

HP Insight Integration with Microsoft® Systems Management Server 2003 User Guide



October 2004 (First Edition)
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Product Version 2.0

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About This Guide

This guide is designed to be used as step-by-step instructions for installation and a reference for operations, troubleshooting, and future upgrades of the HP Insight Integration for Microsoft® Systems Management Server (SMS) 2003.

Audience Assumptions

This guide is intended for use by system integrators and network administrators who are familiar with HP branded server and client system products, Insight Management Agents, Insight Manager, and Microsoft SMS 2003.

Related Documents

For more information on topics discussed in this guide, refer to one of these sources:

- HP Systems Insight Manager user documentation from the HP Management CD
- Insight Management Agents for Microsoft Windows® user documentation from the HP Management CD
- *Microsoft Systems Management Server 2003 Operations Guide*
- *Microsoft SQL Server for Windows System Administrator's Guide*
- *Microsoft Windows Administrator's Guide*

Where to Go for Additional Help

In addition to this guide, the following information sources are available:

- Microsoft SMS documentation
- HP Service advisories and bulletins
- HP Systems Insight Manager software

Telephone Numbers

For the name of the nearest HP authorized reseller:

- In the United States, call 1-800-345-1518.

- In Canada, call 1-800-263-5868.

For HP technical support:

- In the United States and Canada, call 1-800-HP-INVENT (1-800-474-6836).
- Outside the United States and Canada, refer to <http://www.hp.com>.

Why Use the HP Insight Integration for SMS?

Microsoft SMS 2003 is a scalable software solution that maximizes network resources by centrally managing the maintenance of hardware and software inventories and distributing, installing, and metering software packages.

SMS is designed to work with many different hardware platforms and, as a result, it provides relatively generic hardware inventory data. To obtain additional in-depth asset information and facilitate software distribution for HP server hardware, Insight Integration for SMS delivers the following features:

- **Insight Inventory Collector**—A command line utility that extends the SMS database with HP specific information
- **HP Software Distribution Files**—Text files that facilitate the distribution of the following software products:
 - HP Insight Management Agents for HP ProLiant Servers
 - HP ProLiant Support Pack software for Microsoft Windows 2000 and 2003
 - HP Insight Inventory Collector

Using these integration solutions, the SMS administrator can collect the inventory data and distribute software packages to any HP ProLiant server configured as an SMS client.

NOTE: HP Insight Integration for SMS 2003 does not support Microsoft Windows NT® 4.0.

SMS Site Hierarchy

Using the Insight integration solution requires an understanding of the SMS site hierarchy. This hierarchy can include several site categories:

Table 1-1: SMS Site Categories

Category	Description
Central site	Single SMS site that stores system-wide information in a Microsoft SQL Server database. Manages all other SMS sites.
Primary site	Stores subsystem information in an SMS database. Can manage additional primary or secondary sites. Created by running the SMS setup application.
Secondary site	Stores information in the SMS database of the associated primary site. Manages no additional sites. Created by the associated primary site.
SMS site server	The server at a particular site that is responsible for managing that site and channeling all SMS information to and from the site.

NOTE: An SMS site can include one or more domains and can be a parent, a child, or both.

- A parent site contains information on all associated child sites and can manage certain operations at these child sites.
- A child site receives information from and reports information to a parent.

The central site is a parent site.

A primary site is a child site (with the central site or another primary site as parent) and can be a parent site (with secondary sites or other primary sites as child sites).

A secondary site is a child site.

SMS sites are arranged in a hierarchical structure:

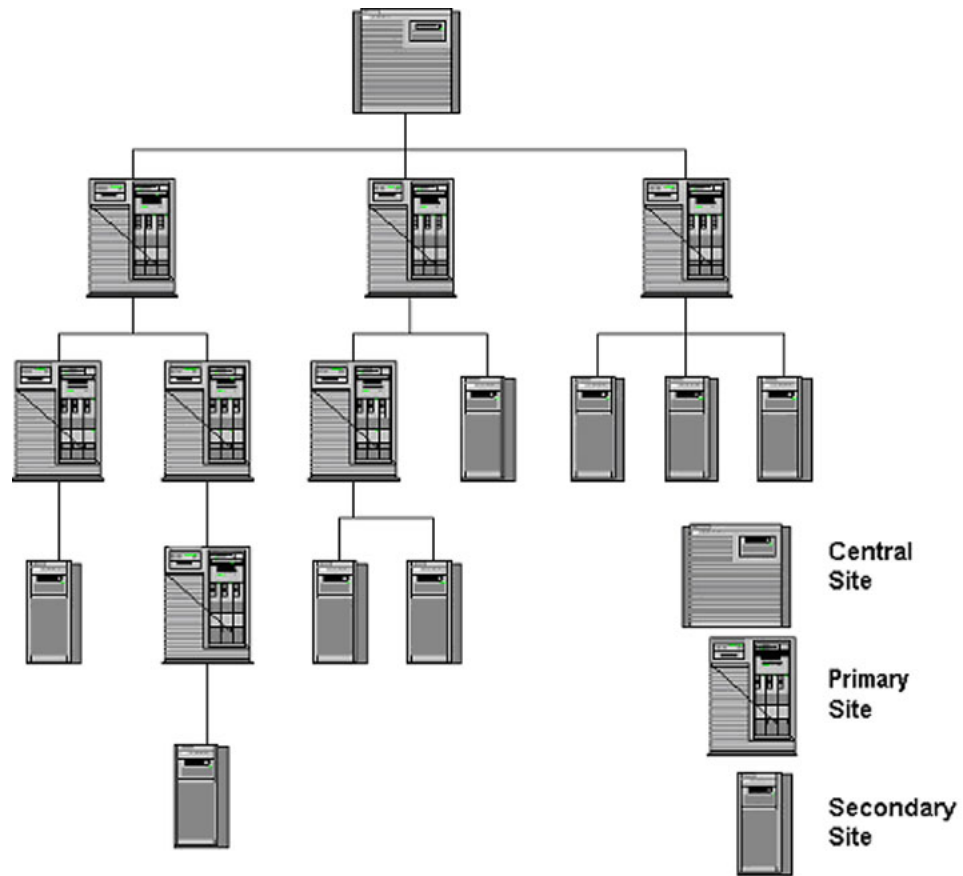


Figure 1-1: Sample SMS site hierarchy

Insight Inventory Collector Features

Introduction

The Insight Inventory Collector (also known as Collect.exe) is a command line utility that uses Insight Management Agents to obtain HP specific hardware information from SMS 2003 client sites and adds this information to the SMS database of the site server. The information can be viewed or queried and automatically updates the inventory information in the SQL Server database of the central site.

Collect runs on each specified client, creating a series of intermediate Management Information Format (MIF) text files that contain inventory information on the particular client. The client SMS inventory agent reads these files and outputs a single .MIF file to the site server so that the appropriate database can be updated.

Each HP specific .MIF file includes one or more tables listing specific inventory information.

NOTE: Version 2.0 of the HP Insight Integration for SMS 2003 is delivered with HP branded Collect.exe executable files. This executable generates data files with HP branded information. Refer to Chapter 6, "Migrating the Insight Integration from SMS 2.0 to SMS 2003," for information on upgrading from SMS 2.0 with Compaq branded inventory information. Note that while the .MIF files retain their original Compaq naming convention, the contents have been modified to represent HP branded data

IMPORTANT: The .MIF files created by the Insight Inventory Collector will not populate the SMS database automatically. The SMS Hardware Inventory service must be configured and active on each managed system to retrieve the .MIF files and populate the SMS database. Refer to the SMS user guide or application help for full details on configuring and using the hardware inventory feature of SMS.

.MIF File Contents

By default, the .MIF files are named Compaq0.MIF through Compaq10.MIF. Each file contains one or more inventory tables.

Table 2-1 contains the contents of the .MIF files.

Table 2-1: Contents of .MIF files

Filename	Inventory Table
COMPAQ0.MIF	CPU attributes EISA/PCI slots System attributes Memory module attributes Portable batteries Portable docking station Portable PC card slots
COMPAQ1.MIF	IDE devices
COMPAQ2.MIF	Video monitor
COMPAQ3.MIF	Health subsystem
COMPAQ4.MIF	Drive array controller Drive array logical drive Drive array physical drive
COMPAQ5.MIF	UPS attributes
COMPAQ6.MIF	Storage system attributes
COMPAQ7.MIF	SCSI devices
COMPAQ8.MIF	Software version information
COMPAQ9.MIF	Remote insight board information
COMPAQ10.MIF	Fibre Channel array controller Fibre Channel array logical drive Fibre Channel array physical drive Fibre Channel host controller Cluster node information Cluster interconnect information

NOTE: Table entries depend on the hardware installed on the particular client. For example, if the client is a server, the table for Portable Batteries will be omitted.

Individual Inventory Table Contents

Table 2-2 contains the contents of each inventory table.

Table 2-2: Inventory Table Contents

Filename	Inventory Table	Type	Description
COMPAQ0.MIF	CPU attributes	CPU number	Position of particular processor (1-4)
		CPU type	Class of Intel® processor, for example: 80486 or Pentium®
		CPU speed	CPU speed in MHz as determined by the HP Management Agents
		L2 cache	Level 2 cache capacity
		L3 cache	Level 3 cache capacity
COMPAQ0.MIF	EISA/PCI slots	Slot number	Slot where the particular board is installed
		Board EISA/PCI ID	Board ID; typically three characters to denote the vendor followed by an alphanumeric ID
		Board name	Vendor's name for the board; formatted per EISA/PCI specifications
		Board revision	Revision level of the board
COMPAQ0.MIF	System attributes	Product name	Full name of the system, for example HP ProLiant 7000
		Flash ROM	Flash ROM installed (YES/NO)
		System partition	HP Utilities partition present (PRESENT/NONE)
		System ROM revision	Revision level of the ROM installed on the system board
		Serial number	Serial number of HP system
		Part number	Part number of HP system
		Asset tag	User-selected string; defaults to serial number
		Total system memory	Memory installed on a Deskpro
		Hood removal	Date Deskpro hood removed
		Hot plug PCI	Hot Plug PCI bus support (YES/NO)
		Ownership tag	ASCII character string describing the user-specified ownership tag of the system
ROM family	Family type of system ROM		

continued

Table 2-2: Inventory Table Contents *continued*

Filename	Inventory Table	Type	Description
COMPAQ0.MIF	Memory module attributes	Board/Module number	Location of particular module; listed first by memory board number then module number
		Module size	Module size in MB
		Module type	Module type, for example: SIMM
		Module speed	Module memory speed, for example: 80 ns
		Memory error checking type	Error checking method used, for example; EDO
		Technology type	Module memory technology, for example: FPM
		Serial number	Module serial number
		Part number	Module part number
		Manufacturer	Module manufacturer
		Manufacture date	Date of manufacture of module
COMPAQ0.MIF	Portable batteries	Index	Index of the particular battery
		Manufacturer	Battery manufacturer
		Date	Battery manufacture date
		Serial number	Battery serial number
		Asset tag	Asset tag of battery
		Chemistry	Battery chemistry, for example: lithium
COMPAQ0.MIF	Portable docking station	Dock status	Dock status (DOCKED/UNLOCKED)
		Model name	Model name of attached docking station
		Serial number	Serial number of docking station
		Asset tag	Asset tag of docking station
		ROM revision	Revision date of the docking station ROM
COMPAQ0.MIF	PC card slots	Index	Index of the particular slot
		Slot location	Physical slot location
		Card presence	Card installed (YES/NO)
		Card status	Operational status of the installed card
		Manufacturer name	Card manufacturer
		Device name	Card name

continued

Table 2-2: Inventory Table Contents *continued*

Filename	Inventory Table	Type	Description
COMPAQ1.MIF	IDE devices	Controller/drive	Slot number and ID for the IDE controller
		Name	Name of the IDE device; for example: HP 2105
		Type	Type of IDE device; for example: disk
		Firmware revision	Revision level of IDE device firmware
		Disk size	Size of the IDE disk
		Serial number	Serial number of the IDE device
COMPAQ2.MIF	Video monitor	Description	Type of monitor
		Name	Model name
		Serial number	Serial number of monitor
		Horizontal pixels	Maximum horizontal pixel resolution
		Vertical pixels	Maximum vertical pixel resolution
		Frequency range	Horizontal and vertical frequency range supported by the monitor
		Fault management support	Presence of fault management support (YES/NO)
		Manufacturer ID	Manufacturer of the monitor
COMPAQ3.MIF	Health subsystem	ASR status	Status of Automatic Server Recovery-2 (ENABLED/DISABLED)
		ASR reboot to	How the system will reboot following an ASR-2 event (OPERATING SYSTEM/HP UTILITIES)
		Pager status	Status of ASR-2 paging (ENABLED/DISABLED)
		Pager number	Number called by server when initiating a paging event
COMPAQ4.MIF	Drive array controller	Model	Drive array model, for example; SMART array
		FW revision	Revision level of drive array controller firmware
		Slot	Slot number of drive array controller
	Drive array logical drive	Index	Index of the particular logical drive
		Controller slot	Slot of drive array controller with which logical drive associated
		Drive size	Size of the logical drive
		Fault tolerance	Type of fault tolerance used by the logical drive, for example: RAID 5
		Physical drives	List of physical drives included in the logical drive

continued

Table 2-2: Inventory Table Contents *continued*

Filename	Inventory Table	Type	Description
COMPAQ4.MIF	Drive array physical drive	Slot/Bay/Port	Slot number of the controller; port used by the physical drive; drive bay containing the drive
		Model	Model of physical drive; for example: HP M2694ES-512
		Firmware revision	Revision level of drive firmware
		Drive size	Size of physical drive
		Hot pluggable	Specifies if drive is hot-pluggable (YES/NO)
		Serial number	Serial number of the drive
COMPAQ5.MIF	UPS attributes	Model	UPS model name
		Serial number	UPS serial number
		Auto shutdown delay	Time (in minutes) UPS waits before shutting down after power loss
COMPAQ6.MIF	Storage system attributes	Index	Index of the particular storage system
		Model	Storage system model; for example: ProLiant 1-5E
		Controller slot	Slot number of storage system controller
		SCSI bus index	SCSI index of storage system
		FW revision	Revision level of storage system firmware
		Vendor	Storage system vendor
COMPAQ7.MIF	SCSI devices	Controller Slot/SCSI ID	Slot number and SCSI ID of the SCSI controller
		Name	HP name for the SCSI device; for example: HP 2105
		Type	Type of SCSI device; for example: disk
		Firmware revision	Revision level of SCSI device firmware
		Bus width	SCSI bus width; for example: 8 bits
		Disk size	SCSI disk size
		Hot pluggable	Specifies if device is hot-pluggable (YES/NO)
		Serial number	Serial number of the SCSI device

continued

Table 2-2: Inventory Table Contents *continued*

Filename	Inventory Table	Type	Description	
COMPAQ8.MIF	Software version information	Name	Name of the .EXE, .SYS, or utility program that runs the particular HP software product	
		Description	Text description of the software, for example: HP Insight Management Service	
		Version	Software version	
COMPAQ9.MIF	Remote Insight Board information	Serial number	Serial number of the Remote Insight Board	
		Firmware revision	Firmware revision of the Remote Insight Board	
		Video status	Status of the video (ENABLED/DISABLED)	
		Keyboard status	Status of the keyboard (ENABLED/DISABLED)	
		Alert status	Status of the alerts (ENABLED/DISABLED)	
		Battery status	Status of the battery (ENABLED/DISABLED)	
COMPAQ10.MIF	Fibre Channel array controller	Model	Fibre Channel Array Controller model	
		Firmware revision	Firmware revision of Fibre Channel array controller	
		Serial number	Serial number of Fibre Channel array controller	
		Storage Box I/O slot	Physical slot within storage box where Fibre Channel array controller installed	
	Fibre Channel array logical drive	Storage box index	Index of storage box where logical drive installed	
		Logical drive index	Index of logical drive within a storage box	
		Logical drive fault tolerance mode	Fault tolerance mode of the logical drive	
		Logical drive size	Size in MB of the logical drive	
		List of physical drives	List of physical drive IDs associated with the logical drive	
		Accelerator status	Status of the accelerator (ENABLED/DISABLED)	
		COMPAQ10.MIF	Fibre Channel array physical drive	Storage box index
	Physical drive index			Index of physical drive; with Storage Box Index, this uniquely identifies a specific physical drive
	Drive model			Text description of the physical drive
Drive size	Size in MB of the physical drive			
Firmware revision level	Firmware revision level of the physical drive			
Serial number	Serial number of the physical drive			

continued

Table 2-2: Inventory Table Contents *continued*

Filename	Inventory Table	Type	Description
COMPAQ10.MIF	Fibre Channel host controller	Host controller slot	Identifies physical slot where HP Fibre Channel host controller resides
		Model	Model name of controller card
		Worldwide name	User-specified string that can be used to further identify the controller card
	Cluster node information	Cluster name	Name of cluster to which this node belongs
		Cluster IP address	Static IP address of cluster
		Cluster node	Node name
	Cluster interconnect information	Interconnect physical ID	Physical device identification
		Interconnect transport	Network transport used by the interconnect; for example: TCP/IP
		Interconnect address	Address used by the interconnect

Command Line Options

Collect is a command line utility that enables you to specify options for obtaining HP specific hardware information from SMS clients. These options enable the SMS administrator to specify:

- The names of the .MIF files to be created by the client
- The SMS directory where the client places the .MIF files

NOTE: If this directory is not specified, Collect outputs the inventory tables to the screen.

- The items to be inventoried

NOTE: If the items are not specified, Collect performs a complete inventory.

- The Collect help screen

Table 2-3 lists the command line options.

Table 2-3: Command Line Options

Option	Name	Description	Tables Collected
/F	Output File	Specifies the name of the single .MIF file (Output File.MIF) created by the client. The default filename is COMPAQ.MIF. This output file includes all requested inventory tables. NOTE: Do not use this option with /M.	
/H	Server Health	Collects server health information.	Health Subsystem
/I	Drive Array	Collects drive array information.	All Drive Array tables
/M	Multiple	Creates multiple output files named COMPAQ0.MIF –COMPAQ10.MIF.	
/SC	SCSI	Collects SCSI information.	SCSI Devices
/SE	Standard Equipment	Collects standard equipment information.	System Attributes
/SMS03	SMS 2003	Places the .MIF files in the SMS 2003 NOIDMIF directory on the client machine. NOTE: This option requires either /F or /M	
/SMS20	SMS 2.0	Places the .MIF files in the SMS 2.0 NOIDMIF directory on the client machine. NOTE: This option requires either /F or /M	
/SS	Storage System	Collects storage system information.	Storage System Attributes
/SW	Software Version	Collects software version information.	Software Version Information
/U	UPS	Collects UPS information.	UPS Attributes
/?	Help	Displays the Collect Help screen.	

The command line syntax is:

```
COLLECT [[/M /SMS03|/SMS20|] /F outfile [/H|/I|/SC|/SE|/SS|/SW|/U]
| [/?]]
```

The default command line is typically:

```
COLLECT /M /SMS03
```

This command places the resulting .MIF files in the appropriate client directory so that SMS can update the database with HP specific inventory information.

Using the Insight Inventory Collector

IMPORTANT: To identify applicable pre-installation requirements, refer to Appendix B, “Pre-Installation Requirements.”

IMPORTANT: Refer to Chapter 6, “Migrating the Insight Integration from SMS 2.0 to SMS 2003,” for environments upgrading to SMS 2003 from SMS 2.0 before using *Collect.exe*.

There are two options for installing and using *Collect*:

- Issuing SMS advertisements from the site server to schedule inventory collections from specified clients
- Running *Collect* manually to collect the inventory of a particular client

Each of these options is discussed in the following sections.

IMPORTANT: The .MIF files created by the Insight Inventory Collector will not populate the SMS database automatically. The SMS Hardware Inventory service must be configured and active on each managed system to retrieve the .MIF files and populate the SMS database. Refer to the SMS user guide or application help for full details on configuring and using the hardware inventory feature of SMS.

Using Scheduled SMS Advertisements

The SMS administrator can schedule a repeating SMS advertisement from the SMS Administrator console to collect inventory information simultaneously from multiple target machines. To use scheduled SMS advertisements:

1. Create a directory on the site server to hold *Collect*.
2. Copy *Collect.exe* to the new directory.

NOTE: For information on obtaining *Collect.exe*, refer to Appendix A, “Obtaining HP Software.”

3. Create a new SMS package to schedule Collect:
 - a. From the Collect Package Properties window, select the **Data Source** tab.

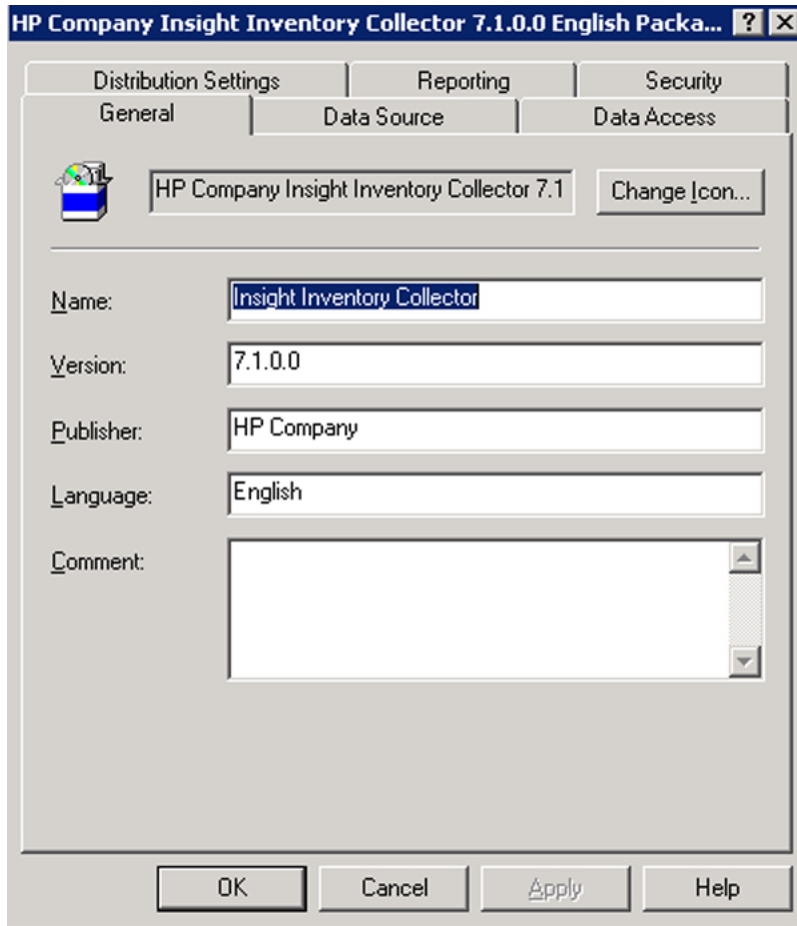


Figure 3-1: The Collect Package Properties window

- b. Select **This package contains source files** in the Data Source tab.

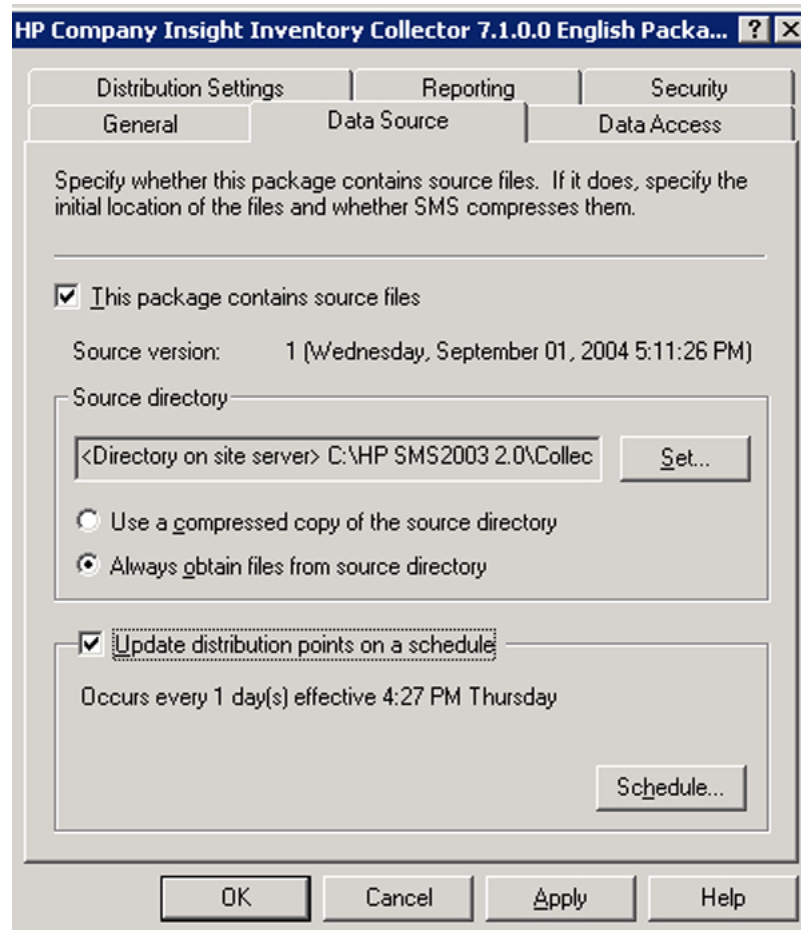


Figure 3-2: The contents of the Data Source tab

- c. Specify the name of the new directory as the source directory.
- d. Be sure that SMS always uses the most recently installed version of Collect by selecting the **Always obtain files from source directory** radio button and the **Update distribution points on a schedule** checkbox.

IMPORTANT: The SMS administrator must be sure that the version of Collect in the source directory is updated as required. All clients running the advertisement after the update will use the most recently installed version.

- e. If the SMS administrator never expects to update the current version of Collect, select **Use a compressed copy of the source directory**, if required.
- f. Click **OK**.

4. Specify the Collect command line:
 - a. From the SMS Administrator console, expand the package just created.

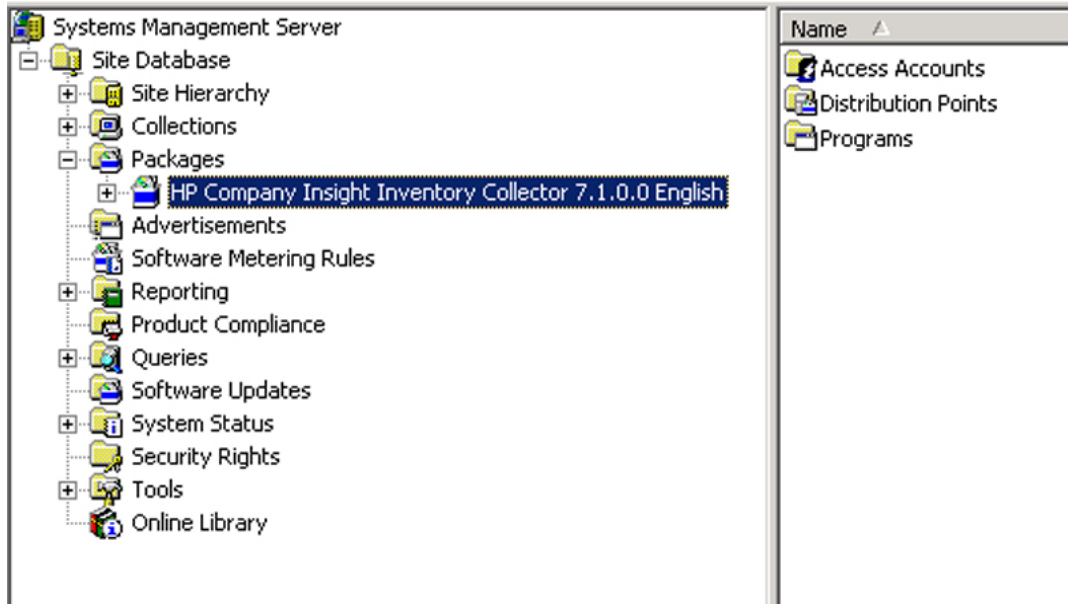


Figure 3-3: Expanding the new package

- b. Right-click **Programs**, and select **New** from the resulting dropdown menu. Select **Program** to open the Collect Program Properties window.

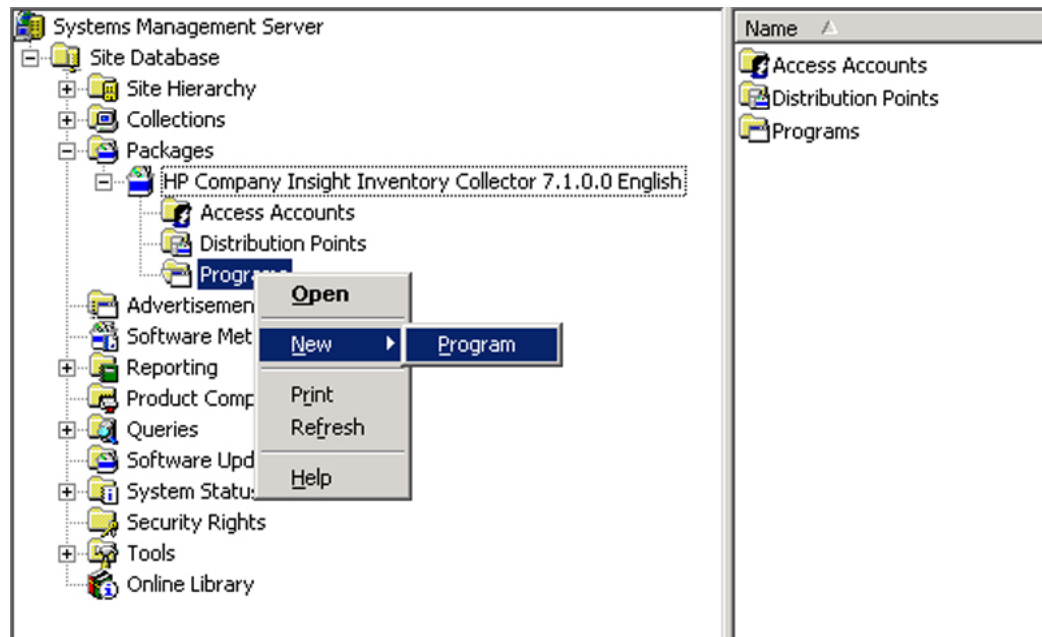


Figure 3-4: Obtaining the Collect Program Properties window

- c. In the General tab, specify a name for the command line, and then specify the command line.

NOTE: The default command line is: COLLECT /M /SMS03. For information on command line options, refer to Chapter 2, "Insight Inventory Collector Features."

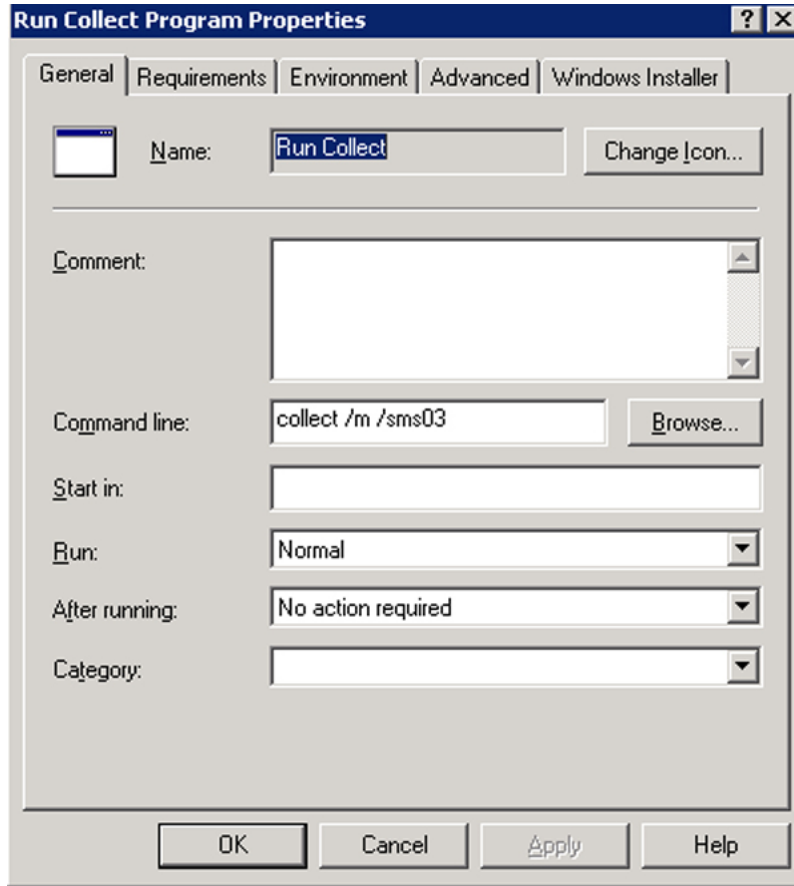


Figure 3-5: Specifying the Collect command line name

- d. To enable Collect to run from the client whether a user is logged on, select the appropriate option from the Program Can Run dropdown menu in the Environment tab.

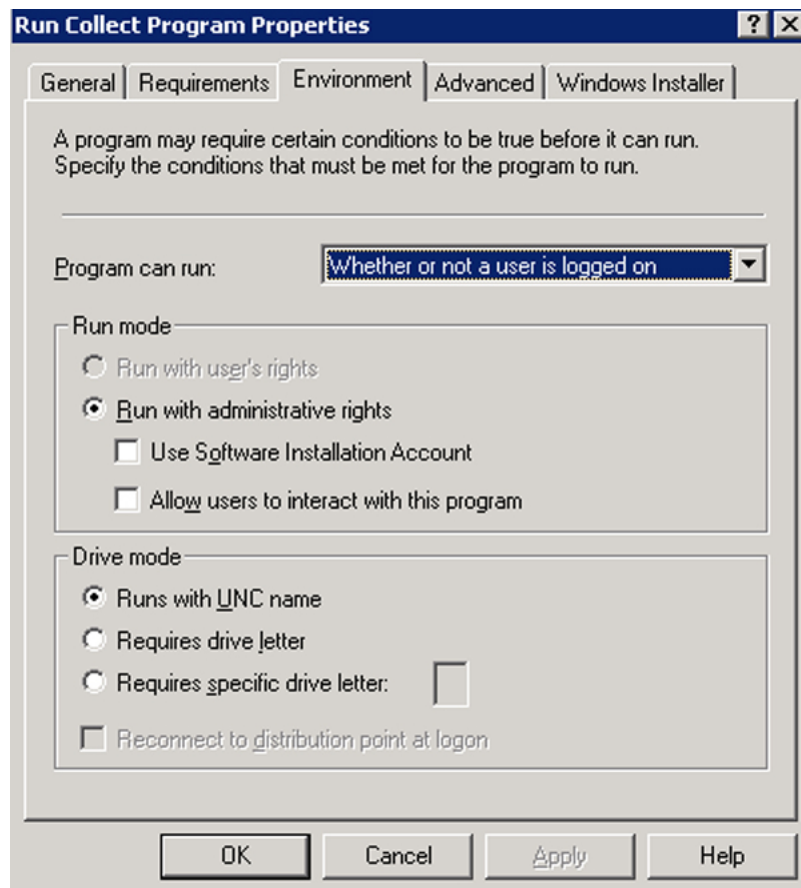


Figure 3-6: Selecting the “Whether or not a user is logged on” option

- e. In the Requirements tab, select the client platforms on which Collect will run when scheduled. Collect is supported on all x86 Windows 2000 and Windows Server 2003 clients.

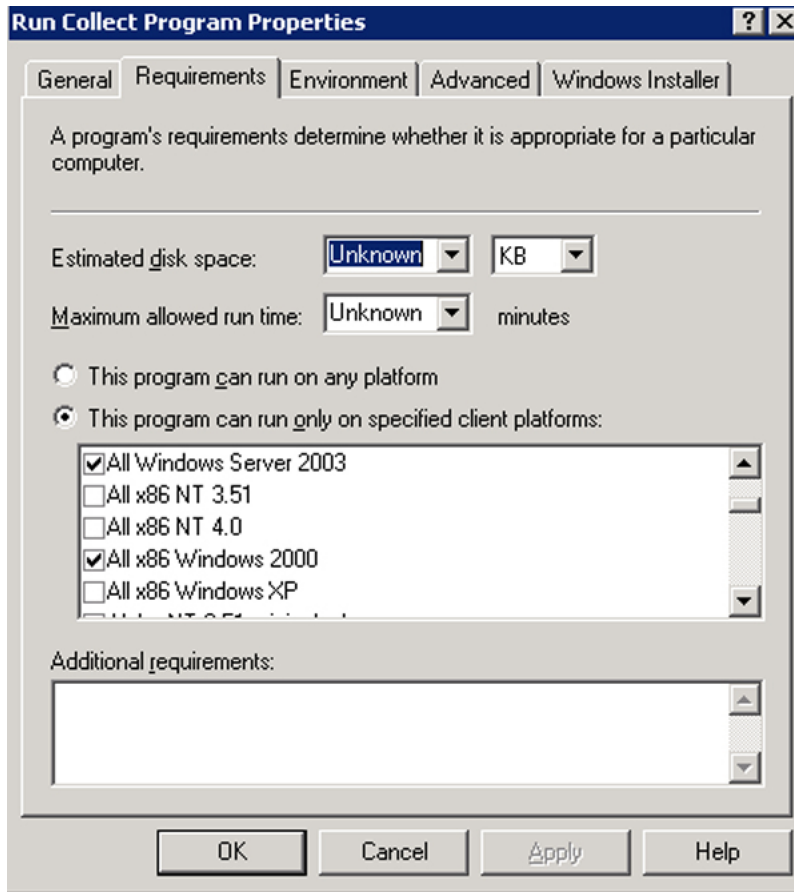


Figure 3-7: Selecting the client platforms on which Collect will run

- f. Create a distribution point for the package.

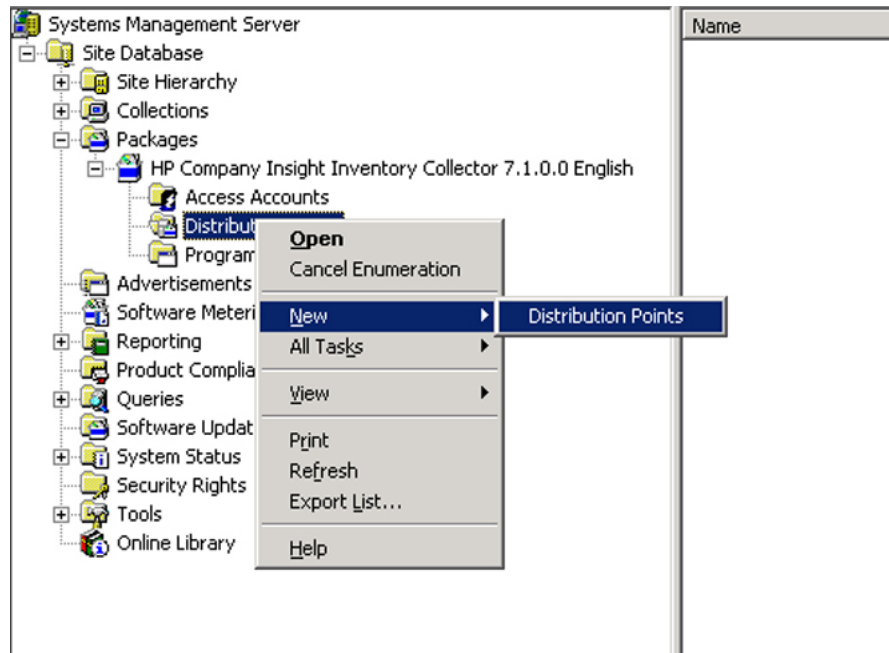


Figure 3-8: Creating a new distribution point

- g. Select the distribution point for the package.

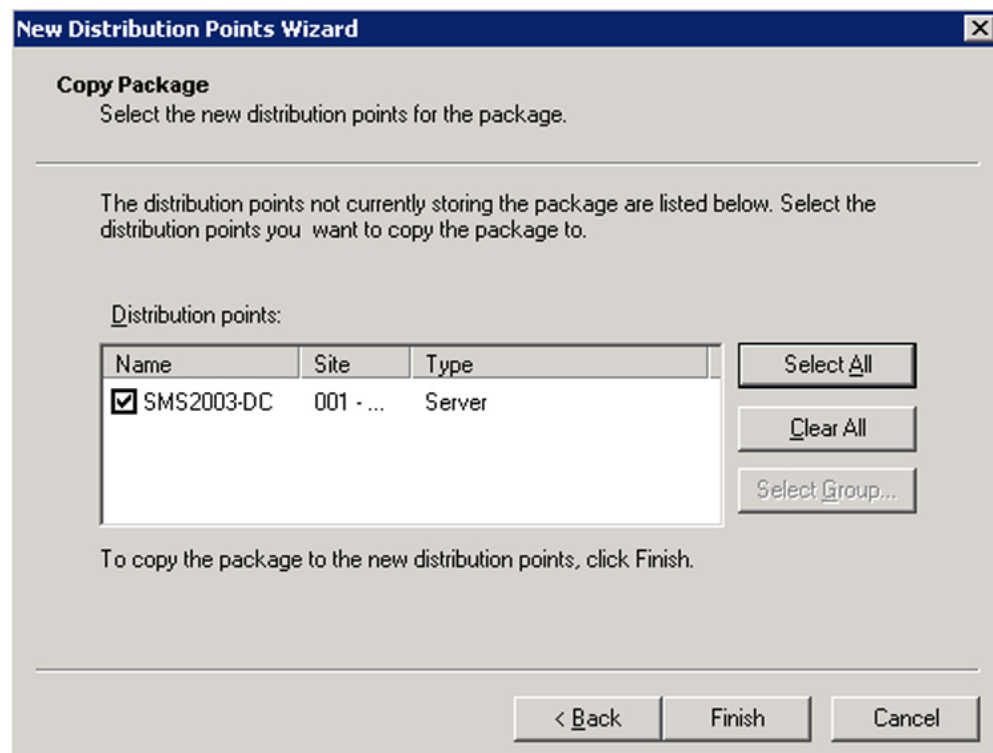


Figure 3-9: Selecting the distribution point

5. Create an advertisement to distribute Collect to the target machines:
 - a. From the SMS Administrator console, right-click the **Advertisements** icon.
 - b. Click **New**.
 - c. Click **Advertisement**.

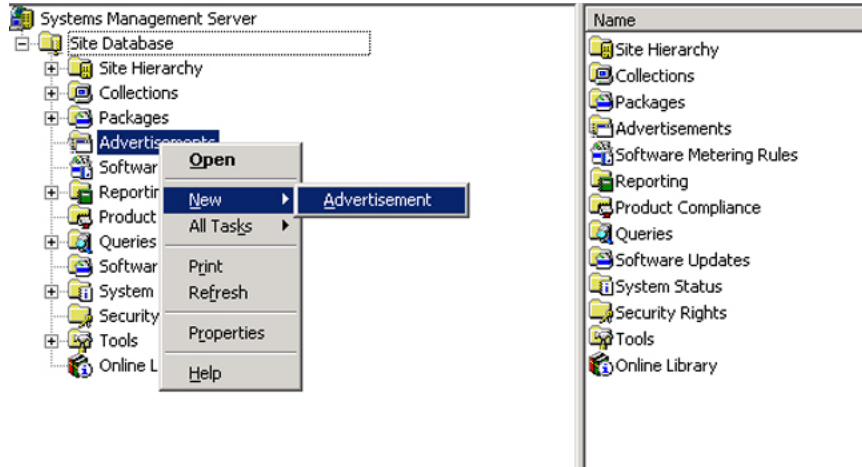


Figure 3-10: Opening the Advertisement Properties window

To schedule regular executions of Collect, create a mandatory schedule under the Schedule tab of the SMS Advertisement Properties window.

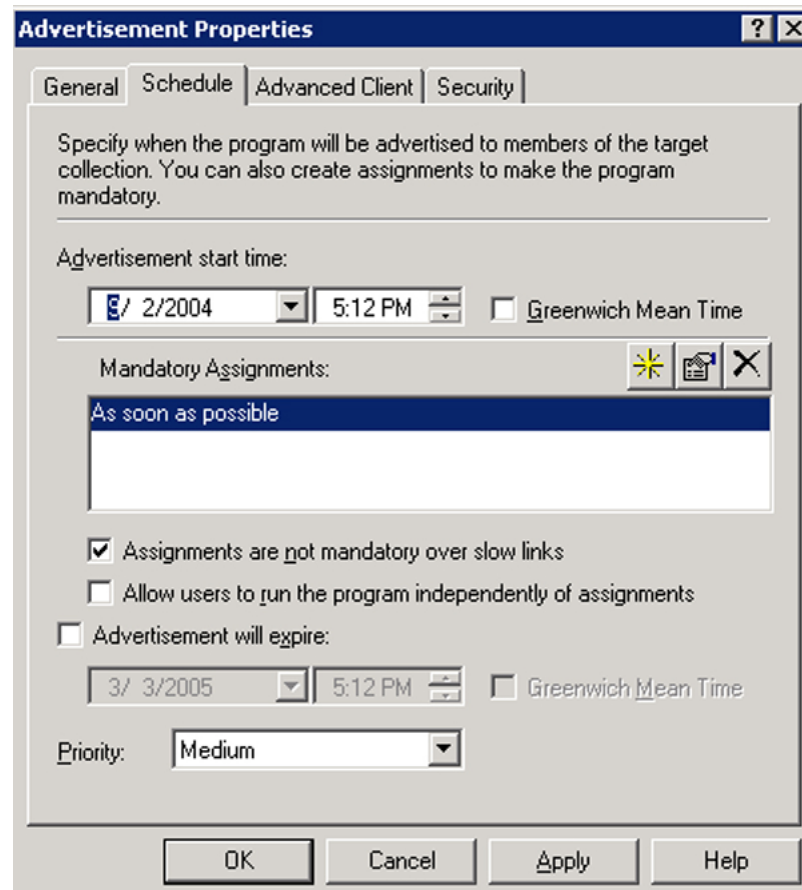


Figure 3-11: Creating a mandatory schedule

Running Collect Manually

At a smaller site, it might be more convenient to run Collect directly from a client machine. To run Collect manually:

1. Create a directory on the local hard drive to hold Collect.
2. Copy Collect.exe to the new directory.

NOTE: For information on obtaining Collect.exe, refer to Appendix A.

3. Switch to the new directory.
4. Run Collect from the command line.

NOTE: The default command line is: `COLLECT /M /SMS03`. For information on command line options, refer to Chapter 2, "Insight Inventory Collector Features."

5. Log in to a domain managed by SMS so that the .MIF files created by Collect can be read by SMS at the next scheduled hardware inventory period.

Related Activities

After installing and executing Collect, the SMS administrator can perform other related operations:

- Viewing the .MIF files
- Querying SMS databases

Viewing the .MIF Files

The information contained in the .MIF files created by Collect can be viewed in the Resource Explorer window at the SMS Administrator console.

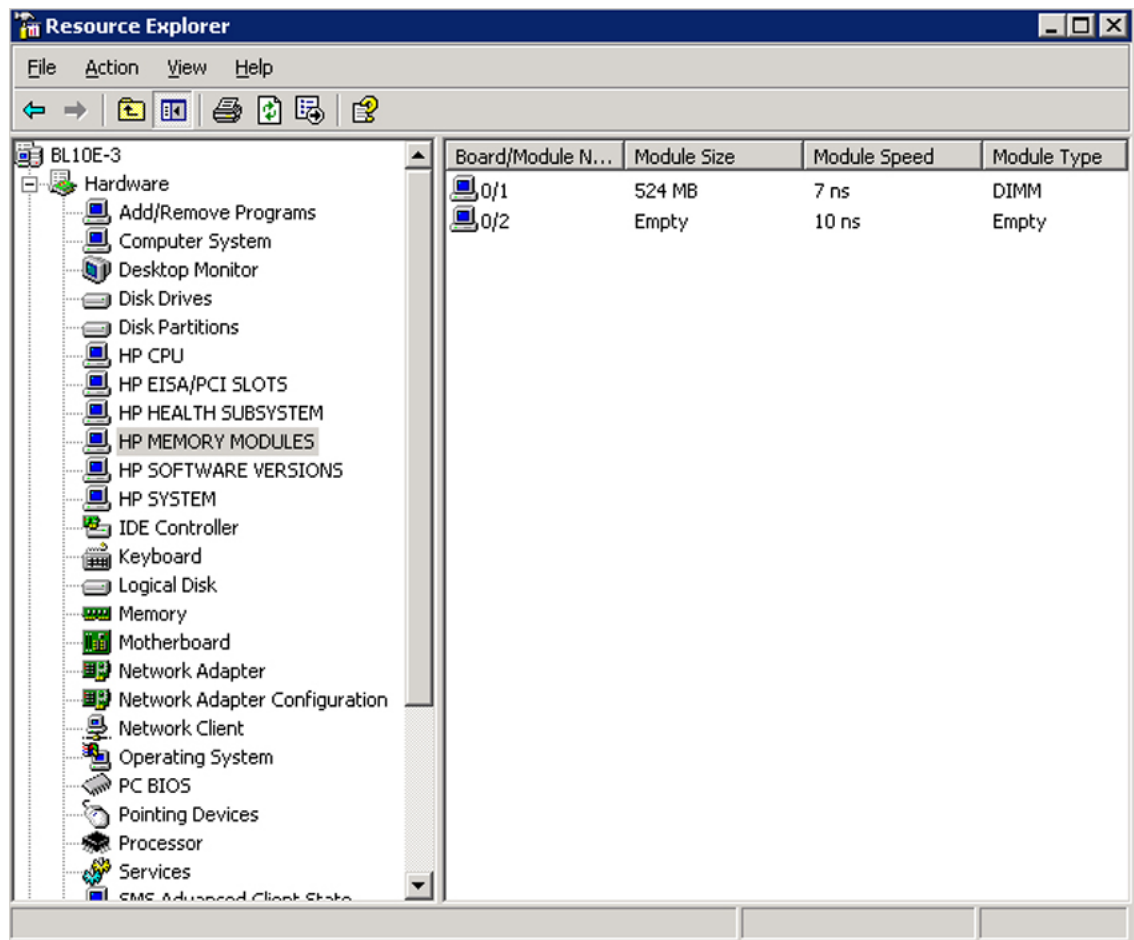


Figure 3-12: Sample Resource Explorer window

In the previous example, the following HP specific inventory information is displayed:

Table 3-1: Examples of Viewing .MIF Files

Hardware Component	.MIF File	Table
HP CPU	COMPAQ0.MIF	CPU Attributes
HP EISA/PCI SLOTS	COMPAQ0.MIF	EISA/PCI Slots
HP HEALTH SUBSYSTEM	COMPAQ3.MIF	Health Subsystem
HP MEMORY MODULES	COMPAQ0.MIF	Memory Module Attributes
HP SOFTWARE VERSIONS	COMPAQ8.MIF	Software Version Information
HP SYSTEM	COMPAQ0.MIF	System Attributes

For more information on the inventory information contained in .MIF files, refer to Chapter 2, “Insight Inventory Collector Features.”

Querying SMS Databases

After the HP specific inventory information has been added to an SMS database, the SMS administrator can query this information in the same manner as generic inventory information.

HP Software Distribution Files and Features

Capabilities

Because the task of configuring software packages and advertisements can be manually intensive, Microsoft SMS 2003 features a flexible software distribution that uses HP Software Distribution Files (.SMS) text files to facilitate the creation of software packages.

The Insight Integration for SMS 2003 includes additional .SMS files to distribute the following HP specific software products:

- Insight Management Agents for ProLiant servers
- ProLiant Support Pack Software for Windows 2000 and 2003
- Insight Inventory Collector

Each .SMS file includes programs that provide the SMS administrator with options for distributing and installing the particular software product.

Distribution Programs

Table 4-1 lists distribution programs contained in the .SMS files.

Table 4-1: Distribution Options

Software Product	Program	Description
Insight Management Agents	Manual Install of Agents	Launches the Insight Management Agents setup program then waits for user input. Does not perform a reboot on completion.
	Silent Install of Agents	Performs an automated install or upgrade of the Insight Management Agents. Does not perform a reboot on completion. NOTE: You do not need to be logged on to the target machine for the install program to function correctly.
ProLiant Support Pack Software	Manual Driver Install	Launches the ProLiant Support Pack setup program then waits for user input. Does not perform a reboot on completion.
	Automated Driver Install	Performs an automated install of a ProLiant Support Pack on a target server. Checks for new hardware, adds updates to the latest drivers and management agents. Does not perform a reboot on completion.
	Automated Driver Install and Reboot	Performs an automated install of a ProLiant Support Pack on a target server. Checks for new hardware, adds updates to the latest drivers and management agents. Performs a reboot on completion.
Insight Inventory Collector	AutoRun	Automatically runs the Inventory Collector and produces a full set of COMPAQx.MIF files for the target machine.

Using the Software Distribution Files

Distributing HP Software Products

The process for using Microsoft SMS 2003 to distribute HP software products includes:

- Preparing the site server
- Creating a package for the software
- Creating queries to target the distribution to specific clients
- Creating the advertisement to distribute the software

IMPORTANT: To identify applicable pre-installation requirements, refer to Appendix B, “Pre-Installation Requirements.”

Preparing the Site Server

To prepare the site server for software distribution, HP recommends that a source directory be created on the SMS site server, into which the appropriate files are copied.

NOTE: Because SMS can obtain software product source files and .SMS files from any share available on the network, these steps are not strictly necessary. For information on where to obtain product source files and .SMS files, refer to Appendix A, “Obtaining HP Software.”

To prepare the site server:

1. Create a source directory on the SMS site server.
2. Copy the appropriate .SMS file to the source directory.
 - **collect.sms**—Definition file for the Inventory Collector
 - **winhpagnt70.sms**—Definition file for Insight Management Agents 7.0 for ProLiant servers running Windows 2000 or 2003
 - **winhpagnt71.sms**—Definition file for Insight Management Agents 7.1 for ProLiant servers running Windows 2000 or 2003
 - **winhppsp.sms**—Definition file for the ProLiant Support Pack 7.0 and 7.1 for Windows 2000 and 2003

NOTE: The predefined .SMS files to deploy Insight Management Agents are designed for use with specific versions and component files delivered with ProLiant Support Packs. To deploy other versions of the Insight Management Agents, the winhpagt7x.sms files can be edited to reflect an alternative component file. Refer to the ProLiant Support Pack release notes and index files to identify specific component names.

- Using the file winhpagt70.sms as an example, edit the bolded items to reflect the desired replacement values and save as a .SMS file

```
[PACKAGE DEFINITION]
LANGUAGE=English
NAME=Insight Management Agents for Windows 2000/2003
VERSION=7.0
PUBLISHER=HP Company
PROGRAMS=ManualInstall, SilentInstall
```

```
[PDF]
Version=2.0
```

```
[MANUALINSTALL]
ADMINRIGHTSREQUIRED=True
SUPPORTEDCLIENTS=Win NT (i386)
USERINPUTREQUIRED=True
WIN NT (I386) MINVERSION1=5.00.0000.0
WIN NT (I386) MAXVERSION1=5.00.9999.9999
WIN NT (I386) MINVERSION2=5.20.0000.0
WIN NT (I386) MAXVERSION2=5.20.9999.9999
COMMANDLINE=cp003732.exe
NAME=Manual Install Insight Management Agents
CANRUNWHEN=UserLoggedIn
DRIVELETTERCONNECTION=True
EstimatedDiskSpace=10 MB
```

```
[SILENTINSTALL]
ADMINRIGHTSREQUIRED=True
SUPPORTEDCLIENTS=Win NT (i386)
USERINPUTREQUIRED=False
WIN NT (I386) MINVERSION1=5.00.0000.0
WIN NT (I386) MAXVERSION1=5.00.9999.9999
WIN NT (I386) MINVERSION2=5.20.0000.0
WIN NT (I386) MAXVERSION2=5.20.9999.9999
COMMANDLINE=Setupc cp003732.exe
NAME=Silent Install Insight Management Agents
CANRUNWHEN=AnyUserStatus
DRIVELETTERCONNECTION=True
EstimatedDiskSpace=10 MB
```

- Copy the source files for the software product to be distributed to the source directory.

IMPORTANT: Be sure that the appropriate version of the software product is copied to the defined source directories:

- Insight Management Agents 7.0 or 7.1
- ProLiant Support Pack 7.0 or 7.1

For information on obtaining software products, refer to Appendix A, “Obtaining HP Software.”

Creating a Package

After preparing the site server, use the Create Package from Definition wizard to create a package for the software product to be distributed:

1. To invoke the wizard:
 - a. In the SMS administrator console, right-click **Packages**.
 - b. Click **New**.
 - c. Click **Package from Definition**.

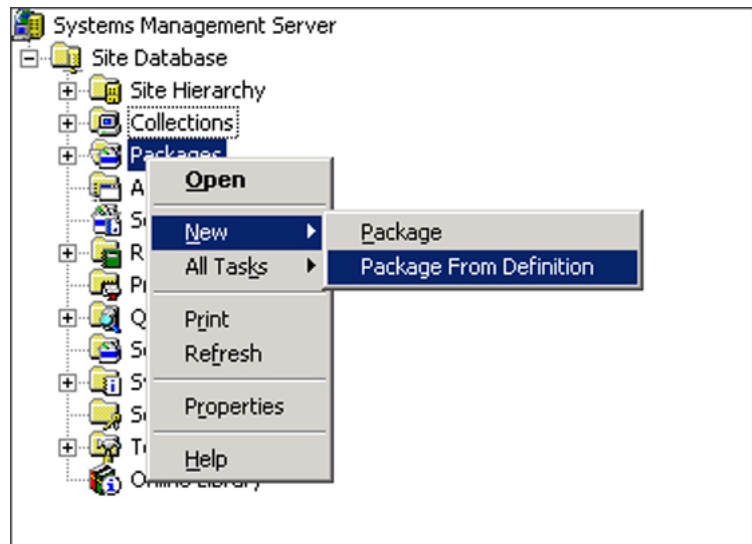


Figure 5-1: Invoking the Create Package from Definition wizard

2. Click **Next** to start the Create Package from Definition wizard.

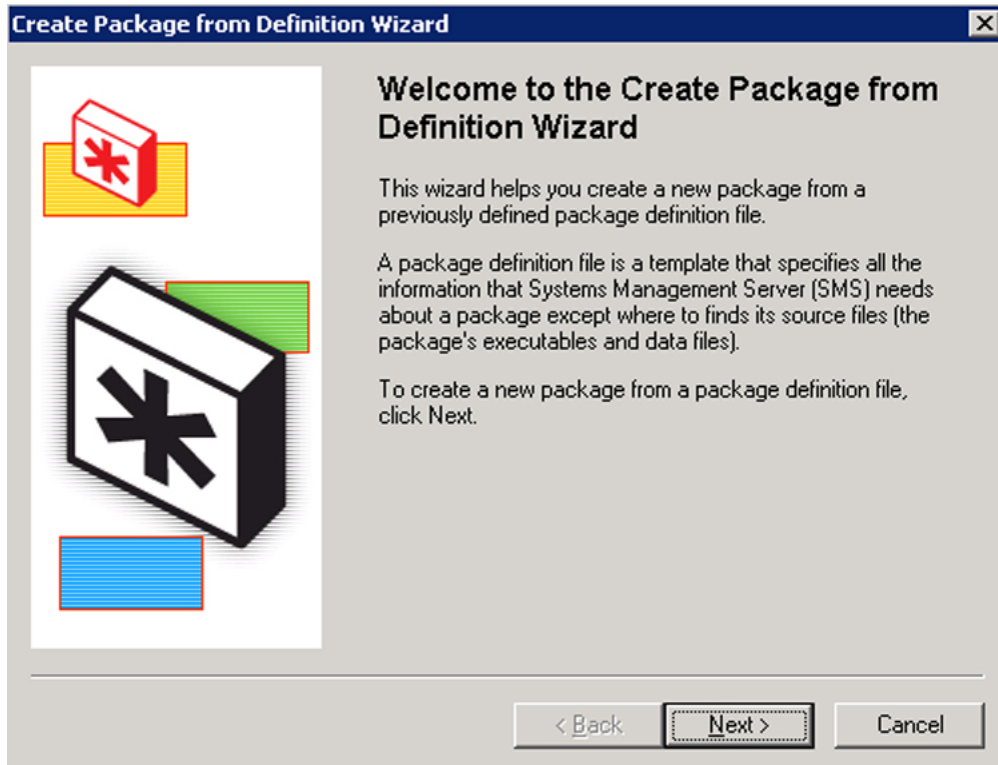


Figure 5-2: The Create Package from Definition wizard

3. Use **Browse** to select the directory where the .SMS file for the particular software product is located.

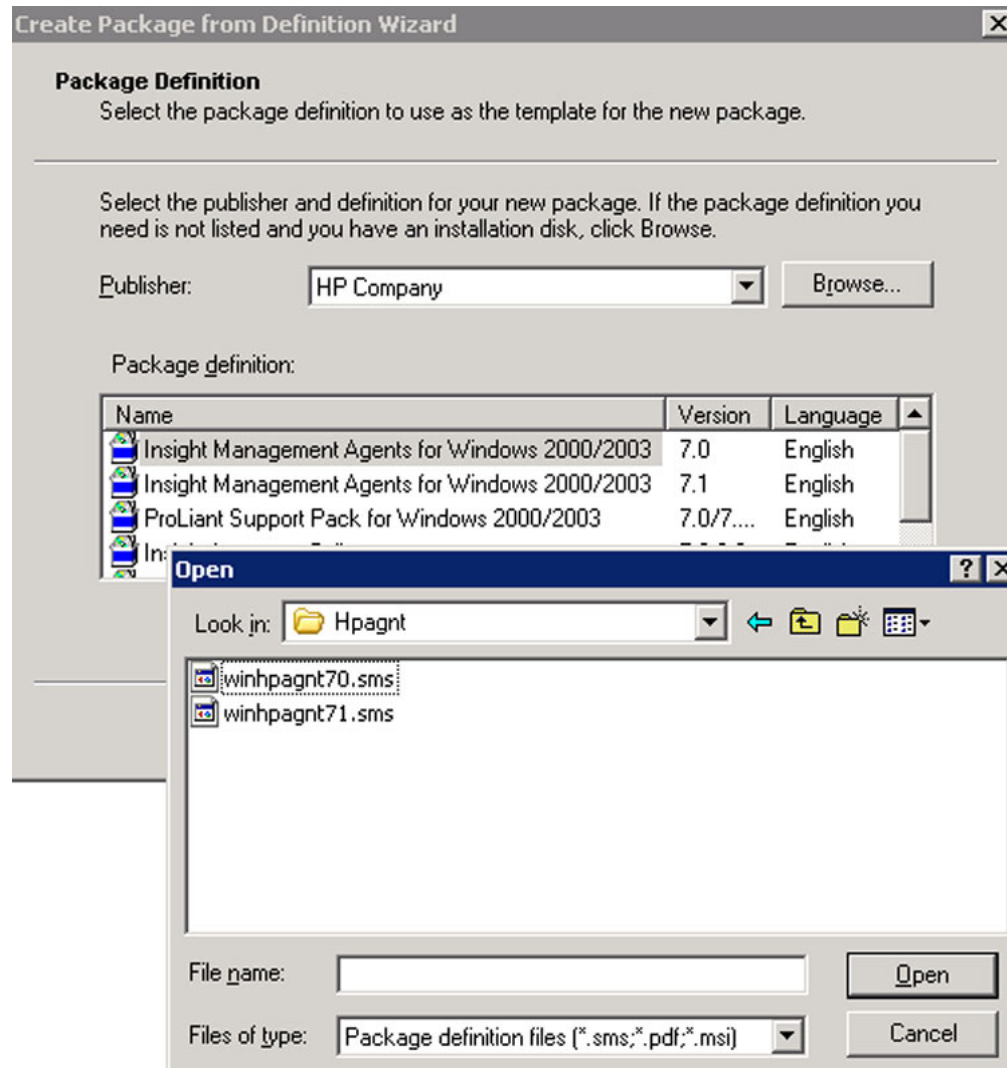
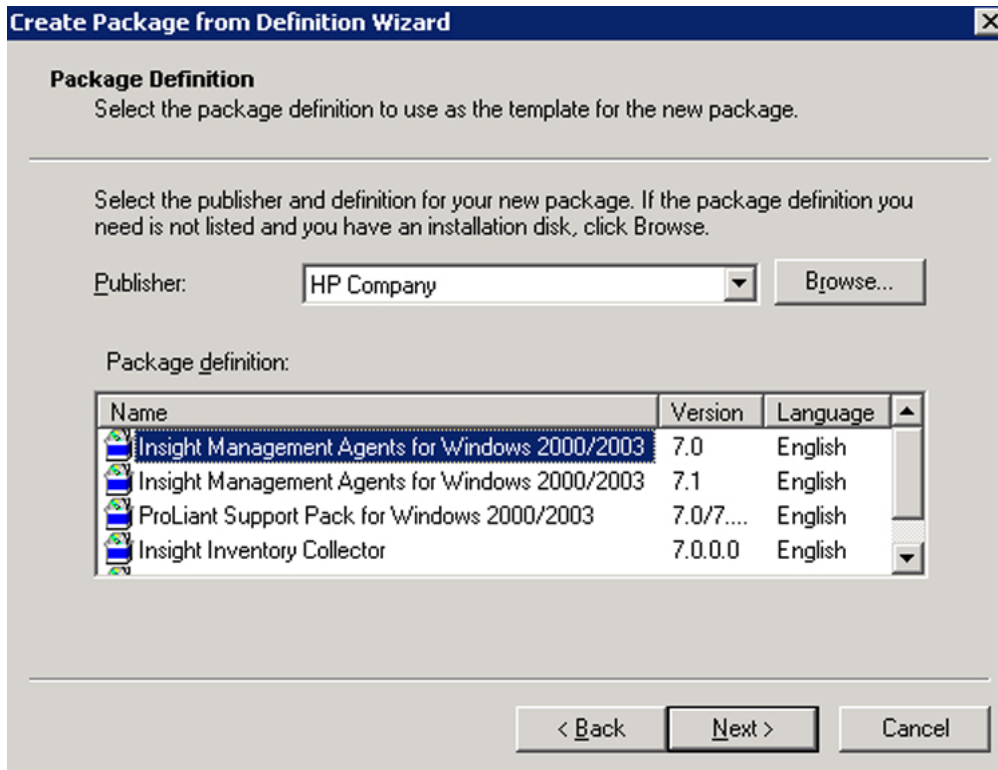


Figure 5-3: Selecting the .SMS file

4. Identify the HP software product to be distributed.



5. Specify how SMS will manage the source files:
 - If the files will always be available in a source directory, select **Always obtain files from a source directory**.

IMPORTANT: The SMS administrator must be sure that the files in the source directory are updated as required so that clients running this advertisement always receive the latest versions of the files.

- If the source files will never be updated, select **Create a compressed version of the source**.
- If the advertisement consists of a command line but no source files, select **This package does not contain any files**.

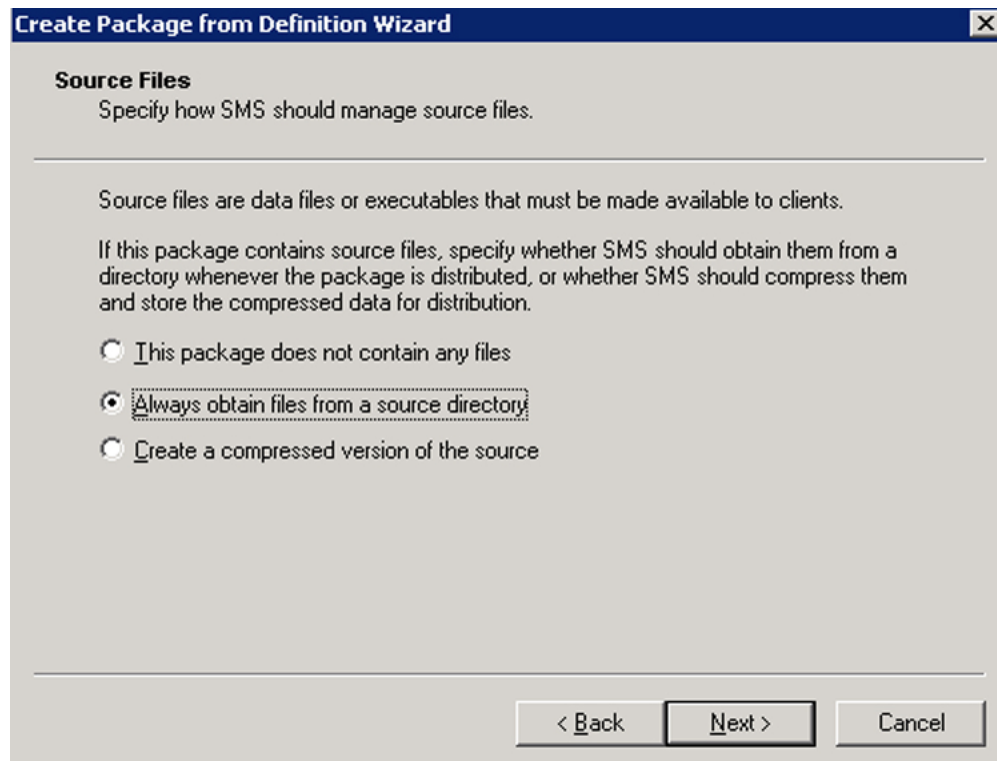


Figure 5-5: Managing the source files

6. Identify the directory containing the product source files. Typically, these files are located on the SMS site server.

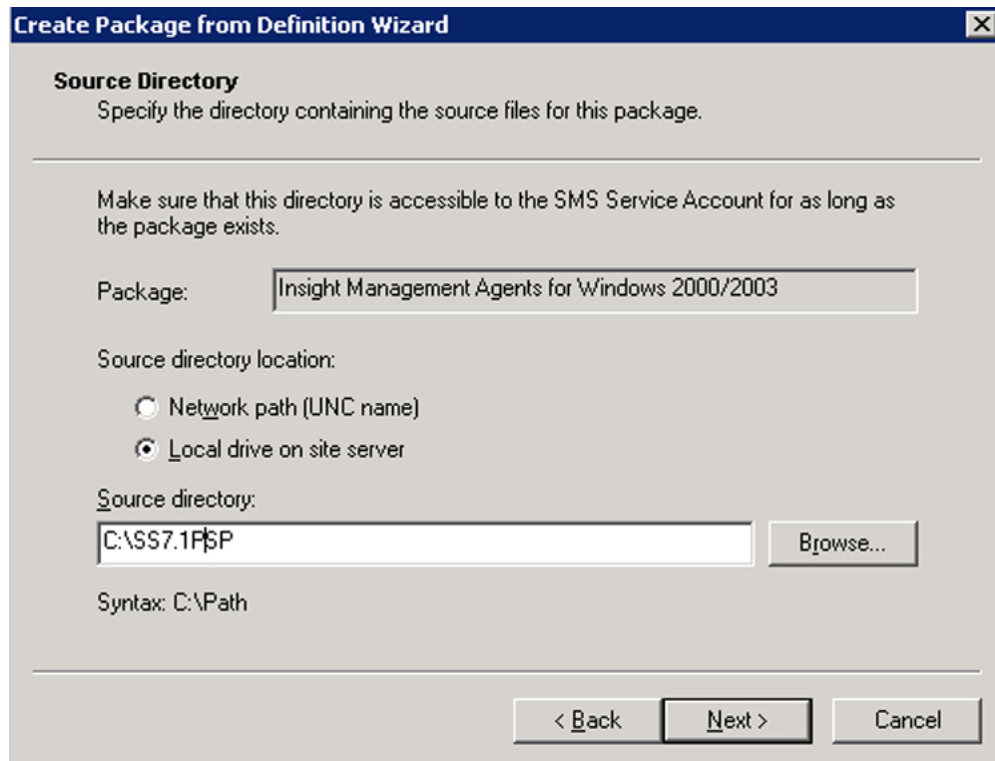


Figure 5-6: Identifying the directory that contains the source files

7. Click **Next**.
8. Click **Finish** to exit the Create Package from Definition wizard.
9. After creating the package, start the New Distribution Points wizard to specify which SMS distribution points will receive the package.

NOTE: Clients receive the package from one of the configured distribution points.

- a. Right-click the new package on the SMS Administrator console.
- b. Click **New**.
- c. Click **Distribution Points**.

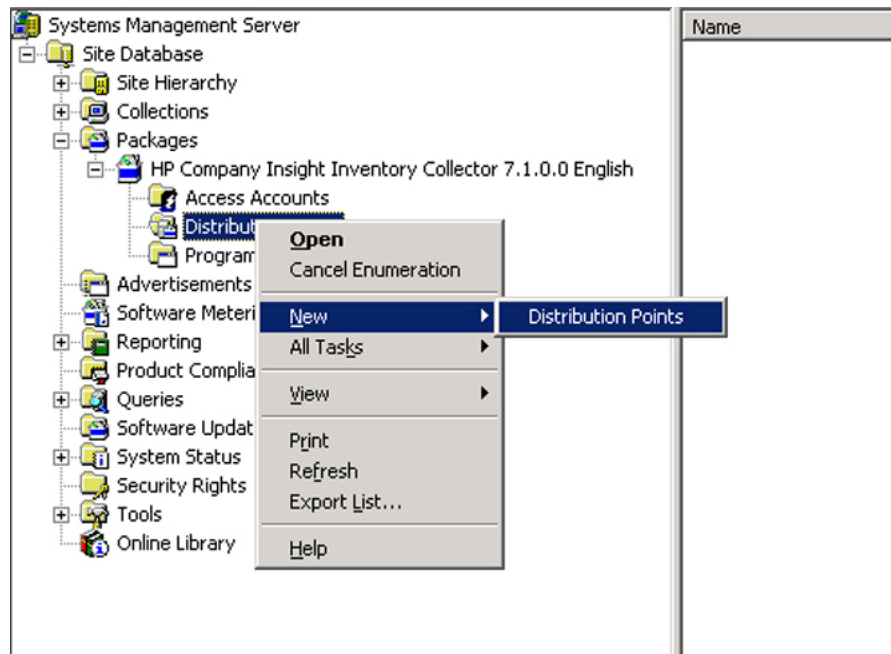


Figure 5-7: Obtaining the New Distribution Points wizard

10. Select the distribution points for the new package.

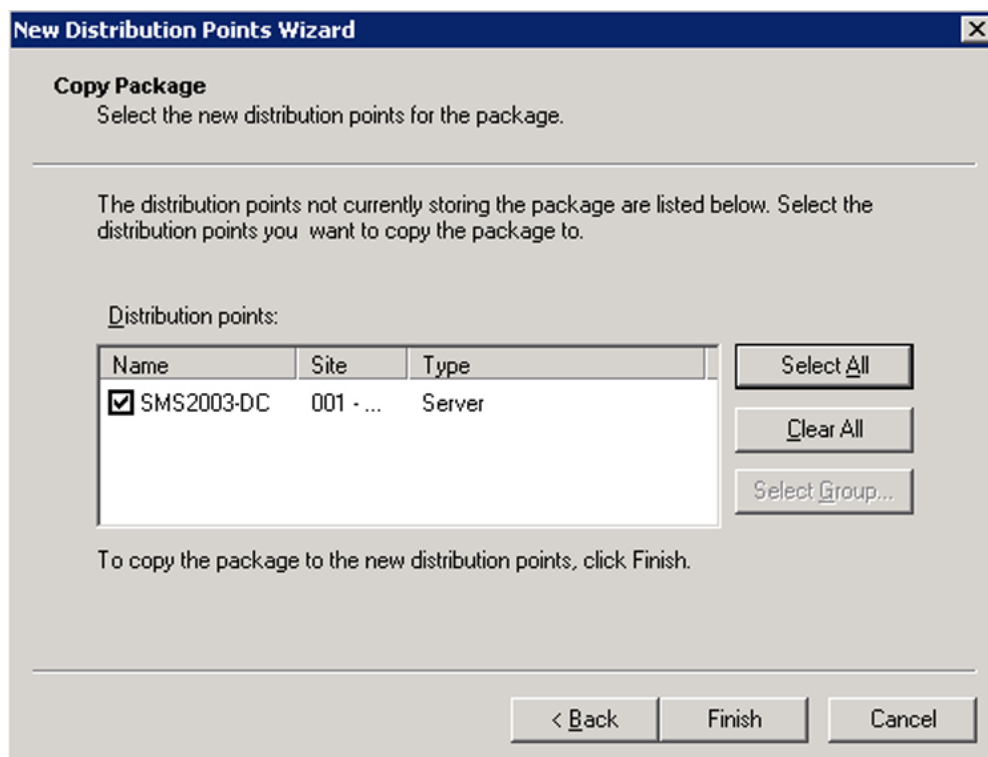


Figure 5-8: Selecting the distribution points

Creating a Query to Target Advertisements

Any information in the SMS database (including HP specific information obtained by the Insight Inventory Collector) can be the subject of a query. The SMS administrator can use the results of a query (known as a collection) to target software advertisements to specific machines.

If the SMS administrator is distributing a software package to many clients, consider breaking the distribution into a series of smaller waves to ease the burden on the network and distribution points. To achieve this, the SMS administrator can:

- Create queries to target different groups of clients; for example, clients requiring a manual install and those requiring an automatic install
- Schedule advertisements to run at different times

For information on creating queries, refer to the *Microsoft Systems Management Server 2003 Operation Guide*.

Example of Using Queries

To spread the distribution load on the network over a longer period, the SMS administrator can:

- Create a query to send a manual install to machines that are operated by knowledgeable users and an additional query to target machines where an automatic install is advisable
- Create queries that target a small subset of machines to perform an automatic install, then create several advertisements scheduled to run at different times that use each query as their target

For information on using collections to target advertisements, refer to the *Microsoft Systems Management Server 2003 Operation Guide*.

IMPORTANT: Take care when specifying automatic install of agents because installation failure can occur.

The Microsoft Windows SETUP.EXE application is used to install the Microsoft Management Agents. This application opens windows during the installation process, which can lead to unpredictable results during a background install

The client end-user can avoid this potential problem by running a password-protected screen saver during an automated installation or by being sure that qualified personnel are available to carry out a manual installation when the software package arrives.

Creating an Advertisement

After determining how the package will be distributed, use this procedure to create a suitable advertisement:

1. To obtain the Advertisement Properties window:
 - a. In the SMS Administrator console, right-click **Advertisements**.
 - b. Click **New**.
 - c. Click **Advertisement**.

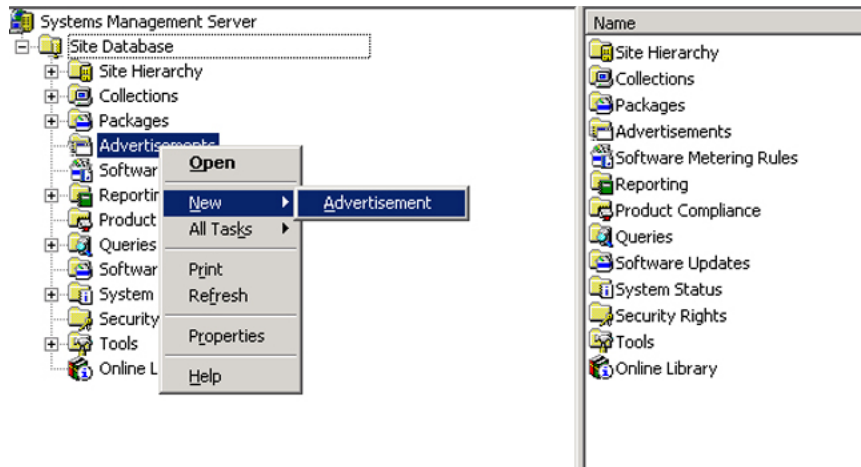


Figure 5-9: Obtaining the Advertisement Properties window

2. Using the General tab of the Advertisement Properties window, specify the contents of the advertisement:
 - a. Specify a name for the advertisement.
 - b. Identify the software package to be distributed.
 - c. Specify the particular program from the HP Software Distribution File to be run on the client. For more information on these programs, refer to Chapter 4, “HP Software Distribution Files and Features.”

- d. Specify the collection targeting the clients that will receive this advertisement.

The screenshot shows the 'Advertisement Properties' dialog box with the following fields and values:

- Name:** ProLiant Support Pack
- Comment:** (Empty text area)
- Package:** HP Company ProLiant Support Pack for Windows 200
- Program:** Auto Install/Reboot for ProLiant Support Pack
- Collection:** All Windows Server 2003 Systems (with a 'Browse...' button)
- Include members of subcollections

Buttons at the bottom: OK, Cancel, Apply, Help

Figure 5-10: Specifying the contents of the advertisement

3. Using the Schedule tab, specify the distribution criteria:
 - a. Set the priority to be assigned by SMS to the advertisement.
 - b. If required, make the advertisement mandatory. In this case, use the starburst icon to schedule the advertisement or specify that the advertisement will run when a particular client event occurs.

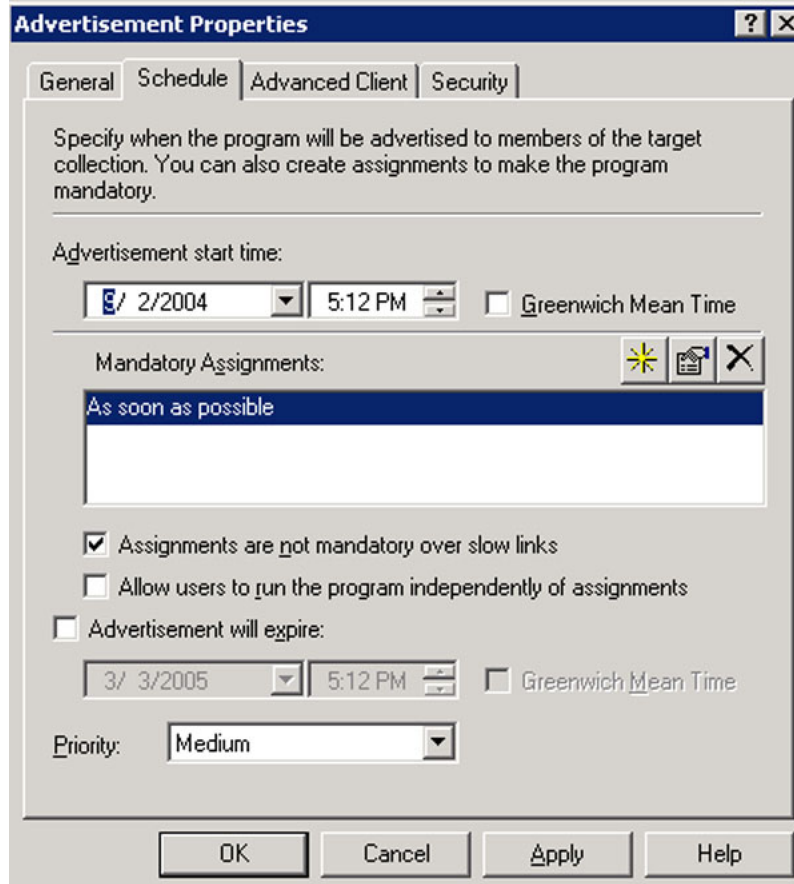


Figure 5-11: Specifying distribution criteria

4. Click **OK** to save the advertisement. SMS now places the package on the SMS distribution points and notifies clients at the appropriate time that an advertisement is ready to run.

Migrating the Insight Integration from SMS 2.0 to SMS 2003

The HP Insight Integration for SMS 2.0 before revision 7.10 provides information to the SMS 2.0 database as Compaq branded entries. The HP Insight Integration for SMS 2.0 revision 7.10 and for SMS 2003 revision 2.0 have been updated to provide HP branded entries. Compaq entries are no longer supported in the Insight Integration for SMS 2003 revision 2.0.

When upgrading from SMS 2.0 to SMS 2003, system inventory and package definition data stored within the SMS database is migrated to SMS 2003 during the upgrade process.

This chapter describes two procedures to migrate Compaq and HP branded data from SMS 2.0 to SMS 2003:

- Migrating from SMS 2.0
- Migrating to HP branded data from SMS 2003

After completing the procedures described in this chapter, all Compaq branded entries within the SMS database will be updated to HP branded entries during the migration.

NOTE: HP Insight Integration for SMS 2003 does not support Microsoft Windows NT 4.0.

Migrating from SMS 2.0

This section describes procedures for migrating from Compaq branded entries to HP branded entries during the SMS 2003 upgrade. This scenario assumes that SMS 2.0 is running with a Compaq branded Insight Inventory Collector installed, providing Compaq entries to the SMS Resource Explorer.

To perform the migration:

1. Update and install the Insight Integration for SMS 2.0 revision 7.10 with HP branded Insight Inventory Collector (Collect.exe version 7.10H).
2. Deploy the Insight Inventory Collector (version 7.10H) on all ProLiant systems managed by SMS.
3. Initiate a Hardware Inventory collection from within SMS 2.0.
4. Verify the resulting HP branded entries in the SMS Resource Explorer against any current Compaq branded entries. The entries should be identical, with “Compaq” replaced by “HP.”

5. Run the Removecpq.sql script to remove all Compaq branded data from the SMS database. The Removecpq.sql script is provided with revision 7.10 of the HP Insight Inventory Collector.

IMPORTANT: The Removecpq.sql script is only supported in SMS 2.0. Running Removecpq.sql removes all Compaq tables from SMS database. Run the script with caution.

- a. Open Removecpq.sql script with a text editor. The first line displays *USE <SMSdbName>*.
- b. Replace *<SMSdbName>* with the name of the database used for the SMS installation, and then save the edited file.
- c. Open the SQL Server Enterprise Manager application, and connect the SMS SQL Server.
- d. From the **Tools** menu, open the SQL Query tool.
- e. Select **File>Open**, and select the Removecpq.sql script modified in step a.
- f. Execute the script. When finished, references to the Compaq tables should be removed from the database.

NOTE: You might see several error messages reported by the SQL script tool. This result is expected and should not normally be a cause for concern. The SMS database might not contain all possible Compaq tables and is dependent on the type of inventoried hardware.

- g. Check the SMS database for any remaining Compaq tables. SMS occasionally creates redundant tables, denoted by a “1” at the end of the table name. Remove any redundant tables.
6. Now that the Compaq branded inventory data has been replaced with HP branded data, follow the standard SMS procedures and upgrade from SMS 2.0 to SMS 2003.

IMPORTANT: Be sure to give SMS 2003 enough time to complete initialization before proceeding. HP recommends waiting a minimum of 30 minutes.

IMPORTANT: Running the Deployment Readiness Wizard (DRW) is required. The DRW might display warnings for the Hardware Inventory Group Map because Compaq branded entries were removed. This is an expected result.

7. With the SMS 2003 Legacy or Advanced Client Agent installed on the clients, install and deploy the HP Insight Inventory Collector for SMS 2003 to collect system inventory information. Refer to Chapter 3, “Installation and Use,” for information on executing the Insight Inventory Collector utility to collect system inventory information.
8. Initiate Hardware Inventory from SMS 2003 to retrieve new inventory information.
9. Review the HP system inventory information from the device Resource Explorer. All HP provided information should display as HP entries.

Migrating existing Compaq data in SMS 2003 to HP data

This section describes procedures for migrating from Compaq branded entries to HP branded entries in SMS 2003. This scenario assumes:

- The environment has already been upgraded to SMS 2003 with Compaq branded entries collected from SMS 2.0
- The HP Insight Integration for SMS 2003 has not been installed

This scenario requires the use of SMS Advanced Client Agents.

To perform the migration:

1. Upgrade the SMS Legacy Client Agents to Advanced Client Agents on the ProLiant systems managed by SMS 2003. Refer to SMS 2003 documentation for a list of supported operating systems.

IMPORTANT: Be sure to give SMS 2003 enough time to complete initialization before proceeding. HP recommends waiting a minimum of 30 minutes.

2. Install and deploy the HP Insight Inventory Collector for SMS 2003 to collect system inventory information. Refer to Chapter 3, "Installation and Use," for information on executing the Insight Inventory Collector utility to collect system inventory information.
3. Initiate Hardware Inventory from within SMS 2003 to retrieve new inventory information.
4. Review HP system inventory information from the device's Resource Explorer. All HP provided information show up as HP entries. All previous Compaq-branded inventory data has now been replaced with HP-branded data.

Obtaining HP Software

Locating Source Files for HP Products

Source files for HP products are available at the following locations.

Table A-1: Locations of Source Files

Product	Location
Insight Management Agents for ProLiant Servers	HP Management CD: \compaq\csp\nt or HP Support and Drivers website: http://welcome.hp.com/country/us/en/ support.html
ProLiant Support Pack	HP SmartStart for Servers CD: \compaq\csp\nt or HP Support and Drivers website: http://welcome.hp.com/country/us/en/ support.html
HP Insight Integration for SMS <ul style="list-style-type: none">• Insight Inventory Collector (Collect)• HP Software Distribution Files (.SMS)	http://www.hp.com/servers/integration

Pre-Installation Requirements

Supported Hardware Platforms

Supported hardware platforms are HP ProLiant servers.

SMS Requirements

Before installing SMS 2003, be sure that the following requirements are met:

- Minimum hardware requirements:
 - HP ProLiant server with a Pentium Pro 200 processor
 - SMS only: 128 MB RAM; SMS and SQL Server: 256 MB RAM
 - 1 GB available hard disk space; if using the machine to run SQL Server or distribute software packages: 4 GB
- Minimum software requirements:
 - For site servers: Microsoft Windows 2000
 - For site servers: Microsoft SQL Server 7.0 with Service Pack 3

IMPORTANT: Because SMS depends heavily on the use of Microsoft SQL Server as a data store, HP highly recommends tuning the SQL Server to optimize performance. For more information, refer to the Microsoft SQL Server documentation.

Insight Management Agent Requirements

The Insight Integration for SMS supports Insight Management Agents for ProLiant servers. Refer to the “Requirements for the Insight Integration for SMS” section for version-specific data.

Before installing the Insight Management Agents, be sure that the following requirements are met:

- Minimum hardware requirements:
 - 32 MB available RAM; 48 MB recommended
 - 35 MB available hard disk space

- Network Interface Controller (NIC) supported by Microsoft Windows 2000, or later
- Minimum software requirements:
 - Microsoft Windows 2000
 - SNMP and TCP/IP stacks installed
 - If managing Novell NetWare servers with IPX protocol: NWLink IPX/SPX transport

Insight Integration for SMS Requirements

To successfully implement the Insight Integration for SMS, certain pre-installation conditions must be met for the following main components:

- Insight Inventory Collector
- HP Software Distribution Files

The minimum requirements are detailed in the following section.

Insight Inventory Collector Requirements

Before installing the Insight Inventory Collector, be sure that these requirements are met:

- Minimum hardware requirements:
 - 1MB available disk space
 - NIC supported by Microsoft Windows NT 4.0 SP4 or later
- Minimum software requirements:
 - Windows 2000 or later
 - HP Insight Management Agents 6.0 or later

NOTE: HP Insight Integration for SMS 2003 does not support Microsoft Windows NT 4.0.

Requirements for HP Software Distribution Files

HP Software Distribution Files are designed for use with ProLiant servers running Microsoft Windows 2000 and 2003. There are no additional pre-installation requirements.

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