

# WHITE PAPER

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## Integrating Compaq Insight Manager with Novell ManageWise 2.6

*Novell ManageWise 2.6 includes new features. This White Paper provides information on integrating Compaq Insight Manager and the Compaq Management Agents with ManageWise 2.6.*

*This White Paper **supplements and changes** some of the information found in the Compaq White Papers, Integrating Compaq Insight Manager with Novell ManageWise 2.1 - Update and Integrating Compaq Insight Manager with Novell ManageWise 2.5 - Update.*



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Integrating Compaq Insight Manager with Novell ManageWise 2.6

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### WHAT'S NEW

This paper contains new information concerning the integration of Compaq Insight Manager with Novell ManageWise. With new files provided in the Compaq Systems Management Toolkit, it is possible to add launch support for the web-enabled Compaq Server, Workstation, Desktop and Portable Management Agents to ManageWise. This lets you perform more detailed management of Compaq systems from the ManageWise map.

The files necessary to perform this integration are in the Systems Management Toolkit on the Compaq Management CD version 4.21. These files are not available on earlier versions of the Management CD. The integration of ManageWise with Compaq Insight Manager and the Compaq Management Agents is explained in the sections below.

### INTEGRATING COMPAQ INSIGHT MANAGER 3.20 AND ABOVE WITH MANAGEWISE

With the release of ManageWise 2.6, both ManageWise and Compaq Insight Manager support Microsoft Windows NT as a console. This allows you to run both applications on the same management console running Windows 95, Windows 98, or Windows NT.

This white paper explains the integration of Insight Manager 3.20 and above with ManageWise 2.6. The integration described here can also be used with ManageWise 2.5. This integration affects what you see on the management console.

### PreInstallation Considerations

#### ManageWise Requirements

This paper assumes you are running Compaq Insight Manager 3.20 or above and ManageWise 2.5 or 2.6. The configurations discussed in this white paper were tested on management consoles running Microsoft Windows 95 and Microsoft Windows NT.

Before installation and integration of a new version of Compaq Insight Manager (3.20 and above), it is important to understand how running ManageWise with Compaq Insight Manager affects trap disposition on the management console.

#### IP/IPX Trap Processing

In the past, certain trap-processing issues arose when running ManageWise 2.5 and Compaq Insight Manager 3.20 and above on the same management console. These issues are described in the white paper "Integrating Compaq Insight Manager with Novell ManageWise 2.5 - Update." Novell has made a patch available for the intraNetWare Client that addresses these issues.

Currently, when running Novell ManageWise and Compaq Insight Manager on the same management console, the application that is launched first will receive all the traps sent to the console. This applies to ManageWise 2.6 and to ManageWise 2.5 with the intraNetWare Client patch installed.

#### Available Patches

There are two patches available from Novell that affect the integration with Compaq Insight Manager and the Compaq Management Agents.

The first patch (NWLINK2.EXE) is for the intraNetWare Client 2.20 for Windows 95 and is available at <http://support.novell.com/products/w95220/patches.htm>. This patch fixes the trap

## INTEGRATING COMPAQ INSIGHT MANAGER WITH NOVELL MANAGEWISE 2.6 *(cont.)*

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issues encountered when running Compaq Insight Manager with ManageWise 2.5 using this version of the client. More information is available at the web site listed above. ManageWise 2.5 and 2.6 should be run with the NetWare 5 client or the Z.E.N.works client if possible to avoid this issue.

The second patch (MW02B.EXE) is for ManageWise 2.6 and is available at <http://support.novell.com/products/mw26/patches.htm>. The launching of Compaq Insight Manager and the Compaq Management Agents from ManageWise 2.6 is possible with this patch from Novell. This file allows the Smart Launch of 32 bit applications from Windows NT and Windows 98 consoles. This patch should be installed before integrating Compaq Insight Manager or the Compaq Management Agents with ManageWise 2.6.

### Compaq Management Agent Requirements

To integrate the web-enabled Compaq Server Management Agents with Novell ManageWise, you must be running version 4.01 or later of the agents. For Windows NT servers, the Insight Management Web Agent service must be running. For Novell Netware servers, the CPQWEBAG.NLM must be loaded.

For integration with the web-enabled Compaq Desktop Management Agents, you should be running version 3.51C or later of the Insight Desktop Agents with Compaq SNMP extensions or DMI 2.0. You should also install version 3.70A or higher of the Compaq Insight Management Desktop Web Agents.

### Supported Clients

ManageWise requires installation of the NetWare Client on the management console. In the test environment, the Novell NetWare Client and the client for Microsoft Networks were installed on the Windows 95 management console. The Novell Client for Windows NT was installed on the Windows NT management console.

### Supported Protocols

The protocols supported in the integration of Compaq Insight Manager and ManageWise are listed below. The following protocols were installed on the Windows 95 management console during testing:

- IPX 32-bit Protocol for Novell NetWare Client
- IPX/SPX-compatible Protocol
- NetBIOS Support for IPX/SPX-compatible Protocol
- TCP/IP

The following protocols were installed on the Windows NT management console during testing:

- NWLink IPX/SPX Compatible Transport
- NWLink NetBIOS
- TCP/IP

## INSTALLING COMPAQ INSIGHT MANAGER 3.20 AND ABOVE

**NOTE:** The version of Compaq Insight Manager installed on the management console must be identical to or higher than the version of Compaq Management Agents you are installing on your systems.

Exit all Windows programs and shut down existing versions of Compaq Insight Manager before you begin this procedure. Depending on your environment, Compaq Insight Manager can be installed from the Compaq Management CD or from an Integration Server. To install Compaq Insight Manager from one of these sources, follow these steps:

1. Insert the Compaq Management CD at the management console. Change to [CD DRIVE:]\INSIGHT\WIN32\ENG and run SETUP  
OR  
Map a drive to the Integration Server (for example: \\server name\CPQIS1\). Switch to this drive. Change directories to CPQIS\INSIGHT\WIN32\ENG\VERSION\ and run SETUP.
2. Select *Next* at the Welcome Screen.
3. Close all active Borland Database Engine (BDE) applications, then select *Next*.
4. Enter your name and your company name, then select *Next*.
5. Select *Yes* to confirm your name and company name.
6. If you are installing Compaq Insight Manager on a Windows NT system, complete this step. If you are installing Compaq Insight Manager on a Windows 95 system, skip to step 7.
  - a) Select *Compaq Insight Manager* to install Compaq Insight Manager or upgrade a previous version of Compaq Insight Manager.
  - b) Select *Microsoft Systems Management Server Launch Support* to integrate Compaq Insight Manager with Microsoft Systems Management Server.Select *Next*.
7. Type the name of the directory in which you want to install Compaq Insight Manager or select the displayed default location. Select *Next* to continue.
8. Enter configuration options.
  - a) Select *Enable auto discovery of IPX servers* to enable automatic discovery of new IPX servers as they appear. Auto-discovered IPX servers will automatically be added to the Responsible Device List. The default is enabled. If you do not manage IPX servers, disable this item for better application performance.
  - b) Select *Enable auto discovery of Remote Console NVT servers* to enable discovery of remote servers through NVT (NetWare Virtual Terminal) discovery. Remotely discovered servers will automatically be added to the Responsible Device List. The default is enabled.
  - c) Enter the number of days that you want to pass before the Version Control database is considered to be out-of-date. The default is 60 days.
  - d) Select *Maintain configuration to support existing Windows 3.1 applications* to maintain your Borland Database Engine configuration for use with 16-bit applications. If you do not use 16-bit applications, disable this feature. The default is enabled.
  - e) Select *Next*.
9. If you selected to install Microsoft Systems Management Server Launch Support in step 6, complete this step. If not, skip to step 10.

**IMPORTANT:** Setup assumes that the installation is occurring on a Systems Management Server Primary Site server, and that the Microsoft SQL Server Tools have been installed. If

this is not the case, the files will be copied but the Compaq Insight Manager entry will not be added to the Systems Management Server database.

- a) Enter the path to the Systems Management Server executable file (SMS.EXE). Select *Next*.
- b) Enter the database name, administrative account, and administrative password for the Systems Management Server database. Select *OK*.

**IMPORTANT:** Do not confuse this with the administrative account/password for the Windows NT server.

Setup invokes the ISQL.EXE utility with the ADDCIM.SQL script, adding the Compaq Insight Manager entry to the Systems Management Server database.

Setup also copies the appropriate files to your Systems Management Server administrator console directory: ADDCIM.SQL and DELCIM.SQL

10. Select an existing group or enter the name of the new group in which the Compaq Insight Manager program items should be placed. Select *Next*. The current settings are displayed.
11. Verify the options you have selected. Select *Back* to change any settings. Select *Next* to begin the installation and setup of Compaq Insight Manager. When the installation is completed, select the Read Me file to view information on new features, then select *Finish*.
12. If you have not already installed the Compaq Management Agents, do so now.

### INSTALLING COMPAQ MANAGEMENT AGENTS

**IMPORTANT:** This section describes the procedure for installing the Compaq Server Management Agents for NetWare. Read the installation instructions completely before trying to install the software.

The procedure for installing the Compaq Server Management Agents is given in the help files on the Compaq Management CD. These instructions are available by selecting the *Overview* button on the CD menu and then selecting the Compaq Insight Management Agents topic. From here, you can access the installation instructions for the desired operating system.

**NOTE:** If you have already installed the Compaq Server Management Agents by using SmartStart, skip to the next section, "Setting up the SNMP System Description and Trap Destinations."

### Installing from the Compaq Management CD

To install the Compaq Server Management Agents for NetWare from the Compaq Management CD, follow these steps:

1. Insert the Compaq Management CD into the CD-ROM drive.
2. If you access the CD-ROM drive as a DOS drive, at the NetWare system console enter the following:

```
LOAD [CD DRIVE]:\AGENTS\NETWARE\ENG\COMPAQ\CPQAGIN
```

If you have mounted the CD as a NetWare Volume, at the NetWare system console enter the following:

```
LOAD [NetWare VOL]:\AGENTS\NETWARE\ENG\COMPAQ\CPQAGIN
```

The installation utility CPQAGIN.NLM installs and configures the Compaq Server Management Agents for NetWare.

3. Follow the instructions on the screen. Press F1 for online help, if needed.

4. For web agent support, be sure to enable CPQWEBAG when configuring the Compaq agents. This option is disabled by default.

**NOTE:** When loading the web-enabled Compaq Management Agents on a NetWare server, you must create an entry in the HOSTS file on that server (SYS:ETC\HOSTS) for the local machine name and IP address.

After the installation is completed, you should reboot the system to enable the Compaq Server Management Agents for NetWare. These agents automatically start each time you reset the system.

### Installing from the Compaq Integration Server

An Integration Server is a server that has been designated as a repository for operating system software, database software, drivers, management agents, software, utilities, and patches. The *Compaq Integration Server User Guide* on the Compaq Management CD provides information about the setup and maintenance of an Integration Server. The following procedure details the installation of the Compaq Server Management Agents for NetWare from an Integration Server.

**IMPORTANT:** Read this installation procedure completely before installing the software. This procedure assumes you have already copied the agents to the Integration Server.

The Compaq Integration Maintenance Utility is automatically loaded on the server during the initial SmartStart process.

To install or update agents on an existing system from an Integration Server, follow these steps:

1. At the target system's command console, enter the following: LOAD CPQMAINT
2. From the Available Options screen, select *Product Options*. A list of products that can be updated is displayed.
3. Select *Compaq Insight Management Agents* from the list.
4. Select *Integration Server* as the source for the installation or update. Follow the instructions on the screen. Press F1 for online help, if needed.
5. For web agent support, be sure to enable CPQWEBAG when configuring the Compaq agents. This option is disabled by default.

**NOTE:** When loading the web-enabled Compaq Management Agents on a NetWare server, you must create an entry in the HOSTS file on that server (SYS:ETC\HOSTS) for the local machine name and IP address.

After the installation is completed, you should reboot the system to enable the Compaq Server Management Agents for NetWare. These agents automatically start each time you reset the system.

### Setting up the SNMP System Description and Trap Destinations

The next step in installing the Compaq Server Management Agents is updating the *SNMP.CFG* and *TRAPTARG.CFG* files to match your server and network management configuration. Sample configuration files, *SNMP.CFG* and *TRAPTARG.CFG*, are in the \AGENTS\NETWARE\ENG\NOVELL\ETC directory of the Compaq Management CD. If your system does not have these files in the SYS:\ETC directory, copy the sample files to your system. Create a SYS:\ETC directory on the system, if one does not already exist.

### Editing the *SNMP.CFG* File

*SNMP.CFG* is an ASCII text file that provides the *SNMP.NLM* with server name, hardware, location, and contact information. The *SNMP.CFG* file, which is a sample, can be edited to reflect the correct information about your installation.

Alternatively, this information may be provided by loading *INETCFG.NLM* and selecting *Manage Configuration - Configure SNMP Information*.

**NOTE:** The *SNMP.NLM* allows configuration of some MIB-II system identification information using the *SNMP.CFG* file. For proper configuration of the identification information, you must have the *SNMP.CFG* file in the SYS:\ETC directory when the *SNMP.NLM* is loaded.

### Editing the *TRAPTARG.CFG* File

The sample *TRAPTARG.CFG* file tells the *SNMP.NLM* where to send alarm information. *TRAPTARG.CFG* is an ASCII text file that lists the addresses of management consoles that should be alerted when the Compaq Management Agents detect an important event. The *TRAPTARG.CFG* file in SYS:\ETC, which is a sample, should be edited to reflect the correct information about your environment configuration. Follow the instructions provided in the *TRAPTARG.CFG* file. Be sure to place the alarm destination address under the appropriate protocol section and to indent each address at least one space.

IP addresses may also be added to the *TRAPTARG.CFG* file using *INETCFG*, instead of editing the file manually. Load *INETCFG.NLM* and select the *Protocols - TCP/IP - SNMP Manager Table* option to add IP addresses to the trap destination list.

To determine the network address of your management PC when using IPX, you can execute the *USERLIST* program.

For NetWare 3.1x, type: `USERLIST /A`

For NetWare 4.x or intraNetWare, type: `NLIST USER /A`

A list of PCs logged into the server is displayed, along with their addresses. An asterisk preceding the user name indicates the PC you are using. Both the network address and the node address given by *USERLIST* are needed by the file.

**NOTE:** If you are using Compaq Insight Manager, verify that the network address of the management PC on which Compaq Insight Manager runs is included in the *TRAPTARG.CFG* file. If you enter trap destinations into the *TRAPTARG.CFG* file, you should shut down and restart the system for the destinations to become active.

To verify that you have the proper address configured, use the Compaq Management Agent Install Utility (*CPQAGIN*). At the system console prompt, enter the following:

```
LOAD CPQAGIN
```

Then select the *Initiate Test Trap* option. This option delivers an alarm to each configured management console.

### SNMP Monitor and Control Community Strings

The final step in installing the Compaq Server Management Agents is setting up SNMP community strings. SNMP defines a community as a relationship between an SNMP agent and one or more SNMP managers. When SNMP messages are exchanged, they contain two parts:

- A community name and information to validate the sending SNMP entity as a member of an identified community



- Data

The community name defines the authentication mechanism.

Compaq Server Management Agents for NetWare allow two different user communities to be specified—the monitor community and the control community. The monitor community is provided to access all SNMP attributes with read-only access. The control community provides read/write or SET privileges.

Use *CPQAGIN.NLM* or *INETCFG.NLM* to configure community strings. To enable Compaq Insight Manager to perform SET operations on system parameters on a NetWare system, you must specify a control community.

**NOTE:** If you want read/write or SET privileges, use a control community name other than “public.” The *public* default is the same default as in Compaq Insight Manager. If you enter a different community string, you must also enter it on the management PC that is responsible for the server. To change the community string in Compaq Insight Manager, select the *Device Setup* button from the Task List Window, or right-click the device and select *Device Setup* from the pop-up menu. This opens the Device Setup Window, on which the community string can be set. For more information on community strings, refer to the *Compaq Insight Manager User Guide*.

Community string usage is as follows:

1. Monitor Community: This community string, which has a 32-character maximum, is used for read-only access to the SNMP attributes. If you do not specify the MONITOR COMMUNITY parameter, the *SNMP.NLM* uses *public* as the default community string. Because there is always a MONITOR COMMUNITY string, there is always read-only access.
2. Control Community: This community string, which has a 32-character maximum, is used for read/write access to the SNMP attributes. If the CONTROL COMMUNITY parameter is not specified, the *SNMP.NLM* disables all read/write access.

**NOTE:** Community names are case-sensitive.

### INSTALLING AND COMPILING THE COMPAQ MIBS INTO MANAGEWISE

This section assumes that you have the ManageWise management PC running successfully.

**NOTE:** The ManageWise console does not need to be running Compaq Insight Manager for you to perform this integration.

**NOTE:** If this is a new installation, your ManageWise management PC needs to complete the automatic discovery process for your network. Depending on your network, this process can take up to several hours; however, this process does not have to be completed before you integrate the Management Information Base (MIB) files.

#### Integrating the Compaq Insight MIB Files

Compaq MIBs can integrate with a ManageWise management PC, allowing you to browse the Compaq MIB on any server running the Compaq Management Agents. ManageWise can also interpret Compaq MIB traps that are sent by the servers running Compaq Management Agents.

To integrate the Compaq MIB files with a ManageWise management PC, follow these steps:

1. Insert the Compaq Management CD into the CD-ROM drive of the ManageWise management PC  
OR  
Map a drive to the Integration Server (for example: \\server name\CPQIS1).

2. Change to the <mw>\NMS\SNMPMIBS\CURRENT directory on the drive on which ManageWise is installed (where <mw> is the directory where ManageWise is installed). For example:  
C:> CD\MW\NMS\SNMPMIBS\CURRENT
3. Copy all MIB files from the Compaq Management CD to the current directory. For example:  
COPY [CD-ROM]:\TOOLKIT\MIBS\\*.MIB  
OR  
Copy all MIB files from the Integration Server to the current directory. For example:  
COPY [<drive>]:\CPQIS\TOOLKIT\VERSION\MIBS\\*.MIB (where <drive> is the drive mapped to the Integration Server).
4. Start the ManageWise console.
5. Select the *SNMP MIB Compiler* option from the Tools menu.
6. Select *Compile* to compile all the MIB files in the CURRENT directory of the ManageWise database.
7. Select *Exit* to exit the SNMP MIB Compiler.

This completes the MIB integration procedure for ManageWise. The *SNMP MIB Browser*, accessed from the ManageWise Tools menu, can now be used to browse the Compaq MIBs.

### Configuring ManageWise Alarm Dispositions

**NOTE:** The application that is launched first on the management console will receive all the traps sent to the management console. This only applies if ManageWise and Compaq Insight Manager are running on the same management console.

To view Compaq alarms, select the *Fault* option, followed by the *Alarm Disposition* option on the menu bar. This opens the Alarm Disposition Table shown in Figure 1, which shows the alarms and their current configurations.

Category	Type	Severity	State	Save in Database	Beep	Ticker Tape	Launch a Program	Program to be Launched
CPQLTH-MIB	Correctable Memory Error Occurred	Minor	Degraded	<input checked="" type="checkbox"/>				
CPQLTH-MIB	Correctable Memory Error Occurred	Minor	Degraded	<input checked="" type="checkbox"/>				
CPQLTH-MIB	Correctable Memory Error Occurred	Minor	Operational	<input checked="" type="checkbox"/>				
CPQLTH-MIB	CPU Fan Failure	Critical	Nonoperational	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	CPU Fan Failure	Critical	Nonoperational	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	CPU Fan OK	Informational	Operational	<input checked="" type="checkbox"/>				
CPQLTH-MIB	CPU Fan OK	Informational	Operational	<input checked="" type="checkbox"/>				
CPQLTH-MIB	Fan Degraded	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Fan Failed	Critical	Nonoperational	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Fan Inserted	Critical	Operational	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Fan Redundancy Lost	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Fan Removed	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Memory Error Tracking Disabled	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Memory Error Tracking Disabled	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Memory Error Tracking Disabled	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	POST Errors Occurred	Minor	Operational	<input checked="" type="checkbox"/>				
CPQLTH-MIB	POST Errors Occurred	Minor	Operational	<input checked="" type="checkbox"/>				
CPQLTH-MIB	Power Redundancy Lost	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
CPQLTH-MIB	Power Supply Degraded	Critical	Degraded	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		

Figure 1. Alarm Disposition Table

These alarms, or traps, have been preconfigured with Severity (critical, major, minor, warning, or unknown) and Object State (operational, degraded, non-operational, or unknown).

Double-clicking an alarm in the Alarm Disposition Table opens the Alarm Disposition Edit Window shown in Figure 2, which allows you to configure the alarm options.

Figure 2. Edit Alarm Disposition Screen

You can, for example, launch a program for each trap or alarm. For instance, when the ManageWise management PC receives a CPQ SCSI Logical Drive Status Change alarm, it indicates a status change to the logical drive configuration. If the logical drive configuration includes fault tolerance (RAID 2, RAID 4, or RAID 5), it can still operate, but the status change requires your attention. By default, an alarm disposition appears:

- On the network management map
- In the Alarm Monitor view

Alarms that have the Save in Database option checked are also put in the Alarm Report, which is accessible from the Fault menu.

In addition to logging the alarm, you can configure the alarm options to cause the management PC to:

- Beep
- Display a message
- Launch an application when the alarm occurs

If you want to launch an application when an alarm occurs, select the *Program* box and type the command line for the application. The command line can contain batch or executable files.

The following are examples of customized alarm configurations that you can specify:

- If you receive the CPQ SCSI Logical Drive Status Change alarm, you can run a batch file that contains the NetWare SEND command that sends a specific message to the ADMIN group.

- If you have a problem with a specific server, you can launch a communications application with a script to call a beeper number and leave a numeric message that indicates the problem.

You can configure each alarm differently to meet your needs. Refer to the ManageWise documentation for more information on alarm management.

When you customize alarms for your configuration, ManageWise can interpret the alarms sent by Compaq servers. You can also use the SNMP MIB Browser to build profiles to query Compaq MIB objects on Compaq servers.

### ADDING COMPAQ INSIGHT MANAGER LAUNCH SUPPORT TO MANAGEWISE

#### Requirements

Compaq Insight Manager 3.20 and above can be integrated with ManageWise 2.6 to allow launching of Compaq Insight Manager to a node on the network map. This integration works with ManageWise versions 2.5 and 2.6. You must have the Systems Management Toolkit from the 3.50 or later version of the Compaq Management CD. These versions include two files that are necessary to perform the integration: *CIMLOAD.EXE* and *COMPAQ.OLF*.

#### Installing Launch Support

When the above requirements have been met, the following steps can be taken to install launch support for Compaq Insight Manager into ManageWise. This assumes that ManageWise and Compaq Insight Manager are already installed on the management console.

1. Close all ManageWise components on the management console.
2. Execute the *INSTALL.BAT* file in the *CIMLOAD* directory, specifying the integration source and ManageWise destination directories. (For example, "*INSTALL.BAT* D:\TOOLKIT\MW\CIMLOAD C:\MW26" - where D:\TOOLKIT\MW\CIMLOAD is the location of the integration files and C:\MW26 is the root directory of ManageWise). This command performs the following actions:
  - a) Copies the file *CIMLOAD.EXE* from the \TOOLKIT\MW\CIMLOAD directory on the Compaq Management CD to the <mw>\NMS\BIN directory (where <mw> is the directory where ManageWise is installed).
  - b) Copies the file *COMPAQ.OLF* from the \TOOLKIT\MW\CIMLOAD directory on the Compaq Management CD to the <mw>\NMS\OLF directory.
  - c) Executes the ManageWise OLF Introducer with the following command:  
n-olfi.exe -f compaq.olf  
This adds the definition of a Compaq server to the ManageWise database.
3. Edit objects on the network map with the ManageWise *Database Object Editor* to add Compaq Server as an available service. Alternatively, you may backup and delete the database, then rediscover the network. This will show Compaq servers on the map with the Compaq server icon.

When these steps have been completed, you will be able to launch Compaq Insight Manager from ManageWise.

#### Launching Compaq Insight Manager from ManageWise

This section describes how to launch Compaq Insight Manager when running it with ManageWise.

**NOTE:** Compaq Insight Manager can only be launched from ManageWise if the integration described in the previous section has been performed.

After you integrate Compaq Insight Manager with ManageWise, you can launch Compaq Insight Manager using the Compaq server icon, the NetWare server icon, or the Insight Manager option located under the Tools menu.

### Launching Compaq Insight Manager Using the Compaq Server Icon

To launch Compaq Insight Manager using the Compaq server icon, follow these steps:

1. Select a Compaq server icon from the ManageWise network management map, as shown in Figure 3.
2. Click again to launch Compaq Insight Manager to the designated Compaq server.

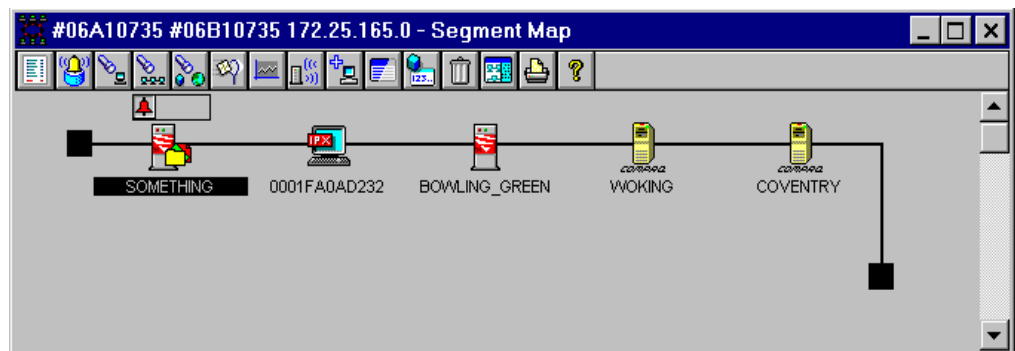


Figure 3. Network Segment Map.

### Launching Compaq Insight Manager Using the NetWare Server Icon

To launch Compaq Insight Manager from ManageWise using the NetWare server icon, follow these steps:

1. Select the NetWare server icon located on the network management map shown in Figure 3. This opens the Open Service window shown in Figure 4. This window displays the services available for the selected node.
2. Select the Compaq server icon in the Manageable Services list and click the Open button to launch Compaq Insight Manager.

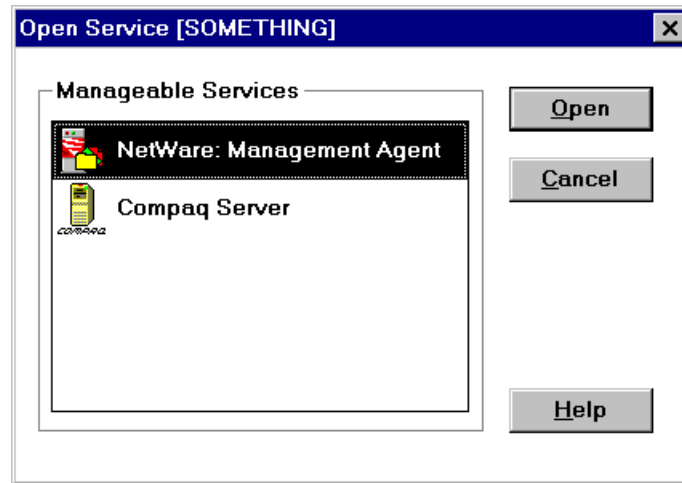


Figure 4. Open Service Window.

### Launching Compaq Insight Manager Using the Server Configuration Window

To launch Compaq Insight Manager from ManageWise using the Server Configuration Window, follow these steps:

1. Select the NetWare server icon located on the network management map shown in Figure 3. This opens the Open Service window shown in Figure 4. This window displays the services available for the selected node.
2. Select *Netware: Management Agent* from the Manageable Services list. This opens the Server Configuration Window shown in Figure 5.
3. Select the Compaq server icon in the list to launch Compaq Insight Manager.

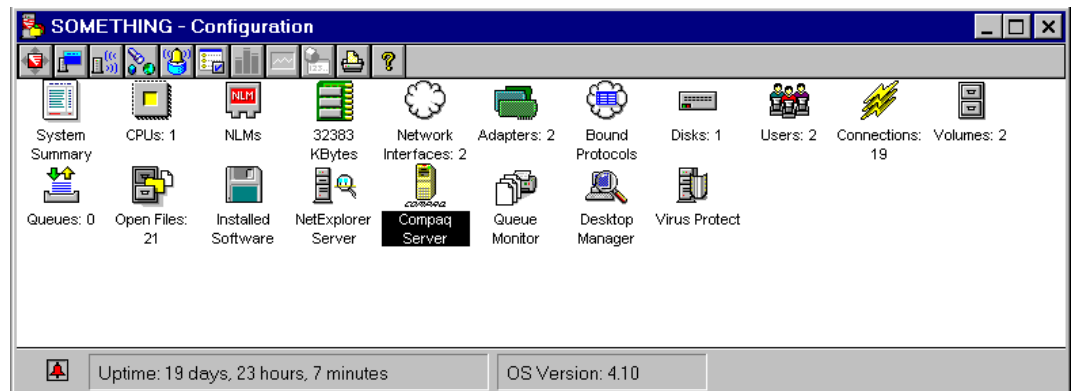


Figure 5. Server Configuration Window.

### Launching Compaq Insight Manager Using the Tools Menu

To launch Compaq Insight Manager from ManageWise using the Tools menu, follow these steps:

1. Select the designated server located on the network management map shown in Figure 3.

2. Select the Insight Manager option from the Tools menu. This launches Compaq Insight Manager.

### **ADDING WEB-ENABLED COMPAQ MANAGEMENT AGENT LAUNCH SUPPORT TO MANAGEWISE**

#### **Requirements**

Beginning with the 4.01 version of the Compaq Management Agents, the agents supported access via a web browser. Web support is also provided for version 3.51C and later of the Compaq Desktop Management Agents. Web support for the Compaq Desktop Management Agents is added by installing the Compaq Desktop Web Management Agents version 3.70A.

These agents can be integrated with ManageWise 2.6 to allow launching of the management console's web browser to a node on the network map running the web-enabled Compaq Management Agents. This node can be a Compaq server, workstation, desktop or portable. This integration works with ManageWise versions 2.5 and 2.6 and requires Microsoft Internet Explorer 4.0 or Netscape Navigator 4.0 as the system browser.

You must have the Systems Management Toolkit from the 4.21 or later version of the Compaq Management CD. This version includes three files that are necessary to perform the integration: *CPQWEB.EXE*, *CPQWEB.OLF* and *CPQWEB.ICO*.

#### **Installing Web-enabled Compaq Management Agent Launch Support**

When the above requirements have been met, the following steps can be taken to install launch support for the web-enabled Compaq Management Agents into ManageWise. This assumes that ManageWise and a web browser are already installed on the management console.

1. Close all ManageWise components on the management console.
2. Execute the *INSTALL.BAT* file from the *CPQWEB* directory specifying the integration source and ManageWise destination directories. (For example, "*INSTALL.BAT D:\TOOLKIT\MW\CPQWEB C:\MW26*" - where *D:\TOOLKIT\MW\CPQWEB* is the location of the integration files and *C:\MW26* is the root directory of ManageWise). This command performs the following actions:
  - a) Copies the file *CPQWEB.EXE* from the *\TOOLKIT\MW\CPQWEB* directory on the Compaq Management CD to the *<mw>\NMS\BIN* directory (where *<mw>* is the directory where ManageWise is installed).
  - b) Copies the file *CPQWEB.OLF* from the *\TOOLKIT\MW\CPQWEB* directory on the Compaq Management CD to the *<mw>\NMS\OLF* directory.
  - c) Copies the file *CPQWEB.ICO* from the *\TOOLKIT\MW\CPQWEB* directory on the Compaq Management CD to the *<mw>\NMS\ICONS* directory.
  - d) Executes the ManageWise OLF Introducer with the following command:  
`n-olfi.exe -f cpqweb.olf`  
This adds the definition of the Compaq Web Agent service to the ManageWise database.
3. Edit objects on the network map with the ManageWise *Database Object Editor* to add Compaq Web Agent as an available service. This will show Compaq servers on the map with the Compaq Web Agent icon.

When these steps have been completed, you will be able to launch the browser to a Compaq system running the web-enabled Compaq Management Agents from ManageWise.

### Installing Web Agent Discovery

ManageWise can be configured to discover the Compaq Web Agent NLM on servers running the NetWare Management Agent. Systems discovered this way will not show the Compaq Web Agent as a service on the ManageWise map. Instead, this service will appear under the NetWare Management Agent. Perform the following steps to add this support:

1. Open the NMS.INI file and find the section entitled NW\_TRANSIENT\_FUNCTIONS.
2. There will be several RULES listed in this section. Add the following line to this section:  
Rule?=CPQWEBAG.NLM,Compaq Web Agent,BOX,Compaq Web Agent  
(Where ? is the next number in the Rule sequence. For example: Rule7.)
3. Restart the ManageWise console.

### Launching to the web-enabled Compaq Management Agents from ManageWise

This section describes how to launch to the web-enabled Compaq Management Agents from within ManageWise.

**NOTE:** The browser can be launched to the Compaq Management Agents only if the integration described in the previous section has been performed.

After you integrate the Compaq Management Agents with ManageWise, you can launch to the web agents using the Compaq Web Agent icon, the NetWare server icon, or the Compaq Web Agent option located under the Tools menu.

### Launching to the Compaq Web Agents Using the Compaq Web Agent Icon

To launch the browser to the Compaq Management Agents using the Compaq Web Agent icon, follow these steps:

1. Select a Compaq Web Agent icon from the ManageWise network management map, as shown in Figure 6.
2. Click again to launch the browser to the designated Compaq system.

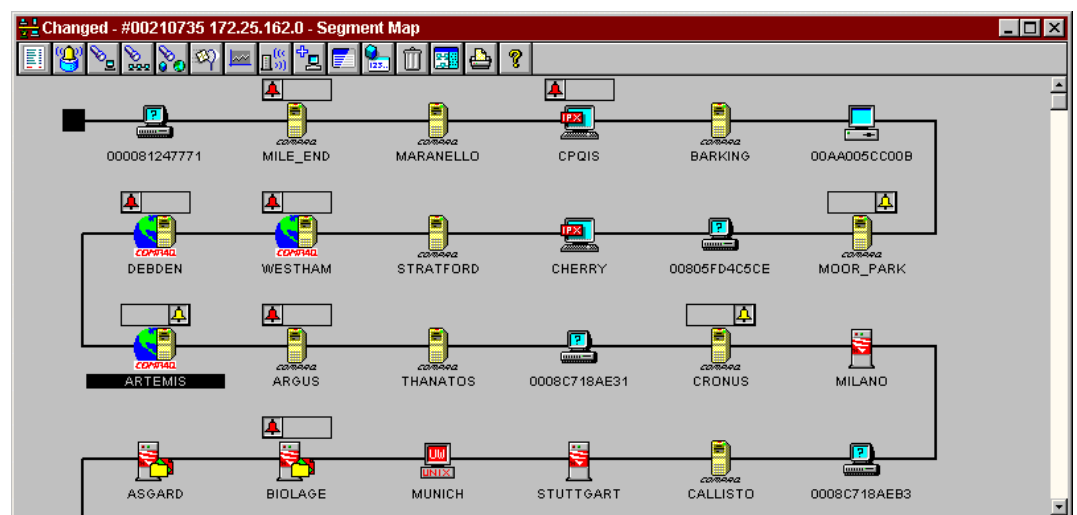


Figure 6. Network Segment Map.



### Launching to the Compaq Web Agents Using the NetWare Server Icon

To launch the browser to the Compaq Management Agents using the NetWare server icon, follow these steps:

1. Select the NetWare server icon located on the network management map shown in Figure 6. This opens the Open Service window shown in Figure 7. This window displays the services available for the selected node.
2. Select the Compaq Web Agent icon in the Manageable Services list and click the Open button to launch the browser to the designated system.

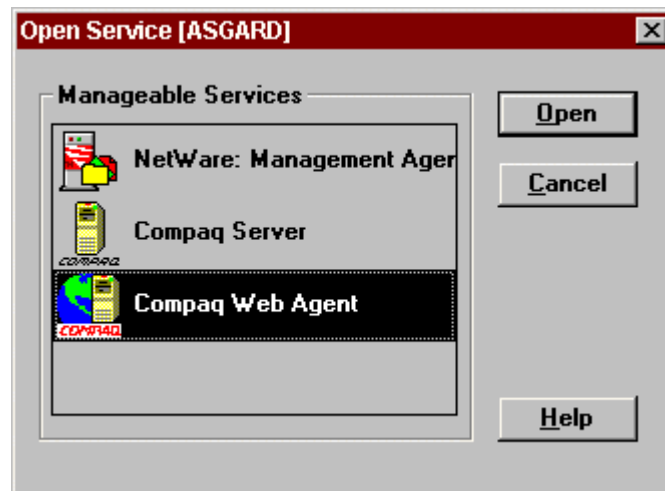


Figure 7. Open Service Window.

### Launching to the Compaq Web Agents Using the Server Configuration Window

To launch the browser to the Compaq Management Agents using the Server Configuration Window, follow these steps:

1. Select the NetWare server icon located on the network management map shown in Figure 6. This opens the Open Service window shown in Figure 7. This window displays the services available for the selected node.
2. Select *NetWare: Management Agent* from the Manageable Services list. This opens the Server Configuration Window shown in Figure 8.
3. Select the Compaq Web Agent icon in the list to launch the browser to the designated system.

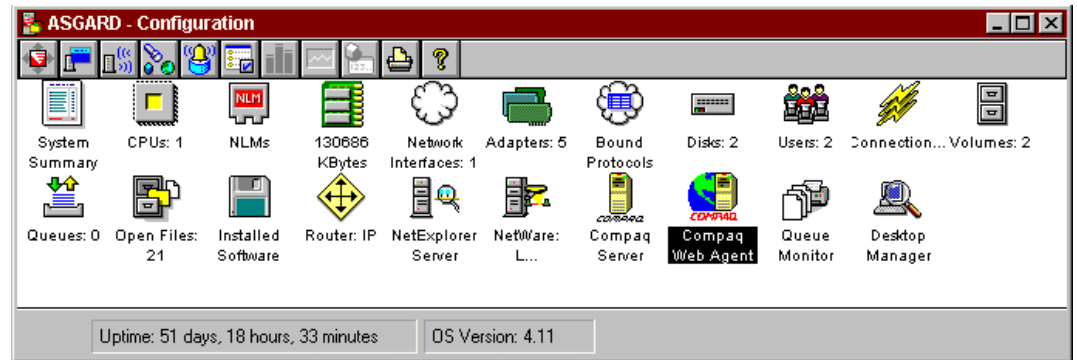


Figure 8. Server Configuration Window.

### Launching to the Compaq Web Agents Using the Tools Menu

To launch the browser to the Compaq Management Agents using the Tools menu, follow these steps:

1. Select the designated server located on the network management map shown in Figure 6.
2. Select the Compaq Web Agent option from the Tools menu. This launches the browser to the selected system.

### DE-INSTALLING COMPAQ INSIGHT MANAGER

Compaq Insight Manager can be removed from the management console by selecting the Add/Remove Programs option in the Control Panel. Removing Compaq Insight Manager from a console with ManageWise installed does not affect ManageWise unless you have installed launch support for Compaq Insight Manager. If launch support was not installed, you can simply remove Compaq Insight Manager from the management console.

If launch support was installed, Compaq Insight Manager will be shown as available in ManageWise even after it has been removed from the management console. In this case, you should remove Compaq Insight Manager and the launch support from the management console.

To remove Compaq Insight Manager launch integration from ManageWise, perform the following steps (Note: <mw> is the directory where ManageWise is installed):

1. Open the NMS.INI file in the Windows directory on the management console.
2. Find the [map] section of the file.
3. Remove the entry CPQCIM from the Modules line in the [map] section.
4. Remove the entry CPQCIM from the RunModules line in the [map] section.
5. Find the [netexplorer] section of the file.
6. Remove the entry COMPAQ from the RuleFiles line in the [netexplorer] section.
7. Delete the file CIMLOAD.EXE from the <mw>\NMS\BIN directory.
8. Delete the file COMPAQ.OLF from the <mw>\NMS\OLF directory.
9. Restart the management console.

These steps prevent servers from being discovered as Compaq servers. However, servers that have already been discovered as Compaq servers will still be shown as Compaq servers after Compaq

Insight Manager is removed. You can edit these servers on the ManageWise map using the ManageWise *Database Object Editor* and remove Compaq Server as an available service. If this is done, these servers will no longer be shown with the Compaq server icon.

Alternatively, you may backup and delete the database, then rediscover the network. Servers will not be discovered as Compaq servers because ManageWise no longer has the definition of a Compaq server.

### DE-INSTALLING WEB-ENABLED COMPAQ MANAGEMENT AGENT SUPPORT

To remove Compaq Web Agent integration from ManageWise, perform the following steps (Note: <mw> is the directory where ManageWise is installed):

1. Open the NMS.INI file in the Windows directory on the management console.
2. Find the [map] section of the file.
3. Remove the entry CPQWEB from the Modules line in the [map] section.
4. Remove the entry CPQWEB from the RunModules line in the [map] section.
4. If web agent discovery was added, remove the entry "Rule?=CPQWEBAG.NLM,Compaq Web Agent,BOX,Compaq Web Agent" from the NW\_TRANSIENT\_FUNCTIONS section (where ? is the rule number).
5. Delete the file CPQWEB.EXE from the <mw>\NMS\BIN directory.
6. Delete the file CPQWEB.OLF from the <mw>\NMS\OLF directory.
7. Delete the file CPQWEB.ICO from the <mw>\NMS\ICONS directory.
8. Restart the management console.

These steps will remove support for the web-enabled Compaq Management Agents from ManageWise. However, servers that have already been associated with the Compaq Web Agent Service will still have that service. You can edit these servers on the ManageWise map using the ManageWise *Database Object Editor* and remove Compaq Web Agent as an available service.

Alternatively, you may backup and delete the database, then rediscover the network. Servers will not be discovered as having the Compaq Web Agent service.

### TROUBLESHOOTING

This section details some of the more common problems that may be seen when using this integration.

*Symptom:* When attempting to launch the browser to the Compaq Management Agents, you receive a Get Last error.

*Possible Cause:* The files MFC42.DLL and MSCVRT.DLL are not properly installed on the management console.

*Resolution:* Obtain these files from another system and copy them to the WINDOWS\SYSTEM directory. These files should be available on any machine running Microsoft Windows NT.

*Symptom:* When launching Compaq Insight Manager from ManageWise 2.6 running on a Windows NT console, the node selected does not appear.

*Possible Cause:* The system does not have the latest patch for ManageWise 2.6 from Novell.

*Resolution:* See the section entitled "Available Patches" for information on obtaining the

required patch.

*Symptom:* When launching the Compaq Management Agents from ManageWise 2.6, the browser does not connect to the selected node and launches with the URL `http://:2301/`.

*Possible Cause:* The system does not have the latest patch for ManageWise 2.6 from Novell.

*Resolution:* See the section entitled "Available Patches" for information on obtaining the required patch.

*Symptom:* When launching Compaq Insight Manager from the ManageWise map, the selected node does not come up when Insight Manager starts.

*Possible Cause:* The node is not in the Device List. The in-context launch of Compaq Insight Manager to a node requires that the node be in the Device List.

*Resolution:* Add the desired node(s) to the Compaq Insight Manager Device List.

*Symptom:* When launching to the Compaq Web Agent service, the browser returns an error saying a connection to the server could not be established.

*Possible Cause:* The web-enabled Compaq Management Agents are not installed or are not currently running on the system.

*Resolutions:* Install the web-enabled Compaq Management Agents, start the Insight Web Agent service, or enable the CPQWEBAG NLM.

*Symptom:* The ManageWise Console does not receive any alarms.

*Possible Cause:* Compaq Insight Manager is currently running on the same console and has registered to receive the alarms sent to the system.

*Resolution:* Exit Compaq Insight Manager and ManageWise, then restart the ManageWise console before launching Compaq Insight Manager.

*Symptom:* Compaq Insight Manager generates the following error when launched: "Compaq Insight Manager Unable to Receive Alarms - SNMP trap port is not available for SNMP Trap Service. If another application is monitoring SNMP traps, close it before starting Compaq Insight Manager. You may need to restart this management console."

*Possible Cause:* ManageWise is running and has registered to receive the alarms sent to the system.

*Resolution:* If you want ManageWise to receive the system alarms, simply click on OK to close the error dialog and continue using Compaq Insight Manager. It will function normally, but will not receive any alarms. Otherwise, exit ManageWise and Compaq Insight Manager, then restart the Compaq Insight Manager console before launching ManageWise.