Management Guide

NetIQ® AppManager® for Hewlett-Packard Systems Insight Manager

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NetIQ

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About this Book and the Library

The NetIQ AppManager product (AppManager) is a comprehensive solution for managing, diagnosing, and analyzing performance, availability, and health for a broad spectrum of operating environments, applications, services, and server hardware.

AppManager provides system administrators with a central, easy-to-use console to view critical server and application resources across the enterprise. With AppManager, administrative staff can monitor computer and application resources, check for potential problems, initiate responsive actions, automate routine tasks, and gather performance data for real-time and historical reporting and analysis.

Intended Audience

This guide provides information for individuals responsible for installing an AppManager module and monitoring specific applications with AppManager.

Other Information in the Library

The library provides the following information resources:

Installation Guide for AppManager

Provides complete information about AppManager pre-installation requirements and step-by-step installation procedures for all AppManager components.

User Guide for AppManager Control Center

Provides complete information about managing groups of computers, including running jobs, responding to events, creating reports, and working with Control Center. A separate guide is available for the AppManager Operator Console.

Administrator Guide for AppManager

Provides information about maintaining an AppManager management site, managing security, using scripts to handle AppManager tasks, and leveraging advanced configuration options.

Upgrade and Migration Guide for AppManager

Provides complete information about how to upgrade from a previous version of AppManager.

Management guides

Provide information about installing and monitoring specific applications with AppManager.

Help

Provides context-sensitive information and step-by-step guidance for common tasks, as well as definitions for each field on each window.

The AppManager library is available in Adobe Acrobat (PDF) format from the AppManager Documentation page of the NetIQ website.

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1 Introducing AppManager for HP Systems Insight Manager

Once your IT infrastructure starts functioning in your organization, you want to make sure it stays up, running, and operating to its peak potential. You need to monitor and analyze its performance to efficiently accomplish this critical goal.

AppManager for Hewlett-Packard Systems Insight Manager (HP SIM), formerly known as Compaq Insight Manager, maximizes server availability so your enterprise performs at top levels, ensuring business functions remain online. Graphs and reports of key server trends provide up-to-date data so you can proactively solve incidents and decrease application downtime. AppManager for HP SIM also enables you to monitor server attributes and easily manage your hardware from a single console.

As utilization increases, it becomes crucial for IT organizations to ensure the availability and performance of HP computers. AppManager for HP SIM provides an Activity Monitor for you to view information about jobs, services, and processes. It also provides comprehensive management of your HP infrastructure by monitoring events and collecting data for analysis.

AppManager-specific Knowledge Scripts allow you to monitor the following:

- Status of the Array logical drives in an array set
- Status of the Array physical drives in an array set
- Status and health of Automatic Server Recovery (ASR)
- Status of individual fans, Fibre Channel Array (FCA) controllers, and fault tolerant power supplies
- Network interface transmission errors and status of the network interface
- Status and the recharge level of the Remote Insight Board battery
- Status of the cable connections and overall condition of Remote Insight Board
- Number of hard resets, soft resets, and command timeouts for the SCSI controller
- Condition of Teamed NIC
- Status of the SIM temperature sensors, the computer's thermal environment, and the voltage level for a server.
- Status of the UPS battery life and the UPS AC power line

Using a set of AppManager-specific Report Knowledge Script, you can generate detailed reports about the following functions:

- Status of the Automatic Server Recovery
- CPU and memory usage by SIM processes
- Number of hard resets, soft resets, and command timeouts for the SCSI controller
- Condition of correctable memory, and the number of new correctable memory errors
- Windows event log entries from the SIM Insight Agent or the System Management Assistant (SMA)
- Network interface input and output errors

In addition to monitoring HP computers, AppManager for HP SIM can intervene to restart stopped services.

2 Installing and Configuring AppManager for HP SIM

This chapter describes the system requirements and the procedure for installing AppManager for HP SIM.

This chapter assumes you have AppManager installed. For more information about installing AppManager or about AppManager system requirements, see the *Installation Guide for AppManager*, which is available on the AppManager Documentation page.

2.1 System Requirements

For the latest information about supported software versions and the availability of module updates, visit the AppManager Supported Products page. Unless noted otherwise, this module supports all updates, hotfixes, and service packs for the releases listed below.

The following table lists the system requirements for AppManager for HP SIM:

Software/Hardware	Version
NetIQ AppManager installed on the AppManager repository (QDB) computers, on the HP SIM computers you want to monitor (agents), and on all console computers	8.0.3, 8.2, 9.1, 9.2, 9.5, or later One of the following AppManager agents are required: ◆ AppManager agent 7.0.4 with hotfix 72616 or later ◆ AppManager agent 8.0.3, 8.2, 9.1, 9.2, 9.5, or later
Microsoft Windows operating system on the agent computers	One of the following: ◆ Windows Server 2016 ◆ Windows Server 2012 R2 ◆ Windows Server 2008 R2 ◆ Windows Server 2008 (32-bit or 64-bit) ◆ Windows 2003 R2 (32-bit or 64-bit)

Software/Hardware	Version
On HPE servers prior to Gen10, HP Insight Management Agent must be installed on the agent computers	One of the following: ◆ 10.90.0 ◆ 10.60.0 ◆ 10.20.0 ◆ 10.0.0 ◆ 9.0.0 ◆ 8.70.0(B) ◆ 8.70.0 ◆ 8.60.0 ◆ 8.50.0 ◆ 8.40.0 ◆ 8.30.0 ◆ 8.15.0 ◆ 8.10.0
On HPE Gen10 servers or later, System Management Assistant (SMA) must be installed on the agent computers	The SMA is installed as part of the AMS package. For more information, see the HPE iLO 5 User Guide.
AppManager for Microsoft Windows module installed on the AppManager repository (QDB) computer, on the computers you want to monitor (agents), and on all console computers	7.6.170.0 or later
Microsoft SQL Server Native Client 11.0 **(for TLS 1.2 support)**	11.3.6538.0 or later **NOTE:** The SQL Server Native client can be installed from this Microsoft download link.

If you encounter problems using this module with a later version of your application, contact NetIQ Technical Support.

NOTE: If you want TLS 1.2 support and are running AppManager 9.1 or 9.2, then you are required to perform some additional steps. To know about the steps, see the article.

2.2 Installing the Module

The module installer automatically identifies and updates all relevant AppManager components on a computer. Therefore, run the module installer only once on any computer. The pre-installation check also runs automatically when you launch the module installer.

The module installer now installs Knowledge Scripts for each module directly into the AppManager repository (QDB) instead of to the `\AppManager\qdb\kp` folder as in previous releases.

You can install the module in one of the following ways:

* Run the module installer, `AM70-CIM-7.x.x.0.msi`.
* Use Control Center to install the module on the remote computer where an agent is installed. For more information, see Section 2.3, "Deploying the Module with Control Center," on page 13.

To install the module manually:

1 Run the module installer on the HP SIM computers you want to monitor (agents) to install agent components.

2 Run the module installer on all console computers to install the Help and console extensions.

3 To install the Knowledge Scripts and, where relevant, the Analysis Center reports:

   3a When installing to the primary QDB, select **Install Knowledge Scripts**.

   3b *If Analysis Center reports are available for this module*, select **Install report package**.

   3c Specify the SQL Server name of the server hosting the QDB as well as the case-sensitive QDB name.

   3d *If Analysis Center reports are available for this module*, specify the SQL Server name of the server hosting the Analysis Center Configuration Database.

> **NOTE**
> * You can install the Knowledge Scripts and Analysis Center reports to local or remote databases.
> * You need to install these module components only once per database.

4 *If you use Control Center 7.x*, run the module installer for each QDB attached to Control Center.

5 *If you use Control Center 8.x or later*, run the module installer only for the primary QDB, and Control Center will automatically replicate this module to secondary QDBs.

6 *If you have repositories running in active/active or active/passive clusters*, run the module installer on the active node. Then, copy the following Registry key to the non-active node.

`HKEY_LOCAL_MACHINE\SOFTWARE\NetIQ\AppManager\4.0`

7 If you have not discovered HP SIM resources, run the Discovery_CIM Knowledge Script on all agent computers where you installed the module. For more information, see Section 2.6, "Discovering HP SIM Resources," on page 15.

8 Upgrade running jobs for any Knowledge Script changes. For more information, see Section 2.7, "Upgrading Knowledge Script Jobs," on page 16.

After the installation has completed, the `CIM_Install.log` file, located in the `\NetIQ\Temp\NetIQ_Debug\`<*ServerName*> folder, lists any problems that occurred.

2.3 Deploying the Module with Control Center

You can use Control Center to deploy the module on a remote computer where an agent is installed. This topic briefly describes the steps involved in deploying a module and provides instructions for checking in the module installation package. For more information, see the *Control Center User Guide for AppManager*, which is available on the AppManager Documentation page.

2.3.1   Deployment Overview

This section describes the tasks required to deploy the module on an agent computer.

To deploy the module on an agent computer:

1 Verify the default deployment credentials.

2 Check in an installation package.

3 Configure an email address to receive notification of a deployment.

4 Create a deployment rule or modify an out-of-the-box deployment rule.

5 Approve the deployment task.

6 View the results.

2.3.2   Checking In the Installation Package

You must check in the installation package, `AM70-CIM-7.x.x.0.xml`, before you can deploy the module on an agent computer.

To check in a module installation package:

1 Log on to Control Center and navigate to the Administration pane.

2 In the Deployment folder, select **Packages**.

3 On the Tasks pane, click **Check in Packages**.

4 Navigate to the folder where you saved `AM70-CIM-7.x.x.0.xml` and select the file.

5 Click **Open**. The Deployment Package Check in Status dialog box displays the status of the package check in.

2.4   Silently Installing the Module

To silently (without user intervention) install a module, run the following command from the folder in which you saved the module installer:

```
msiexec.exe /i "AM70-CIM-7.x.x.0.msi" /qn
```

where x.x is the actual version number of the module installer.

To create a log file that describes the operations of the module installer, add the following flag to the command noted above:

```
/L* "AM70-CIM-7.x.x.0.msi.log"
```

The log file is created in the folder in which you saved the module installer.

2.5 Configuring Security Manager for AppManager for HP SIM

If the community name is not specified in the knowledge script then community name specified in AppManager Security Manager will be used.

To configure Security Manager:

1 Open the Security Manager.

2 Select the CIM server on which you want to run the Knowledge Script.

3 On the **Custom** tab, click **Add.**

4 In the **Label** field, type `snmp`.

5 In the **Sub-Label** field, type `community`.

6 In the **Value 1** field, specify the community string.

7 Leave the **Value 2** and **Value 3** field blank.

8 Leave **Extended application support** unchecked.

9 Click **OK**, and then click **Apply** to save the settings.

IMPORTANT: If security manager is not configured then by default `public` community will be used.

2.6 Discovering HP SIM Resources

Use the Discovery_CIM Knowledge Script to discover HP SIM configuration and resources. This Knowledge Script requires SNMP and the Hewlett-Packard Systems Insight Management Agent or SMA to be running on the HP SIM servers you are discovering. If a required service is not found or is not running, the Discovery job fails.

Set the parameters on the Values tab as needed:

Description	How to Set It
Raise event if discovery succeeds? (y/n)	This Knowledge Script always raises an event when the job fails for any reason. In addition, you can set this parameter to y to raise an event when the job succeeds. The default is n.
SNMP community string	Specify the SNMP community name string that allows access to HP SIM servers and data. The default is the community name specified in AppManager Security Manager or `public` if no community name has been specified.

Description	How to Set It
Event severity when discovery...	Set the event severity level, from 1 to 40, to reflect the importance when the job:
	◆ **...succeeds**. If you set this Knowledge Script to raise an event when the job succeeds, set the event severity level for a successful discovery. The default is 25.
	◆ **...fails**. The default is 5.
	◆ **...partially succeeds**. Set the event severity level for a discovery that returns some data but also generates warning messages. The default is 10.
	◆ **...is not applicable**. This type of failure usually occurs when the target computer does not have SIM installed. The default is 15.
	NOTE: If required services, such as SNMP or the Insight Manager Agent or SMA, are not running on the computer you are discovering, you might see a severity 15 event indicating the computer is not a SIM server. The event detail message provides more information about what caused discovery to fail.
Discover only physical interfaces?	Select Yes to only discover interfaces that are associated with a NIC card.
	Microsoft Windows Server 2008 and Microsoft Windows Server 2008 R2 provide virtual interfaces, which are interfaces that are not associated with a NIC card.
	If you set this parameter to no, AppManager displays virtual as well as physical interfaces in the TreeView. However, CIM_NICFail and CIM_NICError Knowledge Scripts are only applicable to physical interfaces. If you attempt to run these Knowledge Scripts on virtual interfaces, the jobs will report errors.
	If you set this parameter to yes, the console TreeView pane shows extra objects as null or unidentified. The objects do not cause errors or problems with how the module works.
	Any time you change this parameter setting, you must recreate all CIM_NICFail and CIM_NICError jobs on Windows Server 2008 and Windows Server 2008 R2 computers.
	The default is yes, which results in no discovery of virtual interfaces.

2.7 Upgrading Knowledge Script Jobs

This release of AppManager for HP SIM might contain updated Knowledge Scripts. You can push the changes for updated scripts to running Knowledge Script jobs in one of the following ways:

- ◆ Use the AMAdmin_UpgradeJobs Knowledge Script.
- ◆ Use the Properties Propagation feature.

2.7.1 Running AMAdmin_UpgradeJobs

The AMAdmin_UpgradeJobs Knowledge Script can push changes to running Knowledge Script jobs. Your AppManager repository (QDB) must be at version 7.0 or later. In addition, the repository computer must have hotfix 72040 installed, or the most recent AppManager Repository hotfix. To download the hotfix, see the AppManager Suite Hotfixes Web page.

Upgrading jobs to use the most recent script version allows the jobs to take advantage of the latest script logic while maintaining existing parameter values for the job.

For more information, see the Help for the AMAdmin_UpgradeJobs Knowledge Script.

2.7.2 Propagating Knowledge Script Changes

You can propagate script changes to jobs that are running and to Knowledge Script Groups, including recommended Knowledge Script Groups and renamed Knowledge Scripts.

Before propagating script changes, verify that the script parameters are set to your specifications. Customized script parameters might have reverted to default parameters during the installation of the module. New parameters might need to be set appropriately for your environment or application.

You can choose to propagate only properties (specified in the Schedule and Values tabs), only the script (which is the logic of the Knowledge Script), or both. Unless you know specifically that changes affect only the script logic, you should propagate both properties and the script.

For more information about propagating Knowledge Script changes, see the "Running Monitoring Jobs" chapter of the *Operator Console User Guide for AppManager*.

Propagating Changes to Ad Hoc Jobs

You can propagate the properties and the logic (script) of a Knowledge Script to ad hoc jobs started by that Knowledge Script. Corresponding jobs are stopped and restarted with the Knowledge Script changes.

To propagate changes to ad hoc Knowledge Script jobs:

1 In the Knowledge Script view, select the Knowledge Script for which you want to propagate changes.

2 Click **Properties Propagation** > **Ad Hoc Jobs**.

3 Select the components of the Knowledge Script that you want to propagate to associated ad hoc jobs:

Select	To propagate
Script	The logic of the Knowledge Script.
Properties	Values from the Knowledge Script Schedule and Values tabs, such as schedule, monitoring values, actions, and advanced options.

Propagating Changes to Knowledge Script Groups

You can propagate the properties and logic (script) of a Knowledge Script to corresponding Knowledge Script Group members.

After you propagate script changes to Knowledge Script Group members, you can propagate the updated Knowledge Script Group members to associated running jobs. For more information, see "Propagating Changes to Ad Hoc Jobs" on page 17.

To propagate Knowledge Script changes to Knowledge Script Groups:

1 In the Knowledge Script view, select the Knowledge Script Group for which you want to propagate changes.

2 On the KS menu, select **Properties propagation** > **Ad Hoc Jobs**.

3 *If you want to exclude a Knowledge Script member from properties propagation*, deselect that member from the list in the Properties Propagation dialog box.

4 Select the components of the Knowledge Script that you want to propagate to associated Knowledge Script Groups:

Select	To propagate
Script	The logic of the Knowledge Script.
Properties	Values from the Knowledge Script Schedule and Values tabs, including the schedule, actions, and Advanced properties.

5 Click **OK**. Any monitoring jobs started by a Knowledge Script Group member are restarted with the job properties of the Knowledge Script Group member.

3 HP SIM Knowledge Scripts

AppManager (HP SIM) provides a set of Knowledge Scripts for monitoring servers running HP SIM. It also includes Knowledge Scripts to generate reports about the performance of your HP SIM implementation.

From the Knowledge Script view of Control Center, you can access more information about any NetIQ-supported Knowledge Script by selecting it and clicking **Help**. In the Operator Console, click any Knowledge Script in the Knowledge Script pane and press **F1**.

Knowledge Script	What It Does
ArrayLogicalDriveCondition	Monitors the overall condition of logical drives in an array set.
ArrayLogicalDriveStatus	Monitors the status of logical drives in an array set.
ArrayPhysicalDiskStatus	Monitors the status of physical drives in an array set.
ASRHealth	Monitors Automatic Server Recovery (ASR) status and the number of ASR-initiated reboots.
ASRStatus	Monitors changes to the Automatic Server Recovery (ASR) status, and the status of the Pager, DialIn, and DialOut functions.
CorrectableMem	Monitors the condition of correctable memory and the number of new correctable memory errors.
CriticalErrorLog	Monitors the Critical Error Log for uncorrected critical error entries.
EventLog	Monitors NT event log entries created by SIM (entries from Insight Agents or SMA).
FanIndividual	Checks the status of individual fans.
FanSummary	Monitors the status of System and CPU fans.
FCAExternalControllerFail	Monitors the operational status of Fibre Channel Array (FCA) external controllers.
FCAFail	Monitors the status of FCA controllers.
FCAHostControllerFail	Monitors the operational status of FCA host controllers.
FCAHostFail	Monitors the status of FCA host controllers.
FCAOverallCondition	Monitors the overall condition of the FCA system.
FLTPWRIndividualCondition	Monitors the status of fault tolerant power supplies.
FLTPWROverallCondition	Monitors the overall condition of the Fault Tolerant Power Supply sub-system.
HealthCheck	Monitors all SIM services or SMA services and automatically restarts any service that is not running.
IDAFail	Monitors IDA controllers and IDA drives.
IDEFail	Monitors IDE controllers and IDE drives.

Knowledge Script	What It Does
IntegratedLog	Monitors the Integrated Management Log.
NICError	Monitors network interface transmission errors.
NICFail	Checks whether the network interface subsystem is down.
Report_ASRHealth-RebootCount	Generates a report about ASR status, and the number of ASR-initiated reboots.
Report_CIMResource_CPU_MemoryUsage	Generates a report about CPU and memory usage by SIM processes.
Report_CIMSCSI-Status	Generates a report about the number of hard resets, soft resets, and command timeouts for the SCSI controller.
Report_CorrectableMemoryErrors	Generates a report about the condition of correctable memory, and the number of new correctable memory errors.
Report_NewEventLogEntries	Generates a report about Windows event log entries from the SIM Insight Agent or SMA.
Report_NICErrorRate	Generates a report about network interface input and output errors.
ResourceHigh	Monitors the CPU and memory used by the SIM processes or SMA process.
RIBBatteryRechargeLevel	Monitors the battery recharge level of the Remote Insight Board battery.
RIBBatteryStatus	Monitors the status of the Remote Insight Board battery.
RIBBatteryRechargeLevel	Monitors the status of the Remote Insight Board cable connections, including the keyboard, mouse and external power cable.
RIBCondition	Monitors the overall condition of the Remote Insight Board.
RIBInterfaceStatus	Monitors the interface status of the Remote Insight Board.
RIBVirtualPowerCable	Monitors the virtual power cable connection of the Remote Insight Board.
SCSIFail	Monitors discovered SCSI drives.
SCSITimeout	Monitors the number of hard resets, soft resets, and command timeouts for the SCSI controller during the monitoring interval.
TeamedNICCondition	Monitors the condition of Teamed NIC.The job raises an event when Teamed NIC is degraded or fails.
TempIndividual	Monitors the status of SIM temperature sensors.
ThermalStatus	Monitors the computer's thermal environment and the status of the computer's temperature sensors.
UPSBatteryLow	Monitors the UPS battery life.
UPSLineStatus	Checks the status of the UPS AC power line.

3.1 ArrayLogicalDriveCondition

Use this Knowledge Script to monitor the overall condition of logical drives in an array set. The job raises an event if a monitored logical drive is not operating properly.

3.1.1 Resource Object

Array Logical Drive object

3.1.2 Default Schedule

The default interval for this script is **Every 5 minutes**.

3.1.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Logical drive failed	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set failed. The default is 5.
Severity - Logical drive degraded	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is in a degraded condition. The default is 12.
Severity - Unknown condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is in an unknown condition. The default is 15.
Severity - Unexpected Knowledge Script error	Set the event severity level from 1 to 40, to indicate the importance of an event in which the ArrayLogicalDriveCondition Knowledge Script fails unexpectedly. The default is 35.

3.2 ArrayLogicalDriveStatus

Use this Knowledge Script to monitor the status of logical drives in an array set. The job raises an event if the status of a monitored logical drive is anything but normal.

3.2.1 Resource Object

Array Logical Drive object

3.2.2 Default Schedule

The default interval for this script is **Every 5 minutes**.

3.2.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Event severity level for SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Event severity level for logical drive failed	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set failed. The default is 5.
Event severity level for logical drive not configured	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is not configured. The default is 25.
Event severity level for logical drive recovering	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is recovering. The default is 15.
Event severity level for logical drive ready for rebuild	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is ready for rebuild. The default is 25.
Event severity level for logical drive rebuilding	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is being rebuilt. The default is 15.
Event severity level for wrong physical disk replaced	Set the event severity level from 1 to 40, to indicate the importance of an event in which the wrong physical drive in an array set is replaced. The default is 12.
Event severity level for physical disk not responding	Set the event severity level from 1 to 40, to indicate the importance of an event in which a physical disk in an array set is not responding. The default is 12.
Event severity level for array enclosure overheating	Set the event severity level from 1 to 40, to indicate the importance of an event in which an array enclosure is overheating. The default is 12.
Event severity level for logical drive no longer functioning	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is no longer functioning. The default is 5.
Event severity level for logical drive doing data expansion	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is doing data expansion. The default is 15.
Event severity level for logical drive ready for data expansion	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is ready for data expansion. The default is 25.
Event severity level for logical drive unavailable	Set the event severity level from 1 to 40, to indicate the importance of an event in which a logical drive in an array set is unavailable. The default is 25.
Event severity level for unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of a logical drive in an array set is unknown. The default is 15.
Event severity level for unexpected Knowledge Script error	Set the event severity level from 1 to 40, to indicate the importance of an event in which the ArrayLogicalDriveStatus job fails unexpectedly. The default is 35.

3.3 ArrayPhysicalDiskStatus

Use this Knowledge Script to monitor the status of physical drives in an array set. This Knowledge Script raises an event if any physical drive is not operating or if any operation of the physical drive has degraded.

3.3.1 Resource Object

Array Physical Disk object

3.3.2 Default Schedule

The default interval for this script is **Every 5 minutes**.

3.3.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is n.
Event severity level for SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Event severity level for disk failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which a a physical drive in an array set fails. The default is 5.
Event severity level for disk degraded	Set the event severity level from 1 to 40, to indicate the importance of an event in which a physical drive in an array set is in a degraded condition. The default is 12.
Event severity level for unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of a physical drive in an array set is unknown. The default is 15.
Event severity level for unexpected Knowledge Script error	Set the event severity level from 1 to 40, to indicate the importance of an event in which the ArrayPhysicalDiskStatus job fails unexpectedly. The default is 35.

3.4 ASRHealth

Use this Knowledge Script to monitor Automatic Server Recovery (ASR) status. This Knowledge Script checks the overall condition of the ASR. The job raises an event if problems are detected. Event severity is specific to the failed condition.

This Knowledge Script also checks the number of ASR-initiated reboots that have occurred on a server during the monitoring interval. The job raises an event if the reboot count exceeds the threshold you set.

3.4.1 Resource Object

ASR object

3.4.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.4.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect Data? (y/n)	Set to **y** to collect data for charts and reports. If set to **y**, the script returns the number of times ASR rebooted the system. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Reboot maximum threshold	Specify a threshold for the maximum number of server reboots before the job raises an event. The default is 3.
Event severity level for SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Event severity level for overall condition critical	Set the event severity level from 1 to 40, to indicate the importance of an event in which the overall condition of the ASR is critical. The default is 2.
Event severity level for overall condition degraded	Set the event severity level from 1 to 40, to indicate the importance of an event in which the overall condition of the ASR is degraded. The default is 8.
Event severity level for number of reboots exceeded threshold	Set the event severity level from 1 to 40, to indicate the importance of an event in which the number of ASR-initiated reboots exceeded the threshold. The default is 5.

3.5 ASRStatus

Use this Knowledge Script to monitor changes to the Automatic Server Recovery (ASR) status. By default, the Knowledge Script checks the overall status of the ASR and the status of the Pager, DialIn, and DialOut functions. The job raises an event if the status of any monitored function changes during the monitoring interval.

NOTE: You can also raise an event when any ASR function is disabled. To have the Knowledge Script perform this check, set the Event severity level for ASR disabled parameter to a positive number.

3.5.1 Resource Object

ASR object

3.5.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.5.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Check pager? (y/n)	Set to **y** to check Pager status. The default is **y**.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Check DialIn? (y/n	Set to **y** to check DialIn status The default is **y**.
Check DialOut? (y/n)	Set to **y** to check DialOut status. The default is **y**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Event severity level for SNMP or CIM failure	Set the event severity level from 1 to 40 to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Event severity level for ASR disabled	Set the event severity level from 1 to 40 to indicate the importance of an event in which the ASR is disabled, or set to -1 if you do not want events to occur when the ASR is disabled. The default is -1.
Event severity level for ASR status change	Set the event severity level from 1 to 40, to indicate the importance of an event in which the ASR has a status change. The default is 8.

3.6 CorrectableMem

Use this Knowledge Script to monitor the condition of the correctable memory and the number of new correctable memory errors. The job raises an event if the number of correctable memory errors exceeds the threshold you set.

3.6.1 Resource Object

Correctable Memory object

3.6.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.6.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.

Description	How to Set It
Collect data?	Set to **y** to collect data for charts and reports. If set to **y**, the script returns the number of correctable memory errors. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Correctable memory errors maximum threshold	Specify a threshold for the maximum number of correctable memory errors. If you specify -1, the Knowledge Script uses the threshold value from a MIB variable inside SIM. **NOTE:** Because the number of errors reported is a delta value for the interval, it is always 0 for the first interval.
Event severity level for SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Event severity level for overall condition critical	Set the event severity level from 1 to 40, to indicate the importance of an event in which the correctable memory has an overall condition of critical. The default is 2.
Event severity level for overall condition degraded	Set the event severity level from 1 to 40, to indicate the importance of an event in which the correctable memory has an overall condition of degraded. The default is 8.
Event severity level if correctable memory errors exceeded threshold	Set the event severity level from 1 to 40, to indicate the importance of an event in which the number of correctable memory errors exceeded the threshold. The default is 8.

3.7 CriticalErrorLog

Use this Knowledge Script to monitor the Critical Error Log for uncorrected critical error entries:

- ◆ A critical event indicates a failure entry in the Critical Error log.
- ◆ A degraded condition event indicates that an uncorrected error or degraded operation error has been recorded in the log.

NOTE: For more information about the raised events, check the entries using the Insight Manager Console.

3.7.1 Resource Object

Critical Error Log object

3.7.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.7.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Failure entry	Set the event severity level from 1 to 40, to indicate the importance of an event in which a failure entry is recorded in the log. The default is 5.
Severity - Degraded condition entry	Set the event severity level from 1 to 40, to indicate the importance of an event in which an uncorrected error or degraded operation error has been recorded in the log. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which a status of unknown is recorded in the log. The default is 15.

3.8   EventLog

Use this Knowledge Script to monitor the NT event log entries created by HP SIM or SMA. These entries are in the System log. You can define other parameters for filtering the event log, such as event category, event ID, user, server name, and description.

3.8.1   Resource Objects

SIM server objects

3.8.2   Default Schedule

The default interval for this script is **Every 10 minutes**.

3.8.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.

Description	How to Set It
Start with events in past N hours	Set this parameter to determine which events are searched the first time you run the job. The following entries are valid: ♦ **-1** to search all existing log entries during the first interval ♦ **n** to search entries for the past *n* hours (8 for the past 8 hours, 50 for the past 50 hours, etc.) ♦ **0** to search no previous entries (search from the current time forward) The default is 0.
Monitor for events of type: Error?	Set to **y** if you want to monitor Error events. The default is **y**.
Monitor for events of type: Warning?	Set to **y** if you want to monitor Warning events. The default is **y**.
Monitor for events of type: Information?	Set to **y** if you want to monitor Information events. The default is **n**.
Filter the Event Category field for	If you are interested in events in a particular category (for example 9 or 4), specify an appropriate search string. The Knowledge Script looks for matching entries in the Event Log's Category field. You can specify multiple strings separated by commas. The search string can contain criteria used to include entries, exclude entries, or both. Separate the include and exclude criteria with a colon (:). If you are specifying only include criteria, the colon is not necessary.
Filter the Event ID field for	If you are interested in particular event IDs, specify an appropriate search string. The Knowledge Script looks for matching entries in the Event Log's Event field. You can specify multiple IDs separated by commas. The search string can contain criteria used to include entries, exclude entries, or both. Separate the include and exclude criteria with a colon (:). If you are specifying only include criteria, the colon is not necessary.
Filter the Event User field for	If you are interested in events associated with a particular user, specify an appropriate search string. The Knowledge Script looks for matching entries in the Event Log's User field. You can specify multiple strings separated by commas. The search string can contain criteria used to include entries, exclude entries, or both. Separate the include and exclude criteria with a colon (:). If you are specifying only include criteria, the colon is not necessary.
Filter the Event Computer field for	If you are interested in events generated by a particular computer, specify an appropriate search string. The Knowledge Script looks for matching entries in the Event Log's Computer field. You can specify multiple strings separated by commas. The search string can contain criteria used to include entries, exclude entries, or both. Separate the include and exclude criteria with a colon (:). If you are specifying only include criteria, the colon is not necessary.

Description	How to Set It
Filter the Event Description field for	If you are interested in events with a particular detail description or containing keywords in the description, specify an appropriate search string. The Knowledge Script looks for matching entries in the Event Log's Description field. You can specify multiple strings separated by commas.
	The search string can contain criteria used to include entries, exclude entries, or both. Separate the include and exclude criteria with a colon (:). If you are specifying only include criteria, the colon is not necessary.
Maximum number of log entries per event report	Specify the maximum number of log entries to be included in each event's detail message.The script returns multiple events if it finds more entries in the log than the maximum limit you specify. The default is 30 entries.
Event severity level	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 8.

3.9 FanIndividual

Use this Knowledge Script to monitor the status of individual fans. For each fan being monitored, this Knowledge Script raises an event if the fan is not operating properly or the status is unknown.

3.9.1 Resource Object

Fan object

3.9.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.9.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Event severity level for SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Event severity level for critical condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which an individual fan is in critical condition. The default is 8.
Event severity level for unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of an individual fan is unknown. The default is 15.

3.10   FanSummary

Use this Knowledge Script to monitor the status of System and CPU fans. When a required fan fails, this Knowledge Script raises an event indicating a critical condition. When a fan that is not required fails, this Knowledge Script raises an event indicating a degraded condition.

3.10.1   Resource Object

Fan object

3.10.2   Default Schedule

The default interval for this script is **Every 10 minutes**.

3.10.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **y**.
Raise event if fan summary not supported (y/n)?	Set to **y** to raise an event if fan summary is not supported. The default is **n**.
Event severity level for SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Event severity level for critical failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which a required fan fails. The default is 8.
Event severity level for degraded condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which a fan that is not required fails. The default is 15.
Event severity level if fan summary not supported	Set the event severity level from 1 to 40, to indicate the importance of an event in which a fan summary is not supported. The default is 20.

3.11   FCAExternalControllerFail

Use this Knowledge Script to monitor the operational status of Fibre Channel Array external controllers.

The Knowledge Script raises:

- A critical event if the controller fails, making drives on the controller inaccessible.
- A degraded condition event if any of the controller's logical or physical drives is not operating properly.
- A warning if the status is not known.

3.11.1 Resource Object

FCA object

3.11.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.11.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - Critical failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which a controller fails. The default is 5.
Severity - Degraded condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which any of the controller's logical or physical drives is not operating properly. The default is 12.
Severity - Unknown condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of a controller is unknown. The default is 15.

3.12 FCAFail

Use this Knowledge Script to monitor the status of Fibre Channel Array (FCA) controllers.

The Knowledge Script raises:

- A critical event if the controller fails, making drives on the controller inaccessible.
- A degraded condition event if any of the controller's logical or physical drives is not operating properly.
- A warning if the status is not known.

3.12.1 Resource Object

FCA object

3.12.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.12.3　Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Critical failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which the controller fails. The default is 5.
Severity - Degraded condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which any of the controller's logical or physical drives is not operating properly. The default is 12.
Severity - Unknown condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the condition of the controller is unknown. The default is 9.

3.13　FCAHostControllerFail

Use this Knowledge Script to monitor the operational status of Fibre Channel host controllers.

The Knowledge Script raises:

- A critical event if the controller fails, making drives on the controller inaccessible.
- A degraded condition event if any of the controller's logical or physical drives is not operating properly.
- A warning if the status is not known.

3.13.1　Resource Object

FCA object

3.13.2　Default Schedule

The default interval for this script is **Every 10 minutes**.

3.13.3　Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.

Description	How to Set It
Severity - Critical failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which the controller fails, making drives on the controller inaccessible. The default is 5.
Severity - Degraded condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which any of the controller's logical or physical drives is not operating properly. The default is 12.
Severity - Unknown condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the condition of the controller is unknown. The default is 15.

3.14 FCAHostFail

Use this Knowledge Script to monitor the status of Fibre Channel Array (FCA) host controllers.

The Knowledge Script raises:

- A critical event if the controller fails, making drives on the controller inaccessible.
- A degraded condition event if any of the controller's logical or physical drives is not operating properly.
- A warning if the status is not known.

3.14.1 Resource Object

FCA object

3.14.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.14.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Controller failed	Set the event severity level from 1 to 40, to indicate the importance of an event in which the controller failed. The default is 5.
Severity - Degraded drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which any of the controller's logical or physical drives is not operating properly. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of the controller is unknown. The default is 15.

3.15 FCAOverallCondition

Use this Knowledge Script to monitor the overall condition of the FCA system.

The Knowledge Script raises:

- A critical event if the controller fails, making drives on the controller inaccessible.
- A degraded condition event if any of the host controller's logical or physical drives is not operating properly.
- A warning if the status is not known.

3.15.1 Resource Object

FCA object

3.15.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.15.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Controller failed	Set the event severity level from 1 to 40, to indicate the importance of an event in which the controller fails. The default is 5.
Severity - Degraded drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which any of the host controller's logical or physical drives is not operating properly. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of a controller is unknown. The default is 15.

3.16 FLTPWRIndividualCondition

Use this Knowledge Script to monitor the status of fault tolerant power supplies. The job raises a critical or degraded operation event when the fault tolerant power supply is not operating properly.

3.16.1 Resource Object

Fault Tolerant Power Supply object

3.16.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.16.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Power supply failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which a fault tower power supply fails. The default is 5.
Severity - Degraded operation	Set the event severity level from 1 to 40, to indicate the importance of an event in which an operation for a fault tolerant power supply is in a degraded condition. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status if a fault tolerant power supply is unknown. The default is 15.

3.17 FLTPWROverallCondition

Use this Knowledge Script to monitor the overall condition of the fault tolerant power supply sub-system. The job raises a critical or degraded event when the sub-system is not operating properly.

3.17.1 Resource Object

Fault Tolerant Power Supply object

3.17.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.17.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.

Description	How to Set It
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Power supply failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which the fault tolerant power supply sub-system fails. The default is 5.
Severity - Degraded operation	Set the event severity level from 1 to 40, to indicate the importance of an event in which an operation for a fault tolerant power supply sub-system is a degraded condition. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of a fault tolerant power supply sub-system is unknown. The default is 15.
Severity - Unexpected Knowledge Script error	Set the event severity level from 1 to 40, to indicate the importance of and event in which the FLTPWROverallCondition Knowledge Script fails unexpectedly. The default is 35.

3.18 HealthCheck

Use this Knowledge Script to monitor all SIM or SMA services. The job raises an event if any service is not running and automatically re-starts the service. In addition, the SNMP Get function is explicitly exercised to ensure its proper operation. This Knowledge Script raises an event if the SNMP cannot get a SIM MIB variable.

3.18.1 Resource Object

SIM server services objects

3.18.2 Default Schedule

The default interval for this script is **Every 5 minutes**.

3.18.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Auto-start service?	Set to **y** to automatically restart services that are down. The default is **y**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Severity - Service down; restart failed	Set the event severity level from 1 to 40, to indicate the importance of an event in which a SIM service is down and restart failed. The default is 5.
Severity - Service down; restart succeeded	Set the event severity level from 1 to 40, to indicate the importance of an event in which a SIM service was down and restart succeeded. The default is 25.

Description	How to Set It
Severity - Service down; do not restart	Set the event severity level from 1 to 40, to indicate the importance of an event in which a SIM service is down and will not be restarted. The default is 18.
Severity - SNMP service down or cannot get MIB value.	Set the event severity level from 1 to 40, to indicate the importance of an event in which a SIM service is down or cannot get the MIB value. The default is 5.

3.19 IDAFail

Use this Knowledge Script to monitor IDA controllers.

The Knowledge Script raises:

- ◆ A critical event if an IDA drive fails.
- ◆ A degraded condition event if any IDA drive is not operating properly.
- ◆ A warning if the status is not known.

3.19.1 Resource Object

IDA

3.19.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.19.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the community name. The default is either the community name specified in the Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Failed drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which an IDA drive fails. The default is 5.
Severity - Degraded drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which an IDA drive is not operating properly. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of an IDA drive is unknown. The default is 15.

3.20 IDEFail

Use this Knowledge Script to monitor IDE controllers.

The Knowledge Script raises:

- ◆ A critical event if an IDE drive fails.
- ◆ A degraded condition event if any IDE drive is not operating properly.
- ◆ A warning if the status is not known.

3.20.1 Resource Object

IDE

3.20.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.20.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the community name. The default is either the community name specified in the Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Failed drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which an IDE drive fails. The default is 5.
Severity - Degraded drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which an IDE drive is not operating properly. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of an IDE drive is unknown. The default is 15.

3.21 IntegratedLog

Use this Knowledge Script to monitor the current status of the SIM log. The job raises an event if it is not able to scan the SIM log or if it finds unsupported Knowledge Scripts running on the SIM server.

If this Knowledge Script cannot scan the SIM log, it returns, `"Failed to scan Integrated Management Log: errcode = "`. If an unsupported Knowledge Script is run on the SIM server, it returns, `"This Knowledge Script is not supported on this Compaq server."`

3.21.1 Resource Object

Integrated management log

3.21.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.21.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event? (y/n)	Set to **y** to raise events. The default is **y**.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the community name. The default is either the community name specified in the Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Component failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which a component fails. The default is 8.
Severity - Non-fatal error	Set the event severity level from 1 to 40, to indicate the importance of an event in which a non-fatal error occurs. The default is 15.
Severity - Informational but with LCD alert message	Set the event severity level from 1 to 40, to indicate the importance of an informational but with LCD alert message. The default is 20.
Ignore log entries without date and time?	Set to **y** to allow the IntegratedLog Knowledge Script job to ignore log entries for which there is no date or time.
	If set to n, the IntegratedLog Knowledge Script job monitors log entries for which there is no date or time. However, because the job cannot determine whether these entries are old or new, the job might return results for them more than once.

3.22 NICError

Use this Knowledge Script to monitor network interface transmission errors. Both input and output errors are reported and compared to respective thresholds. The job raises an event when the number of network interface errors per minute exceeds the threshold you set.

3.22.1 Resource Object

NIC object

3.22.2 Default Schedule

The default interval for this script is **Every 30 minutes**.

3.22.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Input errors per minute maximum threshold	Specify a threshold for the maximum number of input errors per minute. The default is 2 errors per minute.
Output errors per minute maximum threshold	Specify a threshold for the maximum number of output errors per minute. The default is 4 errors per minute.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Input errors per minute exceeded threshold	Set the event severity level from 1 to 40, to indicate the importance of an event in which input errors per minute exceeded the threshold you set. The default is 10.
Severity - Output errors per minute exceeded threshold	Set the event severity level from 1 to 40, to indicate the importance of an event in which output errors per minute exceeded the threshold you set. The default is 10.

3.23 NICFail

Use this Knowledge Script to monitor the status of the network interface. This Knowledge Script checks whether the network interface subsystem is down when the administrator has indicated it should be in the "up" state. The event details message includes the time when the interface was discovered as down.

3.23.1 Resource Object

NIC object

3.23.2 Default Schedule

The default interval for this script is **Every 5 minutes**.

3.23.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.

Description	How to Set It
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Interface down	Set the event severity level from 1 to 40, to indicate the importance of an event in which the network interface subsystem is down. The default is 6.

3.24 Report_ASRHealth-RebootCount

Use this CIM_Report script to generate a report about Automatic Server Recovery (ASR) status, and the number of ASR-initiated reboots. This report allows you to make a statistical analysis of the data point values over the time range you define for the report.

This report uses data collected by the ASRHealth Knowledge Script.

3.24.1 Resource Object

Report agent

3.24.2 Default Schedule

The default schedule for this script is **Run once**.

3.24.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Data source	
Select computer(s)	Filter the data in your report by computer name.
Select time range	Filter the data in your report by a specific or sliding time range.
Select peak weekday(s)	Filter the data in your report by the days of the week.
Data settings	

Description	How to Set It
Statistics to show	Select a statistical method by which to display data in the report: ◆ **Average**: The average value of data points for the time range of the report ◆ **Minimum**: The minimum value of data points for the time range of the report ◆ **Maximum**: The maximum value of data points for the time range of the report ◆ **Min/Avg/Max**: The minimum, average, and maximum values of data points for the time range of the report ◆ **Range**: The range of values in the datastreams (maximum - minimum = range) ◆ **StandardDeviation**: The measure of how widely values are dispersed from the mean ◆ **Sum**: The total value of data points for the time range of the report ◆ **Close**: The last value for the time range of the report ◆ **Change**: The difference between the first and last values for the time range of the report (close - open = change) ◆ **Count**: The number of data points for the time range of the report
Select sorting/display option	Select whether data is sorted, or the method of display: ◆ **No sort**: Data is not sorted ◆ **Sort**: Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right) ◆ **Top %**: Chart only the top N% of selected data (sorted by default) ◆ **Top N**: Chart only the top N of selected data (sorted by default) ◆ **Bottom %**: Chart only the bottom N% of data (sorted by default) ◆ **Bottom N**: Chart only the bottom N of selected data (sorted by default)
Percentage/count for top/ bottom	Specify a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	If set to **yes**, then the data table shows only the top or bottom N or percent (for example, only the top 10%). Otherwise, the table shows all data. The default is no.
Show totals on the table?	If set to **yes**, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table: ◆ **Report Average**: An average of all values in a column ◆ **Report Minimum**: The minimum value in a column ◆ **Report Maximum**: The maximum value in a column ◆ **Report Total**: The total of all values in a column The default is no.
Report settings	
Include parameter help card?	Set to **yes** to include a table in the report that lists parameter settings for the report script. The default is **yes**.
Include table?	Set to **yes** to include a table of datastream values in the report. The default is yes.

Description	How to Set It
Include chart?	Set to **yes** to include a chart of datastream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set parameters for the output folder.
Add job ID to output folder name?	Set to **yes** to append the job ID to the name of the output folder. The default is no. A job ID helps you correlate a specific instance of a Report Script with the corresponding report.
Select properties	Set miscellaneous report properties as required.
Add time stamp to title?	Set to **yes** to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated. The default is no. A time stamp lets you run consecutive iterations of the same report without overwriting previous output.
Event notification	
Event for report success?	Set to **yes** to raise an event when the report is successfully generated. The default is **yes**.
Severity level for report success	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 35 (magenta level indicator).
Severity level for report with no data	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 25 (blue level indicator).
Severity level for report failure.	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 5 (red level indicator).

3.25 Report_CIMResource_CPU_MemoryUsage

Use this CIM_Report script to generate a report about CPU and memory usage by SIM processes. This report allows you to make a statistical analysis of the data point values over the time range you define for the report.

This report uses data collected by the ResourceHigh Knowledge Script.

3.25.1 Resource Object

Report agent

3.25.2 Default Schedule

The default schedule for this script is **Run once**.

3.25.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Data source	
Select computer(s)	Filter the data in your report by computer name.
Select time range	Filter the data in your report by a specific or sliding time range.
Select peak weekday(s)	Filter the data in your report by the days of the week.
Select the style	Select the style for the report: ◆ **By computer** shows one value for each computer you selected. ◆ **By legend** shows one value for each different legend (the legend is a truncated form of the datastream legend visible in the Operator Console). ◆ **By computer and legend** shows one value for each unique legend from each computer.
Data settings	
Statistics to show	Select a statistical method by which to display data in the report: ◆ **Average**: The average value of data points for the time range of the report ◆ **Minimum**: The minimum value of data points for the time range of the report ◆ **Maximum**: The maximum value of data points for the time range of the report ◆ **Min/Avg/Max**: The minimum, average, and maximum values of data points for the time range of the report ◆ **Range**: The range of values in the datastream (maximum - minimum = range) ◆ **StandardDeviation**: The measure of how widely values are dispersed from the mean ◆ **Sum**: The total value of data points for the time range of the report ◆ **Close**: The last value for the time range of the report ◆ **Change**: The difference between the first and last values for the time range of the report (close - open = change) ◆ **Count**: The number of data points for the time range of the report
Select sorting/display option	Select whether data is sorted, or the method of display: ◆ **No sort**: Data is not sorted ◆ **Sort**: Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right) ◆ **Top %**: Chart only the top N% of selected data (sorted by default) ◆ **Top N**: Chart only the top N of selected data (sorted by default) ◆ **Bottom %**: Chart only the bottom N% of data (sorted by default) ◆ **Bottom N**: Chart only the bottom N of selected data (sorted by default)

Description	How to Set It
Percentage/count for top/bottom	Specify a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	If set to **yes**, then the data table shows only the top or bottom N or percent (for example, only the top 10%).
	Otherwise, the table shows all data.
	The default is no.
Show totals on the table?	If set to **yes**, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:
	◆ **Report Average**: An average of all values in a column
	◆ **Report Minimum**: The minimum value in a column
	◆ **Report Maximum**: The maximum value in a column
	◆ **Report Total**: The total of all values in a column
	The default is no.
Report settings	
Include parameter help card?	Set to **yes** to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to **yes** to include a table of datastream values in the report. The default is yes.
Include chart?	Set to **yes** to include a chart of datastream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set parameters for the output folder.
Add job ID to output folder name?	Set to **yes** to append the job ID to the name of the output folder.
	A job ID helps you correlate a specific instance of a Report Script with the corresponding report.
	The default is no.
Select properties	Set miscellaneous report properties as needed.
Add time stamp to title?	Set to **yes** to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.
	A time stamp lets you run consecutive iterations of the same report without overwriting previous output.
	The default is no.
Event notification	
Event for report success?	Set to **yes** to raise an event when the report is successfully generated. The default is yes.
Severity level for report success	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 35 (magenta level indicator).
Severity level for report with no data	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 25 (blue level indicator).

Description	How to Set It
Severity level for report failure.	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 5 (red level indicator).

3.26 Report_CIMSCSI-Status

Use this CIM_Report script to generate a report about the number of hard resets, soft resets, and command timeouts for the SCSI controller. This report allows you to make a statistical analysis of the data point values over the time range you define for the report.

This report uses data collected by the SCSITimeout Knowledge Script.

3.26.1 Resource Object

Report agent

3.26.2 Default Schedule

The default schedule for this script is **Run once**.

3.26.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Data source	
Select computer(s)	Filter the data in your report by computer name.
Select time range	Filter the data in your report by a specific or sliding time range.
Select peak weekday(s)	Filter the data in your report by the days of the week.
Select the style	Select the style for the report: ◆ **By computer** shows one value for each computer you selected. ◆ **By legend** shows one value for each different legend (the legend is a truncated form of the datastream legend visible in the Operator Console). ◆ **By computer and legend** shows one value for each unique legend from each computer.
Data settings	

Description	How to Set It
Statistics to show	Select a statistical method by which to display data in the report:
	◆ **Average**: The average value of data points for the time range of the report
	◆ **Minimum**: The minimum value of data points for the time range of the report
	◆ **Maximum**: The maximum value of data points for the time range of the report
	◆ **Min/Avg/Max**: The minimum, average, and maximum values of data points for the time range of the report
	◆ **Range**: The range of values in the datastream (maximum - minimum = range)
	◆ **StandardDeviation**: The measure of how widely values are dispersed from the mean
	◆ **Sum**: The total value of data points for the time range of the report
	◆ **Close**: The last value for the time range of the report
	◆ **Change**: The difference between the first and last values for the time range of the report (close - open = change)
	◆ **Count**: The number of data points for the time range of the report
Select sorting/display option	Select whether data is sorted, or the method of display:
	◆ **No sort**: Data is not sorted
	◆ **Sort**: Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right)
	◆ **Top %**: Chart only the top N% of selected data (sorted by default)
	◆ **Top N**: Chart only the top N of selected data (sorted by default)
	◆ **Bottom %**: Chart only the bottom N% of data (sorted by default)
	◆ **Bottom N**: Chart only the bottom N of selected data (sorted by default)
Percentage/count for top/bottom	Specify a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	If set to **yes**, then the data table shows only the top or bottom N or percent (for example, only the top 10%). Otherwise, the table shows all data.
	The default is no.
Show totals on the table?	If set to **yes**, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:
	◆ **Report Average**: An average of all values in a column
	◆ **Report Minimum**: The minimum value in a column
	◆ **Report Maximum**: The maximum value in a column
	◆ **Report Total**: The total of all values in a column
	The default is no.
Report settings	
Include parameter help card?	Set to **yes** to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to **yes** to include a table of datastream values in the report. The default is yes.

Description	How to Set It
Include chart?	Set to **yes** to include a chart of datastream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set parameters for the output folder.
Add job ID to output folder name?	Set to **yes** to append the job ID to the name of the output folder. A job ID helps you correlate a specific instance of a Report Script with the corresponding report. The default is no.
Select properties	Set miscellaneous report properties as desired.
Add time stamp to title?	Set to **yes** to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated. A time stamp lets you run consecutive iterations of the same report without overwriting previous output. The default is no.
Event notification	
Event for report success?	Set to **yes** to raise an event when the report is successfully generated. The default is yes.
Severity level for report success	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 35 (magenta level indicator).
Severity level for report with no data	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 25 (blue level indicator).
Severity level for report failure.	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 5 (red level indicator).

3.27 Report_CorrectableMemoryErrors

Use this CIM_Report script to generate a report about the condition of correctable memory and the number of new correctable memory errors. This report allows you to make a statistical analysis of the data point values over the time range you define for the report.

This report uses data collected by the CorrectableMem Knowledge Script.

3.27.1 Resource Object

Report agent

3.27.2 Default Schedule

The default schedule for this script is **Run once**.

3.27.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Data source	
Select computer(s)	Filter the data in your report by computer name.
Select time range	Filter the data in your report by a specific or sliding time range.
Select peak weekday(s)	Filter the data in your report by the days of the week.
Data settings	
Statistics to show	Select a statistical method by which to display data in the report: ◆ **Average**: The average value of data points for the time range of the report ◆ **Minimum**: The minimum value of data points for the time range of the report ◆ **Maximum**: The maximum value of data points for the time range of the report ◆ **Min/Avg/Max**: The minimum, average, and maximum values of data points for the time range of the report ◆ **Range**: The range of values in the datastream (maximum - minimum = range) ◆ **StandardDeviation**: The measure of how widely values are dispersed from the mean ◆ **Sum**: The total value of data points for the time range of the report ◆ **Close**: The last value for the time range of the report ◆ **Change**: The difference between the first and last values for the time range of the report (close - open = change) ◆ **Count**: The number of data points for the time range of the report
Select sorting/display option	Select whether data is sorted, or the method of display: ◆ **No sort**: Data is not sorted ◆ **Sort**: Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right) ◆ **Top %**: Chart only the top N% of selected data (sorted by default) ◆ **Top N**: Chart only the top N of selected data (sorted by default) ◆ **Bottom %**: Chart only the bottom N% of data (sorted by default) ◆ **Bottom N**: Chart only the bottom N of selected data (sorted by default)
Percentage/count for top/bottom	Specify a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	If set to **yes**, then the data table shows only the top or bottom N or percent (for example, only the top 10%). Otherwise, the table shows all data. The default is no.

Description	How to Set It
Show totals on the table?	If set to **yes**, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:
	◆ **Report Average**: An average of all values in a column
	◆ **Report Minimum**: The minimum value in a column
	◆ **Report Maximum**: The maximum value in a column
	◆ **Report Total**: The total of all values in a column
	The default is no.
Report settings	
Include parameter help card?	Set to **yes** to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to **yes** to include a table of datastream values in the report. The default is yes.
Include chart?	Set to **yes** to include a chart of datastream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set parameters for the output folder.
Add job ID to output folder name?	Set to **yes** to append the job ID to the name of the output folder.
	A job ID helps you correlate a specific instance of a Report Script with the corresponding report.
	The default is no.
Select properties	Set miscellaneous report properties as needed.
Add time stamp to title?	Set to **yes** to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated.
	A time stamp lets you run consecutive iterations of the same report without overwriting previous output.
	The default is no.
Event notification	
Event for report success?	Set to **yes** to raise an event when the report is successfully generated. The default is yes.
Severity level for report success	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 35 (magenta level indicator).
Severity level for report with no data	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 25 (blue level indicator).
Severity level for report failure.	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 5 (red level indicator).

3.28   Report_NewEventLogEntries

Use this CIM_Report script to generate a report about Windows event log entries from the SIM Insight Agent or SMA. This report allows you to make a statistical analysis of the data point values over the time range you define for the report.

This report uses data collected by the EventLog Knowledge Script.

3.28.1   Resource Object

Report agent

3.28.2   Default Schedule

The default schedule for this script is **Run once**.

3.28.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Data source	
Select computer(s)	Filter the data in your report by computer name.
Select time range	Filter the data in your report by a specific or sliding time range.
Select peak weekday(s)	Filter the data in your report by the days of the week.
Data settings	
Statistics to show	Select a statistical method by which to display data in the report:
	◆ **Average**: The average value of data points for the time range of the report
	◆ **Minimum**: The minimum value of data points for the time range of the report
	◆ **Maximum**: The maximum value of data points for the time range of the report
	◆ **Min/Avg/Max**: The minimum, average, and maximum values of data points for the time range of the report
	◆ **Range**: The range of values in the datastream (maximum - minimum = range)
	◆ **StandardDeviation**: The measure of how widely values are dispersed from the mean
	◆ **Sum**: The total value of data points for the time range of the report
	◆ **Close**: The last value for the time range of the report
	◆ **Change**: The difference between the first and last values for the time range of the report (close - open = change)
	◆ **Count**: The number of data points for the time range of the report

Description	How to Set It
Select sorting/display option	Select whether data is sorted, or the method of display: ◆ **No sort**: Data is not sorted ◆ **Sort**: Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right) ◆ **Top %**: Chart only the top N% of selected data (sorted by default) ◆ **Top N**: Chart only the top N of selected data (sorted by default) ◆ **Bottom %**: Chart only the bottom N% of data (sorted by default) ◆ **Bottom N**: Chart only the bottom N of selected data (sorted by default)
Percentage/count for top/ bottom	Specify a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	If set to **yes**, then the data table shows only the top or bottom N or percent (for example, only the top 10%). Otherwise, the table shows all data. The default is no.
Show totals on the table?	If set to **yes**, then additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table: ◆ **Report Average**: An average of all values in a column ◆ **Report Minimum**: The minimum value in a column ◆ **Report Maximum**: The maximum value in a column ◆ **Report Total**: The total of all values in a column The default is no.
Report settings	
Include parameter help card?	Set to **yes** to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to **yes** to include a table of datastream values in the report. The default is yes.
Include chart?	Set to **yes** to include a chart of datastream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set parameters for the output folder.
Add job ID to output folder name?	Set to **yes** to append the job ID to the name of the output folder. A job ID helps you correlate a specific instance of a Report Script with the corresponding report. The default is no.
Select properties	Set miscellaneous report properties as needed.
Add time stamp to title?	Set to **yes** to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated. A time stamp lets you run consecutive iterations of the same report without overwriting previous output. The default is no.

Description	How to Set It
Event notification	
Event for report success?	Set to **yes** to raise an event when the report is successfully generated. The default is yes.
Severity level for report success	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 35 (magenta level indicator).
Severity level for report with no data	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 25 (blue level indicator).
Severity level for report failure.	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 5 (red level indicator).

3.29 Report_NICErrorRate

Use this CIM_Report script to generate a report about network interface input and output errors. This report allows you to make a statistical analysis of the data point values over the time period you define for the report.

This report uses data collected by the NICError Knowledge Script.

3.29.1 Resource Object

Report agent

3.29.2 Default Schedule

The default schedule for this script is **Run once**.

3.29.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Data source	
Select computer(s)	Filter the data in your report by computer name.
Select time range	Filter the data in your report by a specific or sliding time range.
Select peak weekday(s)	Filter the data in your report by the days of the week.
Select the style	Select the style for the report: ◆ **By computer** shows one value for each computer you selected. ◆ **By legend** shows one value for each different legend (the legend is a truncated form of the datastream legend visible in the Operator Console). ◆ **By computer and legend** shows one value for each unique legend from each computer.
Data settings	

Description	How to Set It
Statistics to show	Select a statistical method by which to display data in the report:
	◆ **Average**: The average value of data points for the time range of the report
	◆ **Minimum**: The minimum value of data points for the time range of the report
	◆ **Maximum**: The maximum value of data points for the time range of the report
	◆ **Min/Avg/Max**: The minimum, average, and maximum values of data points for the time range of the report
	◆ **Range**: The range of values in the datastream (maximum - minimum = range)
	◆ **StandardDeviation**: The measure of how widely values are dispersed from the mean
	◆ **Sum**: The total value of data points for the time range of the report
	◆ **Close**: The last value for the time range of the report
	◆ **Change**: The difference between the first and last values for the time range of the report (close - open = change)
	◆ **Count**: The number of data points for the time range of the report
Select sorting/display option	Select whether data is sorted, or the method of display:
	◆ **No sort**: Data is not sorted
	◆ **Sort**: Data is sorted by value (lowest to highest from front to back; highest to lowest from left to right)
	◆ **Top %**: Chart only the top N% of selected data (sorted by default)
	◆ **Top N**: Chart only the top N of selected data (sorted by default)
	◆ **Bottom %**: Chart only the bottom N% of data (sorted by default)
	◆ **Bottom N**: Chart only the bottom N of selected data (sorted by default)
Percentage/count for top/ bottom	Specify a number for either the percentage or count defined in the previous parameter (for example, Top 10%, or Top 10). The default is 25.
Truncate top/bottom?	If set to **yes**, then the data table shows only the top or bottom N or percent (for example, only the top 10%). Otherwise, the table shows all data.
	The default is no.
Show totals on the table?	If set to **yes**, additional calculations are made for each column of numbers in a table, and the following values are listed at the end of the table:
	◆ **Report Average**: An average of all values in a column
	◆ **Report Minimum**: The minimum value in a column
	◆ **Report Maximum**: The maximum value in a column
	◆ **Report Total**: The total of all values in a column
	The default is no.
Report settings	
Include parameter help card?	Set to **yes** to include a table in the report that lists parameter settings for the report script. The default is yes.
Include table?	Set to **yes** to include a table of datastream values in the report. The default is yes.

Description	How to Set It
Include chart?	Set to **yes** to include a chart of datastream values in the report. The default is yes.
Select chart style	Define the graphic properties of the charts in your report.
Select output folder	Set parameters for the output folder.
Add job ID to output folder name?	Set to **yes** to append the job ID to the name of the output folder. A job ID helps you correlate a specific instance of a Report Script with the corresponding report. The default is no.
Select properties	Set miscellaneous report properties as desired.
Add time stamp to title?	Set to **yes** to append a time stamp to the title of the report, making each title unique. The time stamp is made up of the date and time the report was generated. A time stamp lets you run consecutive iterations of the same report without overwriting previous output. The default is no.
Event notification	
Event for report success?	Set to **yes** to raise an event when the report is successfully generated. The default is yes.
Severity level for report success	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 35 (magenta level indicator).
Severity level for report with no data	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 25 (blue level indicator).
Severity level for report failure.	Set the event severity level, from 1 to 40, to indicate the importance of the event. The default is 5 (red level indicator).

3.30 ResourceHigh

Use this Knowledge Script to monitor the CPU and memory used by the SIM processes or the SMA process. The job raises an event if the CPU or memory usage exceeds the threshold you set.

3.30.1 Resource Object

SIM server object

3.30.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.30.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
%CPU usage maximum threshold	Specify a threshold for the maximum percentage of the CPU the SIM process should use. The default is 60%.
Memory usage maximum threshold	Specify a threshold for the maximum memory (in MB) the SIM process should use. The default is 6MB.
Event severity level	You can set the event severity level, from 1 to 40, to indicate the importance of this event. The default is 8.

3.31 RIBBatteryRechargeLevel

Use this Knowledge Script to monitor the battery recharge level of the Remote Insight Board. The job raises an event if the battery recharge level is below the threshold you set.

3.31.1 Resource Object

Remote Insight Board object

3.31.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.31.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Recharge level minimum threshold	Specify a threshold for the minimum percentage to which the battery is recharged. The default is 75%.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Recharge level below threshold	Set the event severity level from 1 to 40, to indicate the importance of an event in which the battery recharge level of the Remote Insight Board is below the threshold you set. The default is 5.

3.32 RIBBatteryStatus

Use this Knowledge Script to monitor the status of the Remote Insight Board battery. The job raises an event if the battery has failed or is disconnected.

3.32.1 Resource Object

Remote Insight Board object

3.32.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.32.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Battery failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which the Remote Insight Board battery fails. The default is 5.
Severity - Battery disconnected	Set the event severity level from 1 to 40, to indicate the importance of an event in which the Remote Insight Board battery **is disconnected**. The default is 15.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of the Remote Insight Battery is unknown. The default is 15.

3.33 RIBCableConnections

Use this Knowledge Script to monitor the status of the Remote Insight board cable connections, including the keyboard, mouse, and external power cable. The job raises an event if any cable is disconnected.

3.33.1 Resource Object

Remote Insight Board object

3.33.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.33.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data? (y/n)	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Cable disconnected	Set the event severity level from 1 to 40, to indicate the importance of an event in which a Remote Insight Board cable is disconnected. The default is 5.
Severity - Unknown connection status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of a Remote Insight Board connection is unknown. The default is 15.

3.34   RIBCondition

Use this Knowledge Script to monitor the overall condition of the Remote Insight Board. The job raises a failed or degraded event if the board is not operating properly.

3.34.1   Resource Object

Remote Insight Board object

3.34.2   Default Schedule

The default interval for this script is **Every 10 minutes**.

3.34.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.

Description	How to Set It
Severity - Failed board	Set the event severity level from 1 to 40, to indicate the importance of an event in which the Remote Insight Board fails. The default is 5.
Severity - Degraded board	Set the event severity level from 1 to 40, to indicate the importance of an event in which the Remote Insight Board is not operating properly. The default is 8.
Severity - Unknown condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the condition of the Remote Insight Board is unknown. The default is 15.

3.35   RIBInterfaceStatus

Use this Knowledge Script to monitor the interface status of the Remote Insight board. The job raises an event if the firmware of the board is not responding to commands.

3.35.1   Resource Object

Remote Insight Board object

3.35.2   Default Schedule

The default interval for this script is **Every 10 minutes**.

3.35.3   Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Not responding	Set the event severity level from 1 to 40, to indicate the importance of an event in which the firmware of the Remote Insight Board is not responding to commands. The default is 5.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of the interface is unknown. The default is 15.

3.36   RIBVirtualPowerCable

Use this Knowledge Script to monitor the virtual power cable connection of the Remote Insight board. The job raises an event if the cable is disconnected.

3.36.1 Resource Object

Remote Insight Board object

3.36.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.36.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Cable disconnected	Set the event severity level from 1 to 40, to indicate the importance of an event in which the virtual power cable of the Remote Insight Board battery **is disconnected**. The default is 5.
Severity - Unknown connection status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of the virtual power cable connection of the Remote Insight Board battery **is unknown**. The default is 15.

3.37 SCSIFail

Use this Knowledge Script to monitor Small Computer System Interface (SCSI) drives.

This Knowledge Script raises:

- ◆ A critical event if a SCSI drive fails.
- ◆ A degraded condition event if any SCSI drive is not operating properly.
- ◆ A warning if the status is not known.

3.37.1 Resource Object

SCSI object

3.37.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.37.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Failed drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which an SCSI drive fails. The default is 5.
Severity - Degraded drive	Set the event severity level from 1 to 40, to indicate the importance of an event in which the SCSI drive is not operating properly. The default is 12.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of the SCSI drive is unknown. The default is 15.

3.38 SCSITimeout

Use this Knowledge Script to monitor the number of hard resets, soft resets, and command timeouts for the Small Computer System Interface (SCSI) controller during the monitoring interval. The job raises an event if any threshold is exceeded.

3.38.1 Resource Object

SCSI object

3.38.2 Default Schedule

The default interval for this script is **Every 30 minutes**.

3.38.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. If set to **y**, the script returns the number of hard resets, soft resets, and command timeouts in the interval. The default is **n**.
Hard reset maximum threshold	Specify a threshold for the maximum number of hard resets. The default is 0 hard resets.

Description	How to Set It
Soft reset maximum threshold	Specify a threshold for the maximum number of soft resets. The default is 2 soft resets.
Command timeout maximum threshold	Specify a threshold for the maximum number of command timeouts. The default is 10 timeouts.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Hard reset threshold exceeded	Set the event severity level from 1 to 40, to indicate the importance of an event in which the hard reset threshold for the SCSI controller is exceeded. The default is 5.
Severity - Soft reset threshold exceeded	Set the event severity level from 1 to 40, to indicate the importance of an event in which the soft reset threshold for the SCSI controller is exceeded. The default is 8.
Severity - Timeout threshold exceed	Set the event severity level from 1 to 40, to indicate the importance of an event in which the timeout threshold for the SCSI controller is exceeded. The default is 12.

3.39 TeamedNICCondition

Use this Knowledge Script to monitor the condition of Teamed Network Interface Cards (NIC). Teamed NICs run in parallel to increase link speed. The job raises an event when Teamed NIC is degraded or fails.

3.39.1 Resource Object

Teamed NIC object

3.39.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.39.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Event?	Set to **y** to raise events. The default is **y**.
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP, HP NIC Agent, or SMA failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which the Teamed NIC fails. The default is 9
Severity - Degraded condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the Teamed NIC is in a degraded condition. The default is 12.
Severity - Critical condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the Teamed NIC is in critical condition. The default is 8.

Description	How to Set It
Severity - Unknown condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the condition of the Teamed NIC is unknown. The default is 15.

3.40 TempIndividual

Use this Knowledge Script to monitor the status of SIM temperature sensors. If the temperature sensors are operating out of normal range, this Knowledge Script raises a degraded condition event. If the temperature sensors indicate a critical condition, this Knowledge Script raises a critical condition event.

3.40.1 Resource Object

SIM temperature sensor object

3.40.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.40.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Event?	Set to **y** to raise events. The default is **y**.
Collect data?	Set to **y** to collect data for charts and reports. If set to **y**, the script returns the number of hard resets, soft resets, and command timeouts in the interval. The default is **n**.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Critical condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the SIM temperature sensors are in critical condition. The default is 3.
Degraded condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the SIM temperature sensors are in a degraded condition. The default is 8.
Severity - Unknown status	Set the event severity level from 1 to 40, to indicate the importance of an event in which the status of the SIM temperature sensors is unknown. The default is 15.
Severity - Unexpected Knowledge Script error	Set the event severity level from 1 to 40, to indicate the importance of and event in which the TempIndividual Knowledge Script fails unexpectedly. The default is 35.

3.41 ThermalStatus

Use this Knowledge Script to monitor the system's thermal environment and the status of the system's temperature sensors. If the overall condition of the system's thermal environment is abnormal or the temperature sensors are operating out of normal range, this Knowledge Script raises a degraded condition event. If the thermal environment or temperature sensors indicate a critical condition, this Knowledge Script raises a critical condition event.

3.41.1 Resource Object

Temperature objects

3.41.2 Default Schedule

The default interval for this script is **Every 10 minutes**.

3.41.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Collect data?	Set to **y** to collect data for charts and reports. The default is **n**.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - Critical condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the system's thermal environment or temperature sensors are in critical condition. The default is 3.
Severity - Degraded condition	Set the event severity level from 1 to 40, to indicate the importance of an event in which the system's thermal environment or temperature sensors are in a degraded condition. The default is 8.

3.42 UPSBatteryLow

Use this Knowledge Script to monitor the UPS battery life. The job raises an event when the battery life is below the threshold you set. Only run this Knowledge Script when the computer is not using AC power if you want to check the UPS battery.

3.42.1 Resource Object

UPS object

3.42.2 Default Schedule

The default interval for this script is **Every 3 minutes**.

3.42.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Battery life minimum threshold	Specify a threshold for the minimum number of minutes of remaining battery life. The default is 3 minutes.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - AC power is on	Set the event severity level from 1 to 40, to indicate the importance of an event in which the AC power is on. The default is 25.
Severity - Battery is low	Set the event severity level from 1 to 40, to indicate the importance of an event in which the UPS battery life is below the threshold you set. The default is 2.

3.43 UPSLineStatus

Use this Knowledge Script to monitor the UPS AC power line. The job raises a critical event if the AC power line is down.

3.43.1 Resource Object

UPS object

3.43.2 Default Schedule

The default interval for this script is **Every 5 minutes**.

3.43.3 Setting Parameter Values

Set the following parameters as needed:

Description	How to Set It
Community	Specify the SNMP community string. The default is either the community name specified in AppManager Security Manager or *public* if no community name has been specified.
Severity - SNMP or CIM failure	Set the event severity level from 1 to 40, to indicate the importance of an event in which SNMP or HP SIM fails. The default is 9.
Severity - AC power line down	Set the event severity level from 1 to 40, to indicate the importance of an event in which the UPS AC power line is down. The default is 2.