. The **Standalone Audit Type** panel appears.

Fig. 67 Standalone Audit Type Panel

3 Select the type of workstation you wish to audit. Click **Windows (32-bit)** for Windows 95, Windows 98, Windows ME, Windows NT, Windows 2000, Windows XP, and Windows Server 2003, **DOS Workstation** for DOS and Windows 3.1, or **NetWare File Server**. Click **Next** to continue. The **Select Drive** panel appears.

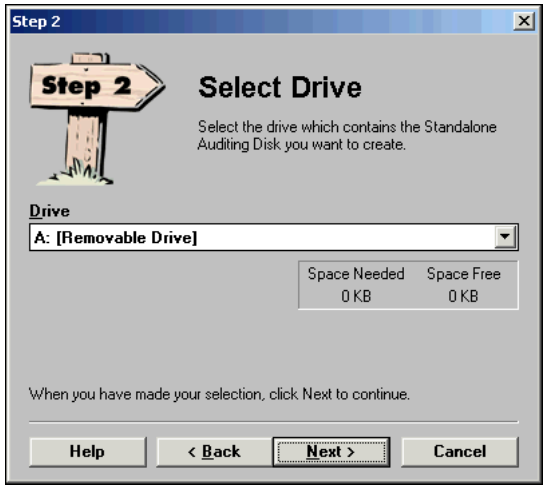


Fig. 68 Select Drive Panel

4 Select the drive containing the disk to use from the list of available drives. You can install the Standalone Auditing files on any drive mapped to a drive letter on your computer, but it is most helpful if you choose a removable volume such as a floppy disk or a removable drive so you can take the disk to another computer easily. Click **Next** to continue.

Note: Some machines with a very large amount of software may produce report files that are too large to fit on a floppy disk. For machines with large and complex collections of software, consider using some form of removable or portable hard disk for auditing.

If there is not enough free space on the disk, an error message appears. Otherwise, the **Summary** dialog appears.

Fig. 69 Summary Panel

5 Review the choices shown in the summary. Click **Next** to create the disk and proceed; use the **Back** button to make corrections. After the wizard copies the Standalone Audit files to the disk, the disk is ready for use.

The Audit Preferences on the Standalone Auditing disk are those in effect when the disk is created. Since the disk cannot be updated, set the Audit Preferences needed before you create the disk. If you change your preferences, you should create new Standalone Auditing Disks.

▶ *To use a standalone auditing disk on Windows or DOS*

Once you have created the Standalone Auditing disk, you can use it to collect information from nodes which are not connected to the network. To use the disk, take the disk to a node you wish to audit.

Note: The standalone auditing disk type needs to match the type of node you are auditing. Use a Windows (32-bit) disk for Windows 95, Windows 98, Windows ME, Windows NT, Windows 2000, Windows XP, and Windows Server 2003 machines; a DOS disk for DOS and Windows 3.1; and a NetWare disk for NetWare file servers.

1 Mount the floppy disk or removable cartridge on the node you wish to audit.

2 Use the Windows 95, Windows 98, Windows ME, Windows NT, Windows 2000, Windows XP, or Windows Server 2003 Explorer,

or a command-line prompt on any platform to run the Standalone Auditing Agent. The file you execute depends on which operating system the node is using. The Windows (32-bit) agent is too large to fit on a single disk. To use it, you must first copy the self-extracting file LONE32SE.EXE to the node, then open it to extract the agent, then run the agent using the command LONEW32.EXE. Use the commands in Table 5 to run the Audit Agent.

Table 5 Standalone Auditing Agents by Platform

Node Operating System	Program to Run
Windows (32-bit)	LONEW32SE.EXE, then LONEW32.EXE
DOS	LONEDOS.EXE

3 If the Standalone Auditing information is too large to fit on the same disk as the Standalone Auditing Agent, the Agent prompts you to switch disks.

4 Insert the disk you wish to save the information on and press **Y** or **Enter** to continue with the audit. The Standalone Auditing Agent audits the node and stores the information on a disk in the same drive the agent was run from. The information from the audit is stored in a file named XXXXXXXX.RAW, where XXXXXXXX is based on the time the audit takes place in order to ensure that the file name is unique. When the audit is complete, remove the disk.

▶ *To use a standalone auditing disk on NetWare*

The NetWare Standalone Auditing Disk is very different from the other standalone versions. Because of the way that NetWare NLM files interact with the server's hardware, the NetWare Auditing Agent runs in two parts.

The first part is a version of the DOS Standalone Agent, which runs before NetWare starts. You can configure your server to run it automatically from the server's `AUTOEXEC.BAT` file if you choose. This part of the audit analyzes the hardware of the Server. It saves the data it collects at the root of the server's `C:` drive in a file called `0000.RAW`.

In addition to the DOS part of the Standalone Auditing Agent, there is a NetWare Loadable Module called `BVFSAUD.NLM`, which is loaded manually or when the server itself starts by the server's `AUTOEXEC.NCF`.

At manually defined intervals, the `BVFSAUD NLM` audits the server. When the audit starts, it contacts the assigned Audit Server and initiates communications. The BVFSAUD NLM searches for a 0000.RAW file produced by the agent at DOS boot time. If one is found, it is copied to the server's "SYS:" volume. The agent then extracts the hardware data from it and sends the data to the Audit Server. The BVFSAUD NLM then collects lists of the server's SET variables, loaded NLM files, and NetWare volumes, and sends that data to the Audit Server. The BVFSAUD NLM then performs a

complete software inventory of every mounted volume in the server, and sends the results to the Audit Server. Finally, the BVFSUAD NLM closes the connection with the Audit Server and waits until the next audit.

The audit interval for NetWare servers is set by a schedule in the BVFSAUD.INI file in the server's SYS:SYSTEM directory. You must manually edit the BVFSAUD.INI file with EDIT.NLM, INSTALL.NLM, or some other text-editing utility to change the interval between audits. Audits continue on the defined schedule while the BVFSAUD NLM is loaded.

▶ *To configure a NetWare server to be audited*

Before you begin, you must decide whether you want a complete hardware audit of the server or a simple software audit. If you do not intend to perform a hardware Audit, you only need to install the NLM and configure it. Skip to Step 4.

1. Using DOS, the File Manager, or the Windows Explorer, copy the files `LONEDOS.EXE`, `BVAUDIT.INI`, and `NIINFO.EXE` from the Standalone Auditing Disk for NetWare to the root of the `C:` drive on the server you wish to audit.

   This usually requires bringing the target server down. If you have the COPY.NLM or BVCOPY.NLM installed and you have not issued a `REMOVE DOS` or `SECURE CONSOLE` command on the server, you can copy the files to the server's `C:` drive while the server is still running.

   Consult your NetWare documentation for details.

2. Edit the target server's `C:\AUTOEXEC.BAT` to run `LONEDOS.EXE` prior to starting the NetWare operating system.

3. `LONEDOS.EXE` runs in the root directory of the `C:` drive and audits the server's hardware.

   Editing the `AUTOEXEC.BAT` usually requires the server to be down, unless you can still access your `C:` drive from the NetWare system console by running `EDIT.NLM` or `INSTALL.NLM`.

4. Modify the server's `AUTOEXEC.NCF` to `LOAD BVFSAUD` at any time during startup.

5. If editing the server's files required bringing it down, start the server.

6. On a machine connected to the server with privileges to access the `SYS:SYSTEM` directory, copy the file `BVFSAUD.NLM` and `BVFSAUD.INI` from the floppy to the server's `SYS:SYSTEM` directory.

7. Edit the `BVFSAUD.INI` file on the server and specify the name of the NETinventory Audit Server the BVFSAUD NLM should send audit data to. The selected Audit Server must be running version 6.0 or later of the Audit Server software. Any Audit Server, no matter what operating system it is running, can host the server's audits. If the server is itself an Audit Server, it can even host its own data.

8 Access the target server's system console, and load the NLM by typing `LOAD BVFSAUD`. The `BVFSAUD` NLM will load and initialize. The first audit occurs according to the schedule you set in `BVFSAUD.INI`, at which point the server's software inventory will be available.

After the first audit, the server appears in NETinventory databases as a node. The server's hardware information appears once the server has been rebooted and the standalone agent runs.

▶ *To retrieve DOS and Windows standalone node data*

Once the data on a standalone node has been collected, it must be merged with the data on your Audit Servers in order to retrieve it as part of a query. The data is stored by the Standalone Audit Agent in a file with a *.RAW extension, where the first part of the file's name is a serial number assigned during the audit.

1 Open the **NETinventory Setup** dialog. Click the **Standalone Auditing Configuration** icon. The **Standalone Auditing Configuration** panel appears.

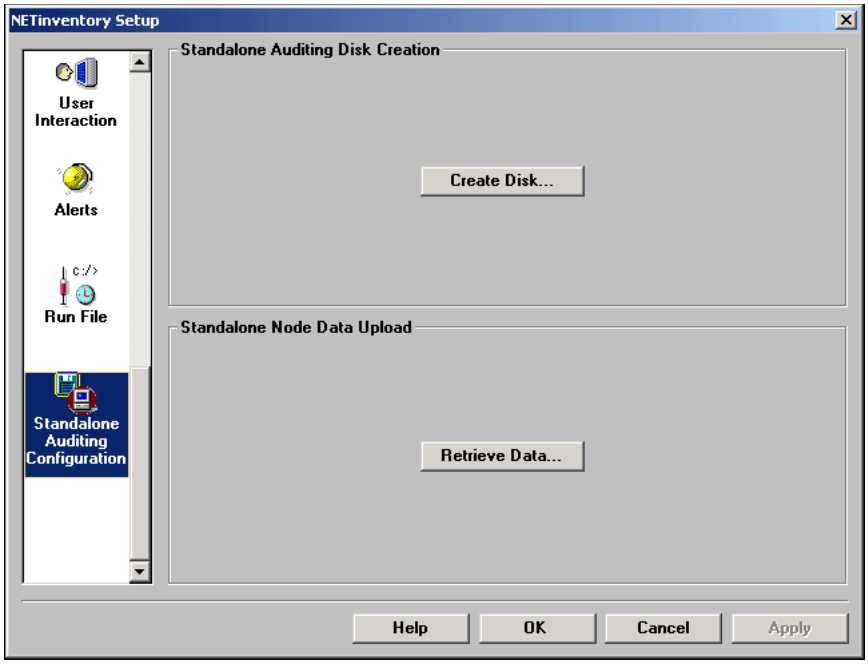


Fig. 70 Standalone Auditing Configuration Panel

2 Click the **Retrieve Data** button and the **Select Path** panel appears.

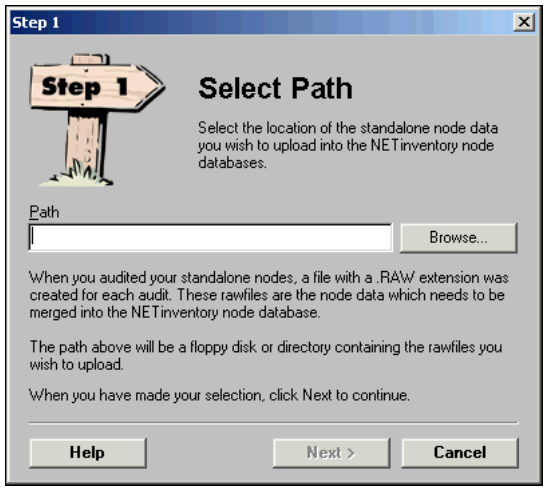


Fig. 71 Select Path Panel

3 Type a path where the wizard can find *.RAW files created by the Standalone Audit Agent or click **Browse** and locate the files. Click **Next**. The **Choose Nodes** panel appears.

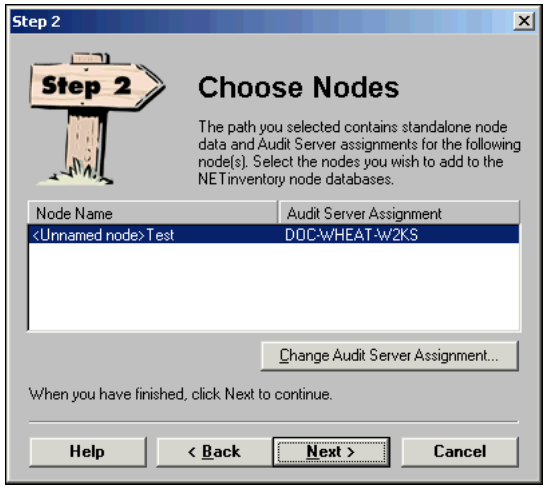


Fig. 72 Choose Nodes Panel

The wizard scans the path you give it for all of the *.RAW files it can find and uses the New Node Assignment rules to assign the node to an Audit Server (see "Audit Server Assignment Rules" on page 151). The nodes and the assigned Audit Servers are listed in the dialog.

4 To manually reassign the Audit Server where a node is assigned, select its name (or Shift-click or Control-click to select multiple nodes) and click **Change Audit Server Assignment** (or double-click the node) to select a new Audit Server.

5 Click **Next**. The **Process Data Now** panel appears.

Fig. 73 Process Data Now Panel

The NETinventory Audit Server can process the new data and include it in its databases immediately or wait until the next scheduled merger. To have the data processed immediately, select **Yes**. To wait until the next scheduled merger, select **No**.

For more information on configuring how often the Audit Server merges data, please see "To change Audit Server tuning options" on page 138.

6 Click **Next**. The **Summary** panel appears.

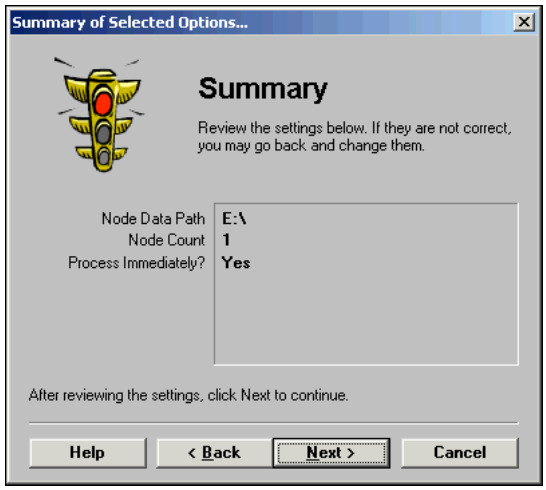


Fig. 74 Summary Panel

7 The **Upload Standalone Audit Node Data - Summary** panel displays a summary. To make a change, click **Back** and make the change. To proceed, click **Next**.

The data collected by the Standalone Audit Agent is uploaded to the Audit Server(s). When the upload is complete, the **NETinventory Setup** dialog appears. The data is merged into the Audit Server database automatically.

5 Setting Up NETinventory Server Components

In This Chapter

Server Setup Panels 102
Master Server Settings 102
- Master Server and Data Rollup 102
- Master Server and NETinventory-RMS Snap-in 103
- Master Server Roles 103
- Master Server SQL Settings 104
- Updating the Master Server 112
- Controlling Synchronization 122
- Master Server Performance Tuning 124

Audit Server Settings 125
- Creating a New Audit Server 126
- Removing an Audit Server 134
- Changing Audit Server Protocol Settings 136
- Setting Audit Server Restrictions 137
- Setting Audit Server Tuning Options 138

Login Server Settings 139
- Running the Audit Agent when Logging In 139
- Modifying Login Server Settings 140
- Creating a New Login Server 141
- Audit Agents and Windows NT Servers 147
- Audit Agents and NetWare Login Scripts 147
- Removing a Login Server 148

Site Configuration 149
Audit Server Assignment Rules 151
- Modifying Audit Server Assignment Rules 152

Account Configuration 156

Server Setup Panels

The server configuration/setup panels allow you to configure the NETinventory Master, Audit, and Login Servers, and the node routing information used when nodes are audited for the first time. To access these panels open the **NETinventory Setup Navigator** (Fig. 75), and click **Server Setup**.

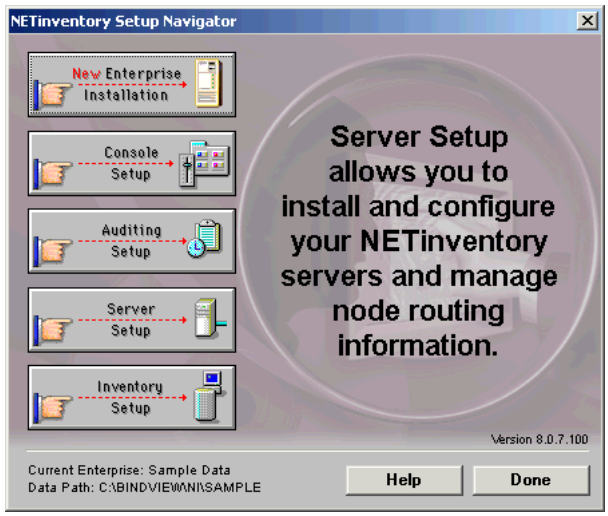


Fig. 75 NETinventory Setup Navigator Dialog

Master Server Settings

The Master Server keeps the Audit and Login Servers on your Enterprise Network synchronized. The Master Server periodically connects to each Audit and Login Server on the Enterprise Network and verifies that they all have their required files and databases, and that they are all using the same version of the Audit Server software and Audit Agents.

The Master Server also replicates Audit, Server, and Inventory Setup settings to the Audit and Login Servers when needed and keeps the Audit Server Routing Tables synchronized.

Master Server and Data Rollup

If you choose to turn on server data rollup, the Master Server hosts duplicate copies of some of the information on the Audit Servers. If you choose to use data rollup when you set your Reporting Configuration, data for some queries will be drawn from the Master Server, rather than from the Audit Servers.

Collecting information from the Master Server speeds query processing. To review setting the Reporting Configuration to use rolled up data, see “Setting the Reporting Configuration” on page 49.

To use data rollup, it must be enabled for the Master Server and for the Audit Servers. Please see “To set Master Server tuning options” on page 124 for information on turning rollup on, and see “To change Audit Server tuning options” on page 138 for information on including or excluding Audit Servers.

Master Server and NETinventory-RMS Snap-in

The Master Server also updates the SQL databases used by the NETinventory snap-in for the BindView RMS Console. The SQL databases are similar to, but separate from, server data rollup. When you enable SQL rollup, data is collected from the Audit Servers on your network to a SQL database maintained by the Master Server. You can then configure NETinventory-RMS to report on the data in the SQL database.

Note: Any tool which can retrieve data from a SQL database can retrieve NETinventory data from the SQL rollup database.

Master Server Roles

The Master Server hosts the **master copy** of the NETinventory Routing Table and synchronizes it to every Audit Server in your enterprise. The Routing Table on each Audit Server in your enterprise should be a replica of every other Routing Table. The Master Server continually updates its own Routing Table, then updates the Routing Table for each Audit Server. The Routing Table determines which Audit Servers accept audit information from specific nodes in your enterprise network.

Whenever a node logs in to a Login Server, the Login Server starts the correct Audit Agent on the node and instructs the agent to connect to the Login Server's Primary Dispatch Audit Server. The dispatch Audit Server uses its Routing Table to route the node to the correct Audit Agent.

If the node has never been audited, the node is assigned to an Audit Server based on the Audit Server Assignment Rules. See "Audit Server Assignment Rules" on page 151 for information on setting these rules.

If the node has been audited, it is routed to the appropriate Audit Server (unless Audit Server Audit Restrictions overrule the assignment). Audit Restrictions are discussed in greater detail under "Audit Server Settings" on page 125.

You can also begin immediate synchronization and set detailed performance tuning options in the **Master Server Setup** panel.

▶ ***To modify Master Server settings***

Open the **NETinventory Setup** dialog. The **Master Server Settings** panel appears.

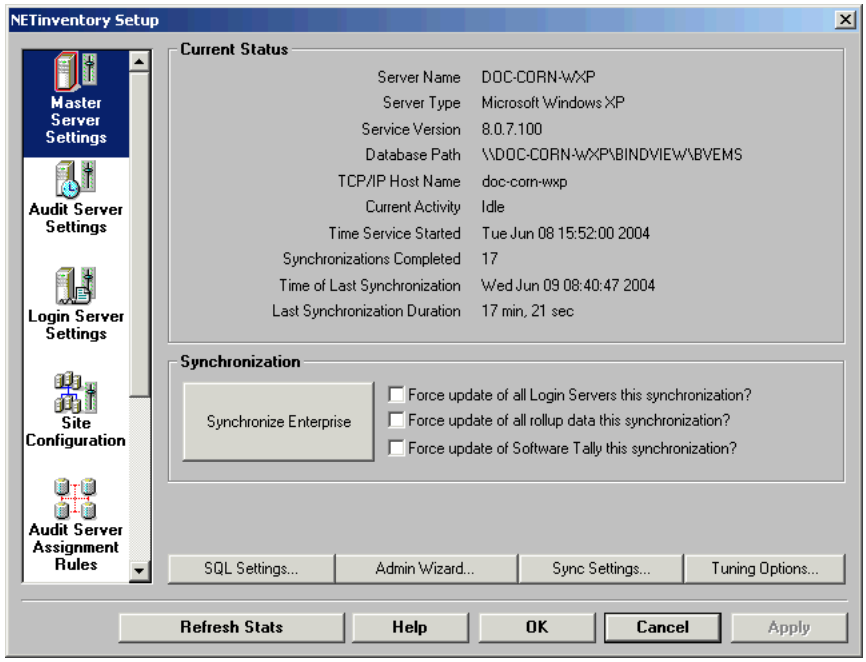


Fig. 76 Master Server Settings Panel

Master Server SQL Settings

The NETinventory Master Server can roll up audit data from Audit Servers to a SQL database. The SQL database can be on any machine the Master Server can access.

Data rolled up to the SQL database can be accessed and reported on using the NETinventory snap-in for the BindView RMS Console. The NETinventory-RMS snap-in allows you to integrate your NETinventory data with that provided by the other BindView RMS Console snap-ins and to use the querying and reporting tools in the BindView RMS Console to process queries.

When you configure SQL database rollup, you must specify the name of the machine hosting the Microsoft SQL Server and the path on the machine where the data should be stored. The following versions of Microsoft SQL Server are supported for storing data:

- Microsoft SQL Server 7.0
- Microsoft SQL Server 2000
- Microsoft SQL Server Desktop Engine (MSDE) 7.0
- Microsoft SQL Server 2000 Desktop Engine (MSDE 2000)

Note: The MSDE 2000 installer is included on the NETinventory product installation disc. It is also required to use the BindView RMS Console and Information Server, and is included on the BindView RMS Console and Information Server installation disc.

MSDE data storage is suitable for networks with up to 10,000 nodes. If you have more nodes, you should use Microsoft SQL Server to store the NETinventory SQL Database. In addition, if you will have more than 4 clients (BindView Information Servers or SQL Clients) accessing the NETinventory data, you should use Microsoft SQL Server.

▶ *To enable NETinventory SQL database rollup*

If the currently selected Master Server already is configured to use a SQL database, this option is not available.

1 Open the **Master Server Settings** panel and click **SQL Settings**.The **NETinventory SQL Database Configuration Wizard Welcome Page** appears.

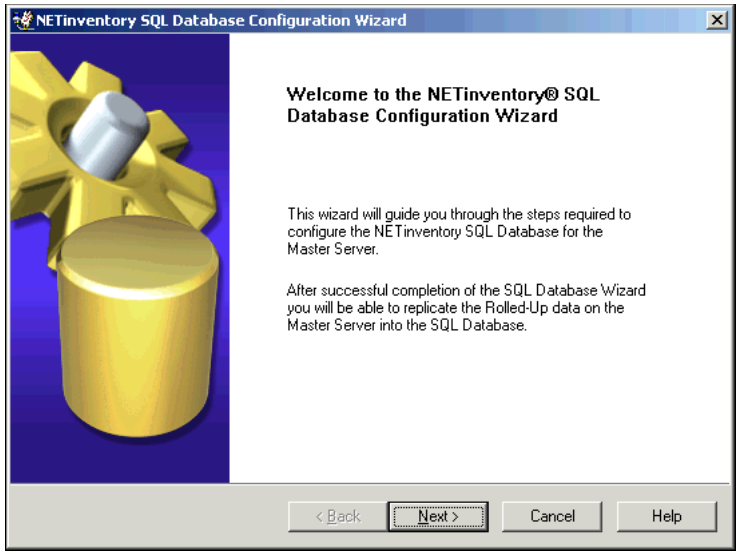


Fig. 77NETinventory SQL Database Configuration Wizard

2 Click **Next**. The **Select Operation** panel appears.

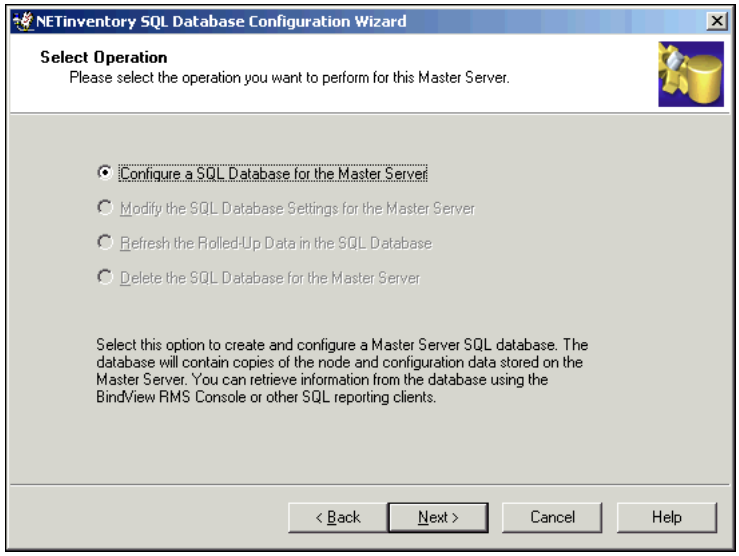


Fig. 78 Select Operation Panel

If no SQL Database exists, you can only create a SQL Database for the currently selected Master Server. Therefore, the only option available is **Configure SQL Database for the Master Server**.

3 Click **Next**. The **SQL Server and Database** panel appears.

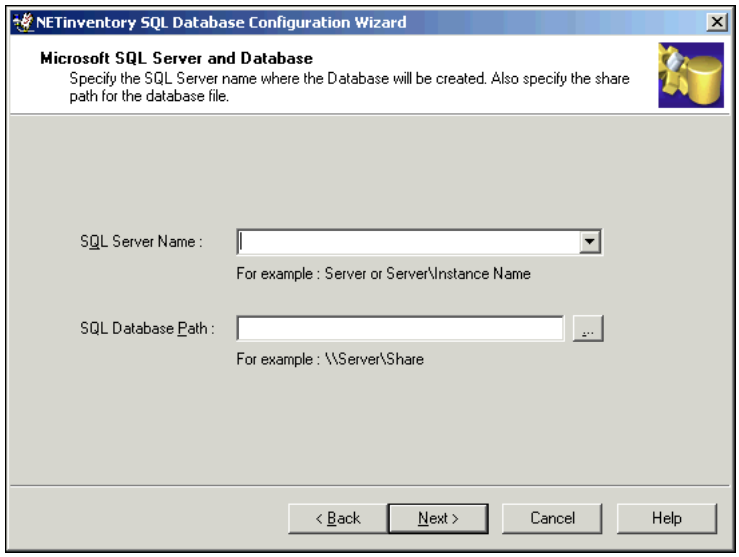


Fig. 79SQL Server and Database Panel

4 Enter the name of the SQL Server the Master Server should roll data up to in the **SQL Server Name** field or choose the server's name from the drop-down list. Click the browse (**...**) button or enter the path to the SQL database in the **SQL Database Path** field.

Note: If the SQL Server you select is set up to use Windows Authentication, it must be in the same domain or in a trusted domain of the machine which hosts the BindView Information Server you will use to access the information. If there is not a trust relationship between the two domains, you must use SQL Authentication instead.

5 Click **Next**. The **Summary** panel appears.

6 Click **Next**. The **Completing NETinventory SQL Database Configuration Wizard** panel appears. Make sure that **Perform Complete Database Synchronization** is selected and click **Finish** to create the database and roll data up into it.

An icon will appear in the System Tray on the Windows taskbar on the computer you use to enable SQL Rollup. When you double-click the icon, a dialog will appear allowing you to view the SQL Rollup status.

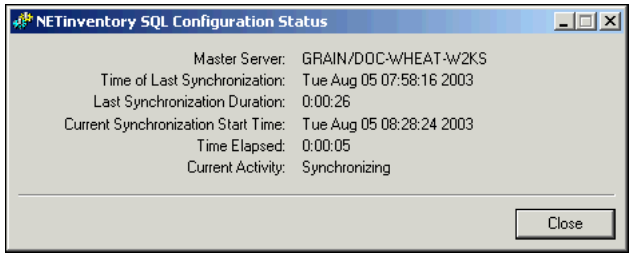


Fig. 80 NETinventory SQL Configuration Status Dialog

In the future, new and changed data will be rolled up to the SQL server whenever the Master Server synchronizes the Enterprise network.

Once you have audited nodes and a scheduled synchronization has taken place (by default, every hour), you will be able to use the NETinventory Snap-in for BindView RMS to retrieve NETinventory data from the SQL database.

Note: The initial data rollup to SQL may take up to several hours, depending on your network configuration and how much NETinventory data has been collected already.

▶ *To modify SQL database configuration*

1 Open the **Master Server Settings** panel and click **SQL Settings**.The **NETinventory SQL Database Configuration Wizard** Welcome page appears.

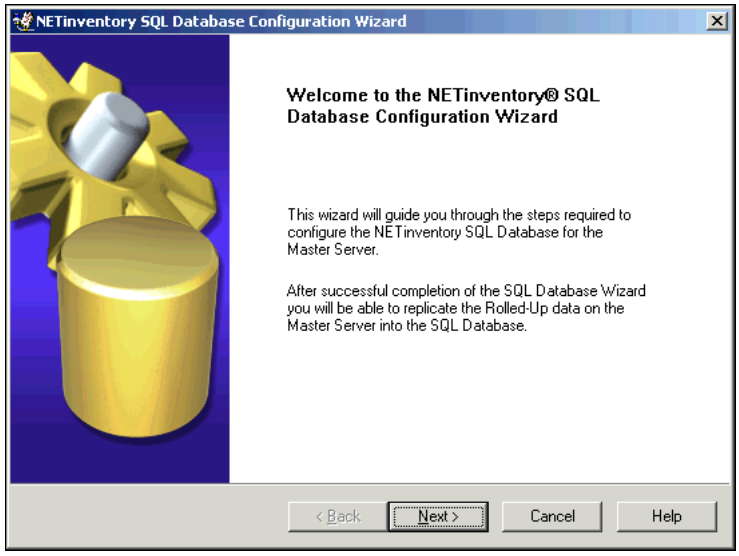


Fig. 81NETinventory SQL Database Configuration Wizard

2 Click **Next**. The **Select Operation** panel appears.

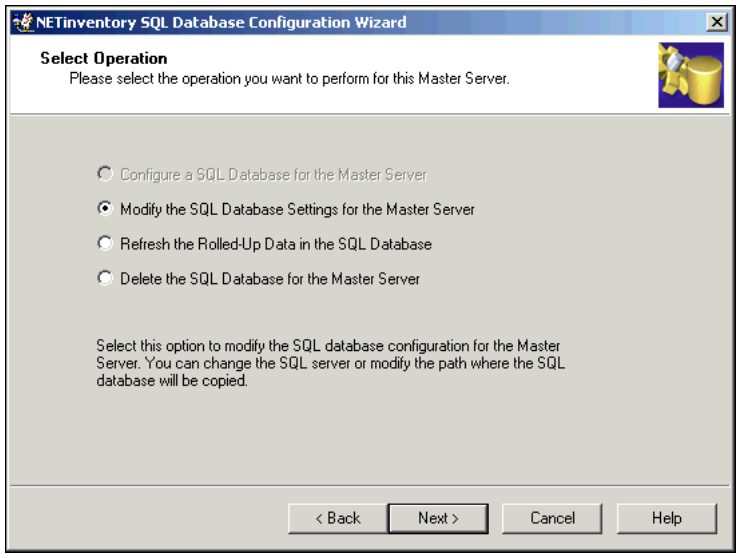


Fig. 82 Select Operation Panel

3 Choose **Modify SQL Database Settings for the Master Server**. Click **Next**. The **SQL Server and Database** panel appears with the current settings for the server in the fields.

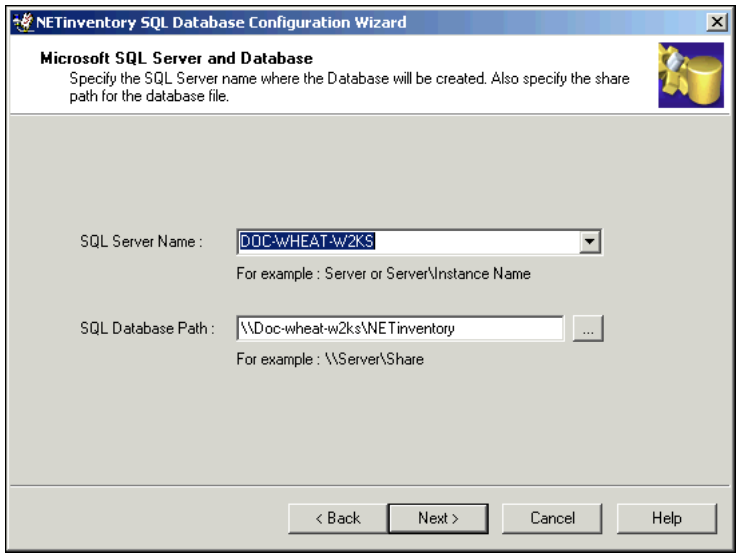


Fig. 83 SQL Server and Database Panel

4 Make any changes to the name of the SQL Server the Master Server should roll data up to in the **SQL Server Name** field. You can also choose the server's name from the drop-down list.

5 Click the browse (**...**) button or enter the path to the SQL database in the **SQL Database Path** field.

Note: If the SQL Server you select is set up to use Windows Authentication, it must be in the same domain or in a trusted domain of the machine which hosts the BindView Information Server you will use to access the information. If there is not a trust relationship between the two domains, you must use SQL Authentication instead.

---

6 Click **Next**. The **Summary** panel appears.

7 Click **Next**. The **Completing NETinventory SQL Database Configuration Wizard** panel appears. Make sure that **Perform Complete Database Synchronization** is selected and click **Finish** to modify the database and roll data up into it.

▶ *To refresh rollup data in the SQL database*

1 Open the **Master Server Settings** panel and click **SQL Settings**.The **NETinventory SQL Database Configuration Wizard** Welcome page appears.

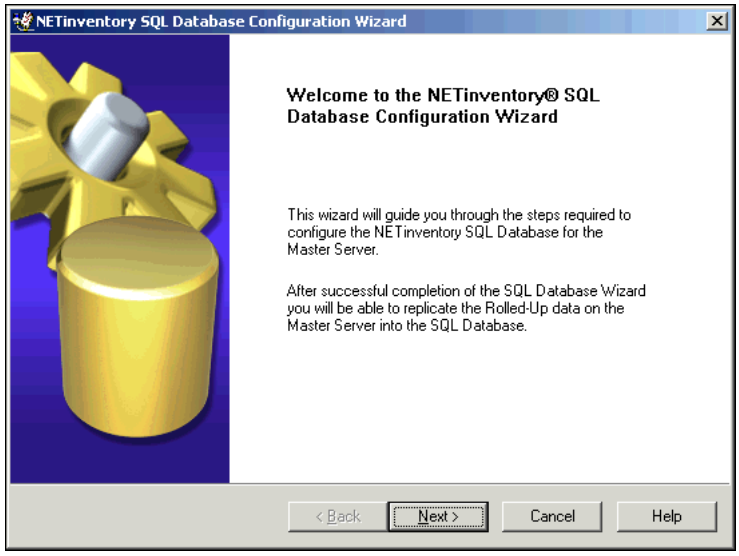


Fig. 84NETinventory SQL Database Configuration Wizard

2 Click **Next**. The **Select Operation** panel appears.

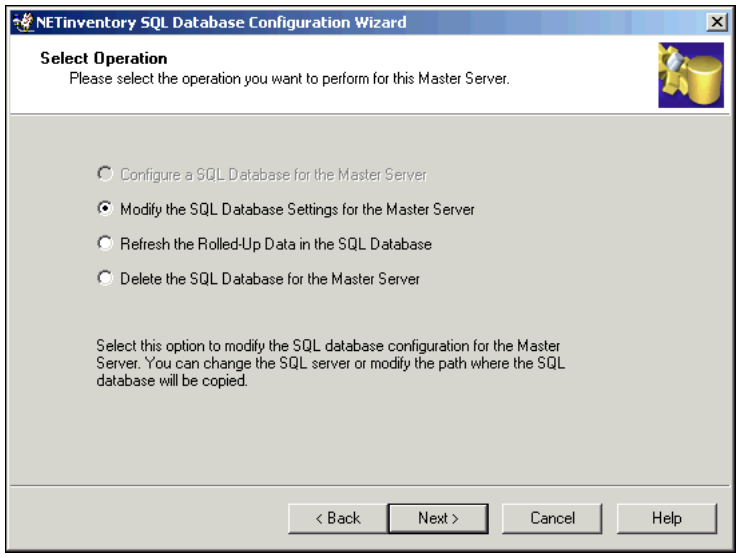


Fig. 85 Select Operation Panel

3 Choose **Refresh the Rolled-Up Data in the SQL Database**. Click **Next**. The **Summary** panel appears.

4 Click **Next**. The **Completing NETinventory SQL Database Configuration Wizard** panel appears. Click **Finish** to update the roll up data in the database.

▶ *To delete the SQL database*

1 Open the **Master Server Settings** panel and click **SQL Settings**.The **NETinventory SQL Database Configuration Wizard** Welcome page appears.

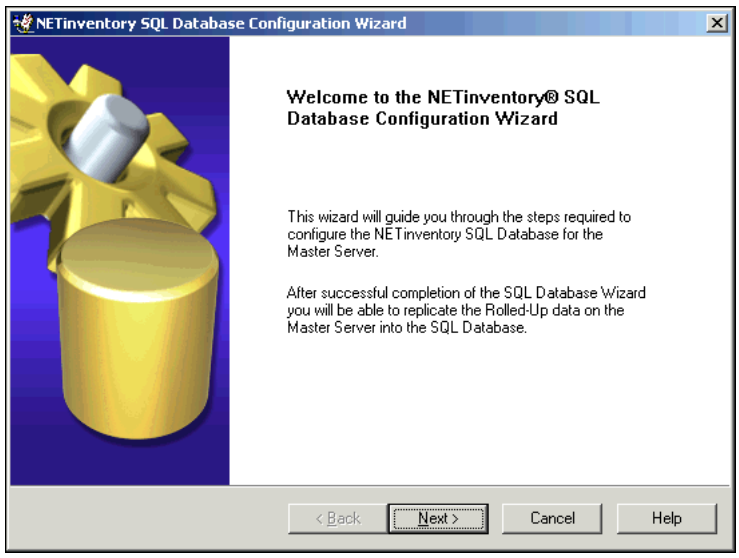


Fig. 86NETinventory SQL Database Configuration Wizard

2 Click **Next**. The **Select Operation** panel appears.

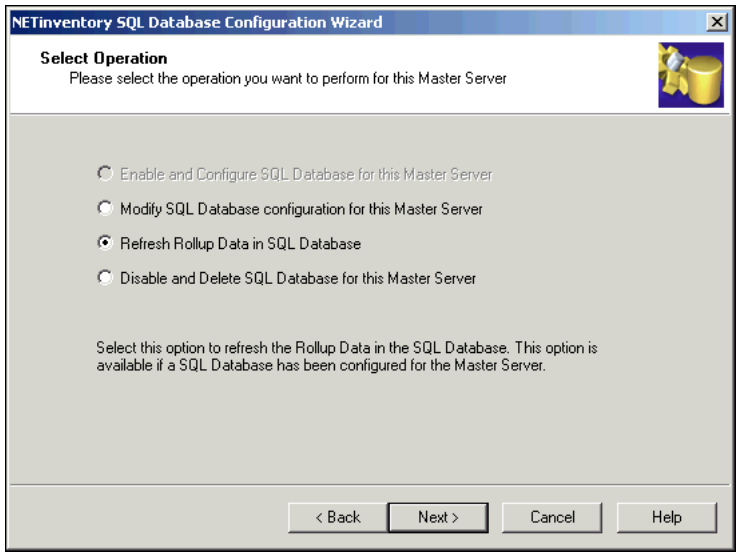


Fig. 87 Select Operation Panel

3 Choose **Delete the SQL Database for the Master Server**. Click **Next**. The **Summary** panel appears.

4 Click **Next**. The **Completing NETinventory SQL Database Configuration Wizard** panel appears. Click **Finish** to disable SQL database rollup and delete the existing database.

Updating the Master Server

When you upgrade the software or databases on the Master Server, the Audit and Login Servers on your network are upgraded in turn. The NETinventory Update Wizard is used to upgrade the software and databases on the Master Server.

▶ *To use the NETinventory Update Wizard*

The **Master Server Settings** panel allows you to update your Master Server software "in place" and to update your Master Server's NETinventory databases periodically.

1 Open the **Master Server Settings** panel and click **Admin Wizard**. The **NETinventory Update Wizard** dialog appears.

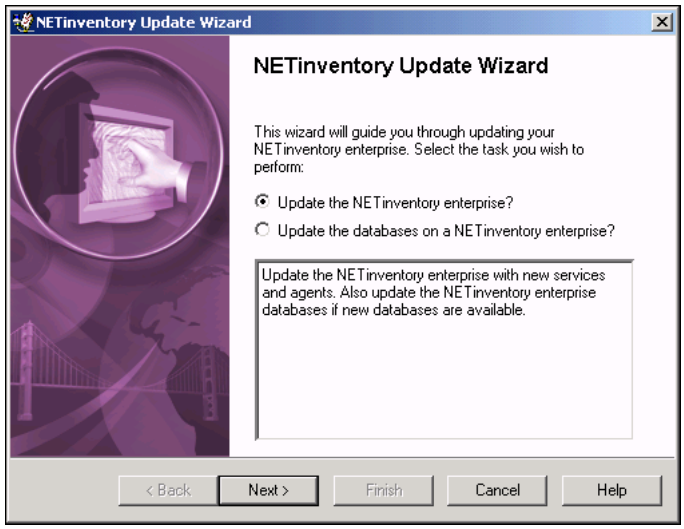


Fig. 88 NETinventory Update Wizard

2 The **NETinventory Update Wizard** can update the enterprise's servers to a new version of NETinventory server software or update the enterprise's databases. Select which task to perform and click **Next** to continue.

▶ *To update the NETinventory Enterprise*

When BindView releases new versions of the software used by Master, Audit, and Login servers, the NETinventory Update Wizard can update your existing servers to use the new software.

1 Open the **Master Server Settings** panel and click **Admin Wizard**. The **NETinventory Update Wizard** dialog appears.

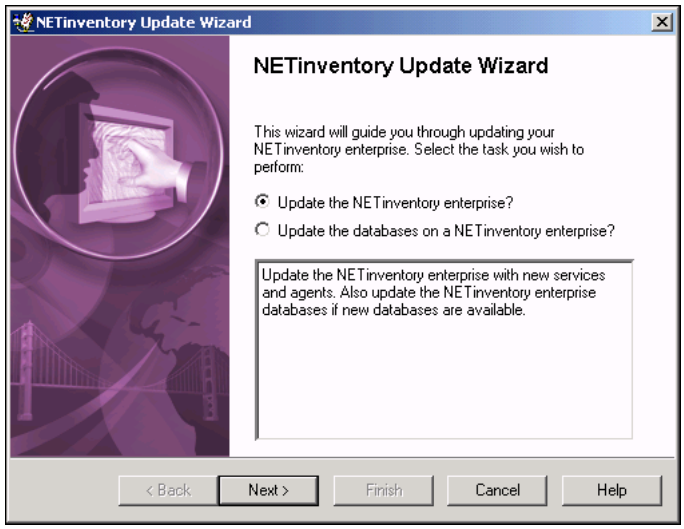


Fig. 89 NETinventory Update Wizard

2 Select the button labeled **Update the NETinventory enterprise.** Click **Next.** The **Locate the NETinventory Update Files** panel appears.

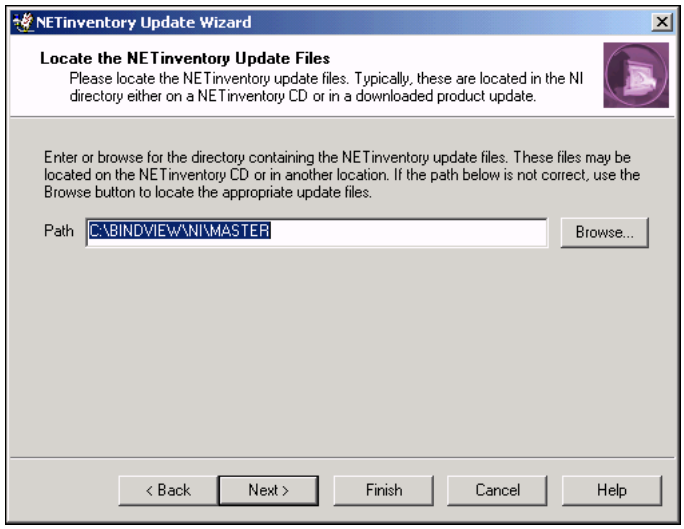


Fig. 90 Locate the NETinventory Update Files Panel

The wizard needs the location of the update files to update your enterprise. If you have one, insert the NETinventory Upgrade CD. Normally, the files are located in the `NI\MASTER` directory on the CD.

3 If you do not have an upgrade CD, click the **Browse** button to locate them. Click **Next** to continue. The **Master Server Information** panel appears.

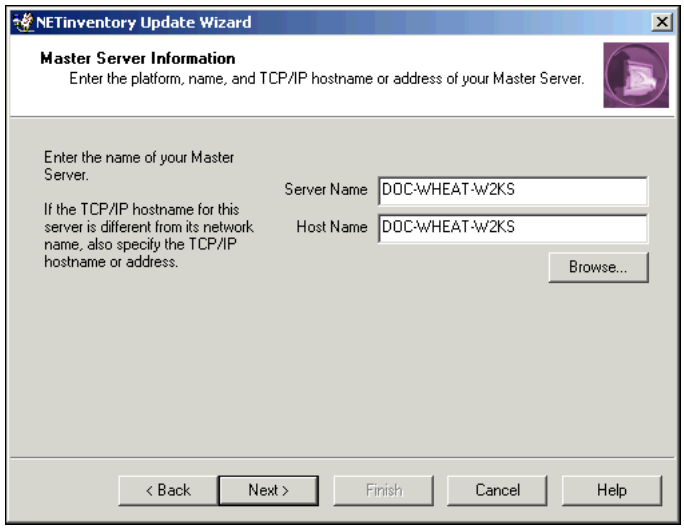


Fig. 91 Master Server Information Panel

4 Type the server's name in the **Server Name** field if it is not there already. If the server's TCP/IP Hostname is different from its name, type the Hostname *or* TCP/IP address in the **Host Name** field. If you are not sure of the exact spelling of the server's name or hostname, click **Browse** to locate it.

5 Click **Next** when you are ready to continue. The **Review Service Credentials?** panel appears.

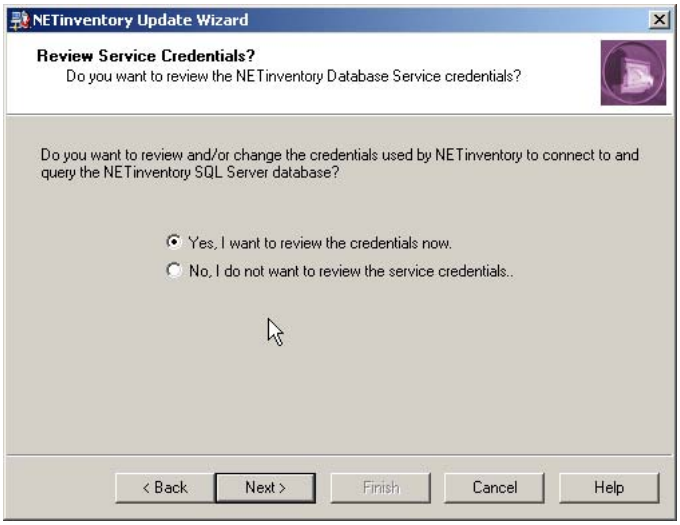


Fig. 92 Review Service Credentials? Panel

6 If you do not wish to review the credentials, click **No, I do not want to review the service credentials** and click **Next**. Skip to Step 8 on page 116.

To review the credentials, select **Yes, I want to review the credentials now** and click **Next**. The **Service Credentials** panel appears.

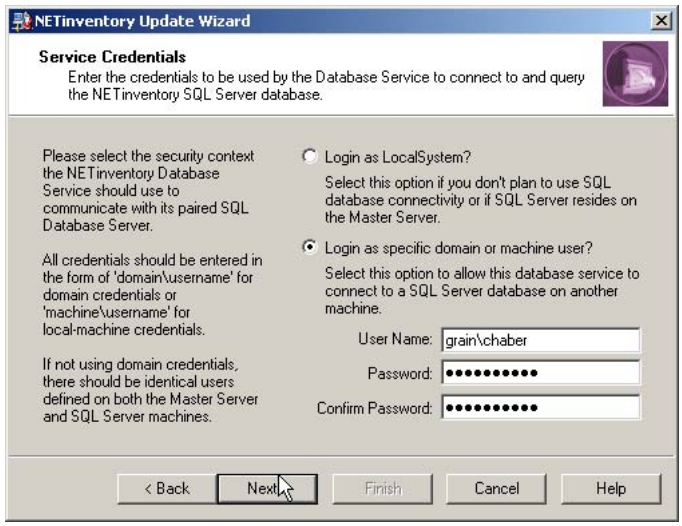


Fig. 93 Service User Context Panel

7 Select the Security Context to use for the NETinventory Database Service. If the Master Server and the SQL Server the Master Server uses are on the same machine you should select **Login as LocalSystem**.

If the Master Server is not on the same machine as the SQL Server, you should select **Login as specific domain or machine user** and enter a Username, Password and Domain that the BindView Database (BVBT) service should use when it runs. The username and password you supply should be a Local Admin on the computer hosting the Master Server or a Domain Admin in the domain.

8 Click **Next** to continue. The wizard verifies that the server you specified is a valid Master Server and the **Upgrade Enterprise Databases** panel appears.

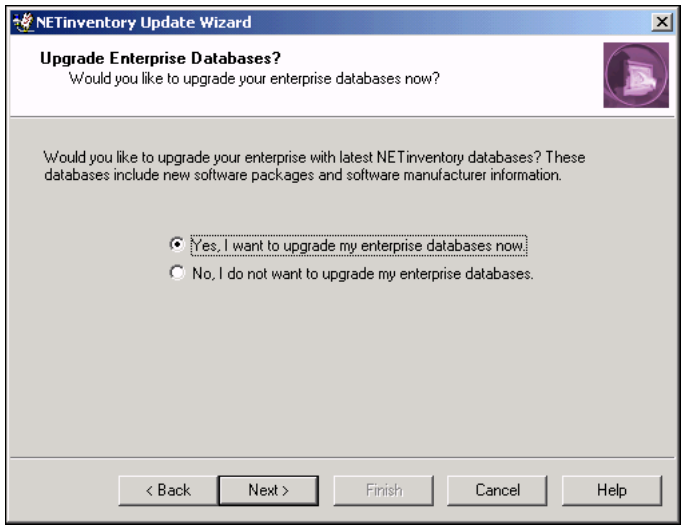


Fig. 94 Upgrade Enterprise Databases Panel

The wizard can upgrade the databases used by your enterprise while upgrading the software, integrating your database changes into the latest version of the databases shipped by BindView.

9 Select **Yes** if you would like to upgrade your databases now; Select **No** if you would prefer not to upgrade your databases.

10 Click **Next** to continue.

If you chose to upgrade your databases, the **Enterprise Database Upgrade Options** panel appears, as shown in Fig. 95. If you chose to not upgrade your Enterprise Databases, you may skip to Step 11 on page 117 to continue.

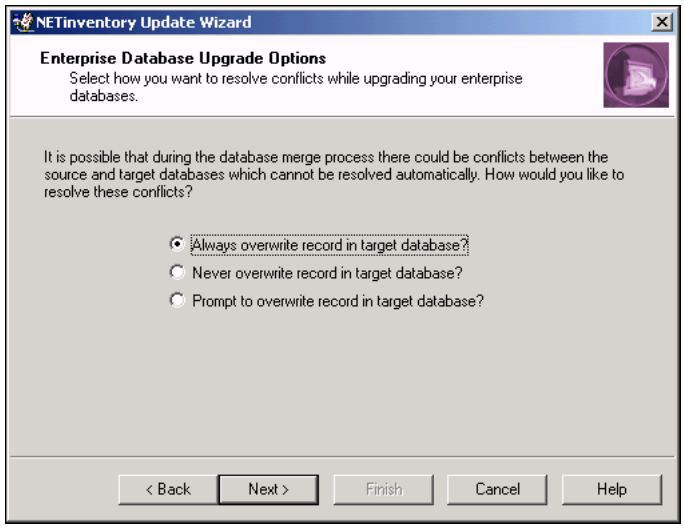


Fig. 95 Enterprise Database Upgrade Options Panel

The **Enterprise Database Upgrade Options** panel allows you to control how the wizard behaves if it finds new entries in the Master Software list distributed by BindView that match ones that you have created in the Custom Software list.

11 To keep the record distributed by BindView replacing the one you created, select **Always overwrite record in target database**.

To retain your modified record, select **Never overwrite record in target database**.

To have the wizard ask you which record to keep for each conflict it finds, select **Prompt to overwrite record in target database**.

Note: In most cases, the new record distributed by BindView will contain more complete information and you should use it. Information that only you can enter, such as comments, copies owned, and so on, is always preserved, even if the rest of the data in the record is replaced.

When you are ready to continue, click **Next**. The **Synchronize Master Server** panel appears.

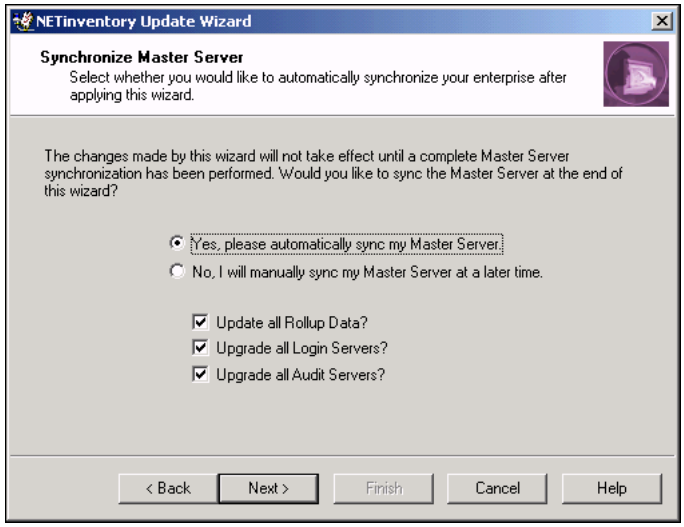


Fig. 96 Synchronize Master Server Panel

The updates the wizard makes will not take effect until your entire network has been synchronized. The wizard allows you to force the entire network to synchronize as soon as the Master Server update is complete. This synchronization can take a number of hours, since every server's software will be updated. You can also wait until a later time and synchronize manually.

12 Select **Yes** to force immediate synchronization; select **No** to perform the synchronization manually later.

If you choose to synchronize automatically, you can also choose to update all rollup data and upgrade the Login Server and Audit Server software separately from the synchronization.

Click **Next**. The **Wizard Summary** panel appears.

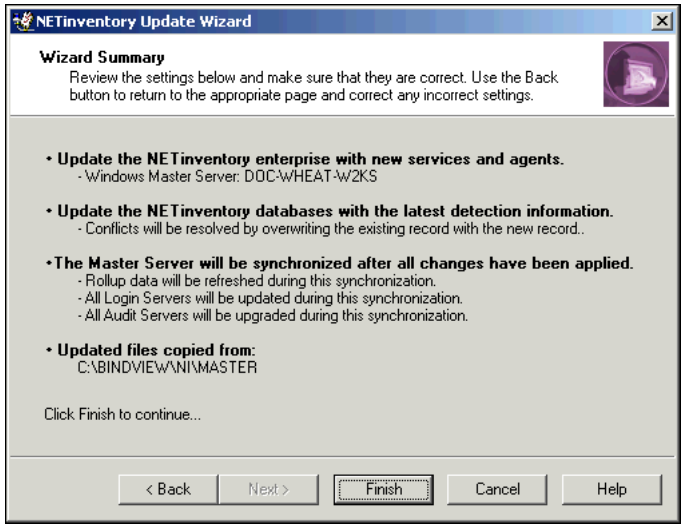


Fig. 97 Wizard Summary Panel

13 The **Wizard Summary** panel describes the choices you have made. To change the settings, use the **Back** button to return to the appropriate page and make a change. Click **Finish** and the wizard will update your enterprise. A progress panel appears.

▶ *To Update the Master Server Databases*

New versions of the Master Server databases are released routinely by BindView. Contact BindView Technical Support or visit the BindView Web site at http://www.bindview.com for information on obtaining the latest release of the NETinventory Master Server Databases.

The **NETinventory Update Wizard** allows you to update your existing Master Server database files.

1 Open the **Master Server Settings** panel and click **Admin Wizard**. The **NETinventory Update Wizard** dialog appears.

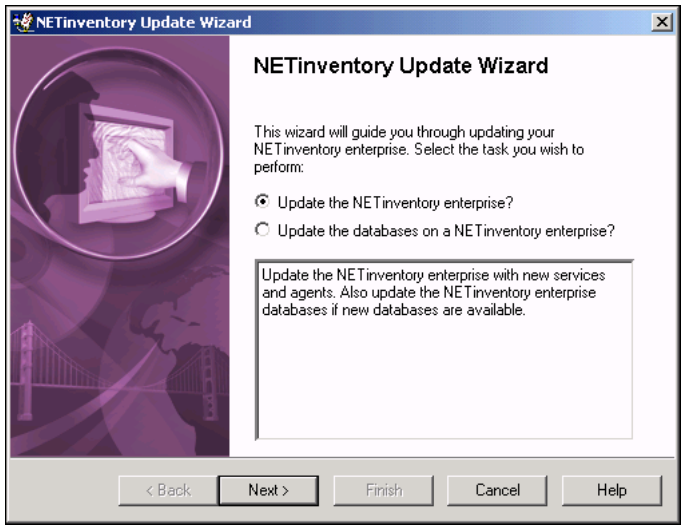


Fig. 98 NETinventory Update Wizard

2 Select the **Update the databases on a NETinventory enterprise** button and click **Next.** The **Locate the NETinventory Update Files** panel appears.

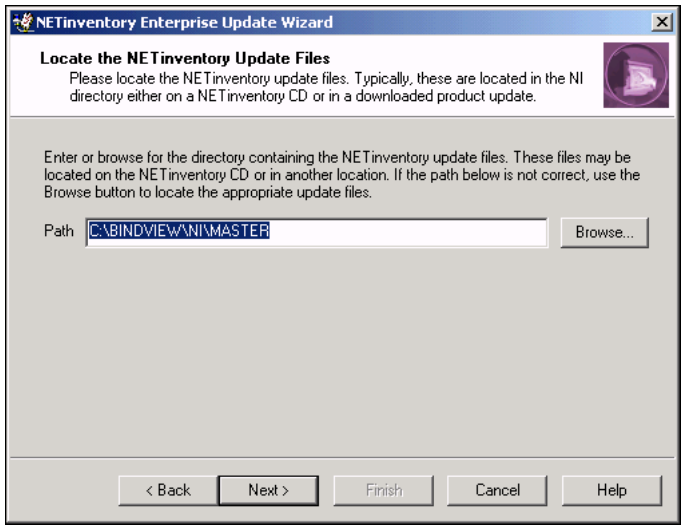


Fig. 99 Locate the NETinventory Update Files Panel

3 The wizard needs the location of the update files to update your enterprise. If you have a NETinventory Upgrade CD, insert it. Normally, the files are located in the `NI\MASTER` directory on the CD.

4 If you do not have an upgrade CD, click the **Browse** button to locate them. Click **Next** to continue. The **Master Server Information** panel appears.

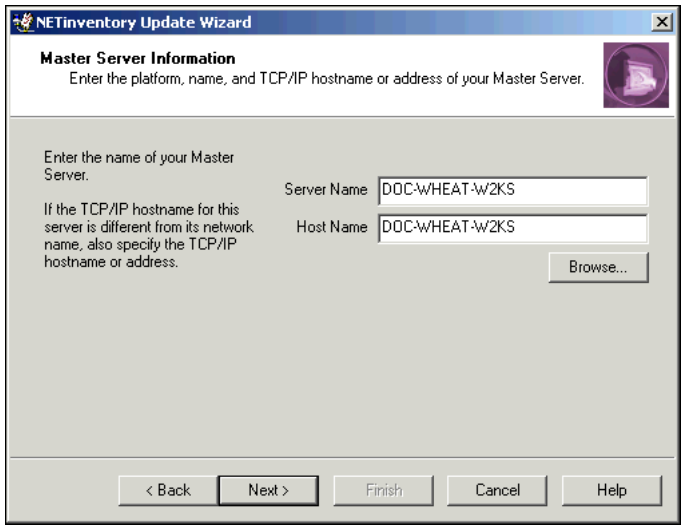


Fig. 100 Master Server Information Panel

5 Type the server's name in the **Server Name** field. If the server's TCP/IP Hostname is different from its name, type the Hostname *or* TCP/IP address in the **Host Name** field. If you are not sure of the exact spelling of the server's name or hostname, click **Browse** to locate it. Click **Next to** continue.

6 Enter a Username, Password and Domain that the BVBT service should use when it runs. The username and password you supply should be a Local Admin on the computer hosting the Master Server or a Domain Admin in the domain.

7 Click **Next** when you are ready to continue. The wizard verifies that the server you specified is a valid Master Server and the **Enterprise Database Upgrade Options** panel appears.

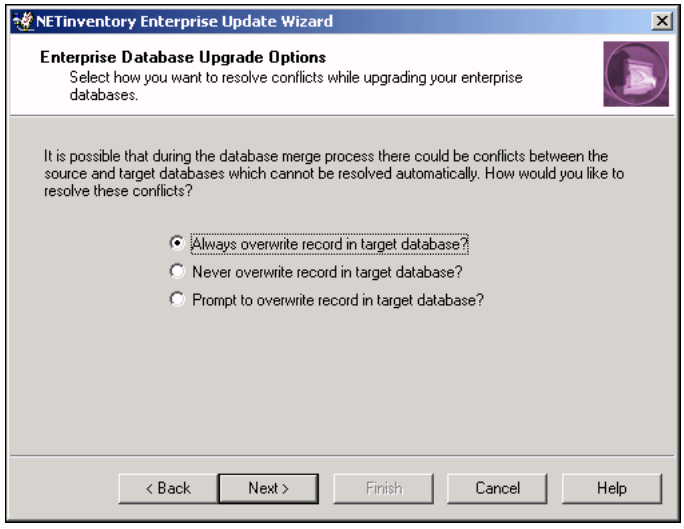


Fig. 101 Enterprise Database Upgrade Options Panel

The **Enterprise Database Upgrade Options** panel allows you to control how the wizard behaves if it finds new entries in the Master Software list distributed by BindView that match ones that you have created in the Custom Software list.

8 Select **Always overwrite record in target database** to keep the record distributed by BindView, replacing the one you created

Select **Never overwrite record in target database** to retain your modified record.

Select **Prompt to overwrite record in target database** to have the wizard ask you which record to keep for each conflict it finds.

Note: In most cases, the new record distributed by BindView will contain more complete information and you should use it. Information that only you can enter, such as comments, copies owned, and so on, is always preserved, even if the rest of the data in the record is replaced.

---

9 Click **Next**. The **Synchronize Master Server** panel appears.

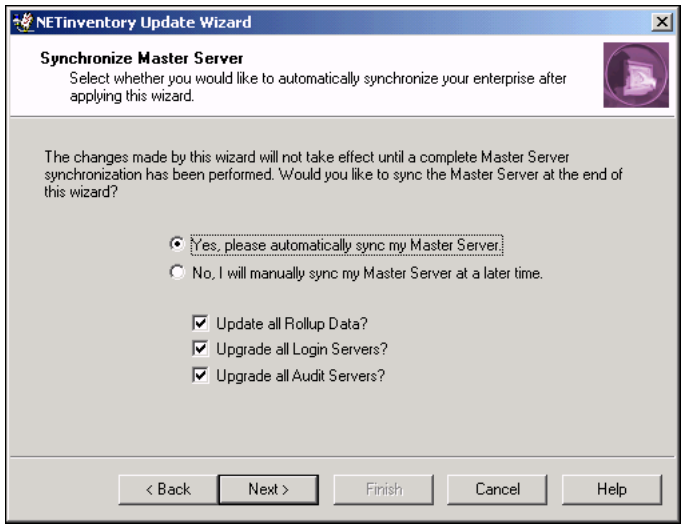


Fig. 102 Synchronize Master Server Panel

The updates the wizard makes will not take effect until your entire network has been synchronized. The wizard allows you to force the entire network to synchronize as soon as the Master Server update is complete. This synchronization can take a number of hours, since every server's software will be updated. You can also wait until a later time and synchronize manually.

10 Select **Yes** to force immediate synchronization; select **No** to perform the synchronization manually later.

If you choose to synchronize automatically, you can also choose to update all rollup data and upgrade the Login Server and Audit Server software separately from the synchronization.

11 Click **Next**. The **Wizard Summary** panel appears.

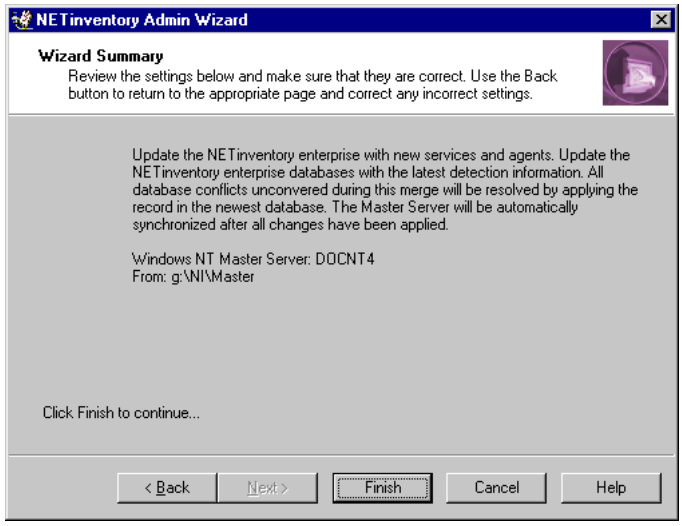


Fig. 103 Wizard Summary Panel

12 The **Wizard Summary** panel describes the choices you have made. To change the settings, use the **Back** button to return to the appropriate page and make a change. Click **Finish** and the wizard will update your enterprise. A progress panel appears with the status of the update. When the update is complete, the wizard will close.

Controlling Synchronization

You can control how often the Master Server synchronizes the settings and routing tables it stores with the copies kept on each Audit Server and Login Server.

▶ ***To force immediate synchronization***

1 Open the **Master Server Settings** panel.

2 Click **Synchronize Enterprise**.

When you synchronize manually, select **Force update of all Login Server this synchronization** to update all Login Servers immediately. Since very little information changes on Login Servers, the Master Server normally only synchronizes one of every ten Login Servers on each synchronization. After the synchronization is complete, NETinventory automatically clears the check box.

When you upgrade Audit Agents, changes to Audit Server Assignment Rules (see “Audit Server Assignment Rules” on page 151) or other major changes, you may want to roll your changes out to all Login Servers immediately.

Select **Force update of all rollup data this synchronization?** to force the Master Server to perform a complete synchronization of all rolled up data.

Select **Force update of Software Tally this synchronization?** to force the Master Server to count software licenses detected on audited nodes.

▶ *To set the synchronization interval*

1. Open the **Master Server Settings** panel.
2. Click **Sync Settings**. The **Synchronization Settings** dialog appears.

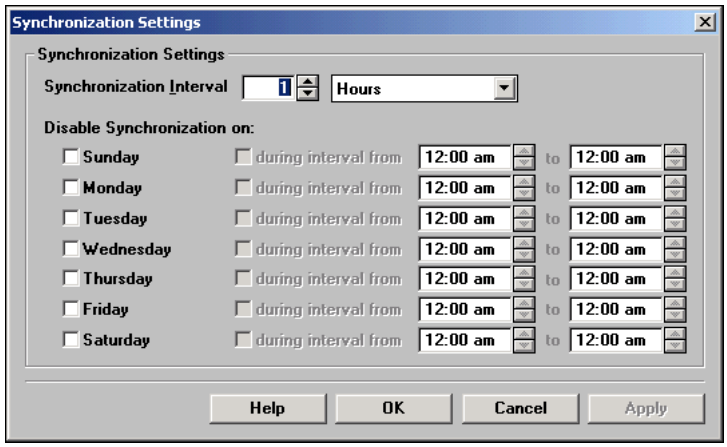


Fig. 104 Synchronization Settings Dialog

Set the interval in increments of Minutes, Hours, Days, or Weeks. The minimum Synchronization Interval is 1 hour, the maximum is 7 days.

You can disable automatic synchronization for specified days of the week, or for time ranges for each day. You may want to suppress synchronization to control the impact of synchronization on network resources.

Warning: Even though you can disable synchronization entirely by disabling it on every day of the week, you should never do so. You must allow the Master Server to perform a synchronization at least one time per week. If you do not, the Master Server will not be able to update the Audit and Login Server software and databases. Query results, especially those using the NETinventory snap-in for the BindView RMS Console, will be incorrect.

Note: BindView strongly recommends that you synchronize daily. You should synchronize several times a day whenever possible. You should allow synchronization as often as network usage permits.

3. Click **OK** to close the dialog and save changes or click **Cancel** to close the window without saving changes.

Master Server Performance Tuning

The Master Server Performance Tuning Options allow you to tune the Master Server to your network environment. Normally the default options will work for almost every enterprise network.

▶ ***To set Master Server tuning options***

1 Click **Tuning Options**. The **Master Server Tuning Options** dialog appears.

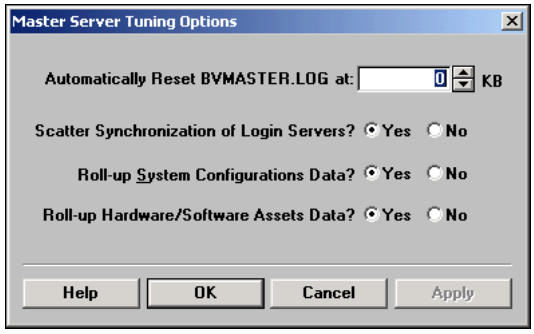


Fig. 105 Master Server Tuning Options Dialog

Caution: While you can make changes to the Master Server Performance Tuning Options, the defaults should give the best results in most circumstances. Changes from the defaults can severely impair the performance of your NETinventory enterprise. Generally, you should only make changes to these settings—except for rollup—if you have consulted with BindView Technical Support.

The options in this dialog tune the following Master Server performance parameters:

Automatically Reset BVMASTER.LOG at ... KB
The maximum size of the event log the Master Server keeps. The log size is expressed in kilobytes (KB).

Scatter Synchronization of Login Servers?
If **Yes** is selected, the Master Server will only contact ten percent of the Login Servers during each synchronization. Normally, this should be set to **Yes** since relatively few changes are made to the Login Servers during each synchronization.

Roll-up System Configurations Data?
If **Yes** is selected, the Master Server collects Node Data from Audit Servers which have Rollup enabled and stores a duplicate copy on the Master Server.

If the data is Rolled up, *and* the Master Server is the Primary Data Path, *and* the Master Server is set to use Rolled Up data, then queries will retrieve some of the Node Data from the Master Server rather than the Audit Server where it originated.

Storing the data on the Master Server can greatly increase the speed at which queries are processed, but there is a chance that the data may be out-of-date; the Audit Server may have newer data than the data rolled up to the Master Server.

If you enable data rollup, changed data is rolled up to the Master Server during each synchronization.

Roll-up Hardware/Software Assets Data?
If **Yes** is selected, the Master Server will collect Inventory Data from Audit Servers which have Rollup enabled and store a duplicate, consolidated copy on the Master Server in the same way that it collects Node Data.

Audit Server Settings

Audit Servers can be hosted by Windows or NetWare servers. The Audit Server Settings panel allows you to make changes to Audit Servers. You can configure the Audit Servers to use certain network communication protocols to either accept or deny audit information from certain Login Servers, or from certain network segments, and you can tune the performance of Audit Servers.

You may need to install additional Audit Servers to handle the auditing needs of your enterprise network. You should have at least one Audit Server set up for each 2000–3000 audited nodes. You can break the audited nodes down into smaller divisions by enterprise departments or regional organizations. You create and remove Audit Servers using the **Audit Server Settings** panel.

▶ ***To view Audit Server Settings***

1 Open the **NETinventory Setup** dialog and select the **Audit Server Settings** panel. The **Audit Server Settings** panel appears.

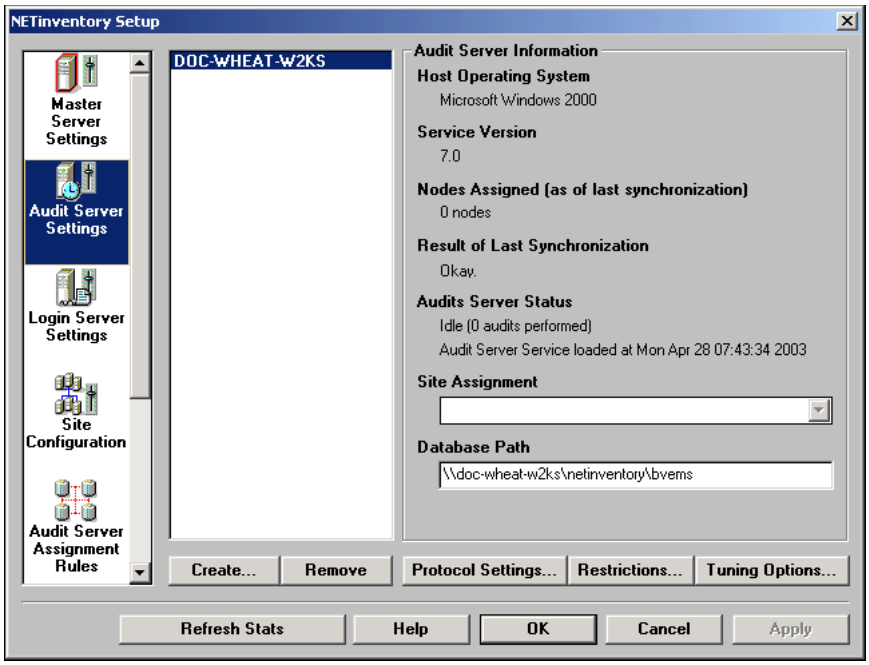


Fig. 106 Audit Server Settings Panel

2 Select an Audit Server in the Audit Server list.

The right side of the dialog shows basic information about the server, including statistics on the work the Audit Server has done since the last time it was loaded, the site it is assigned to, the location of the Audit Server databases on the server hosting the Audit Server, and whether the current version of the Audit Server is loaded.

3 You can assign an Audit Server to a new Site by selecting its name and choosing the site it should be assigned to from the **Audit Server Site Assignment** list of available sites. Refer to "Site Configuration" on page 149 for information about Sites.

Creating a New Audit Server

NETinventory lets you balance the load on your servers by dividing the Audit Server workload among multiple Audit Servers. You can create as many Audit Servers as you need. You should have one Audit Server to host every 2000-3000 nodes although you can have more Audit Servers if you choose.

▶ ***To create a new Audit Server***

1 Open the **Audit Server Settings** panel.

2 Click **Create**. The **Install New Audit Server** wizard starts, and the **New Audit Server** panel appears.

Fig. 107 New Audit Server Panel

3 The **New Audit Server** Panel allows you to choose between a guided process and *Expert Mode*. If you choose to use Expert Mode, the Audit Server Installation Wizard uses a single panel to prompt you to enter all of the information needed to create your new NETinventory Audit Server.

If you choose to use Expert Mode, the Audit Server Wizard will not validate the information you supply until it tries to create the new server. In normal mode, the Wizard performs more checks to ensure that your new Audit Server can be set up the way you desire on the server you select.

To use Expert Mode, select the box labeled **Expert Mode** in the **New Audit Server** panel. To use normal mode, leave the box unselected.

4 Click **Next**. The **Select Server** panel appears.

Fig. 108 Select Server Panel

Any NetWare 4, 5, or 6 server, or Windows NT 4.0 (with Service Pack 6a), Windows 2000, Windows XP, or Windows Server 2003 machine on your network can be an Audit Server. A server that is already hosting a Login Server can also host an Audit Server.

When you choose an Audit Server, keep in mind that it must store audit information from nodes for the NETinventory Console and the Master Server to retrieve. First-time audits require about 150 kilobytes of stored data per audited workstation. Over time, audit files may require 1 megabyte or more per workstation.

Dividing the work of storing audit information between Audit Servers speeds node auditing and prevents any single Audit Server from bearing too much of the auditing load.

5 Type the name of the machine hosting an Audit Server, or click **Browse** and use the Network browser to locate the machine. Click **Next** to continue.

The **Admin Account** panel appears.

Fig. 109 Admin Account Panel

6 Enter a valid Login Name and Password combination for the server. The Master Server will use the name and password to administer the Server.

If this is a Windows machine, the account must be a Domain Admin or a Local Admin on the machine. Enter the user name in one of these formats:

```
Domain\User Name
Machine Name\User Name
```

If this is a NetWare machine the account must have security equivalent to the ADMIN account. You must also choose to use a **Bindery Login** or a **Directory Services Login**. If using a Directory Services Login, you also specify the tree the server is a part of.

You may wish to create a new user for this purpose.

Click **Next** and the **Database Path** panel appears.

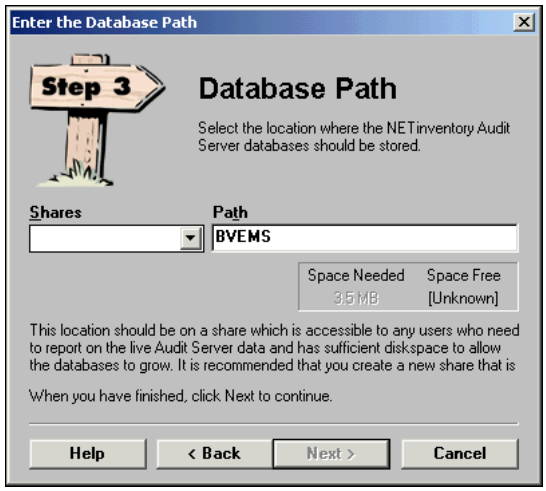


Fig. 110 Database Path Panel

7 You must set the location on the server where the Audit Server database files will be stored. Select an existing share or volume from the **Shares** or **Volume** drop-down list.

Note: Every user who will report on audit data using the NETinventory Console must have access to the share or volume. Consider creating a new share or volume specifically for NETinventory to use.

---

8 Enter a path on the selected share or volume to store the files. The default directory is `BVEMS`. Click **Next** to proceed.

On NetWare Audit Servers, the **Verify Btrieve Settings** panel appears, as shown in Fig. 111. For a Windows Audit Server, skip to Step 9.

Fig. 111 Verify Btrieve Settings Panel

NETinventory requires the Btrieve NLM on NetWare Audit Servers. The setup wizard verifies that version 6.10c or later of Btrieve is installed on the selected Audit Server. If an earlier version of Btrieve is installed on the selected server, you will need to update it to version 6.10c or later to complete the NETinventory installation.

If the correct version of Btrieve is installed, but the Btrieve settings are not correct for NETinventory to work properly, the setup wizard can automatically update the Btrieve settings. The setup wizard will prompt you to change the Btrieve settings if necessary.

9 Click **Next** in the **Verify Btrieve Settings** panel to continue. The **Select Site** panel appears.

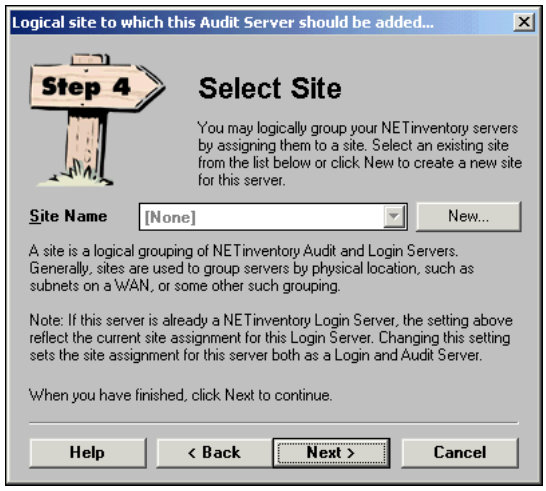


Fig. 112 Select Site Panel

10 Audit Servers can be assigned to a *Site.* If you have already created a site, select it from the drop-down list of available sites or click **New** to create a new Site. The **Enter New Site Information** dialog appears.

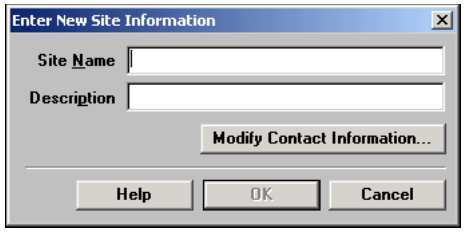


Fig. 113 Enter New Site Information Dialog

11 Type a name for the site in the **Site Name** field and one line of identification information in the **Description** field. Click **OK** to close the dialog and save your changes. For more information about sites, see “Site Configuration” on page 149.

12 Click **Next** to continue. The **Reporting Account** panel appears.

Fig. 114 Reporting Account Panel

The reporting account is used to connect to an Audit Server when a user reports on data stored on that Audit Server. If you do not enter a reporting account, users will be prompted to log in to the Audit Server if they are not already logged in. If the NETinventory Console uses the Reporting Account to connect to a server, it disconnects from the server after it has collected information from the server.

The Reporting Account allows users who cannot access the NETinventory directory on the server to perform queries. You can also use Rollup data or enable SQL storage of data and use the NETinventory-RMS snap-in to allow access to the data.

13 Type a **Login** name and **Password** to use for the Audit Server Reporting Account

If this is a Windows machine, enter the user name in one of these formats:

```
Domain\User Name
Machine Name\User Name
```

If this is a NetWare machine then the account must have equivalent security to the ADMIN account. You must also choose to use a **Bindery Login** or a **Directory Services Login**. If using a Directory Services Login, you also specify the tree the server is a part of.

14 Click **Next** to continue. The **Protocol Selection** panel appears.

Fig. 115 Protocol Selection Panel

This panel sets the communications protocol Audit Agents use to communicate with this Audit Server. You also use this panel to set the TCP/IP Hostname or Address of the Audit Server.

On NetWare-based Audit Servers, you can use the IPX or TCP/IP protocols. On Windows-based Audit Servers, you must use TCP/IP.

15 Select the protocol to use. If the Audit Server will use TCP/IP, type its TCP/IP hostname or address in the **TCP/IP Hostname or Address** box.

16 Click **Next** to proceed. The **Automatic Install** panel appears.

Fig. 116 Automatic Install Panel

Copying the NETinventory databases and settings to the Audit Server can be a slow process, especially over slow connections. The NETinventory Master Server can copy the needed files automatically during normal synchronization attempts. This greatly speeds up the process of creating multiple Audit

Servers. If the Master Server should automatically copy the files, select **Yes**; otherwise select **No**.

17 Click **Next** to continue. The **Summary** panel appears.

Fig. 117 Summary Panel

18 If the settings are correct, click **Next** to install the Audit Server. To make a change to the settings, click **Back** to return to the page with the incorrect information and make the change.

The **Installing Services** panel appears. This panel displays the installation progress.

When the installation is finished, the **Start Audit Server NLMs** dialog appears on NetWare servers.

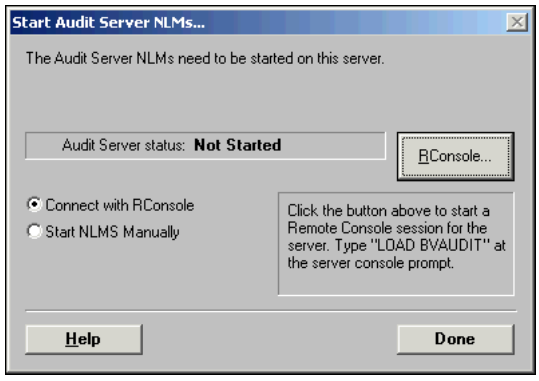


Fig. 118 Start Audit Server NLMs Dialog

19 On a NetWare Audit Server, you must start the Audit Server NLM. To do so, use the NetWare RConsole utility or go to the console and type `LOAD BVAUDIT` and press **Enter**. The Audit Server NLM will load and complete the installation.

When the installation is complete, the **New Audit Server** panel reappears.

Fig. 119 New Audit Server Panel

20 Click **Finish** to complete the installation.

Removing an Audit Server

The **Audit Server Settings** panel is used to remove a NETinventory Audit Server if you need to do so.

▶ ***To remove an Audit Server***

1 Open the **Audit Server Settings** panel and select the Audit Servers you wish to remove. Click **Remove**. The **Confirm Delete Action** panel appears.

Fig. 120 Confirm Delete Action Panel

2 To delete the Audit Servers, select **Yes** and click **Next**. The **Move or Delete Nodes** panel appears.

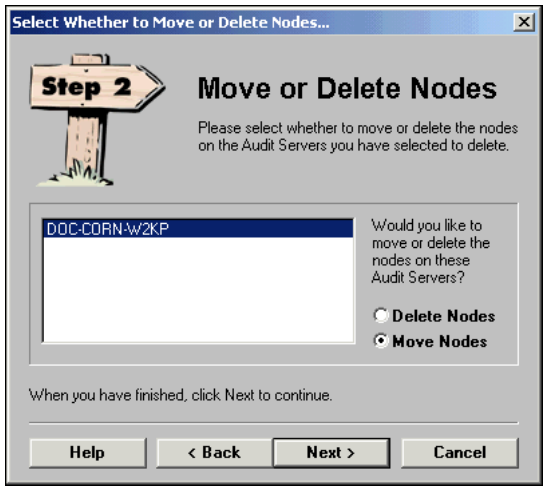


Fig. 121 Move or Delete Nodes Panel

3 The audit data stored on the servers can be moved to another Audit Server or be deleted. To move the node data to another Audit Server, choose **Move Nodes**. To delete the node data choose **Delete Nodes**. Click **Next** to proceed.

Note: If you are deleting your last Audit Server, you will only be able to delete stored node data.

---

4 If you chose to move the node data, the **Select Audit Server** panel appears.

Fig. 122 Select Audit Server Panel

5 Select the Audit Server to receive the data from the drop-down list and click **Next**. The **Summary** panel appears.

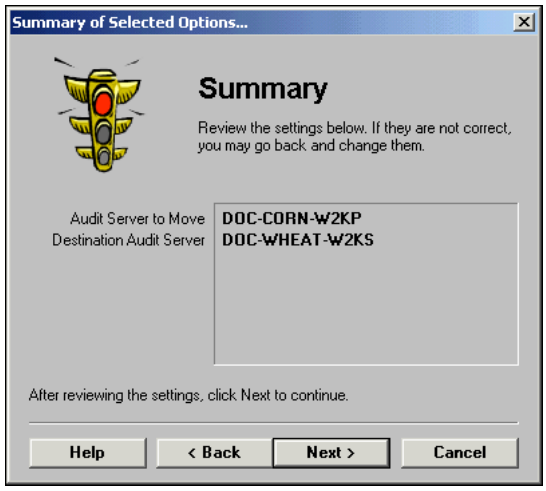


Fig. 123 Summary Panel

6 Click **Next** to remove the server, or click **Back** to make changes to the settings. When you click **Next**, a progress panel appears. The node data will be moved or deleted and the Audit Server files will be deleted from the server.

Changing Audit Server Protocol Settings

When you create an Audit Server, you can set the communications protocol Audit Agents to communicate with it. If your network changes, you can change the protocol used by an Audit Server.

Note: Audit Servers hosted by Windows machines always use TCP/IP Connections.

▶ *To change Audit Server protocol settings*

1 Open the **Audit Server Settings** panel and select the Audit Server whose protocol you wish to change. Click **Protocol Settings**. The **Audit Server Protocol Settings** dialog appears.

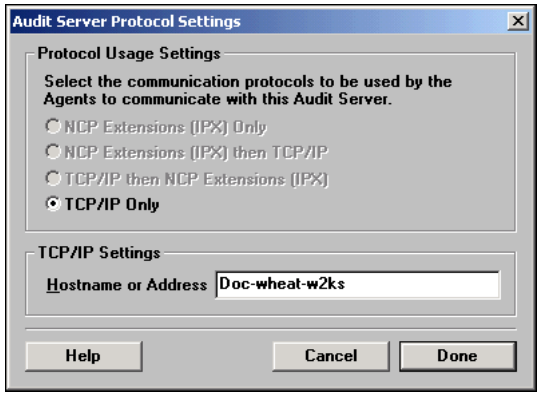


Fig. 124 Audit Server Protocol Settings Dialog

2 Select the communications protocol Audit Agents should use to communicate with the Audit Server. NetWare servers can use IPX-based NCP Extensions only, TCP/IP only, NCP with a TCP/IP backup, or TCP/IP with NCP as a backup. Windows machines can only use TCP/IP.

If any TCP/IP methods are selected, the Audit Server's host must be configured to use TCP/IP. For information on using TCP/IP on NetWare servers, consult your NetWare User Guides.

If any TCP/IP methods are selected, you must supply the Audit Server's TCP/IP hostname or TCP/IP address.

3 Click **Done** to save the changes and close the dialog.

Setting Audit Server Restrictions

You can restrict which nodes an Audit Server audits. Restrictions can be based on:

- The Login Server referring the node
- The node's IPX or TCP/IP network

▶ ***To set Audit Server Restrictions***

1 Open the **Audit Server Settings** panel and select the Audit Server to configure. Click **Restrictions**. The **Audit Server Restrictions** dialog appears.

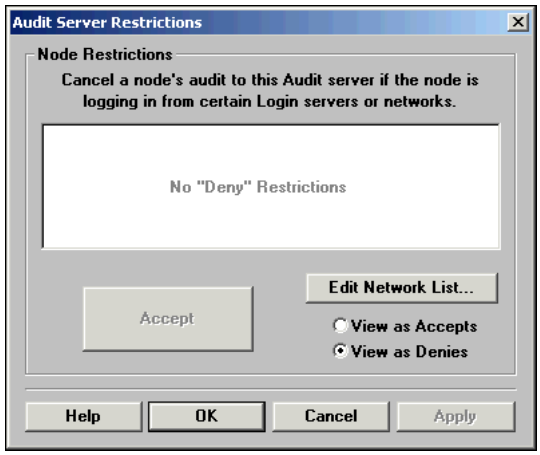


Fig. 125 Audit Server Restrictions Dialog

2 Set restrictions for the Audit Server to perform. Select **View as Accepts** or **View as Denies** to view the restrictions on the Audit Server. Select a condition and click **Accept** or **Deny** to change the way the Audit Server treats the condition.

3 Click **OK** to save the changes and close the dialog.

You can accept or deny audits:

- Originating with individual Login Servers.
- From network segments or network numbers.

Combine these restrictions to control which nodes are audited by Audit Servers.

For example, you could configure an Audit Server to accept audit information from nodes in all network segments associated with a particular business function. At the same time, you could deny audit information from nodes in network segments that are part of another business function.

Setting Audit Server Tuning Options

It is possible to make changes to some Audit Server behaviors that affect performance. The default performance settings for Audit Servers are best for most installations. You should only make changes to the tuning options with the assistance of the BindView Technical Support department.

▶ ***To change Audit Server tuning options***

1 Open the **Audit Server Settings** panel and select the Audit Server to configure. Click **Tuning Options**. The **Audit Server Tuning Options** dialog appears.

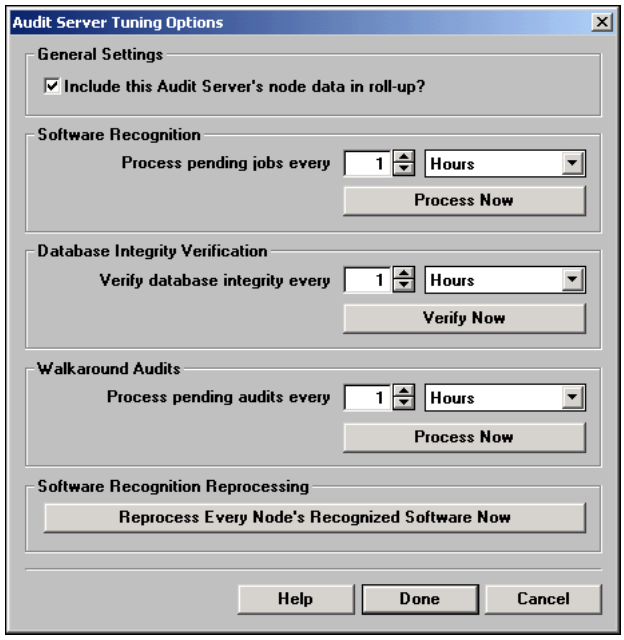


Fig. 126 Audit Server Tuning Options

2 Use the dialog to make changes to the tuning options. The options and their effects are explained below.

3 Click **Done** to save the changes and close the dialog.

- **General Settings: Include this Audit Server's node data in roll-up?**
  When selected, the Audit Server's node data will be included in data rollups to the Master Server.

  To use rolled up data, you must also turn on rollup in the Master Server's Tuning Options dialog (see "Master Server Performance Tuning" on page 124). You must also activate rolled up data in the Reporting Configuration panel of the NETinventory Console Setup pages (see "Setting the Reporting Configuration" on page 49).

Note: This setting only influences rollup for the Master Server and NETinventory Console, not SQL rollup for NETinventory-RMS.

- **Software Recognition: Process pending jobs every**
  This setting controls how often the Audit Server processes for unprocessed software inventory files.

  When node software is audited, processing the contents of the audit and merging with the existing audit databases can interfere with the server if the server is busy. The Audit Server stores the audit data file and processes it later.
- **Database Integrity Verification: Verify database integrity every**
  The Audit Server periodically checks its own databases to ensure that they do not become corrupt. This setting controls how often that verification is performed.
- **Walkaround Audits:Process pending audits every**
  The Audit Server periodically checks for the presence of files generated by standalone audits and processes any it finds. This setting controls how often the Audit Server should process them.
- **Software Recognition Reprocessing:Reprocess Every Node's Recognized Software Now**
  When selected, the Audit Server discards all Software inventory information from all nodes and begins analyzing every node's software inventory information using the current Master and Custom Software lists.

Note: This reprocessing does not require that nodes be reaudited. Instead, the Audit Server reanalyzes stored data using the current Master and Custom Software lists.

Login Server Settings

You should install Login Server components on every server that users log in to. Add or remove Login Servers and configure settings using the **Login Server Settings** panel.

A Login Server is a host for the NETinventory Audit Agent and an associated preference file. Any NetWare server or Windows machine on your network can host a Login Server. Every server that users log in to should host a Login Server.

Running the Audit Agent when Logging In

After installing the Login Server files, you must configure the machines hosting Login Servers to run the Audit Agent on nodes which log in to the Login Server.

On NetWare machines, edit each server's login scripts to execute the Audit Agent for the operating system running on that node.

For Windows servers, this configuration depends on how the server is configured. If the server has user-based login scripts enabled, you can use them. Otherwise, you should set up a system or

domain policy that loads the Audit Agent from a generally available share such as NETLOGON when users log in to the server.

Modifying Login Server Settings

Use the **Login Server Settings** panel to view and configure Login Servers.

▶ *To modify Login Server Settings*

1 Open the **NETinventory Setup** dialog and select the **Login Server Settings** icon. The **Login Server Settings** panel appears.

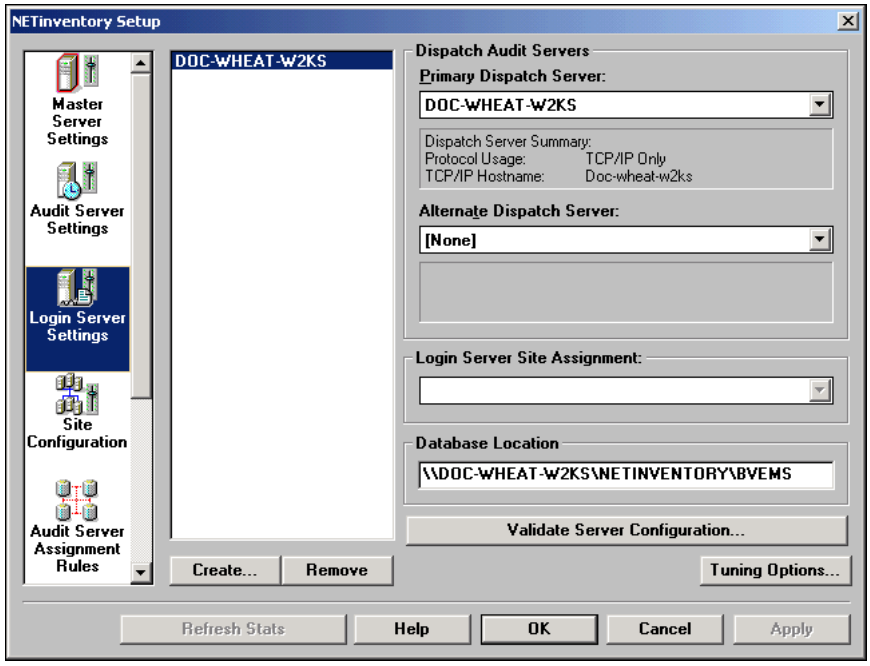


Fig. 127 Login Server Settings Panel

2 Select a Login Server from the list. The server's settings appear on the right side of the panel. The information includes:

- The **Primary** and **Alternate Dispatch Servers**
- The site the server is assigned to
- The location of the Login Server database files.

3 To change the **Primary** and **Alternate Dispatch Servers**, choose a new server from the drop-down lists. The Alternate Dispatch Server is optional.

Note: The Primary and Alternate Dispatch servers must each be different Audit Servers.

4 To change the server's site, choose a site from the **Login Server Site Assignment** list. See "Site Configuration" on page 149 for a more detailed discussion of Site Configuration and how it is used.

5 To save the changes without closing the dialog, click **Apply**. To save the changes and close the Server Setup dialog, click **OK**. To close the dialog without saving the changes, click **Cancel**.

Creating a New Login Server

Both Windows and NetWare machines can host Login Servers. The procedures for creating NetWare and Windows NT Login Servers are similar, and both use the Install Login Server wizard.

▶ ***To create a new Login Server***

1 Open the **Login Server Settings** panel and click **Create**. The **Install New Login Server** wizard starts and the **New Login Server** panel appears.

Fig. 128 New Login Server Panel

2 The **New Login Server** Panel allows you to choose between a guided process and *Expert Mode*. If you choose to use Expert Mode, the Audit Server Installation Wizard uses a single panel to prompt you to enter all of the information needed to create your new NETinventory Audit Server.

If you choose to use Expert Mode, the Login Server Wizard will not validate the information you supply until it tries to create the new server. In normal mode, the Wizard performs more checks to ensure that your new Login Server can be set up the way you desire on the server you select.

To use Expert Mode, select the box labeled **Expert Mode** in the **New Login Server** panel. To use normal mode, leave the box unselected.

3 Click **Next**. The **Select Server** panel appears.

Any NetWare 4, 5, or 6 server, or Windows NT 4.0 (with Service Pack 6a), Windows 2000, Windows XP , or Windows Server 2003 machine on your network can be a Login Server. Machines hosting an Audit Server can also host a Login Server.

Every server that users log in to should be a Login Server. Login Servers host Audit Agent files, but not any services or NLMs. Space requirements for Login Server files do not change over time, and the Master Server maintains Login Servers. After creating a Login Server, you can ignore it.

Type the name of the machine that will host the Login Server, or click **Browse** and use the Network browser to locate the machine.

4 Click **Next** to continue. The **Admin Account** panel appears.

Fig. 129 Admin Account Panel

5 Enter a valid Login Name and Password combination for the server. The credentials will be used by the Master Server to administer the Login Server.

If this is a Windows machine, enter the user name in one of these formats:

`Domain\User Name`
`Machine Name\User Name`

If this is a NetWare machine then the account must have security equivalent to the ADMIN account. You must also choose to use a **Bindery Login** or a **Directory Services Login**. If using a Directory Services Login, you also specify the tree the server is a part of.

You may wish to create a new user for this purpose.

6 Click **Next** and the **Agent Path** panel appears.

Fig. 130 Agent Path Panel

You must set the location on the server where the Login Server database files will be stored. Select an existing share or volume from the **Shares** (on Windows machines) or **Volume** (on NetWare servers) drop-down list.

7 Enter a path on the selected share or volume to store the files. The default directory is `BVEMS`. Click **Next** to proceed.

Every user will need the ability to run the Audit Agent on the Login Server. You can set a a share or volume where every user has access, or you can have the Audit Agent copied to locations all users can access. The NETLOGON share on Windows machines and the SYS:PUBLIC directory on NetWare servers work well, since all users have read access to them by default. If you have changed your server's settings to prohibit read access to the these, you should create another share or volume and directory that all users will have read access to.

If the wizard should copy the Login Server files to the server's NETLOGON share on Windows machines or to the SYS:PUBLIC and SYS:SYSTEM directories on NetWare servers, select the appropriate boxes. Normally, you should choose to have the files copied to these locations.

8 Click **Next** to continue. The **Select Site** panel appears.

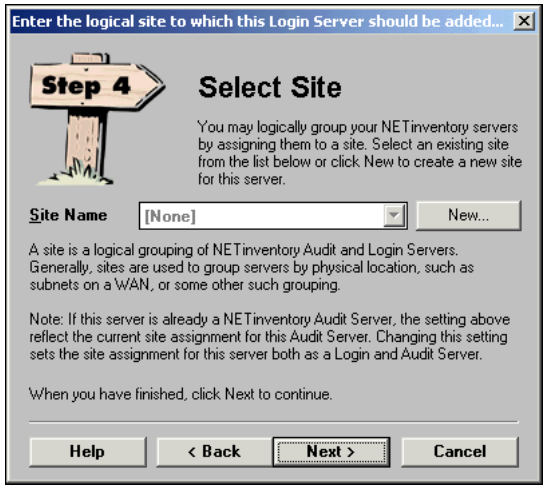


Fig. 131 Select Site Panel

Login Servers can be assigned to a *Site.* If you have already created a site, select it from the drop-down list of available sites or click **New** to create a new Site. The **Enter New Site Information** dialog appears.

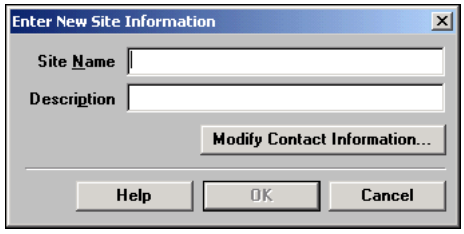


Fig. 132 Enter New Site Information Panel

9 Type a name for the site in the **Site Name** field and one line of identification information in the **Description** field. Click **OK** to close the dialog and save your changes. For more information on using sites, see “Site Configuration” on page 149.

10 Click **Next** to continue. The **Dispatch Servers** panel appears.

Fig. 133 Dispatch Servers Panel

When an Audit begins, the Audit Agent contacts an Audit Server. The Audit Server sends audit preferences to the Agent and "dispatches" the agent to the Audit Server the node is assigned to. This Audit Server role is known as a *Dispatch Server.* Any Audit Server can be a Dispatch Server. The Dispatch Server should be close to the Login Server on the network, with fast communications between the two.

Choose the Primary Dispatch Audit Server in the **Primary Dispatch** from the drop-down list. You can choose an Alternate Dispatch Server for the Audit Agent to contact if the primary server is unreachable.

11 Click **Next**. The **Automatic Install** panel appears.

Fig. 134 Automatic Install Panel

Copying the NETinventory databases and settings to the Audit Server can be a slow process, especially over slow connections. The NETinventory Master Server can copy the needed files

automatically during normal synchronization attempts. This greatly speeds up the process of creating multiple Login Servers. If the Master Server should automatically copy the files, select **Yes**; otherwise select **No**.

12 Click **Next** to continue. The **Summary** panel appears.

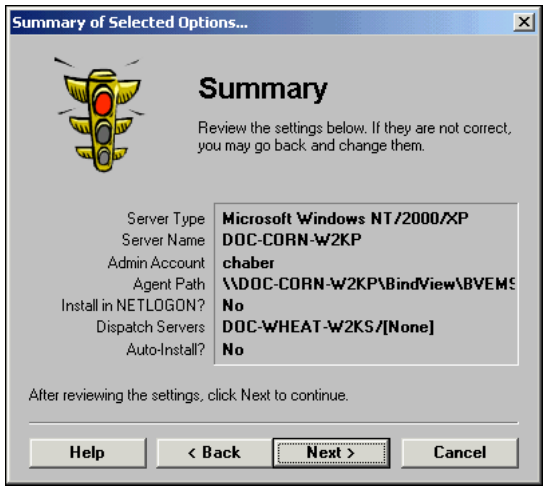


Fig. 135 Summary Panel

13 If the settings are correct, click **Next** to install the Audit Server. To make a change to the settings, click **Back** to return to the page with the incorrect information and make the change.

The **Installing Login Server** panel shows the installation progress.

When the installation is complete, the **New Login Server** dialog reappears.

Fig. 136 New Login Server Panel

14 Click **Finish** to complete the Login Server Installation.

You must manually configure your new Login Server to automatically start the Audit Agent on nodes that log in to it.

Audit Agents and Windows NT Servers

For a node to be audited, the node must run the Audit Agent, which does the actual work of auditing. You must configure your Login Servers to run the Audit Agent when users log in.

If individual user login scripts are enabled in your Windows-hosted Login Server's User Manager, you should add the command `bvaudit.exe` to users' login scripts. This process is easiest if multiple users share login scripts. If each user has a different login script, or if login scripts are not enabled, you can use policies to start the Audit Agent.

System or group policies can be used to start the Audit Agent. For complete information on using System and Group policies, please consult your Windows documentation.

To use policies, make sure that Active Directory is set up as specified in the Windows Server documentation. Then, use the System Policy Editor on a Domain Controller (DC) to add the Audit Agent's Universal Naming Convention (UNC) path to the Default User's Startup folder. After this is done, whenever a user logs into the domain, the Audit Agent will run. If a user only logs in to the local workstation without accessing network resources, the Agent will not run.

Finally, you can add the command to run the Audit Agent to the node itself. On a DOS or Windows 3.1 node, add it to the node's AUTOEXEC.BAT file. On a Windows 95, Windows 98, Windows Millennium Edition, Windows NT, Windows 2000, Windows XP, or Windows Server 2003 node, add the Audit Agent to the Startup folder in the Start menu. To prevent the icon from appearing in the Start menu, you can use the Windows Policy Editor to add it to the Startup group without an icon appearing.

Audit Agents and NetWare Login Scripts

NetWare login scripts are used to run the Audit Agent on nodes connecting to NetWare servers. Edit NetWare login scripts on each Login Server to include the command `#bvaudit.exe`. For information on setting up and editing Login Scripts on your NetWare server, please see your NetWare documentation.

Note: With some versions of the Novell NetWare client, you must to include an explicit reference to the Audit Agent's path in the Login Script command. If you chose to add the agent to the `SYS:PUBLIC` directory when creating the Login Server, add the command `#BVAUDIT.EXE` to the login script.

Removing a Login Server

When you remove a Login Server, you use the Login Server Settings panel.

▶ *To remove a Login Server*

1 Open the **Login Server Settings** panel and select the Login Server to remove. Click **Remove**. The **Confirm Delete Action** dialog appears.

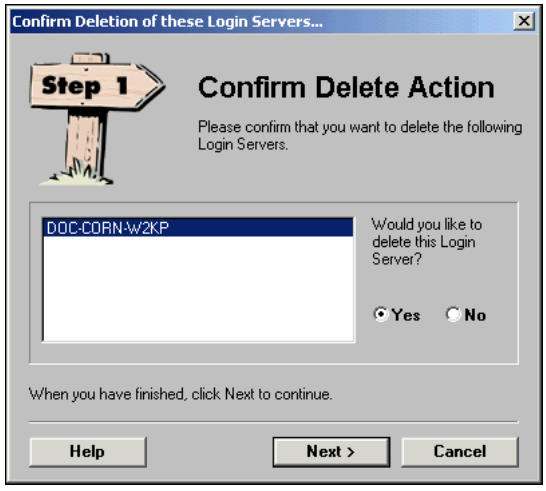


Fig. 137 Confirm Delete Action Panel

2 To delete the server, select **Yes** and click **Next**. To leave the server, select **No** and click **Next**.

The **Summary** panel appears.

Fig. 138 Summary Panel

3 Click **Next** to delete the Login Server; click **Back** to make changes. The **Deleting Login Server** dialog appears, and the Login Server will be deleted.

Site Configuration

A Site organizes a group of Audit and Login Servers. The resulting group can then be used when setting the scope of a query. The servers which make up a Site should always be linked by fast (LAN-speed) links, and should normally be in close proximity to one another.

If you have many NETinventory servers at one location, you can subdivide the servers into sites based on your organization. For example, you might have a different site for each city in which your company has satellite offices linked to the main LAN by low-speed (WAN) links. The main office might have either a single site or a number of sites—one for each group of floors in your building.

You can associate contact information as well as comments with each Site definition.

Whenever you create an Audit or Login server, you are prompted to assign it to a site. You can create a new site at the same time. Any machine—whether it hosts one or more NETinventory servers—can only be associated with a single Site.

▶ *To modify site information*

1 Click **Site Configuration** in the **Server Setup** dialog. The **Site Configuration** panel appears.

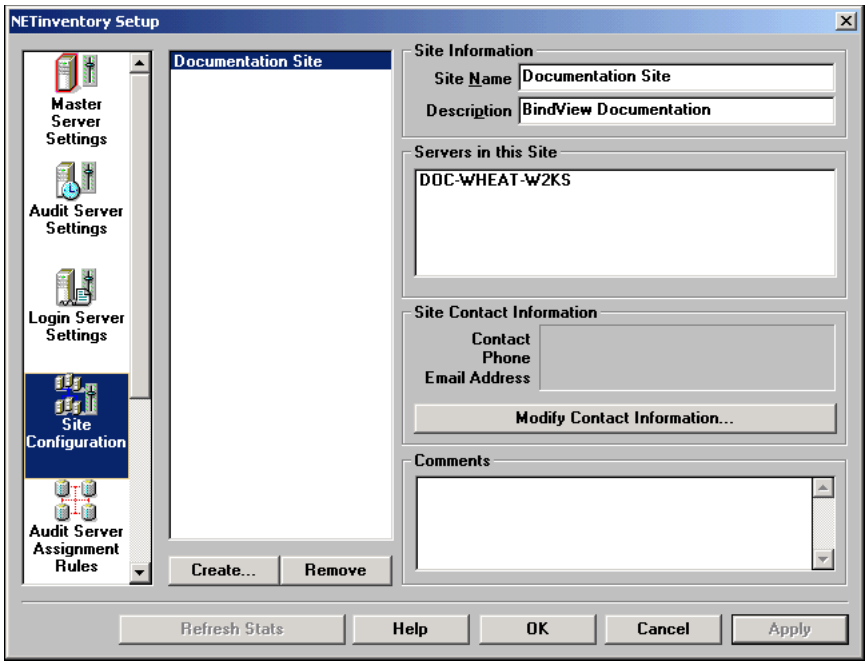


Fig. 139 Site Configuration Panel

2 Select a Site in the list of available NETinventory sites.

The information for the selected site appears on the right side of the dialog.

3 Modify the site name or description. You can add comments about the site in the **Comments** field. Click **Modify Contact**

Information to make changes to the site information. The **Site Contact Information** dialog appears.

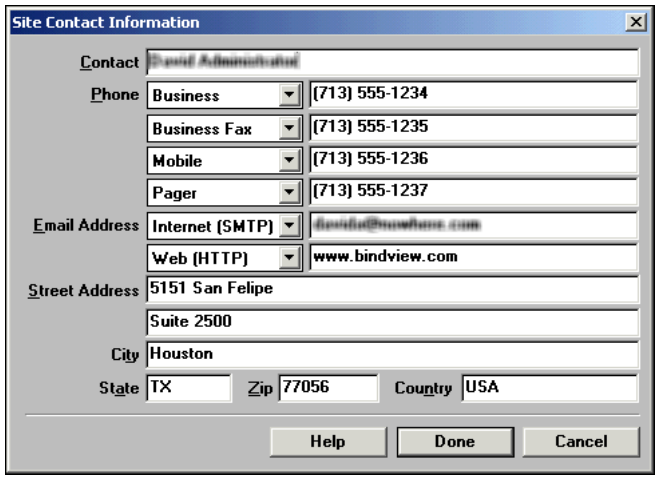


Fig. 140 Site Contact Information Dialog

4 Make any needed changes to the Site Contact information.

5 Click **Done** to close the dialog and save the changes.

6 To save the changes you have made to the Site Configuration, click **Apply** (or **OK**) in the **NETinventory Setup** dialog.

▶ ***To create a new site definition***

1 In the **NETinventory Setup** dialog select the **Site Configuration** panel and click **Create**. The **Enter New Site Information** dialog appears.

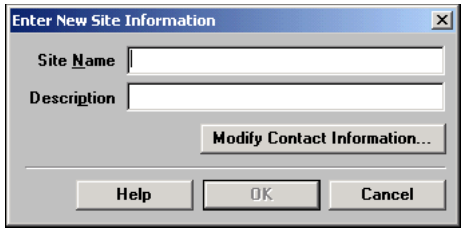


Fig. 141 Enter New Site Information Dialog

2 Type a Site Name and Description. If you choose, click on **Modify Contact Information** to enter contact information for a Site. When you do, the Site Contact Information dialog appears. Enter the contact information and click **Done** to save the information.

3 Click **OK** in the **Enter New Site Information** dialog. The **Enter New Site Information** dialog closes and the new Site Definition appears in the list of Sites.

▶ ***To remove a site definition***

1. Select a Site in the list of available NETinventory sites. The information for the selected site appears on the right side of the **NETinventory Setup** dialog.
2. Click **Remove**.
3. You are prompted to confirm that you want to delete the site information.

   The Site definition is permanently deleted from the displayed list of NETinventory sites.

Note: When you delete a site, you only delete the grouping, not the servers assigned to the site.

Audit Server Assignment Rules

Audit Server Assignment Rules determine how nodes that have never connected to an Audit Server are assigned to an Audit Server. for storing audit information. After a node has been routed to an audit server according to these rules, the assignment is permanent unless you manually move the node to a new Audit Server.

Audit Server Assignment Rules are a three-tier method of assigning nodes to the most appropriate Audit Server.

The tiers consist of:

- The IPX network segment or TCP/IP network the node is connected to.
- The Login Server the node logged in to.
- A specified Audit Server.

A node can be trapped by the network tier and routed to a specified Audit Server, or passed to the Login Server tier. The node can either be trapped by the Login Server tier and routed to a specific Audit Server, or passed through to the last tier. The last tier serves as a “catch–all.” Any node that passes the first two tiers is assigned to a specific Audit Server.

Fig. 142 shows the three-tier assignment system.

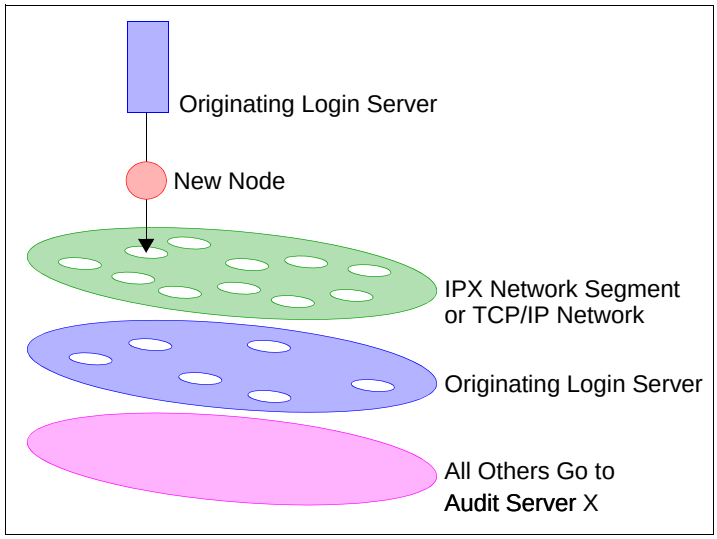


Fig. 142 New Node Audit Server Assignment Rules

Modifying Audit Server Assignment Rules

The **Audit Server Assignment Rules** panel is used to define the three-tier Audit Server Assignment Rules. Fig. 143 illustrates how each tier of the assignment rules is defined.

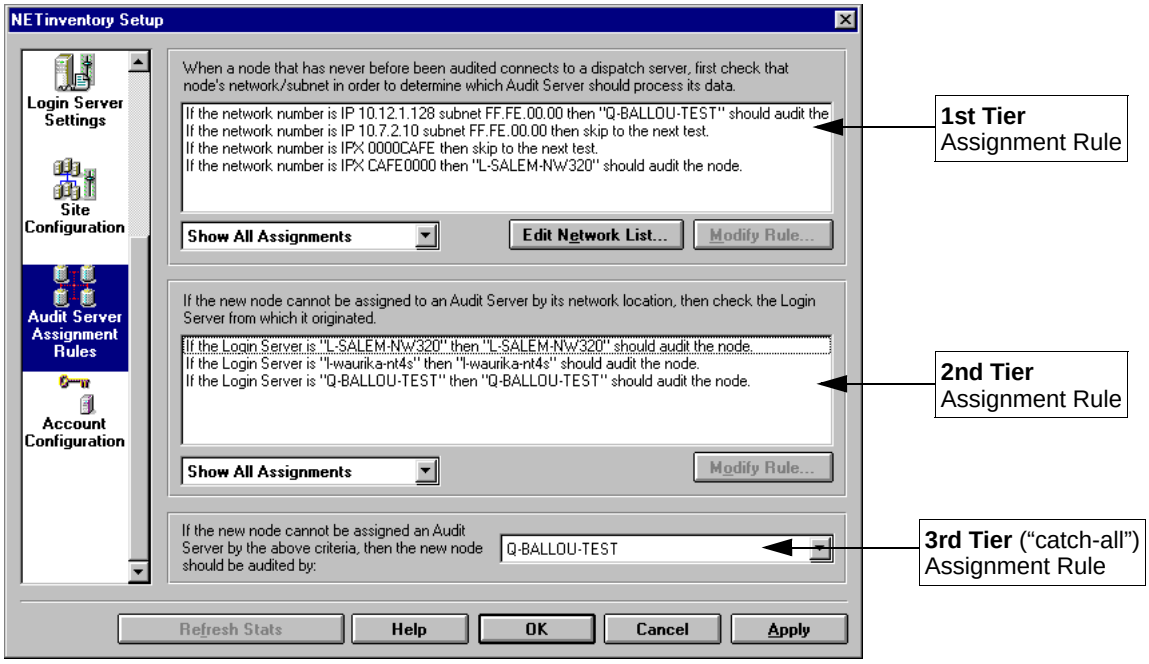


Fig. 143 Audit Server Assignment Rules Panel

To help you configure Audit Server Assignment Rules, each portion of the **Audit Server Assignment Rules** panel is defined as follows:

First Tier Assignment Rule

The First Tier Assignment Rule is based on network number. To change a network's routing, click its name one time, then click **Modify**.

When a node's assignment is governed by both an IPX network and a TCP/IP network rule, the node is routed according to the IPX network's rule.

Before you can assign rules to networks, you must edit NETinventory's list of those networks. For information on editing the network list, see "To edit the TCP/IP network list" on page 154.

Show All Assignments/Show Active Assignments
NETinventory can display every network known to NETinventory, or just the subset of networks which have active routing assignments. If **Show Active Assignments** is selected, networks whose rule is set to "skip to next test" will not be displayed.

Edit Network List
Displays the **Edit Network List** dialog, which allows you to manually add and remove IPX and TCP/IP networks in the NETinventory list. For information on editing networks, see "To edit the TCP/IP network list" on page 154.

Modify Rule
Displays the Network Number-based Audit Server Assignments dialog, which allows you to make changes to the routing rule associated with a network.

Second Tier Assignment Rule

If a node is on a network that is not governed by the first rule, the nodes on the network can be routed to an Audit Server based on the Login Server they run the Audit Agent from. Rules are listed by Login Server.

Show All Assignments/ Show Active Assignments
NETinventory can display the Audit Server Assignment rules associated with every Login Server or just Login Servers with active Audit Server Assignment rules. If "Show Active Assignments" is selected, servers whose rule is "skip to next test" will not be displayed.

Modify Rule
Displays the Secondary New Node Audit Server Assignment Rule dialog, which allows you to make changes to the New Node Audit Server Assignment rules associated with servers.

Third Tier ("Catch-All") Assignment Rule

If a new node is not assigned based on its network or on its Login Server, it will be routed to a specified Audit Server. Select a default Audit server to use when the other rules do not apply.

Click **Apply** to save the changes without closing the dialog, or **OK** to save the changes and close the dialog.

Editing the Network List

Before you can assign rules to networks, you must list the networks you wish to use. You can edit both IPX and TCP/IP networks.

How TCP/IP Addresses are Used

NETinventory uses the TCP/IP address of a valid node on the network and the subnet mask you supply together to arrive at the

network number. When you enter a valid TCP/IP Address and Subnet Mask in the **Enter TCP/IP Network** dialog, **NETinventory** uses the subnet mask to determine a network number.

Consider a TCP/IP Network Number and Subnet Mask written out in binary. For example, the address 10.7.2.10 and the subnet mask 255.255.0.0:

10.7.2.10 = 00001010.00000111.00000010.00001010

255.255.0.0 = 11111111.11111111.00000000.00000000

In this case, if the values in a node's TCP/IP address match the values in the reference address in the locations where there are binary 1's in the subnet mask, then the node will be considered to be on the same network as the reference address. You might imagine that the binary 1's in the subnet mask serve as a "filter" for the network number. When you write the node's address, the reference address, and the subnet mask as a binary string, the values in the node's address and the reference address are compared only where the subnet mask has binary 1's in the string.

Note: NETinventory stores only the number of significant bits of the subnet mask, not the entire mask (an 8-bit piece of data instead of a 32-bit or 48-bit piece of data). As a consequence, NETinventory only supports subnet masks which are formed of contiguous high-order bits, i.e., all the significant bits are in a block on the left end of the address. Subnet masks which are discontiguous are not supported.

In this example, any node whose address is of the pattern 10.7.X.Y will be on the same network as far as NETinventory is concerned.

▶ ***To edit the TCP/IP network list***

1 Open the **Server Setup** dialog and select the **Audit Server Assignment Rules** panel. Click the **Edit Network List** button. The **Edit Network List** dialog appears.

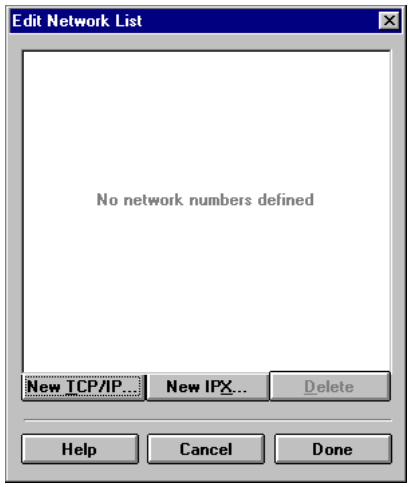


Fig. 144 Edit Network List Dialog

2 To create a new TCP/IP network in the list, click **New TCP/IP**. The **Enter TCP/IP Network** dialog appears.

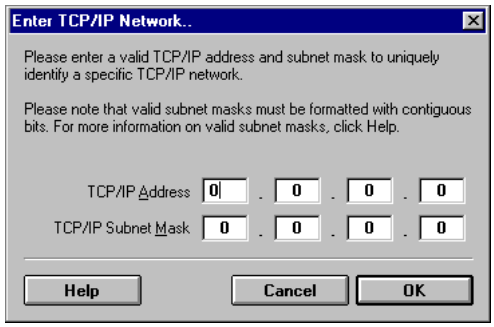


Fig. 145 Enter TCP/IP Network Dialog

TCP/IP addresses have both the node's network number and ID on that network in a single value; the Subnet mask allows you to determine which part of the address is the network number and which refers to the individual node.

3 Enter a valid TCP/IP Address and Subnet Mask in the fields in the **Enter TCP/IP Network** dialog.

4 Click **OK** to close the dialog and save the changes, or click **Cancel** to close the dialog without saving the changes.

▶ *To edit the IPX network list*

1 Open the **Server Setup** dialog and select the **Audit Server Assignment Rules** panel. Click the **Edit Network List** button. The **Edit Network List** dialog will appear.

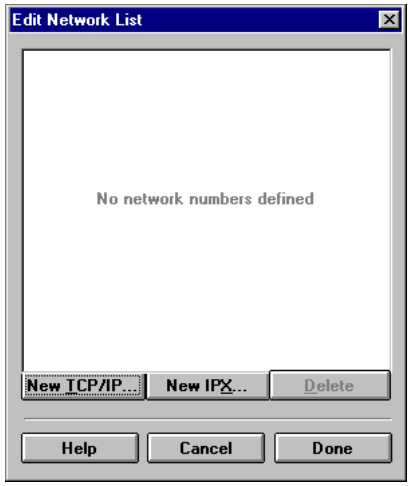


Fig. 146 Edit Network List Dialog

2 Click **New IPX**. The **New IPX Network** dialog appears.

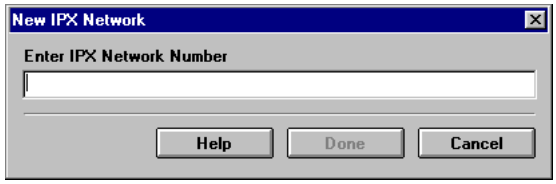


Fig. 147 New IPX Network Dialog

3 Enter the new IPX network number.

4 Click **OK** to close the dialog and save the changes, or click **Cancel** to close the dialog without saving the changes.

▶ ***To delete an existing network from the list***

To delete an existing network, select it in the list and click **Delete**.

Account Configuration

NETinventory needs credentials to manage Master, Audit and Login Servers. The Account Configuration panel allows you to make changes to credentials without deleting and reinstalling servers.

There are two types of accounts you can configure: administrative and reporting. You must create an *administrative account* for each NETinventory server. The NETinventory Console and the Master Server use the credentials to connect with and maintain Master, Audit, and Login Servers. The *reporting account,* used only on Audit Servers, gives access to reporting tools in the NETinventory Console without compromising access to the machine hosting the Audit Server.

▶ *To configure NETinventory server accounts*

1 Click **Account Configuration** in the **Server Setup** dialog. The **Account Configuration** panel appears.

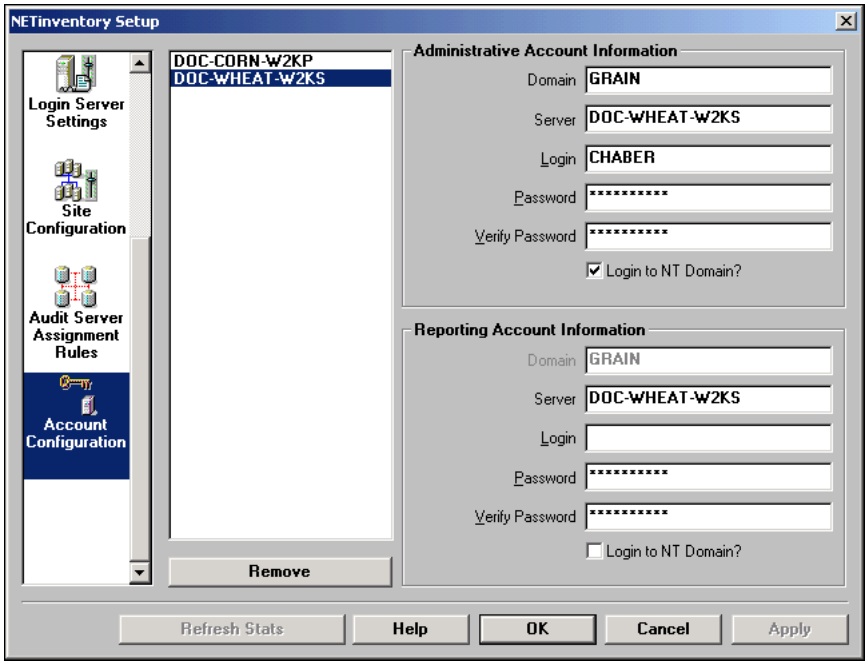


Fig. 148 Account Configuration Panel

2 Select a server.

The account information for the server appears on the right side of the NETinventory Setup dialog.

Note: The appropriate account types are displayed for the selected server. Only Audit Servers have both Administrative and Reporting Account Information displayed. Login and Master Servers have only Administrative Account Information.

---

3 Enter the **Domain** (for Windows machines) **Login** name, **Password**, and **Verify Password** information for each type of account.

Select **Login to NT Domain** to log in to the domain on Windows machines. For NetWare, select **Login to NDS Tree** to log in to the tree.

4 Click **Apply** or **OK** to save the changes.

Click **Remove** to remove the server's information completely.

6 Setting Up The NETinventory Inventory Database

In This Chapter

Overview 160
Year 2000 Identification 161
Software Lists 163
Master Software 163
Custom Software 166
Unknown Software 171
Category Information 175
Vendor Information 177
Manufacturer Information 179
Hardware Product Information 181
Maintenance Types 184
BIOS Identification 186

Overview

NETinventory stores a database of hardware and software products installed on nodes. The hardware and software may be off-the-shelf or custom products. NETinventory includes records for off-the-shelf products. You create records for custom products, or new products released since you installed NETinventory. Use Inventory Setup to create and manage records for custom products.

The Inventory Setup dialog contains the following setup panels:

- Year 2000 Identification
- Master Software
- Custom Software
- Unknown Software
- Category Information
- Vendor Information
- Manufacturer Information
- Hardware Product Information
- Maintenance Types
- BIOS Identification

Each panel is used to manage an aspect of your software and hardware inventories.

▶ *To open the Inventory Setup dialog*

The Inventory Setup dialog allows you to view and change the NETinventory databases.

1 Choose Options>NETinventory Setup. The **NETinventory Setup Navigator** dialog appears.

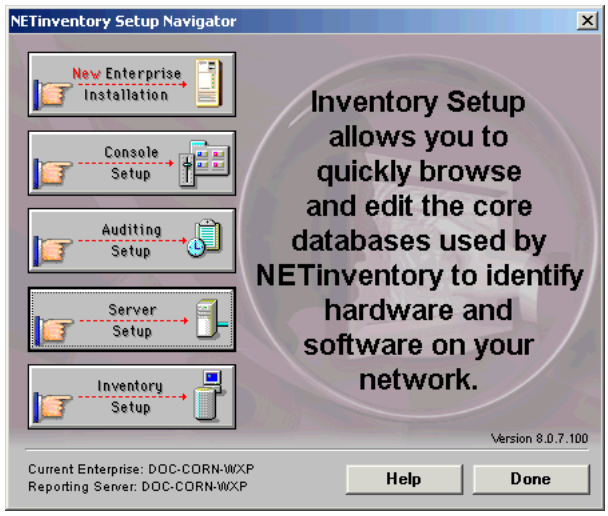


Fig. 149 NETinventory Setup Navigator Dialog

2 Click **Inventory Setup**. The **NETinventory Setup** dialog appears.

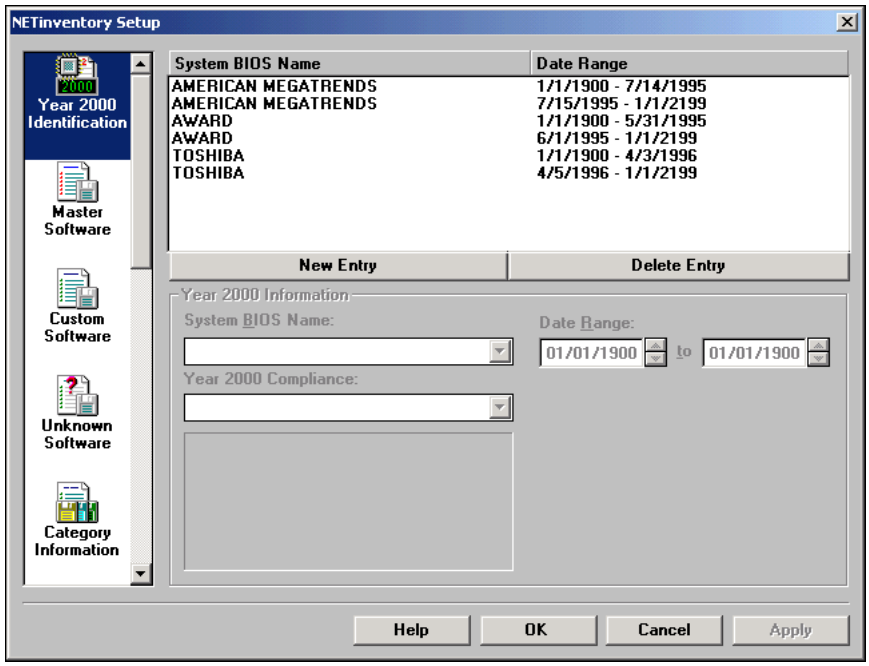


Fig. 150 NETinventory Setup Dialog

Year 2000 Identification

NETinventory includes information from manufacturers on BIOS Year 2000 compliance. NETinventory identifies a BIOS using a BIOS identification string and the date the BIOS was manufactured.

If you identified any Year 2000-related BIOS Limitations for BIOSes detected in your enterprise you can add them to the database.

▶ *To add a BIOS to the Year 2000 Identification Database*

1 Open the **NETinventory Inventory Setup** dialog. Select the **Year 2000 Identification** item.

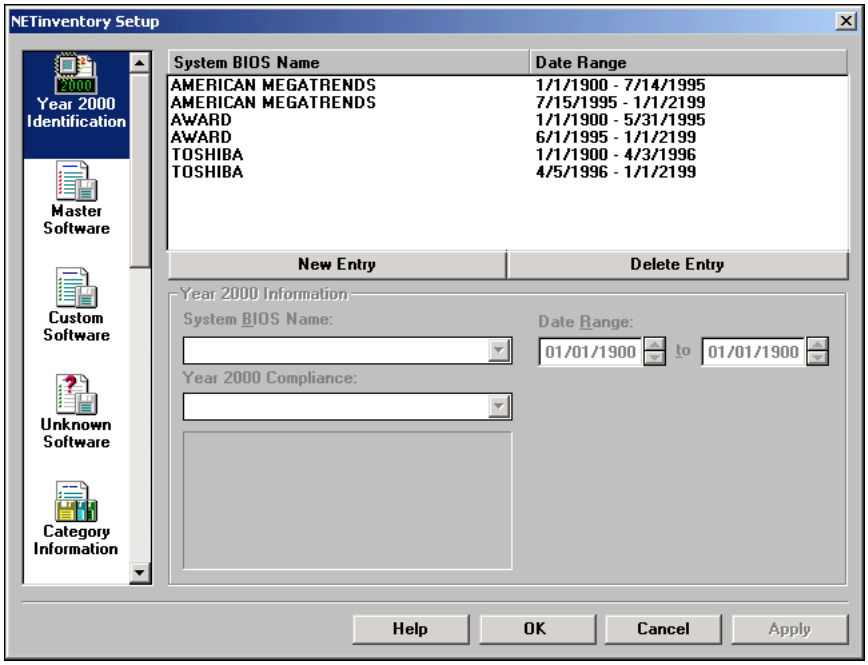


Fig. 151 Year 2000 Identification Panel

2 Click **New Entry**. The **New Year 2000 BIOS Entry** dialog appears.

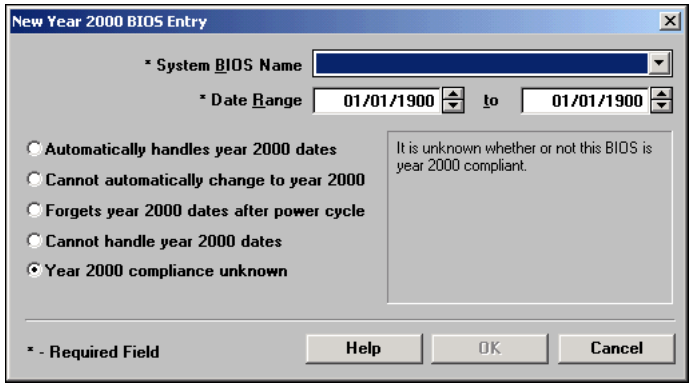


Fig. 152 New Year 2000 BIOS Entry Dialog

3 Select a manufacturer from the **System BIOS Name** drop-down list.

4 Enter a date range including the date the BIOS chip was manufactured.

5 Select the BIOS date-handling capability.

6 Click **OK** to save the BIOS limitation record. Any BIOS produced by that manufacturer during the date range will be identified in the BIOS Compliance Information Grid.

Software Lists

NETinventory tracks the software on your network using two separate databases. The first of these is the Master Software List. The Master Software list contains information about software packages and the files that make them up. The Master Software list is created by BindView, and new versions are released periodically. For information on updating the Master Software list on your Master Server to a new version, see “Updating the Master Server” on page 112.

Programs you have developed in-house and programs released since the most recent Master Software list update are not included in the Master Software list. Instead, information about these programs is stored in second database, the Custom Software list. You control the contents of the Custom Software list, and you define “packages” of software that the Audit Agent recognizes.

When software on a node is inventoried, the Audit Agent lists files that could be software—generally .EXE and .COM files. The Audit Server compares this file list to the files in the Master and Custom Software lists.

Files that cannot be positively identified in either list are placed in the Unknown Software list, found on the **Unknown Software** panel. You can use the Unknown Software list to build new package definitions for the Custom Software list. As you define additional custom software packages, fewer files will be listed in the unknown software list.

Master Software

The **Master Software** panel lists each off-the-shelf software product included in the NETinventory database on your Master Server. When you select a product in the Master Software list, you can:

- View an item’s details.
- Modify information in the item’s record.

When the Audit Agent scans nodes for software, it uses the entries in the Master Software list (and the Custom Software list) to determine which software packages are installed on nodes. If the files in a package are found on a node, the package is added to the node’s Software Inventory database.

▶ *To open the Master Software panel and view a software product's details*

1 Open the **NETinventory Inventory Setup** dialog and select **Master Software**. The **Master Software** panel appears.

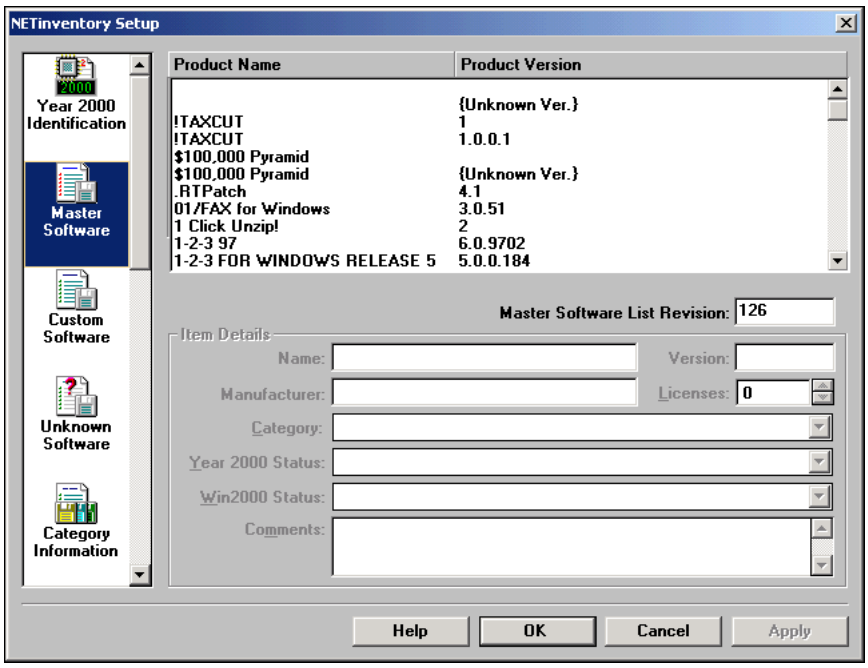


Fig. 153 Master Software Panel

2 Select the item whose details you wish to view.

3 The product's details appear in the **Item Details** area.

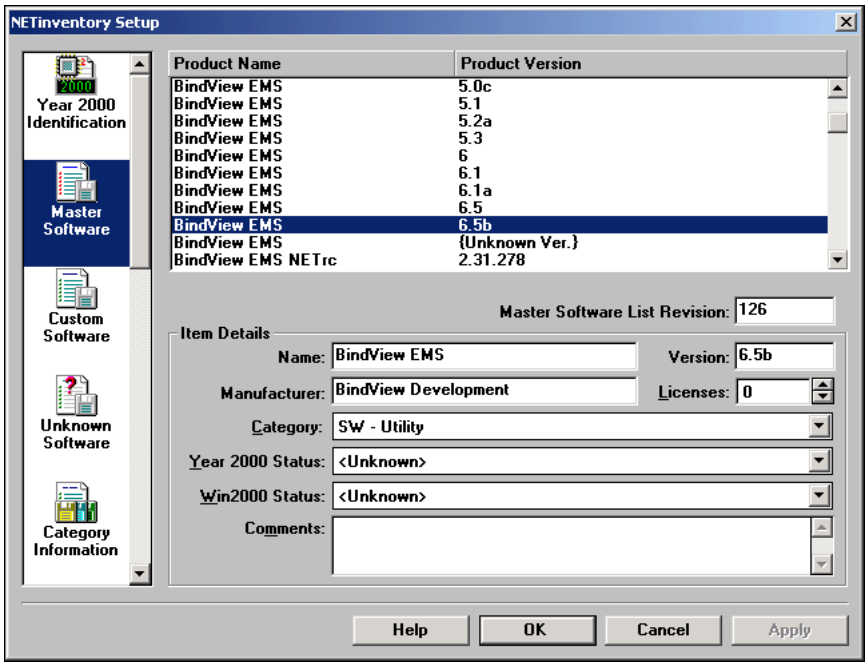


Fig. 154 Master Software Panel

Some of the record details shown in the **Master Software** list can be modified. You can modify the following data:

- Number of Licenses
- Category
- Year 2000 Status
- Windows 2000 Status
- Comments

The Licenses value lets you store the number of valid licensed copies of the product you own.

The Category value lets you classify and organize software products.

The Year 2000 Status and Windows 2000 Status fields contain information about Year 2000 and Windows 2000 compatibility from the manufacturer.

The Comments value lets you store product-related notes.

▶ *To modify a software product's details*

1. Open **Master Software** panel and select the product to modify.
2. Make changes to the **Licenses**, **Category**, **Year 2000 Status**, **Win2000 Status**, or **Comments**.

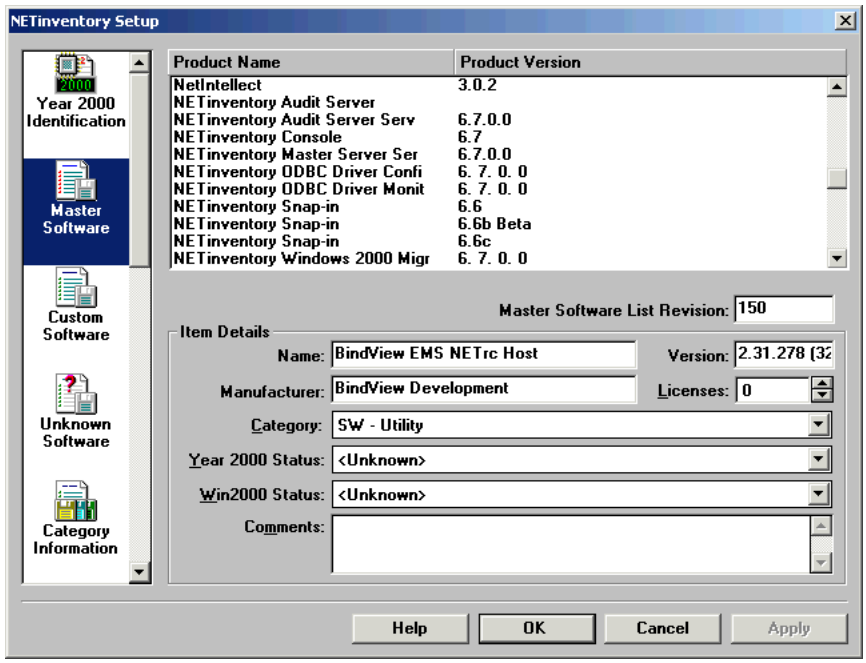


Fig. 155 Master Software Panel

3. Click **Done** to save the changes and close the dialog.
4. Click **OK** to save the changes and close the dialog or click **Apply** to save the changes and leave the dialog open.

Custom Software

The Custom Software List contains custom or company-specific software you add to the list the Audit Agent detects. You have complete control over the Custom Software List. You select which files make up a package, the package name and category, and which files are required for the package and which are optional.

A Custom Software Package consists of a single *main file*, which must always be present for the package to exist. For the NETinventory Console, the main file is BVW.EXE. The main file is often the file you use to start the program. On DOS machines, this is the file name you type to launch the program. On Windows machines, the main file is usually the file opened when you select the program in the Start Menu. For more information on determining which file the icon refers to, see your Windows User's Guide.

In addition to the main file, a package may contain one or more *ancillary files*—files that are part of the package, but which are not required for the package to be considered present. Ancillary files include utility programs or add-on programs. DLL files usually are not considered ancillary files since the default Software Audit does not track them. If you alter software auditing to include DLL files, you can include them as ancillary files.

You can define files that are required for the presence of a package and files that rule out the presence of a package. For example, the Audit Agent might find one or two components of an office software suite on a node, but the office suite is ruled out unless all the components are present. Since there is only a subset of the components present, the programs which make up the office suite are treated as individual packages.

The **Custom Software** panel lists each custom software product that has been entered to date. Use the Custom Software panel to:

- View and modify custom product details.
- Create a record for new Custom Software.
- Edit the package of files that define a Custom Software list entry.
- Convert unknown software into Custom Software records.

▶ *To open the Custom Software panel and view an existing entry*

1 Open the **NETinventory Inventory Setup** dialog and select **Custom Software**. The **Custom Software** panel appears.

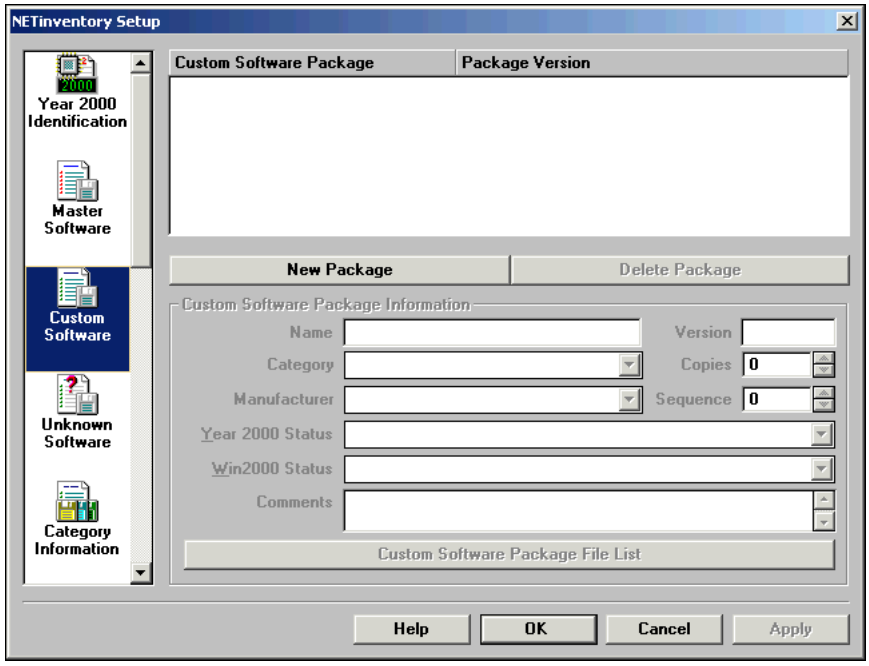


Fig. 156 Custom Software Panel

2 Select a software package. The package's details appear in the **Custom Software Package Information** group.

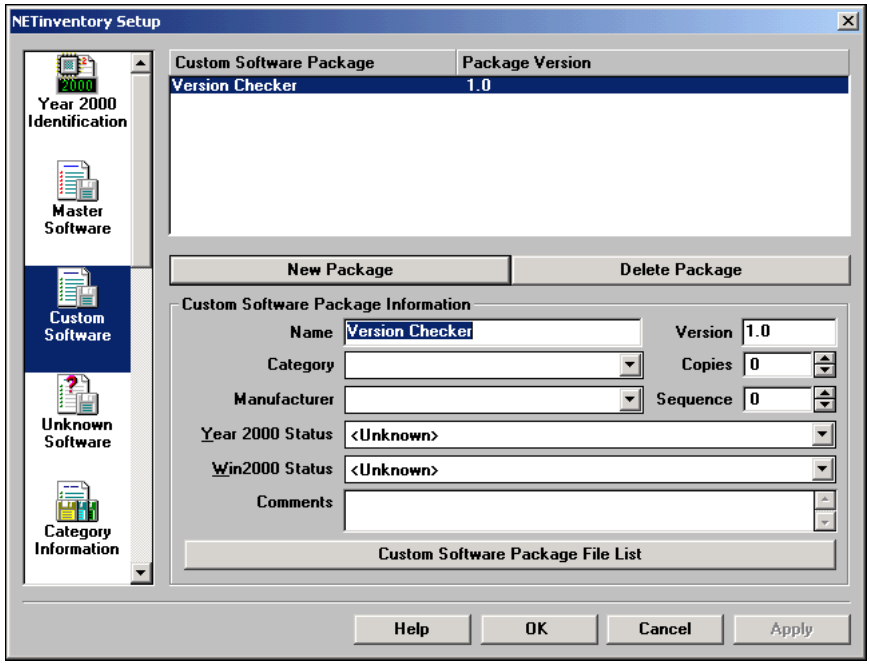


Fig. 157 Custom Software Panel with Package Information

▶ *To change an existing Custom Software entry*

1. With the **Custom Software** panel displayed, Select a software package. The package details appear in the **Custom Software Package Information** group.
2. Edit the fields containing the information you want to change.
3. Click **OK** to save the changes and close the dialog, or click **Apply** to save the changes and leave the dialog open.

▶ *To add a new package*

1. Open the **Custom Software** panel and click **New Package**.

   The **New Custom Software Entry** dialog appears.

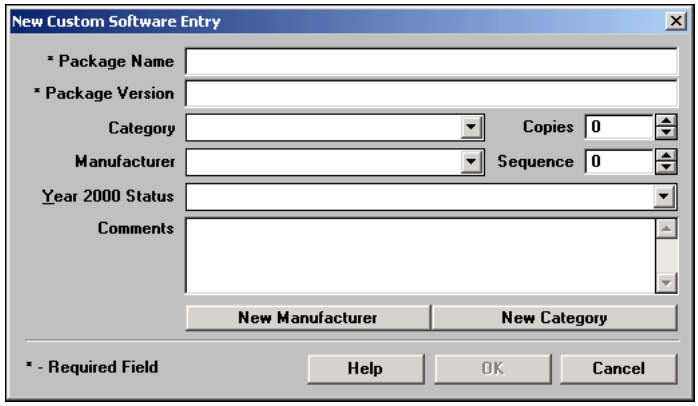


Fig. 158 New Custom Software Entry Dialog

2. Enter appropriate values and click **OK** to create the new package. Mandatory fields are marked with an asterisk (*). All others are optional.

   The new Custom Software package appears in the **Custom Software Package** list.

▶ *To add files to a Custom Software package*

1 Open the **Custom Software** panel displayed and select a package to add files to. Click **Custom Package File List**. The **Custom Software Package Properties** dialog appears.

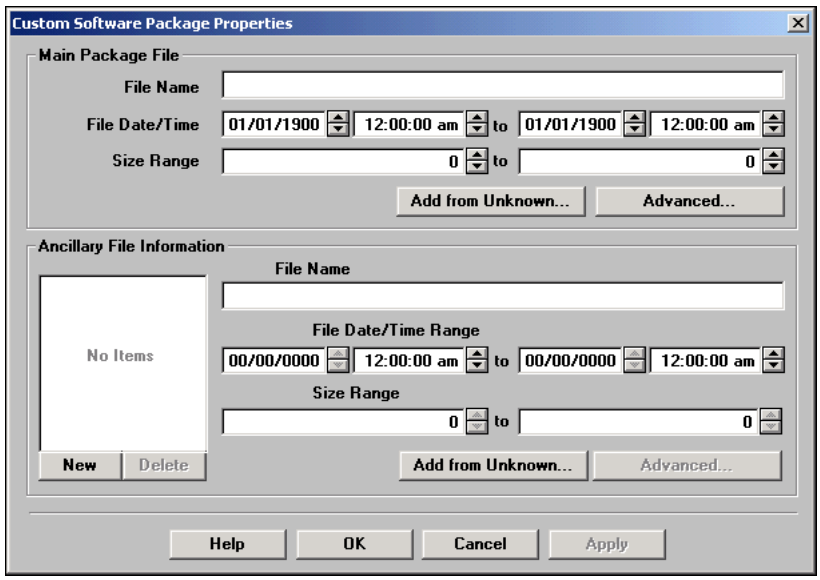


Fig. 159 Custom Software Package Properties Dialog

2 If the software package is already installed on an audited node, you can select an Unknown Software file that should be the package's Main file by clicking **Add from Unknown** in the **Main Package File** area of the dialog.

The **Select Software to Identify as Custom Software** dialog appears.

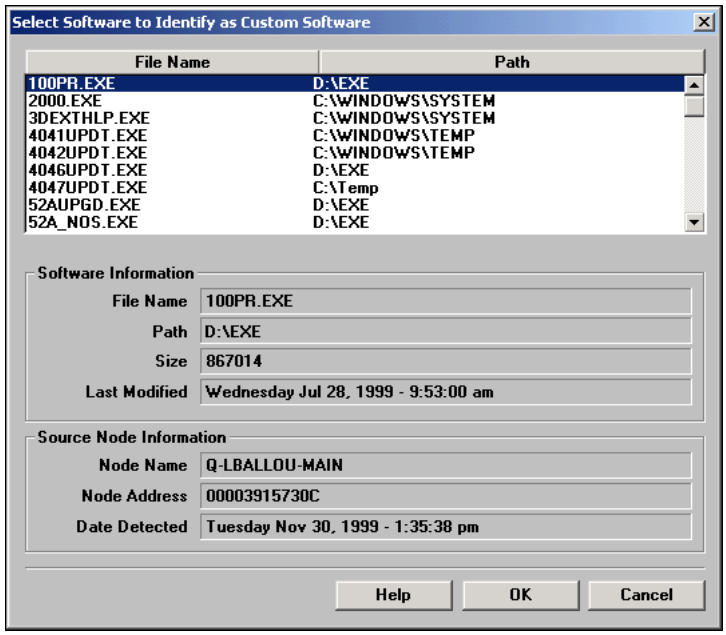


Fig. 160 Select Software to Identify as Custom Software Dialog

3 Select the file to designate as this package's main file and click **OK**.

The name of the file appears in the **Custom Software Package Properties** dialog.

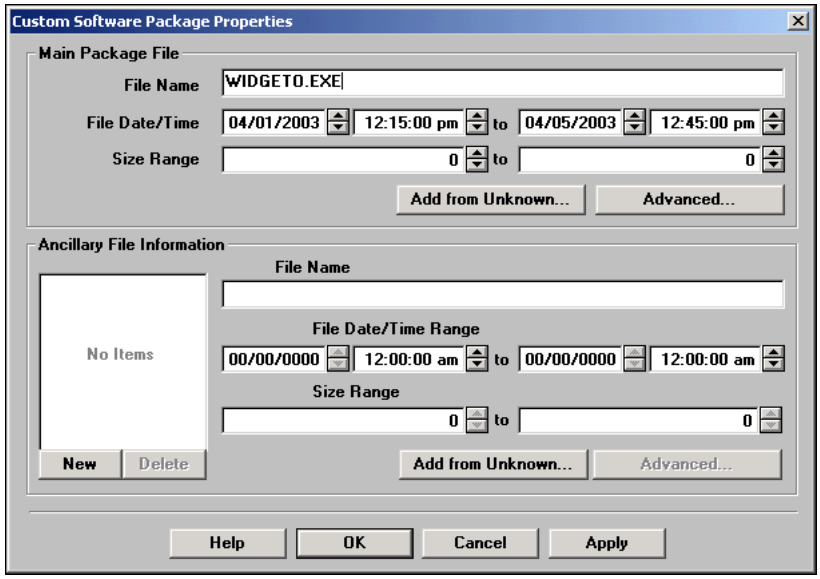


Fig. 161 Custom Software Package Properties Dialog

If you know the name, date, and size of a file, you can enter its parameters manually. If you add a file's parameters manually, the file name is not case-sensitive. Wildcards are not allowed.

4 To more precisely define the existence or absence of a software package, click **Advanced**. The **Advanced File Settings** dialog appears, as shown in Fig. 162.

The Advanced File Settings allow you to specify one or two files whose presence is required for the package to exist, or conversely, one or two files whose presence rules out the existence of the package.

The **Advanced File Settings** dialog defines the current Include and Exclude file settings. The file names the agent searches for are not case-sensitive.

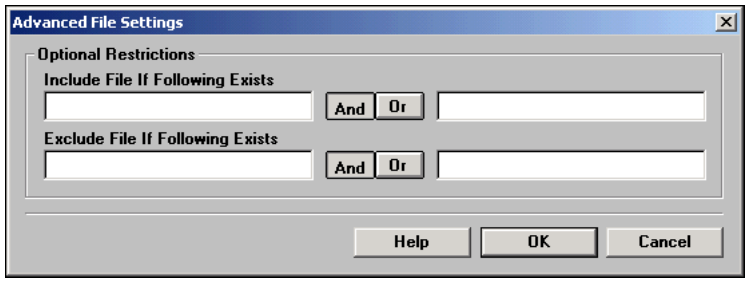


Fig. 162 Advanced File Settings Dialog

5 Click **OK** to save the changes and close the dialog.

6 You can include one or more ancillary files in the package. For each file to include in the custom software package, do one of the following:

Click **Add from Unknown** in the Ancillary File Information area, select a file to add and click **OK**.

or

Click **New** in the Ancillary File Information area and enter the file's details manually.

Files included in the package appear in the **Ancillary File Information** file list.

7 If you want to include or exclude an ancillary file from a package based on the presence or absence of other files, select the file in the ancillary file list and click **Advanced**.

8 Specify the inclusion or exclusion, and click **OK**.

9 When the package's files are defined, click **OK** to save the changes and close the dialog.

Unknown Software

The **Unknown Software** panel lists the found unknown files of the types set in the Software Detection panel of the Audit Setup dialog. See "Configuring Software Detection" on page 69 for information on

configuring software detection. Use the **Unknown Software** panel to:

- View unknown file details.
- Define unknown files as part of a package and move them into the Custom Software List.

▶ *To open the Unknown Software panel and view file details*

1 Open the **NETinventory Inventory Setup** dialog and select **Unknown Software**. The **Unknown Software** panel appears.

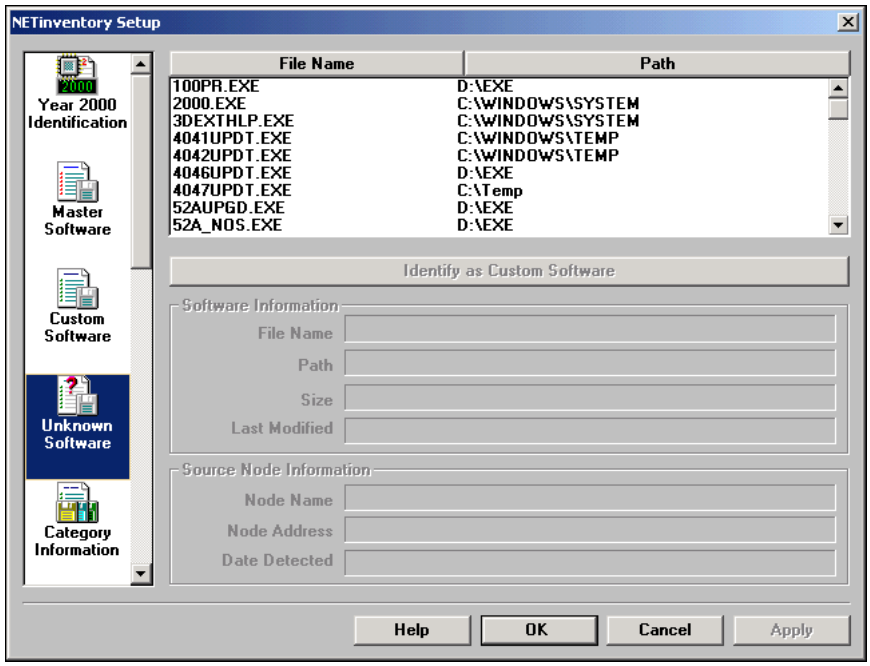
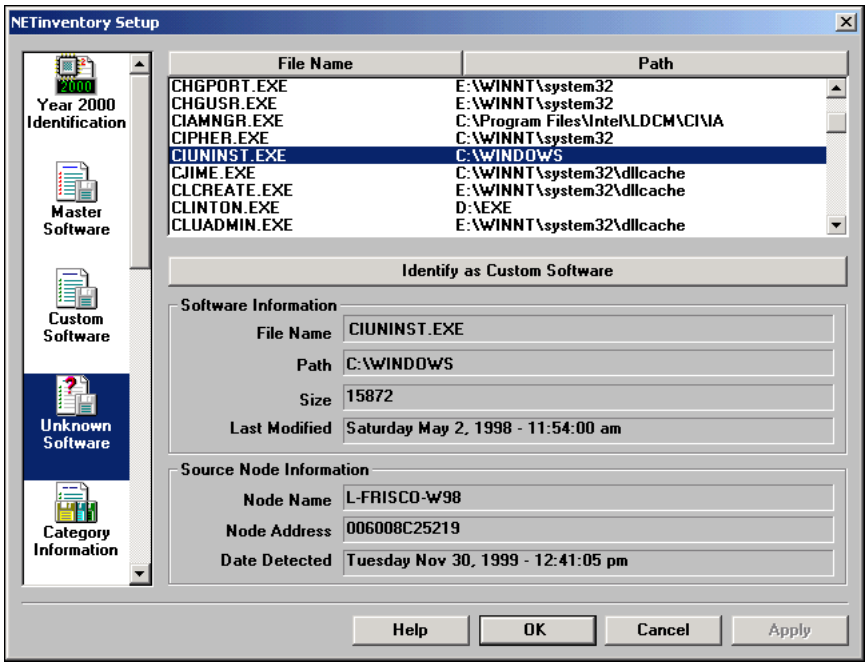


Fig. 163 Unknown Software Panel

2 Select a file from the list. Details related to the file appear in the **Software Information** and **Source Node Information** groups.



3 Unknown Software Panel with File Information

▶ *To identify an Unknown Software file as Custom Software*

1 Open the **Unknown Software** panel and select one or more unknown software files in the File Name list.

2 Click **Identify as Custom Software**. The Unknown Software Identification dialog appears.

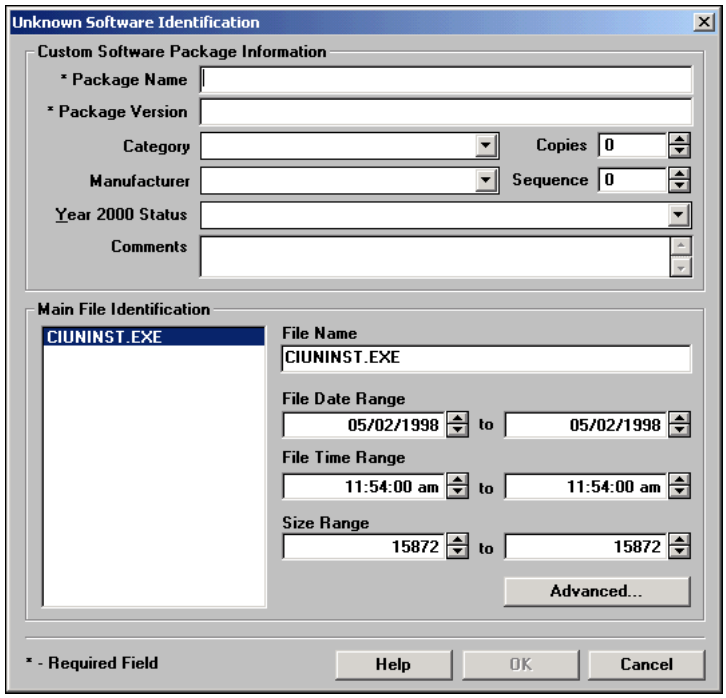


Fig. 164 Identify as Custom Software Dialog

3 Enter appropriate values. Mandatory fields are marked with an asterisk (*). All others are optional.

4 If you selected more than one file, select one from the list to designate as the package's main file. The file's name cannot include wildcards.

You can alter the range of acceptable dates and times and the range of acceptable sizes for the file. Any file with the name you enter which was created in the range you specify and in the size range you specify will qualify as the package's main file.

5 If you want the presence of the selected file to affect the identification of a software package, click **Advanced**.

The **Advanced File Settings** dialog defines the current Include and Exclude file settings. The file names the agent searches for are not case-sensitive.

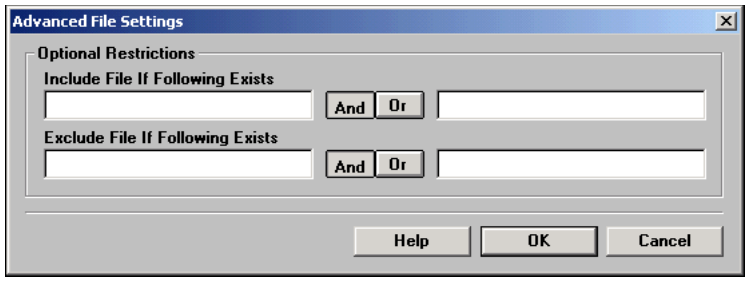


Fig. 165 Advanced File Settings Dialog

6 Click **OK** to save the changes and close the dialog.

The files in the new Custom Software package are removed from the **Unknown Software** panel's File Name list and the new package is added to the Custom Software Package list.

A package can contain a number of ancillary files related to the package. Use the **Custom Software** panel's **Custom Package Files** dialog to add ancillary files to the package. For more information, see "To add files to a Custom Software package" on page 169.

When a package's files have been identified, they will be removed from the Unknown Software list.

Category Information

The **Category Information** panel lists categories available to classify inventory items, including both hardware and software. You can:

- View a category's details.
- Modify an existing category's details.
- Add a new category.

▶ *To open the Category Information panel and view category details*

1 Open the **NETinventory Inventory Setup** dialog and select **Category Information**. The **Category Information** panel appears.

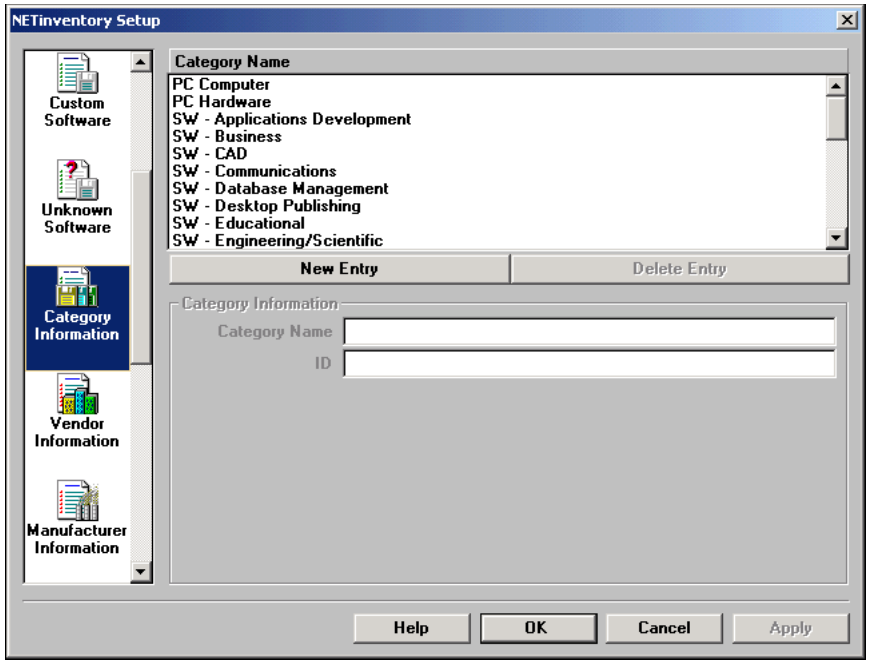


Fig. 166 Category Information Panel

2 Select a category in the list. The category's details appear in the **Category Information** area of the panel.

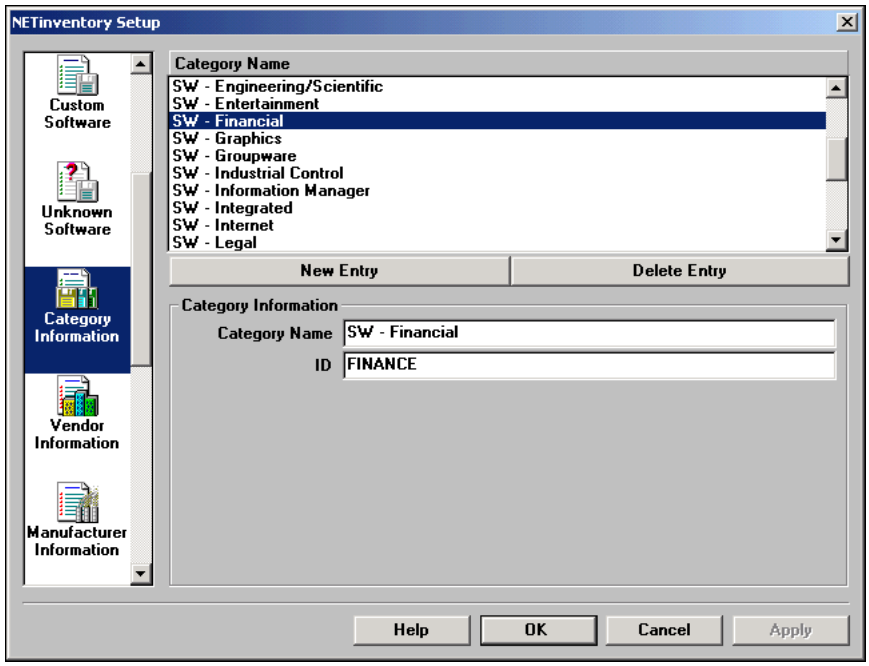


Fig. 167 Category Information Panel with Category Selected

▶ *To change an existing category entry*

1 Open the **Category Information** panel. Select a category.

The category's details appear in the **Category Information** area of the panel.

2 Edit the **Category Information**. The **Category Name** and **ID** must each be unique.

3 Click **OK** to save the changes and close the dialog or click **Apply** to save the changes and leave the dialog open.

▶ *To create a new category*

1 Open the **Category Information** panel and click **New Entry**.

The **New Category Entry** dialog appears.

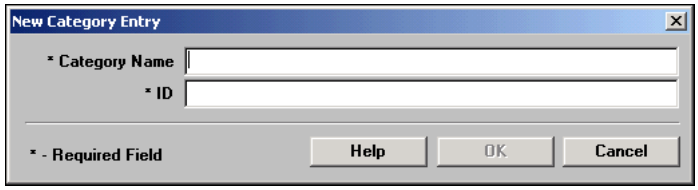


Fig. 168 New Category Entry Dialog

2 Enter the **Category Name** and **ID** values and click **OK**. The **Category Name** and **ID** must both be unique, and both are required.

The new entry appears in the **Category List**.

Vendor Information

The **Vendor Information** panel lists vendors for inventory items, including both hardware and software. You can:

- View vendor details.
- Modify existing vendor details.
- Add a vendor.

When you install NETinventory, no Vendor definitions are included. You define vendors to fit your situation. Vendors can include companies you purchase hardware and software from, companies that maintain your network and the computers on it, or any other vendor type you find useful.

▶ *To open the Vendor Information panel and view vendor details*

1 Open the **NETinventory Inventory Setup** dialog and select **Vendor Information**. The **Vendor Information** panel appears.

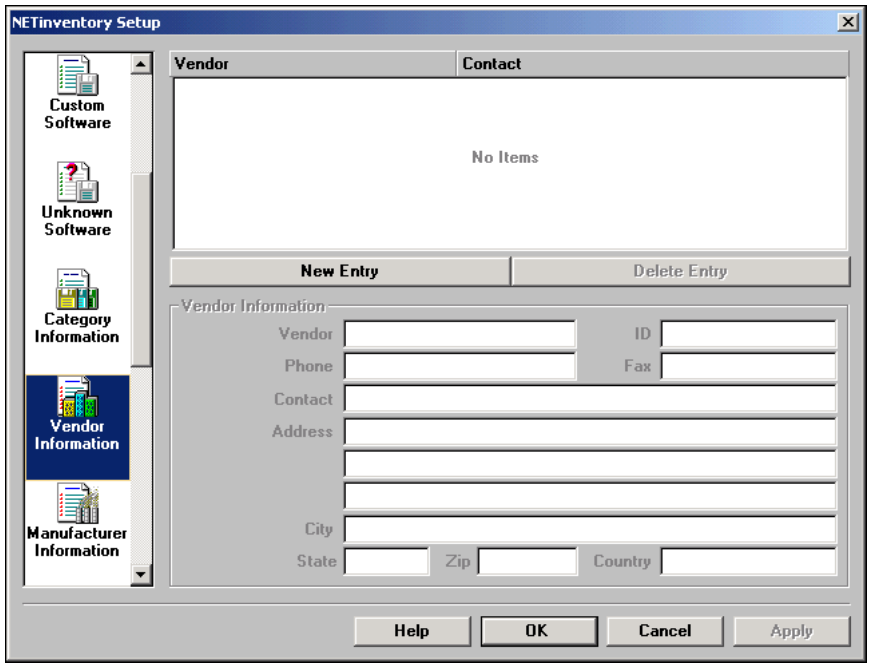


Fig. 169 Vendor Information Panel

2 Select the desired vendor. Details related to the selected vendor appear.

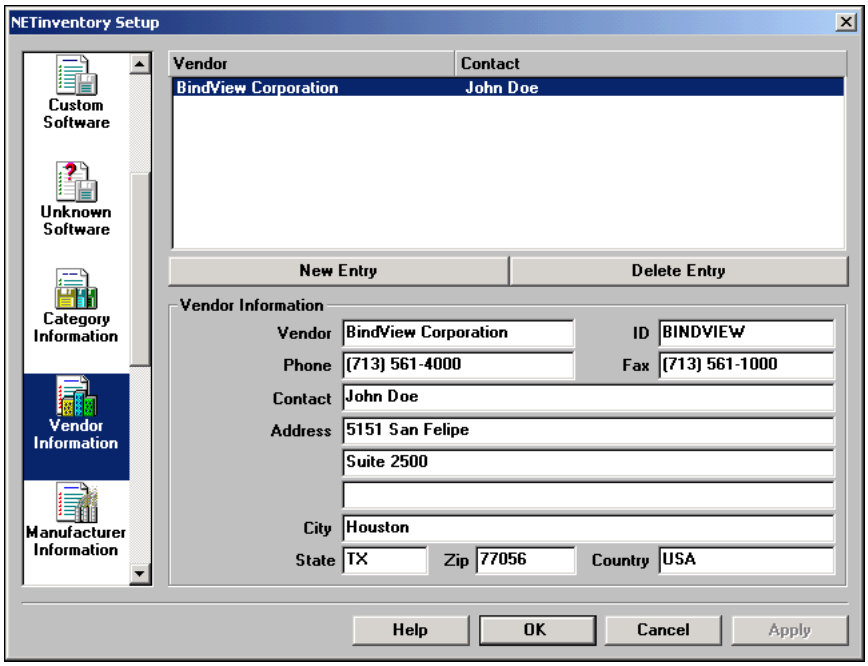


Fig. 170 Vendor Information Panel with Vendor Selected

▶ *To change an existing vendor entry*

1 Open the **Vendor Information** panel and select the desired vendor.

Details related to the selected vendor appear.

2 Edit the **Vendor Information** fields containing the information you want to change. You must enter unique values for the Vendor Name and ID; the other fields are optional.

3 Click **OK** to save the changes and close the dialog or click **Apply** to save the changes and leave the dialog open.

▶ ***To add a new vendor***

1 Open the **Vendor Information** panel and click **New Entry**. The **New Vendor Entry** dialog appears.

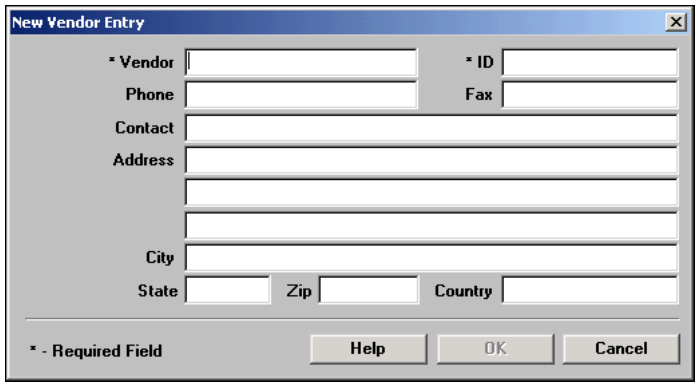


Fig. 171 New Vendor Entry Dialog

2 Enter appropriate values and click **OK** to save the new vendor. The Vendor name and ID must be unique and are mandatory. All other fields are optional.

The new entry appears in the Vendor list.

Manufacturer Information

The **Manufacturer Information** panel lists manufacturers for products in software and hardware inventories. You can:

- View manufacturer details.
- Modify existing manufacturer details.
- Add a manufacturer.

Manufacturer records can be linked to the items in the Master and Custom Software lists and to items in the Hardware Products list. Manufacturers and inventory items are linked, Manufacturer contact information can be included in an inventory report. A suitably formatted report can be exported and used in conjunction with a word processor's mail merge capability to contact manufacturers.

▶ *To open the Manufacturer Information panel and view manufacturer information*

1 Open the **NETinventory Inventory Setup** dialog and select **Manufacturer Information**. The **Manufacturer Information** panel appears.

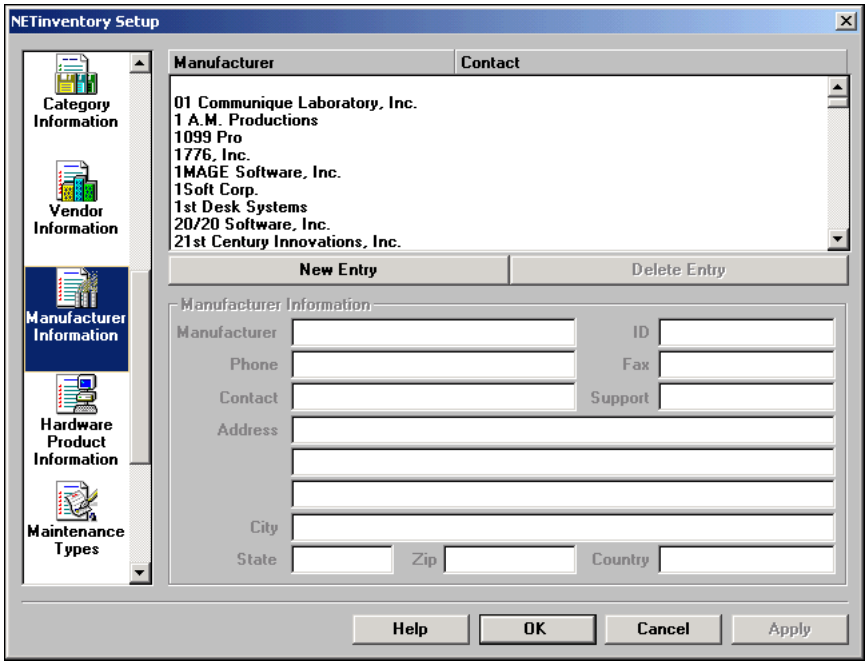


Fig. 172 Manufacturer Information Panel

2 Select the desired manufacturer. Details related to the manufacturer appear.

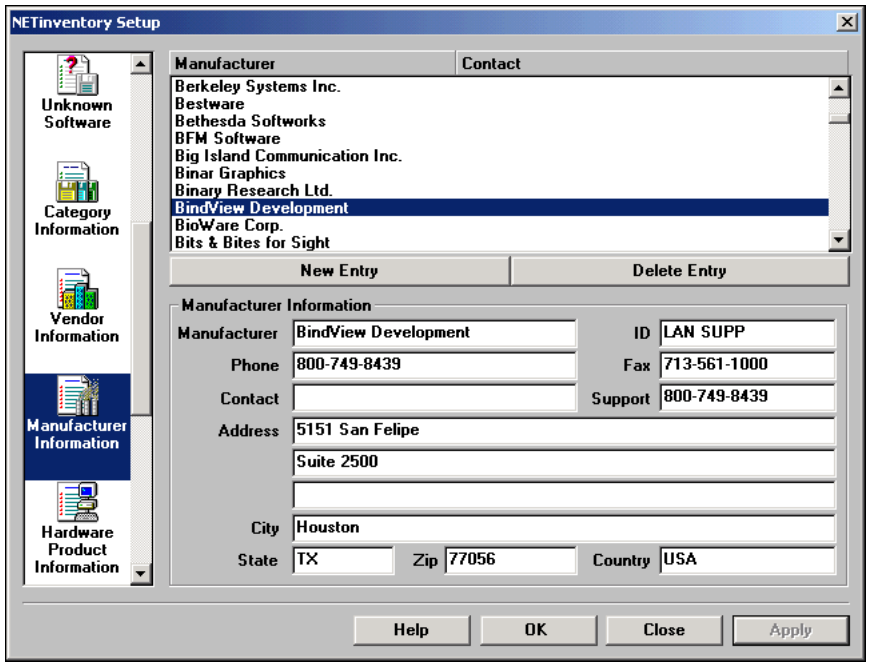


Fig. 173 Manufacturer Information Panel with Manufacturer Selected

▶ *To modify an existing manufacturer's entry*

1 Open the **Manufacturer Information** panel, and select the desired manufacturer. Details related to the manufacturer appear.

2 Edit the Manufacturer Information fields. The Manufacturer Name and ID you provide must be unique, and are required. The other fields are optional.

3 Click **OK** to close the dialog and save the changes you have made, or click **Apply** to save the changes without closing the dialog.

▶ *To add a new manufacturer*

1 Open the **Manufacturer Information** panel and click **New Entry**. The **New Manufacturer Entry** dialog appears.

2 Enter appropriate values. The Manufacturer Name and ID must be unique, and are required. The other fields are optional.

3 Click **OK** to save the changes and close the dialog.

The new entry appears in the Manufacturer list.

Hardware Product Information

The **Hardware Product Information** panel lists information about the hardware products in the hardware inventory. You can:

- View a hardware product's details.
- Modify a hardware product's details.
- Add a hardware product.
- Add a model of a hardware product.

▶ *To open the Hardware Product Information panel and view details*

1 Open the **NETinventory Inventory Setup** dialog and select **Hardware Product Information**. The **Hardware Product Information** panel appears.

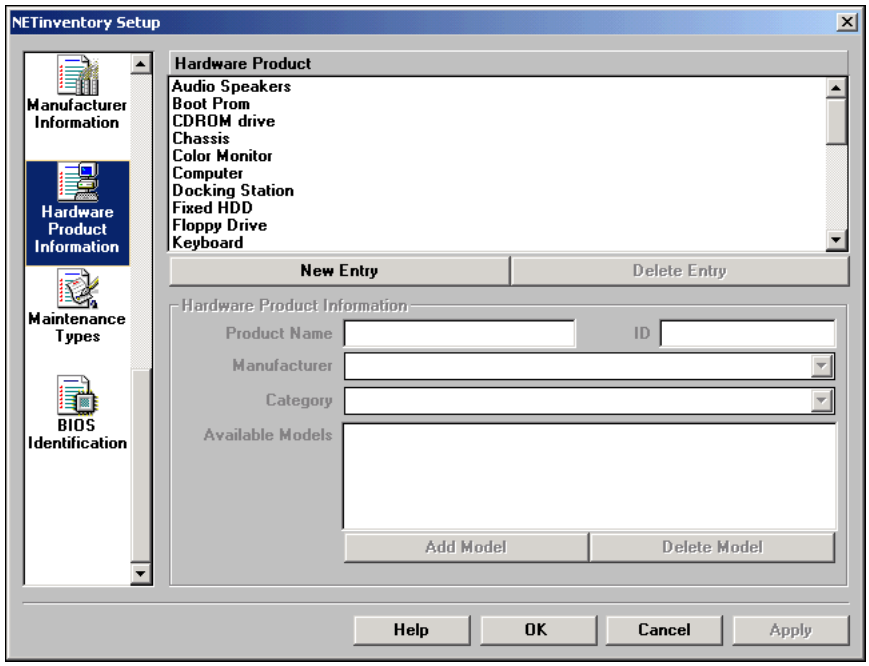


Fig. 174 Hardware Product Information Panel

2 Select the desired hardware. Details appear in the **Hardware Product Information** group.

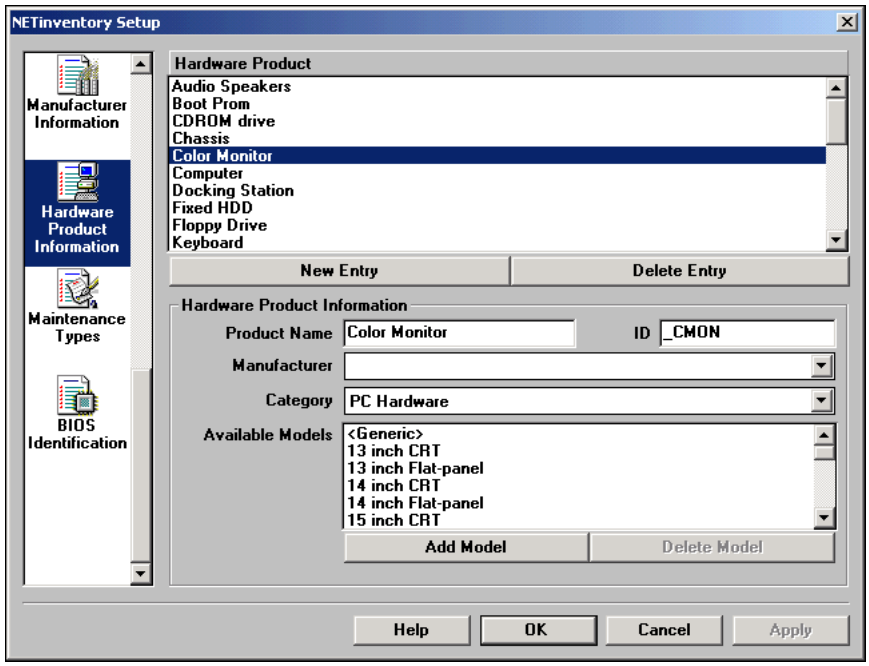


Fig. 175 Hardware Product Information Panel with Product Selected

▶ *To modify existing Hardware Product Information*

1 Open the **Hardware Product Information** panel and select a hardware product. Details related to the selected hardware product appear in the **Hardware Product Information** group.

2 Edit the Hardware Product Information fields.

3 Click **OK** to save the changes and close the dialog, or click **Apply** to save the changes and leave the dialog open.

▶ *To add a new hardware product*

1 Open the **Hardware Product Information** panel and click **New Entry**. The **New Hardware Product Entry** dialog appears.

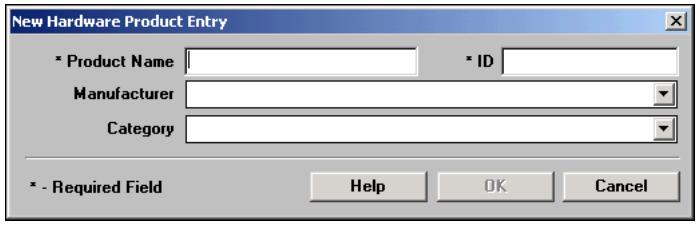


Fig. 176 New Hardware Product Entry Dialog

2 Enter appropriate values and click **OK**. The Product name and ID you provide are required and must be unique. The other fields are optional

▶ ***To add a new hardware model***

1 Open the **Hardware Product Information** panel and select a Hardware Product.

2 Click **Add Model**. The **New Hardware Model** dialog appears.

Fig. 177 New Hardware Model Dialog

3 Enter a name for the new Hardware model and click **Done**.

The new entry appears in the selected hardware product's **Available Model** list.

Maintenance Types

The **Maintenance Types** panel edits maintenance types software and hardware inventory. A maintenance type can be assigned to each item in your inventory to keep track of warranties and maintenance contracts on individual items. Using the **Maintenance Types** panel, you can:

- View maintenance type details.
- Modify an existing maintenance type's details.
- Add a maintenance type.

▶ *To open the Maintenance Types panel and view type details*

1 Open the **NETinventory Inventory Setup** dialog and select **Maintenance Types**. The **Maintenance Types** panel appears.

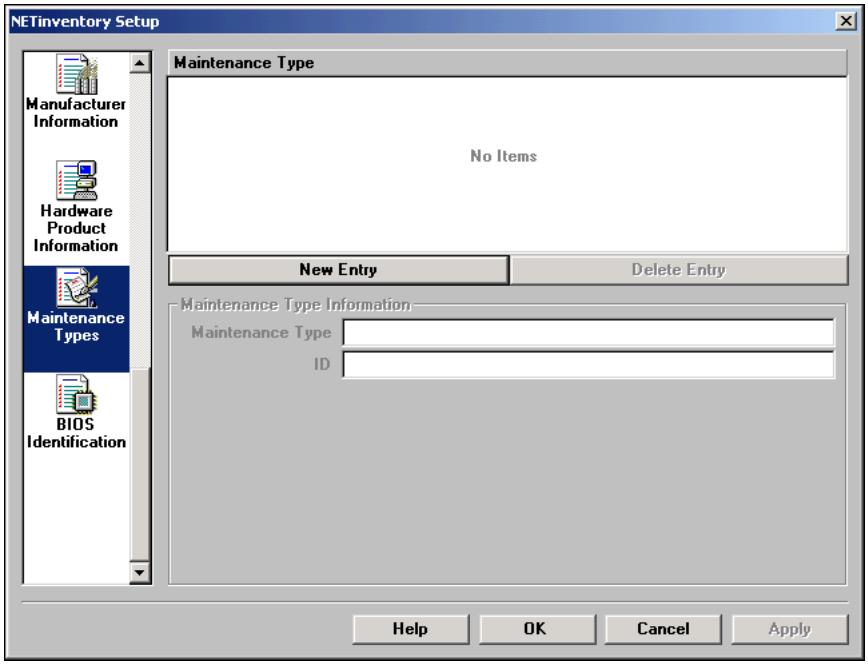


Fig. 178 Maintenance Types Panel

2 Select the desired maintenance type. Details appear in the **Maintenance Type** panel.

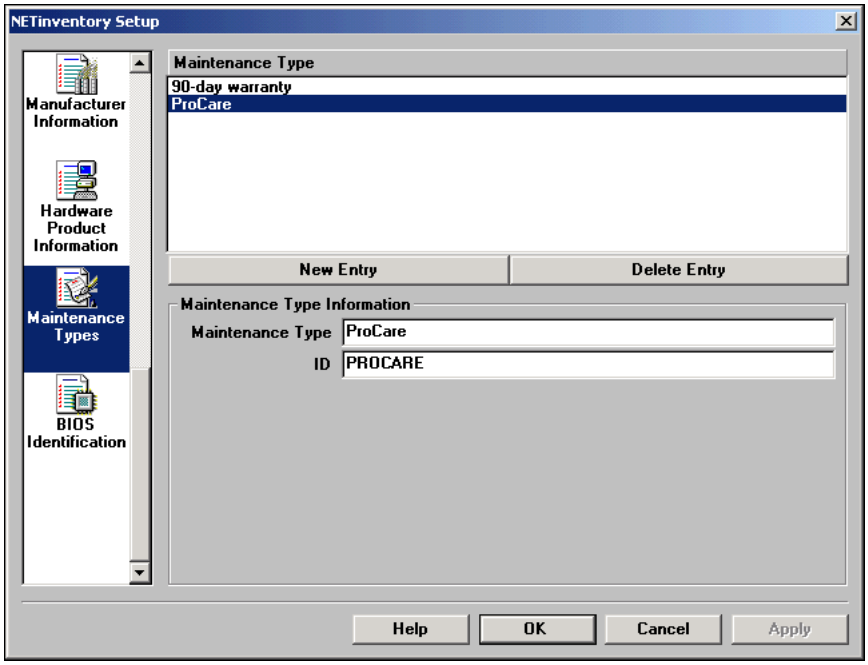


Fig. 179 Maintenance Types Panel with Type Selected

▶ ***To change an existing Maintenance Type entry***

1 Open the **Maintenance Type** panel and select the maintenance type.

Details related to the maintenance type appear.

2 Click **OK** to save the changes and close the dialog or click **Apply** to save the changes and leave the dialog open.

▶ ***To enter a new Maintenance Type***

1 Open the **Maintenance Type** panel and click **New Entry**. The **New Maintenance Type Entry** dialog appears.

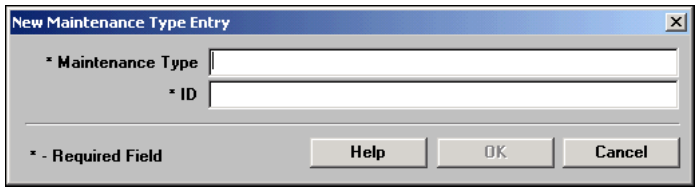


Fig. 180 New Maintenance Type Entry Dialog

2 Enter the appropriate values and click **OK**. Both the **Maintenance Type** and **ID** are mandatory. The **ID** must be unique.

BIOS Identification

The **BIOS Identification** panel contains the database of BIOSes the Audit Agent searches for. You can:

- View BIOS details.
- Modify existing BIOS details.
- Add a BIOS identification string and manufacturer name.

Furthermore, the items in the BIOS Identification list can be linked to the Manufacturers in the Manufacturers List.

▶ *To open the BIOS Identification panel and view BIOS details*

1 Open the **NETinventory Inventory Setup** dialog and select **BIOS Identification**. The **BIOS Identification** panel appears.

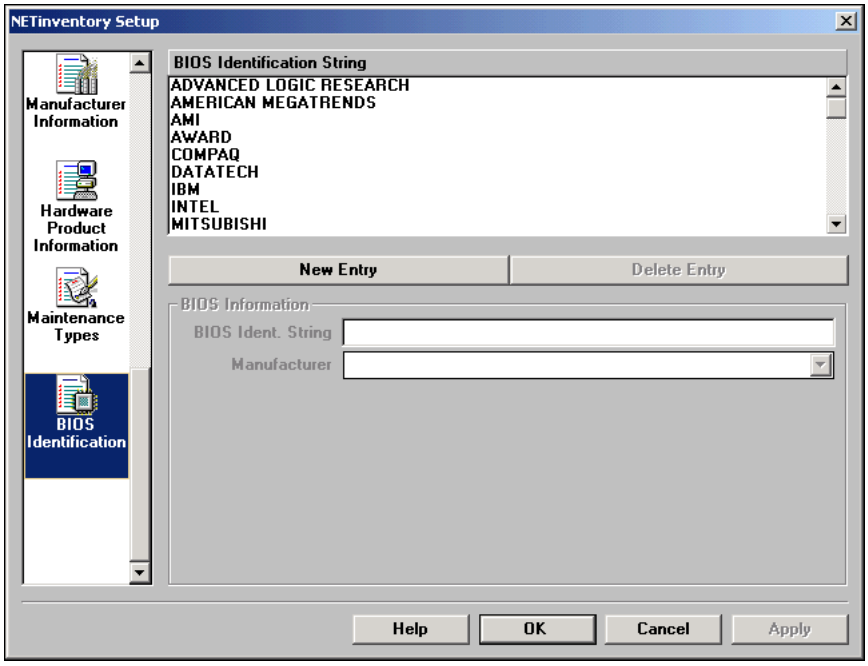


Fig. 181 BIOS Identification Panel

2 Select the desired BIOS. Details appear in the **BIOS Information** panel.

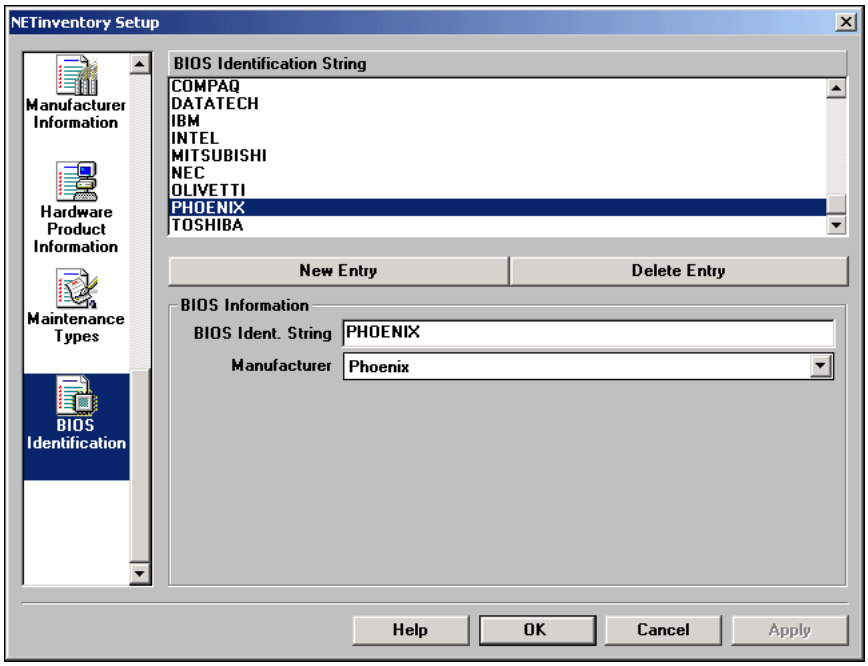


Fig. 182 BIOS Identification Panel with BIOS Selected

▶ *To modify an existing BIOS identification string*

1. Open the **BIOS Identification** panel and select a BIOS from the list.

   Details related to the selected BIOS Identification String appear in the **BIOS Information** panel.

2. Edit the **BIOS Identification** fields. The **BIOS Ident String** is the string of characters the Audit Agent searches for in the BIOS of each audited node.

3. Click **OK** to save the changes and close the dialog or click **Apply** to save the changes and leave the dialog open.

▶ *To add a new BIOS Identification string*

1. Open the **BIOS Identification** panel and click **New Entry**. The **New BIOS Entry** dialog appears.

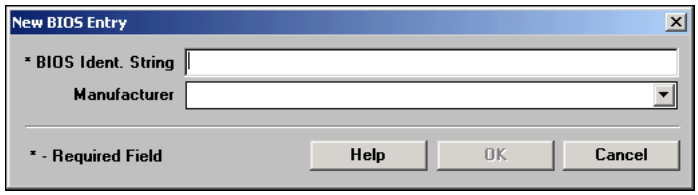


Fig. 183 New BIOS Entry Dialog

2. Enter appropriate values and click **OK** to save the new BIOS Identification. The BIOS Ident. String is required, but the Manufacturer is optional. If the manufacturer you wish to use is not in the list of known manufacturers, you can add the manufacturer. See "To add a new manufacturer" on page 181.

7 Node Management

In This Chapter

Overview 190
Opening the Node Manager 190
Information Available Through the Node Manager 191
NETinventory Status Panel 192
Hardware and Software Inventory Information 195
Managing Node Alerts 201
Managing Tracked Files 204
Customizing Audits for Nodes 210
Taking Control with NETrc 215

Overview

The NETinventory Snap-in Module gathers hundreds of pieces of information about each node it audits. This information is collected by the NETinventory Audit Agent and is stored by the Audit Server.

The NETinventory *Node Manager* is used when viewing any grid within the NETinventory Console to access all information about any single node within your enterprise.

You can open the Node Manager while viewing any NETinventory grid. When you open the Node Manager, it displays information about a single node. To access the Node Manager, run any NETinventory grid, then double-click any field in the grid.

The Node Manager has a number of individual panels detailing many aspects of the node. The Node Manager also allows you to maintain node hardware and software inventory data. You also use the Node Manager to view the results of file audits and string searches performed on nodes.

Opening the Node Manager

The Node Manager is accessible when you are viewing a NETinventory grid.

▶ ***To open the Node Manager***

1. Run any grid containing NETinventory information.
2. Double-click any field in the grid to open the Node Manager.

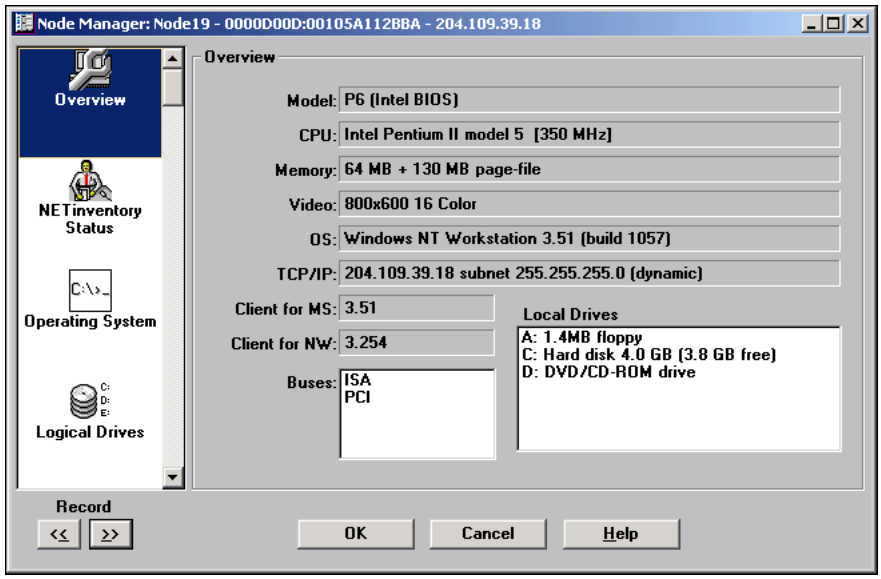


Fig. 184 NETinventory Node Manager

3. The information in the Node Manager is grouped according to type. Select an icon in the scrolling area on the left side of the **Node Manager** dialog to determine the category of node information displayed.

The two buttons at the bottom of the scrolling list of panels allow you to scroll through the available nodes in the current grid.

Information Available Through the Node Manager

All NETinventory information about nodes is available using the Node Manager. To make the information easy to find and use, the information is divided into logical groups on panels in a dialog book. The contents of some panels are subdivided into tabbed pages. Some panels are organized by the node's operating system, others are grouped according to content. Most of the panels are informational, and their contents cannot be changed. The *NETinventory User Guide* only discusses the panels where you can make significant changes to the information NETinventory stores.

The panels in the Node Manager are categorized according to the information found on them. In order from top to bottom, the panels are:

- Overview
- NETinventory Status
- Operating System
- Logical Drives
- Physical Drives
- Software
- Hardware Assets
- NIC and Modem
- Network Configuration
- NetWare Configuration
- Environment/SET Variables
- Drivers/Services/NLMs
- User Defined Fields
- Alerts
- Tracked Files
- File Download History
- DMI System
- DMI CPU
- DMI BIOS
- DMI Memory
- DMI Chassis
- CPU
- BIOS
- Memory
- PCI and EISA
- Ports (COM & LPT)
- Sound Card
- Mouse

- Video
- Audit Detect Flags
- Custom Audit Interval
- NETrc

NETinventory Status Panel

The NETinventory Status panel contains information about the names NETinventory knows the node by. You can also view information about when the node was audited and the Audit Server the node is assigned to.

Moving and Deleting Nodes

Normally, Audit Server Assignment Rules("Audit Server Assignment Rules" on page 151), control which Audit Server a node is assigned to. The NETinventory Status panel in the Node Manager allows you to move an existing node from Audit Server to Audit Server.

▶ ***To move a node***

1 Open the Node Manager and select the **NETinventory Status** icon. The **NETinventory Status** panel appears.

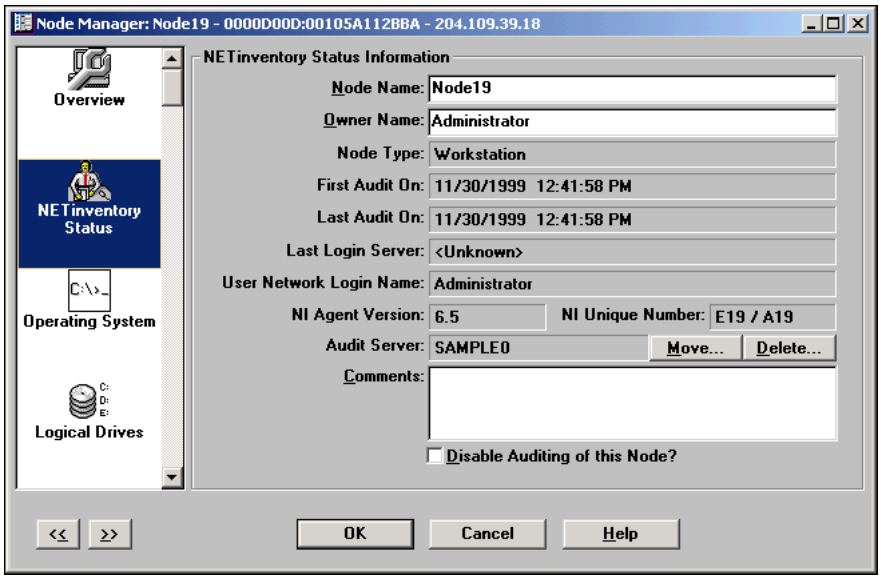


Fig. 185 NETinventory Node Manager - Status Panel

2 The node's current server is listed in the **Audit Server** field. To move the node to a different Audit Server, click **Move**. The **Select New Audit Server** dialog appears.

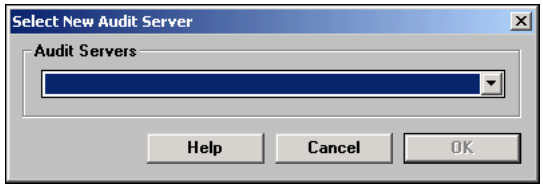


Fig. 186 Select New Audit Server Dialog

3 Select the node's new Audit Server from the drop-down list.

4 Click **OK** to move the node and close the dialog.

▶ *To delete a node*

1 Open the Node Manager and select the **NETinventory Status** icon. The **NETinventory Status** panel appears.

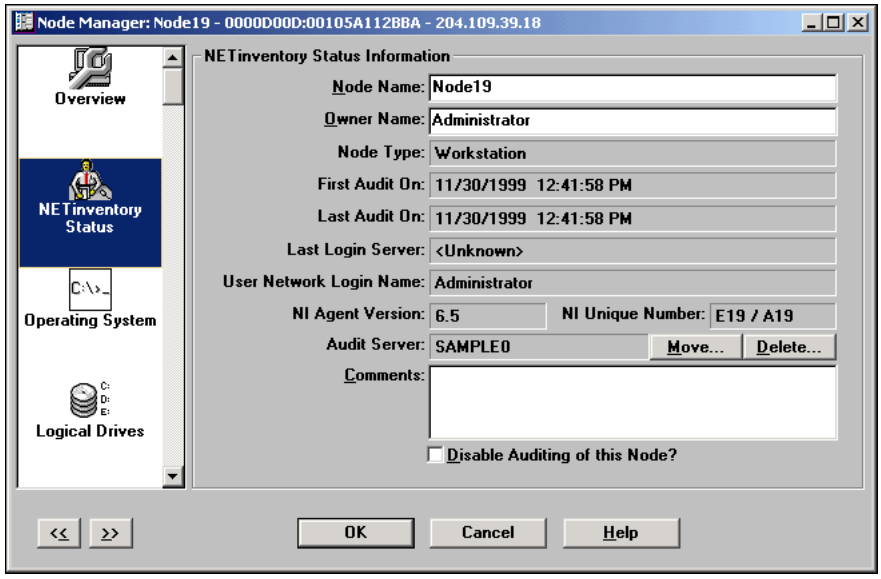


Fig. 187 NETinventory Node Manager - Status Panel

2 Click **Delete**. You will be prompted to confirm the deletion.

3 Click **Yes** to delete the node.

Node Comments

NETinventory allows you to record general comments about each audited node on your enterprise network. Use this area to record information that does not fit in any other area.

▶ *To enter general comments for a node*

1 Open the Node Manager and select the **NETinventory Status** icon.

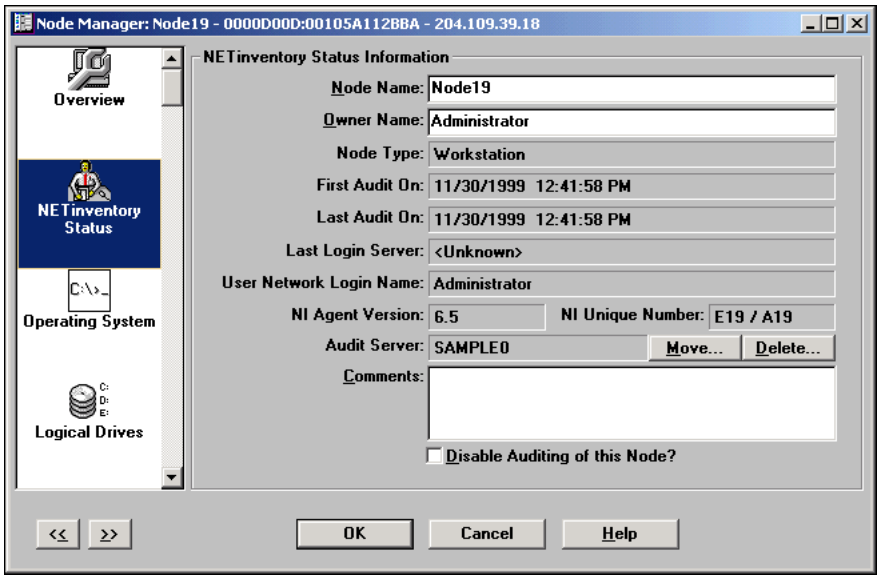


Fig. 188 NETinventory Node Manager - Status Panel

2 Enter any comments about the node in the **Comments** field.

3 Click **OK** to close the Node Manager and save the comments.

Hardware and Software Inventory Information

The Software panel and Hardware Assets panel help you keep track of the hardware and software in your enterprise. The Node Manager panels allow you to enter information specific to each node into the NETinventory databases.

Software Asset Information

The **Software** panel lists all identified software packages installed on the node's local drives. You can add asset management information about each software application found.

NETinventory can track a great deal of information about each software package. Items tracked include:

- Package name
- Manufacturer
- Vendor
- Software category
- Serial number

Some of these fields are assigned automatically when software is identified, and can only be edited in the Master and Custom Software Lists. See "Master Software" on page 163 and "Custom Software" on page 166 for more information. Other fields store information about an individual node and can be edited.

▶ *To view software information for a node*

1 Open the Node Manager and select **Software**. The **Software** panel appears.

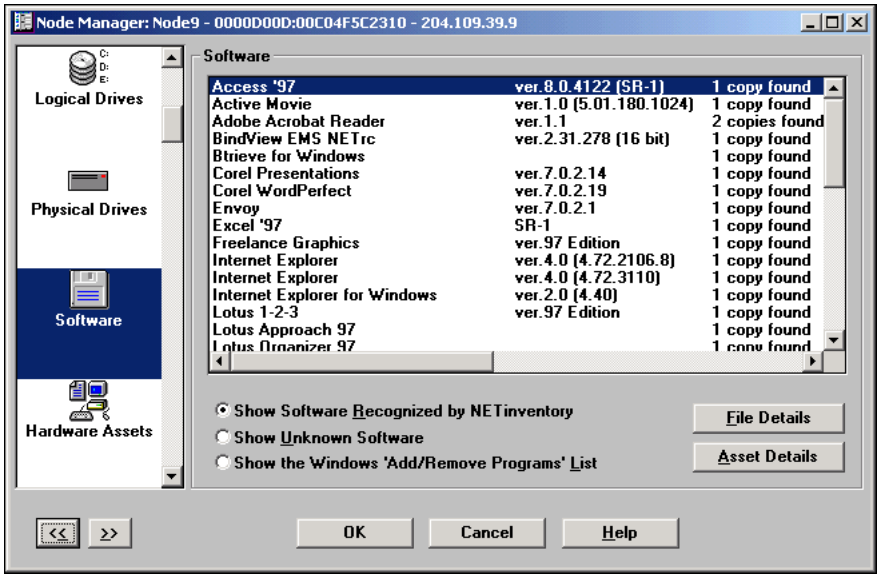


Fig. 189 NETinventory Node Manager - Software Panel

2 Select **Show Software Recognized by NETinventory** to list the software packages NETinventory found on the node.

3 Select **Show Unknown Software** to view the software **NETinventory** was unable to categorize on the node.

4 Select **Show the Windows 'Add/Remove Programs' List** to view the items listed in the Add/Remove Programs Control Panel.

5 For any item, click **File Details** for information about the files in the package.

▶ *To view software asset details*

The brief listing in the **Software** panel displays the name of the package identified, its version, and the number of copies found. NETinventory stores additional information about each item, including asset information you set.

1 Open the **Software** panel.

2 Double-click any software package *or* select Software package and click **Asset Details**. The **Software Maintenance Information** dialog appears.

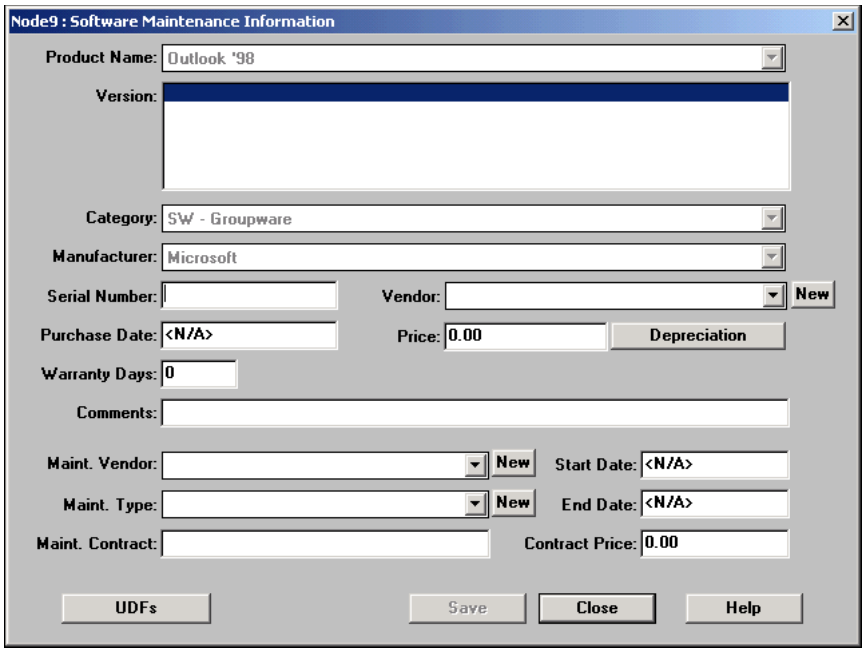


Fig. 190 Software Maintenance Information Dialog

3 Click in any field to edit it. Fields assigned when the product is identified cannot be edited and are dimmed. Change these items in the Master or Custom Software lists.

4 Click the **Depreciation** button to edit depreciation. The **Software Asset Depreciation Information** dialog appears.

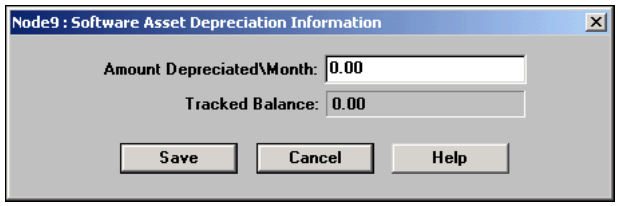


Fig. 191 Software Asset Depreciation Information Dialog

5 Enter a value for the **Amount Depreciated\Month**. Only whole-dollar amounts can be tracked.

If the **Price** is entered in the **Software Maintenance Information** screen, the time since purchase (in months and fractions of months) will be multiplied by the **Amount Depreciated\Month** and the result will be subtracted from the purchase price to yield the **Tracked Balance**.

Click **Save** to save the changes and close the dialog.

6 NETinventory stores up to 6 User Defined Fields for each software asset. These are separate from the general User Defined Fields. You can include these UDFs in queries you create.

7 Click the **UDFs** button.The **Software Asset User Defined Fields** dialog appears.

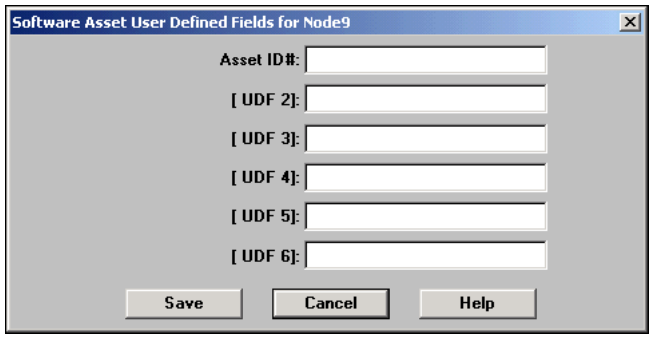


Fig. 192 Software Asset User Defined Fields Dialog

8 Click in any of the six User Defined Fields in the User Defined Fields screen to edit them.

9 Click **Save** to save the changes and close the dialog.

10 Click **Done** in the **Software Maintenance Information** dialog to save the changes and close the dialog.

Hardware Assets Information

The **Hardware Assets** panel contains a list of all identified hardware components as well as components you may have added manually for a particular node.

Determining what constitutes Hardware Assets

The list of items considered to be hardware assets varies greatly from organization to organization. Which pieces of hardware are classified as individual components, and which are simply parts of another component depends on corporate policies. What is considered to be a component worth tracking on its own in one organization will be considered part of another component in a different organization.

▶ ***To view and edit Hardware Asset information***

Open the Node Manager and select **Hardware Assets**. The **Hardware Assets Information** panel appears.

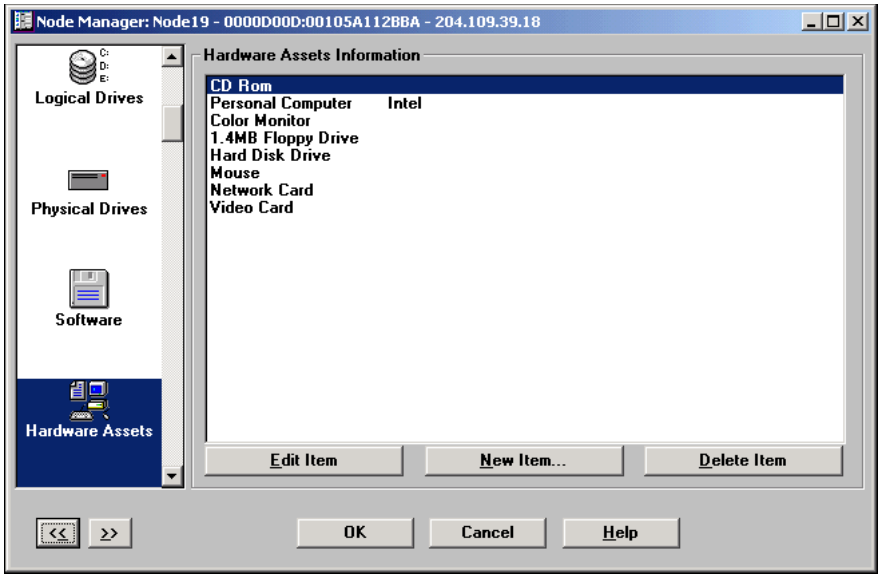


Fig. 193 NETinventory Node Manager - Hardware Assets Panel

The panel lists the hardware components NETinventory tracks for the selected node.

▶ ***To view hardware asset details***

1 The brief listing only displays the type of item tracked and brief descriptive information. NETinventory also stores detailed information about each item.

2 Double-click any hardware item *or* select the hardware item and click **Edit Item**. The **Hardware Maintenance Information** dialog appears.

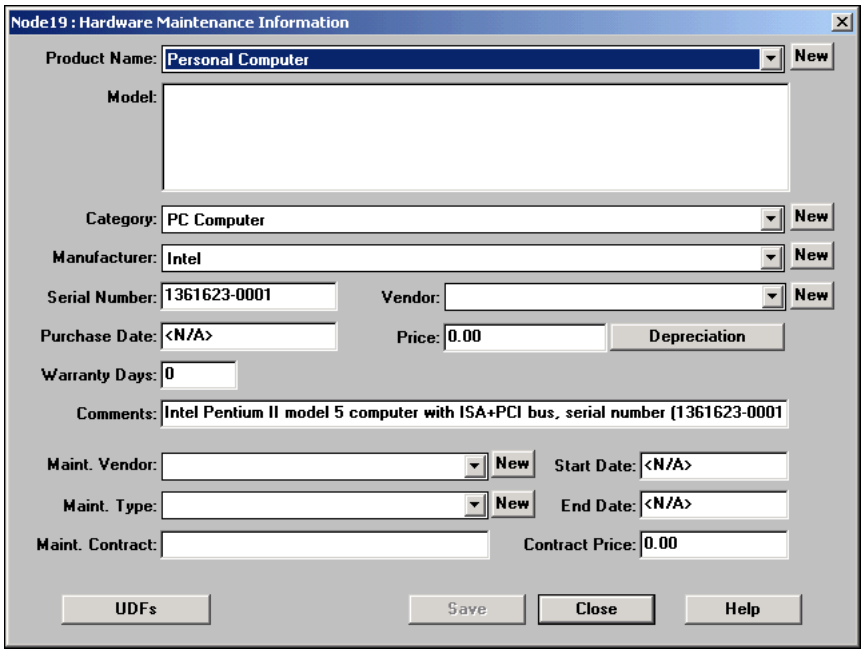


Fig. 194 Hardware Maintenance Information Dialog

3 Click in any field to edit it.

4 Click the **Depreciation** button to edit depreciation. The **Hardware Asset Depreciation Information** dialog appears.

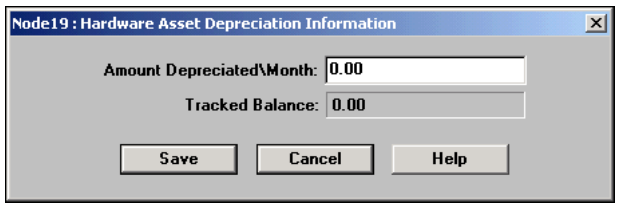


Fig. 195 Hardware Asset Depreciation Information Panel

5 Enter a value for the **Amount Depreciated\Month**. Only whole-dollar amounts can be tracked.

If the **Price** is entered in the **Hardware Maintenance Information** screen, the time since purchase (in months and fractions of months) will be multiplied by the **Amount Depreciated\Month** and the result will be subtracted from the purchase price to yield the **Tracked Balance**.

6 Click **Save** to save the changes and close the dialog.

NETinventory stores up to 6 User Defined Fields for each hardware asset. These are separate from the general User Defined Fields. You can include these UDFs in queries you create.

7 Click the **UDFs** button.The **Hardware Asset User Defined Fields** dialog appears.

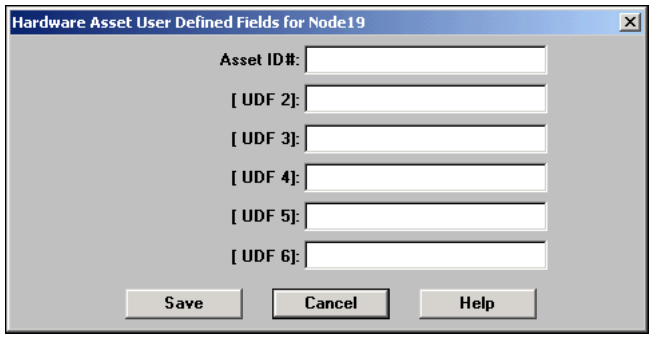


Fig. 196 Hardware Asset User Defined Fields Dialog

8 Click in any of the six User Defined Fields to edit them.

9 Click **Save** to save the changes and close the dialog.

10 Click **Done** in the **Hardware Maintenance Information** dialog to save the changes and close the dialog.

▶ *To create a new hardware asset*

If the Audit Agent does not locate a hardware item associated with a particular node (e.g. an Uninterruptible Power Supply) and you wish to associate it with a node, you can create a hardware asset record for the node.

1 In the **Hardware Assets** panel of the **Node Manager**, click **New**. The **Hardware Maintenance Information** dialog appears, blank.

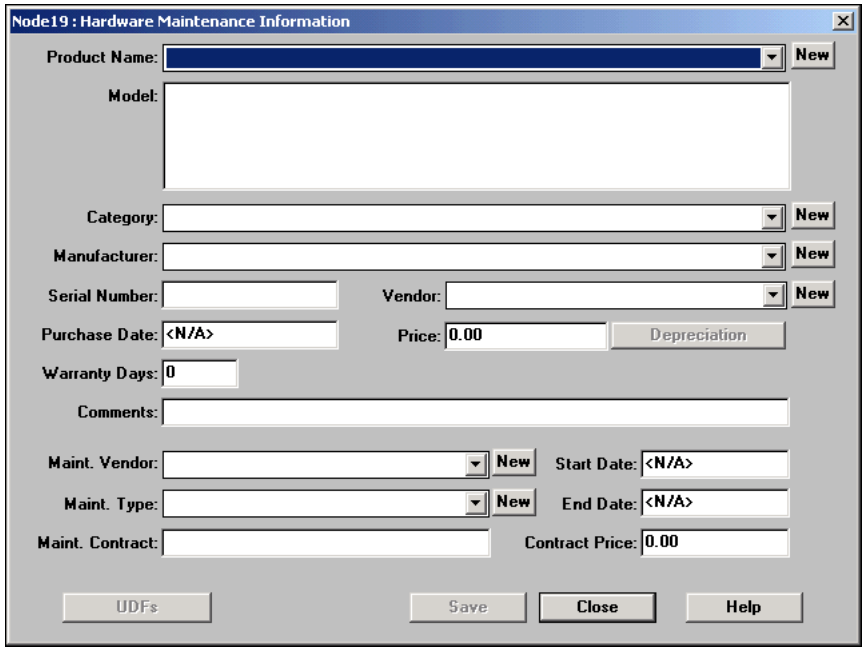


Fig. 197 Hardware Maintenance Information Dialog

2 Enter the information for the hardware asset you wish to add. The **Product Name** is mandatory. All other fields are optional. You can also add Depreciation and UDF information.

3 Click **Done** in the **Hardware Maintenance Information** dialog to save the changes and close the dialog.

▶ ***To delete an item from the hardware assets database***

1 Select the item's name in the **Hardware Assets** panel.

2 Click **Delete Item**.

NETinventory will ask you to confirm that you want the item deleted. If you click **Yes**, the item will be deleted.

Managing Node Alerts

The Node Manager's **Alerts** panel collects and manages all alerts relevant to a node.

During an audit, the NETinventory Audit Agent generates alerts when specified conditions are met. The conditions are defined using the **Auditing Setup** dialog. See Chapter 4, "Alerts," on page 66 for more information about creating alerts.

Every alert is associated with a specific node. Each alert contains a message describing the alert condition, the alert's date and time, and the acknowledgment associated with the alert. This data appears as rows on the **Alerts** panel.

You use the Node Manager to *acknowledge* alerts, *delete* alerts, and *view* alert details.

Acknowledging an alert marks it so that it can be filtered from queries.

Alerts appear in the Node Manager's **Node Alert Information** panel until you delete them.

Alert details in the **Alert Detail** dialog that appear when you view an alert describe the node, the condition that triggered the alert, the alert level, and the acknowledgment status.

▶ *To view node alerts*

1 Open the Node Manager and select **Alerts**. The **Alerts** panel appears if the node has one or more alerts associated with it.

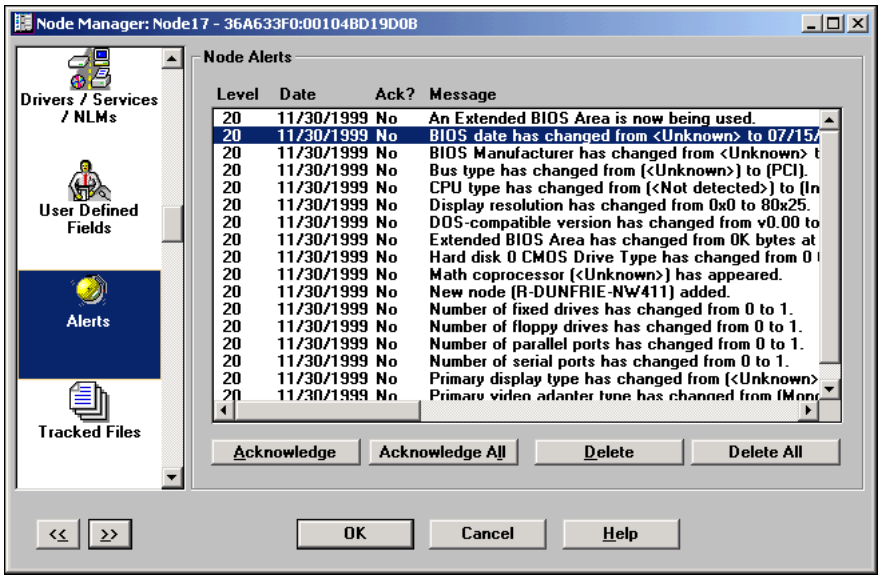
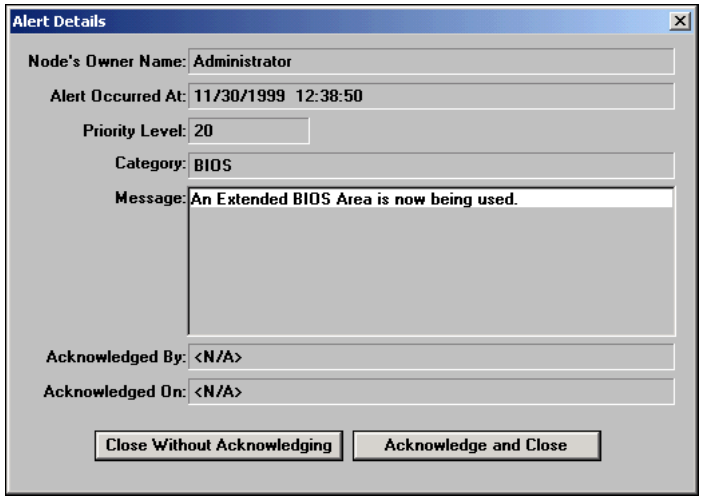


Fig. 198 NETinventory Node Manager - Alerts Panel

2 If a node has alerts associated with it, you can *view* the details of any alert. Double-click any alert. The **Alert Details** dialog appears.



3 Click **Close Without Acknowledging** or **Acknowledge and Close** to close the dialog.

▶ *To acknowledge an alert*

1 Open the **Alerts** panel and select the alert to acknowledge.

2 Click **Acknowledge** or **Acknowledge All**.

Acknowledged alerts are displayed with “Ack” in the **Ack** (Acknowledged) column.

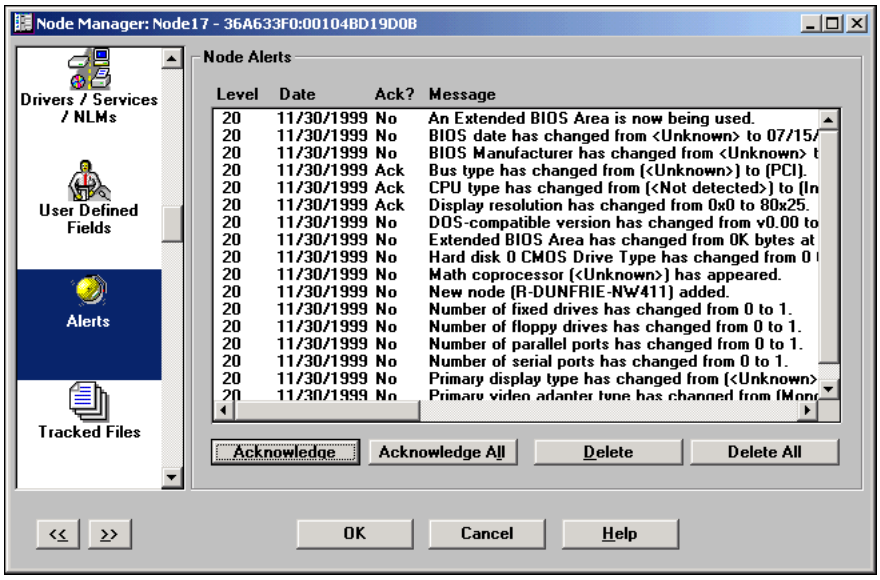


Fig. 199 NETinventory Node Manager - Alerts Panel

▶ *To delete an alert*

Once an alert is generated, it remains until deleted. Acknowledged alerts can be deleted.

To delete an alert associated with the current node:

1. Open the **Alerts** panel and select the alert to delete.
2. Click **Delete** or **Delete All**.

Managing Tracked Files

When the Audit Agent performs a file audit on a workstation, it can automatically store a compressed copy of audited files on the Audit Server. For information on configuring file auditing, see "Configuring Tracked Files" on page 72. Each type of file you track is called a *File Audit*. Once a file has been set for auditing, the NETinventory Audit Agent will monitor all versions of that file found on audited nodes.

When a file is stored on the Audit Server in this way, you can view and edit the file, receive alerts when it changes, and keep a revision history of the file.

You use the **Tracked Files** panel in the Node Manager to:

- View a listing of each copy of each tracked file.
- View and edit the contents of tracked files.
- Download edited or original copies of tracked files back to the original workstation and optionally force the node to reboot when the download is complete.

▶ *To view tracked file information*

1 Open the **Node Manager** dialog and select **Tracked Files**. The **Tracked Files** panel appears.

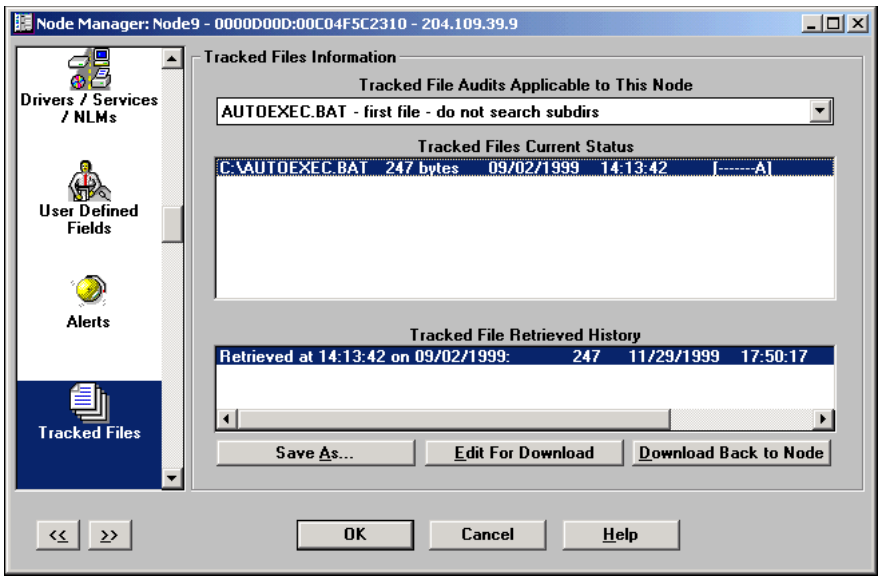


Fig. 200 NETinventory Node Manager - Tracked Files Panel

The **Tracked Files** panel lists each tracked file type in a drop-down list at the top of the panel. The sections below list the individual files that were located and each located file's revisions.

2 Select the type of tracked files to view from the drop-down list at the top of the panel, then select an individual tracked file of that type to see the revisions of the individual file.

Each tracked file type represents a single file audit. Each file audit may be configured to track a single file (i.e., AUTOEXEC.BAT), or a

range of files by using wildcards (i.e., *.BAT or *.INI). For more information on configuring file audits, see "Configuring Tracked Files" on page 72.

Viewing the Contents of a Tracked File

If a file audit retrieves the contents of the files it tracks, you can view the contents of any given revision of the file. If the file audit was not configured to retrieve the file's contents, you only view basic information about the file, such as its size, the date and time it was last modified, and its path.

▶ *To view or edit the contents of a tracked file*

1. Select the tracked file type you wish to view from the **Tracked File Audits Applicable to This Node** drop-down list.
2. If more than one file is tracked by the audit, select the appropriate instance. A list of revisions appears in the **Tracked File Retrieved History** field.

   The dates shown in the **Tracked File Retrieved History** field are the dates the Audit Agent found a new version of the file. There is a separate listing for each revision, with the most current revision listed last (at the end of the list).
3. Select the individual revision of the file you want to view and double-click it or click **Edit for Download**. If the file's contents are stored on the Audit Server, the file editing dialog appears.

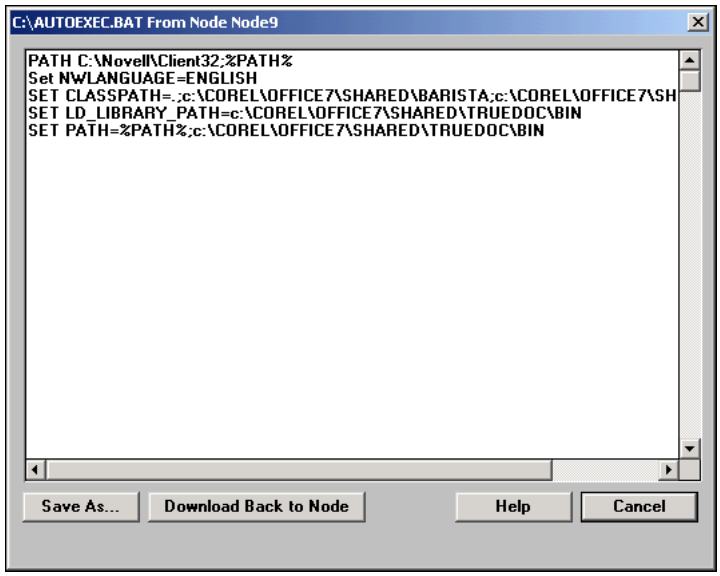


Fig. 201 File Editing Dialog

4. Make any changes you wish to the file.
5. Click **Save As** to save the file or **Download Back to Node** to send it to the node. Click **Cancel** or press **ESC** to close the editing window.

▶ *To download a tracked file to a node*

After viewing or editing a tracked file, you can download the changed file to the workstation it was retrieved from. You can also select any revision of a tracked file and schedule it for download to the node where it originated.

1 When viewing a tracked file, click **Download Back to Node**. You can also click **Schedule for Download** in the **Tracked Files** panel without editing the file. The **File Download Configuration** dialog appears.

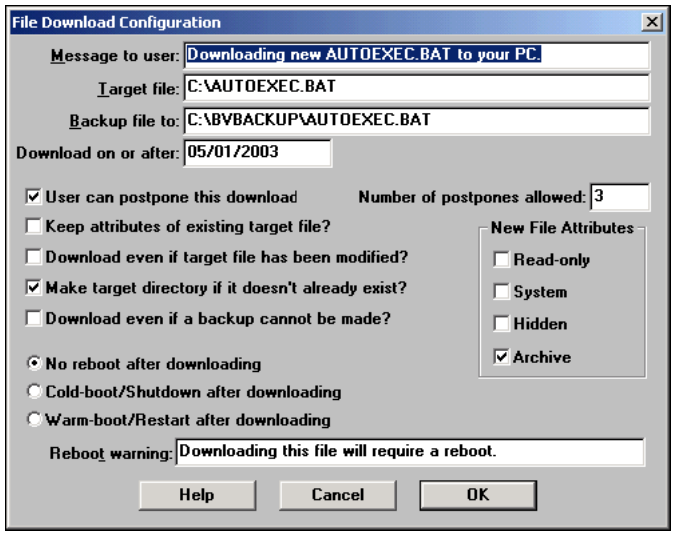


Fig. 202 File Configuration Dialog

2 Configure the download and click **OK** to save the settings and schedule the file to be downloaded to the node. For information on each setting, see Table 6, “File Download Configuration Options” .

The file download is now pending. The next time the node is audited, the Audit Agent will download the file according to the preferences you have set.

The download job is added to the **File Download History** panel with a status of “Pending.” To alter or delete the download job before it downloads, use the **File Download History** panel in the Node Manager. For information on the **File Download History** panel, please see “Using the File Download History” on page 209.

Table 6 File Download Configuration Options

Message	Description
Message to User	Edit or delete the message that appears on the node when a file download is pending. The message always appears, even if the user is not allowed to refuse the download, unless the message is blank.
Target File `<Path>`	Specifies the file name and the path where the file will be placed. The default for this option is the original location on the workstation.

Table 6 File Download Configuration Options (Continued)

Message	Description
Backup file to <Path>	Specifies the name and path on the node where the Audit Agent should back up the file being replaced. This option allows restoring the original configuration file if there is a problem with the download.
Download on or after	Enables you to specify a future time and date for the download to take place. The download will occur at the first audit following the specified date. The default date for download is the day when the download is created, meaning the file will be downloaded during the next audit. **Download on or after** is useful if changes need to be made but should not take effect until a later date.
User can postpone this download	Specifies if the user of node can delay the download of file. If **User can postpone download** is selected, the user node will be prompted during every audit to download the file until they accept it, or the **Number of postpones** are exhausted. If **User can postpone download** is unselected, the download will happen when the node is next audited.
Number of postpones allowed	Sets the number of times a user may refuse the download of a new file. Once the number of grace logins reaches zero, the file will either be automatically downloaded during the next login or the download will be canceled (depending on the action specified in the **User Can Refuse Download** option). If the user should not be allowed to refuse the file for even a few logins, the grace login count may be set to zero. To download the file without notifying the user that it is even occurring, be sure to also clear the **Message to User** field.
Keep attributes of existing target file?	Enables you to specify whether the downloaded file should have a specific set of file attributes, or if it should take on the file attributes of the file being replaced. When selected, the downloaded file will be set to the same attributes as the file being replaced on the workstation. When unselected, the file will be downloaded with the file attributes listed in the **New File Attributes** area (see the next field definition).
New File Attributes	Enables you to specify the attributes that the downloaded file will have on the user's node. These attributes are assigned only if **Keep attributes of existing target file** is unselected (see previous field definition). To change the attributes for the downloaded file, select or unselect the appropriate attributes.

Table 6 File Download Configuration Options (Continued)

Message	Description
Download even if target file has been modified?	**Download even if target file has been modified** allows you to specify if the download should proceed if the file being replaced is more recent than the most recent revision of the tracked file in the NETinventory database. This will occur if that file was edited between the time of the last audit and the current download. Selecting this box ensures that the download will proceed anyway. When the box is unselected, the download will not proceed if the file has been modified. You can then review the changes made before deciding whether to proceed with the download.
Make target directory if it doesn't already exist?	When selected, the Audit Agent will create the specified directory and then download the file to it. If the box is unselected, the download will not take place if the target directory does not exist.
Download even if a backup cannot be made?	This box enables you to specify whether the download should proceed even if the file being replaced cannot be backed up. When the box is unselected, the download will not proceed if the file being replaced cannot be backed up (to the directory and file name specified in the **Backup file to** field) for any reason. Selecting this box ensures that the download will proceed regardless of the ability of the Audit Agent to back up the file being replaced.
No reboot after downloading / Cold-boot / Shutdown after downloading / Warm-boot / Restart after downloading	Specifies whether the node should be automatically rebooted immediately following the download of the file. This option is useful for downloading new versions of files such as `CONFIG.SYS` which will not take effect until the system is rebooted. You can force a reboot by choosing either the **Cold** or **Warm** reboot options. When you do so, the next time a user logs in from that workstation, the workstation will be audited, the file downloaded, the station logged out, and then rebooted. Please see "To configure software and hardware prompts" on page 85 for more information about reboot options.
Reboot warning	Specifies a message the Audit Agent should display immediately before rebooting the machine. This allows you to notify the user that the node must be rebooted in order to complete the download or for the change to take effect.

Using the File Download History

The **File Download History Information** panel lets you track all file downloads performed through the **Tracked Files** panel. The File Download History is a database of all file downloads to a selected node.

▶ *To view the File Download History*

Select **File Download History** panel in the Node Manager. The **File Download History Information** panel appears.

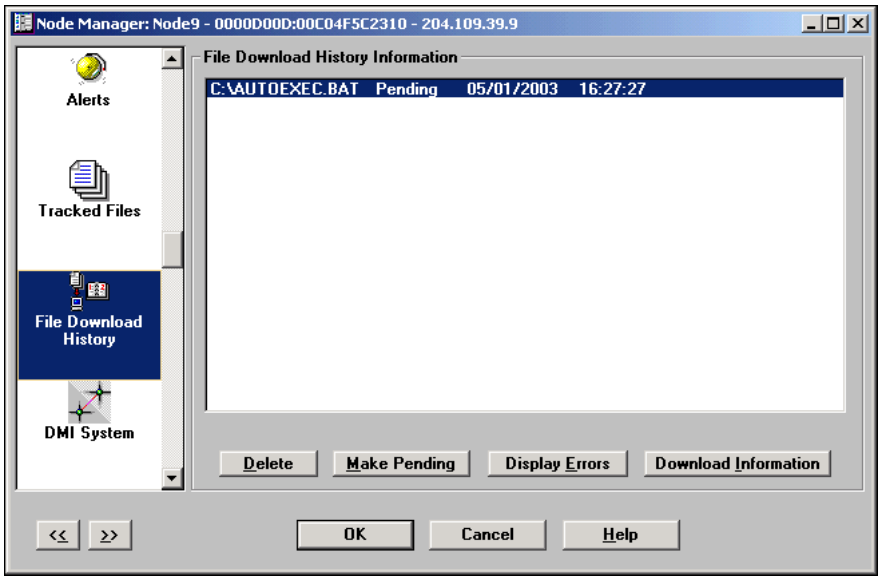


Fig. 203 File Download History Information Panel

Any time a configuration file is edited and scheduled for download through the **Tracked Files** panel, a record of that action is placed in the **File Download History** log and marked **Pending**. As soon as the new file is successfully downloaded or rejected, the status of that record is updated to reflect the outcome of the download.

▶ *To cancel a pending download*

A download may be canceled by selecting a download with status **Pending** and clicking **Delete**.

▶ *To change download options for a pending download*

1 Open the Node Manager and select **File Download History**. The **File Download History Information** panel appears.

2 Select any pending file download and click **Download Information**. The same **File Download Configuration** dialog used by the File Management panel appears.

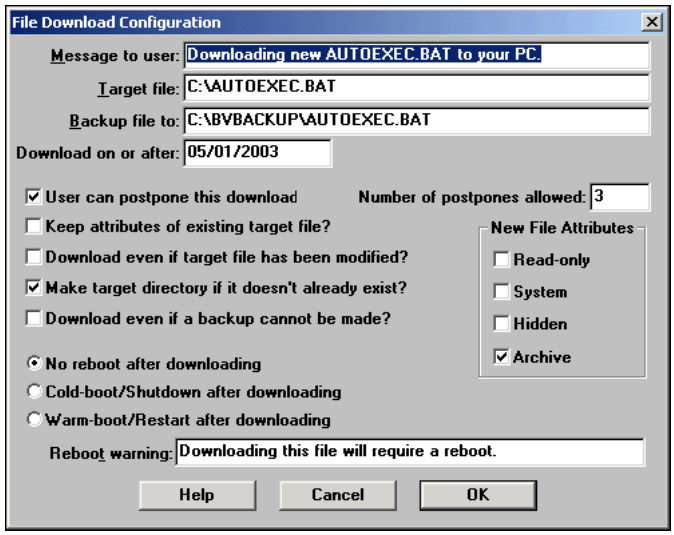


Fig. 204 File Download Information Dialog

▶ ***To view download errors***

If a download had any errors, you may view the error messages relating to the download failure by selecting the download record and clicking **Display Errors**.

▶ ***To repeat a download***

It is also possible to re-queue a previously downloaded file to be downloaded again to the PC. To do this, select the desired file download, and click **Make Pending**. This creates a copy of the previous download and sets it for downloading with the same parameters as the last time it was downloaded. The new download appears on the File Download History list with a status of **Pending**.

Customizing Audits for Nodes

Use the Audit Setup dialog, described in Chapter 4 on page 59, to control the kinds of information that the NETinventory Audit Agent collects from all nodes on your network. When finer control is necessary, you can use the Node Manager to configure custom audit intervals and specific tests the Audit Agent performs for individual nodes.

Controlling the Tests the Audit Agent Performs

Audit Setup controls which tests the Audit Agent performs on every node. The Node Manager can control the tests on a node-by-node basis. A particular test might cause a crash or other difficulty on a given node, or you might choose to omit the test for a particular node. The Audit Detect Flags panel in the Node Manager can enable or disable tests on individual nodes.

▶ *To select which tests the audit agent performs on a node*

1 Open the **Node Manager** dialog and select **Audit Detect Flags**. The **Audit Detect Flags** panel appears.

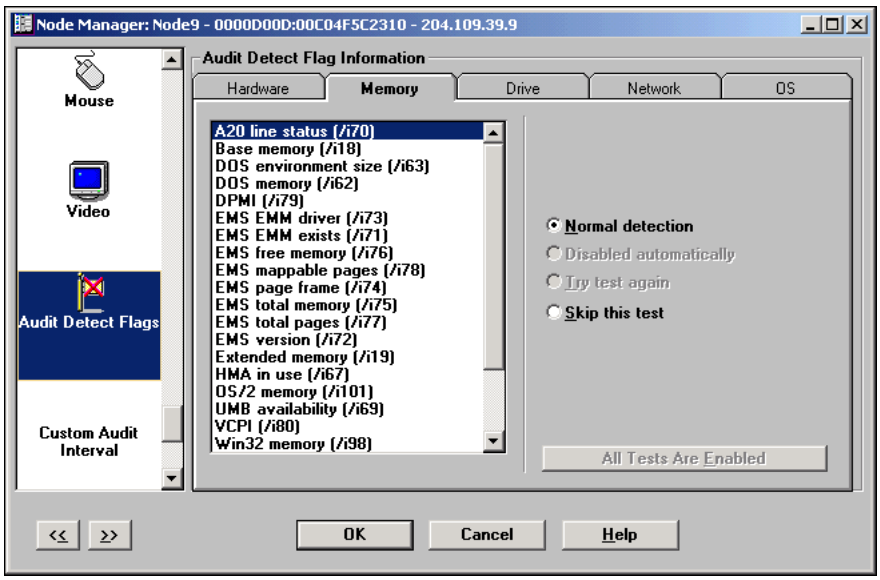


Fig. 205 Audit Detect Flags Panel

2 The tests are grouped according to type. Select the tab for the type of test you wish to perform, then select an individual test from the list.

3 The option set indicates the status of the test on the node. You can make changes to the status by selecting a new status. When you change to a different panel or click **OK**, NETinventory will save the changes you made. Refer to Table 7, “Audit Detect Flag Options” .

Table 7 Audit Detect Flag Options

Option	Effect
Normal detection	When **Normal detection** is selected, the selected test will be performed normally.
Disabled automatically	If a problem occurs while NETinventory is performing an audit, the **Disabled automatically** option is set. While this option is set, the NETinventory Audit Agent will not perform the selected test on the node.

Table 7 Audit Detect Flag Options (Continued)

Option	Effect
Try test again	If NETinventory sets the test option to **Disabled Automatically**, but you believe the test should work properly, you can set the flag to **Try test again** to force the test to be performed. If the test fails again, NETinventory will not change the setting.
Skip this test	When selected, NETinventory will not attempt the selected test on the current node.

Setting a Custom Audit Interval

Most nodes are audited at the same interval. For certain nodes, a custom audit interval is required. The Node Manager allows you to set a custom interval for both the hardware and software portions of an audit.

▶ ***To set a custom audit interval***

1 Open the Node Manager and select **Custom Audit Interval**. The **Custom Audit Interval Information** panel appears.

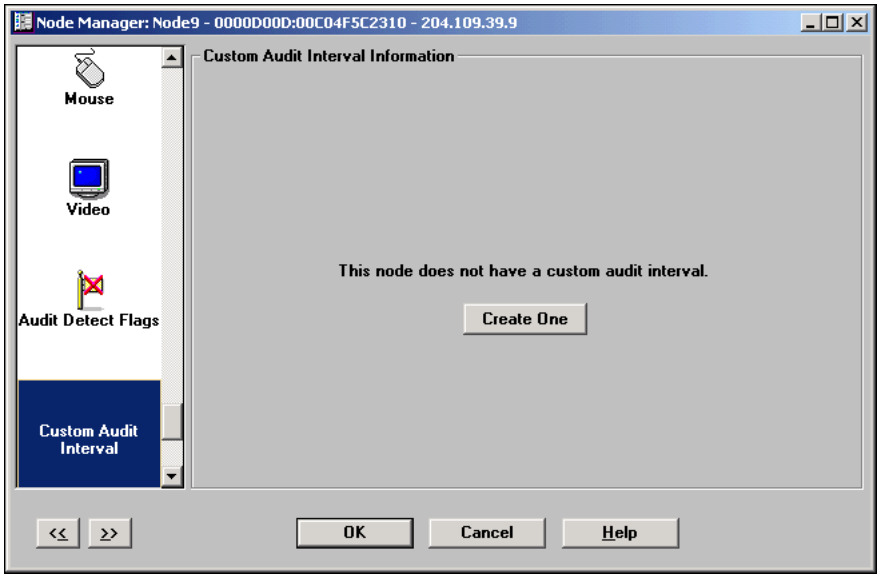


Fig. 206 Custom Audit Interval Information Panel – No Custom Interval

2 If the node already has a Custom Audit Interval, it appears in the panel. If the node does not have a Custom Audit Interval

defined, click **Create One**. The **Custom Audit Interval Information** panel appears.

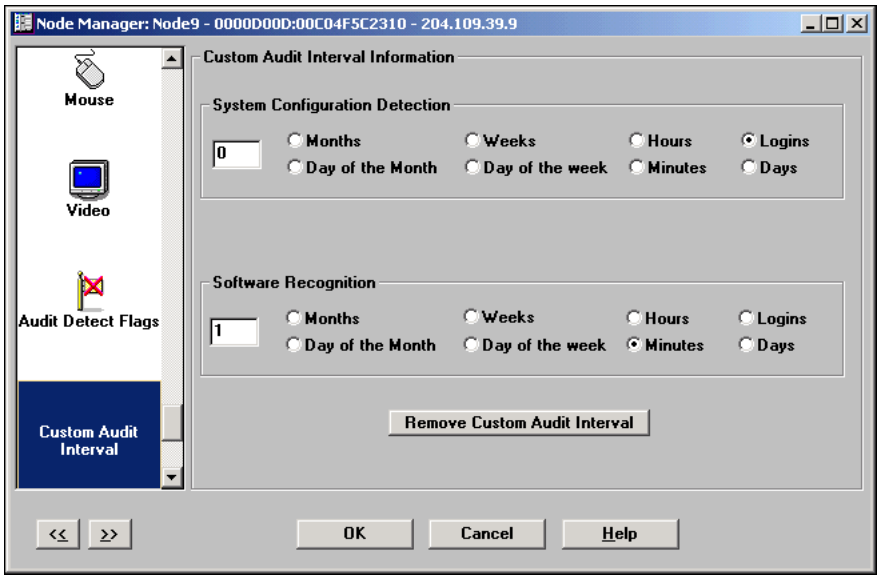


Fig. 207 Custom Audit Interval Information Panel – With Custom Interval

3 Select the units to use for the System Configuration Detection and Software Recognition intervals and enter the number of those units each audit should wait between audits.

4 Click **OK** to close the Node Manager and save the changes you made, or click **Cancel** to close and discard your changes.

▶ *To remove a custom audit interval*

1 Open the Node Manager and select **Custom Audit Interval**. The **Custom Audit Interval Information** panel appears.

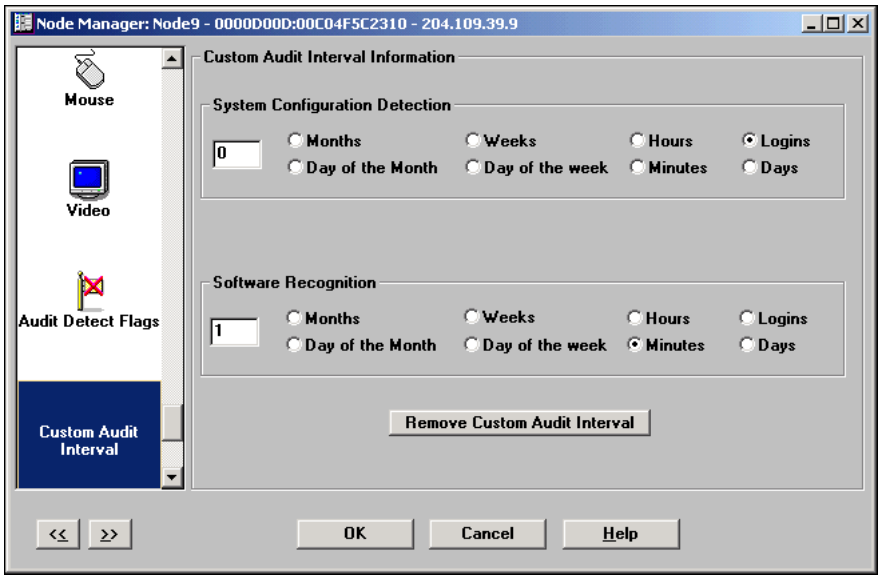


Fig. 208 Custom Audit Interval Information Panel – Removing Custom Interval

2 Click **Remove Custom Audit Interval**. NETinventory discards the custom audit interval and the **Custom Audit Interval Information** panel appears.

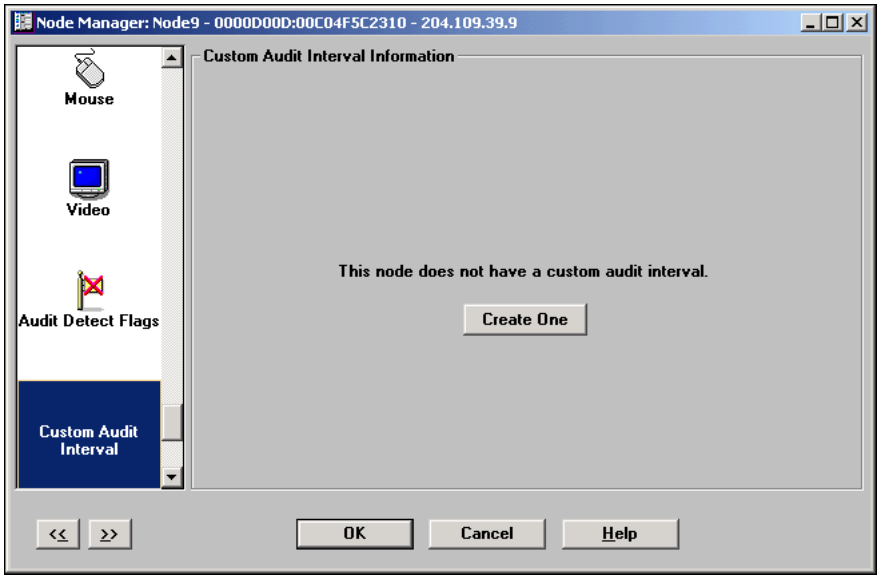


Fig. 209 Custom Audit Interval Information Panel– Custom Interval Removed

3 Click **OK** to close the Node Manager and save the changes you made, or click **Cancel** to close the dialog and discard your changes.

Taking Control with NETrc

To take control of a node with the NETrc Host software installed, you can use the NETinventory Node Manager. In order to take control of a node, NETrc must be installed, as well as licenses for each node you wish to remotely control. You must also assign a profile to the node which installs the NETrc Host software. For more information on installing, configuring, and using NETrc, please see the *NETrc User Guide*.

▶ *To take control with the Node Manager*

1 Open the Node Manager, and select **NETrc**. The **NETrc** panel appears.

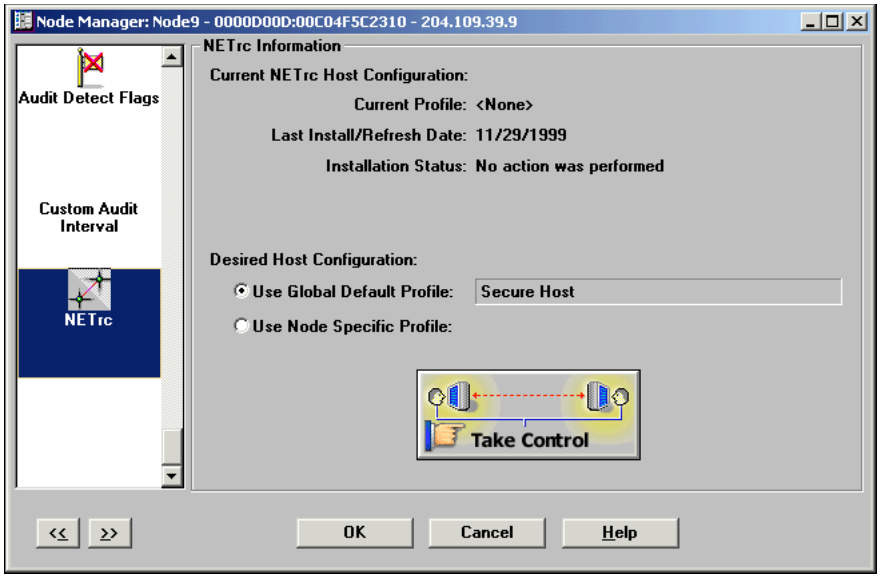


Fig. 210 NETinventory Node Manager - NETrc Panel

2 Click **Take Control**. The NETrc Master runs.

If the user of the node must be prompted for permission, or if the person taking control must enter a password to control the node, a password prompt appears on the host.

The screen of the node under control appears.

3 When you are finished controlling the node, click the NETrc Master's close box or double-click the System menu to close NETrc Master and disconnect from the node.

Assigning a Profile to a Node

The NETrc panel in the Node Manager also indicates the NETrc status of the node, including the profile the node is currently using, the last date the profile was installed or refreshed by the Audit Agent, and the installation status of the profile on the node.

1 To assign a specific profile to the node, select **Use Node Specific Profile**.

2 Choose a profile to assign from the list of available profiles.

3 Click **OK** to close the window and save the changes you have made, or click **Cancel** to close the window without saving the changes.

The Audit Agent updates the profile on the node the next time the node is audited.

Removing NETrc Host Software from a Node

You can use profiles to remove the NETrc Host software from a node you select. When you select the profile named **None (Uninstall)**, the NETinventory Audit Agent removes the NETrc Host software and preferences from nodes.

1 In the NETrc panel of the Node Manager, select **Use Node Specific Profile**.

2 Select the profile named **None (Uninstall)**.

3 Click **OK** to close the window and save the changes you have made.

The NETinventory Audit Agent uninstalls the NETrc Host software from the node the next time the node is audited.

Using the NETinventory Node Viewer

NETinventory also includes a separate utility, the NETinventory Node Viewer that allows you to take control of a node without starting the NETinventory Console. You can copy this utility to any machine on your network and use it to take control of nodes with NETrc installed. To use the NETinventory Node Viewer, you must enable NETinventory SQL Rollup. For more information, please see “Master Server SQL Settings” on page 104.

▶ ***To take control of a node using the NETinventory Node Viewer***

1 The NETinventory Node Viewer utility is separate from the NETinventory Console. Open the \NI\Utility folder in the folder where the NETinventory Console is installed (normally C:\BindView), and double-click the NINodeViewer.exe file. The NETinventory Node Viewer appears.

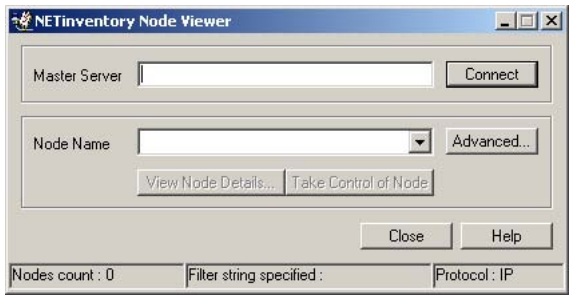


Fig. 211 NETinventory Node Viewer Dialog

2 Enter the name of your Master Server in the **Master Server** field.

3 Click **Connect**. The Node Viewer connects to the Master Server and lists all audited nodes in the Master Server database in the **Node Name** field.

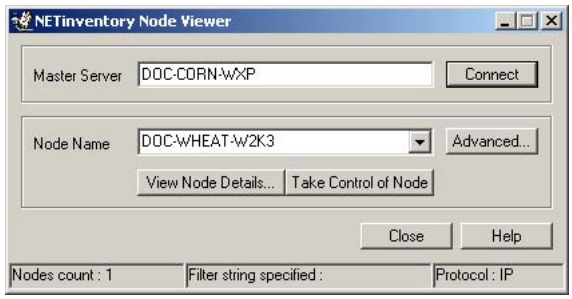


Fig. 212 NETinventory Node Viewer with Nodes listed

4 The **Node Name** drop-down list displays all nodes in the Master Server's database. If you wish to restrict the nodes displayed, click **Advanced**. The **Advance Settings** dialog appears.

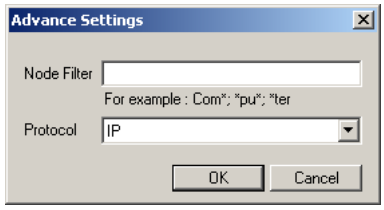


Fig. 213 Advance Settings Dialog

5 Enter a partial name to use as a filter in the **Node Filter** field. You can use the * wildcard in this field. Select a default network protocol to use to connect to the node using from the **Protocol** field. Click **OK** to close the dialog and filter on the conditions you've set. The **NETinventory Node Viewer** dialog reappears. Only nodes that match the conditions you set in the **Advance Settings** dialog appear in the **Node Name** drop-down list.

6 Select a node name from the **Node Name** drop-down list. To view information about the node, click **View Node Details**. The **Node Details** dialog appears.

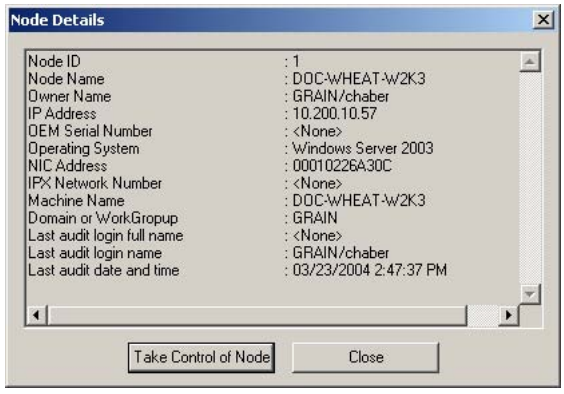


Fig. 214 Node Details Dialog

7 When you are finished viewing the node's details, click **Close.** The **NETinventory Node Viewer** dialog reappears.

8 To take control of a node using NETrc, click **Take Control of Node** in either the **Node Details** or the **NETinventory Node Viewer** dialog. The NETrc Viewer will appear and allow you to take control of the node.

9 When you are finished controlling the node, close NETrc and take control of another node or click the **Close** button in the NETinventory Node Viewer to close it.

10 When you close the NETinventory Node Viewer, you will be prompted to save the current settings. If you click **Yes**, the same settings will be applied the next time you start the NETinventory Node Viewer.

If you wish, you can also connect to a node using NETinventory Node Manager from the command line. The name of the program to run is `NINodeViewer.EXE`. The command-line options are listed in Table 8, "NINodeViewer.EXE Options" and in the NINodeViewer.EXE help.

Table 8 NINodeViewer.EXE Options

Option	Notes
/M<Master Server>	Start the NINodeViewer and connect to the specified Master Server.
/N<NodeName>	The Node that should be selected by default when when the NINodeViewer utility starts.
/P<Protocol>	The protocol to be used. Can be either IP or IPX.
/C<Name or IP>	Take control of a computer using NETrc without launching NINodeViewer utility. You can specify the Windows machine name or the IP address of the node. The NETrc Host must be installed on the node, and the NETrc Viewer must be installed on the machine running the NINodeViewer utility.
/F<Filter String>	Start the NINodeViewer using this value as a filter for node names. If you specify /F along with the /N option then the /F option will be ignored.
/X<Password>	The password to use when connecting to a node.
/?	Start the NINodeViewer and display the help.

8 NETinventory Control Panel

In This Chapter

Using the NETinventory Service Manager Control Panel . 220
The Master Server Tab 220
The Audit Server Tab 222
The Database Engine Tab 222
TCP/IP Ports 224

Using the NETinventory Service Manager Control Panel

The NETinventory Service Manager is a Windows Control Panel. To open it, open the Windows Control Panel folder and double-click the NETinventory Service Manager icon. The **NETinventory Service Manager** dialog appears. If you have the Master Server service installed on the server, the Master Server tab appears (Fig. 215). If you have the Audit Server services installed but not the Master Server services, the Audit Server tab appears ().

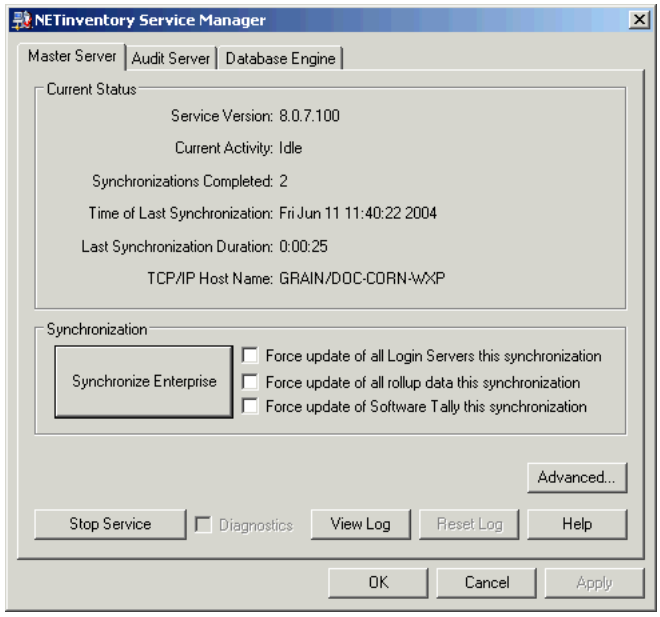


Fig. 215 Master Server Tab

The Master Server Tab

The top portion of the Master Server tab contains information about the current status of the Master Server. The Synchronization area allows you to manually control synchronization of the enterprise.

▶ ***To force an immediate synchronization***

Click the **Synchronize Enterprise** button. The Master Server immediately begins synchronizing the enterprise, using the preferences you have set.

Normally only 10% of the Login Servers on the network are synchronized during a given synchronization. When you select **Force update of all Login Servers this synchronization** and click **Synchronize Enterprise**, all Login Servers will be updated during the synchronization.

Normally only some of the rolled up databases are updated during each synchronization. When you select **Force update of all rollup data this synchronization** and click **Synchronize Enterprise**, all rolled up databases will be updated.

Select **Force update of Software Tally this synchronization?** to force the Master Server to count software licenses detected on audited nodes.

▶ *To stop or start the service*

When you click the **Stop Service** or **Start Service** button, the Service Manager will attempt to stop or start the Master Server Service immediately and report its progress. The button changes name depending on whether or not the service is currently running.

▶ *To change advanced server settings*

Click the **Advanced** button and the **Master Server Advanced Settings** Dialog appears.

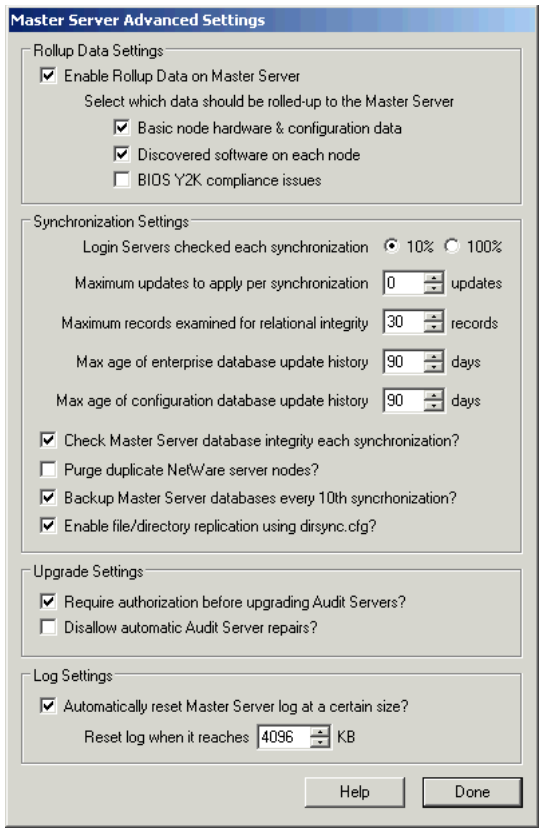


Fig. 216 Master Server Advanced Settings Dialog

The items in the **Advanced Settings** dialog configure how the Master Server behaves. You should only change the items in this dialog when instructed to do so by BindView technical support. For more information on these settings consult the available Help or BindView Technical Support.

Caution: Changes to these settings have the capability of slowing the Master Server considerably. Use extreme caution if you make changes to these settings.

The Audit Server Tab

The **Audit Server** tab allows you to see the current status of the Audit Server installed on the machine and to force the Audit Server to perform some operations immediately.

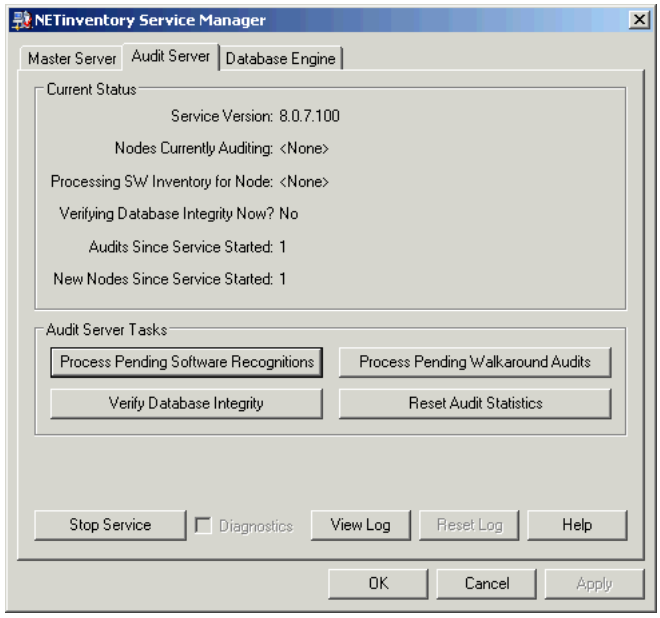


Fig. 217 Audit Server Tab

The top of the tab includes information about the status of the Audit Server. The lower portion of the tab allows you to control the Audit Server.

▶ ***To force immediate processing***

You can force the Audit Server to immediately process any accumulated Software Inventory data or Standalone Audit data, or to verify its databases by clicking the corresponding button in the lower portion of the Audit Server tab. You can also force the Service Manager to reset the Audit Server statistics in the top part of the tab by clicking the **Reset Audit Statistics** button.

The Database Engine Tab

The Master and Audit Servers both rely on a separate database engine to store information collected from nodes, preferences, and so on. The **Database Engine** tab allows you to control some aspects of the database engine's performance. With the exception of the User Name and password you can change by clicking the **Configure Service** button, You should only make changes to these settings when directed by BindView Technical Support. For more information on the items in the tab, consult the available help or BindView Technical Support.

Caution: Changes to these settings have the capability of slowing the Master or Audit Server considerably. Use extreme caution if you make changes to these settings.

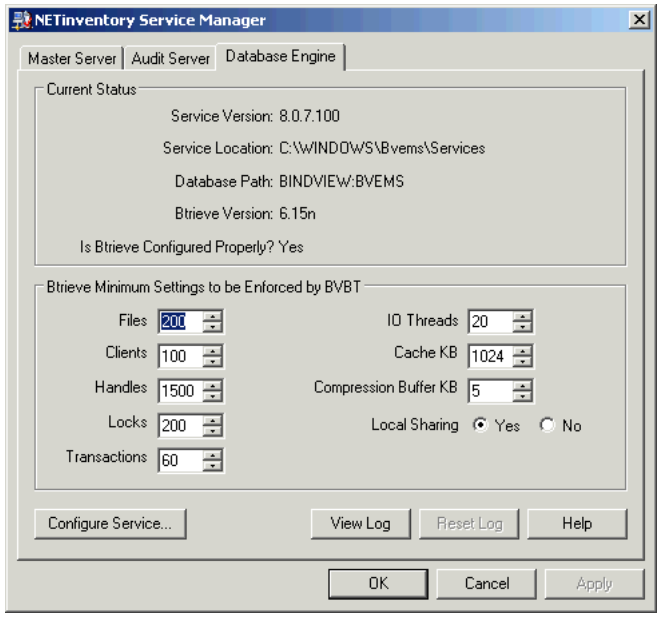


Fig. 218 Database Engine Tab

▶ ***To change the database engine service context***

1. Open the NETinventory Control Panel and select the **Database Engine** tab.
2. Click **Configure Service**. The **Database Engine Configuration** dialog appears.

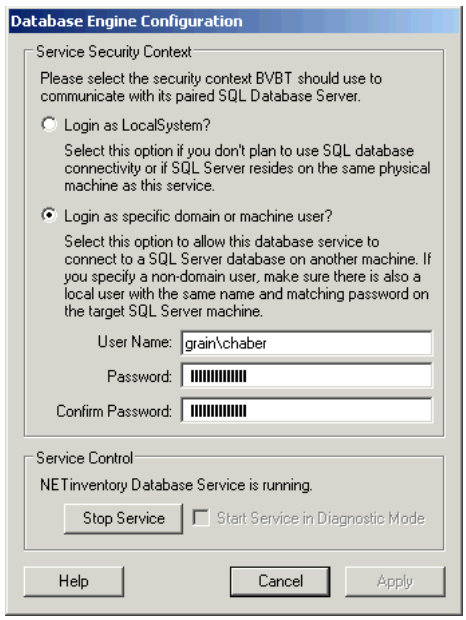


Fig. 219 Database Engine Configuration Dialog

3 Choose **Login as LocalSystem** or **Login as specific domain or machine user**. If you choose to login as a specific user, make any needed changes to the User Name and Password. Any user name must be in the format Domain\User Name or Machine Name\User Name. If you change the password, you must confirm it in the **Confirm Password** field. Click **OK** to close the dialog and save the changes you have made.

TCP/IP Ports

On Windows Servers, the Master and Audit Servers use TCP/IP to communicate. The ports used are:

- Audit Server service: port 22850
- Master Server service: port 23850
- Database Engine service: port 21850

Section 2: NETinventory-RMS

Using NETinventory with the BindView RMS Console

9 Configuring the NETinventory Snap-in for BindView RMS

In This Chapter

Overview 228
System Requirements 228
Configuring Master Server SQL Rollup 229
Configuring NETinventory-RMS 231

Overview

The NETinventory® Snap-in for the BindView RMS® system allows you to use the BindView RMS Console to retrieve and display information collected by NETinventory. The BindView RMS Console includes data analysis features that are not included in the NETinventory Console.

When you use the NETinventory-RMS snap-in, the data collected from Audit Agents by the Audit Servers is rolled up to a SQL database by the Master Server. The NETinventory-RMS snap-in can then retrieve the data.

When data is rolled up to the SQL database, you cannot perform ActiveAdmin changes of the data, since the transfer to the SQL database is one-way. In addition, some data may be out-of-date, since rollup only occurs when the Master Server synchronizes with the Audit Servers. For complete information on data rollup and on scheduling and controlling synchronization, see Chapter 5 “Setting Up NETinventory Server Components.”

System Requirements

In order to use the NETinventory Snap-in for the BindView RMS Console, your system must meet these requirements:

BindView RMS Console and NETinventory Snap-in Only

- Pentium® II 450 MHz
- 256 MB RAM
- 300 MB of free disk space
- SVGA monitor that supports 256 colors with the display set to 800 x 600 pixels or greater
- Microsoft® Windows® 2000 SP3 (server or workstation), Windows XP® Professional SP1, or Windows Server™ 2003 or later
- Microsoft Internet Explorer v5.5 SP1 or later
- Microsoft® Outlook® 2000, Novell® GroupWise® v5.5, Lotus Notes® v5.0 or Lotus Domino (only required for e-mailing export files)
- Microsoft® Excel (required for Excel (using OLE) export files)
- Client for Microsoft® Networks

BindView RMS Console and Information Server and NETinventory Snap-in

- Pentium III 800 MHz
- 512 MB RAM
- 500 MB of free disk space
- Microsoft Windows 2000 SP3 (server or workstation), Windows XP Professional SP1, or Windows Server 2003 or later
- Microsoft SQL Server v7.0 or 2000, or Microsoft SQL Server Desktop Engine (MSDE) v1.0 or 2000
- Microsoft Internet Explorer v5.5 SP1 or later
- Microsoft Outlook 2000, Novell GroupWise v5.5, Lotus Notes v5.0 or Lotus Domino (only required for e-mailing export files)
- Microsoft Excel (required for Excel (using OLE) export files)
- Client for Microsoft Networks

If you install the Console and Information Server on the same machine, the machine must meet all of the listed system requirements.

Configuring Master Server SQL Rollup

When you configure the SQL database rollup, you must specify the SQL server to store the data and the path on the server where the data should be stored. The following SQL server applications are supported for storing data:

- SQL Server 7.0
- SQL Server 2000
- MSDE 7.0
- MSDE 2000

Note: MSDE is required to use the BindView RMS Console and Information Server, and is included on the BindView RMS Console and Information Server installation disc.

MSDE data storage is suitable for networks with up to 10,000 nodes. If you have more nodes, you should use Microsoft SQL Server to store the NETinventory SQL Database. In addition, if you will have more than 4 clients (BindView Information Servers or SQL Clients) accessing the NETinventory data, you should use Microsoft SQL Server.

▶ ***To enable NETinventory SQL database rollup***

1 Open the **Master Server Settings** panel and click **SQL Settings**.The **NETinventory SQL Database Configuration Wizard** Welcome page appears.

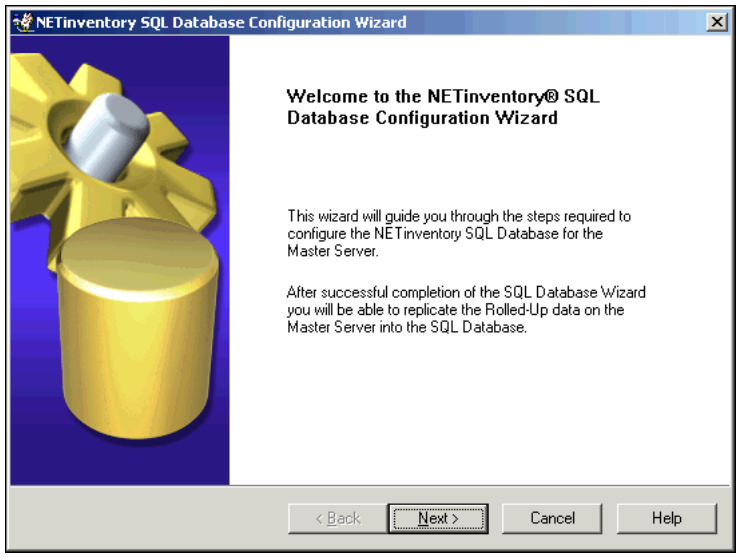


Fig. 220 NETinventory SQL Database Configuration Wizard

2 Click **Next**. The **Select Operation** panel appears. Since you can only create a SQL Database for the currently-selected Master Server if none exists, the only option available is **Configure SQL Database for the Master Server**. Click **Next**. The **SQL Server and Database** panel appears.

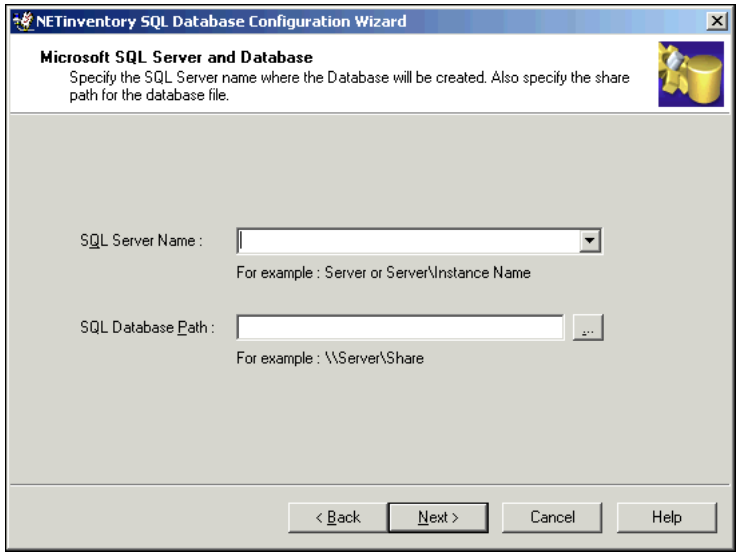


Fig. 221 NETinventory SQL Database Configuration Wizard - SQL Server and Database Panel

3 Enter the name of the SQL Server the Master Server should roll data up to in the **SQL Server Name** field or choose the server's name from the drop-down list. Click the browse (**...**) button or enter the path to the SQL database in the **SQL Database Path** field.

Note: If the SQL Server you select is set up to use Windows Authentication, it must be in the same domain or in a trusted domain of the machine which will hosts the BindView Information Server you will use to access the information. If there is not a trust relationship between the two domains, you must use SQL Authentication instead.

---

4 Click **Next**. The **Summary** panel appears.

5 Click **Next**. The **Completing NETinventory SQL Database Configuration Wizard** panel appears. Make sure that **Perform Complete Database Synchronization** is selected and click **Finish** to create the database and roll data up into it.

6 Click **Synchronize all records to Master Server** to create the database and copy all existing data to the SQL database.

In the future, new and changed data will be rolled up to the SQL server whenever the Master Server synchronizes the Enterprise network.

Once you have audited nodes and a scheduled synchronization has taken place (by default, every hour), you will be able to use the NETinventory Snap-in for BindView RMS to retrieve NETinventory data from the SQL database.

Note: The initial data rollup to SQL may take up to several hours, depending on your network configuration and how much NETinventory data has been collected already.

Configuring NETinventory-RMS

You must configure the BindView RMS Console and Information Server and the NETinventory-RMS snap-in before you can retrieve NETinventory information.

▶ *To configure the BindView RMS Console*

1 Open the BindView RMS Console. The simplest way to start the console is to select **BindView RMS Console** from the BindView RMS group in the Start menu. The **BindView RMS Console Configuration Wizard** Welcome panel appears.

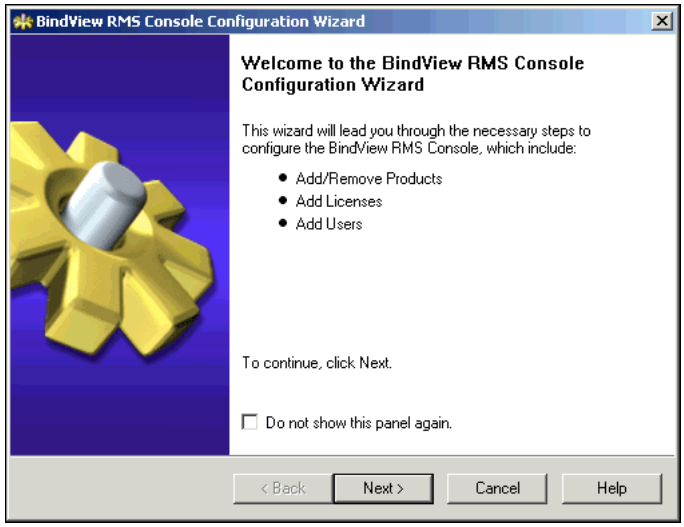


Fig. 222 BindView RMS Console Configuration Wizard Welcome Panel

2 Click **Next**. The **Add/Remove Products** panel appears.

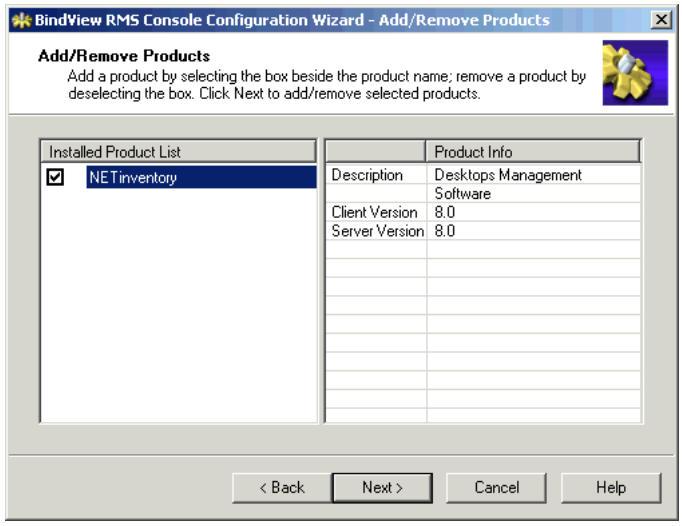


Fig. 223 Add/Remove Products Panel

3 Select the box for any new BindView RMS snap-in modules you have installed and click **Next**. The **Add Licenses** panel appears.

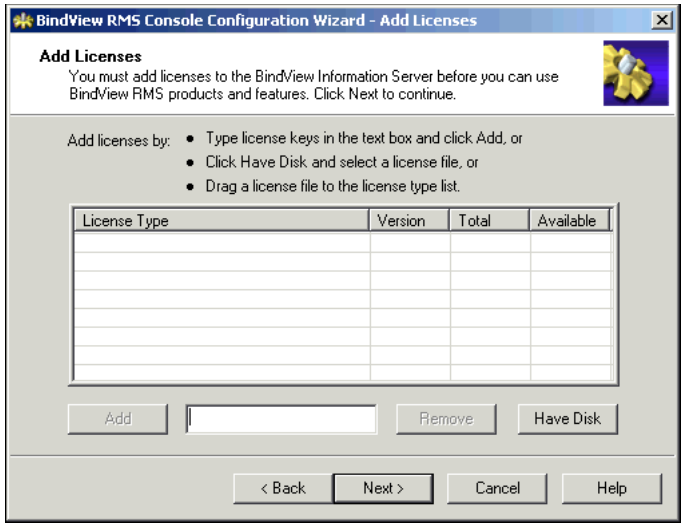


Fig. 224 Add Licenses Panel

4 Enter a license code in the text box, then click **Add**. The NETinventory Snap-in for the BindView RMS console does not require licenses, but you may need to add a license for the BindView RMS Console or for other BindView RMS Snap-in modules you install. The licenses may be provided on disk. If they are, insert the disk and click **Have Disk**.

Note: BindView RMS Console licenses are separate from the licenses required by the NETinventory Console. BindView RMS Console licenses are stored in text (.txt) files. NETinventory Console

licenses are stored in .lic files. You must enter a license code for the BindView RMS Console, but no license code is required for the NETinventory-RMS snap-in.

---

5 Continue adding licenses until all licenses have been entered, then click **Next**. The **License Summary** panel appears.

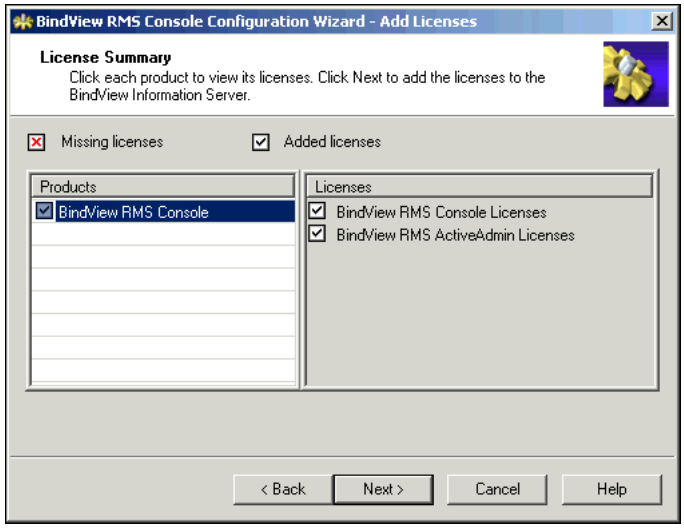


Fig. 225 License Summary Panel

6 Click **Next** to install the licenses. The **Add Licenses Completed** panel appears.

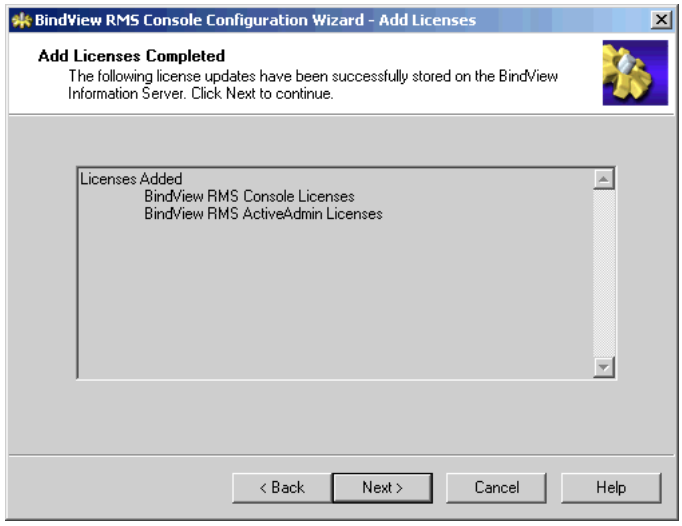


Fig. 226 Add Licenses Completed Panel

7 Click **Next**. The **Add/Remove Products in progress** panel appears.

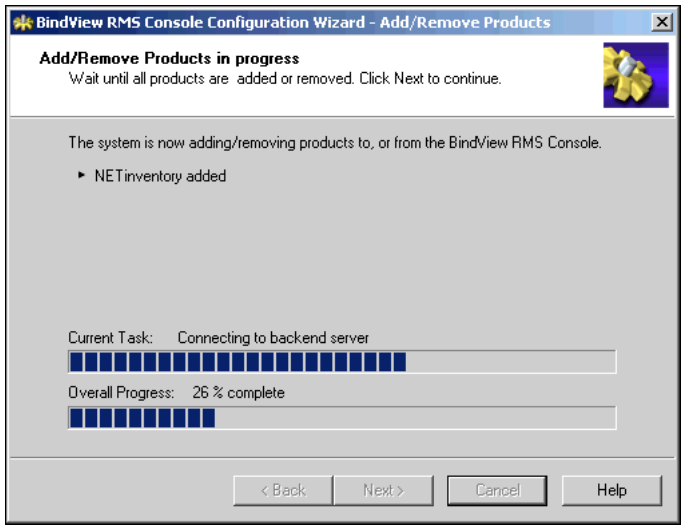


Fig. 227 Add/Remove Products in progress Panel

8 When the installation is complete, click **Next** to proceed. The **Add Users** panel appears.

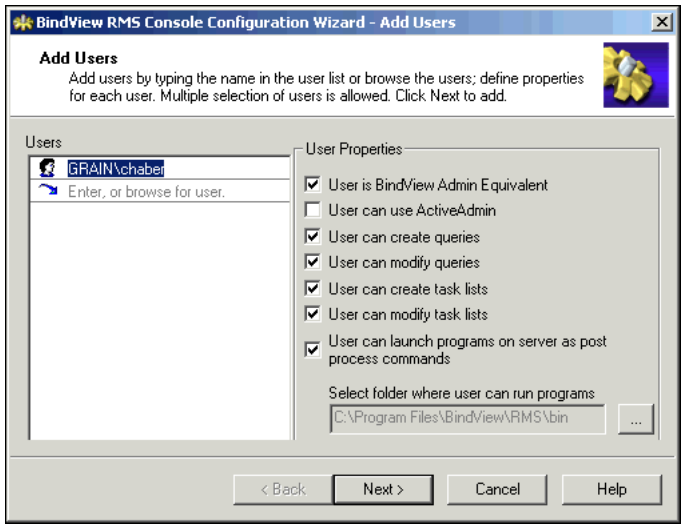


Fig. 228 Add Users Panel

Individual users of the BindView RMS Console can have unique privileges. When you have multiple BindView Snap-ins installed, different users can have access to different modules, based on credentials.

▶ *To add a BindView RMS Console user*

1 Click in the Users field to add a user by typing their name and domain, or click the browse button (...) to locate the user.

2 Set the user's rights in the **User Properties** area. Repeat to create additional users, then click **Next** to proceed. The **Add Users Summary** panel appears.

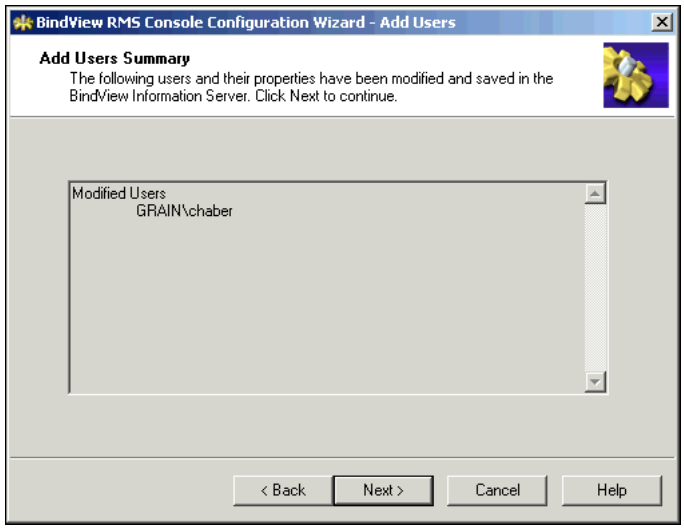


Fig. 229 Add Users Summary Panel

3 Review the summary, then click **Next** to finish the installation. The Configuration Complete panel appears.

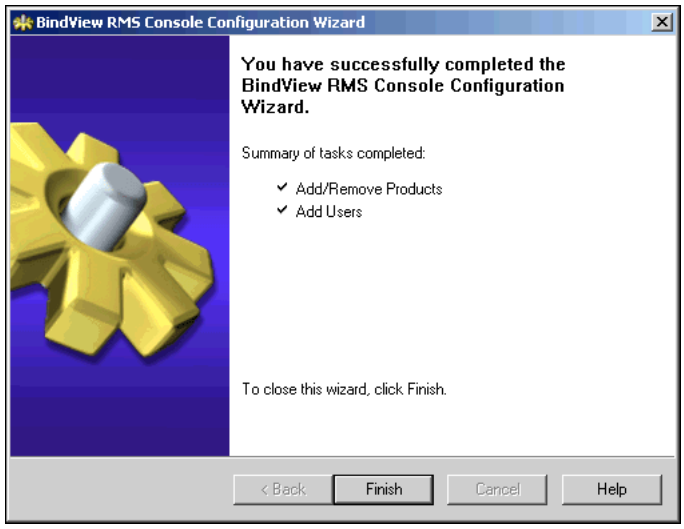


Fig. 230 Configuration Complete Panel

4 Click **Finish** to close the Wizard. The BindView RMS Console appears.

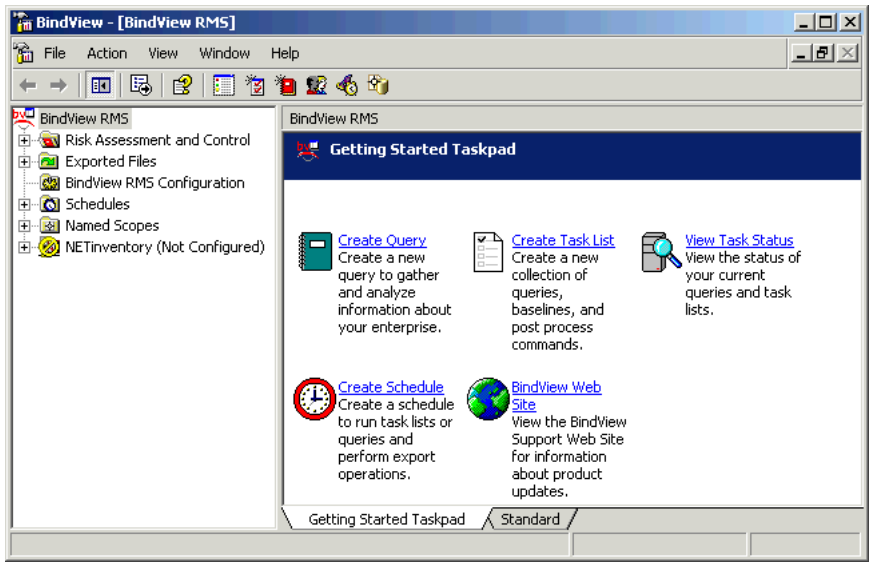


Fig. 231 BindView RMS Console

▶ ***To configure the NETinventory-RMS snap-in***

1 Select the **NETinventory(Not Configured)** item. The NETinventory configuration item appears.

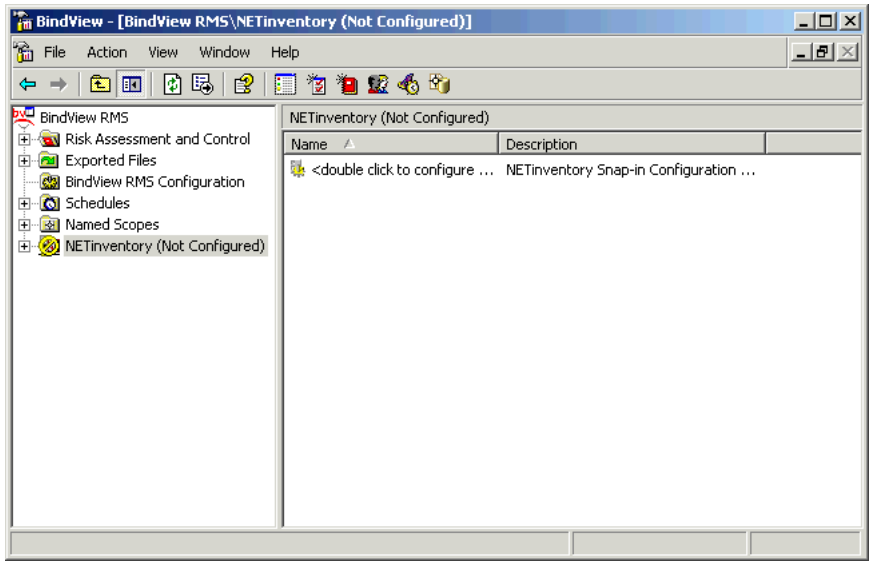


Fig. 232 BindView RMS Console Dialog - NETinventory Node

2 Double-click the **<double-click to configure NETinventory Snap-in>** item. The **NETinventory Configuration Wizard** Welcome panel appears.

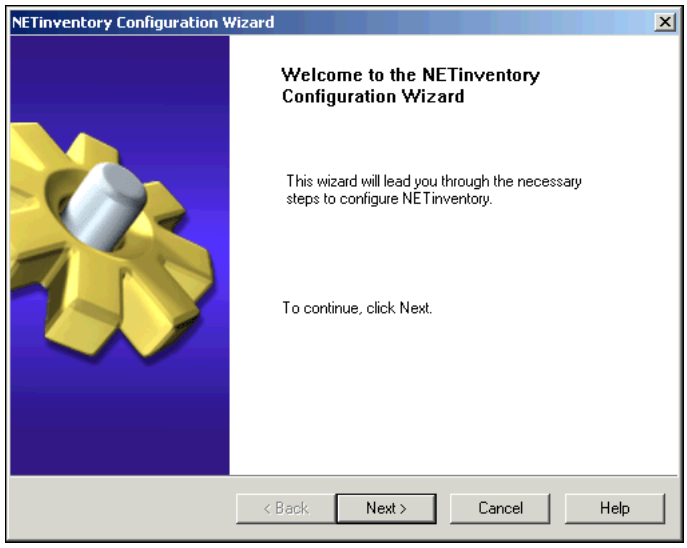


Fig. 233 NETinventory Configuration Wizard - Welcome Panel

3 Click **Next**. The **Register Master Servers** panel appears.

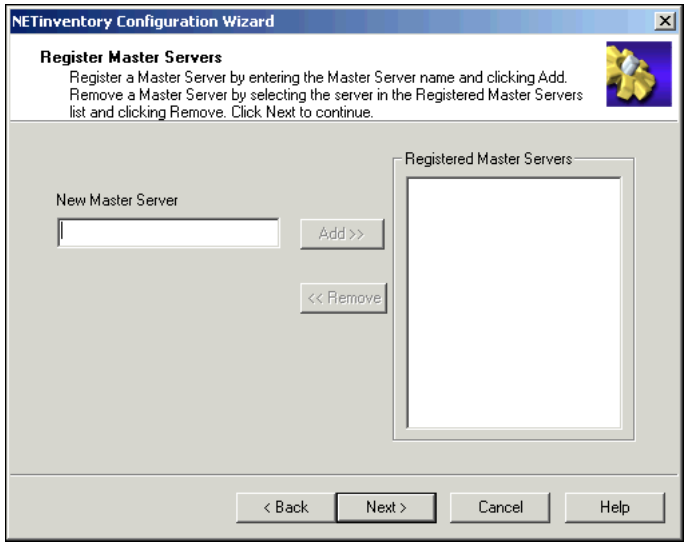


Fig. 234 Register Master Servers Panel

4 Master Servers must be registered for the NETinventory-RMS snap-in to access them. Type the name of your Master Server in the **New Master Server** field and click **Add**. The Master Server you add must have SQL data rollup enabled.

5 Click **Next**. The **Add Credential Databases** panel appears.

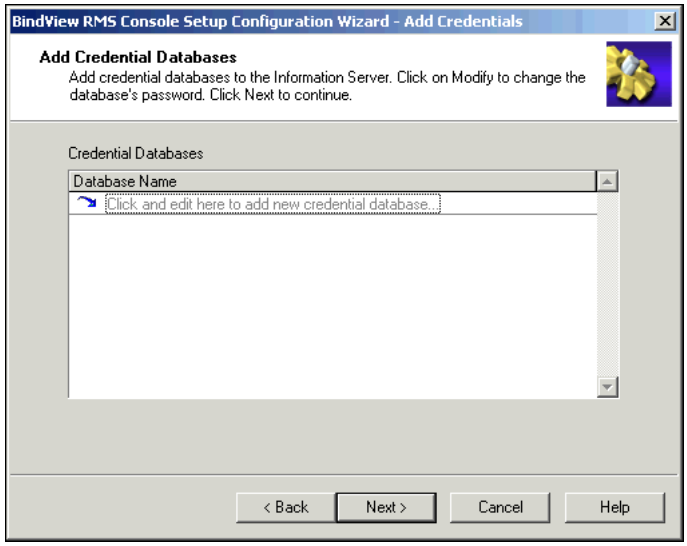


Fig. 235 Add Credential Databases Panel

6 Click in the **Database Name** field on **Click and edit here to add new credential database** to add a new Credential Database. Type the name of the new database, and press **Enter**. The **Create New Database** dialog appears.

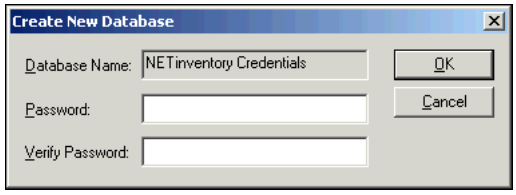


Fig. 236 Create New Database Dialog

7 Enter a password for the database and verify it and click **OK**.

8 The **Add Credential Databases** panel reappears. Click **Next** to proceed. The **Select Credentials** panel appears.

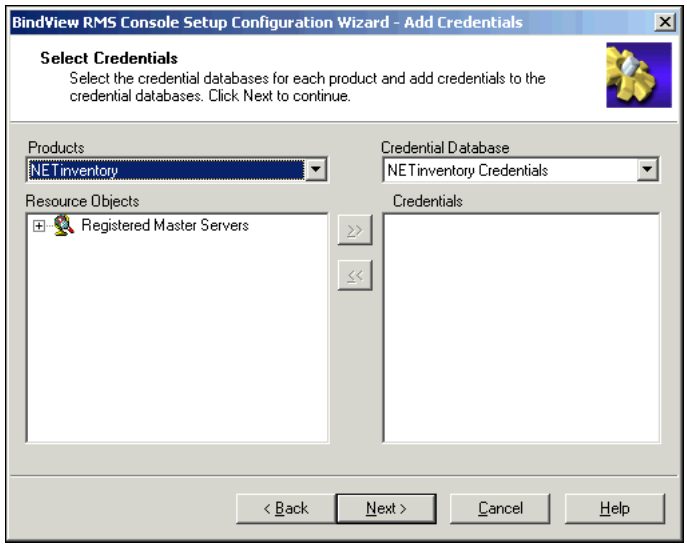


Fig. 237 Select Credentials Panel

9 Click the plus (**+**) sign next to **Registered Master Servers** to expand the list of available servers. Select the server's name and click **>>** to add the server to the credentials database. The **Additional Settings** dialog appears.

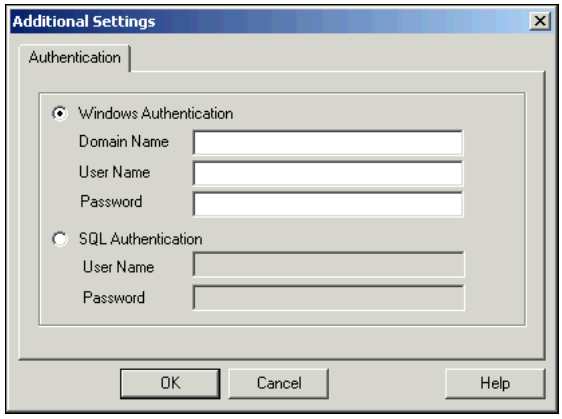


Fig. 238 Additional Settings Dialog

10 Enter credentials the NETInventory-RMS snap-in will use to access the SQL database where the NETInventory data is located.

You can select **Windows Authentication** and enter a **Domain Name**, **User Name**, and **Password** combination, or you can choose **SQL Authentication** and enter a **User Name** and **Password** combination. The authentication method you use depends on how your SQL server is configured.

11 When you have entered the credentials, click **OK**, and the **Select Credentials** panel will reappear. Click **Next**. The **Assign a Credential Database to Each User** panel appears.

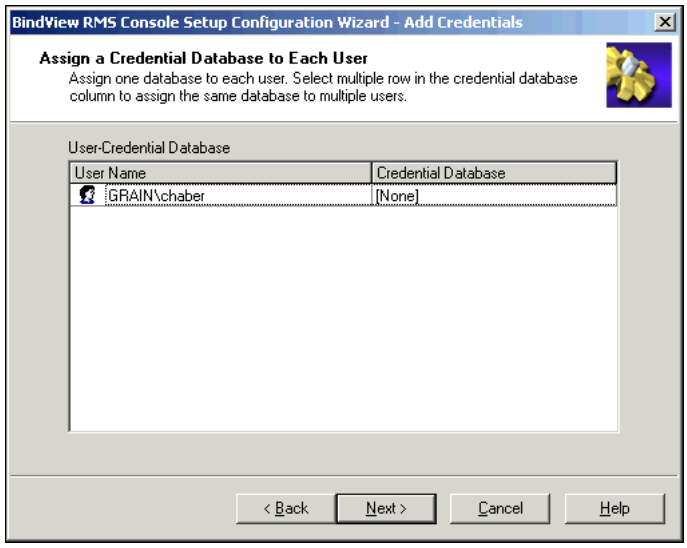


Fig. 239 Assign a Credential Database to Each User Panel

12 Beside each user name is a drop-down list of available Credential Databases. For each listed user, select the Credential Database to assign to the user from the drop-down list. When all users who should be able to access NETinventory data are assigned a Credentials Database, click **Next**. The **Verify Credentials** panel appears.

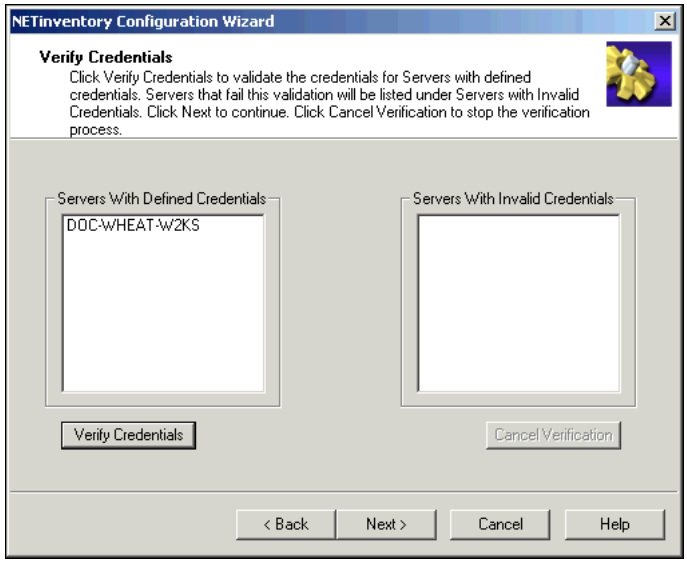


Fig. 240 Verify Credentials Panel

13 Click **Verify Credentials** to test the connections to the Master Servers. Servers whose credentials cannot be verified will be listed in the **Servers With Invalid Credentials** field.

If any server's credentials cannot be verified, click **Back** to edit the credentials database.

If all server credentials are verified, click **Next**. The **Change Default Scopes** panel appears.

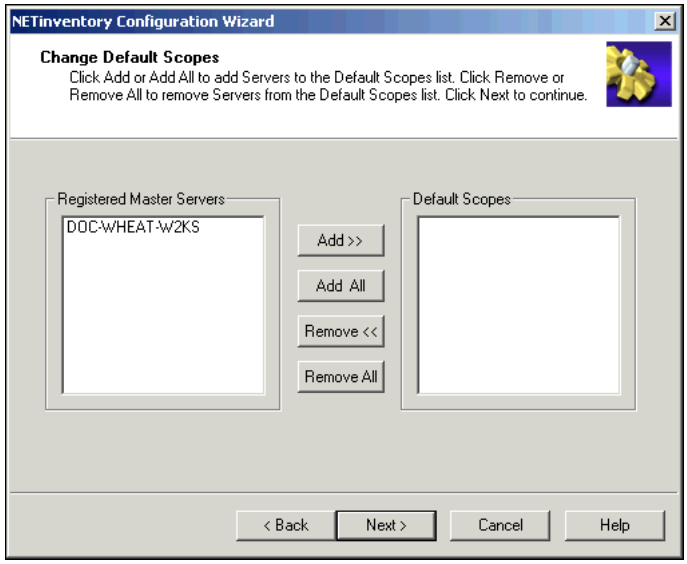


Fig. 241 Change Default Scopes Panel

14 Available Master Servers are listed in the **Registered Master Servers** field. Click **Add** to add them to the default NETinventory scope on the right side. Click **Next**.

The **Completing the NETinventory Configuration Wizard** panel appears.

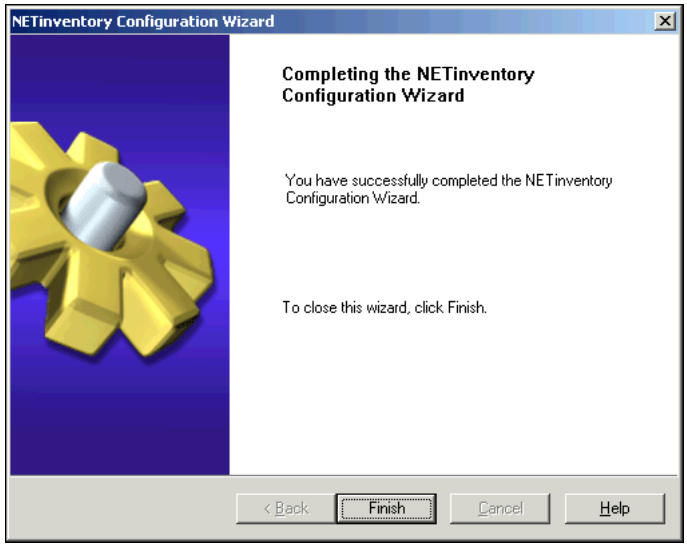


Fig. 242 Completing the NETinventory Configuration Wizard Panel

15 Click **Finish** to close the wizard.

You can now use the BindView RMS Console to view NETinventory data.

When you open the **NETinventory** item in the BindView RMS Console, the **<double-click to configure NETinventory Snap-in>** item is replaced with two new items. **Registered Master Servers** lists all NETinventory Master Servers available to report on. **Configuration** starts the **NETinventory Configuration** Wizard, allowing you to add additional Master Servers or to make changes to the NETinventory-RMS configuration.

Note: If you double-click on a Registered Master Server, every node in that server's SQL database is listed.

---

10 Using the NETinventory Snap-in for BindView RMS

In This Chapter

Understanding Queries 244
Creating a Query 245
Running Queries 254
Baselining 257
Exporting 260
Creating Task Lists 266
Creating Schedules 270
Charting 276

Understanding Queries

A query is a question that you define based on a specific set of criteria, and submit to the Information Server to receive specific information about resource objects in your environment.

By querying your environment using the NETinventory-RMS snap-in, administrators can use the Query Builder process to create reports that are specific to the data sources and fields of the query. The query can be customized to report on specific information in your organization. The query results can then be saved for analysis and planning of your environment at a later time.

You must have processing rights to create and modify queries. Only BindView Administrators can assign user rights for query processing.

For information on assigning query rights, see the *BindView RMS Console and Information Server User Guide*, or online Help.

In order to process a query, you must first configure the NETinventory-RMS snap-in and create a credential database that will be used to process queries. For information on configuring NETinventory-RMS, please see “Configuring NETinventory-RMS” on page 231.

Pre-Defined Reports

The NETinventory-RMS snap-in provides pre-defined reports that allow you to get started using the product immediately. You can access the pre-defined reports under the **Risk Assessment and Control>Pre-Defined>NETinventory** folders in the Console tree.

For a complete list of pre-defined reports and their definitions, see the *NETinventory Query Summary Report*.

Query Components

The following components allow you to create a query:

- **Data Source** - Fields that represent a resource object or a collection of resource objects that are specific to NETinventory.
- **Field Specification** - Allows you to select the fields to be reported on by the query.
- **Filter Specification** - Allows you to define values for certain fields in the query results. These fields are used to select specific records, and to more narrowly define the information that the query gathers.

  Filters are not required in query definitions.
- **Sort Specification** - Allows you to determine the order in which fields and values appear in the query results.

  Sorts are not required in query definitions.
- **Scope Specification** - Allows you to restrict query processing to one or more of the Master Servers you have registered with the NETinventory-RMS snap-in.

Creating a Query

The first step in defining a query is to determine the information about your environment that you want to gather. When defining a query, use the **Select Data Source** dialog and the **Query Builder** dialog to specify the information that you want and the manner in which you want it collected. These dialogs can be accessed from the **New Query** icon on the BindView product toolbar.

For additional information about the **Select Data Source** and **Query Builder** dialogs, see the *BindView RMS Console and Information Server User Guide*.

Selecting a Data Source

You must select a data source for the query definition. A data source contains fields that represent a resource object, or a collection of resource objects.

▶ ***To select a data source***

1 Click the **New Query** icon on the product toolbar.

The **Select Data Source** dialog appears.

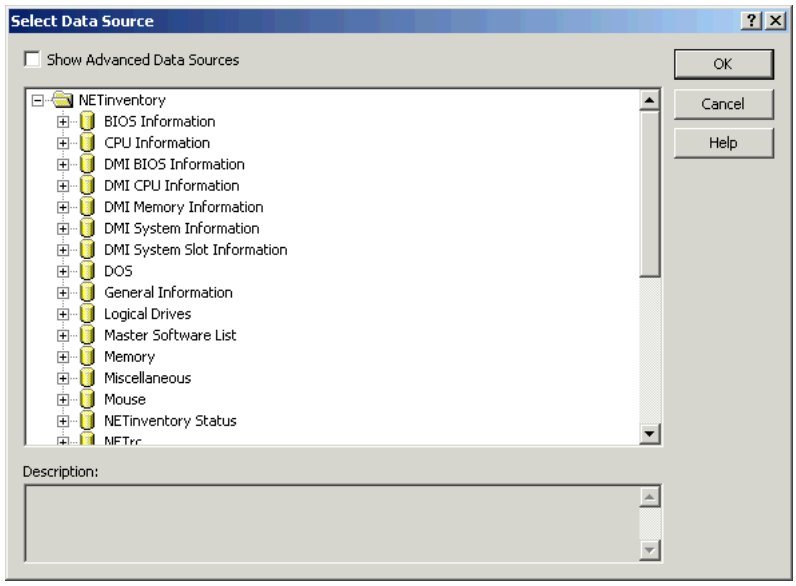


Fig. 243 Select Data Source Dialog

2 Select a data source and click **OK**.

The **Query Builder** dialog appears (Fig. 244 on page 246).

Adding Fields

To add fields to the query definition, use the **Field Specification** tab on the **Query Builder** dialog. A query definition must contain at least one field.

The added fields define the type of information received about the resource objects when the query is run.

▶ *To add a field*

1 Select a field in the **Available Fields** list.

You can view a description of the selected field by clicking the **Field Info** button.

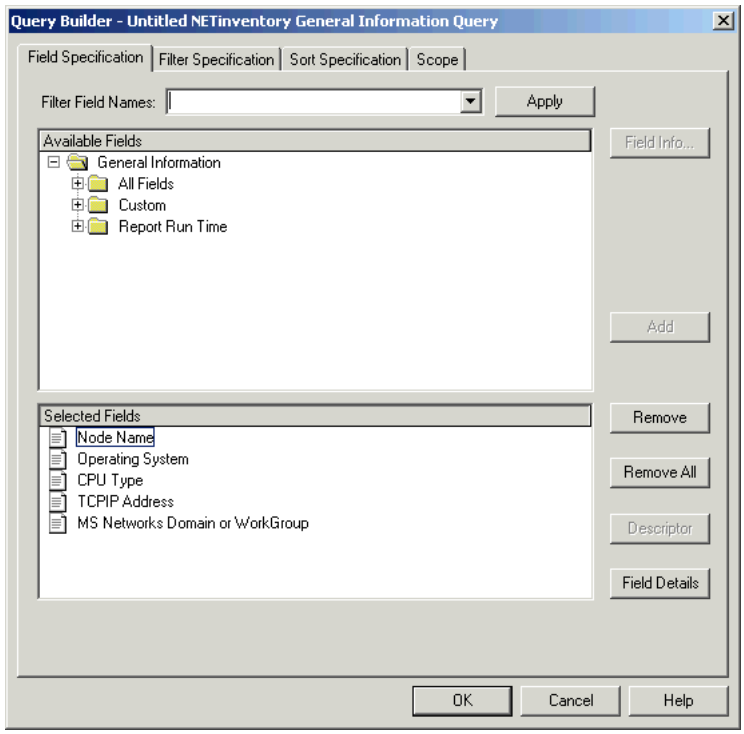


Fig. 244 Query Builder Dialog - Field Specification Tab

2 Click **Add**.

The field appears in the **Selected Fields** list.

Fields can also be added by double-clicking them, or by dragging them to the **Selected Fields** list.

Fields appear in the dataset in the order they appear in the **Selected Fields** list. The field order can be rearranged by dragging fields.

Some fields, such as ranges, require a descriptor value. A dialog (Fig. 245) for that field appears after you click **Add**.

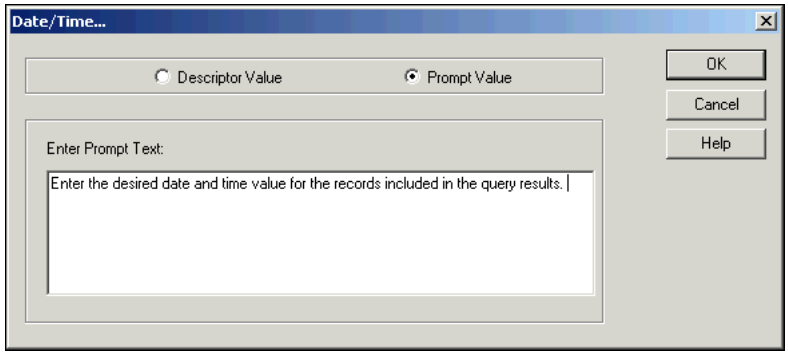


Fig. 245 Descriptor Field Dialog - Prompt Value

After you enter the value and click **OK**, the field with its value appears in the **Selected Fields** area.

Filtering the Available Fields List

You can quickly search for a specific field in the selected data source by creating a filter for the **Available Fields** list.

▶ ***To filter the Available Fields list***

1. Enter the string in the **Filter Field Names** text box (Fig. 244 on page 246).
2. Click **Apply**.

   The fields that contain the string appear in the **Available Fields** list (Fig. 244).

Clearing the **Filter Field Names** box and clicking **Apply** repopulates the **Available Fields** list with all the fields contained in the data source.

Adding Filters

You can add filters to the query definition to reduce the number of resource object records returned in the dataset. Filters consist of one or more filter terms. A filter term is a value, or group of values, selected by the user that defines the record types that are returned in the dataset.

Users must supply all filter term values before the Information Server can process a query that contains a filter. Users supply filter term values either immediately after adding a filter term to a query definition, or each time the query is run. If the user who creates the query definition includes a prompt user command, the filter term value must be defined by the user who runs the query.

When the Information Server processes a query, it applies the filter to each record that is gathered for the selected resource objects. Only the records that match the filter are included in the dataset.

▶ *To add a filter term*

1 Select the **Filter Specification** tab on the **Query Builder** dialog.

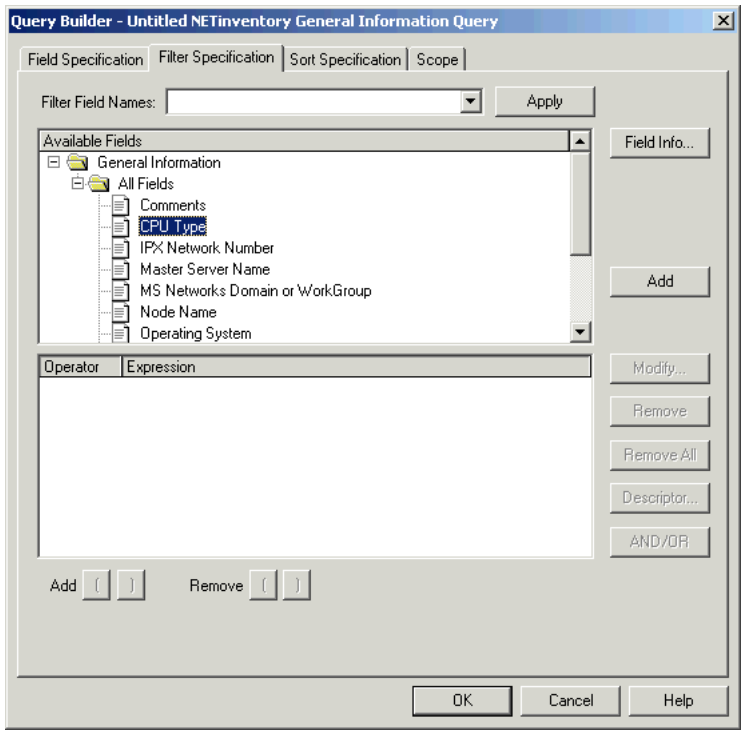


Fig. 246 Query Builder Dialog - Filter Specification Tab

2 Select a field for which you want to define a filter term and click **Add**.

The **Filter Term Definition** dialog appears.

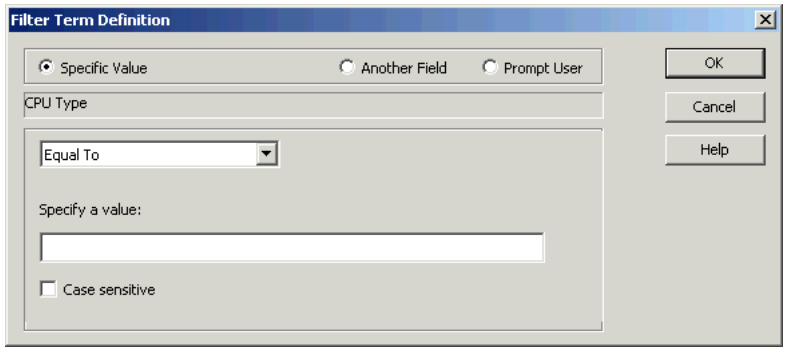


Fig. 247 Specific Value Filter Term Definition

The **Filter Term Definition** dialog allows you to further filter the selected field.

3 Select a filter option.

4 Select an operator from the drop-down list.

5 Enter a specific value for the operator in the **Specify a value** box.

6 Click **OK**.

The filter term appears in the **Expression** list on the **Filter Specification** tab (Fig. 246 on page 248).

Grouping Filter Terms

You can group two or more filter terms that you want to function as a single unit by using the **Add** parentheses buttons on the **Filter Specification** tab to group filter terms. The **Remove** parentheses buttons ungroup the filter terms.

Modifying and Removing Filter Term Definitions

To modify the filter term, select the filter term and click **Modify**. The **Modify** button invokes the **Filter Term Definition** dialog (Fig. 247). To remove a filter term, select the filter term and click **Remove**.

Filtering Field Names

As on the **Field Specification** tab, you can quickly search for a specific field in the selected data source by creating a filter for the Filter Field Names. See "Filtering the Available Fields List" on page 247.

Adding Sorts

Sorts determine the order in which sort fields and sort field values appear in the dataset. You can only apply sorts to fields that you added to the query definition.

▶ ***To add a sort***

1 Select the **Sort Specification** tab on the **Query Builder** dialog.

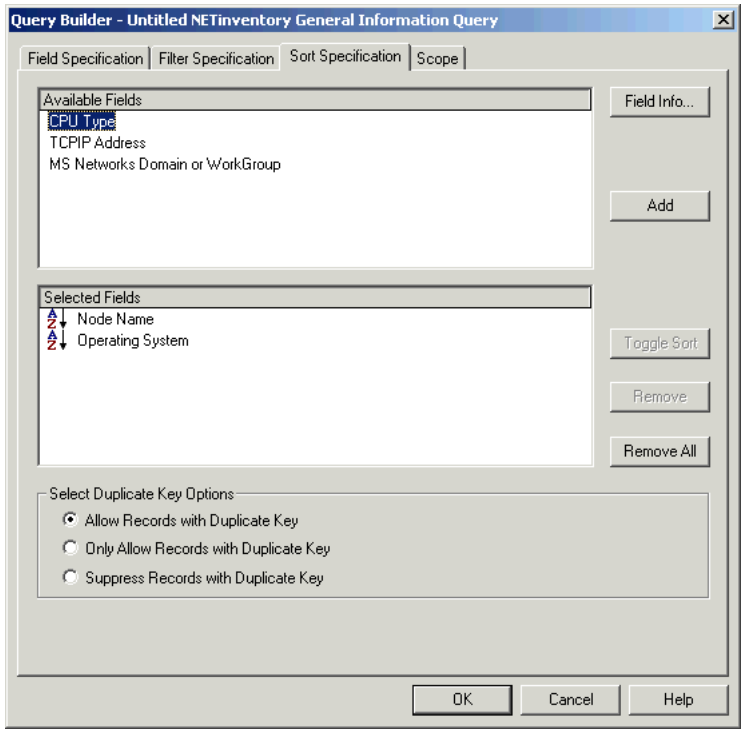


Fig. 248 Query Builder Dialog - Sort Specification Tab

2 Select a field and click **Add**.

The selected sort fields appear in the **Selected Fields** list.

The fields and field values appear in the dataset according to the sort specification.

3 Select a duplicate key option.

- **Allow Records with Duplicate Key** - Includes all records regardless of key duplication.
- **Only Allow Records with Duplicate Key** - Includes only those records that have duplicate keys.
- **Suppress Records with Duplicate Key** - Includes only the first record of a key.

Modifying and Removing Sort Fields

To modify the sort direction of the fields, select a field and click **Toggle Sort** to toggle between an A to Z or Z to A sort for the values returned for the sort field. You also can change the sort direction by double-clicking the sort field.

To modify the sort order of the fields, select a field and drag it to the desired position.

To remove a field, select a field and click **Remove**. The field is removed from the **Selected Fields** list.

Adding Scopes

A scope narrows the range of resource objects that are queried. A scope consists of user-selected scope items. A scope item is a single resource object or a container that holds several resource objects.

Since the Information Server only queries the resource objects indicated by the scope, you can use scopes to significantly reduce the time it takes to retrieve a dataset.

In NETinventory-RMS, the only resource object type is the Registered Master Server.

▶ ***To add a Scope***

1 Select the **Scope** tab on the **Query Builder** dialog (Fig. 249).

2 Select a scope in the **Available Items** list.

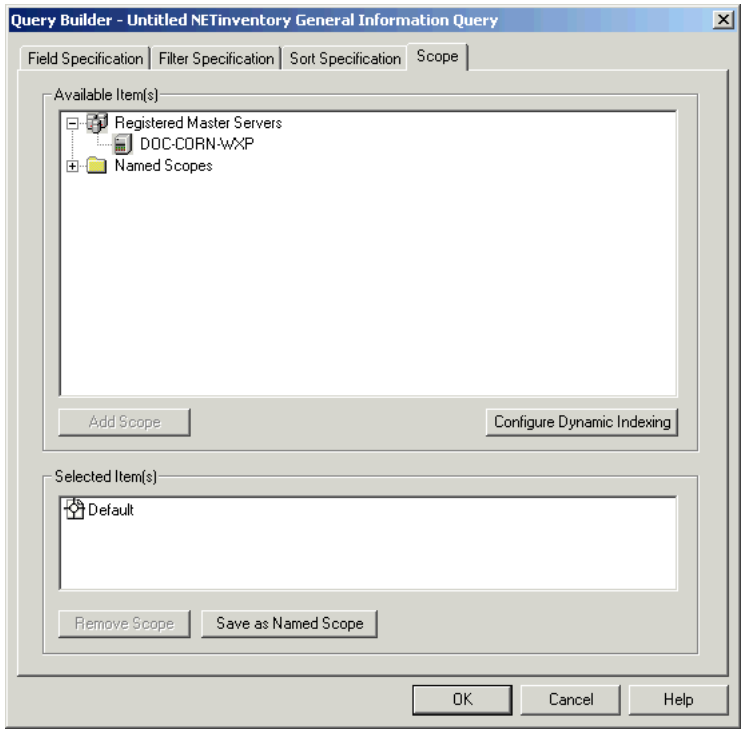


Fig. 249 Query Builder Dialog - Scope Tab

3 Click **Add Scope**.

The scope appears in the **Selected Item(s)** list.

Using Dynamic Indexing

Dynamic indexing reduces the display time of scope items on the **Scope** tab of the **Query Builder** dialog. Dynamic indexing alphabetically categorizes large numbers of nodes, or scope items, into several folders.

Dynamic index folders have a unique icon and are labeled with the name of the first and last scope item in the folder. By default, dynamic indexing is enabled for all users. Each user has their own default dynamic indexing settings.

▶ ***To disable or modify your default dynamic index settings***

1. Click **Configure Dynamic Indexing** on the **Scope** tab.

   The **Configure Dynamic Indexing** dialog appears.

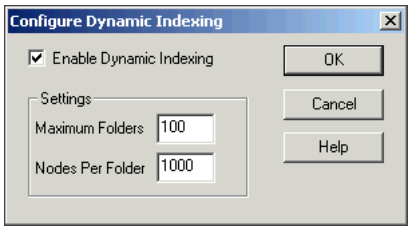


Fig. 250 Configure Dynamic Indexing Dialog

2. Select to enable or disable dynamic indexing. If you disable dynamic indexing, proceed to step 4.
3. Enter the number of folders and nodes that you want to be displayed in the **Available Items** list.
4. Click **OK**.

Saving Named Scopes

A named scope is a group of saved scope items stored on the Information Server. All users of the Information Server can access any named scope saved on it.

1. Select the **Scope** tab on the **Query Builder** dialog (Fig. 249 on page 251).
2. Select the item in the **Selected Item(s)** list.
3. Click **Save Scope**.

   The **Named Scope** dialog appears.

Fig. 251 Named Scope Dialog

4. Enter the name for the scope.
5. Click **OK**.

The named scope is saved on the Information Server that you are currently using and can be reused for other queries based on the data source.

Adding Named Scopes to Query Definitions

You can add a named scope to any query definition that contains the same data source as the one associated with the named scope. When you add a named scope, you link the named scope to the query definition.

▶ ***To add a named scope to a query definition***

1. Expand the **Named Scopes** folder on the **Scope** tab on the **Query Builder** dialog (Fig. 249 on page 251).

   All named scopes stored on the Information Server for the selected data source appear.

2. Select the named scope.
3. Click **Add Scope**.

   The scope is now listed in the **Selected Item(s)** field.

4. Click **OK**.

   The named scope is linked to the query definition.

Note: If you save a query definition that contains a link to a named scope, any modifications made to the named scope are automatically applied to query definitions that use the named scope.

Removing a Scope

To remove a scope, select the scope and click **Remove**. The scope is removed from the **Selected Fields** list.

Saving a Query Definition

A query definition is referred to as the Query Binder by the BindView RMS Console. By default, the Query Binder file is saved in the **My Items** folder, a subfolder found in the **Risk Assessment and Control** subfolder of the **BindView Risk Management** container. If you want to save your Query Binder in a different location, you can browse for the location and select it. The **Query Options** dialog is used to save the Query Binder.

▶ *To save a Query Binder*

1 Click **OK** on the **Query Builder** dialog.

The **Query Options** dialog appears.

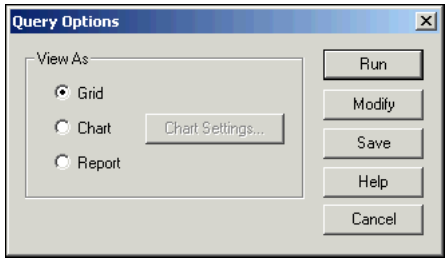


Fig. 252 Query Options Dialog

2 Click **Save**.

The **Save Query** dialog appears.

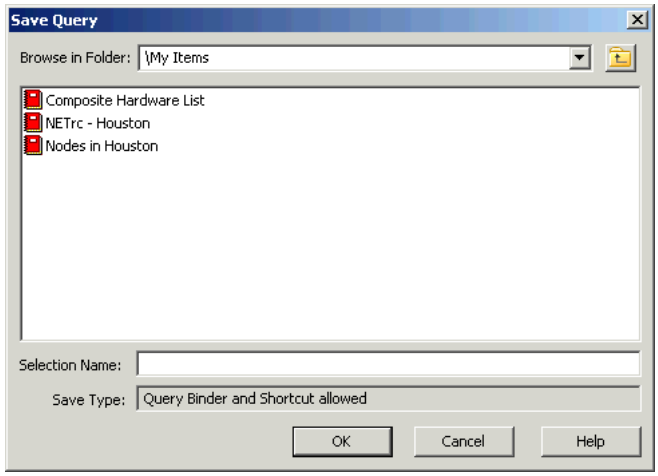


Fig. 253 Save Query Dialog

3 Enter the name of the Query Binder in the **Selection Name** field.

4 Click **OK**.

The **Query Options** dialog reappears (Fig. 252), and you are now ready to run the query.

Running Queries

You can run a query from the **Query Options** dialog or the **Query Binder** shortcut menu. When you run a query, the Information Server polls the resource objects you selected in the query definition and returns this information in a dataset.

Datasets can be displayed in the following view types:

- **Grid** - Displays the dataset in a spreadsheet-style interface. Grid columns represent the fields included in the query definition, the grid rows represent the resource object records, and grid cells contain the gathered resource object attributes.

If a record length exceeds the displayed column width, a red arrow appears in the record cell. Red arrows invoke pop-up windows when you place the cursor on them.

After running a query, always check for messages that have been returned with the query results. Click the **Messages** button at the lower right-side of the report to view messages.

- **Chart** - Displays the results of a query in a graphic format. Charts are created and modified using the Chart Builder Wizard. The wizard guides you through the process of building a custom chart for your query. During the building process, you select the type of chart (column, pie, or histogram) you want to build, and how you want the chart to be labeled.
- **Report** - Allows you to create a variety of customized reports for your query results, and to print a report of the data results from your query. The Console is installed with default settings. However, you can customize the default settings by using the **Global Report Style Settings** item in the **BindView RMS Configuration** folder.

For more information about query results settings, see the *BindView RMS Console and Information Server User Guide*.

▶ *To run a query from the Query Options dialog*

1. Click **OK** on the **Query Builder** dialog.

   The **Query Options** dialog appears.

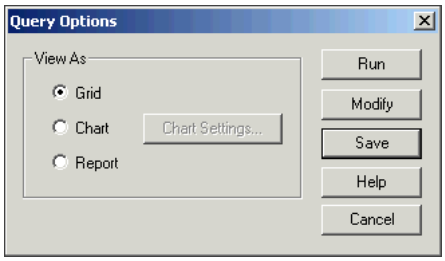


Fig. 254 Query Options Dialog

2. Select the view type in the **View As** area.
3. Click **Run**.

   The query results are returned in a dataset.

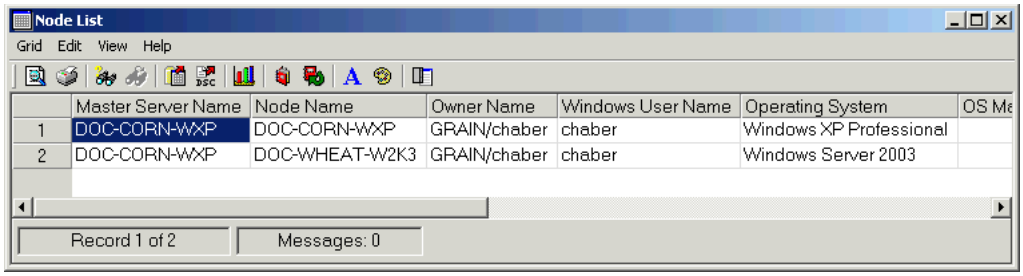


Fig. 255 Query Results in Grid View Type

▶ ***To run a query from an existing query binder***

1. Double-click **Risk Assessment and Control** in the **BindView RMS** container.
2. Click **My Items** to view the existing saved queries.
3. Select the query you want to run.

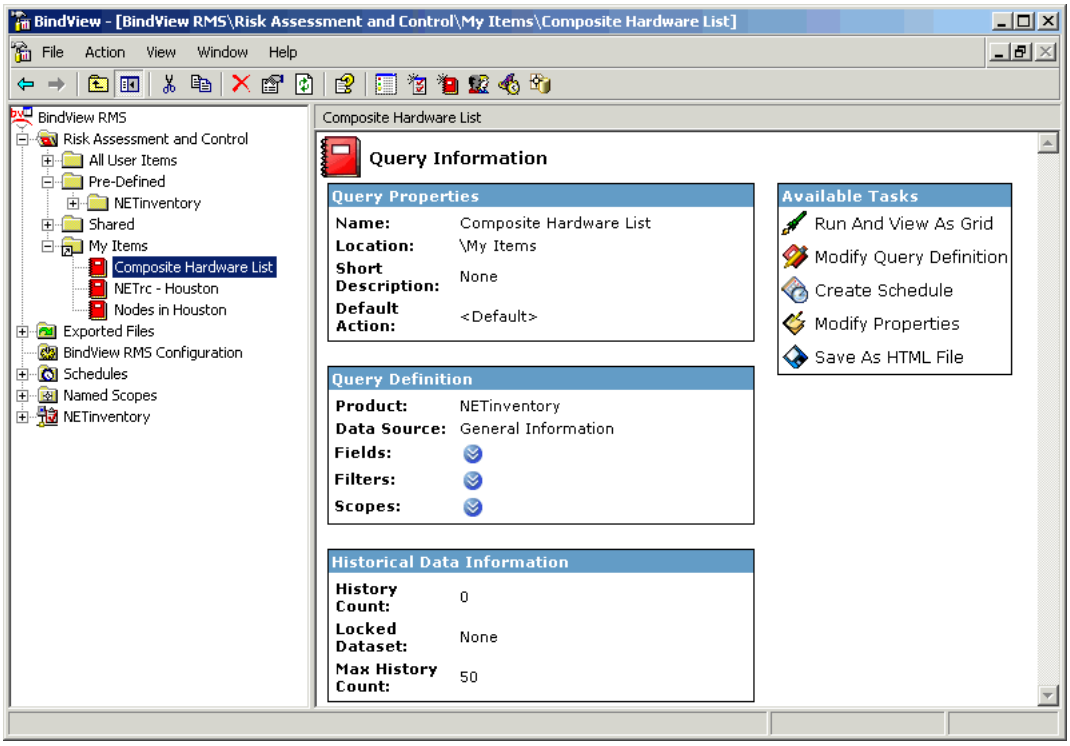


Fig. 256 Accessing the Query Binder

4. Click **Run And View As Grid** to run the query.

   The query results appear in a grid (Fig. 255).

Rerunning Queries from the Grid Toolbar

The **Rerun Query** icon on the grid toolbar allows you to rerun the query that was used to create the dataset displayed on the grid. The resulting dataset is automatically displayed as a grid.

Saving datasets in a query binder using either the **Save** or **Save As** command removes the query task from the **Task Status** dialog because the corresponding dataset has been moved into a query binder.

Monitoring the Status of Processed Queries

Using the **Task Status** dialog, you can quickly monitor and manage your query tasks that are processed by the Information Server.

You can access the **Task Status** dialog by clicking the **Task Status** icon  on the product toolbar, or the **View Task Status** option on a taskpad.

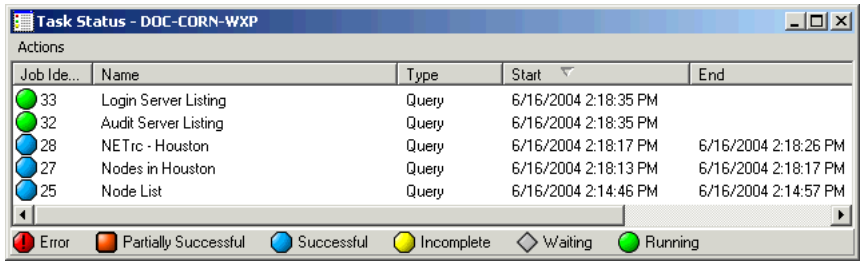


Fig. 257 Task Status Dialog

You can monitor query tasks by observing their associated status icons. You can manage query tasks using the **Query Task** shortcut menu commands:

- **View** – Displays the dataset gathered for the query as a grid.
- **Halt** – Stops query processing and displays the gathered dataset as a grid.
- **Delete** – Stops query processing and deletes the gathered dataset.
- **Save** or **Save As** – Links the dataset to the query binder containing the query definition for the processed query.

Baselining

Baselining compares the records of two historical datasets linked to a query binder and produces a delta dataset that you can export or display as a grid or report. Delta datasets are used to view exceptions and monitor changes in your resource objects over time.

Baselining can help you perform risk management by allowing you to view exceptions and monitor changes in your environment. You can then analyze the differences to determine how your environment has changed between query executions.

You must have at least two historical datasets linked to a query binder to use the baseline feature. These historical datasets must be created from a query definition that contains a data source that supports baselining.

When you baseline two historical datasets, the records in the newer dataset are compared against the records in the older dataset. The older dataset is called the baselined dataset, and the newer dataset is called the compared dataset.

When you run a baseline, the Information Server creates a delta dataset that contains all baselined and compared dataset records that match the user-selected record status options.

Each record status has an associated icon.

Baseline Record Status Types

	Added
	Deleted
	Changed
	Unchanged

Creating a Delta Dataset

When you create a delta dataset, it is automatically displayed as a grid. Although you cannot save delta datasets, you can use the grid functionality to print a report or export the delta dataset.

▶ ***To create a delta dataset***

1 Right-click the query binder file in the **BindView RMS>My Items** folder and select **Manage>Historical Data** from the shortcut menu.

The **Manage Historical Data** dialog appears.

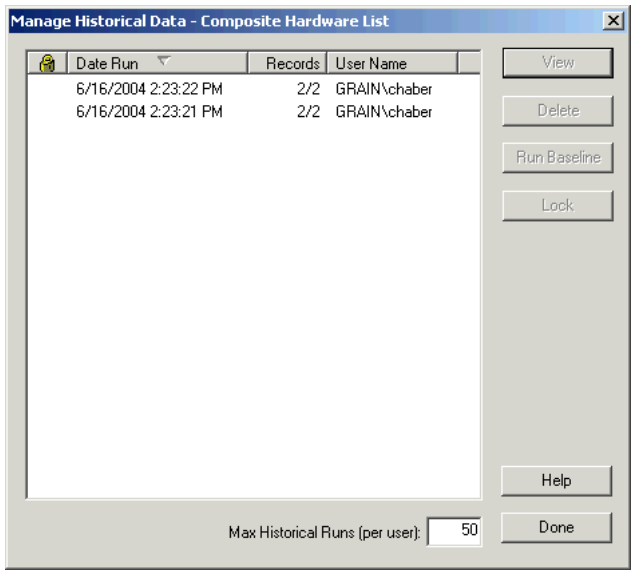


Fig. 258 Manage Historical Data Dialog

2 Select the two historical datasets that you want to baseline. Hold the **Control** key down as you make your selections.

Note: The **Run Baseline** button appears dimmed if the data source in the query definition does not support baselining.

3 Click **Run Baseline**.

The **Baseline Options** dialog appears, configured with the default settings.

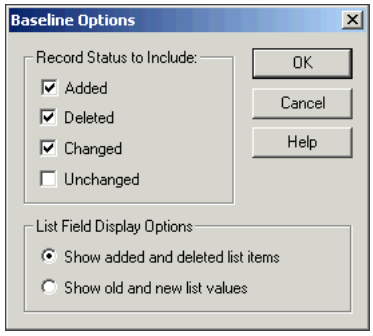


Fig. 259 Baseline Options Dialog

4 Select a **Record Status** option.

5 Select a **List Field Display** option.

6 Click **OK**.

The delta dataset results appear on a baseline grid.

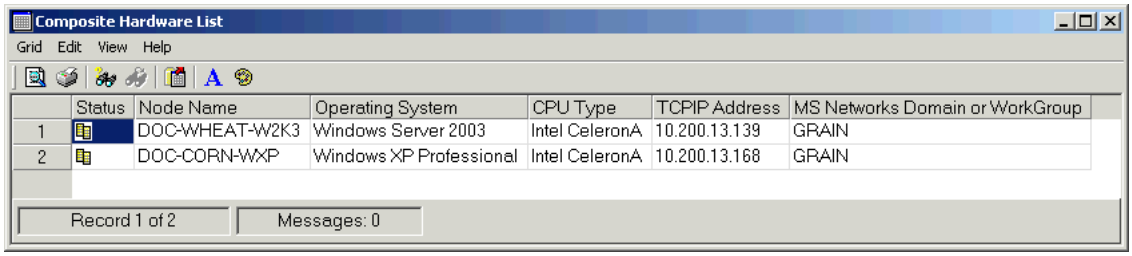


Fig. 260 Delta Dataset Results on a Baseline Grid

The baseline grid displays all records from the two historical datasets that match the selected record status options.The baseline grid is used to create a report of the delta dataset, or to create a delta dataset export file.

Exporting

The Exporting feature allows you to format and send data so that it can be used by another application. You can export the following types of BindView data:

- Datasets
- Historical datasets
- Delta datasets
- Session logs
- Charts

The **Export Setup** dialog is used to export datasets and session logs. The data is exported by either the Console or the Information Server machine, depending on how you open the **Export Setup** dialog.

Table 9 Invoking the Export Setup Dialog

Items that invoke the Export Setup Dialog	Machine to Export From
Export button  on the **Grid** toolbar	Console
Export command on the **Grid** menu of a grid	Console
Export button and command on the **Grid** menu of a baseline grid	Information Server
Run>And Export command on the **Query Binder** shortcut menu	Information Server
Export button on the **Manage Historical Data** dialog	Information Server
Query or **Baseline Post Process Commands** dialog	Console or Information Server

Exporting from the Information Server machine is more secure because BindView Administrators can restrict the directories that users can send export files to.

You can also use the **Export Settings** dialog to save export settings so that you can apply them to multiple datasets or session logs.

Exporting Prerequisites

Before you export a dataset or session log, you must configure the report settings and the export mail server.

Report Settings

Report settings determine the appearance of the report.

▶ ***To configure the report settings***

1. Click the **Grid** menu on the dataset and select **Report Settings**.
2. Select the **Fields** tab and select the **Print** check boxes for each field you want to export.
3. If you are creating a text-based export file, you should select **Auto** in the **Column Width** area on the **Spreadsheet** tab.

For additional information on report settings, see the *BindView RMS Console and Information Server User Guide*.

Export Mail Server

For e-mail and Microsoft Exchange exports, you must designate your mail server on the **Export Mail Server** dialog. For information on designating your mail server, see the *BindView RMS Console and Information Server User Guide*.

Export File Format Types

You can export a dataset or session log in the following file formats. Text-based formats are represented by an asterisk (*).

Table 10 Available File Formats for Exporting Datasets

- Acrobat format (PDF)
- Microsoft® Access 2000 (MDB)
- Character-separated values*
- Comma-separated values (CSV)*
- Crystal Reports® (RPT)
- dBase IV®
- Excel 5.0 (XLS)
- Excel 7.0 (XLS)
- Excel 8.0 (XLS)
- Excel (using OLE)
- HTML 4.0*
- HTML (Enhanced)
- Microsoft SQL Server
- Microsoft SQL Server (Enhanced)
- Paginated Text*
- Record style (columns of values)*
- Rich text format (RTF)*
- Tab-separated values*
- Text*
- Word for Windows® (DOC)*
- XML

For information on file formats, see the online Help.

Exporting to a Disk File

You can export a dataset or session log to a disk file by specifying a path in the **File Name** box on the **Export Settings** dialog.

▶ *To export to a disk file*

1 Open the **Export Setup** dialog using one of the methods listed in Table 9 on page 260.

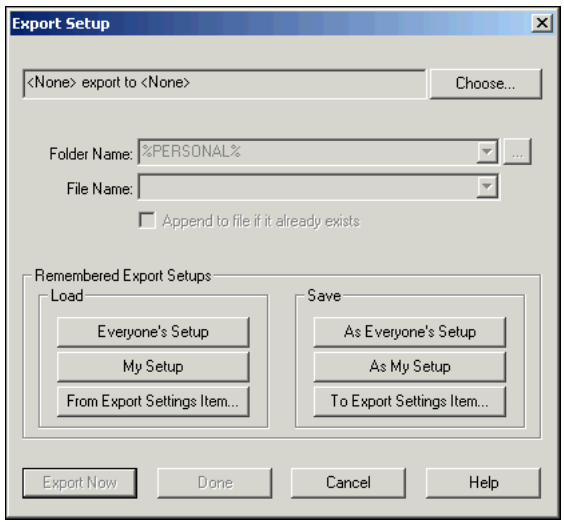


Fig. 261 Export Setup Dialog

2 Click **Choose**.

The **Choose Export** dialog appears.

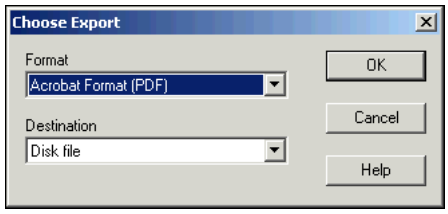


Fig. 262 Choose Export Dialog

3 Select a format for the export file from the **Format** drop-down list.

4 Select **Disk file** from the **Destination** drop-down list.

5 Click **OK**.

The **Export Setup** dialog reappears with the format and destination settings that you defined (Fig. 261).

Note: If you selected **Character-separated values**, **Paginated Text** or **MS SQL Server** for your format, a secondary dialog appears. Access the context-sensitive Help on the dialog for detailed information on defining the required format settings.

6 Enter the path and file name in the **Folder Name** and **File** boxes. You can use the browse (**...**) button to select a different folder.

7 If you want to add the exported data to an existing file or table, select **Append to file / table if it already exists**.

If the selected export format does not support the append feature, this option will be dimmed.

8 Click **Export now**.

The dataset or session log is exported in the defined format to the disk file destination indicated in the **Folder Name** box.

Exporting to an Exchange Mailbox

You can email the dataset or session log export file to any user mailbox using the **Exchange mailbox** destination type. When you create an email export file, your default Exchange Server is used. If you are exporting from the Information Server machine, you must provide your password in your default export setup to successfully email the export file.

▶ ***To email an export file to any user mailbox***

1 Open the **Export Setup** dialog (Fig. 261 on page 262).

2 Click **Choose**.

The **Choose Export** dialog appears.

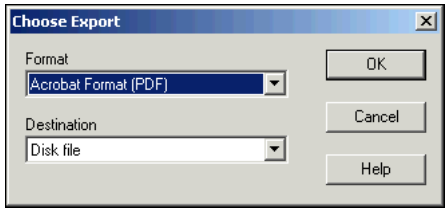


Fig. 263 Choose Export Dialog

3 Select a format for the export file from the **Format** drop-down list.

4 Select **Exchange mailbox** from the **Destination** drop-down list.

5 Click **OK**.

Note: If you selected **Character-separated values**, **Access 2000**, or **Paginated Text** for your format, a secondary dialog appears. Access the context-sensitive Help on the dialog for detailed information on defining the required format settings.

The **EMail Settings** dialog appears.

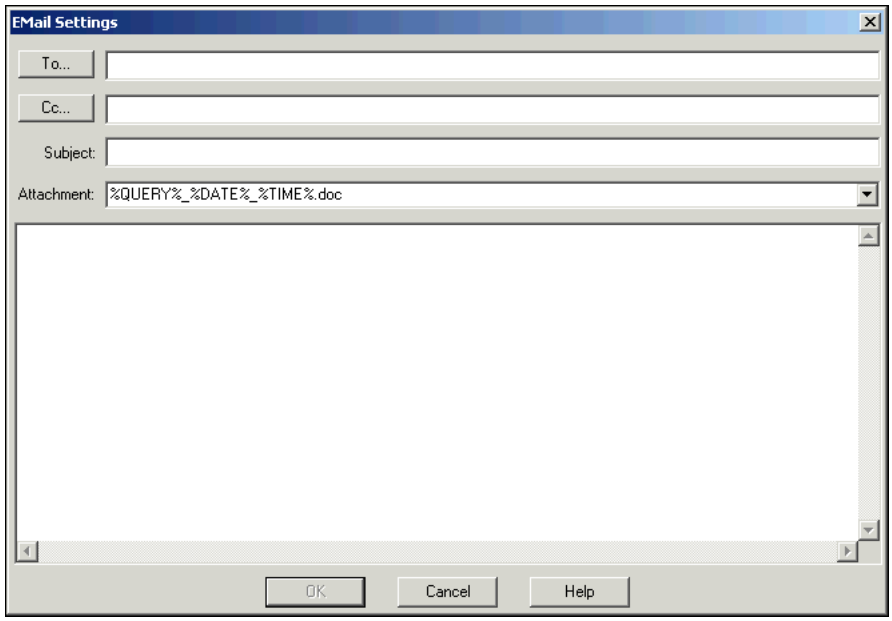


Fig. 264 EMail Settings Dialog

6 Enter the recipients, subject, and message for the email export file and click **OK**.

If a recipient belongs to a different mail server than your default Exchange server, you must enter their entire email address.

The **Export Setup** dialog reappears (Fig. 261 on page 262).

The field at the top of the dialog displays the format and destination settings you defined.

7 Click **Export now**.

The dataset or session log export file is emailed to the specified recipients.

Saving Export Settings

The three types of default export settings are automatically applied to the **Export Settings** dialog according to the following hierarchy:

- Export Settings Item
- User (My Setup)
- Global (Everyone's Setup)

All default export settings are stored on the Information Server. The export settings item and user default export settings are specific to the user who created them. However, all users can access export settings items that reside in the Shared folder, and the global default export settings that are saved by the BindView Administrator.

▶ ***To save export settings***

1. Open the **Export Setup** dialog (Fig. 261 on page 262).
2. Click **To Export Settings Item**.

   The **Save Report Item** dialog appears.

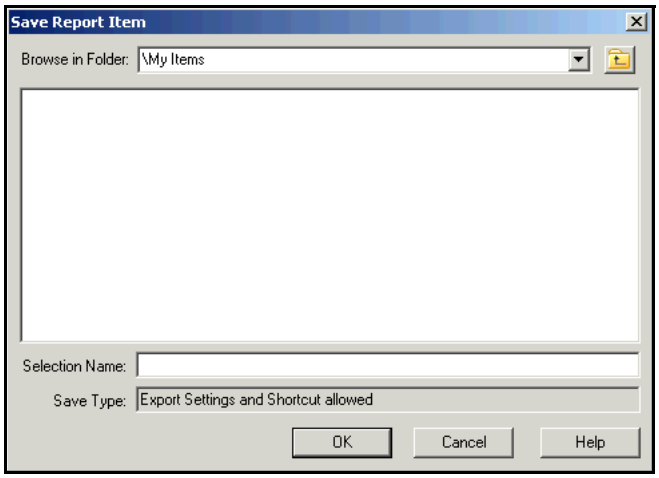


Fig. 265 Save Report Item Dialog

3. Enter the name of the export settings item in the **Selection Name** box.
4. Click **OK**.

   The **Export Setup** dialog reappears (Fig. 261 on page 262).
5. Click **OK**.

   The settings are saved as the default for the query binder.

As My Setup Export Settings

If you want to save the settings defined in the **Export Setup** dialog as your user default export settings, click **As My Setup** in the **Save** area.

Global Default Export Settings

Only BindView Administrators can save global default export settings for users of the Information Server.

An Information Server can store only one group of global default export style settings at a time. When a BindView Administrator saves new global default export style settings, the old settings are automatically deleted.

Information Servers cannot share global default export style settings.

BindView Administrators use the **As Everyone's Setup** button in the **Save** area of the **Export Setup** dialog to save the settings defined on the dialog as the global default export settings.

Note: The **As Everyone's Setup** option appears dimmed if you are not a BindView Administrator.

▶ ***To apply export settings***

1 Open the **Export Setup** dialog (Fig. 261 on page 262).

2 Click **From Export Settings Item** in the **Load** area.

The **Select Report Item/Folder/Shortcut** dialog appears.

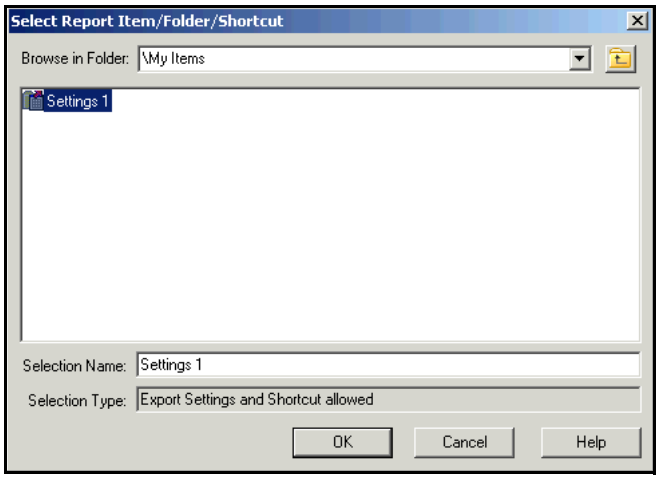


Fig. 266 Select Report Item/Folder/Shortcut Dialog

3 Select the export settings item and click **OK**.

The **Export Setup** dialog is now configured with the settings saved in the export settings items.

For detailed information on exporting, see the *BindView RMS Console and Information Server User Guide*.

Creating Task Lists

The **Task List** feature allows you to group several tasks and manage them as one task file. A task list file can contain the following items:

- Query tasks
- Baseline tasks
- Post-process commands for added tasks
- Summary file commands

When you run a task list, the Information Server processes all tasks and post process commands added to the task list in a sequence. If a baseline task is dependent on a query task, the Information Server processes the query task before the baseline task.

When you create a task list, you can perform the following activities:

- Add query tasks from query binders
- Define post process commands for added query tasks
- Apply a scope for added query tasks
- Add baseline tasks from query binders
- Define post process commands for added baseline tasks

- Import query or baseline tasks from saved task lists
- Define summary file properties

▶ *To create a new task list*

1 Click the **New Task List** icon on the product toolbar.

The **Task List** dialog appears.

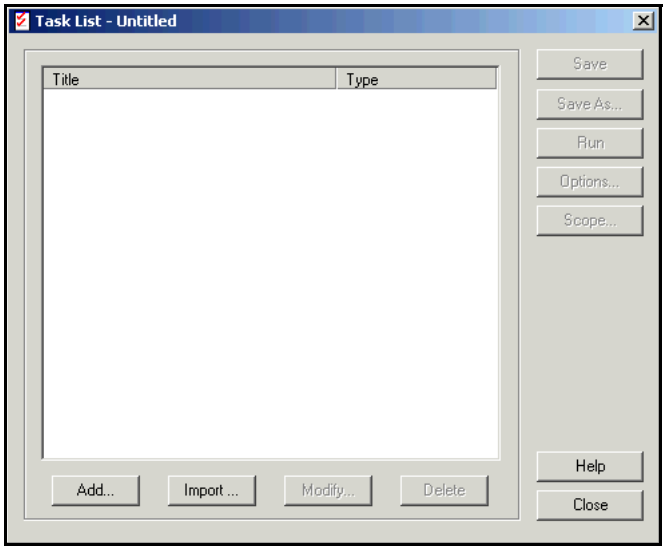


Fig. 267 Task List Dialog

2 Click **Add**.

The **Select a Task Type** dialog appears.

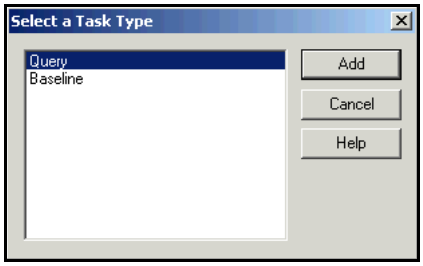


Fig. 268 Select a Task Type Dialog

3 Select the task type and click **Add**.

The **Select Query Binder** dialog appears.

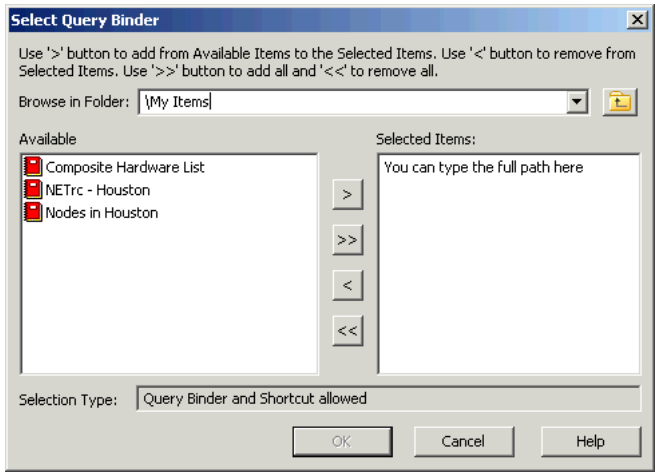


Fig. 269 Select Query Binder Dialog

4 Select the Query Binder from the **Available Items** list and click **>** or click in the **Selected Items** list and enter the full path of the item. To add all items from the **Available Items** list, click **>>**.

You can browse to other folders using the  button.

5 Click **OK** to close the **Select Query Binder** dialog.

The following dialogs that appear are based on the user selecting a Query task type. The dialogs and steps are similar for a Baseline task type.

The **Query Task Item** dialog appears configured with the selected query binder and default post process commands.

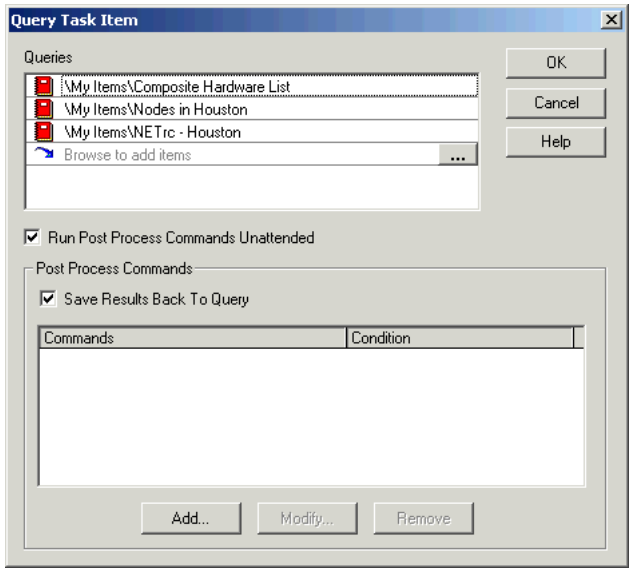


Fig. 270 Query Task Item Dialog

6 If you want to add additional query binders to the task item, click the browse (**...**) button and select the items.

7 If you want the Information Server machine to execute the added post process commands when the task list is run, select the **Run Post Process Commands Unattended** check box.

If this check box is cleared, the Console machine executes the commands.

8 Click **Add**.

The **Query Post Process Commands** dialog appears.

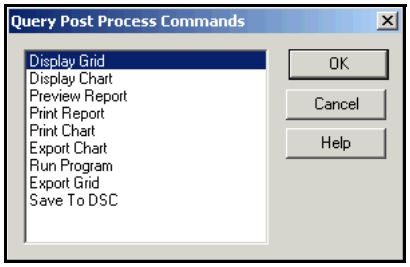


Fig. 271 Query Post Process Commands Dialog

A query task post process command tells the Console or Information Server machine what to do with the dataset gathered for the query task. You must have at least one post process command defined.

9 Select the post process command.

10 Click **OK**.

If the post process command requires additional user selections, a secondary dialog appears.

If additional user selections are not required, the **Query Task Item** dialog reappears. The post process command you added appears in the **Post Process Commands** list.

If you want to add another post process command, click **Add** and repeat Step 9 and Step 10.

11 Continue to add post process commands, if needed.

12 Click **OK**.

The **Task List** dialog reappears. The query task you added appears in the list of added tasks.

After you have saved the task list, you can run it at any time.

Running Task Lists

You run task lists from the following locations:

- Task List dialog
- Shortcut menu of a saved task list
- Schedules
- Command line

Use the **Run** button on the **Task List** dialog to run the task list. After you run the task list, the **Run** button changes to **Run Again**.

Saved task lists have shortcut menus that you can use to run the task list.

To start a task list at a specified time, you can use the Console Create Schedule Wizard. As long as the BindView RMS Information Server is running, the task will be processed at the time you specify.

Note: If you create the Scheduled Task on a machine hosting the BindView RMS Console, rather than a machine hosting the Information Server, and the machine is off, the Task List may not be processed on schedule. To ensure that it is processed at the desired time, you should consider creating the Scheduled Task on the machine hosting the Information Server.

You can also use the command-line task list launcher or a third-party scheduling application. For additional information on scheduling task lists, see “Creating Schedules” on page 270.

For information on using the command-line task list launcher or a third-party scheduling application, see the *BindView RMS Console and Information Server User Guide*.

Creating Schedules

You can schedule existing task lists and queries for automatic processing by the BindView Information Server using the **Create Schedule Wizard**. As long as the machine that hosts the BindView Information Server is on and the BindView Information Server Service is running, the scheduled item will be processed at the specified time.

You can schedule tasks lists or queries and have them processed one time only, or on a daily, weekly, or monthly basis. When a task list is scheduled, the task list is processed using the user name and password combination you supply, exactly as if that user executed the task list. Any post processing the task list performs will also be executed.

If the tasks in the task list are not set up to run post process commands unattended, all non-interactive post process commands (such as exporting) will be performed. Post process commands that require user interaction (such as displaying a grid or chart) will be performed when the user who created the schedule starts the Console.

To view existing schedules, click the **Schedules** container in the Console tree.

Note: If the current user is a BindView User, only the schedules they create appear. If the current user is a BindView Administrator, all existing schedules appear.

For complete information on Schedules, see the *BindView RMS Console and Information Server User Guide*.

▶ *To schedule task lists*

1 Click the **New Schedule** icon on the product toolbar, or click **Schedules** in the Console tree and double-click **<double-click to add new schedule>** in the Details pane.

The **Welcome to the Create Schedules Wizard** appears (Fig. 272 on page 271).

Fig. 272 Welcome to the Create Schedules Wizard

2 Click **Next**.

The **Choose a schedule type** panel appears.

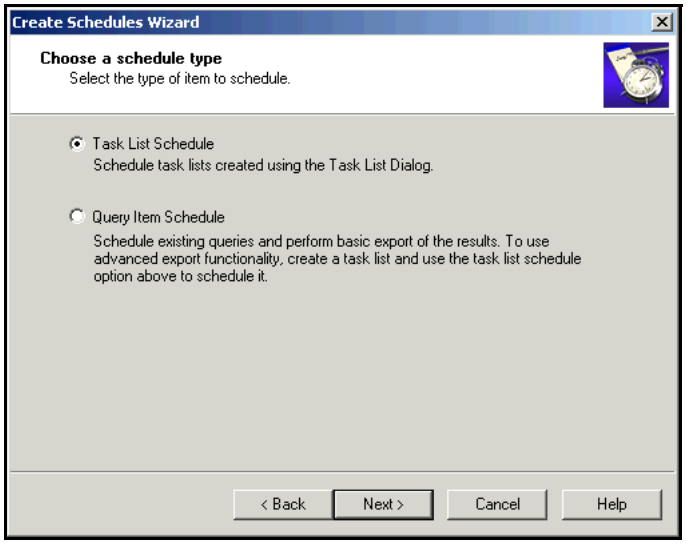


Fig. 273 Choose a Schedule Type Panel

3 Select **Task List Schedule** and click **Next**.

The **Add Items** panel appears.

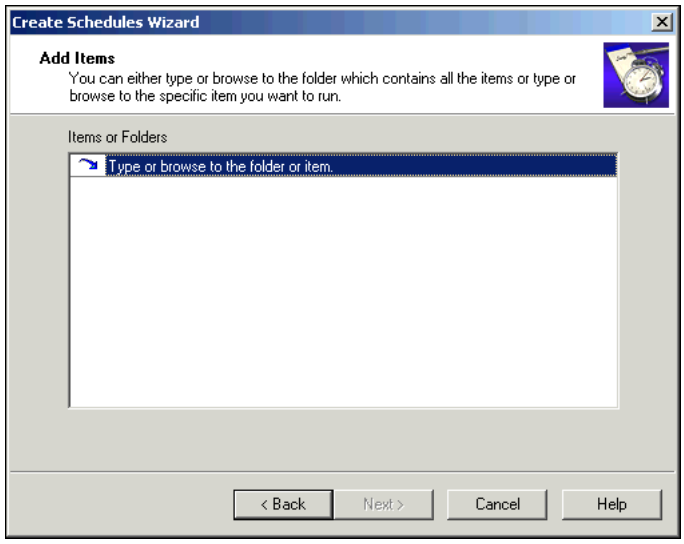


Fig. 274 Add Items Panel

4 Enter the full path and name of the folder or item to be added to the schedule. You can also use the browse (**...**) button that appears when you click in the text box to select the item. You can add one or more task lists, shortcuts to task lists, or folders.

If you add a folder, all the items in that folder will be added to the schedule, including subfolder contents, shortcuts, and linked folders.

If you click the browse (**...**) button, the **Select file** dialog appears.

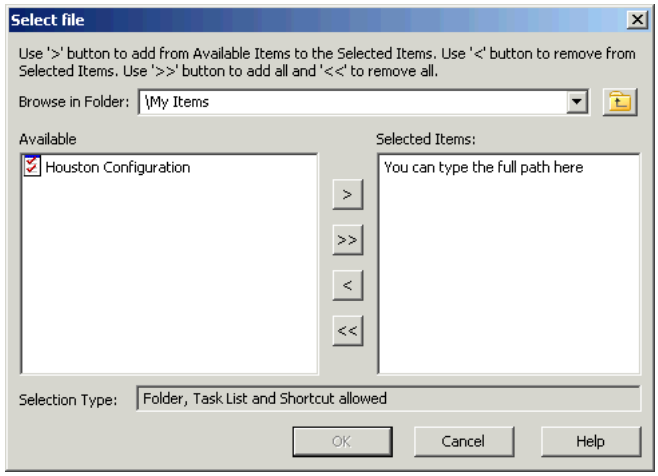


Fig. 275 Select File Dialog

5 Select the item from the **Available Items** list and click **>**. To add all items from the **Available Items** list, click **>>**.

To remove an item in the **Selected Items** list, select it and click **<**. To remove all items, click **<<**.

6 Click **OK**.

The **Add Items** panel reappears (Fig. 274 on page 272).

7 Click **Next**.

The **Name the schedule** panel appears.

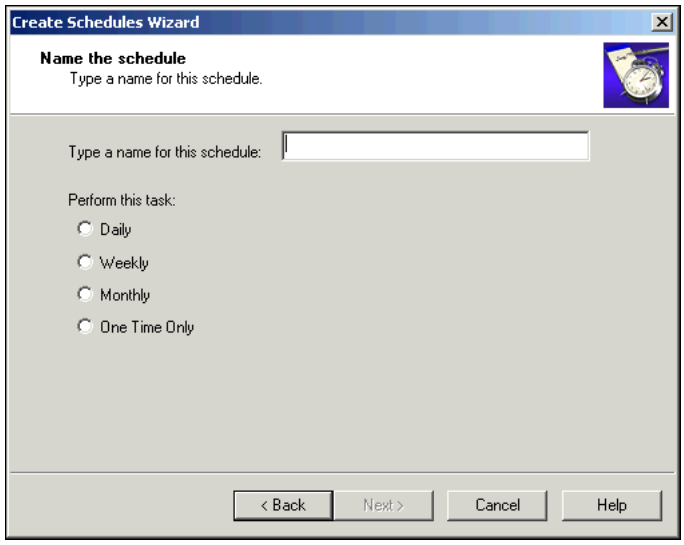


Fig. 276 Name the Schedule Panel

8 Enter a name for the schedule in the **Type a name for this schedule** field and select how often the task should be run.

9 Click **Next**.

The **Specify Schedule** panel appears.

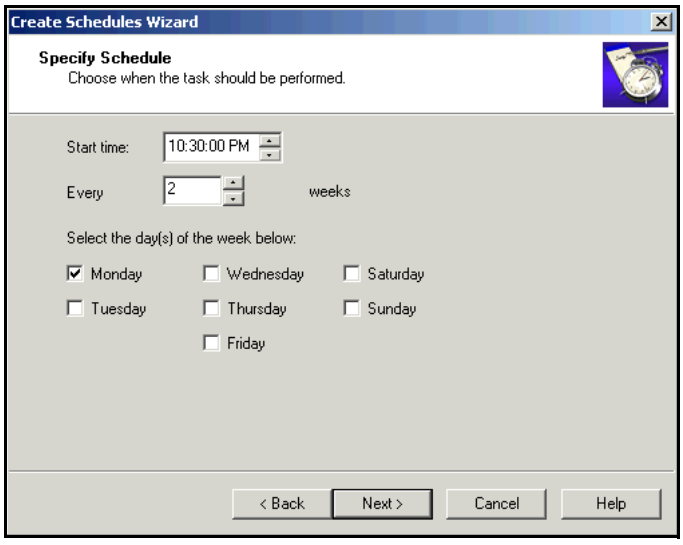


Fig. 277 Specify Schedule Panel - Weekly Options

The contents of the **Specify Schedule** panel vary depending on how often you chose to run the task on the **Name the schedule** panel.

10 Select the time the task should run in the **Start time** box.

11 Select the options specific to the schedule and click **Next**.

The **Specify Account Information** panel appears.

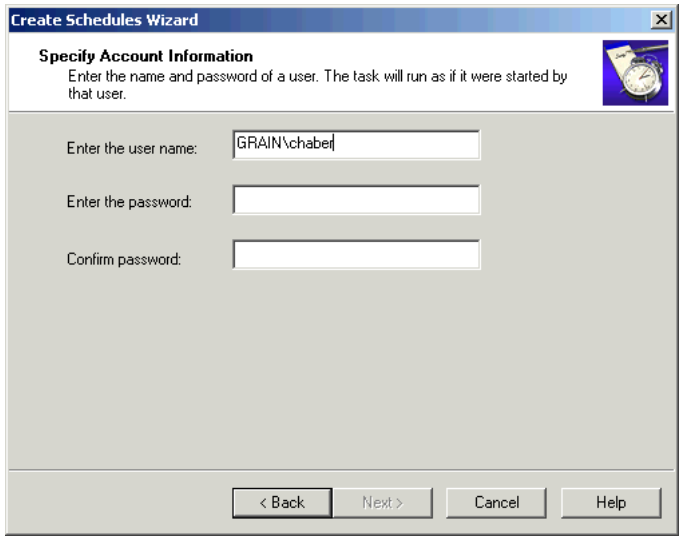


Fig. 278 Specify Account Information Panel

12 Enter the **User Name** and **Password** that the BindView Information Server uses when processing the task lists in the schedule, and confirm the password.

Caution: Use caution when using another user's credentials. The other user could make changes to their account, including changing the password, at any time. If changes are made to the account and you do not update the credentials in the schedule, the schedule will not be processed at the specified time.

---

13 Click **Next**. The **Summary** panel appears.

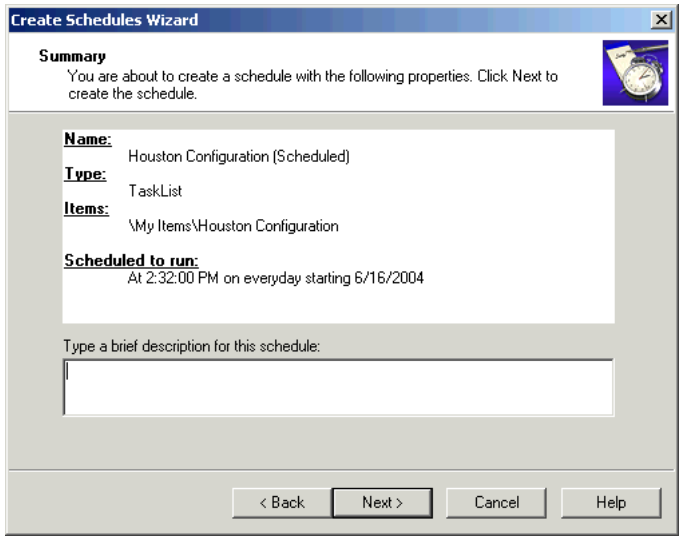


Fig. 279 Summary Panel

14 Verify that the settings are correct and enter a description of the schedule in the **Type a brief description for this schedule** field.

If you want to change any of the settings, click **Back**.

15 Click **Next**.

The **Create Schedules Wizard c**ompletion panel appears.

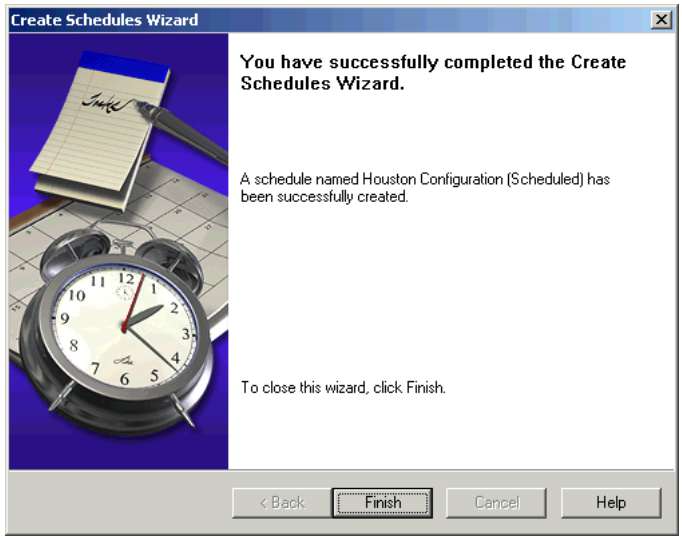


Fig. 280 Create Schedules Wizard Completion Panel

16 Click **Finish** to close the Wizard.

17 The new schedule item appears in the Details pane of the **Schedules** container.

Charting

The chart feature is used to display datasets in a graphic format. Using the Chart Builder Wizard, you can create the following types of charts:

- **Series** – Displays the relative values of one or more fields for each record in a dataset.
- **Histogram** – Displays the value frequencies for the records associated with a single field in a dataset. For information on creating a Histogram Chart, see the *BindView RMS Console and Information Server User Guide*.

You can open the **Chart Builder Wizard** from the following locations:

- Chart options in the Query Options dialog
- Chart-related Post Process Commands dialogs
- Grid toolbar and View menu
- Chart toolbar and View menu
- Query Binder shortcut menu

Creating a Series Chart

You should only use the series chart type if the dataset you are charting contains a limited number of fields and records.

▶ ***To create a series chart***

1 Open the **Chart Builder Wizard** and click **Next**.

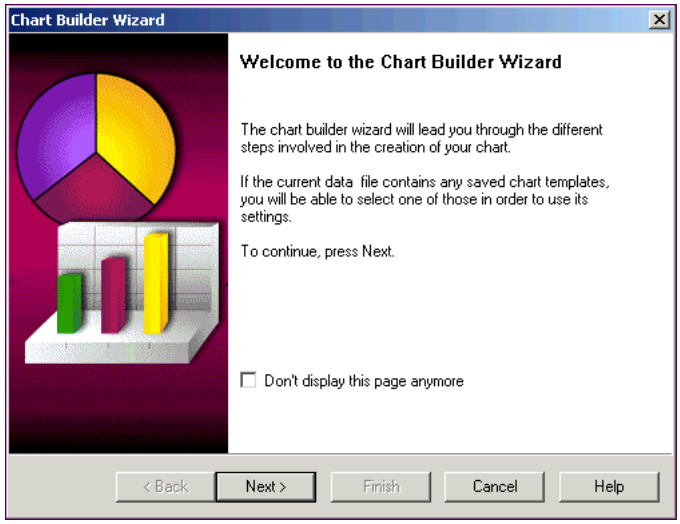


Fig. 281 Chart Builder Wizard Welcome Panel

The **Chart Type** panel appears.

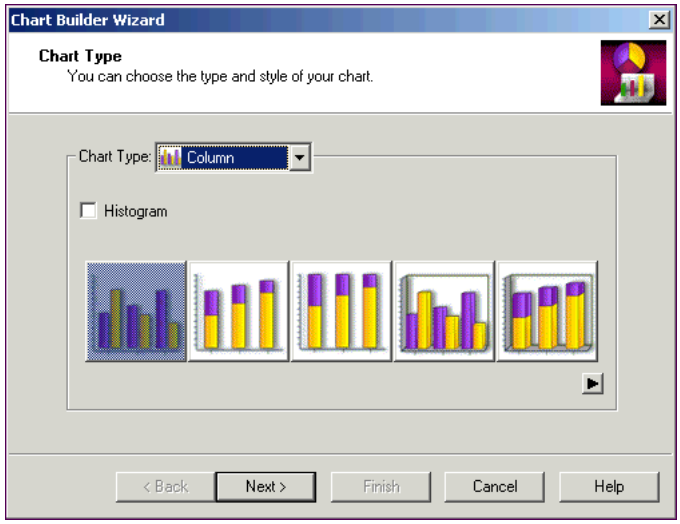


Fig. 282 Chart Type Panel

2 Ensure that the **Histogram** check box is cleared and click **Next**.

The **Chart Data Source** panel appears.

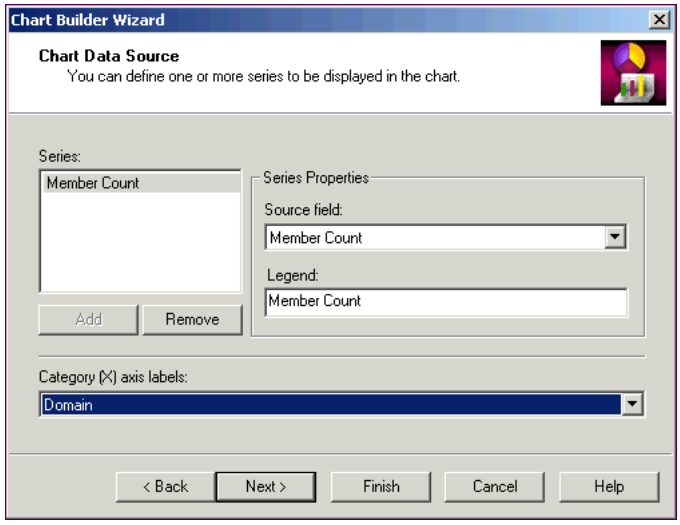


Fig. 283 Chart Data Source Panel

3 Designate a field for each **Series** position by selecting the field from the **Source field** list.

4 Click **Add**. You must designate a field for each series position in the **Series** list.

5 Select the desired label from the **Category (X) axis labels** list and click **Next**.

The **Chart Titles** panel appears.

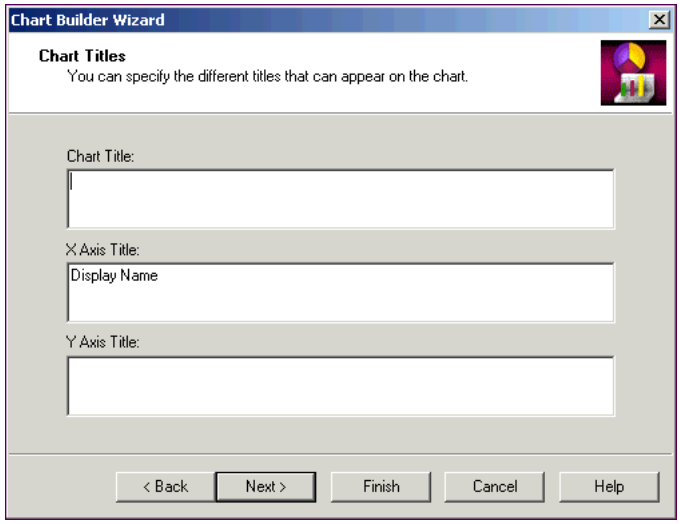


Fig. 284 Chart Titles Panel

6 Enter the titles for the chart and click **Next**.

The **Chart Legends** panel appears.

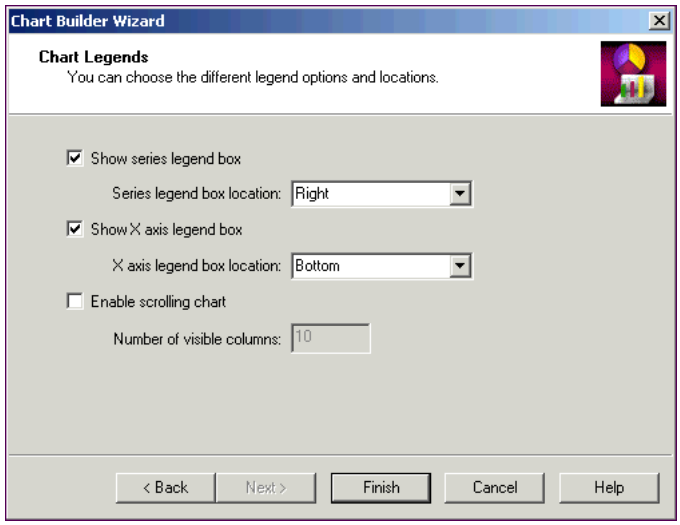


Fig. 285 Chart Legends Panel

7 Select the legend check boxes and the position.

Even if you do not select legends now, you can use the chart legend shortcut menu of the completed chart to add them later.

8 Add a scroll bar, if needed, and enter the number of series displayed on the chart at one time.

A scroll bar is automatically added to charts that have 20 or more series positions.

9 Click **Finish**.

A series chart for the specified properties appears.

Section 3: NETinventory Console

Using the NETinventory Console to Create Queries

11 Console and Desktop

In This Chapter

The NETinventory Console User Interface..... 282
The NETinventory Console Desktop 283
NETinventory Console Snap-in Modules 284

The NETinventory Console User Interface

The NETinventory Console includes several elements. When you run the NETinventory Console, a window appears with a menu, toolbar, and work space. Fig. 286 shows the NETinventory Console User Interface elements.

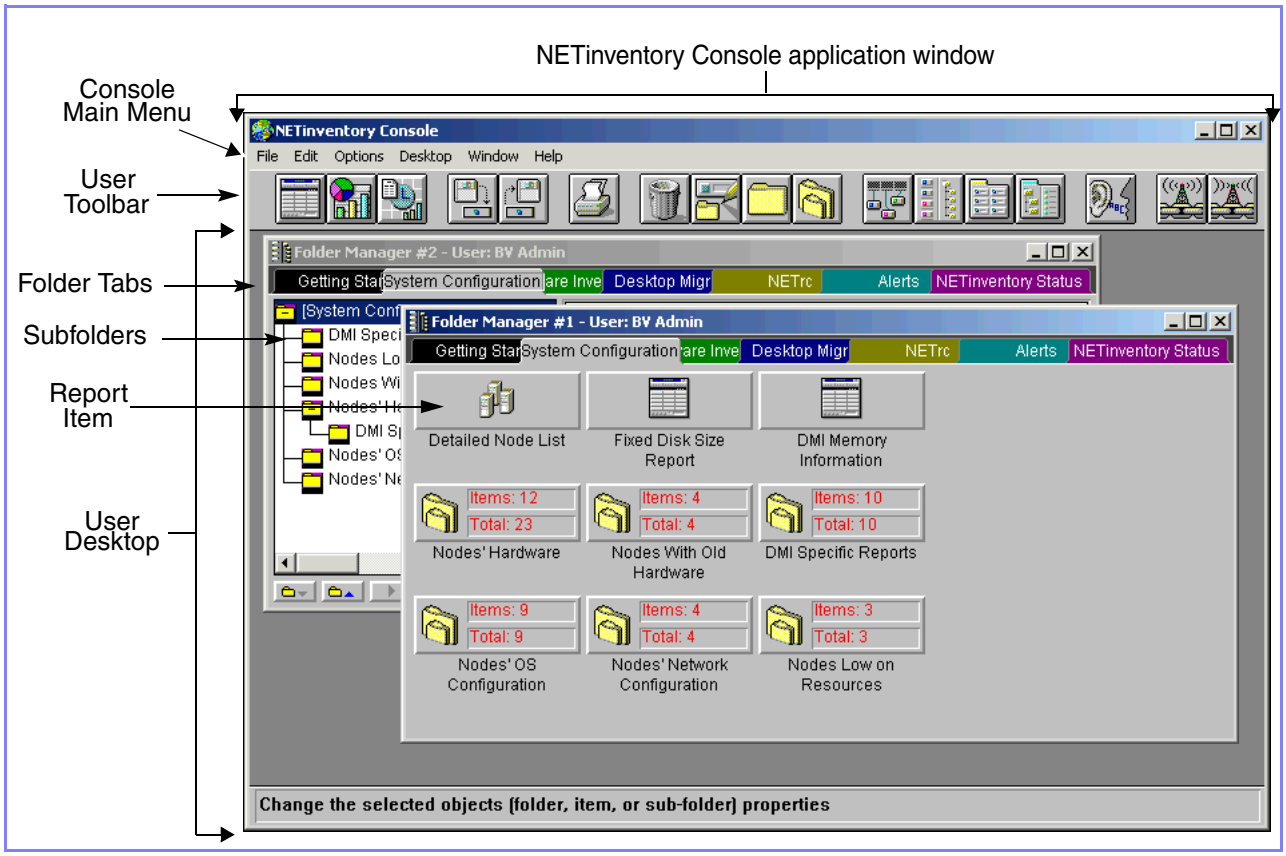


Fig. 286 NETinventory Console User Interface

User Interface Terms Defined

Table 11 defines the parts of the NETinventory Console User Interface.

Table 11 Console User Interface Terms

Term	Definition
User Toolbar	Contains tool buttons for common Console actions.
User Desktop	Automatically appears when you run the NETinventory Console. Your user Desktop is based on your login name and password.
Folders	Highest-level organizational item used to contain and organize *Report Items* and *Subfolders* on a user Desktop. Folders are selected by clicking Folder Tabs. This brings the Folder contents to the foreground.

Table 11 Console User Interface Terms (Continued)

Term	Definition
Subfolders	Categorize and organize Report Items within Folders. Subfolders can contain Report Items or other Subfolders.
Report Items	Report Items enable you to analyze and manage various aspects of your network. The three types of Report Items are: *Grids*, *Graphs*, and *Schedules*.
Grid	The Grid is used to gather, view, and manage network information. Grids contain a query. When you run a Grid, the embedded query gathers data and displays the query results.
Graph	The Graph is used to gather and view network information. Graphs contain a query. When you run a Graph, the embedded query gathers data and displays the query results in a graphical format. You can choose the type of Graph displayed.
Schedule	Schedules group Grids and Graphs into logical business functions.

The NETinventory Console Desktop

When you log into the NETinventory Console, your user Desktop appears. Each Desktop is self-contained and can be configured to individual needs.

When you start the NETinventory Console, a prompt appears asking you to enter a user name and password. The user name and password combination determines the user Desktop that appears.

When you launch the NETinventory Console for the first time, you log in as the BindView Administrator (`BV Admin`). You can create additional users later.

Item Definitions

The parameters used to generate grid or graph items is called the *item definition*. The components of an item definition vary depending upon the item type (e.g., Grid, Graph, or Schedule item). The major components of the item definition are the data source, query, page setup, and graph setup.

Data source

Data Sources are categories of information the NETinventory Console can report on. Each category is called a Data Source.

Query

Queries are part of Grid and Graph item definitions. A query allows you to obtain specific information in a particular Data Source. The NETinventory Console Query Builder guides you through the process of formulating a query. ActiveAdmin gives the ability to update editable fields generated by a query

Page setup

The page setup definition is part of a Grid item definition. The NETinventory Console reporting engine uses the dataset of a Grid

item as the basis for report content. Most of the configuration of a report layout is performed within a grid query using page setup.

Graph setup

Graph Setup is part of a Graph item's definition. Use it to change the look or layout of a Graph.

NETinventory Console Snap-in Modules

The NETinventory Console is modular and only the modules you purchase are loaded. The two modules available for the NETinventory Console are NETinventory and NETrc®.

NETinventory

NETinventory is the primary Snap-in Module for the NETinventory Console.

Examples of some of the NETinventory capabilities:

- Comprehensive configuration information (over 600 unique items of information per node).
- Master software list of over 12,000 software packages.
- Three-tier, client-server database architecture with low requirements on network bandwidth.
- Real-time enterprise-wide reporting.
- Centralized, automated configuration management of workstation inventory throughout your entire enterprise—a must for managing enterprise-wide inventory on large, distributed networks.
- Easy, point-and-click configuration file management.
- User-definable alerts, priority levels, and alert actions.
- Unlimited tracking of node configuration history.

NETrc

NETrc is a Snap-in Module for the NETinventory Console that works in conjunction with the NETinventory Console and the NETinventory Snap-in Module. Once NETrc is installed, you can view or control any workstation that has the NETrc Host software installed. Once you have taken control of a workstation, you can view its screen, investigate problem reports, or troubleshoot, just as if you were in front of the workstation. NETrc components work in conjunction with the NETinventory components to let you efficiently manage the workstations on your enterprise network.

12 Grid, Graph, and Schedule Item Basics

In This Chapter

Item Definition 286
Grid Item Defined 288
Graph Item Defined 289
Schedule Item Defined 290

Item Definition

The parameters used to collect information from your enterprise are called the item definition. The components of the item definition vary depending upon the item type (e.g., Grid, Graph, or Schedule).

Properties of an Item

You can customize how an item is displayed in the Folder Manager by editing the item's properties. Edit the item properties by highlighting the item and selecting Properties from the Edit menu or by pressing Alt+Enter. The **Modify Item Properties** dialog appears.

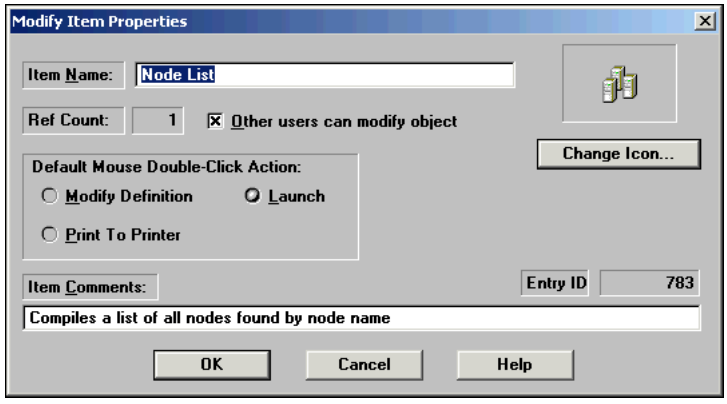


Fig. 287 Modify Item Properties Dialog

Item Properties

- **Item Name -** The name assigned to an item.
- **Ref Count -** A reference can be shared between users, and the reference count contains the number of desktops that include the reference. An item always has at least one reference.
- **Other users can modify object -** When selected, allows other users to modify the definition of an item sent as a reference. For more information on references, please see "Sharing Items Between Desktops" on page 306.
- **Default Mouse Double-Click Action -** Defines the action taken when double-clicking an item. Choose to Modify Definition, Print to Printer, or Launch when the item is double-clicked.
- **Item Comments -** Optional description or comment about the item. When the mouse is over the item, the comments appear in the lower left portion of the NETinventory Console window.
- **Change Icon** - Change the item icon.
- **Entry ID -** The internal NETinventory Console serial number for the item.

Queries and the Query Builder

Create queries using the Query Builder. To create a meaningful query, you should understand the query process itself.

What is a Query?

A query collects information about your enterprise network.

The NETinventory Console gathers data and displays the results that answer these types of questions. Results can be displayed in a grid (spreadsheet style interface), a printed report, or a graph. Every time you process a query, the results are updated.

Why Create a Query?

A query defines the information you wish to retrieve and provides a way to retrieve all or a portion of the information about a resource.

Expressed simply, a sample query might be:

> For all audited nodes on my enterprise network, display the computers that do not have a processor of a certain speed or faster, or which do not have a certain amount of memory.

What is a Data Source?

Within each Module are categories of information. Each category is called a Data Source.

Note: Once a query item is created, the Data Source for that item cannot be changed.

What is a Query Builder?

The Query Builder is used to create or modify a query. The results of a query can be displayed in Grid or Graph format and can be printed. The Query Builder consists of a dialog with four panels.

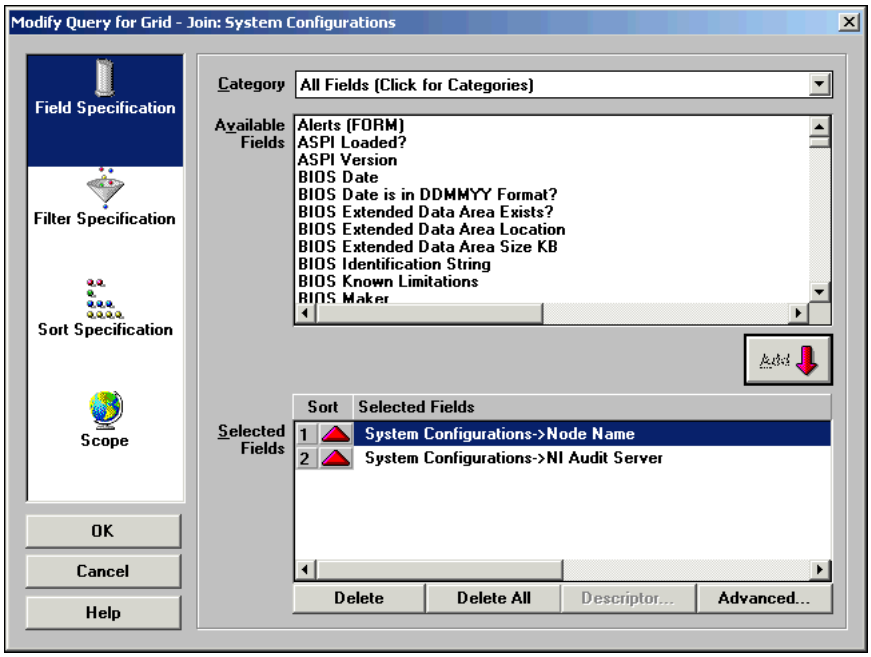


Fig. 288 NETinventory Console Query Builder

The parts of the Query Builder are:

- **Field Specification** - Use to select which fields the NETinventory Console collects when it processes the query.
- **Filter Specification** - Allows you to prevent the inclusion of unwanted records in query results. Filter criteria can be grouped using logical AND/OR operators and the parentheses.

- **Sort Specification** - Allows you to define the order that information collected by the query displays in.
- **Scope -** Allows you to restrict a search to particular Audit Servers.
  Instead of searching the entire network, the query can focus only on the Audit Servers of interest. This speeds processing the query and reduces the time necessary to produce results.

Grid Item Defined

A Grid is used to analyze, display, and print information about resources in your enterprise in the form of a spreadsheet interface. In addition, ActiveAdmin gives the ability to update editable fields. A Grid can serve as the basis for generating printed reports.

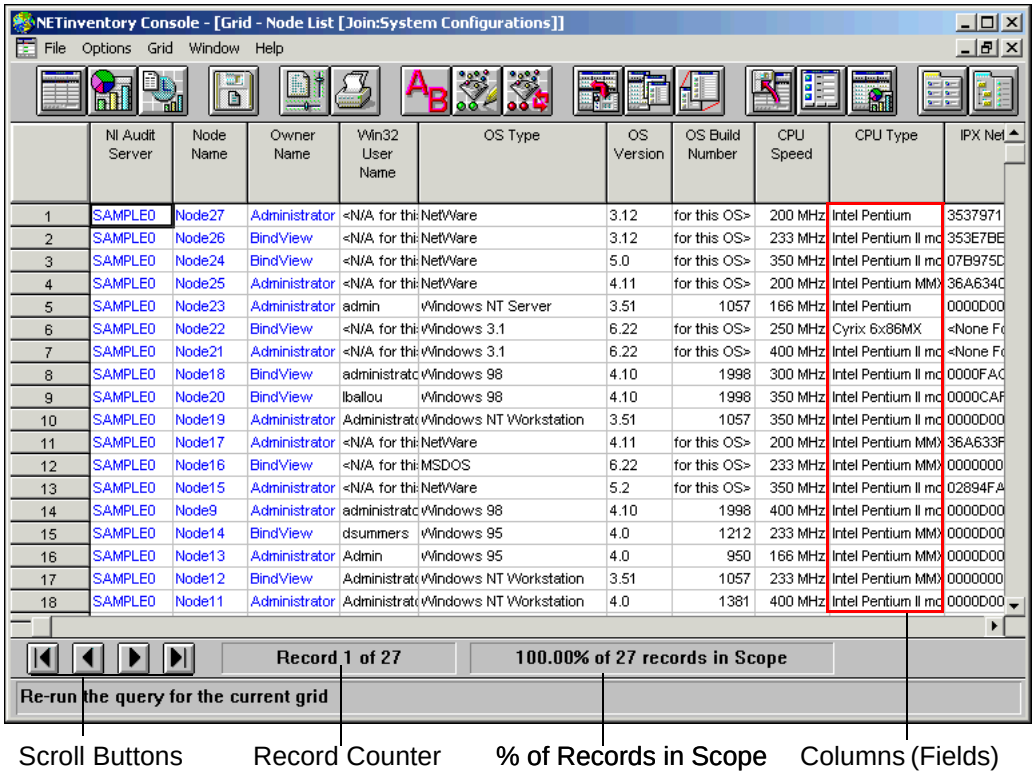


Fig. 289 Grid Dialog

Components of a Grid Item

The components of a Grid item are:

- Query
- Item Properties
- Page Setup settings
- Display Font

A report is the printed output of a Grid. To customize a report, use Page Setup. Page Setup allows you to customize the appearance of your reports.

Graph Item Defined

A Graph is used to analyze, display, and print information about particular aspects of your enterprise in an pictorial format. An example a Graph is shown below.

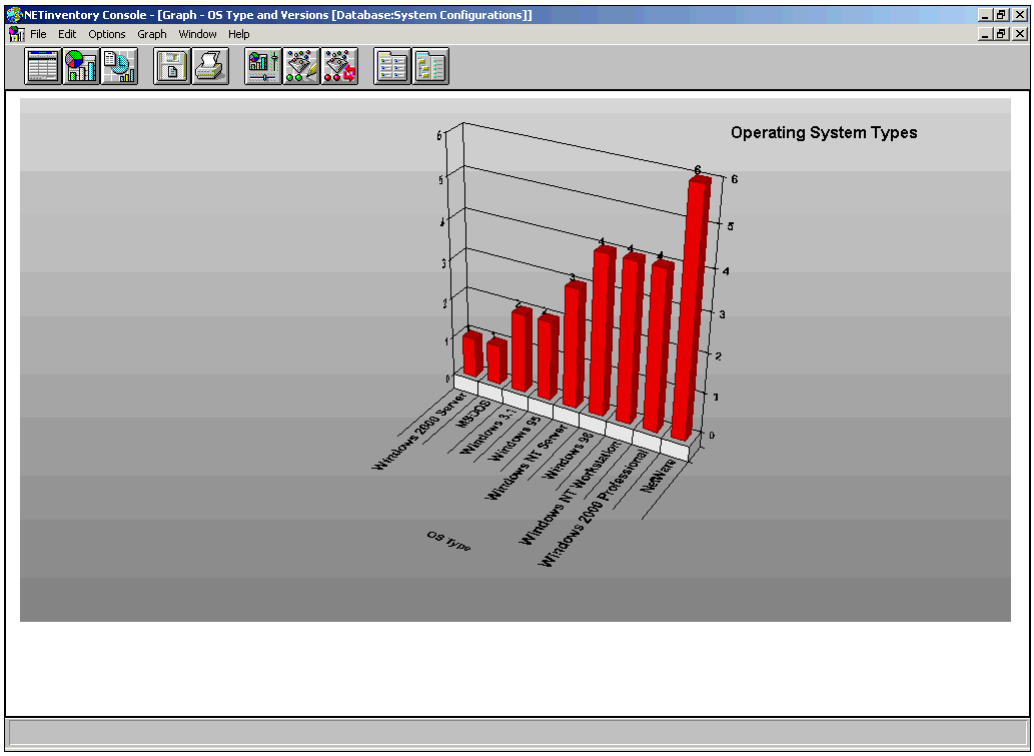


Fig. 290 Graph Dialog

Components of a Graph Item

A Graph item consists of the following components:

- Query
- Item Properties
- Graph Setup

Graph Setup

Graph Setup is available when creating or modifying a Graph item. It is also available from an open Graph. The Graph Setup dialog controls the layout of the Graph. To access Graph Setup for an existing Graph item, right-click a Graph item and select Modify

Definition from the pop-up menu. To access Graph Setup in an open Graph, select Graph from the Main menu and select Modify Graph.

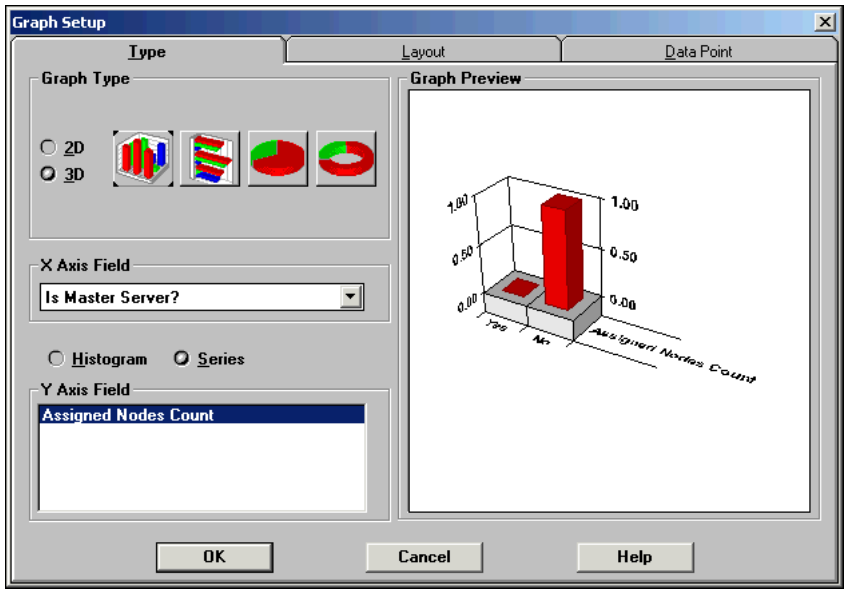


Fig. 291 Modify Graph Dialog

Schedule Item Defined

Schedules group Grid, Graph, or Schedule items into a batch. The items contained in the Schedule can be launched immediately or at another time. A schedule can contain any grid, graph, or schedule items available on your NETinventory Console desktop.

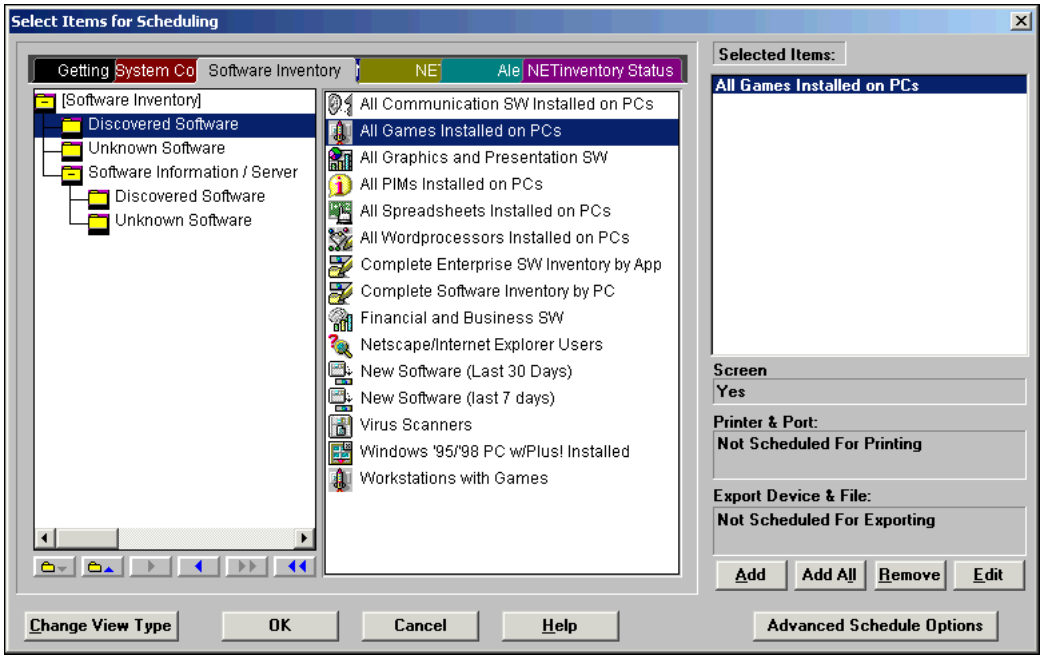


Fig. 292 Select Items for Scheduling Dialog

Components of a Schedule

Schedules combine items into a batch process. A Schedule Item consists of the following components:

- The list of items in the Schedule.
- The item properties, which customize appearance on the desktop.

Select Properties from the Edit menu to view Schedule properties. Edit the Item List for a Schedule by clicking the Schedule item and selecting Modify Definition from the Edit menu.

13 Creating and Changing Items

In This Chapter

Creating a New Grid or Graph Item 294
Changing Existing Grid or Graph Items 300
Creating a New Schedule Item 301
Changing Existing Schedule Items 306
Sharing Items Between Desktops..... 306
Copying Items..... 310
Exporting and Importing Items..... 310

Creating a New Grid or Graph Item

Use the NETinventory Console to create new grid and graph report items. When you create a Grid or Graph, you use the Query Builder to specify the data you want to display. After specifying the data to display, use Page Setup or Graph Setup to customize the presentation of the report.

Data Source

You must select the data source for a query when you create it. Every property of a query can be changed after you create it except the Data Source.

▶ *To select a Data Source*

1. Click the **New Grid** or **New Graph** icon in the NETinventory Console toolbar. Or select **New Grid** or **New Graph** from the **File** menu.

Fig. 293 New Grid Button

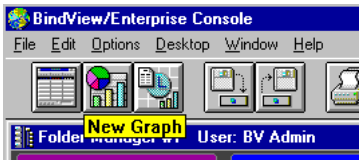


Fig. 294 New Graph Button

2. Highlight a data source to use in this query.

   Once an item is created, the Data Source cannot be changed for that item.

   The **Description** field provides a general description of the information available in the highlighted data source.

3. Click **Show Advanced Data Sources** to display less commonly used Data Sources, including internal data sources

used by the NETinventory Console, such as lists of available fields.

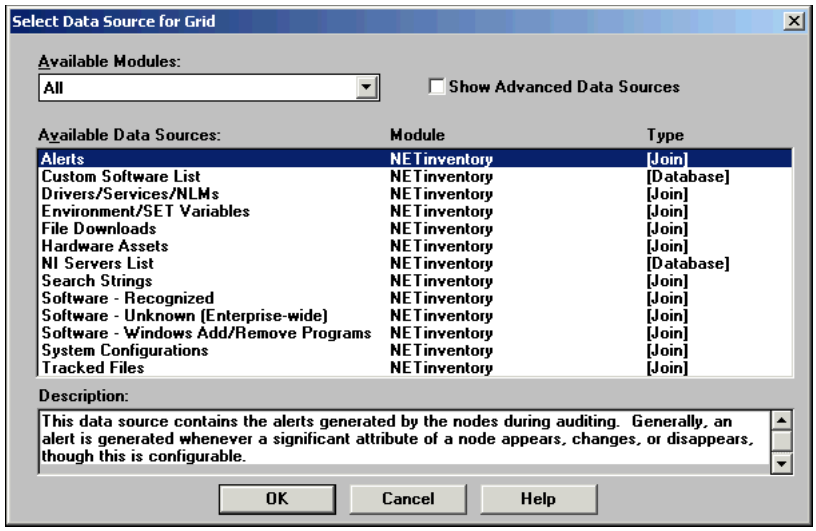


Fig. 295 Select Data Source Dialog

4 Click **OK** to select the data source and start the Query Builder.

Field Specification

You can customize the query you are creating by adding or removing fields to display the information you need.

The Category field contains a list of categories that narrow the number of fields displayed. The default Category is “All Fields.”

▶ *To add a field to a query*

1 Select a Category or leave the Category field set to **All Fields** to display all fields available for the selected Data Source.

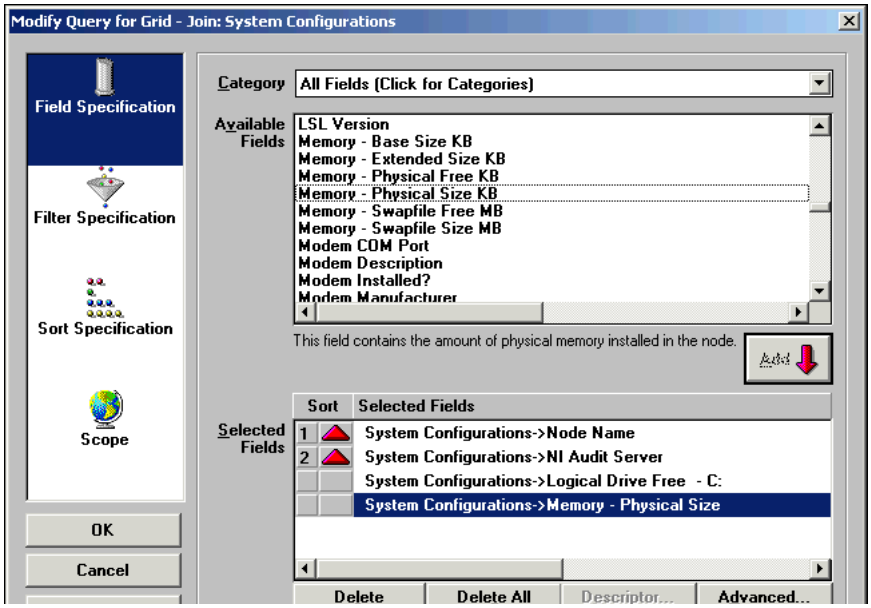


Fig. 296 Query Builder Dialog - Field Specification Panel

2 Select the fields to add to the query and click **Add**.

To select multiple fields, hold down the CTRL key, select each item in turn, and then click **Add**.

Filter Specification

Filters allow you to restrict the information the query will display. Use the filter specification option to add filters to the query.

▶ ***To add a filter to a query***

1 Click **Filter Specification**.

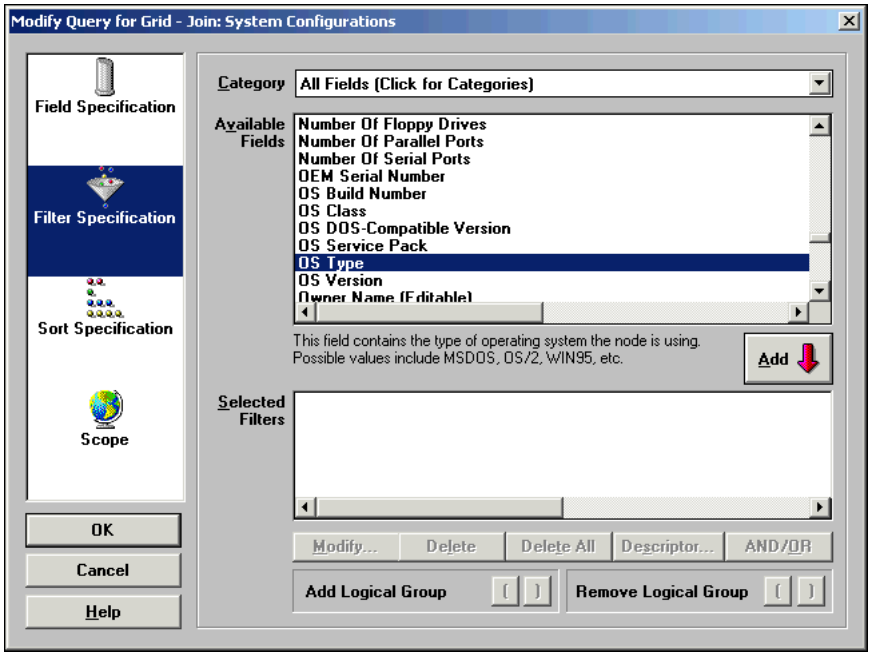


Fig. 297 Query Builder Dialog - Filter Specification Panel

2 Select the field to add as a filter and click **Add**.

3 In the **Define Filter Term** dialog, select the filter term and add any needed conditions. If the browse (**...**) button is present, click it to display a list of choices.

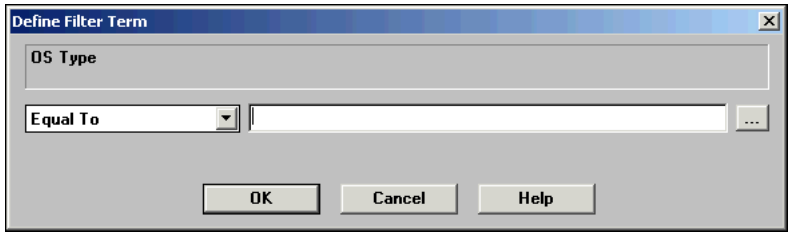


Fig. 298 Define Filter Term Dialog

4 Click **OK**. The **Query Builder** dialog appears.

Sort Specification

Use the Sort Specification to change the way information is sorted and grouped. Duplicate Key Options can limit the report to allow duplicates, allow only duplicates, or suppress duplicates.

▶ *To change the sort order of information*

1 Click **Sort Specification**.

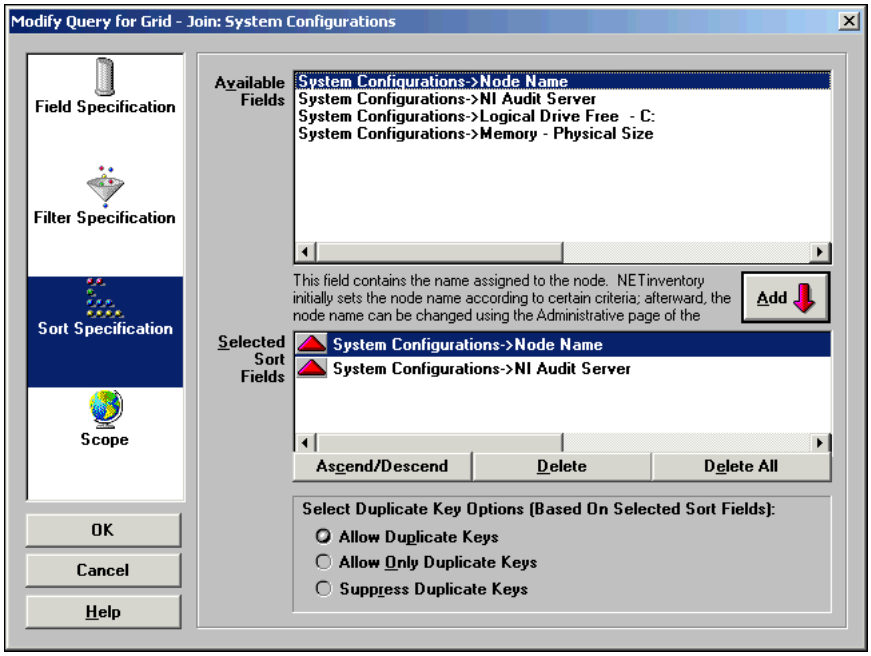


Fig. 299 Query Builder Dialog - Sort Specification Panel

2 Highlight the field to add to the Sort Specification and click **Add**.

3 Drag and drop fields in the **Selected Sort Fields** area into the sort order you choose.

The fields in the query will be sorted according to the order that they appear in the list. For each field you add to the Sort Specification, you can choose to sort in ascending sequence (that is, A to Z or lowest number to highest number) or descending sequence (that is, Z to A or highest number to lowest number) sequence.

▶ *To change the sort direction*

Highlight the name of the field you wish to change the sort order for and click the **Ascend / Descend** button.

You can also change the ascend/descend direction by double-clicking the red arrow beside the field name.

Duplicate Record Processing

The NETinventory Console gives options for duplicate record processing. Duplicate record processing options include the ability to suppress duplicates or to allow only duplicates. By default no special duplicate processing takes place; all records that meet the

scope and filter conditions in the query will appear, without regard to their status as duplicates. Duplicate Key Options can restrict the inclusion of duplicate records in the result.

Duplicate options only function within a selected sort sequence (e.g., a record is considered a duplicate if all the fields selected for sorting match another record). If no fields are selected for sorting, duplicate key options are not available.

Scope

The Scope option allows you to target sites or Audit Servers to search. Use this feature to reduce the size of the area to be searched, thereby reducing the amount of time it takes to create a report.

▶ ***To define the areas to search***

1 In the query builder, click **Scope**.

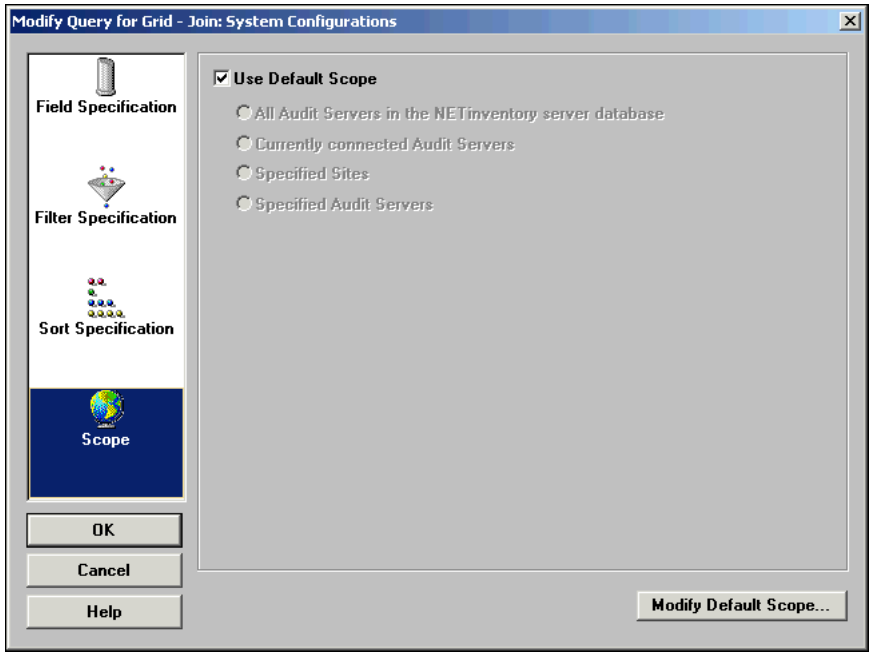


Fig. 300 Query Builder Dialog - Scope Panel

2 To use a scope other than the default scope, deselect **Use Default Scope**.

3 Select the new scope to use.

4 To change the default scope for all queries, click **Modify Default Scope** to modify the default NETinventory scope.

Save the New Grid or Graph Item

You can save Graph or Grid items for later use. You can also export saved items you create or send references to your items to other users.

▶ *To save your new Grid or Graph item*

1. Click **OK** in the **Query Builder** to define the query.
2. Click **Save Grid Definition** or **Save Graph Definition**.

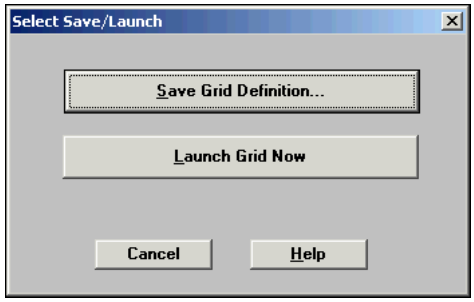


Fig. 301 Select Save/Launch Dialog - Grid

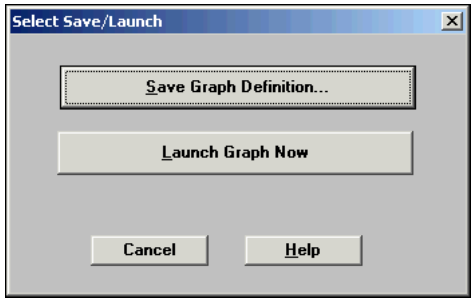


Fig. 302 Select Save/Launch Dialog - Graph

The **Save As** dialog appears.

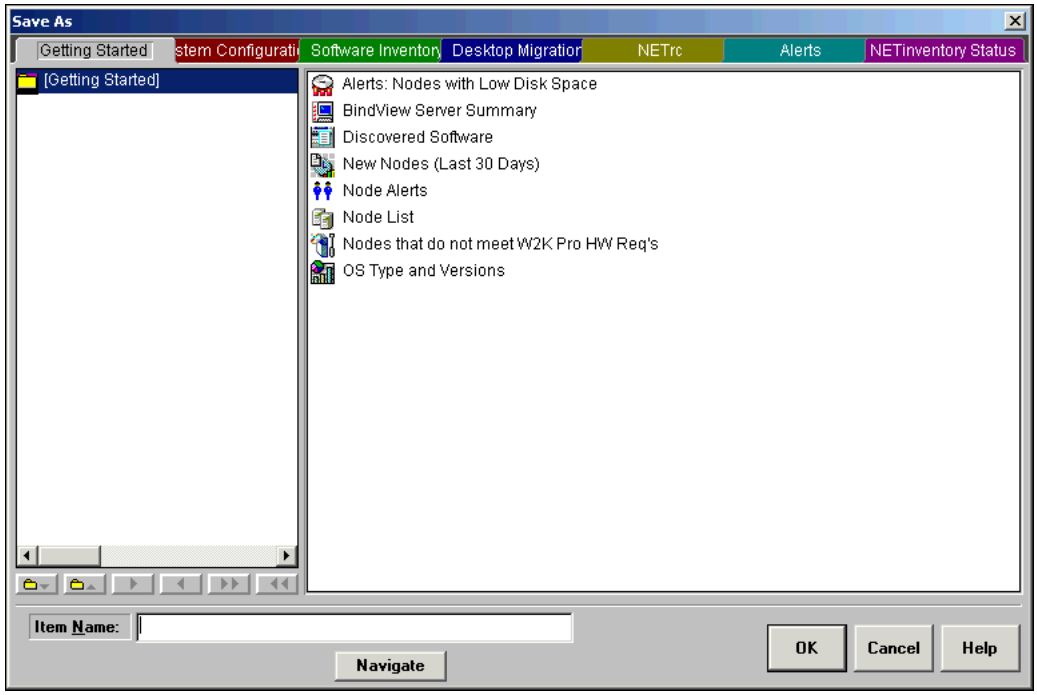


Fig. 303 Save As Dialog

3 Select the NETinventory Console folder where you want to save the item. Click the **Navigate** button if you want to change the view, add a folder or sub-folder, or delete a folder or item.

4 Enter the name of the item.

5 Click **OK**.

Changing Existing Grid or Graph Items

You can use the Query Builder to modify the definitions of existing grid and graph items. In addition, you can customize the attributes of an item using the Properties menu option.

▶ ***To modify an existing Grid or Graph Item***

1 Right-click an existing item and select **Modify Definition** or choose **Modify Definition** from the Edit menu.

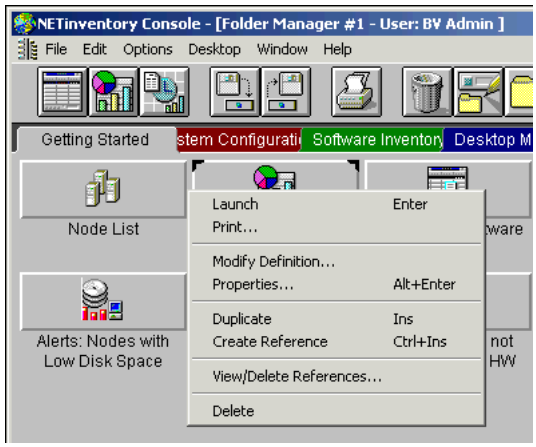


Fig. 304 Grid Context (Right-Click) Menu

2 In the **Modify Grid Definition** or **Modify Graph Definition** dialog, click **Query**.

Fig. 305 Modify Grid Definition Dialog

The **Query Builder** dialog appears.

Use the Query Builder to add or remove fields; to add, remove, or modify filters; to change the sort specification; or to change the scope of the query.

3 When you have made changes, the NETinventory Console will prompt you to save or launch the modified query.

Creating a New Schedule Item

Schedules group related items together, allowing you to process them easily.

▶ ***To create a new Schedule item***

1 Click the **New Schedule** icon in the NETinventory Console toolbar or select **New Schedule** in the **File** menu.

Fig. 306 New Schedule Icon

The **Select Items for Scheduling** dialog appears.

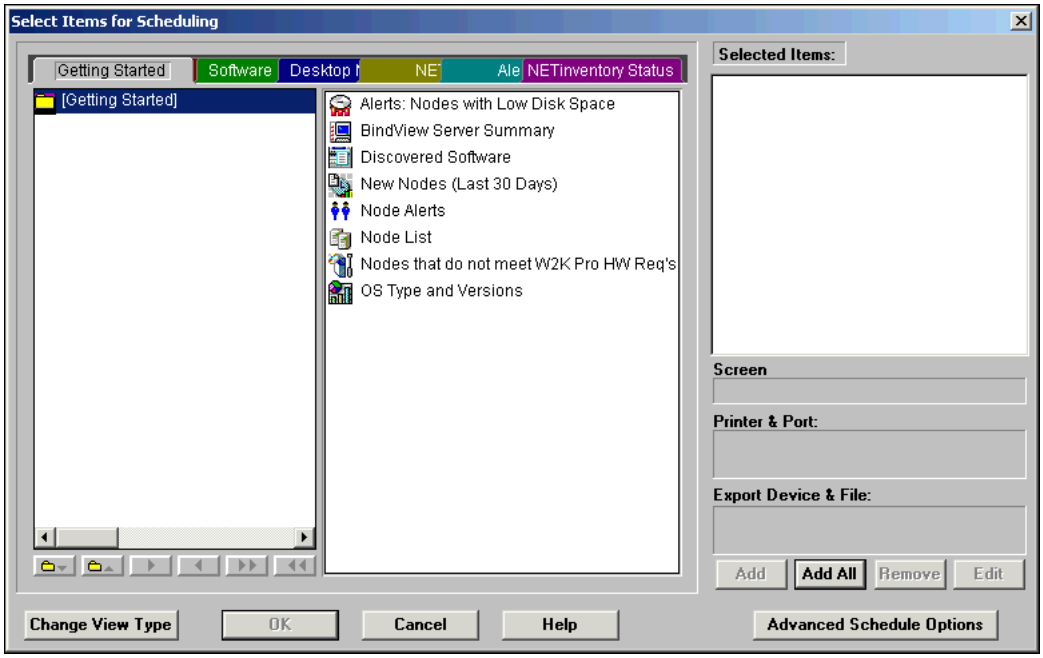


Fig. 307 Select Items for Scheduling Dialog

2 Use the tabs to locate the items to add to the Schedule.

3 Select items to add to the Schedule and click **Add**, or click **Add All** to add all items in a folder to the Schedule. The **Scheduled Item Properties** dialog appears.

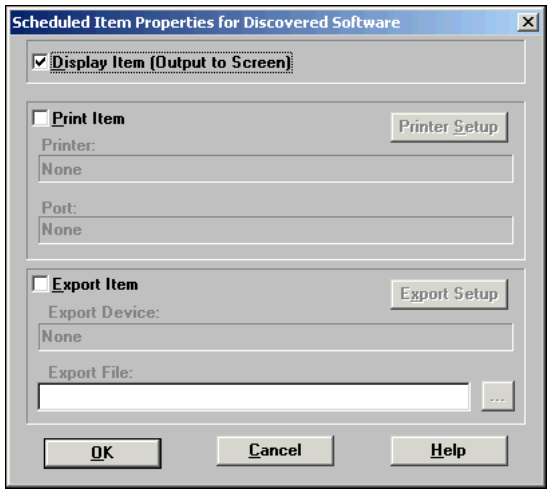


Fig. 308 Scheduled Item Properties Dialog

4 Choose what actions the NETinventory Console should take when the Schedule is processed.

If Print Item is selected, click **Printer Setup** to review or override the default print setup.

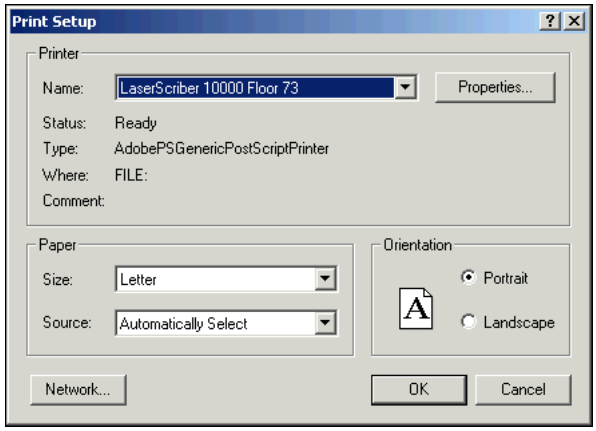


Fig. 309 Print Setup Dialog

If Export Item is selected, refer to the Export Data instructions on page 330.

5 Click **OK** to add the item to the schedule. If you choose, you can continue to add items to the schedule.

6 If you choose, select one or more items and click **Advanced Schedule Options**. The **Advanced Schedule Options** dialog appears.

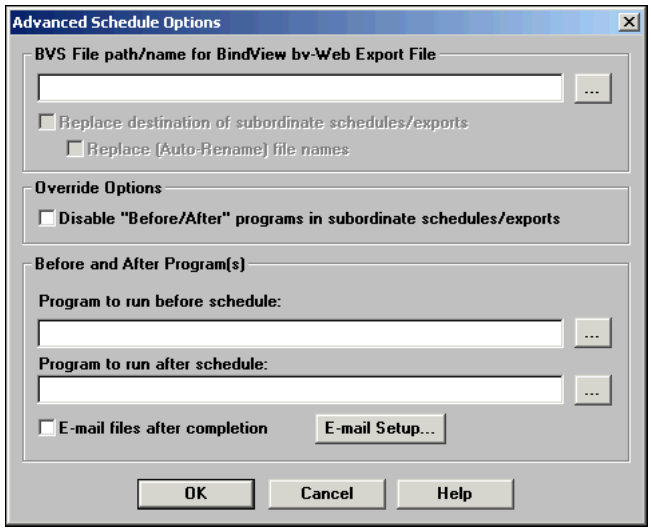


Fig. 310 Advanced Schedule Options Dialog

7 The NETinventory Console can export all the items in the Schedule as a group for the bv-Web analysis tool, or can override the before and after programs in any schedules included in the schedule. Make any changes to the bv-Web export settings if needed, and set up any programs to run before or after the schedule is run. Press the browse (**...**) button to search/select files from a directory list.

8 Click **OK** to save the changes and close the **Advanced Schedule Options** dialog.

9 Click **OK** in the **Select items for Scheduling** dialog to save the schedule. The **Save As** dialog appears.

10 Select the location to save the Schedule. Click the **Navigate** button if you want to change the view, add a folder or sub-folder, or delete a folder or item.

Enter the name of the Schedule. Click **OK**.

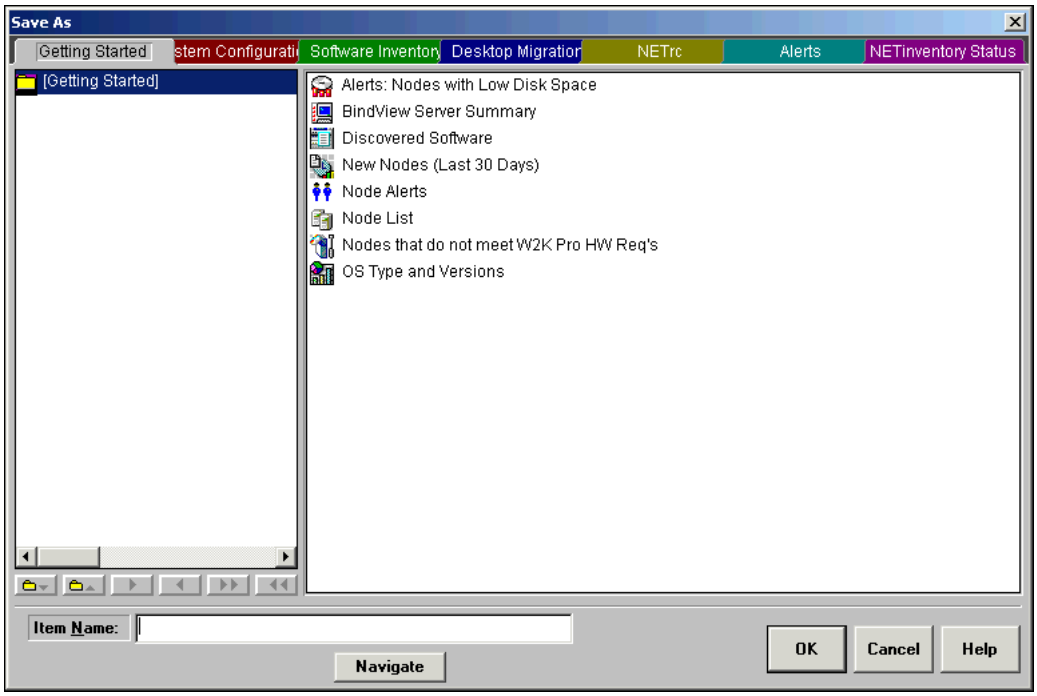


Fig. 311 Save As Dialog

▶ ***To create a command-line file***

1 If you wish to run selected Schedule Items automatically using a third-party scheduling tool, select **Create Command-Line File** from the File menu.

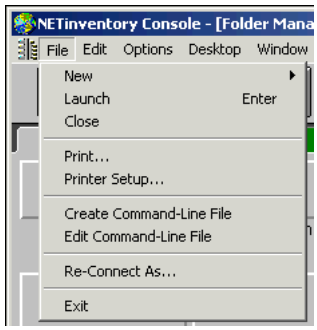


Fig. 312 NETinventory Console File Menu

The **Command-Line File Creation** dialog appears.

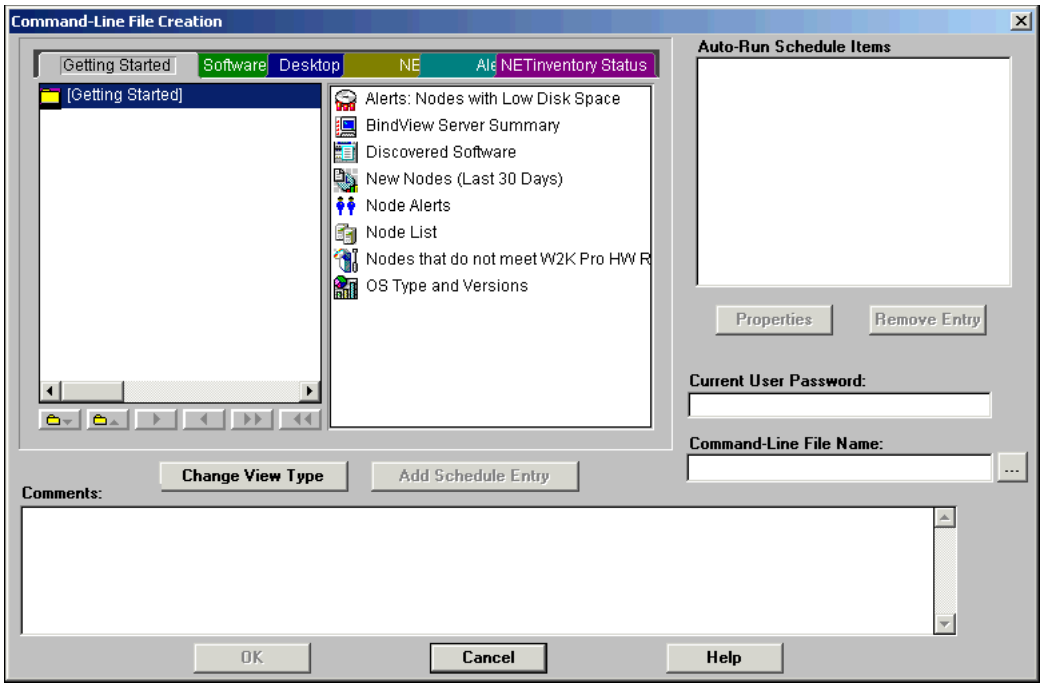


Fig. 313 Command-Line File Creation Dialog

2 Double-click to add the Schedule Items you want to run automatically. The Schedule Items will run in the sequence you select them. You can set up the same Schedule Item to run multiple times.

Enter Comments describing the type of command line file. It is a good idea to note the purpose of the file as well as the individuals who will receive the information generated when the Schedule Items automatically run.

3 Enter the **Current User Password**. Asterisks (*) appear in place of the password you enter.

4 Enter the Command-Line File Name or press the browse (**...**) button and enter the file name in the search window.

The File Name extension must be .ARF.

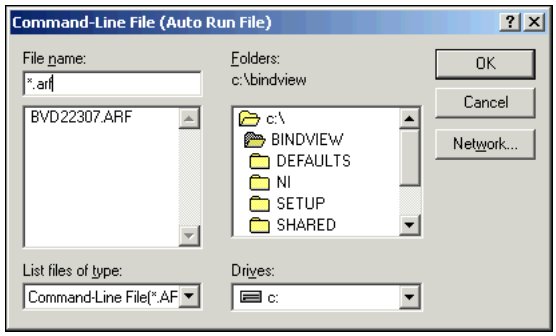


Fig. 314 Command-Line File (Auto Run File) Dialog

5 Enter the command-line file name and Schedule run details into your third-party scheduling program.

You can use any third-party scheduling application to set a date and time to run a Schedule item. You can use any scheduler program you choose with the NETinventory Console, including the Windows task scheduler. When the scheduling program starts the Command-line file, the NETinventory Console will start and use the current user's name and the password you supplied to process the queries in the schedule.

Changing Existing Schedule Items

You can make changes to an existing schedule item if you need to add items to or delete items from an existing schedule.

▶ ***To modify an existing Schedule***

1 Right-click a Schedule item and select **Modify Definition** or choose **Modify Definition** from the Edit menu. The **Select Items for Scheduling** dialog appears.

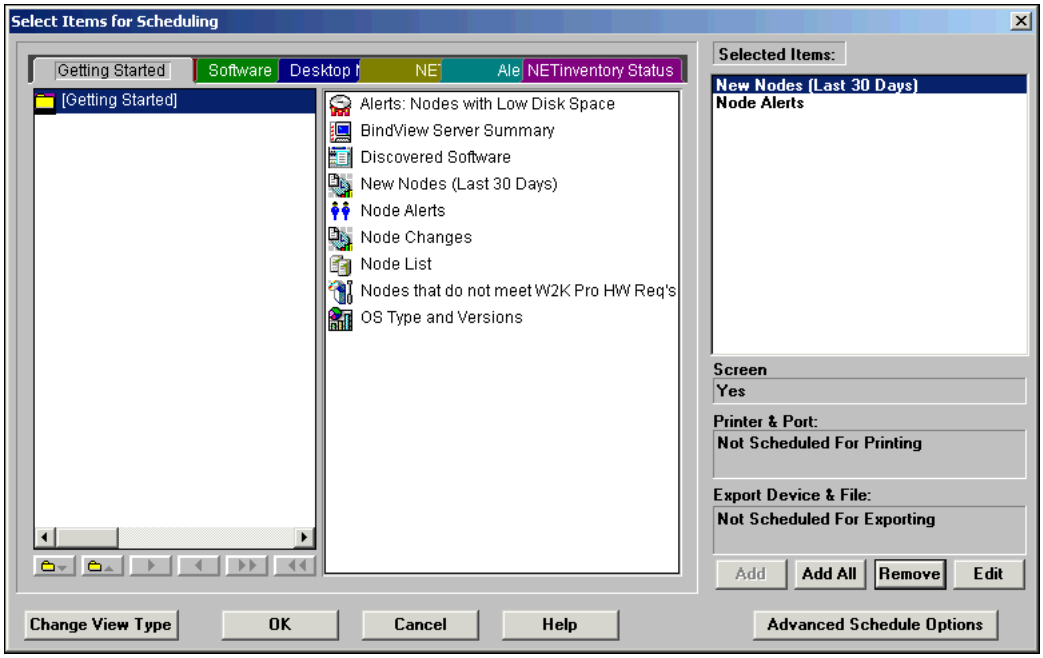


Fig. 315 Select Items for Scheduling Dialog

2 Add items to the schedule, delete items from the schedule, or change the Advanced Schedule Options.

3 Click **OK** to save the changes you have made to the Schedule.

Sharing Items Between Desktops

The NETinventory Console provides two ways to share Grid or Graph items. You can send and receive references to items or export and import items.

References create a link that exists on more than one NETinventory Console desktop. Changes made to an item by one user affect other users of the item. If you export items and then import them into another desktop, the items are copied; there is no link between an item and its copy. Copies can be modified without any impact on the original item.

When a reference is sent to another user's desktop, the sender can control the recipient's the ability to modify the item.

Sending/Receiving References to Report Items

References are links to Grid and Graph items. References can be from one NETinventory Console desktop to another. You can send and receive references to Grids, Graphs, or Schedules.

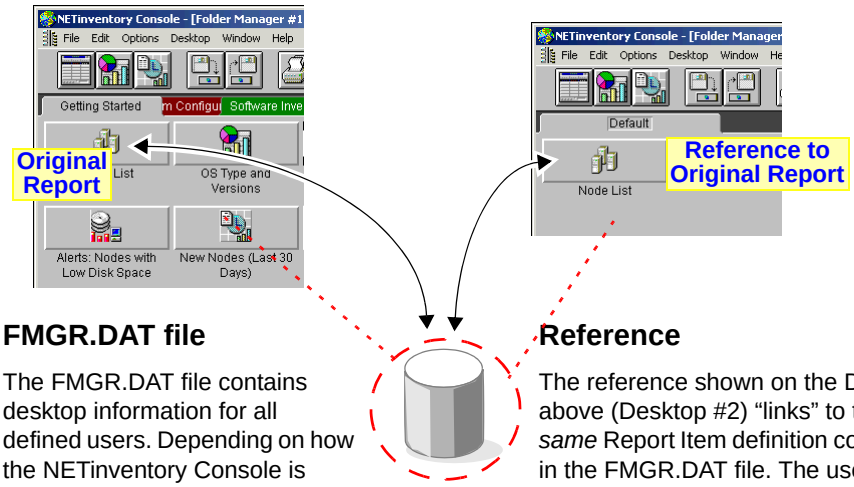
Fig. 316 illustrates how references work.

User Desktop #1

When an item is created, is appears on the creator's desktop. The report definition is stored in the FMGR.DAT file, which can be on a local drive or a network drive—depending on how you installed the NETinventory Console.

User Desktop #2

A user's desktop can contain a reference to an item created by another user. A reference to the item was sent from one user's desktop to another user's desktop. The reference "points" to the Report Item definition in the FMGR.DAT file.



FMGR.DAT file

The FMGR.DAT file contains desktop information for all defined users. Depending on how the NETinventory Console is installed, this file may reside on a local or network drive.

Reference

The reference shown on the Desktop above (Desktop #2) "links" to the *same* Report Item definition contained in the FMGR.DAT file. The user who received the reference can modify the underlying item definition if the sender gave permission to modify it.

Fig. 316 References to Desktop

Sending and receiving references allows items to be shared while keeping control over item definitions. This allows corporate standardization, while still allowing multiple users to generate the report. If you change an item definition, all references to the item will reflect the changes.

Note: References within a single desktop provide easy access to the most-used items. Using references, a single report is accessible from multiple NETinventory Console folders.

A reference does not create a copy of the item. Deleting the references does not delete the original item, only the reference.

▶ *To send a reference*

1 Choose **Send References** from the **Desktop** menu. The **Select Items to Send** dialog appears.

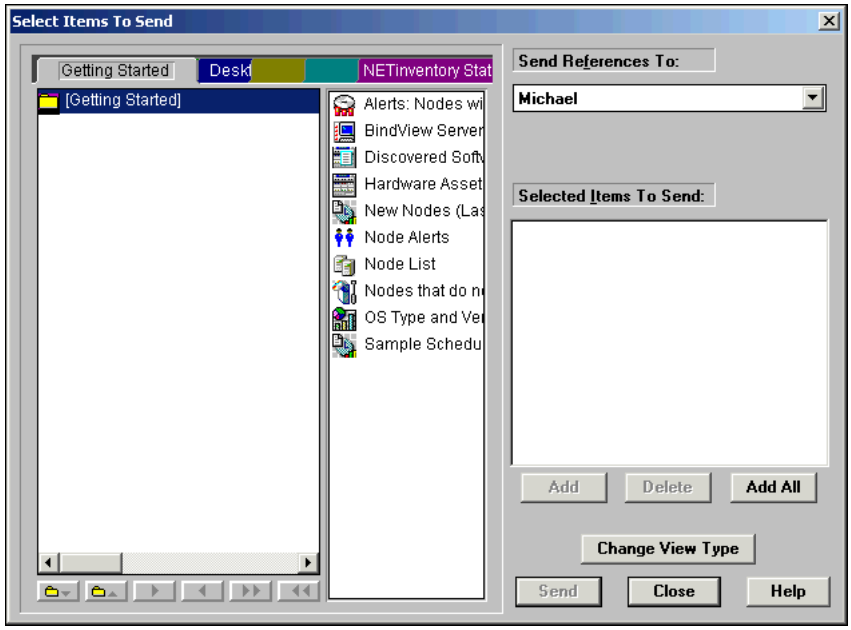


Fig. 317 Select Items to Send Dialog

2 Choose a user from the **Send References To** drop-down list.

3 Select the items to be sent as references and click **Add** or click **Add All** to add all items in the active folder to the list of items to send. Repeat to add items to send as references.

4 Click **Send** to send the items as references. A message when the items have been sent as references.

5 Click **Close** to close the **Select Items to Send** dialog.

▶ *To receive a reference*

1 Select **Receive References** from the **Desktop** menu.

2 If there are no new received references, a message will inform you that there are no new references. Click **OK** to close the dialog.

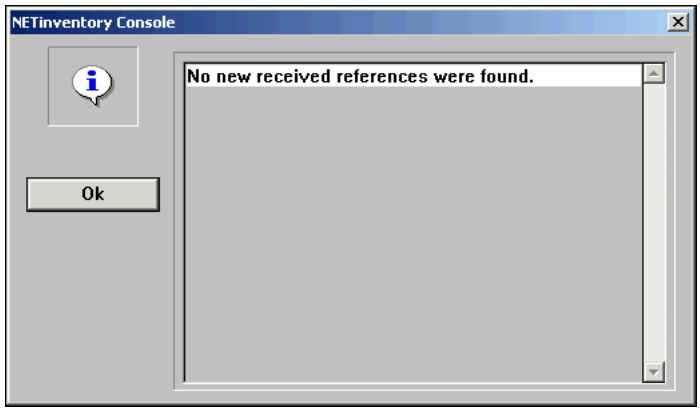


Fig. 318 No References to Receive Dialog

3 If there are new received references, the **Receive Item References** dialog appears. Select the folder where you want to save the references.

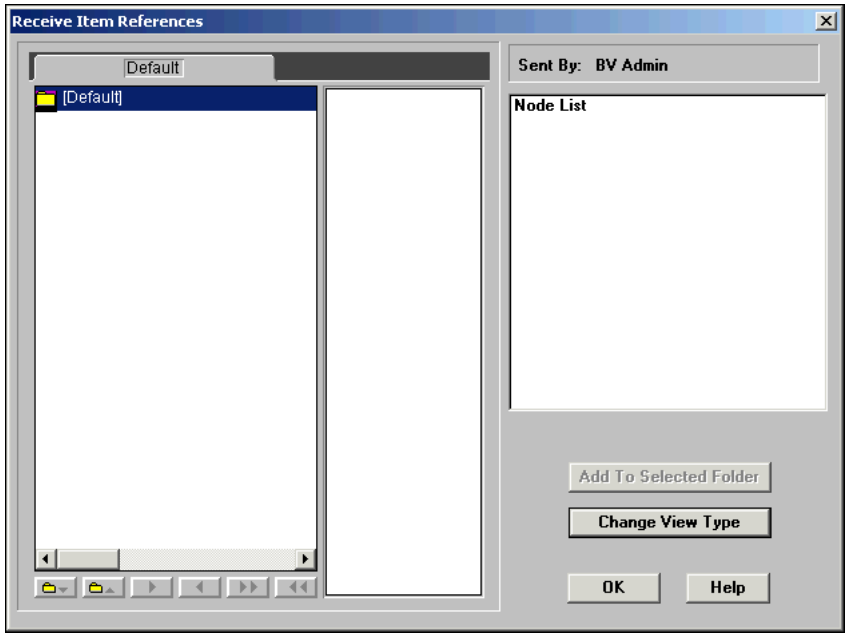


Fig. 319 Receive Item References Dialog

4 Select the References to place in the selected folder.

5 Click **Add To Selected Folder**. The references are added to your desktop.

6 Click **OK** to close the **Receive Item References** dialog.

▶ ***To scan for new references***

Scanning for references alerts you when references are waiting to be received.

1 Choose **Scan for New References** from the **Desktop** menu. The **Incoming Reference Options** dialog appears.

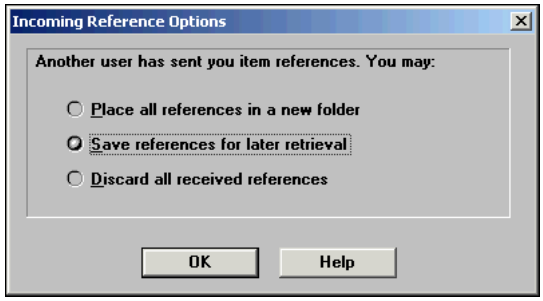


Fig. 320 Incoming Reference Options Dialog

2 Select an option for saving the references and click **OK**. The NETinventory Console will process the incoming references and close the dialog.

Copying Items

Copying an item creates an entirely new item definition. Copying differs from creating a reference to an item because when an item is copied the connection or reference to the original item is removed.

▶ ***To copy an item***

Right-click an item and select **Duplicate**.

The copied item is placed in the current folder.

Exporting and Importing Items

The NETinventory Console has the ability to export and import report items or entire user desktops. Exporting and importing a desktop allows you to replicate a desktop setup for a new user. Exporting and importing report items allows you to give another user a copy of a report item that they can make changes to without affecting the original.

Any user can be given the right to export and import report items. Exporting and Importing report items gives the person importing the items the ability to run them from their own desktop. Since there are multiple copies of the items in the FMGR.DAT file, each can be modified independently of the other. Changes to the query in the exported copy of the report item are not reflected in the original item.

Exporting and importing Grid and Graph items allows you to share Grids and Graphs from one NETinventory Console installation to

another. In contrast, references remain within a single installation of the NETinventory Console

Exporting and Importing Individual Report Items

Exported items are saved by the NETinventory Console in *.EXP (exported item) files. The exported files must be accessible to the NETinventory Console to import them.

▶ To export report items

You can export the contents of an entire folder tab and its contents, a subfolder and its contents, or individual grids or graphs.

1. Select the Folder, Subfolder, Grid, or Graph to export.
2. In the NETinventory Console, choose **Desktop>Export Item**. The **Save As** dialog appears.

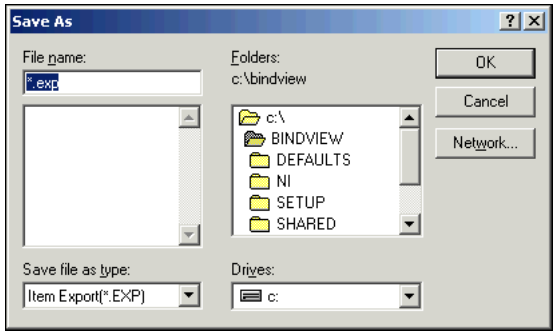


Fig. 321 Save As Dialog

3. Enter a file name for the export file. The file's name must end in the *.EXP extension.
4. Select the location to save the export file.
5. Click **OK**. The NETinventory Console saves the export file.

▶ To import report items

1. In the NETinventory Console, choose **Desktop>Import Item**. The **Open** dialog appears.

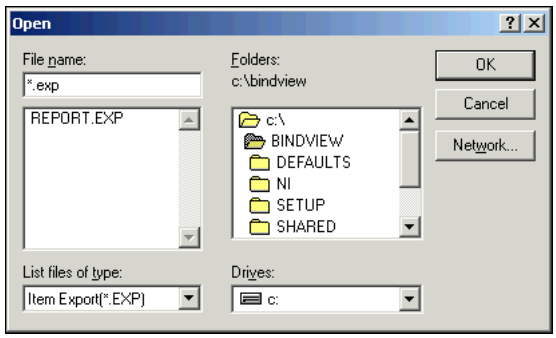


Fig. 322 Open Dialog

2. Select the exported file (*.EXP) to import. The name of the selected file appears in the **File name** field.

3 Click **OK**. The **Enter Item Name** dialog appears.

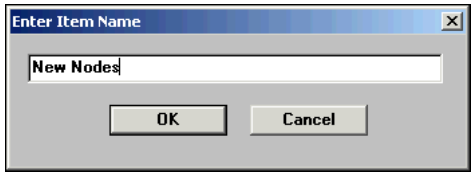


Fig. 323 Enter Item Name Dialog

4 Type the name to assign to the item on the Desktop and click **OK**. An imported Grid, Graph, or Subfolder will be imported into the currently selected folder. An imported top-level Folder will create a new folder tab.

Exporting and Importing an Entire Desktop

The NETinventory Console allows you to import an entire Desktop that was exported from another NETinventory Console user's Desktop.

Note: You must be logged in to the NETinventory Console using the BV Admin user account to import a Desktop and its entire contents. When you import a Desktop, a new user account is created. Only the BV Admin account can create new accounts.

When you export the contents of an entire Desktop, the following items are saved in a *.DSK file:

- Console toolbar configuration
- Folders
- Subfolders
- Grids
- Graphs

Note: When exporting an entire user Desktop, Schedule Items are not included.

▶ ***To export an entire desktop***

1 In the NETinventory Console, choose **Desktop>Export User Desktop**. The **Save As** dialog appears.

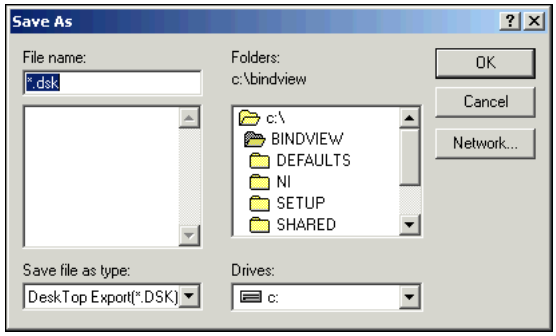


Fig. 324 Save As Dialog

2 Enter a file name for the Desktop export file. The file's name must end in the *.DSK extension.

3 Select the location to save the Desktop (*.DSK) file.

4 Click **OK**. The NETinventory Console saves the Desktop file and the **Save As** dialog disappears.

▶ *To import an entire Desktop*

Note: You must be logged into the NETinventory Console using the BV Admin account to import an entire desktop.

1 In the NETinventory Console, choose **Desktop>Import User Desktop**. The Open dialog appears.

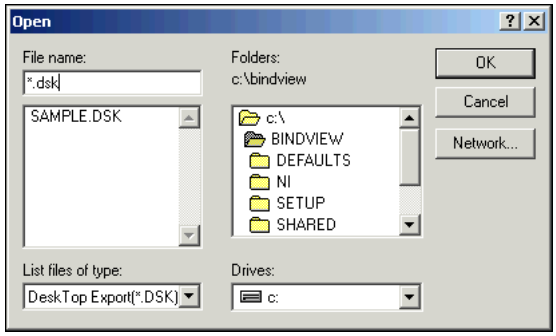


Fig. 325 Open Dialog

2 Select the exported Desktop file (*.DSK) to import. The name of the selected file appears in the **File name** field.

3 Click **OK**. The Enter User Account Information dialog appears.

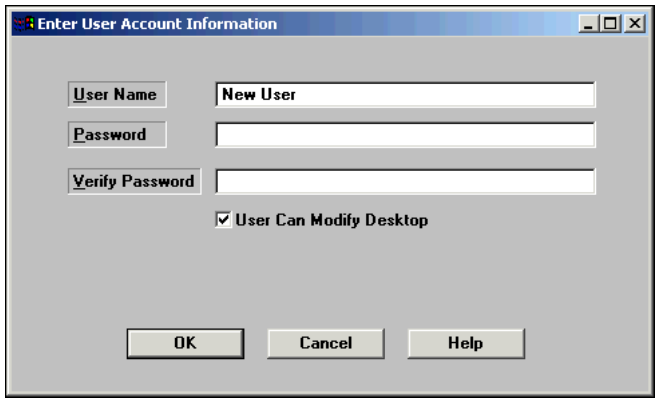


Fig. 326 Enter User Account Information Dialog

4 Enter a User Name and Password for the new account, then verify the password and click **OK**. The NETinventory Console Window reappears. The NETinventory Console is now logged in to the new user's account using the imported Desktop.

14 Printing an Item

In This Chapter

Customizing a Grid Report 316
Customizing a Graph Item 323

Customizing a Grid Report

A report is the printed output of a Grid. To customize a report, use the Page Setup options to change the appearance of reports.

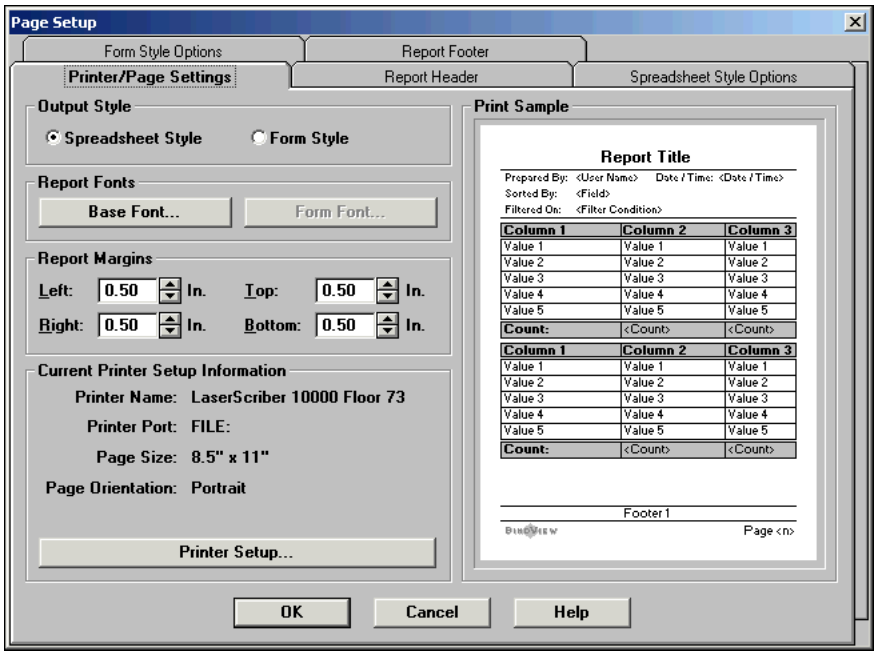


Fig. 327 Page Setup Dialog - Printer/Page Settings Tab

The **Printer/Page Settings** tab settings are the most important for report construction and overall appearance.

▶ ***To open the Page Setup dialog***

Open a Grid. Choose **Page Setup** from the file menu.

or

Right-click any Grid item and choose **Modify Definition**. Click **Page Setup**.

or

Select any Grid item and choose **Edit>Modify Definition**. Click **Page Setup**.

The **Page Setup** dialog appears.

Using the Printer/ Page Settings Tab

The Printer/Page Settings Tab allows you to make changes to the basic appearance of the report, including fonts, margins, and so on. You can also select the printer the report will print to.

Table 12, “Page Setup - Printer/Page Settings Tab” explains the **Printer/Page Settings** options.

Table 12 Page Setup - Printer/Page Settings Tab

Setting	Behavior
Spreadsheet Style or **Form Style**.	Determines the output style of a report
Base Font	Determines the font used on a Spreadsheet style report
Form Font	Determines the font used on a of a form style report
Report Margins	Sets the left, right, top, and bottom margins on the printed report.
Printer Setup	Opens the **Print Setup** dialog, allowing you to control the printer for the report.

Using the Spreadsheet Style Options Tab

The Spreadsheet Style Options tab lets you control the appearance of Spreadsheet style reports.

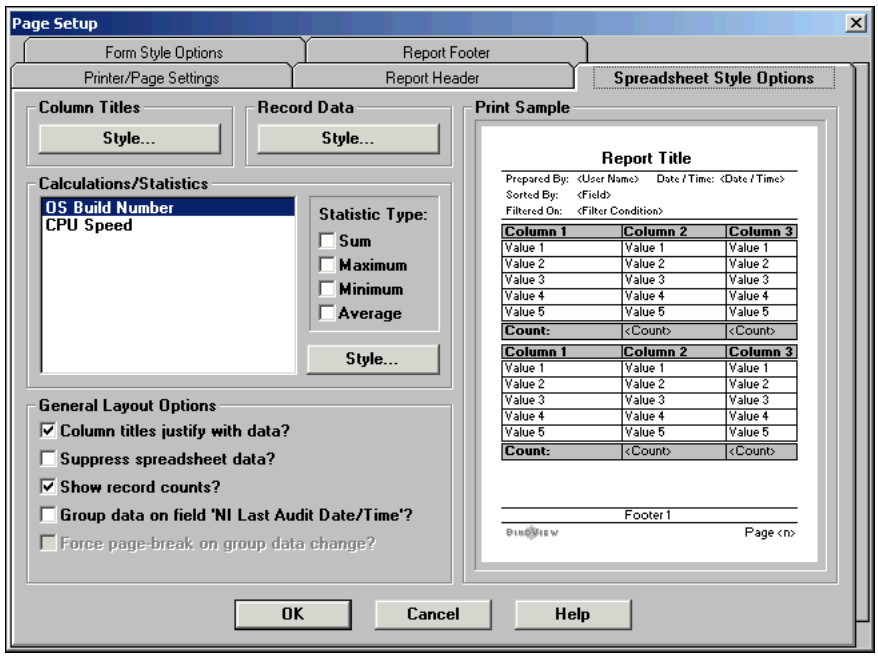


Fig. 328 Page Setup Dialog - Spreadsheet Style Options Tab

If Spreadsheet Style is selected on the **Printer/Page Settings** tab, the options on the Spreadsheet Style Options tab are available to customize the report.

Use the Spreadsheet Style Options tab to define the style of column titles and record data, specify calculations and/or statistics for

selected fields, and further define general layout Options for the spreadsheet.

Table 13, “Page Setup - Spreadsheet Style Options Tab” explains the Spreadsheet Style Options settings.

Table 13 Page Setup - Spreadsheet Style Options Tab

Setting	Behavior
Column Titles:Style	Sets the style options for report Column Titles
Record Data:Style	Sets the style options for record data in a report table
Calculations/Statistics	Allows you to add one of the four statistic types to the currently-selected field. Select a statistic type to add it to the report. Each field can have statistics added independently.
Column titles justify with data?	Aligns titles of columns with data in the tables
Suppress spreadsheet data?	Suppresses record data and shows only statistics
Show record counts?	Displays the number of records generated by a query at the bottom of the report.
Group data on field?	Groups data on the named field
Force page-break on group data change?	Forces a page break when group data changes. Only available when **Group Data on field** is selected.

Using the Form Style Options Tab

The **Form Style Options** tab allows you to make changes to reports printed as forms.

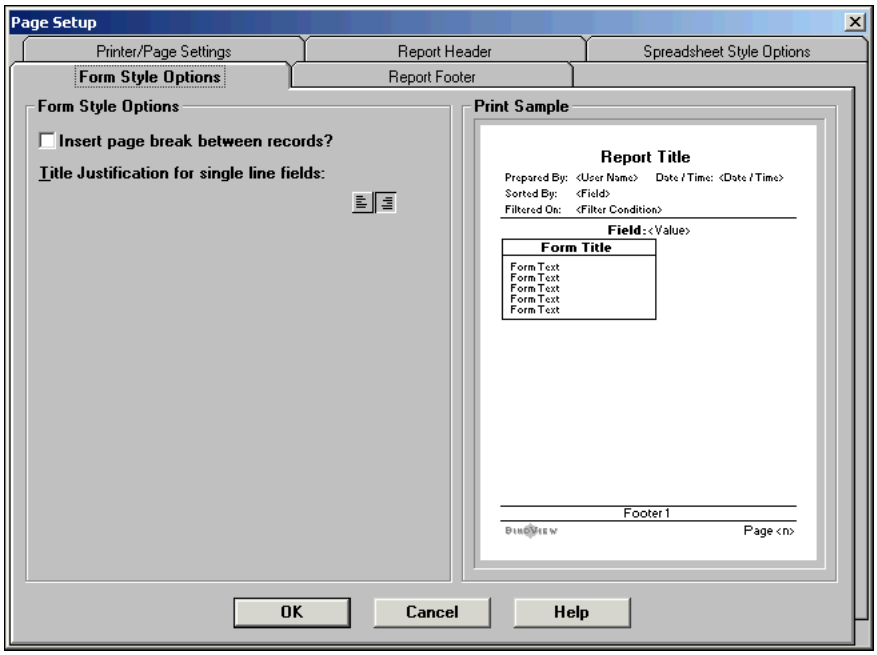


Fig. 329 Page Setup Dialog - Form Style Options Tab

The Form Style Options tab allows you to hide empty Form or List Fields, insert page breaks between Form/List Fields, and align titles of single line fields to the left or right side of the page.

Table 14, “Page Setup - Form Style Options Tab” explains the Form Style Options settings.

Table 14 Page Setup - Form Style Options Tab

Setting	Behavior
Insert page break between records?	Inserts a page break after every record.
Title Justification for single line fields	Right- or left- justifies titles for single line fields

Using the Report Header Tab

Use the Report Header Options tab to define report title and subtitle style options, fonts, and text justification. Also use it to include or exclude author, sorting and filtering information in the report.

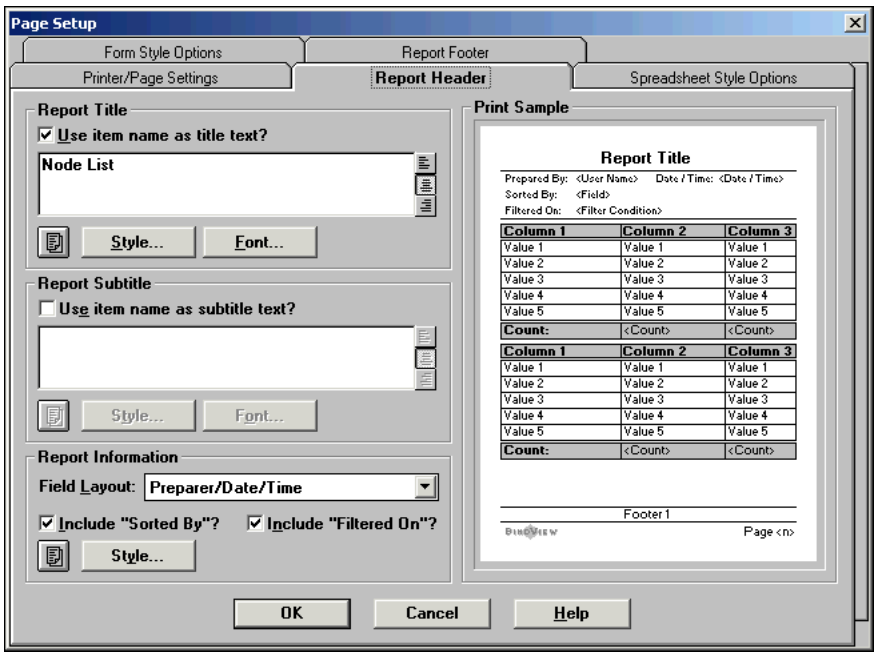


Fig. 330 Page Setup Dialog - Report Header Options Tab

Table 15 Page Setup - Report Header Tab

Setting	Behavior
Use item name as title text	Adds the query name as a title for the report.
Report Title field	Type a title to use for the report. **Use item name as title text** must be unchecked.
Use item name as subtitle text	Adds the query name as a subtitle for the report.
Report Subtitle field	Type a subtitle to use for the report. **Use item name as subtitle text** must be unchecked.
Field Layout	Adds information about the report to the report. Choose a report information format from the drop-down list.
Include “Sorted By”	Adds sort criteria to the report information area of a report.
Include “Filtered On”	Adds filter criteria to the report information area of the report.

Table 15 Page Setup - Report Header Tab (Continued)

Setting	Behavior
Alignment buttons 	Changes the alignment of the title or subtitle. You can select Left- or Right-justified or centered.
Font	Changes the title or subtitle font.
Style	Change a title or subtitle style.
Single Page button  Double Page button 	When the Single Page button is selected, that header type will appear only on the first page of a report. When the Double Page button is selected, the header information will appear on every page.

Using the Report Footer Tab

Use the Report Footer tab to define the contents of report footers. You may specify the style and font for three separate footer lines. In addition, you may choose whether or not to number the pages, as well as designate page number alignment.

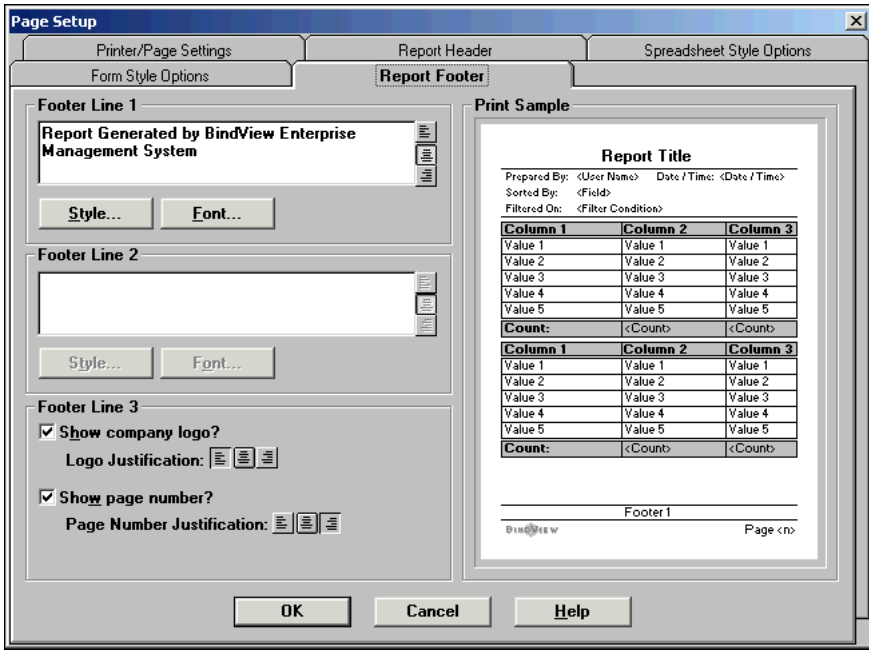


Fig. 331 Page Setup Dialog - Report Footer Tab

Table 16, “Page Setup - Report Footer Tab” explains the Report Footer options.

Table 16 Page Setup - Report Footer Tab

Setting	Behavior
Footer Line 1 / Footer Line 2	Enter footer text in the Footer Line 1 or the Footer Line 2 fields.
Style	Changes the footer style.
Font	Change a footer font.
Add page numbers to a report	....the Report Footer tab and select **Show page number** option. The page number will print on Footer Line 3.
Alignment buttons 	Changes the alignment of the footer. You can select Left- or Right-justified or centered.
Show company logo?	Displays the BindView logo in the footer of the report.
Logo Justification	Aligns the logo to the left, center, or right of the footer.

Table 16 Page Setup - Report Footer Tab (Continued)

Setting	Behavior
Show page number?	Displays the page number of the report in footer line 3.
Page Number Justification?	Aligns the page number to the left, center, or right of the footer.

Customizing a Graph Item

Graph Setup allows you to make changes to the appearance of a graph when creating or modifying a Graph Item and from an open Graph. The Graph Setup dialog contains three tab pages: Type, Layout, and Data Point. These tab pages control the layout of the Graph.

▶ ***To access Graph Setup***

1 Right-click a Graph Item and select **Modify Definition** from the menu or select a Graph Item and select **Modify Definition** from the Edit menu.

or

Open a graph and Select **Modify Graph** from the Graph menu.

The **Modify Graph Definition** dialog appears.

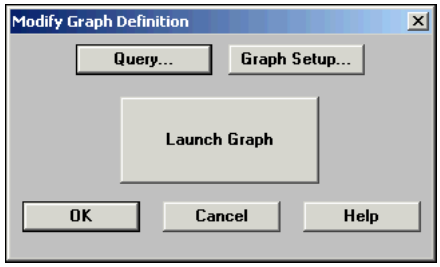


Fig. 332 Modify Graph Definition Dialog

2 Click **Graph Setup**. The **Graph Setup** dialog appears.

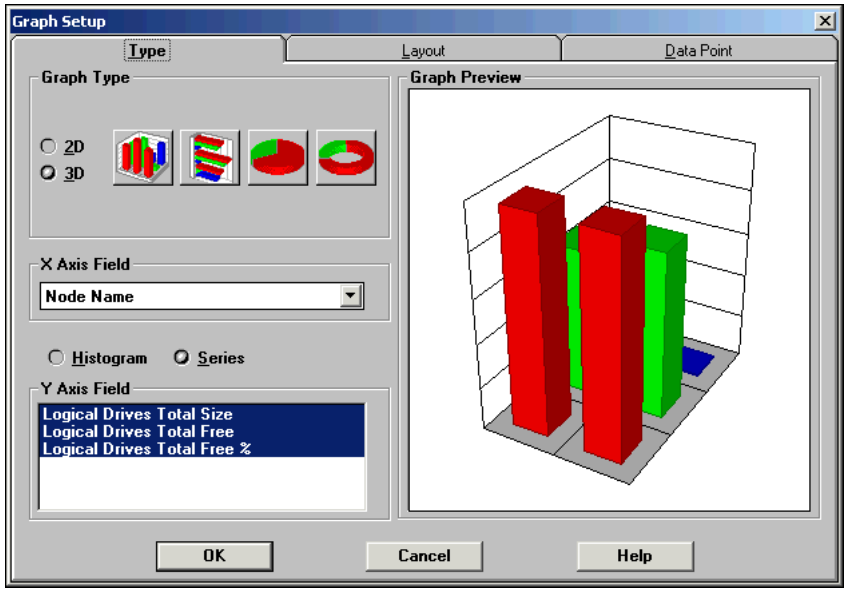


Fig. 333 Graph Setup Dialog - Type Tab

Using the Type Tab

Use the options on the Type tab to select the type of Graph to produce and whether to graph data as a histogram or a series. If

you graph as a series you can select which fields to graph along the Y Axis.

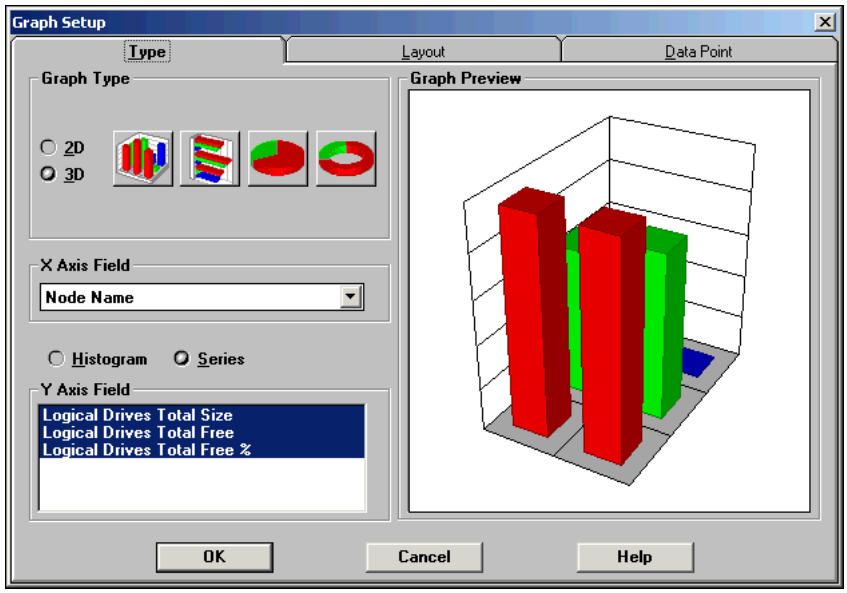


Fig. 334 Graph Setup Dialog - Type Tab

Table 17 Graph Setup - Type Tab

Setting	Behavior
Graph type	Determines the graphs' basic appearance. Select **2D** or **3D** and then click the icon for the type of graph to display.
X Axis Field	The field selected for this option is the X axis of the Graph.
Y Axis Field	Select one or more Y Axis Field(s). The Y axis fields are available when creating a series and can contain all of the numeric fields selected for the query
Histogram / Series	Toggle between histogram and series chart. The histogram calculates and displays individual and cumulative frequencies for a range of data. Series Graphs display multiple field values for a given record.

Using the Layout Tab

The Layout tab allows you to add titles and a legend for the Graph. You can also modify the appearance of the Graph using the Sort, Series and Calculation options.

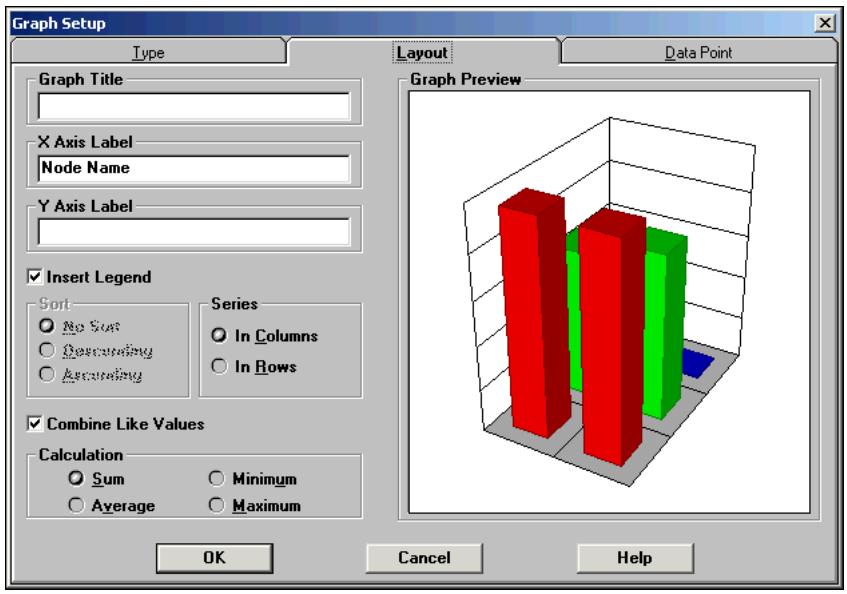


Fig. 335 Graph Setup Dialog - Layout Tab

Table 18 Graph Setup - Layout Tab

If you want to...	Go to...
Graph Title	The main heading for the graph.
X Axis Label / Y Axis Label	The label for the selected axis. You can add, change, or delete axis labels.
Insert Legend	Adds a legend to the graph.
No Sort / Descending / Ascending	Changes the sort order of the Graph. The sort option determines the order of each data point in the Graph. The sort option is used in conjunction with a Histogram Graph.
Series: In Rows / In Columns	Plots series Graphs using Rows or Columns.
Combine Like Values	Allows you to combine similar values into one value. The combination of values can be a Sum, Average, Minimum, or Maximum. Available only when the for Series type graphs.

Using the Data Point Tab from Graph Setup

The Data Point tab determines which Data Point labels to use and where to position them on a Graph. When **Data Point Location** and **Data Point Labels** are selected, the labels are applied to all data points in a series. You can make changes to the individual labels using the full Graph view. If you have applied changes while using full Graph view, and wish to have the **Data Point** tab options applied, click the **Reset to Defaults**.

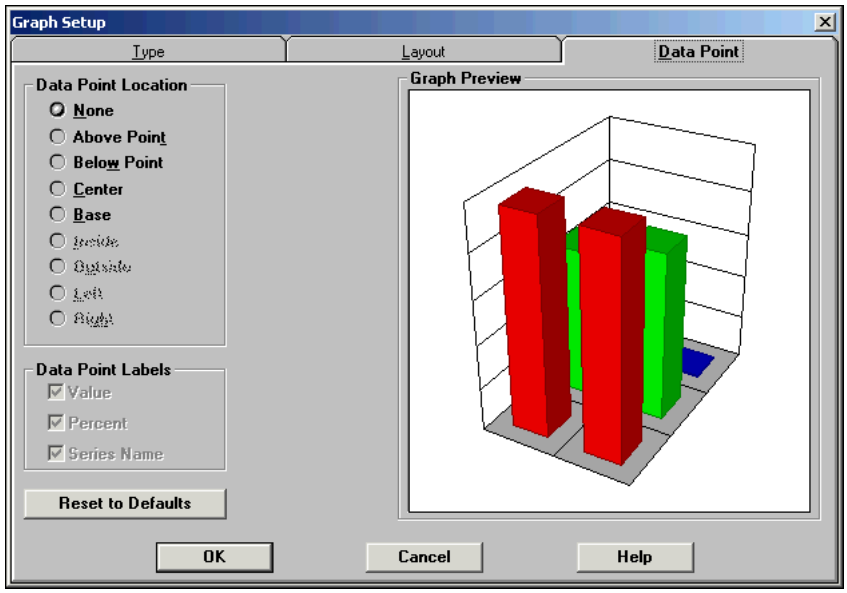


Fig. 336 Graph Setup Dialog - Data Point Tab

There are three Data Point Labels which may be added individually or in combination to a Graph. The labels are Value, Percent, and Series. The labels can be positioned in different locations on the Graph. The options for data point placement vary by Graph type. The positions include: None, Above Point, Below Point, Center, Base, Inside, Outside, Left, and Right.

Table 19 Graph Setup - Data Point Tab

Setting	Behavior
Data Point Location	Determines where data points are displayed on the graph. Only appropriate options for the graph type selected on the **Type** tab are available.
Data Point Labels	Selects the type of information displayed for each data point. You can add **the Value**, **Percent**, or **Series Name**.
Reset to Series Defaults	Resets series options to the settings in the **Data Point** tab.

Print a Graph

Once you have set up your graph's options, you can print the graph to any printer you have defined.

▶ ***To print a Graph***

1. Click the **Print Graph** icon on the toolbar.
2. Configure your printer and then click **Print**.
3. Close the Graph when finished.

Advanced Graph Options

In addition to the graphing options in Graph Setup, there is an additional set of advanced graphing options. These options are available from an open Graph by right-clicking the Graph or by selecting Graph from the main menu and then clicking Advanced Options.

Filtering Out "Special Values" in Graphs

When making Graphs of numerical fields (such as "Maximum Connections" or "Account Balance"), it is necessary to filter out any non-numerical replies that might occur. For instance, the value of "Maximum Connections" could be "N/A" if Concurrent Connections are not limited for that user. When these non-numeric answers show up in a Graph, it distorts the values of the answers.

Making sure these values don't occur is as simple as setting a filter not to include records whose values are equal to one of these "special values". For example a filter of "Maximum Connections Not Equal to N/A" would remove these items from the Graph in this case. This is easy to do because the intelligent filter picker in the NETinventory Console will prompt you with these values as options.

Rotating, Copying, and Pasting Graphs

When a Graph is displayed on screen in 3-D mode, you can press the CTRL key and use the mouse to rotate the Graph to view it from different angles and perspectives. Additionally, Graphs may be cut and pasted into other applications that support graphics by clicking on the Graph so that its box is highlighted and performing a standard Windows COPY operation (CTRL-C or Edit>Copy).

Hints for Making Better Graphs

When creating Graphs it is important to remove extra information or "noise" from the Graph and present only the information that is essential. The suggestions below will assist you in accomplishing this.

Eliminate Non-essential Text

By eliminating non-essential text, the actual Graph data is displayed at its largest possible size. Graph labels should be sized as small as possible while still displaying the necessary information. Making the labels smaller occupies less viewing area.

Reduce the Number of Plotted Values

You can reduce the number of plotted values through the use of Scope and Filtering specifications. Both of these features are available in the Query Builder.

15 Exporting Grid Data

In This Chapter

Exporting Grid Data 330
Managing Export Devices 333

Exporting Grid Data

You can export information collected by Grid items for use in a document created by another program. The NETinventory Console ships with many of the most common formats already defined.

- You can export to a delimited text file.
- You can export to a fixed-field text file.
- You can export to a dBASE file.
- You can export data to spreadsheet and word processing programs including:
  - Lotus® 1-2-3
  - Excel
  - Microsoft® Word
  - WordPerfect®
  - Quattro Pro®

Note: When you export to Microsoft Excel or Microsoft Word file formats, be sure to use the correct export device for the version of the Microsoft application file format you wish to export. To export to the most recent versions of Microsoft file formats, you must have the Microsoft application you are exporting to installed on the same machine as the NETinventory Console.

Several export file types are pre-defined in the NETinventory Console and appear in the Export Data dialog (Fig. 338 on page 333). To export to a file type not shown in the Export Data dialog, add it as an export device type. See “Managing Export Devices” on page 333.

Table 20 on page 330 lists the Export Device Types supported by the NETinventory Console and describes:

- Whether they appear by default in the Export Data dialog or if they must be defined before they can be used.
- Whether the export device type can append data to a file.
- The limit on the number of records that device type can export.

Table 21 on page 331 lists the Export Device Types supported by the NETinventory Console and lists export device type considerations.

Table 20 Grid Data Export Properties

Export Device Type	Pre-defined in Console?	Can Append to Data File?	Record Limit?
ASCII Delimited Text File	Yes	Yes	Drive Space
ASCII Fixed Field Text File	Yes	Yes	Drive Space
bv-Web Export	Yes	Yes	Drive Space
dBASE IV	Yes	Yes	Drive Space

Table 20 Grid Data Export Properties (Continued)

Export Device Type	Pre-defined in Console?	Can Append to Data File?	Record Limit?
Lotus 1-2-3 v.5.x	Yes	Yes	32,000
Microsoft Excel 5.0, 95, 97	Yes	Yes	32,000
Microsoft Excel OLE Table	Yes	Yes	65,000
Microsoft Word 2.x Table	No	No	32,000
Microsoft Word OLE Table (6.0, 95, 97)	Yes	No	32,000
Quattro Pro	Yes	Yes	32,000

Table 21 Grid Data Export Considerations

Export Device Type	Considerations
ASCII Delimited Text File	[FORM] fields are indicated but not exported.
ASCII Fixed Field Text File	[FORM] fields are indicated but not exported.
dBASE IV	The fastest export device type. Fully supports [FORM] fields. When a Grid including [FORM] fields is exported with this device type, two files are created (*.dbf and *.dbt) The *.dbt file contains the information found in the [FORM] fields. When the *.dbf file is opened, it automatically opens the *.dbt file. Both files must reside in the same directory for the [FORM] fields to be displayed. MAPI compliant e-mail programs attach both files to a single e-mail message.
Lotus 1-2-3 v.5.x	[FORM] fields are exported, but may be truncated.
Microsoft Excel 5.0	Opening Excel 5.0 (non-OLE) exported files using Excel 95 or 97 causes an invalid page fault. The file will open correctly using Excel from Office 4.3. [FORM] fields are exported, but may be truncated.

Table 21 Grid Data Export Considerations (Continued)

Export Device Type	Considerations
Microsoft Excel OLE Table	Used for exporting to Excel 6.0, 95, 97. 2000, and XP. OLE exports can take a long time to complete, even on fast PCs. To perform OLE exports, the appropriate Microsoft application must be installed. If you get an error message that says “Unable to read target file” or “Excel 6, 95, or 97 must be installed”, you may need to install the Data Access Add-on pack version 8.0.4031. It should be located on the Office 97 CD-ROM in the `\VALUPACK\DATAACC` directory. [FORM] fields are exported, but may be truncated.
Microsoft Word OLE Table	Used for exporting to Word 6.0, 95, 97, 2000, and XP. OLE exports can take a long time to complete, even on fast PCs. To perform OLE exports, the appropriate Microsoft application must be installed. If you get an error message that says “Unable to read target file” or “Excel 6, 95, or 97 must be installed”, you may need to install the Data Access Add-on pack version 8.0.4031. It should be located on the Office 97 CD-ROM in the `\VALUPACK\DATAACC` directory. [FORM] fields are exported, but may be truncated.
Quattro Pro	[FORM] fields are exported, but may be truncated.

▶ ***To export grid data***

1 Double-click a Grid item to run the query.

2 Choose **Export Data** from the **File** menu, or click the **Export Data** icon on the toolbar.

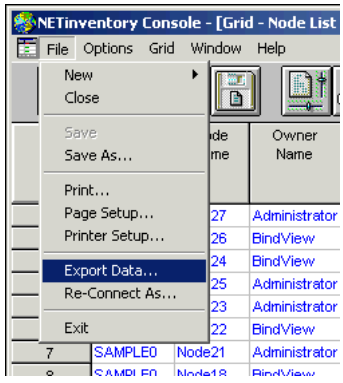


Fig. 337 NETinventory Console File Menu

3 In the **Export Data** dialog, click the **Basic** tab.

4 Select the desired **Export Device**. Click **Browse** to select the directory.

5 Enter the File Name for the exported data. Some export devices allow data to be appended to the end of the file. Select the **Append data if file exists** check box to append the export data to the end of an existing file.

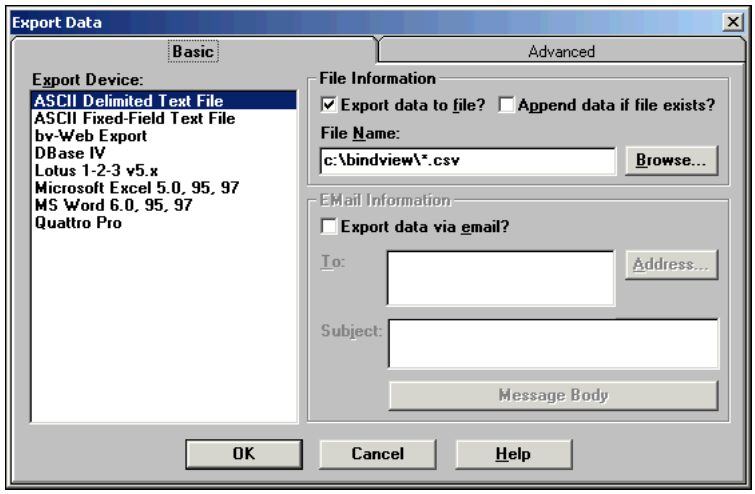


Fig. 338 Export Data Dialog - Basic Tab

6 Select the **Advanced** tab in the **Export Data** dialog.

7 Edit the **Advanced** settings for the chosen **Export Device** if required. To run programs before or after the data is exported, click **Browse** and choose the program to run.

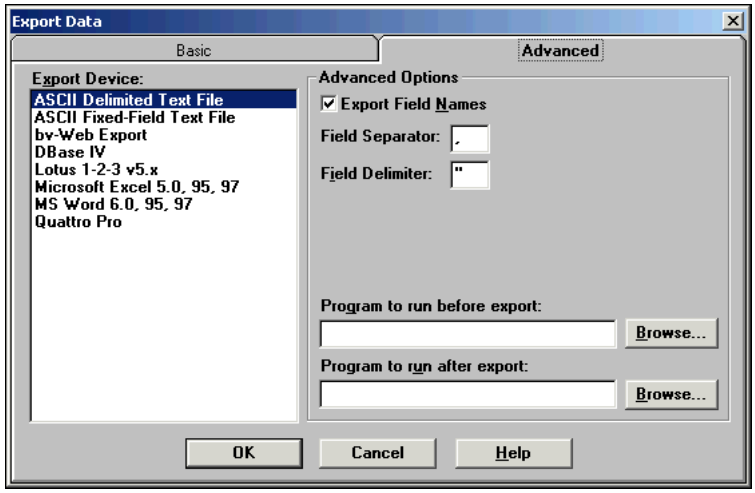


Fig. 339 Export Data Dialog - Advanced Tab

8 Click **OK** to complete the export.

Managing Export Devices

You can configure defaults for all export devices. You can also define new export devices using pre-defined file formats.

▶ *To set export device Defaults*

1 Choose **Manage Export Devices** from the **Options** menu.

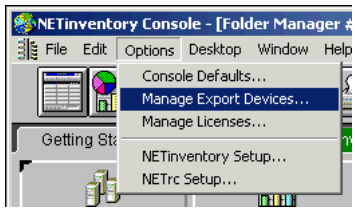


Fig. 340 NETinventory Console - Options Menu

2 Select an Export Device type and enter a default file name, directory, and extension for the export destination.

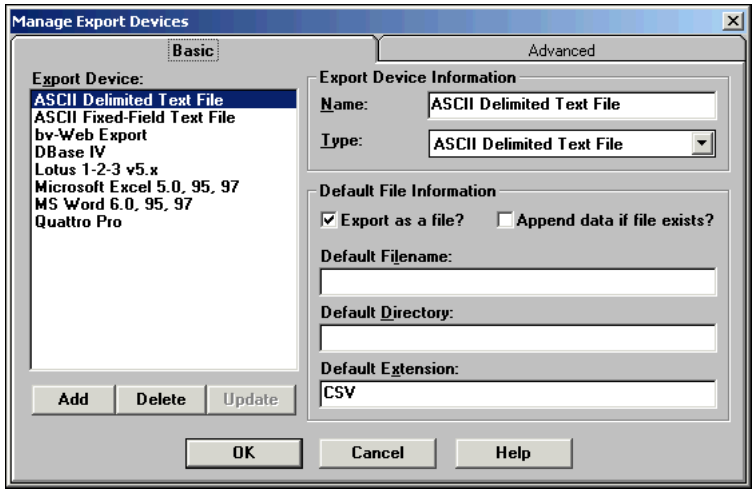


Fig. 341 Manage Export Devices - Basic Tab

3 Select the **Advanced** tab.

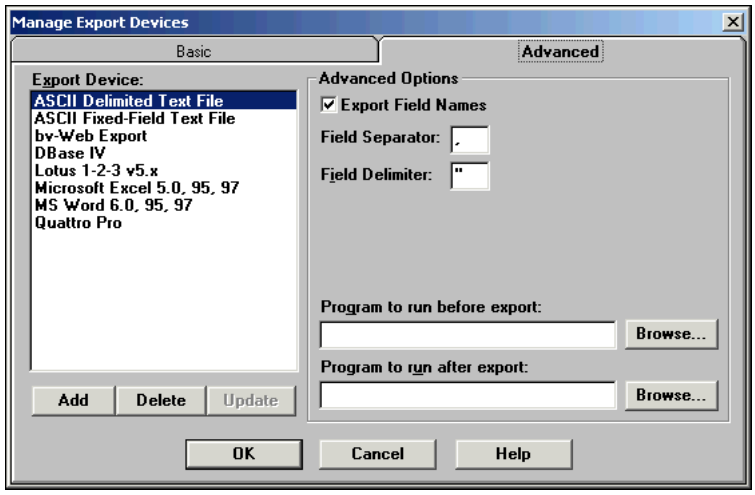


Fig. 342 Manage Export Devices - Advanced Tab

4 Select **Export Field Names** to include the export field name(s) and change field separators or delimiters and programs to run before or after export if needed.

5 Click **OK** to save the changes to the export device defaults.

▶ *To create a new export device*

1 Open the **Manage Export Devices** dialog.

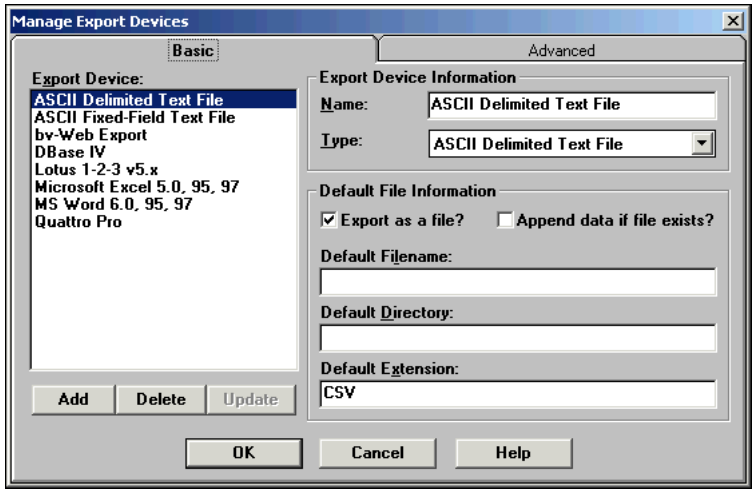


Fig. 343 Manage Export Devices - Basic Tab

2 Click **Add**. The **Add a New Export Device** dialog appears.

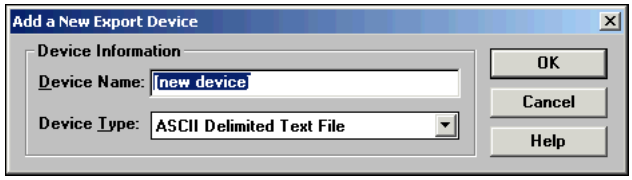


Fig. 344 Add a New Export Device Dialog

3 Enter a name for the new export device and select the file format the device should use from the **Device Type** drop-down list.

4 Click **OK** to create the device.

5 Set the device options using the **Manage Export Devices** dialog.

6 Click **OK** to save the new export device.

16 Configuring NETinventory Console Users

In This Chapter

User Desktop 338
BV Admin Account 338
Changing Account Passwords 340
Console Default Configuration Settings 341
Managing Licenses 346

User Desktop

When you log into the NETinventory Console, a personal workspace, called the “desktop,” appears. Every user of a single copy of the NETinventory Console has a unique Desktop. User Desktops can be configured to meet individual needs by including pre-defined reports and queries. Users can create individual views of system management information and organize them as they wish.

When you install the NETinventory Console, a single account—the BV Admin account—exists by default. Any other accounts must be created while logged in using the BV Admin account.

BV Admin Account

The BV Admin user account is the administration account for the NETinventory Console. The BV Admin user account is used to add new user accounts, modify existing accounts, and edit other users’ desktops. The BV Admin user account cannot be deleted or modified. You should generally only use the BV Admin account to modify users. You should export and import query items or use references to set user desktops up with query items.

Modifying Desktops of Other Users

The BV Admin user is the only user account that can add and delete items on other users’ desktops. This allows the BV Admin user to set up a user account that has rights to run items but cannot create new items or modify existing ones. The BV Admin user can then add the items for the user to run.

▶ ***To add a new user account***

1 Select **User Account Administration** from the Desktop menu. The **User Account Administration** dialog appears.

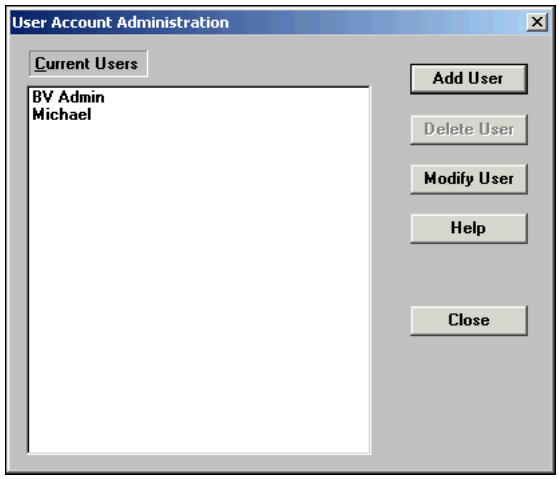


Fig. 345 User Account Administration Dialog

2 Click **Add User**. The **Enter User Account Information** dialog appears.

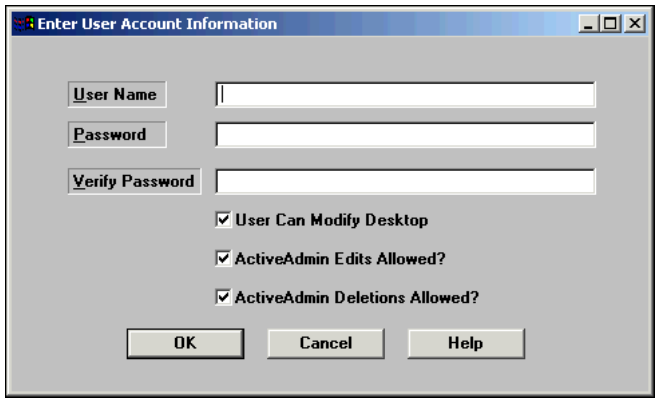


Fig. 346 Enter User Account Information Dialog

3 Enter a User Name and Password, re-enter the Password in the Verify Password field and select the account options to set.

4 Click **OK** to add the user account to the NETinventory Console.

▶ ***To modify an existing user account***

1 Select User Account Administration from the Desktop menu. The **User Account Administration** dialog appears.

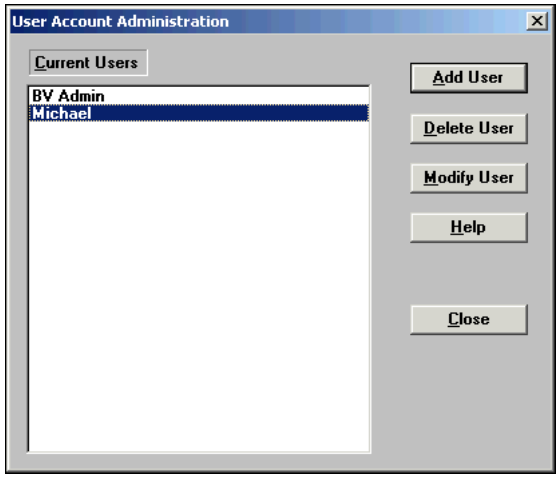


Fig. 347 User Account Administration Dialog

2 Select the user account to be changed and click **Modify User**. The **Enter User Account Information** dialog appears.

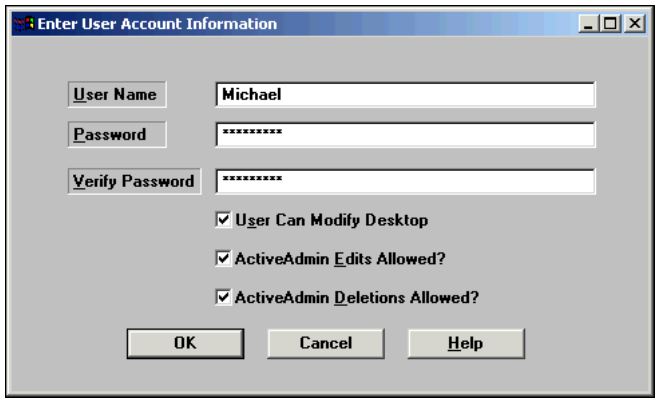


Fig. 348 Enter User Account Information Dialog

3 Make any changes to the account options.

4 Click **OK** to close the dialog and save the changes.

▶ ***To delete an existing user account***

1 Select **User Account Administration** from the Desktop menu. The **User Account Administrations** dialog appears.

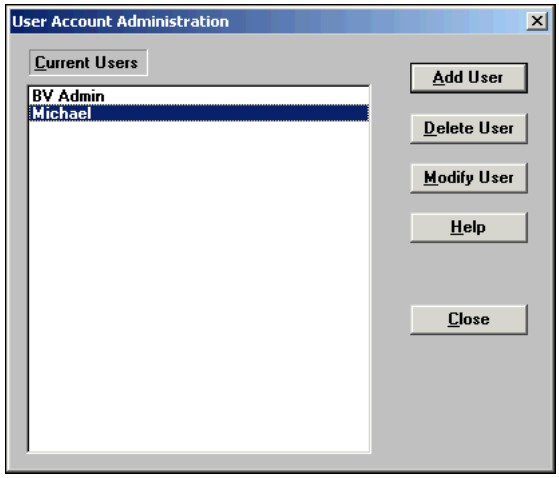


Fig. 349 User Account Administration Dialog

2 Select the user account to delete.

3 Click **Delete User**.

4 Click **Yes** to confirm that you want to delete the account.

Changing Account Passwords

User accounts (including the BV Admin account) have passwords attached that prevent other users from accessing the personal desktop. The BV Admin account can change any user's password

using the **User Account Administration** dialog; other users use the **Change Password** dialog to change their own password.

▶ ***To change the account password***

1 From the Desktop Menu, select **Change Password**. The **Enter New Password** dialog appears.

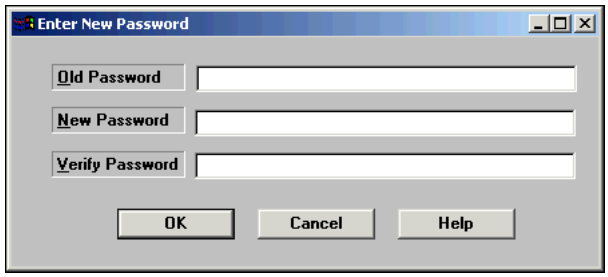


Fig. 350 Enter New Password Dialog

2 Enter the old password, then the new password, and re-enter the new password to verify.

3 Click **OK** to save the new password.

Console Default Configuration Settings

When a user account is created, many aspects of the NETinventory Console are automatically configured using default settings. These defaults are listed in the Console Defaults tab dialog.

Default Data Formats: When a query is processed, the results are displayed using the user's default data format settings. These settings include data and time and number formats and whether "yes" and "no" or "true" and "false" are used for the logical field.

Default Toolbar Settings: The NETinventory Console uses customizable toolbars. Each toolbar can be customized to include the features and commands most frequently accessed.

Default Page Setup Settings: When creating a new Grid report item, the reporting engine uses the default settings from Page Setup. These settings control the appearance of the report, including the style, headers and footers, margins, and fonts.

Default Display Font for a Grid: You can specify a default font to be used when displaying Grid data. This font can be customized for individual reports.

Default E-Mail Settings: You can specify default e-mail settings that should be used when exporting via e-mail.

Default Grid Settings

The Default Grid Settings include the default font for new Grid reports and the default Page Setup for new printed Grid reports.

Default Display Font

The “display font” is the type, style, and size of the font used to display data in a Grid. It is also the default font used for printed reports.

▶ ***To set a default display font***

1. Select **Console Defaults** from the **Options** menu.

   The Console Defaults dialog appears.

2. Click the **Default Grid Settings** tab.

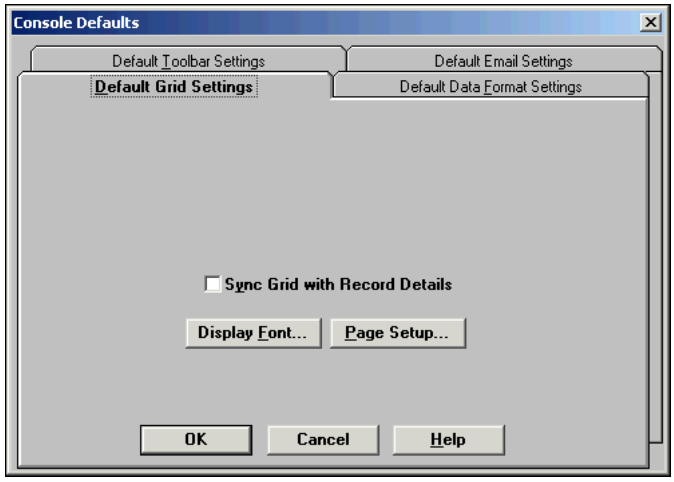


Fig. 351 Console Defaults Dialog - Default Grid Settings Tab

3. Click **Display Font**. The **Font** dialog appears.
4. Select the type, style and size of the Grid font to be used.
5. Click **OK** to close the **Font** dialog.

Default Page Setup

You can configure the Default Page Setup options for all Grid items, or you can configure individual Page Setup options for each Grid item. Page Setup options are saved with each Grid item, so changes to the defaults do not affect existing Grid items.

▶ ***To set page setup defaults***

1 Select **Console Defaults** from the **Options** menu. The **Console Defaults** dialog appears. If it is not selected, select the **Default Grid Settings** tab.

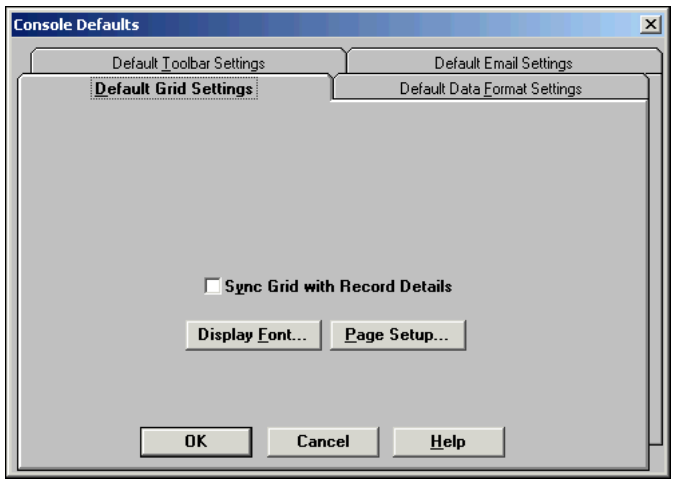


Fig. 352 Console Defaults Dialog - Default Grid Settings Tab

2 Click **Page Setup**. The **Page Setup Defaults** dialog appears. The **Page Setup Defaults** options are identical to the **Page Setup** options. For complete information on **Page Setup** options, see "Customizing a Grid Report" on page 316.

3 When you have configured the Page Setup Defaults, click **OK** to save the changes and close the **Page Setup Defaults** dialog.

Default Data Format Settings

The Default Data Format Settings tab allows you to define the format for displayed Grid data. You can set the appearance of the date, time, numbers, and logical format (yes/no or true/false).

▶ ***To set data format defaults***

1 Select **Console Defaults** from the **Options** menu.

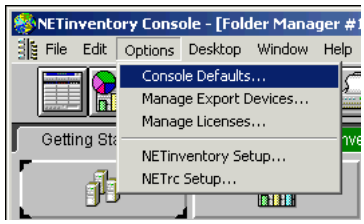


Fig. 353 NETinventory Console Options Menu - Console Defaults

2 Select the Default Data Format Settings tab.

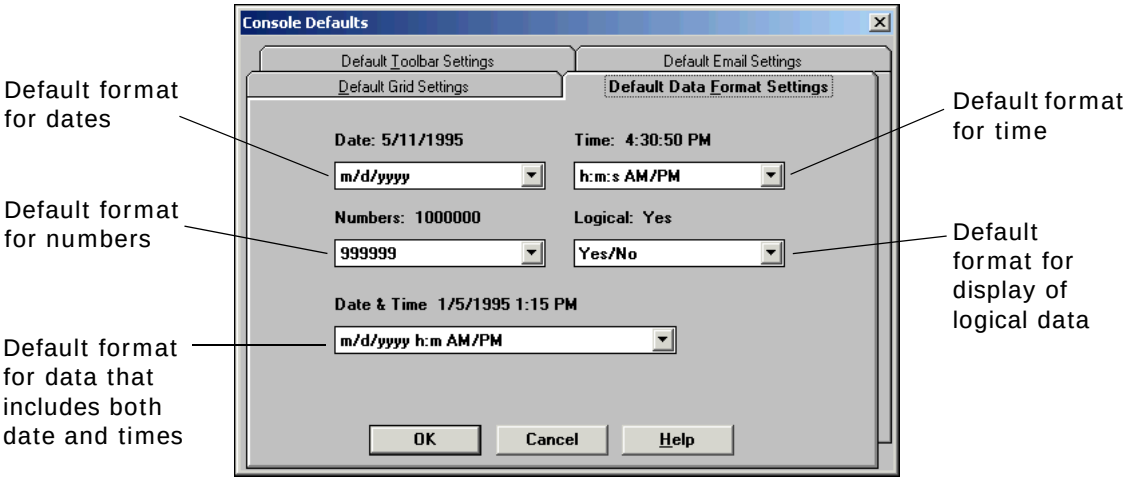


Fig. 354 Console Defaults

3 Click **OK** when you have set the Data Format Defaults.

Default Toolbar Settings

The NETinventory Console uses customizable toolbars. Each toolbar can be customized to include the features and commands most frequently accessed.

▶ ***To configure default toolbar settings***

1 Select **Console Defaults** from the **Options** menu.

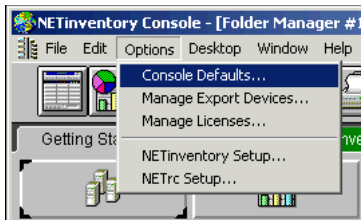


Fig. 355 NETinventory Console Options Menu - Console Defaults

2 Select the **Default Toolbar Settings** tab.

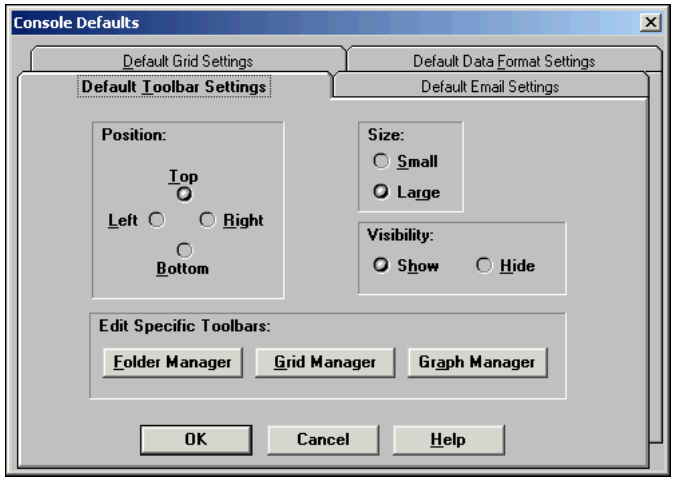


Fig. 356 Console Defaults Dialog - Default Toolbar Settings Tab

3 The main toolbar screen has settings that apply to all toolbars. Select the position, size, and visibility settings for all toolbars.

4 Use the buttons along the lower part of the screen to configure individual toolbars. You can select the actions available in the toolbar.

Default E-mail Settings

The NETinventory Console supports both VIM-based and MAPI-based e-mail. If you select VIM e-mail support, you must enter a P.O. (Post Office) Directory. If you select MAPI e-mail support, you must enter a MAPI Profile Name.

User Name: The default e-mail user name *for the sender*.

Password: The default e-mail password *for the sender*.

Mail Program: The type of e-mail program to use. You may choose either Vendor Independent Messaging (VIM) or Messaging Application Programmer Interface (MAPI) e-mail.

P.O. Directory: If you select VIM e-mail as a default, you must specify the directory of the VIM mail post office. Use the entire path.

Profile Name: If you select MAPI e-mail as a default, you must specify the sender's MAPI profile name.

▶ ***To configure default e-mail settings***

1 Select **Console Defaults** from the **Options** menu.

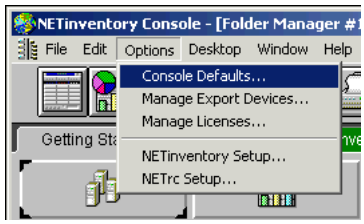


Fig. 357 NETinventory Console Options Menu- Console Defaults

The Console Defaults dialog appears, as shown in Fig. 358.

2 Select the **Default E-mail Settings** tab.

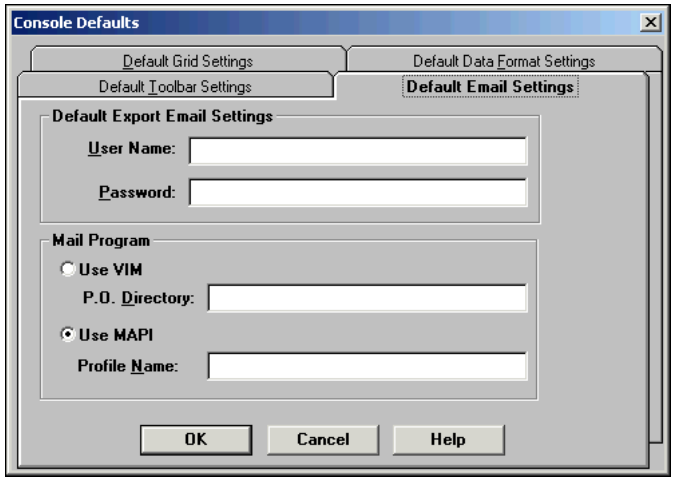


Fig. 358 Console Defaults Dialog

3 Enter in the user name and password, and the P.O. directory or MAPI Profile Name of the user who will send E-mail reports.

4 Click **OK** to close the Console Defaults dialog and save the changes.

Managing Licenses

The NETinventory Console, NETinventory, and NETrc all require licenses. The NETinventory Console stores license information in a file named `LICENSE.DAT` in the same folder as the NETinventory Console installation. The `BINDVIEW.INI` file points to the location of the `LICENSE.DAT` file. You can view NETinventory Console licenses using the BindView License Manager, which can be accessed from within the BindView Console.

There are several options available within the License Manager:

- *License File* – Shows the location of the `LICENSE.DAT` file as defined in the `BINDVIEW.INI` file.
- *Installed Licenses* – Lists the licenses currently installed.

- *Add* – Displays the NETinventory Console License Installation screen, allowing you to add a new license key code shipped with a package or module.
- *Remove* – Displays the NETinventory Console License Removal dialog, allowing you to remove a license.
- *Details* – Displays the NETinventory Console License Information screen. This screen displays the License Type, Version Number, Serial Number, Duration, Expiration Date, and a Unit Count for specific licenses.
- *Print* – Allows you to print a detailed report about the BindView licenses installed on your network.

▶ *To manage licenses*

1 Select **Manage Licenses** from the **Options** menu.

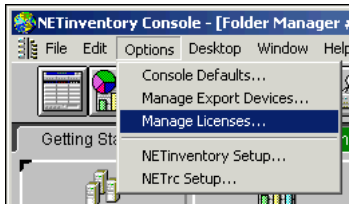
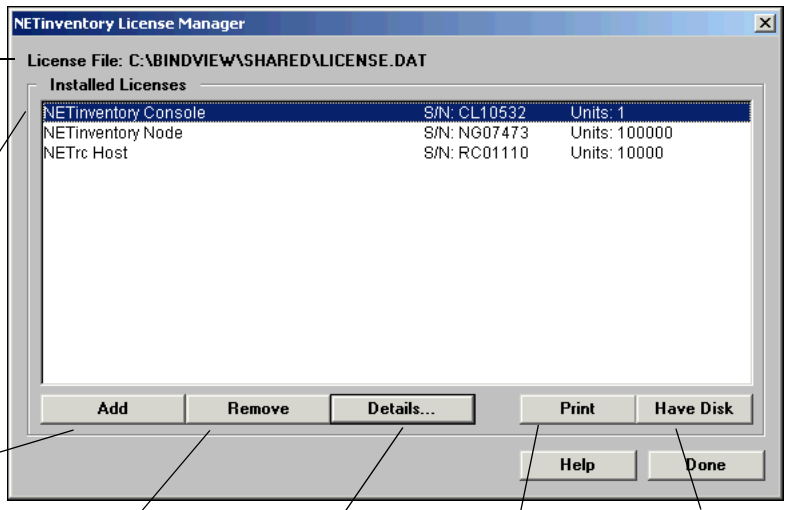


Fig. 359 NETinventory Console Options Menu - Manage Licenses

2 Click the desired Manage License function from the NETinventory Console License Manager.



License File: shows the location of the LICENSE.DAT file as defined in the BINDVIEW.INI file

Installed Licenses: List of the licenses currently installed

Add: Displays the NETinventory Console License Installation screen, allowing you to add a new license key code

Remove: Allows you to remove the selected license

Details: Displays the NETinventory Console License Information screen

Print: Allows you to print a detailed report about the NETinventory licenses on your network

Have Disk: Allows you to install licenses from a diskette

Fig. 360 NETinventory Console License Manager

Section 4: NETrc

Setting up and Using the NETrc Module

17 Overview

In This Chapter

What is NETrc? 352
NETinventory Console and NETrc 352
NETrc and NETinventory 352
NETrc Architecture 352
Connections 353
Installing NETrc 354
Setting Up NETrc 354
NETrc System Requirements 354

What is NETrc?

NETrc® is a Snap-in Module for the NETinventory Console. It works in conjunction with and requires the NETinventory Console and the NETinventory Snap-in Module. Together they allow you to remotely view and control workstations on your enterprise network. Before using NETrc, you must use the BindView Setup program to install the NETinventory Console and NETinventory along with the NETrc Snap-in Module.

NETinventory Console and NETrc

Since NETrc is a Snap-in Module for the NETinventory Console, it cannot stand alone; it requires essential services provided by the NETinventory Console. To use NETrc to control a workstation on your enterprise network, you first use the NETinventory Console to configure both NETrc and NETinventory to install the NETrc Host software on the workstation during an audit. Once the audit is complete and the NETrc Host software is installed and running, you use the NETinventory Console to generate a list of audited nodes. Using this list, you select a node with NETrc installed and take control.

NETrc and NETinventory

Just as it relies on the NETinventory Console to provide a user interface and other essential services, NETrc relies on NETinventory for other services. In particular, the NETinventory Audit Agent is used to automatically install the NETrc Host on machines you designate. The Audit Agent also updates preference files stored with the Host software, and removes the Host when needed. In addition, the NETinventory Master Server and Audit Servers house the NETrc License database.

NETrc Architecture

NETrc consists of three parts: the first two reside on the machine that hosts the NETinventory Console; the third is installed on machines you select during an audit by the NETinventory Audit Agent. The NETrc Console components and the NETrc Master are installed automatically with the NETinventory Console, while the NETrc Host software is installed on every machine you designate.

NETrc Console Components

NETrc extends the capabilities of the NETinventory Console. The NETrc Console components are used to enable and disable NETrc, to configure Master and Host settings, to set a default profile for nodes on your network, and to configure profiles. Finally, the NETrc Console components are used to administer NETrc Licenses, and to distribute them among NETinventory Audit Servers.

The NETinventory Console components add an ActiveAdmin control to NETinventory result sets in the NETinventory Console. The ActiveAdmin control allows you to take control of a node. Finally, the NETinventory Node Manager is used to assign a NETrc Profile to

a particular node or to take control of a node that has the NETrc Host installed.

NETrc Master

When you view or take control of a node with the NETinventory Console, the NETrc Master launches automatically. The Master connects to the node using parameters passed to it by the NETinventory Console. It then displays the screen of the controlled node in a window on your desktop.

NETrc Host

The NETrc Host software runs on the workstations on your enterprise network and allows a computer (called the *remote host*) to accept connections from a master so that its display is visible to that master and its user interface can be controlled by it. The Host and the Master both have integral security features, so that only a NETrc Master can view a NETrc Host's transmissions. You can also prevent viewing or control of the screen while the remote control is active unless the user of the workstation allows it, or you can require a password to control the remote computer.

NETrc Profiles

Every node audited by the NETinventory Audit Agent has a NETrc Profile assigned. A Profile is a collection of NETrc preferences for installation, network protocol, and security. In addition, the profile settings control how the user is or is not made aware that NETrc is being used to view the screen. Newly audited nodes have a default profile assigned, and you can assign a specific profile to a node using the NETinventory Node Manager.

You can create and name up to nineteen individual profiles with unique settings. IN addition, there is a default profile, called None, that removes NETrc if it is installed.

Connections

The Master connects to the Host, and the Master controls the Host. This is a *peer-to-peer* connection.

Any Master and Host can connect to each other, as long as they each use the same protocol (IP or IPX) over the connection. The

operating system platforms for Master and Host do not need to be the same.

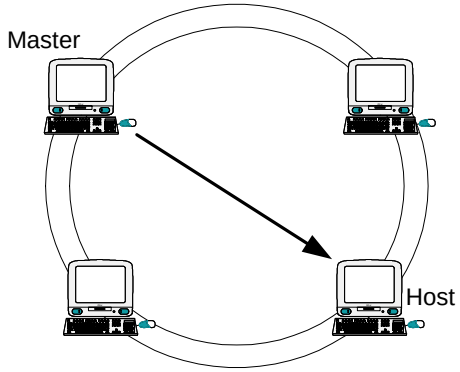


Fig. 361 A peer-to-peer connection

NETrc Host 4.10 and later, however, can only receive connections from a NETrc Master of version 4.01 or later. A NETrc Master of version 4.10, on the other hand, can connect to and control all NETrc Hosts of version 2.0 and later.

Installing NETrc

The NETrc Console components and viewer are installed by the NETinventory Console installation program. For information on installing the NETinventory Console, please consult the *Getting Started Guide*, which has complete information on installing the NETinventory Console. To use NETrc, you must also install and configure the NETinventory Snap-in Module.

Setting Up NETrc

Setting up NETrc is simple: all you need do is install NETrc licenses, then configure one or more profiles and choose which profile should be the default profile installed when the NETinventory Audit Agent audits a machine for the first time. Before the NETinventory Audit Agent can install the NETrc Host, you will need to install and configure NETinventory Master, Audit, and Login Servers. You will also need to have NETinventory begin auditing the machines on your enterprise network. For complete information on configuring NETinventory, please see the *NETinventory User Guide*.

NETrc System Requirements

This topic describes the system requirements on the machines running NETrc.

NETrc Host Requirements

NETrc Host 4.10 may be installed on the same computer as NETrc Master. It will run on any computer that meets the minimum system requirements of the operating system. The following operating systems are supported:

- Windows® 98
- Windows® 98 Second Edition (SE)
- Windows® 98 Millennium Edition (Me)
- Windows NT® (with Service Pack 4.0 or later)
- Windows® 2000
- Windows XP®
- Windows Server™ 2003

Network Requirements

NETrc may be used over any type of network that supports the IP or IPX standard protocols, including dial-up, Ethernet, token ring, and FDDI. The following conditions apply:

- IP is a general purpose protocol supported on a wide variety of networks and servers.
- IPX is usually run on networks using Novell® NetWare®. To enable communication using IPX, it is not necessary for any PC to be logged into a NetWare server, nor is it necessary to run a NetWare client, although the NetWare Client for the platform should be installed.

Display Requirements

NETrc Master can correctly display the screens of Host PCs running the following Windows display drivers:

- 16-color
- 256-color
- 15/16-bit color
- 24/32-bit color

Color

NETrc Master's ability to render colors accurately depends on the capabilities of the Windows display driver. The most accurate color reproduction occurs when the Master's color capability matches or exceeds that of the Host PC. For example, a Master running in a Windows session with a 16-color display driver is able to render a Host PC running Windows with a 16-color display driver perfectly. However, if the Host PC's display driver is 256-color, the Master must approximate some of the colors.

Resolution

The NETrc Master can display host PC screens of any size by using scroll bars. It is most convenient to use a high-resolution display for the PC running the Master (1024 x 768 or higher) so that most Host PC displays can be displayed in their entirety without scroll bars.

The NETrc Master can render virtually any graphic resolution. If the Host PC enters a display mode that the Master cannot render, the Master window will be blank until the Host PC enters a display mode that the Master can display.

18 Setting Up NETrc

In This Chapter

NETrc Setup 358
Configuring the NETrc Master Settings 359
Configuring Advanced Master Settings 363
Configuring NETrc Host Profiles 364
Configuring NETrc Licenses 370
Removing the NETrc Host 373

NETrc Setup

To use NETrc to control a node, the node must have the NETrc Host installed and must have a NETrc Profile assigned. Use the NETrc Setup dialog to enable NETrc, to configure a default profile that will be assigned to new nodes, and to manage NETrc licenses.

Before you can configure NETrc, you must install and configure a NETinventory Enterprise Installation, including a Master Server and *at least* one Audit Sever and one Login Server.

Setting the Default NETrc Profile

In order to use NETrc to remotely control audited nodes on your network, you must assign a profile which installs the NETrc Host on the node. For information on configuring profiles, see "Configuring NETrc Host Profiles" on page 364.

The default NETrc profile is set for all nodes which have no other NETrc profile assigned, including new nodes.

▶ *To choose the default NETrc Profile*

Open the **NETrc Setup** dialog and select the **General Setup** panel. The **NETrc Setup** dialog appears.

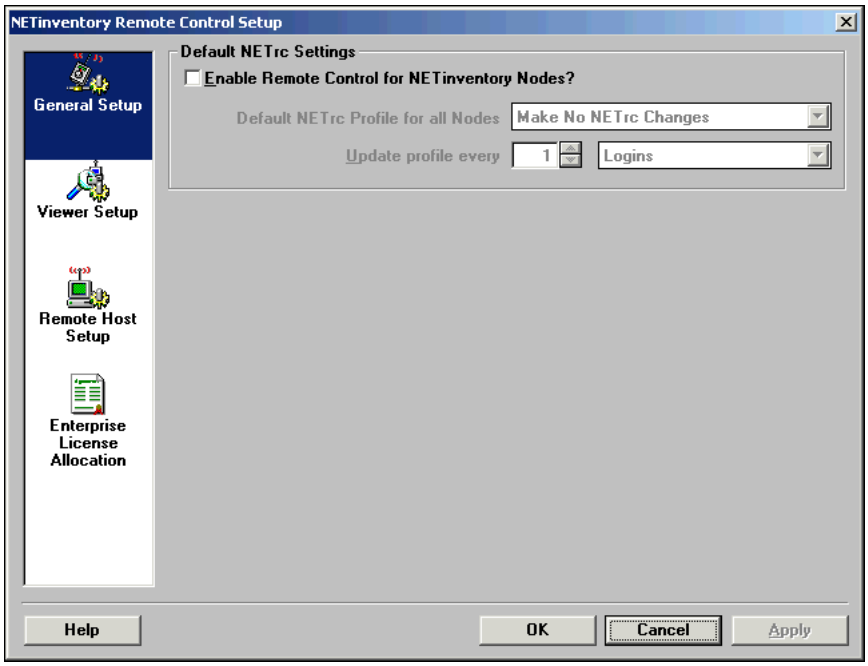


Fig. 362 NETrc Setup Dialog - General Setup Panel

1 Select **Enable Remote Control for NETinventory Nodes?** and choose the default NETrc profile for new nodes from the list of available profiles.

If you choose the profile named **None (Uninstall)**, the NETrc Host software will not be installed on the host PC, and remote control of the node will not be possible.

The profile you select determines the Host settings used for the node. For information on configuring profiles, please see "Configuring NETrc Host Profiles" on page 364.

2 Click **OK** to close the dialog and save the changes you have made, or click **Apply** to save the changes without closing the dialog.

▶ ***To configure the profile update interval***

You can also configure how often the NETinventory Audit Agent will update the NETrc profile settings on nodes.

1 Open the **NETrc Setup** dialog and select the **General Setup** panel.

2 Select the number and type of units the Audit Agent should wait between updates of the profile.

Updating the profile ensures that the profile is installed and that the settings in the Host's preference file match those set in the **NETrc Setup** dialog.

3 Click **OK** to close the dialog and save the changes, or click **Apply** to save the changes without closing the dialog.

Configuring the NETrc Master Settings

You can control the settings the NETrc Master software uses when it runs by making changes to the **Viewer Setup** panel. You can also make changes to these settings from within the NETrc Master. Changes made from within the NETrc Master will be lost when you quit.

▶ *To configure NETrc Master Settings*

1 Open the **NETrc Setup** dialog and choose the **Viewer Setup** panel. The **Viewer Setup Panel** appears.

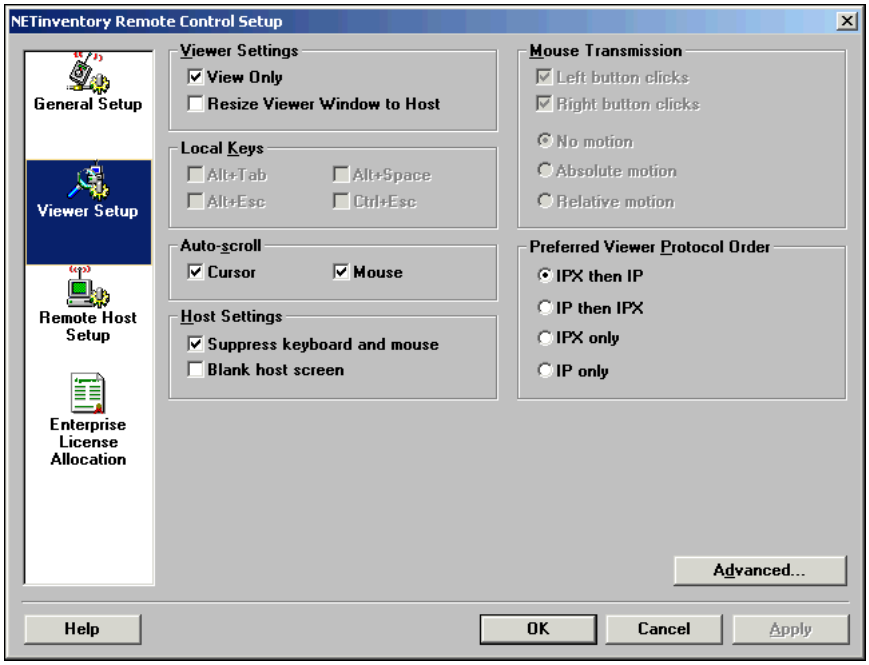


Fig. 363 NETrc Setup Dialog - Viewer Setup Panel

2 The items on the panel allow you to set the NETrc Master preferences. Table 22, "Master Settings," describes each item.

3 Click **OK** to close the dialog and save the changes you have made, or click **Apply** to save the changes without closing the dialog.

Table 22 Master Settings

Item Name	Effect
Viewer Settings	
View Only	When selected, the viewer can only view the remote machine's screen, and cannot control the remote machine. In addition, some of the selections which determine how the Master controls a remote machine are unavailable.
Resize Viewer Window to Host	When selected, the viewer's windows automatically resize to display the host's entire screen if possible.
Local Keys	Certain key combinations are useful to control the local workstation. When each of the following is selected, the keystroke will never be transmitted to the NETrc Host.
ALT+TAB	When selected, the ALT+TAB key combination will not be transmitted to the NETrc Host.

Table 22 Master Settings (Continued)

Item Name	Effect
ALT+SPACE	When selected, the ALT+SPACE key combination will not be transmitted to the NETrc Host.
ALT+ESC	When selected, the ALT+ESC key combination will not be transmitted to the NETrc Host.
CTRL+ESC	When selected, the CONTROL+ESC key combination will not be transmitted to the NETrc Host.
Auto-Scroll	If the screen of the machine being controlled is larger than the window the viewer is using to display it, you can choose to automatically scroll the window when your cursor or mouse pointer reaches the edge of the window.
Cursor	When checked, the NETrc Master window automatically scrolls when the cursor nears the edge of the window.
Mouse	When checked, the NETrc Master window will automatically scroll when the mouse pointer nears the edge of the window.
Host Settings	These settings control how the NETrc Host behaves on the machine under control.
Suppress keyboard and mouse	When checked, the keyboard and mouse of the Host will not work while the NETrc Master is being used to control the computer if suppression of the keyboard and mouse is allowed by the profile. Please see "Configuring NETrc Host Profiles" on page 364 for more information on profile settings.
Blank host screen	When checked, the screen on the node you are connecting to will be "blanked" while you are viewing or controlling it if blanking is allowed by the profile. Please see "Configuring NETrc Host Profiles" on page 364 for more information. ***Note:*** Some older video drivers cannot blank the screen. If the host's screen doesn't blank, upgrade to the latest version of the host's video drivers.
Mouse Transmission	These settings control how mouse clicks and motion are passed from the NETrc Master to the Host.
Left button clicks	When selected, "left" mouse button clicks will be passed to the Host.

Table 22 Master Settings (Continued)

Item Name	Effect
Right button clicks	When selected, “right” mouse button clicks (clicks that would normally display the context menu) will be passed to the Host.
No motion	When selected, mouse motion will not be passed to the controlled node.
Absolute motion	When selected, the NETrc Master will transmit mouse motion as absolute mouse position.
Relative motion	When selected, the NETrc Master will transmit mouse motion as the difference between successive mouse positions.
Preferred Master Protocol Order	These settings control the way the NETrc Master communicates with the NETrc Host on the selected node.
IPX then IP	The NETrc Master will try to connect using NetWare IPX packets, and will try IP packets if the first method fails.
IP then IPX	The NETrc Master will try to connect using IP packets, and will try NetWare IPX packets if the first method fails.
IPX Only	The NETrc Master will try to connect using NetWare IPX packets, and will fail if it is unable to complete a connection.
IP Only	The NETrc Master will try to connect using IP packets, and will fail if it is unable to complete a connection.
Advanced	This button displays the Advanced Master Settings dialog, which allows you to configure additional parameters for the Master.

Clicking the **Advanced...** button in the **Master Setup** panel displays the **Advanced Master Settings** dialog, as shown in Fig. 364.

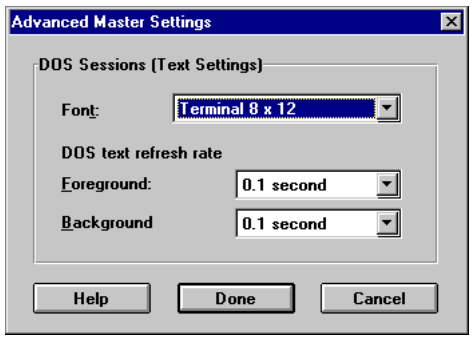


Fig. 364 Advanced Master Settings Dialog

Configuring Advanced Master Settings

The **Advanced Master Settings** dialog allows you to control how the NETrc Master handles full-screen DOS Sessions on hosts.

The **Font** field controls the typeface and type size that NETrc uses to display the host PC's screen when it is in text mode.

By varying the font, you can increase or decrease the size of the host PC's screen as displayed in the NETrc window. With a smaller font, you'll be able to see more of the host PC in a smaller window. With a larger font, you'll improve readability at the expense of requiring a larger window.

▶ ***To select a DOS Text Session font***

1 Click the **Font** field for a pull-down list of fonts.

2 Click one of the fonts in the list to select it.

The fonts in the list are shown previewed as they will actually appear. The names of the fonts are composed of a typeface name and a size. Thus, the font Terminal 8 x 12 is typeface Terminal, whose character dimensions are 8 horizontal pixels by 12 vertical pixels.

The **DOS text refresh rate** settings allow you to control how frequently the host PC sends screen updates to the NETrc Master. There are two refresh rates to set.

The **Foreground** rate applies whenever the NETrc Master window is active.

The **Background** rate applies whenever the NETrc Master window is not active.

The foreground refresh rate is the more important of the two, since it determines the speed of response of the window that you are actually operating. If you set a slower background rate, the window will update more slowly whenever it is not the foreground window, but will resume speed as soon as you bring it to the foreground.

When you set the refresh rate, you can select from a list of refresh rates ranging from **Fast** (the maximum) to **10 seconds**.

The faster the refresh rate, the faster changes on the Host PC will be reflected in the NETrc window, and the "snappier" your session will feel. But with a faster refresh rate, the host PC will be spending more CPU time scanning its screen and transmitting changes, and NETrc will be spending more CPU time displaying those changes.

In general, if both the NETrc Master PC and the host PCs are fast (386 or higher), you can usually leave both refresh rates set to **Fast** without much worry.

You should consider slower refresh rates if:

- You are running a computationally intensive DOS graphics program on the host PC and you notice that it slows down when connected.
- You are running multiple NETrc windows, all of which are simultaneously updating the display.

- Your network is heavily loaded with communications traffic.

Configuring NETrc Host Profiles

The settings in the previous section control how the NETrc Master and Host interrelate from the Master's end. A separate group of settings control how they interrelate from the Host's end. Unlike the Master settings, each Host can have assigned a different group of settings which are collectively known as a profile.

Once NETrc is installed, every node audited by NETinventory has a Profile assigned to it. If the NETrc Host software is not to be installed on the node, use the **None (Uninstall)** profile. NETrc comes with a number of predefined profiles, and you may configure up to 19 profiles.

▶ *To configure NETrc host profiles*

1 Open the **NETrc Setup** dialog and choose the **Remote Host Setup** panel. The **Remote Host Setup** Panel appears.

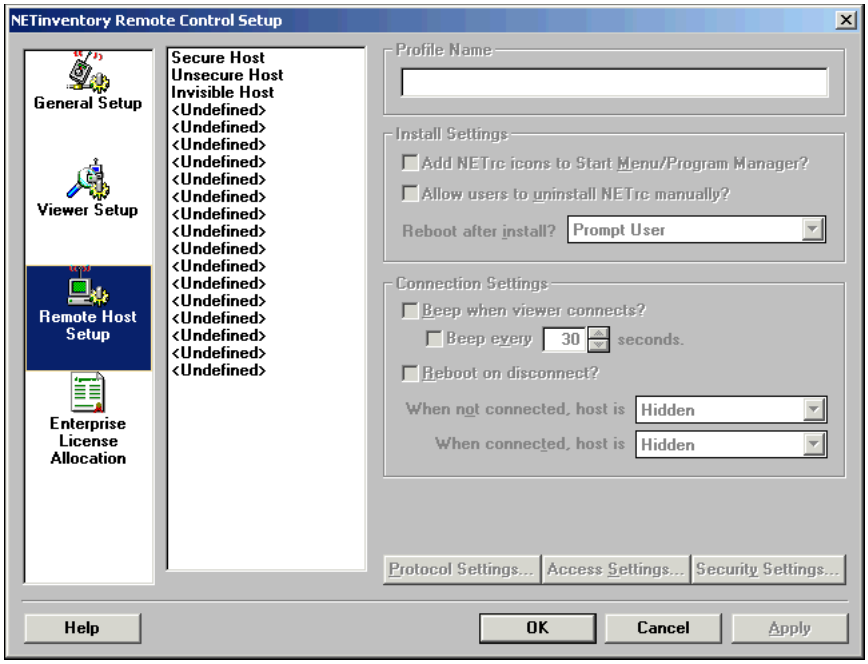


Fig. 365 NETrc Setup Dialog - Remote Host Setup Panel

2 In order to make changes to a profile, click its name to select it. The profile will be highlighted, and the profile's settings will appear on the right of the panel.

The items on the panel allow you to set the NETrc Master preferences. Table 23, "Host Settings," describes each item.

3 Click **OK** to close the dialog and save your changes, or click **Apply** to save your changes without closing the dialog.

Table 23 Host Settings

Item Name	Effect
Profile Name	The name of the profile whose settings you are editing. To edit the name of the profile itself, click in the field.
Install Settings	These settings control where and how the NETrc Host software is installed on nodes.
Install Path	The path to the directory on nodes where the NETrc Host software is installed. If the directory specified does not exist, the Audit Agent will create it when installing.
Reboot after install?	In order for the NETrc Host software to load properly, newly installed nodes must usually be rebooted. This controls how that reboot happens. If you choose **Prompt User**, the user will be prompted to complete the installation by rebooting. If you choose **Always**, the node will be rebooted automatically without notifying the user. Since this reboot takes place at the end of the NETinventory Audit, there is no need to worry about saving files. If you choose **Never**, the host software will silently wait until the next time the user boots the machine and will complete the install at that time.
Add NETrc icons to Start Menu/Program Manager?	When checked, a NETrc group will be added to the Start menu.
Allow users to uninstall NETrc manually?	When checked, the user can use the Windows **Add/Remove Programs...** control panel to remove the NETrc Host software manually. If you chose to add the NETrc icons to the Start Menu, the user can also use the "Remove NETrc" icon in the group to remove the host software.
Connection Settings	These settings control how the NETrc Host software behaves while the NETrc Master is connected to it.
Beep when viewer connects?	When checked, the NETrc Host software will beep when a NETrc Master connects to the node.
Beep every... seconds.	When checked, the NETrc Host software will beep at an interval you specify while a NETrc Master is connected to the node. These two settings are useful for letting users know that their machines are under remote control, especially in conjunction with the **Blank on Connect** option in the **Master Setup** panel.

Table 23 Host Settings (Continued)

Item Name	Effect
Reboot on disconnect?	When checked, nodes you connect to with the NETrc Master will automatically be rebooted when the Master disconnects.
When not connected, host is...	This setting controls the appearance of the NETrc Host software while the NETrc Master is not connected. If you choose **Hidden**, the host software will not appear. If you choose **Icon**, the host software will appear as a minimized program.
When connected, host is...	This setting controls the appearance of the host software while the Master is connected to a node. Again, you can choose to have the host software **Hidden** or as an **Icon**.
Protocol Settings...	When clicked, displays the **Host Protocol Settings** dialog.
Access Settings...	When clicked, displays the **Host Access Settings** dialog.
Security Settings...	When clicked, displays the **Host Security Settings** dialog.

Configuring Host Protocol Settings

Clicking the **Host Protocol Settings** button displays the **Host Protocol Settings** dialog.

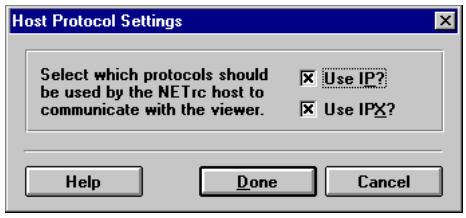


Fig. 366 Host Protocol Settings Dialog

This dialog allows you to configure which networking protocols the host software will use to communicate with the NETrc Master software.

Check **Use IP?** to allow the Host to use TCP/IP-based communications with the Master. Click **Use IPX?** to allow the Host to use NetWare IPX-based communications with the Master. Click **Done** to save your changes and close the dialog.

Configuring Host Access Settings

The Host Access settings allow you to configure how and when the host will allow the viewer software to connect. If you have more than one node with the NETinventory Console and NETinventory and NETrc Snap-in Modules installed, then unauthorized users could potentially access confidential information. These settings allow you to control who can access nodes with the NETrc Host installed and

when the access can take place. To view or change the Host Access Settings, click **Access Settings...**. The **Host Access Settings** dialog appears.

Fig. 367 Host Access Settings Dialog

▶ *To control access based on time*

The **Access Settings** controls allow you to restrict access based on time.

1 Select the **Never restrict access to host computer** option if the NETrc Master should be able to attempt a connection twenty-four hours a day, seven days a week.

Select **Always restrict access (no connections allowed)** if the Host software should be installed but should always refuse connections.

If you want to permit connections at some times, but prohibit them at others, choose **Lock out/Permit connections for times:** and then click the **Time Settings...** button to configure which times are allowed.

2 When you click the **Time Settings...** button, the **Lock out/ Permit connections** dialog appears.

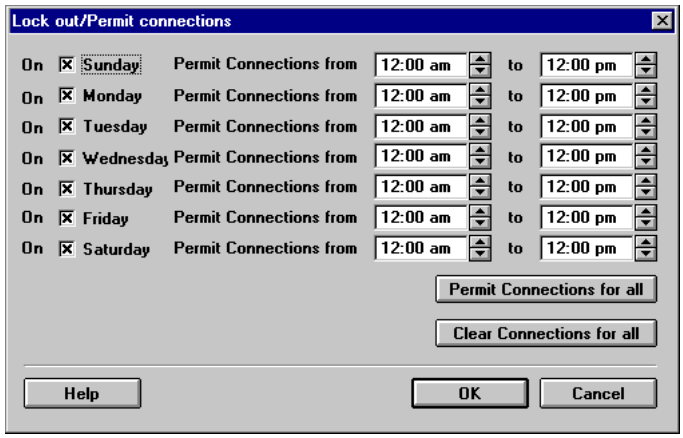


Fig. 368 Lock out/Permit connections Dialog

3 Check the boxes next to the days you wish to allow connections to nodes with this profile assigned and then select the time range when connections should be allowed on that day.

Note: 12:00 AM is midnight, and 12:00 PM is noon.

Clicking **Permit Connections for all** turns access on for all days and all times; clicking **Clear Connections for all** turns all days and times off.

4 Click **OK** to close the dialog and save the changes you have made or click **Cancel** to close the dialog without saving the changes.

▶ *To allow the node's user to control access*

The **Access Permission** group of controls allows you to specify what permission from the user of the node is required.

1 Choose **No permission required for remote access** and the user of a node will not be consulted before the Master connects.

2 Choose **Permission only requested from host user for access** and the user of the node will be asked for permission to connect. If the user refuses, the connection will not be made. If the user does not respond within the period you specify in the **Access automatically granted after** field, the connection will be made anyway.

3 Choose **Permission must be granted by host user for access** and the user must grant access within the period you specify in the **Host user must grant access within** field or the connection will not be allowed.

4 Click **OK** to close the dialog and save the changes you have made or click **Cancel** to close the dialog without saving the changes.

▶ *To require a password to connect*

You can choose to require users of the NETrc Master to enter a password before they can connect to the Host.

1. Open the **Host Access Settings** dialog.
2. Enter a password in the **Access Password** field. The user of the **NETrc** viewer will need to enter the password before being able to connect with the Host.

   Note that this password will be required *in addition* to any permission that the user of the node itself must grant. You may wish to use these two settings in combination for nodes which have sensitive information on them to ensure that only authorized users can view the node's contents.
3. Click **Done** to close the dialog and save the changes you have made, or click **Cancel** to close the dialog without saving changes.

Configuring Host Security Settings

If you are using NETrc to provide support to users of your enterprise network, you may at times make changes to users' machines that they should not see (your passwords, for example). The **Host Security Settings** dialog allows you to control what interaction users can have with the node while the NETrc Master is connected to it.

With the **Remote Host Setup** panel displayed, click the **Security Settings** button. The **Host Security Settings** dialog appears.

Fig. 369 Host Security Settings Dialog

▶ *To suppress the keyboard and mouse*

The controls in the **Suppress Host Keyboard / Mouse** group allow you to affect what control the user has over the node while the NETrc Master is connected. Suppressing the keyboard and mouse on the host prevents the user from conflicting with the user of the NETrc Master over control of the keyboard and mouse. On the other hand, when you allow the user to control the keyboard and mouse, you can watch as they reproduce a problem, then step in when needed to correct it. This approach is especially powerful if you can

speak with a user by phone while observing their computer use with NETrc.

1. Choose **Always suppress keyboard / mouse** to prevent all keyboard and mouse input from being accepted on the Host while the Master is controlling the node.
2. Choose **Allow keyboard / mouse to be suppressed** to allow suppression of the keyboard and mouse to be controlled by the settings in the **Master Setup** panel or by the settings in the NETrc viewer itself.
3. Choose **Never allow suppression of keyboard / mouse**, and the user will always be able to control the node, even when the NETrc viewer is also in control.
4. To close the dialog and save the changes you have made, click **Done**. To close the dialog without saving the changes, click **Cancel**.

▶ ***To blank the host display***

There are times when you may not want users of Hosts to see what is being done to their machines. When this is the case, you can choose to have the node's screen blank while the node is under control.

1. Choose **Always blank host display** and the host's screen will always be blanked when the NETrc Master connects to it.
2. Choose **Allow host display to be blanked** and display blanking will be controlled by the settings in the **Master Setup** panel or by the settings in the NETrc viewer itself.
3. Choose **Never allow blanking of host display** and the display will never blank.
4. To close the dialog and save the changes you have made, click **Done**. To close the dialog without saving the changes, click **Cancel**.

Note: Some video drivers do not support screen blanking. If you encounter difficulty with screen blanking on a particular node, try updating the video driver to the latest version for your card. That may correct the problem. If it does not, the card's driver may not allow blanking.

Configuring NETrc Licenses

NETrc licensing is unlike the licensing of the other NETinventory Console Snap-in Modules. For NETrc, licenses are for individual, installed copies of the NETrc Host software. You must have a license installed for every node with the Host software installed. In addition, licenses must be manually assigned from a central pool of available licenses to individual NETinventory Audit Servers before they can be used for nodes. If one Audit Server has a surplus of licenses, and another is out of licenses, you can manually move

them from one to another, but they will not be moved automatically.

When the default profile is set to an active profile that is something other than **None (Uninstall)**, no licenses are actually used until an audit successfully installs the NETrc Host software on the actual node. When you run a grid *before* the installation is complete, the desired profile will appear in the Node Manager and the status will be "Installation Pending." In this case no license has yet been used. After the installation has completed, a license will be in use.

The other case is when you assign a specific profile to a node. If you assign a specific profile to a node which does not have the NETrc Host software running, a license will immediately be allotted to the node, even though the Host software has not necessarily been installed yet.

In short, assigning a specific profile to a node allows you to allocate a license to a specific node; relying on the default profile to assign profiles to a node causes licenses to be doled out to nodes on a first come, first served basis.

Uninstall works much the same way. If you uninstall by setting the default profile to **None (Uninstall)**, the NETinventory Audit Agent will uninstall the host software from nodes using the default profile and return their license to the pool of available licenses on that Audit Server once the uninstall is complete. Nodes which have a specific profile assigned will not be uninstalled, and their licenses will not be returned to the pool.

To uninstall from nodes where you have assigned a specific profile and to return their license to the pool, assign the profile **None (Uninstall)** to the nodes or reassign them to use the default profile.

To assign licenses, choose the **NETrc License Page** icon in the NETrc setup dialog. The NETrc **Enterprise License Allocation** panel appears.

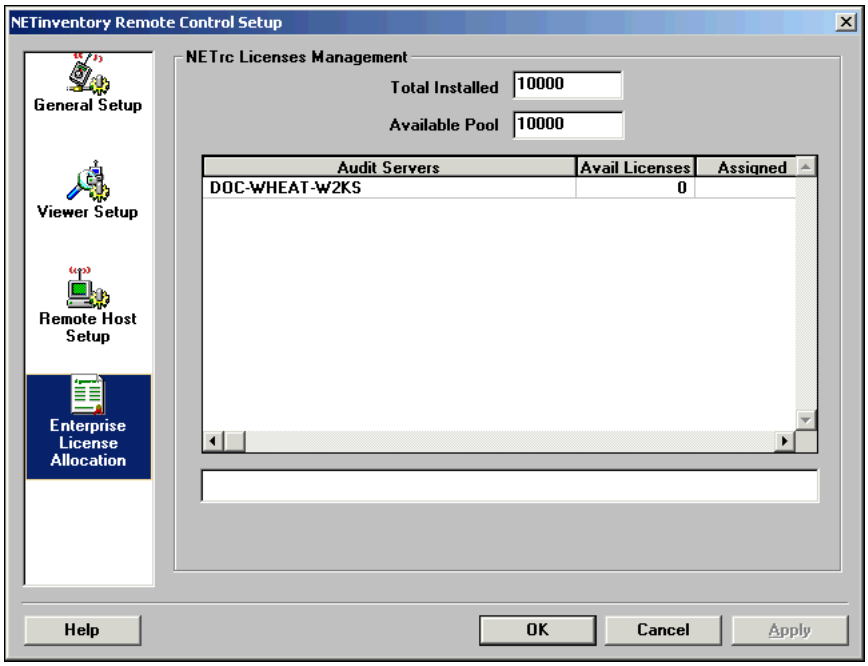


Fig. 370 NETrc Setup Dialog - Enterprise License Allocation Panel

This page allows you to see how the NETrc licenses you have installed on your enterprise are used and to reassign licenses as needed.

The **Total Installed** field lists the total number of NETrc licenses installed on your enterprise network. The **Available Pool** field lists the number of licenses of the total installed which have not yet been assigned to NETinventory Audit Servers. You cannot edit these numbers directly. To add more NETrc licenses to the total installed, use the NETinventory Console license manager. For more information on using the license manager, please see the *NETinventory Console User Guide*.

Below these two fields, all the Audit Servers on your enterprise network are listed by name. Alongside each server's name are two fields, **Avail Licenses** and **Assigned**. The **Assigned** field lists how many licenses have been assigned to the Audit Server from the **Total Installed** on your network. The **Avail Licenses** field provides the number of licenses assigned to the Audit Server minus the number of copies of the NETrc Host software which have been installed on nodes audited by that Audit Server.

To change the number of licenses on the Audit Server, click in the field and type the new number of licenses that should be assigned to the Audit Server. In order to lower the number, there must be available licenses on the Audit Server. Every license you delete from the **Assigned** field will be removed from the **Avail Licenses**

field for that server and returned to the **Available Pool** field for the entire enterprise network.

In order to raise the number of licenses assigned to a particular Audit Server, there must be licenses in the **Available Pool.** The sum of the number of licenses in the **Available Pool** and those **Assigned** to all the Audit Servers adds up to the **Total Installed**.

When a profile which allows remote control is no longer assigned to a node, that node's license is returned to the pool of available licenses on the node's Audit Server.

Removing the NETrc Host

There are three ways to remove the host software from a node. The first two are automatic and rely on the NETinventory Audit Agent to work. The second is manual and depends on the user of the node.

Removing Host Components Automatically

The simplest ways to remove the NETrc Host software let the NETinventory Audit Agent do so. If you assign the **None (Uninstall)** profile to a node using the NETinventory Node Manager, the Audit Agent will automatically remove the Host software the next time the node is audited. In addition, if you uncheck **Enable Remote Control for NETinventory Nodes?** in the **General Setup Panel** of the **NETrc Setup** dialog, NETrc will be removed from all nodes the next time they are audited.

To use the Node Manager, double-click the name of the node in any NETinventory Grid report. The NETinventory **Node Manager** window will appear, as shown in Fig. 371

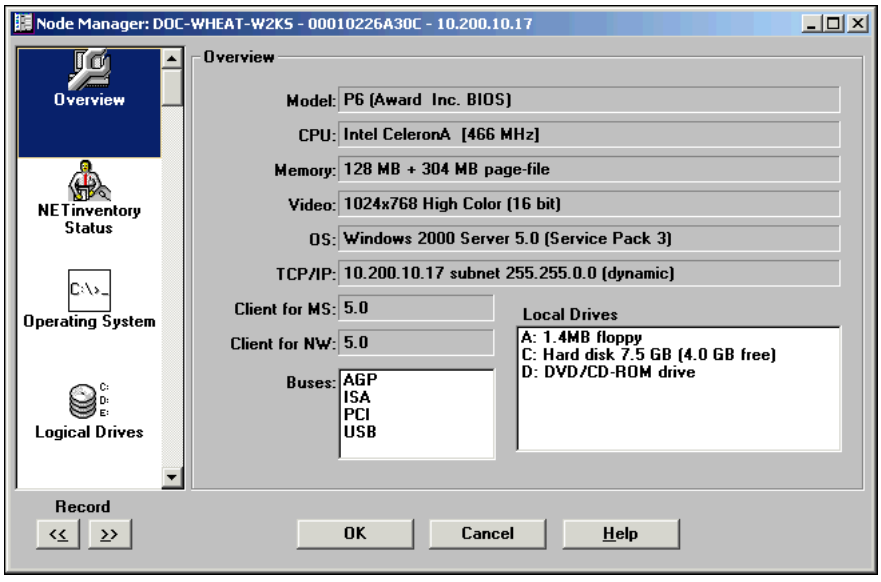


Fig. 371 NETinventory Node Manager - Overview Panel

Scroll through the list of available panels on the left side of the window and click the **NETrc** icon. The **NETrc Information** panel will appear, as shown in Fig. 372.

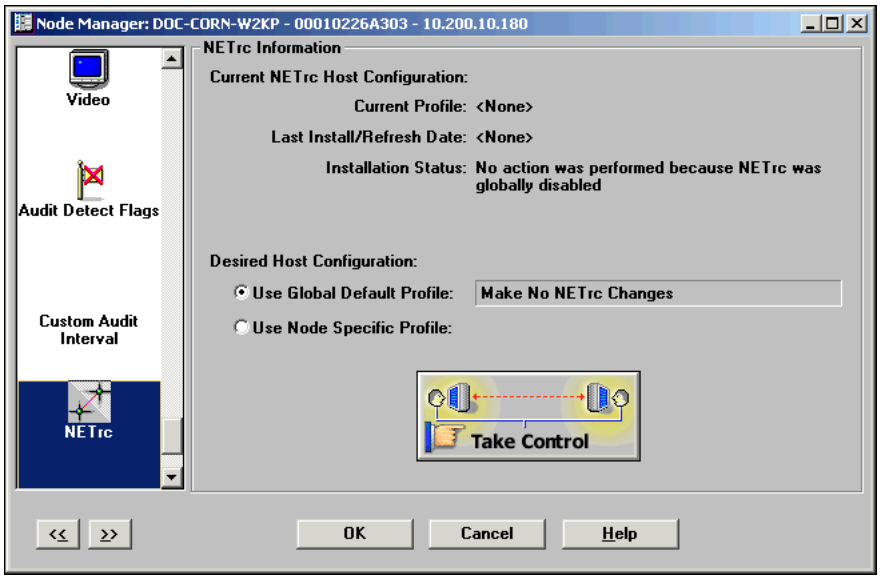


Fig. 372 NETinventory Node Manager - NETrc Information Panel

▶ ***To assign a specific profile to a node***

The NETrc panel shows the current NETrc status of the selected node, including the profile the node is currently using, the last date the profile was checked by the NETinventory Audit Agent, and the current status of the profile on the node.

1. To assign a specific profile to the node, click **Use Node Specific Profile**.
2. Choose the **None (Uninstall)** profile from the list of available profiles. The NETrc Host software will automatically be removed by the NETinventory Audit Agent the next time the node is audited after the update interval expires.
3. Click **OK** to close the window and save the changes you have made, or click **Cancel** to close the window without saving the changes.

Removing Host Components Manually

When setting up a profile, you can allow users to manually uninstall their host software, so that they can use the NETrc uninstaller themselves.

The simplest way to uninstall manually is to use the **Add/Remove Programs** control panel.

▶ ***To use the Add/Remove Programs control panel***

1. Open the Control Panel from the **Start** menu or by double-clicking the **My Computer** icon and then the **Control Panel** icon.

2 Double-click the **Add/Remove Programs** icon, as shown in Fig. 373.

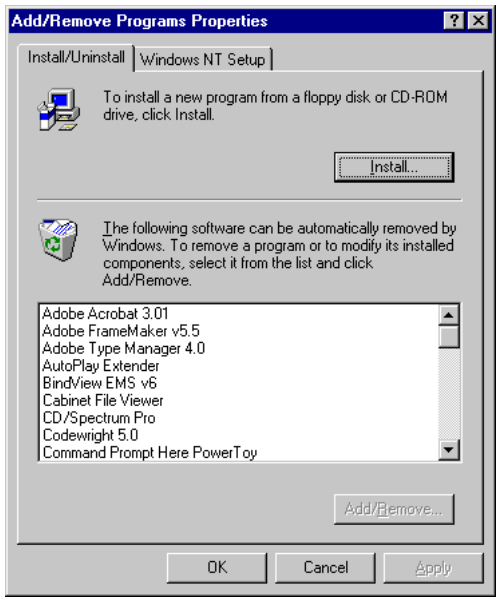


Fig. 373 Add/Remove Programs Dialog

3 Select the **NETrc Remote Control - Host** item, and then click **Add/Remove...**. You will be prompted to confirm that you really want to delete the Host software. If you click **Yes**, the software will be automatically removed. You may be prompted to restart your machine after the removal is complete. If so, you should go ahead and restart.

19 Using NETrc

In This Chapter

Taking Control with NETrc 378
Assigning a Profile to a Node 381
Using NETrc Master 381
Menu and Toolbar Commands 382
Remote Control 389
File Transfer 390
Remote Printing 394

Taking Control with NETrc

To take control of a node with the NETrc Host software installed, you use the NETinventory Node Manager. This means that to take control of a specific node, you must first run a NETinventory Grid report which contains the node. For more information on creating Grid Queries, please see Section 3, “NETinventory Console,” on page 279. For more information on NETinventory, please see Section 1, “NETinventory,” on page 19.

If you are using the NETinventory Console and are logged in using the preconfigured “BV Admin” account, you can use the “Node List” report that is at the top level of the Getting Started folder or the “Node List - NETrc Installation Status” report in the NETrc folder to get a convenient list of all available nodes.

▶ *To take control with ActiveAdmin*

You can take control of any node with NETrc installed using the ActiveAdmin® feature. To use ActiveAdmin to take control of a node, run any NETinventory grid, like the one shown in Fig. 374.

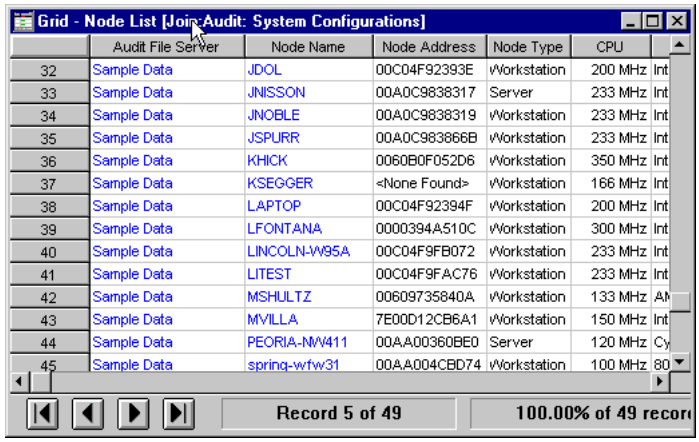


Fig. 374 NETinventory Grid

1 Click the node’s row number in the grid (at the extreme left of the grid) to select the node, as shown in Fig. 375.

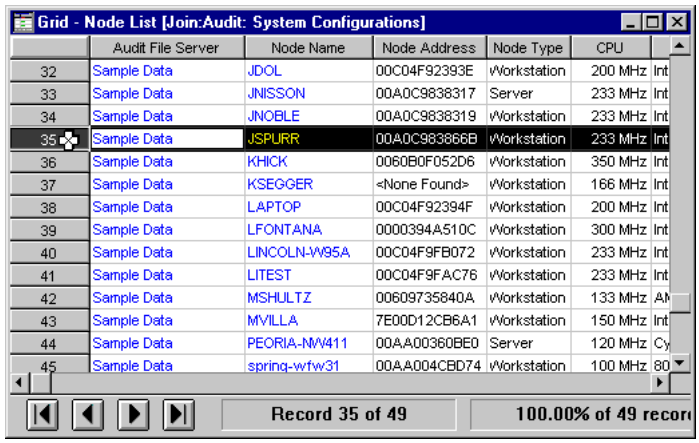


Fig. 375 Grid with Row Selected

2 Move the cursor over any field in the selected row and right-click to display the context-sensitive menu, as shown in Fig. 376.

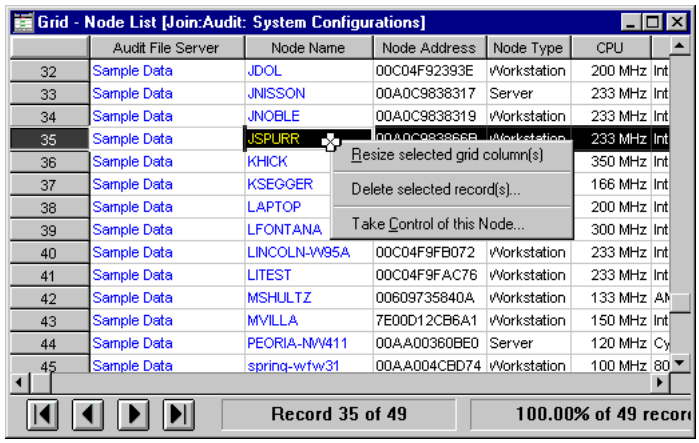


Fig. 376 NETinventory Context-Sensitive Menu

3 Select **Take Control of this Node** to take control of the selected node. The NETrc Master will run.

4 If the user of the node must be prompted for permission, or if the person taking control must enter a password to control the node, a password prompt appears.

5 The screen of the node under control will appear.

6 When you are finished controlling the node, click the NETrc Master's close box or double-click the System menu to close the NETrc Master and disconnect from the node.

▶ *To take control with the Node Manager*

To use the Node Manager, double-click the name of the node in any NETinventory Grid report. The NETinventory Node Manager window will appear, as shown in Fig. 377.

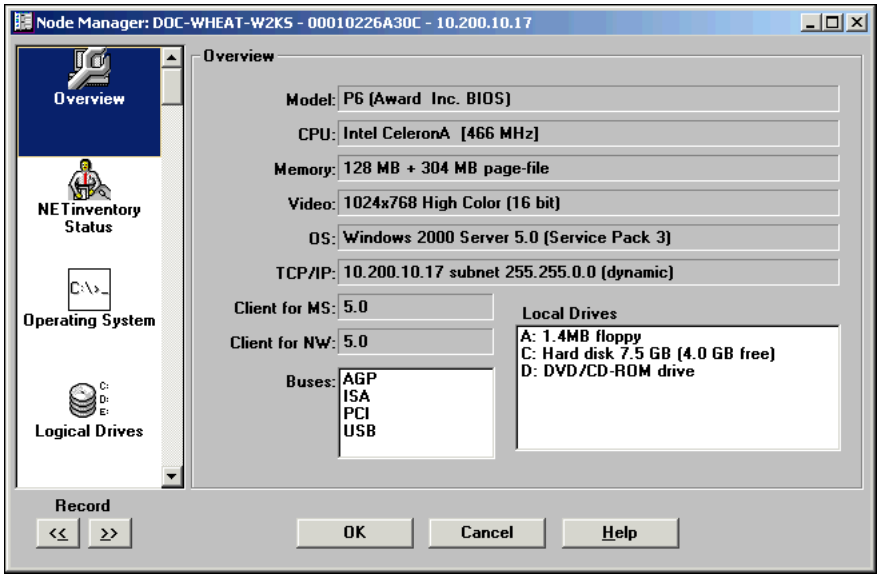


Fig. 377 NETinventory Node Manager - Overview Panel

Scroll through the list of available panels on the left side of the window and click the **NETrc** icon. The **NETrc Information** panel appears (Fig. 378).

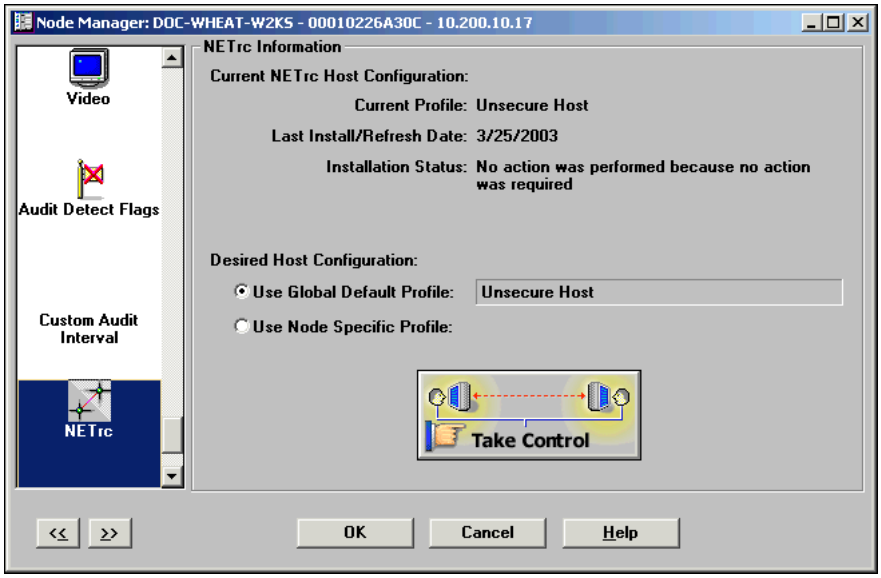


Fig. 378 NETinventory Node Manager - NETrc Information Panel

1 Click the **Take Control** button. The NETrc Master will run.

2 If the user of the node must be prompted for permission, or if the person taking control must enter a password to control the node, a password prompt appears.

3 The screen of the node under control will appear.

4 When you are finished controlling the node, click the NETrc Master's close box or double-click the System menu to close the NETrc Master and disconnect from the node.

Assigning a Profile to a Node

In addition to letting you take control of a node, this panel shows the current NETrc status of the selected node, including the profile the node is currently using, the last date the profile was checked by the NETinventory Audit Agent, and the current status of the profile on the node.

1 To assign a specific profile to the node, select **Use Node Specific Profile**.

2 Choose a profile to assign from the list of available profiles.

3 Click **OK** to close the window and save your changes, or click **Cancel** to close the window without saving the changes.

The NETinventory Audit Agent will update the profile on the node the next time the node is audited.

Removing the NETrc Host Software from a Node

You can use profiles to remove the NETrc Host software from a node you select. When you select the profile named **None (Uninstall)**, the NETinventory Audit Agent will remove the NETrc Host software and preferences from nodes on the enterprise network.

1 In the NETrc panel of the NETinventory Node Manager, click **Use Node Specific Profile**.

2 Choose the profile named **None (Uninstall)**.

3 Click **OK** to close the window and save the changes you have made, or click **Cancel** to close the window without saving the changes.

The NETinventory Audit Agent will uninstall the NETrc Host software from the node the next time the node is audited.

Using NETrc Master

A NETrc Master Connection Window is your view into the activity of the NETrc Host. Once you have established a connection with a Host, you can remotely control the host, transfer files or print remotely.

You can perform the activity of your choice by selecting the associated tab at the bottom of the Connection Window or by selecting one of the first three icons on the Toolbar.

Menu and Toolbar Commands

Although some of the commands that appear on the menu and Toolbar change according to which page of the Connection Window is active, many of them remain constant. Some of these correspond directly to equivalent commands on the NETrc Control Panel.

The following are menu commands which are always available on all pages of the Connection Window.

The Connection Menu

If you select the **Exit** command, you will be disconnected from the Host and the Connection Window will close. The icon on the Toolbar performs the same function if you are viewing the Remote Control tab. Otherwise, it just disconnects the File Transfer or Remote Printing connection and closes the tab, returning you to the Remote Control tab.

When you choose the **Properties** command, the Connection Properties dialog appears with information about the remote connection.

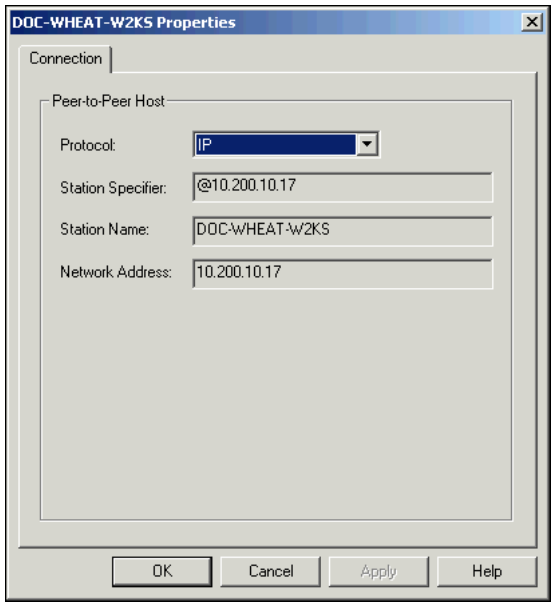


Fig. 379 Connection Properties Dialog

The **Disconnect** command immediately disconnects you from the remote host. You must choose which of the three possible sorts of connections you want discontinued: Remote Control, File Transfer, or Remote Printing. Only the options corresponding to the kinds of connections you have established already will appear on this menu. If you choose Remote Control, the Connection Window will close.

If you select **Add to Favorites**, the current remote Host will be added to the list of Favorite Hosts.

You may occasionally need to reboot a Host computer that is under your control. The **Reboot Host** command allows you to reboot Host computers. After it has done so, you can reconnect to it again.

To reboot remote hosts running later versions of Windows, you can select the **Start > Shut Down** command on the remote Host.

The Edit Menu

The **Edit** menu relates to interaction with the user interface of the remote host.

If you select the **Send Keystroke** command, you will be able to send one of a number of special key combinations to the Host, as though it were entered on the keyboard of the remote Host.

There are times when it is useful to make a copy of some selection of text or graphics from the Connection Window and place the selection in the Master's clipboard. The following features will allow you to copy and paste material from the remote Host into a document on the local computer.

Copying from the Host Display

The **Copy Text** command, equivalent to the  icon on the Toolbar, allows you to copy text from the Connection Window (displaying the view of the remote Host computer) into the system clipboard of the Master computer if the Host screen is in Text Mode.

1. After you select this command, the mouse cursor will change shape to an "I-beam" text selection cursor.
2. Move to the beginning position of the selection you wish to copy and click and drag with the left mouse button to select the text you wish to copy.
3. Release the mouse button and the Copy Text mode will be completed and the text will be copied to your clipboard.

The **Copy Graphics** command, equivalent to the  icon on the Toolbar, allows you to copy a rectangle from the Connection Window (which displays the view of the remote Host) into the system clipboard of the Master computer.

1. After you select this command, the mouse will become a top-corner angle icon  to indicate that you will be placing the first anchor of the selection.
2. Move to the top-left corner of the rectangle you wish to copy and click and drag with the left mouse button to select the text you wish to copy.
3. Release the mouse button and the Copy Graphics mode will be completed and the graphics will be copied to your clipboard.

The View Menu

The **View** menu allows you to specify what elements of the Control Panel are to be visible or hidden and how to organize the Host icons in each display. The menu is organized into three different sets of

options: connection window elements, connection window tabs, and graphic rendering options.

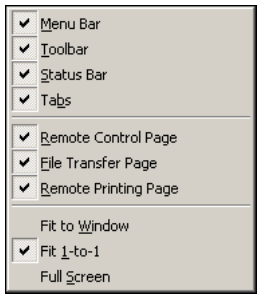


Fig. 380 NETrc View Menu

Connection Window Elements

The first four commands on the **View** menu hide or show the Menu Bar, Toolbar, Status Bar, or Tab Bar on the Control Panel.

Connection Window Tabs

The middle three selections on the **View** menu form a list of the different tabs that can appear in the NETrc Control Panel.

Each of these items can be selected or unselected from this menu. If the item is selected, the corresponding tab will appear in the Tab Bar and the corresponding page will appear when the tab is selected. If the item is unselected, neither the tab nor the page will be available.

Graphic Rendering Options

The last three commands on the View menu—**Fit to Window**, **Fit 1-to-1**, and **Full Screen**—allow you to change the way that the display of the remote host is rendered in the Connection Window.

These three options appear as menu commands and are also available using three icons on the Toolbar:

Fig. 381 NETrc Graphic Rendering Options Toolbar Buttons

- You can fit the display of the Host into a Connection Window or allow the entire Master screen to display the Host. The first icon toggles between these two display modes. The **Full screen** command (which is only available when the remote Host screen is displayed in a window) causes your entire Master computer screen to be taken over by the display of the screen of the Host.

  If you choose for your entire screen to display the Host screen, a floating window with these three icons appears. The buttons in the window allow you to make changes to the current display option. The buttons allow you to toggle the display back into a Connection Window, displaying any other windows.

- The second icon in this set corresponds to the **Fit 1-to-1** command, and specifies that one pixel of the Host will correspond to exactly one pixel on the display of the Master computer. That is to say, no scaling of the image will be done.

If this display mode is chosen and the pixel dimensions of the Host differ from that of the Master computer, the resulting display will make this discrepancy obvious. If the pixel dimensions of the Host's display are larger than the Connection Window in which the Host is displayed, or larger than the screen of the Master computer if Full screen mode is operative, scroll bars will appear to allow you to access the rest of the Host's screen.

- The third icon in this set corresponds to the **Fit to Window** command, and scales the image of the Host's display to fit the display of the Master computer.

  If you are not in Full screen mode but are viewing the screen of the Host through a Connection Window, the entire screen of the Host is scaled to fit in the Connection Window.

If you hold down the **[CTRL]** key while you resize a Connection Window—regardless of which of these three display options you have chosen—the aspect ratio of the host's display will be retained.

The Options Menu

The **Options** menu allows you to control NETrc Master settings. The settings you control include how keystrokes on the Master are mapped to the Host, Connection Window settings, and whether the Master and Host can control the machine or just view its operation.

Keyboard Mapping Dialog

If you select the **Keyboard Mapping** command, the Keyboard Mapping dialog will appear. It allows you to define the key combinations entered into the Master computer, to be translated into special key combinations on the Host.

There are a number of key combinations that perform special functions on a computer. Examples include Control-Alt Delete, Alt-Tab. The special key combinations have meaning on the Master computer, but they also need to be sent to the Host.

The computer on which NETrc runs can use the Keyboard Mapping dialog to define new key combinations for these keystrokes. This allows the usual special key combinations for local control with new combinations for the remote host.

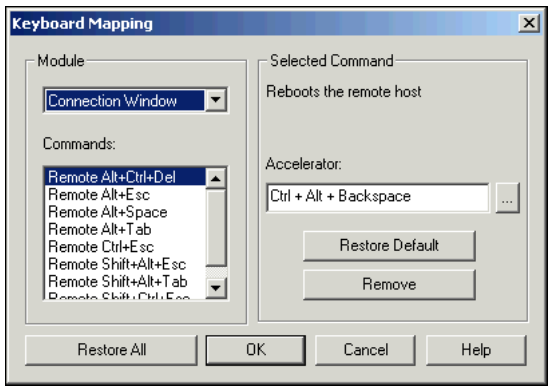


Fig. 382 Keyboard Mapping Dialog

▶ *To map a keystroke on the Master to a special keystroke on the Host*

1. Key combinations have been divided into two sets, called *Modules,* one dealing with the keys used specifically to control the connection on the Host end (**Connection Control**), while the other set contains key combinations that are used and recognized by application software in general (**Global Commands**). Select the module you wish to change keys for from the **Module** drop-down list.
2. Select the special keystroke from the **Command** list.
3. When you press the keystroke shown in the **Accelerator** field on the Master, the special keystroke you selected will be sent to the remote Host.
4. To change the keystroke, click the browse (**...**) button associated with the key it triggers on the remote Host (shown in the **Commands** field), and click the browse (**...**) button. The **Special Hot Key** dialog will appear.

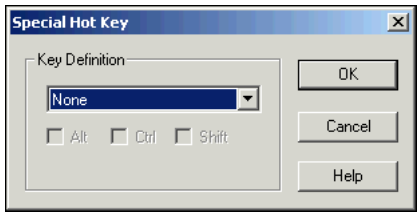


Fig. 383 Special Hot Key Dialog

5. Choose the keystroke to use from the drop-down list and select the check boxes to add modifier keys. If you choose **None**, no keystroke will send that special key to the remote Host. Click **OK** to close the dialog and save your changes. Clicking the **Remove** button in the **Keyboard Mapping** dialog also deletes the key combination.
6. To set the key combination to the default value, click the **Restore Default** button in the **Keyboard Mapping** dialog.

To restore all key combinations to their default value, click **Restore All** in the **Keyboard Mapping** dialog.

Connection Window Settings

If you choose **Connection Window Settings** from the **Options** menu, or click the  icon on the Toolbar the **Connection Window Settings** dialog appears.

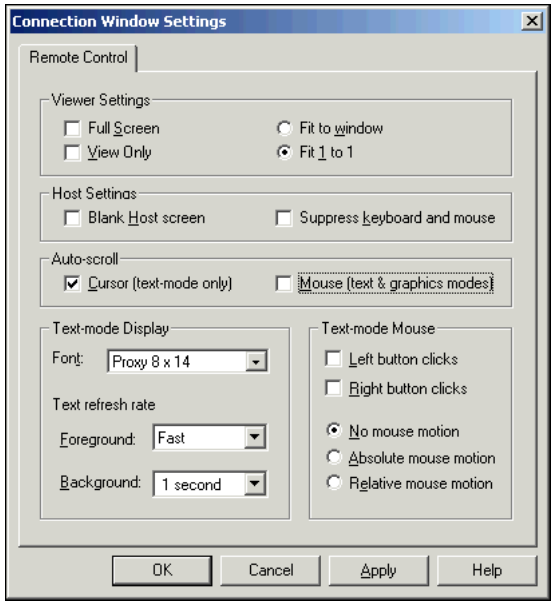


Fig. 384 Connection Window Settings Dialog

Viewer Settings

These controls allow you to specify how the remote computer is displayed by default when you connect to it.

- If **Full Screen** is selected, then the screen of the remote computer will fill the entire screen of the master computer.
- If **View only** is selected, then the Master will not take control of the remote Host but only view the display.
- If the **Fit to window** button is selected, then the display of the remote computer is scaled to fit into the available space of the display of the master.
- If the **Fit 1 to 1** button is selected, then one pixel on the remote display always corresponds to one pixel on the master computer, regardless of any discrepancies of display sizes on the two differing display areas.

Host Settings

The **Host Settings** group allows you to specify what should happen from the perspective of the user at the remote Host when the Master establishes a connection.

- If **Blank Host screen** is selected, then the display on the remote Host will be blanked out as soon as the Master connects to it.

Note: Screen blanking is only supported on Hosts running Windows 98, 98 SE, and 98 ME. It is additionally possible for the user at the remote Host to override the request to blank the screen, and it is not possible for the user at the Master to know whether the remote screen is actually blank or not.

- If **Suppress keyboard and mouse** is selected, then the remote Host will be asked to disable the mouse and keyboard. If this request is granted, the user at the remote Host will be shut out from operating the computer while the Master is connected to it and maintains exclusive control.

Note: It is possible for the user at the remote Host to override the request to suppress the keyboard and mouse, and it is not possible for the user at the Master to know whether the input devices are disabled.

Auto-scroll

The **Auto-scroll** group specifies whether or not you want the window to scroll when the cursor (for text-only screens) or mouse (on graphical user interfaces) reaches a boundary.

- If **Cursor (text-mode only)** is selected, then the text display will automatically scroll as soon as the cursor comes to an edge.
- If **Mouse (text & graphics mode)** is selected, then the graphical user interface will automatically scroll as soon as the mouse comes to an edge.

Text Mode Display

The **Text-mode Display** group deals specifically with displaying Hosts with textual rather than graphical screens.

- The **Font** drop-down list allows you to select the typeface and type size that is used to display the remote Host's screen.

  By varying the font, you can increase or decrease the size of the Host computer's screen as displayed in the Connection Window.

  The fonts in the list are shown previewed as they will appear. The names of the fonts are composed of a typeface name and a size. The text fonts called 'NETrc' are fonts that came with this software package. Fonts with other typeface names are other Windows fonts that are also suitable for text display.

The **Text refresh rate** settings allow you to specify the rate at which changes in the text display are updated on your screen. This allows you to find a suitable compromise between "refresh rate" and the amount of computation time and network resources spent in updating the text display.

- The **Foreground** setting applies whenever the Master window is active.
- The **Background** setting applies whenever the Master window is not active.

The refresh rate of the foreground is the more important of the two, since it determines the speed of response of the window that you are actually using. If you set a slower background rate, the window will update more slowly whenever you switch out of it, but will resume speed as soon as you re-activate it.

When setting a refresh rate, you can select from a list of refresh rates ranging from **Fast** to **10 seconds** (the slowest setting).

You should consider slower refresh rates if:

- You are running multiple NETrc Master windows, all of which are updating their displays at the same time.
- Your network is loaded heavily with communications traffic.

Text-mode Mouse

The **Text-mode Mouse** group controls how information from the mouse on the Master computer is transmitted to a remote Host in Text Mode.

If you select **Left button clicks** or **Right button clicks**, clicks of that mouse button will be transmitted to the Host.

There are three different ways in which the motion of the mouse on the Master can be interpreted and sent to the remote Host:

- If you select **No motion**, no mouse motion will be transmitted.
- If you select **Absolute motion**, an absolute mouse position will be transmitted (i.e., the coordinates of a precise location on the screen).
- If you select **Relative motion**, the differential motion of the mouse (number of pixels up, down, left, or right from current position) will be transmitted.

The Goto Menu

There are three commands on the Goto menu which allow you to choose between the three different functions—and associated displays—of the Connection Window: **Remote Control** page, **File Transfer** page, and **Remote Printing** page.

Remote Control

The **Remote Control** page of the Connection Window allows you to view and operate the remote Host just as though you were the local user. You can choose to take control of the mouse and keyboard, or you can watch without interrupting the local user.

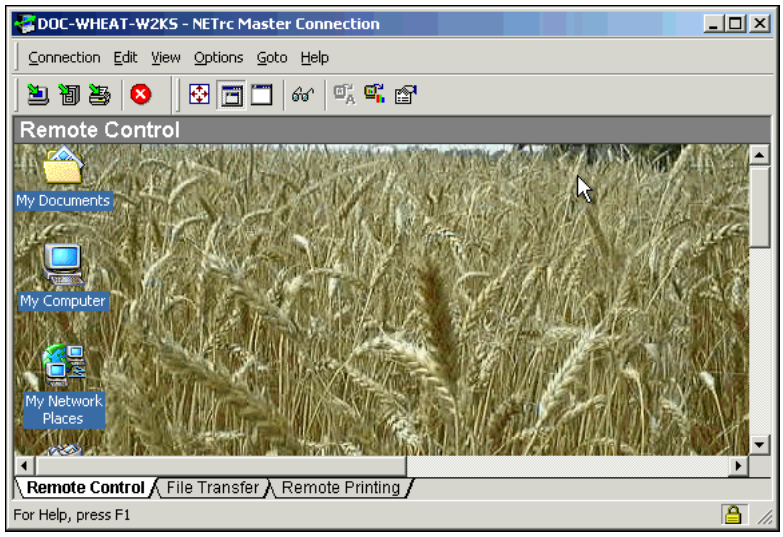


Fig. 385 NETrc Master - Remote Control Tab

Controlling the Remote Host

When you select a Connection Window (so that it is the active window and has the focus on your desktop) your input devices—keyboard and mouse—can be used to control the remote Host just as if they were connected directly to that computer.

Operating the Mouse

Remote mouse operation can be confusing at first. Keep in mind that the mouse at your Master computer now does double-duty: it allows you to operate your local Windows session, and it also allows you to operate the remote Host computer. The division of duties is as follows:

- While the mouse is inside a Connection Window, the mouse is entirely "remote" and all movements and clicks are transmitted to the Host.
- While the mouse is anywhere else (e.g. in the floating window that appears if you are in Full Screen rendering mode), the mouse is entirely "local" and any mouse operation affects only your local Windows session or the Connection Window itself.

Operating the Keyboard

As a rule, while the cursor is positioned in the Connection Window, NETrc transmits normal keystrokes to the remote Host. Special key combinations, however, are interpreted according to the values that you specified in the Keyboard Mapping dialog. *See "Keyboard Mapping Dialog" on page 385*.

The rule as to which keystrokes are kept and which are sent while the cursor is within a Connection Window is as follows:

1. If the keystroke is listed as the **Accelerator** for a key mapping, the equivalent remote keystroke is passed onto the Host.
2. If the keystroke is a special key combination but not listed as the **Accelerator** for any defined key, it remains at the Master computer.
3. All other keystrokes are passed onto the Host.

Note: If you want a special key combination to be passed onto the Host as is, it will have to appear as its own Accelerator on the Keyboard Mapping dialog.

File Transfer

The File Transfer page of the Connection Window allows you to transfer files between the Master computer and the remote Host, and to perform other file maintenance tasks on the Host.

When you select the File Transfer page a number of extra commands appear in the menus and a number of additional icons appear in the Toolbar.

The display is split into four adjustable panes:

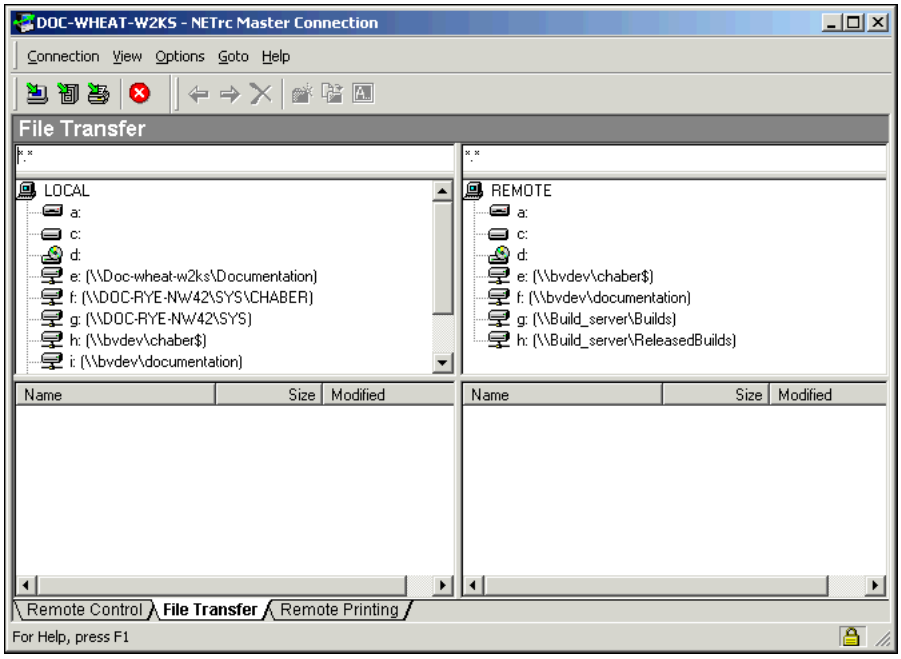


Fig. 386 NETrc Master - File Transfer Tab

- By default, the local (Master) computer is on the left and the remote (Host) computer is on the right.
- The top panels display the folder hierarchies in the computer associated with that side.
- The bottom panels show the files in any folder that you have opened by double-clicking it in the corresponding top panel.
- A text field at the top of the page, one for the left side and another for the right, indicates the full pathname of the currently open or selected folder.

You can easily change the layout of this display and what files are shown in them:

- Adjust the amount of screen space given to each side of a panel pair by clicking and dragging the boundary lines between them.
- The default pane configuration corresponds to the **View > View Local <--> Remote** command. This allows you to see the files on the local (Master) computer on the left side of the display and the files on the remote (Host) computer on the right side of the display.
- You can specify that both left and right sides show different folders of the remote Host by selecting the **View Remote <--> Remote** command from the **View** menu. This allows you to split the display between two file areas of the remote (Host) computer, which could be useful for moving or manipulating files on the host.

Displaying File Information

Commands are added to the **View** menu to allow you to configure the display of file lists in the window. These commands determine the way in which both file lists are configured.

- If a check mark appears next to the **View File Attributes** command, an extra column in the file display appears that provides the file attributes. Selecting this command toggles the state of this option and the check mark.
- If a check mark appears next to the **View Hidden & System Files** command, all of the hidden and system files in the directories are displayed in the file lists. Selecting this command toggles the state of this option and the check mark.
- If you select the **Sort files by** command, you will be able to choose whether the files in both of the file lists are sorted by name, size, date, or attribute. You can sort the files by selecting one of the column titles (**Name**, **Size**, **Modified**, or **Attributes**).

  If you select one of the column titles, all of the files on that side of the display will be sorted according to their values for that column.

  For example, if you select the **Name** column on the left side, all of the files on the left side will be arranged in alphabetical order according to their name, regardless of how the right side is displayed.
- If you select the **Refresh** command, the current directory will be reread from the remote Host and redisplayed.

Selecting Files and Folders

The top panels display the folder hierarchy, but only reveal the contents of the nodes of the tree that you explicitly open. No files appear in the top panels, nor do any folders appear in any bottom panels.

You must select a drive, folder, or one or more files before you can perform most File Transfer operations.

When you initially open a computer, drive or folder by double-clicking its icon (or by selecting it and then choosing the **List Directory** command from the pop-up menu), you will see a list of all of the folders (or devices) that it contains.

Fig. 387 Folder Tree

If you double-click one of these folders, you hide the other folders in the hierarchy tree, effectively creating a path through this particular folder. Any folders within this folder will appear in the top

panel, revealing a further level of nesting of the file directory. Any files in the folder will appear in the bottom panel.

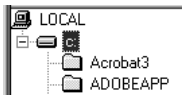


Fig. 388 Folder Tree - Expanded

The folder will then appear with a small box next to it at a joint which connects it to the hierarchy tree. The minus sign (-) appears, indicating that the folder is open. If you select the joint-box, the internal folders will be hidden and the plus sign (+) appears.

Fig. 389 Folder Tree - Collapsed

You can display the files within any folder by selecting the folder in the top panel and choosing the **List Directory** command from the pop-up menu.

You can also control the current selection with the keyboard. The up and down arrows move the current selection within the current pane, while the **ENTER** key opens the current directory if its contents are hidden (i.e., if its joint-box is marked with a '+'). The **Tab** key moves the current selection to the next panel. The **Backspace** key moves the current selection to the parent folder in the hierarchy tree.

If you begin spelling the name of any of the files or folders (depending on which pane contains the current selection), that item will become the current selection.

Select a file in one of the lower panels by selecting its name. This may enable or disable menu commands and Toolbar icons. You may select multiple files by using **Ctrl+Click** to select a series of non-contiguous files. Or you may select one anchor point and select the other end of the contiguous selection with **Shift+Click**.

Manipulating Files and Folders

The icons on the Toolbar allow you to manipulate files in various ways, whether copying or moving files from one computer to the other, deleting files, renaming files, or creating new directories. Each of these has an equivalent command on the popup menu that appears when you right-click.

When you select a file from one of the file lists, the following icons will be enabled and allow you to perform the following actions:

- If you select one of the blue arrows, the currently selected file will be copied into the directory on the opposite side.

  When a file in the left half is selected, for example, the right-pointing blue arrow  will become enabled, signalling that the file can be copied into the directory on the right side. (This can correspond to either **Get** or **Put** commands on the popup menu,

depending on whether it is going to or from the Master computer.)

- If you select the delete icon  (corresponding to the **Delete** command on the popup menu), the currently selected file will be deleted.
- If you select the create directory icon  (corresponding to the **Create Directory** command on the popup menu), a new folder in the currently selected directory will be created.
- If you select the move icon  (corresponding to the **Move** command on the popup menu), the currently selected file will be moved from its current location to another location on the same computer. You will be prompted by a dialog for the new location.
- If you select the rename icon  (corresponding to the **Rename** command on the popup menu), you will be able to give the currently selected file or folder a different name.

Remote Printing

The Remote Printing page of the Connection Window is part of the underlying program which allows NETrc communication. Remote Printing is not supported in NETrc.

A Uninstalling NETinventory

In This Appendix

Uninstalling the Servers 396
Uninstalling NETinventory-RMS 399
Uninstalling the NETinventory Console 399

Overview

If you choose to remove NETinventory Console from a workstation, you must use the tools provided. This chapter guides you through removing the NETinventory Console.

Uninstalling the Servers

This chapter describes the process of removing the NETinventory software from the servers on your Enterprise Network.

Removing the NETinventory SQL Database

There are two ways to delete the NETinventory SQL Database. You can use the NETinventory SQL Configuration Wizard to delete the database, or you can use the administration tools that accompany your SQL database to delete the NETinventory database. The steps to delete the database using the built-in tools depend on the SQL server you are using. The SQL database created is named `NI_<MASTER_SERVER_NAME>`.

▶ ***To use the NETinventory SQL Configuration Wizard to delete the SQL database***

1. Start the NETinventory Console and open the **Master Server Settings** panel.
2. Click **SQL Settings**.The **NETinventory SQL Database Configuration Wizard** Welcome page appears.

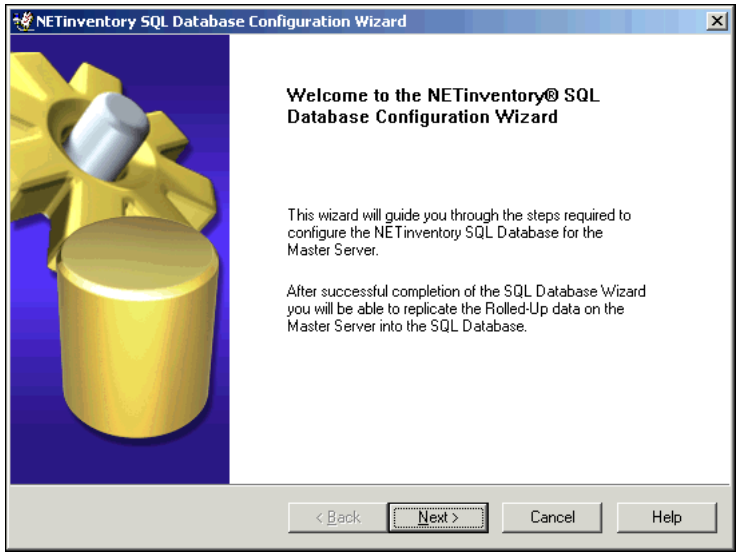


Fig. 390NETinventory SQL Database Configuration Wizard

3 Click **Next**. The **Select Operation** panel appears.

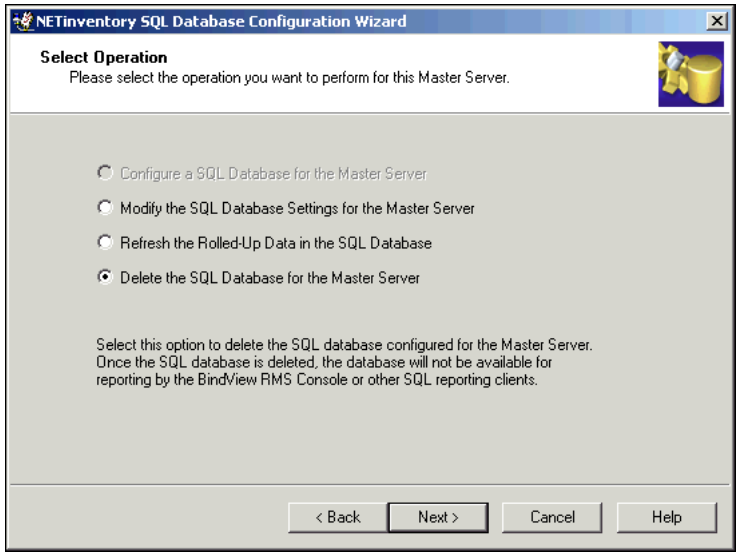


Fig. 391 Select Operation Panel

4 Choose **Delete the SQL Database for the Master Server**. Click **Next**. The **Summary** panel appears.

5 Click **Next**. The **Completing NETinventory SQL Database Configuration Wizard** panel appears. Click **Finish** to disable SQL database rollup and delete the existing database.

6 Exit the NETinventory Console.

Uninstalling Login Servers

The NETinventory **Server Setup** section helps you to automatically remove Login Servers.

▶ ***To remove Login Servers***

1 Choose **NETinventory Setup.**

2 Click **Server Setup**.

3 Select the **Login Server Settings** panel.

4 Select all of your Login Servers.

5 Click **Remove** and follow the prompts.

For more complete information about removing Login Servers, see the *NETinventory User Guide*.

Uninstalling Audit Servers

The NETinventory **Server Setup** section helps you to automatically remove Audit Servers.

▶ ***To remove Audit Servers***

1 Choose **NETinventory Setup**.

2 Click **Server Setup**.

3 Select the **Audit Server Settings** panel.

4 Select all of your Audit Servers.

5 Click **Remove** and follow the prompts.

For more complete information about removing Audit Servers, please see the *NETinventory User Guide*. On each Audit Server, you should also manually delete the NETinventory Service Manager Control Panel file. For information on deleting it, please see "Removing the NETinventory Service Manager Control Panel" on page 398.

Uninstalling the Master Server

Unlike the other two server types, there is no automatic utility to remove the Master Server.

▶ ***To remove the Master Server***

1 Open the NETinventory Service Manager Control Panel.

2 Click the **Stop Service** button on both the Master Server and Database Engine panels. Once the services have been stopped, close the Service Manager.

3 Open a Command Prompt dialog and navigate to the `bvems\services\` directory in the share where you installed the NETinventory files. Normally, this is directly in the `c:\winnt` directory, but you may have chosen another location. If you are having trouble locating the file, try finding the BVMASTER.EXE file.

4 Once you have located the proper directory, type
`install remove`
at the Command Prompt and press Enter. The install script will undo the changes it makes when installing and then exit.

5 Delete the entire BVEMS directory and all of the files it contains.

You should also manually delete the NETinventory Service Manager Control Panel file. For information on deleting the Control Panel, please see "Removing the NETinventory Service Manager Control Panel."

Removing the NETinventory Service Manager Control Panel

Once you have deleted your Master and Audit Server software from a machine, you can manually delete the NETinventory Service Manager Control Panel. To delete the Control Panel, use the Windows Explorer, the Command Prompt, or any other method to delete these files:

```
\winnt\system32\ni.cpl

\winnt\system32\nismhelp.cnt

\winnt\system32\nismhelp.hlp
```

Uninstalling NETinventory-RMS

The NETinventory snap-in for the BindView RMS Console is removed using the Windows Add/Remove Programs control panel. It is removed separately from the BindView RMS Console and Information Server. See the *BindView RMS Console and Information Server User Guide* for information on removing the BindView RMS Console.

▶ ***To remove NETinventory-RMS***

1. Open the **Add/Remove Programs** control panel.
2. Select **BindView NETinventory RMS Snapin**.
3. Click **Change/Remove**.
4. You will be prompted to confirm that you want to remove the snap-in and all of its components. Click **Yes**. NETinventory-RMS will be removed.
5. A status dialog appears while the Uninstall wizard removes NETinventory-RMS. Once the uninstall process is complete, a message appears underneath the progress bar. Click **OK** to exit the Uninstall wizard.

Uninstalling the NETinventory Console

Use the **Add/Remove Programs** icon in the Windows Control Panel to remove the NETinventory Console

1. Open the **Add/Remove Programs** control panel.
2. Select NETinventory Console v8.00 and click **Change/Remove**. The Confirm File Deletion dialog appears.

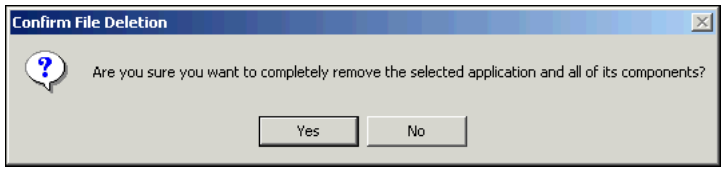


Fig. 392 Confirm File Deletion Dialog

3. A status dialog appears while the Uninstall wizard removes the NETinventory Console. Once the uninstall process is complete, a message appears at the bottom of the dialog. Click **OK** to exit the Uninstall wizard.

Index

.COM
File Tracking, 163
.EXE files
File Tracking, 163

A

accessing
Graph Setup from a graph item, 289, 323
page setup, 316
accessing data
export settings, 264
Accessing Sample Data, 48
Account Configuration, 156
Accounts
Setting Up on a Server, 156
ActiveAdmin, 378 – 379
Add to Favorites command, 382
adding
a legend to a graph, 326
a new user account, 338
axis labels to a graph, 326
data labels to a graph, 327
fields, 246
filters, 247 – 249
licenses, 346
scope, 250
sort fields, 249
Administrative Account, 156
Alerts
Accessing with Node Manager, 202
Acknowledging, 202
Actions, 68
Defaults, 88
Defined, 66
Deleting, 203
Device Driver, 82
File Audit, 74
Managing, 201
Software Detection, 70
String Search, 77
System Configuration Detection, 67
Ancillary Files, 166
appending files
export files, 263
Architecture, 352
Assignment Rules
Audit Server, 151
Audit
Example, 28
Audit Agent, 166
Audit Server Assignment Rules, 151
Controlling Tests, 210
Creating Standalone, 92
Defined, 26
Setting Up, 28
Uploading Standalone Data, 97
Using Standalone, 94, 95
Audit Detect Flags, 210
Audit Restrictions, 137
Audit Server
and TCP/IP, 136
As Dispatch Server, 145
Assignment Rules, 151
Audit Restrictions, 137
Audit Server Assignment Rules, 151
Communications Protocol Settings, 136
Defined, 25
Performance Tuning Options, 138
Removing, 134
Requirements, 25
Restrictions, 137
Selecting all as Default Scope, 56
Setting Up, 125
Settings, 125
Site Definition, 149
Suggested number of nodes each, 25
TCP/IP Hostname, 136
Auditing Setup
Accessing, 61
Alert Actions, 68
Alert Defaults, 88
Alerts, 66
Configuring Prompts, 85
Configuring User Interaction, 83
Controlling the Agent Tests, 210
Custom Audit Interval, 212
Customizing Individual Nodes, 210
Default Hardware Assets, 65
Default Names for New Nodes, 62
Device Driver Alerts, 82
File Audit Alerts, 74
File Auditing, 72
Hardware Detect Flags, 65
Node Names, 62
Run Files, 90
Setting Files Detected As Software, 70

Software Detection, 69, 70
Special String Search Characters, 76
Standalone Auditing
Creating Agent, 92
Uploading Data, 97
Using Agent, 94
Using NetWare Agent, 95
String Searches, 74
System Configuration Alerts, 67
System Configuration Detection, 63
Virus Scanning, 90
Auto-scrolling, 388
axis labels for a graph, 326

B

baseline
creating, 258 – 259
options dialog, 259
overview, 257
requirement, 257
baselined dataset, 257
BindView RMS Console
Configuring, 231 – 236
BIOS
Identification String, 188
BIOS Identification, 160
BIOS Identification Panel, 186
Blanking Host screen, 387
BV Admin
modifying the desktops of other users, 338
User Administration, 338

C

calculations
adding to a report, 318
Category Information, 160
Category Information Panel, 175
changing
a password, 340
the graph dimensions, 325
the graph type, 325
the graph's title, 326
the X and Y axis fields, 325
chart format
histogram style, 276
labels, 277
legend, 277, 278
series style, 276
titles, 278
chart view
accessing the feature for, 276
Color displays, 355
combining like values for a graph, 326
compared dataset, 257
Configuring
BindView RMS Console, 231 – 236
NETinventory, 32
configuring
dynamic indexing, 252
Information Server
export settings, 265
Information Server export settings, 265
Connection Window Settings command, 387
Console
exporting from, 260
minimum system requirements, 228
post process command execution, 269
system requirements, 228
Console Components, 23, 352
Console Setup
Default Scope, 52
Enterprise Configuration, 48
Opening dialog, 46
Overview, 46
Reporting Configuration, 49
Copy Graphics command, 383
Copy Text command, 383
Custom Audit Interval, 212
Removing, 214
Setting, 212
Custom Software, 160, 163, 166
customizing
graphs, 323
reports, 316

D

Data
, 288
Data Format
defaults, 341, 343
Data Point tab, 327
Data Rollup
and the Master Server, 102
Data Source
defined, 287
display advanced option, 294
modifying, 294
selection example, 294
data source
adding to a query definition, 245
available fields of, 246
defined, 245
fields included in, 246
selecting for
query definition, 245
data storage
named scope, 252

Database Synchronization, 122
dataset
defined, 254
deleting, 257
retrieval time of, 250
saving to
query items, 257
viewing, 257
default
dynamic index settings, 252
post process commands, 268
Default Scope, 29, 52
and Enterprise Configuration, 52
Selecting All Audit Servers, 56
Setting, 56
defaults
Data Format, 343
desktop, 341 – 347
Page Setup, 342
Deleting Nodes, 192
delta dataset, 258 – 259
desktop, 338
modifying, 338
sharing information, 306
Device Driver
Alert Defaults, 88
Setting Alerts, 82
Dispatch Server
Defined, 145
Display Font
default overview, 341
viewing data on screen, 301
Display of Host, 387
DLL files, 166
Download File Options
Download Even If Target File Has Been Modified?, 208
Downloading File, 207, 208
Downloading Files, 206, 207, 208
Backup File, 207
Destination File, 206
duplicate key options, 297
dynamic indexing, 252

E

Effective Data Source, 48, 49
emailing export files, 263
Enterprise Configuration, 29, 48
Setting, 48
Environment Variable
Alert Defaults, 88
Exchange export destination, 263 – 264
Exchange server, 263
export file
appending files, 263
emailing, 263
Exchange mailbox destination, 263 – 264
format types, 261
text-based file type, 261
export settings
accessing, 264, 266
appending export files, 263
applying saved settings, 266
default, 265
email, 264
global default, 264, 265
hierarchy for default settings, 264
Information Server default, 264, 265
query binder default, 264 – 265
settings item, 266
sharing, 264
storage location, 264
user default, 264, 265
exporting
export formats, 333
grid data, 332, 333
managing, 333
options, 330
overview, 260
prerequisites, 261
to a disk file, 262
expression list, 249
External Programs, 90

F

Field Specification, 287, 295
category, 295
fields, 246
adding, 246
appearing in
chart, 276
available fields list, 246
list of, 246
File Auditing
Advanced Settings, 78
Alert Defaults, 88
Alerts, 74
Creating a New File Audit, 73, 80
Editing Audited Files, 205
Limiting, 78
Retrieving a String Value, 77
Saving Files, 205
Setting Up, 72
String Searches, 74
Viewing Audited Files, 205
File Download History, 209
File Management
Accessing, 204

Editing a File, 205
filter
adding to a query, 296
filter and sort criteria
adding to reports, 320
Filter Specification, 287
filter specification, 244
filter term, 247
adding, 248 – 249
grouping, 249
modifying, 249
removing, 249
Fit 1-to-1 command, 384
Fit to Window command, 385
Form Style Report Options, 319
formats for export files, 261
Full screen command, 384

G

global default
export settings, 264, 265
Graph, 289
adding a legend, 326
adding axis labels, 326
Advanced Options, 328
changing title, 326
creating, 294
customizing, 323
defined, 289
dimensions, 325
histogram vs. series, 326
Item Properties, 286
making better graphs, 328
options, 325 – 327
printing, 328
Setup, 284
accessing from a graph item, 289, 323
accessing from an open graph, 290, 323
adding data labels, 327
changing the X and Y axis fields, 325
combining like values, 326
Data Point tab, 327
histogram vs. series, 325
Layout tab, 326
plotting series graphs, 326
positioning data points, 327
resetting series options, 327
Type Tab, 324
titles, 326
type, 325
Grid, 288
change font, 317
change report margins, 317
creating, 294
data source, 294
definition, 288
display font, 301
exporting data from, 332
launching, 298
modifying, 300
reports, 316
grid, 254
grid toolbar, 256
grouping filter terms, 249

H

Hardware, 160
Detecting Configuration, 63
Product Information Panel, 181
Products Information, 160
User Interaction Prompts, 85
Hardware Assets
Default Records, 65
Deleting an Item, 201
Editing, 198
Viewing, 198
hierarchy for default settings
export, 264
histogram
chart, 276
versus series graphs, 326
historical dataset, 257
baselined dataset, 257, 258
compared dataset, 257, 258
delta dataset, 257
Host, 352
Allowing User to Control Access, 368
Configuring Profiles, 364 – 370
Controlling Access by Time, 367
Defined, 353
Removing, 373 – 375
Requiring a Password, 369
Security Settings, 369
Host Settings
Access Settings, 366
Blanking the Display, 370
Connection, 365
Install, 365
Keyboard and Mouse, 369
Profile Name, 365
Protocol Settings, 366
Security, 369

I

icons
dynamic index folder, 252

query binder, 245
Information Server
configuring with
export settings, 265
exporting from, 260
global default
export settings, 264, 265
minimum system requirements, 228
named scopes stored on, 252
post process command execution, 269
system requirements, 228
Installing NETinventory, 28, 32
Inventory Database, 159
BIOS Identification, 160
Category Information, 160
Custom Software, 160
Maintenance Type, 160
Manufacturer Information, 160
Master Software, 160
Setting Up, 160
Unknown Software, 160
Vendor Information, 160
Year 2000 Identification, 160
IP Protocol, 355
IPX Protocol, 355

K

Key combinations, 383

L

label
series chart, 277
LAN, 149
Layout tab, 326
legend, 277, 278
legend for a graph, 326
Licenses, 352, 370
licenses, 346
linking
datasets to query binders, 257
Log Size
Master Server, 124
Login Name
Server Account Configuration, 157
Login Scripts
NetWare, 139, 147
Windows NT, 43, 147
Login Server
Changing Settings, 140
Defined, 25
Login Scripts, 147
NetWare Login Scripts, 139
on Windows NT, 43
Removing, 148
Requirements, 25
Setting Up, 139, 141 – 146
Settings, 139
Site Definition, 149
Windows NT, 147

M

Maintenance Type, 160
Maintenance Types Panel, 184
managing licenses, 346
Managing User Configuration Files
Download File History, 209
Downloading a File to a Node, 206
File Contents, 205
Manufacturer Information, 160
Manufacturer Information Panel, 179
Master Server
Data Rollup, 102
Database Synchronization, 103, 122
Defined, 24, 32
Installing, 32 – 43
Maximum Log Size, 124
Moving, 112
Performance Tuning Options, 124
Preferences, 104
Requirements, 24
Rollup, 124
Scatter Login Server Synchronization, 124
Setting Up, 33, 102, 104
Settings, 102
Synchronization, 122
Synchronization Settings, 123
Upgrading, 112
Master Software, 160, 163
Microsoft SQL Server
export file, 261
modifying
desktops with BV Admin, 338
existing schedule, 306
existing user account, 339
export devices, 333
graph dimensions, 325
graph type, 325
graph's title, 326
licenses, 346
password, 340
the desktop
receiving a reference, 308
scanning for new references, 310
sending a reference, 308
the X and Y axis fields, 325
Moving Nodes, 192

N

named scope
- adding to query definition, 252, 253
- defined, 252
- linking to query definition, 252
- removing, 253

NETinventory
- and NETrc, 352
- Architecture, 22
- Audit Agent Defined, 26
- Audit Agents, 43, 147
- Audit Example, 28
- Audit Server, 25
- Console, 282
- Console Components, 23
- Console Setup, 46
- Installing, 28
- Login Server, 25
- Master Server, 24
- Master Server Defined, 32
- Multi Server Illustration, 27
- New Enterprise Installation, 32 – 43
- Nodes per Audit Server, 25
- Post-Installation Setup, 32
- Scoping, 29
- Setting Up, 28
  - Audit Server, 126 – 134
  - Master Server, 33
  - NT Login Server, 141 – 146
- Single Server Illustration, 27
- Using ActiveAdmin, 378 – 379
- Using Node Manager, 380 – 381
- Windows NT Login Server Login Scripts, 43, 147

See also Login Server

See also Master Server

NETinventory-RMS
- Configuring, 231 – 242

NETrc
- overview, 284
- Using Node Manager, 215

NetWare
- Auditing Servers, 95

New Enterprise Installation, 32

New Task List button, 267

Node Manager, 380 – 381
- Alerts, 201
- Alerts Defined, 66
- Assigning a Profile, 215, 374, 381
- Customizing Node Audits, 210
- Hardware Assets Information, 197 – 201
- Managing User Configuration Files, 204
- Moving or Deleting Nodes, 192
- NETrc, 215
- Node Comments, 193
- Opening, 190
- Setting New Node Names, 62
- Setting Node Name Variables, 87
- Software Inventory Information, 195 – 197
- Using to Remove the NETrc Host, 373

Nodes
- Moving or Deleting, 192

P

Page Setup
- defaults, 343

page setup, 283, 288
- accessing, 316
- defaults, 342

Panels
- Server Setup, 102

password
- changing, 340

Peer-to-peer connection, 353

Performance Tuning, 124

Personal folder, 253, 256

plotting series graphs, 326

positioning data points, 327

post process commands
- default, 268
- defined, 269
- query task defaults, 268

printing a graph, 328

Profile, 353
- Assigning to a Node, 215, 374, 381
- Setting Default, 358
- Setting Update Interval, 359

Prompts, Configuring, 85

Properties command, 382

Q

Query, 283, 286
- adding a filter, 296
- data source, 294
- defined, 286, 287
- defining Scope, 298
- field specification, 287, 295
- saving example, 298
- Scope, 29, 288
- sort specification, 288, 297
- what is a query?, 286

query
- accessing the feature, 245
- components, 244
- grid toolbar, 256
- reducing the processing time of, 250
- results, 255

running, 254
Query Binder
accessing, 253
default export settings, 265
linking datasets to, 257
saving, 253
Query Builder
filter specification, 287
query definition
adding
filter, 247
scope, 250
data source included in, 245
resource objects selected in, 245, 250
scope, 250
query items, sharing, 264
Query Options dialog
running queries, 255
saving query binders, 254
query task
halting, 257
reduce processing time, 250
stop processing, 257

R

record
displayed on
histogram chart, 276
series chart, 276
references
receiving, 308
scanning for new references, 310
sending, 308
Why use references, 307
Refresh rate, 388
Remote host, 353
Remotely Controlling a Node, 378 – 381
Removing NETrc, 373 – 375
report, 255
author and date information, 320
calculations to a report, 318
change font, 317
change margins, 317
choose output style, 317
customizing, 316
filter and sort information, 320
fonts, 321, 322
footer, 322
Form Style options, 319
header, 320
page numbers, 322
spreadsheet style options, 318
title, 320
Reporting Account, 156
Rerun Query button, 256
resetting series options, 327
resource object
querying, 245, 250
reducing the number queried, 250
Risk Assessment and Control folder, 253, 256
Rollup
Master Server
Data Rollup, 49
Master Server Settings, 124
Routing Table, 103
Run Files, 90
Creating a New Run File, 91
running tasks
query, 254
scheduling for unattended processing, 270

S

Sample Data
Accessing, 48
saving
datasets, 257
query definition, 253
scanning for new references, 310
schedule
adding an item, 306
components, 291
creating, 301
defined, 290
scheduling
task lists, 270
Scope, 149, 288
and NETinventory, 29
Default Scope, 52
defining query scope, 298
scope
defined, 250
dynamic indexing, 252
item, 250
named, 252
reducing display time of items, 252
removing, 253
specification feature, 244
selecting
data source, 245
sending a reference, 308
series chart, 276
series graph, 326
series options, 327
Server
Accounts, 156
Server Setup, 102
Account Configuration, 156
Audit Server Assignment Rules, 151

Audit Server Settings, 125
Login Server Settings, 139
Master Server Settings, 102
Site Configuration, 149
Setting Up
Audit Server, 125
Enterprise Configuration, 48
Inventory Database, 159, 160
Login Server, 139
NETinventory, 28
Reporting Data Source, 51
Year 2000 BIOS Limitations, 161
Setting Up NETinventory, 28
Settings, 352
Assigning Licenses, 370
Default Profile, 358
Host Profiles, 364 – 370
Profile Update Interval, 359
Viewer, 359 – 364
setup
graph, 323
sharing information, 307
sharing information between desktops, 306
Site
Configuring, 149
Contact, 150
Creating a New Site Definition, 150
Defined, 149
Modifying Site Configuration Information, 149
Removing a Site Definition, 151
Software, 160
Adding a New Software Category, 176
Changing an Entry, 176
Manufacturer Information, 181
Tracking Off-The-Shelf Products On Your Network, 163
Vendor Information, 179
Software Detection
Alerts, 70
Configuring Files, 70
Software Inventory Information, 195 – 197
User Defined Fields, 197, 200
Viewing, 195
Viewing Maintenance Information, 196
Software User Interaction Prompts, 85
sort fields
adding, 249
modifying, 250
removing, 250
Sort Specification, 288, 297
Spreadsheet Style Report Options, 318
Standalone Auditing
Creating Disk, 92
Uploading Data, 97
Using Agent, 94, 95
storage of data
named scope, 252
String Search
Advanced Parameters, 77
Alert Defaults, 88
Alerts, 77
Ignoring Comment Lines, 77
Setting Up, 74
Special Characters, 76
Suppressing Host keyboard and mouse, 388
Synchronization
Database (Routing Table), 103

T

task lists
creating, 266, 267, 269
default settings, 268
post process commands, 269
processing, 270
running, 270
scheduling, 270
Task Scheduler, 270
task status
dialog, 257
TCP/IP
Audit Server Assignment Rules, 153
Subnet Masks, 153
Text Mode, 383
text-based export files, 261
Text-Mode, 389
Toggle Sort button, 250
toggling between histogram and series graphs, 325
Toolbar
defaults, 341
Tracking
Custom Software Packages, 166
Software Vendor Information, 179
Unknown Software, 171
Tracking Hardware, 181
BIOS Identification, 186
BIOS Identification String, 188
Maintenance for a Hardware Item, 186
Maintenance Types, 184
Modifying Product Hardware Information, 183
New Hardware Product Information, 183
New Maintenance Type, 186
New Model, 184
Tracking Software
Ancillary Files, 166
Manufacturer Information, 179

Unknown Software as Custom Software, 173
Using Software Categories, 175
Vendor Information, 177
Type Tab, 324

U

Uninstall
Audit Server, 134
Login Server, 148
Unknown Software, 160
Unknown Software Panel, 171
User
adding an account, 338
deleting an account, 340
modifying an existing user account, 339
User Configuration Files, 204
user default
export settings, 264
User Defined Fields, 83, 87
User Interaction
Configuring, 83
General Settings, 87
Prompts, 85
user properties
dynamic index settings, 252
export, 265

V

Vendor Information, 160
Vendor Information Panel, 177
Version compatibility, 354
view types
report, 255
Viewer, 352, 353
Viewer Settings, 359 – 364
Auto-Scroll, 361
Communications Protocols, 362
DOS Session Font, 363
DOS Session Refresh Rate, 363
Host Settings, 361
IP, 362
IPX, 362
Local Keys, 360
Mouse Transmission, 361
viewing data, 48, 300
Virus Scanning, 90

W

WAN, 149

X

X axis field, 325

Y

Y axis field, 325
Year 2000
BIOS Limitations Database, 161
Software Product Status, 165