HP Insight Integration for Tivoli Revision 4.6 User Guide

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Intended audience

This guide is intended for individuals who are familiar with the configuration and operation of HP System Management Homepage, HP Remote Management processors, and HP Systems Insight Manager applications to manage the operation of HP ProLiant systems within a Tivoli environment. Because of the risk of data loss, only individuals experienced with using this software should implement the procedures in this guide.

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About this guide

Intended audience

This guide is for systems administrators who use the HP Insight Integration for Tivoli, HP System Management Homepage, HP Remote Management processors, and HP Systems Insight Manager applications to manage the operation of HP ProLiant systems within a Tivoli environment.

The HP Insight Integration for Tivoli has been developed to integrate into an existing Tivoli Managed Region.

Typical users of this guide are familiar with the configuration and operation of Tivoli Enterprise, HP Systems Insight Manager, HP Remote Light-Out or Integrated Lights-Out management processors, and HP Insight Management Agents. Users must have a working knowledge of the operating environments to be used with the Insight Integration module, Tivoli Enterprise, and HP Systems Insight Manager.

Where to go for additional help

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

- Management Integration Support website (http://h18000.www1.hp.com/products/servers/management/integration/support.html)
- ProLiant Essentials Software website (http://h18013.www1.hp.com/products/servers/management/index.html?jumpid=servers/proliant/manage)
- *Tivoli Framework User's Guide*
- *Tivoli Enterprise Console User's Guide*
- *Tivoli Inventory User's Guide*

Product overview

Product description

HP Insight Integration for Tivoli is a comprehensive solution that simplifies systems management by integrating SNMP event and status indications for HP ProLiant servers into the TEC. HP Insight Integration also enables in-depth hardware data collection for ProLiant servers and integrated links to HP management tools.

HP Insight Integration builds on HP hardware instrumentation and Insight Management Agent technology, which work with native Tivoli services to provide comprehensive infrastructure management for Tivoli across a wide range of operating system platforms. This functionality enables you to manage HP server and storage hardware, in addition to other enterprise resources, from within a common Tivoli environment. Supported operating platforms for host and managed systems include HP-UX, Sun Solaris, IBM AIX, Windows Server® 2000, Windows Server® 2003, Novell NetWare, Linux, HP Tru64 UNIX®, and HP OpenVMS.

HP Insight Integration for Tivoli includes SNMP Adapter definitions for over 1,100 individual notifications, in addition to Basic Recorder of Objects in C (BAROC) event class definitions and rules to correlate nearly 650 SNMP events. These definitions, classes, and rules integrate closely with the TEC application, enabling HP SNMP events and Fibre Channel Management SNMP events to be identified, processed, translated, and appear in the TEC console. The predefined HP rules can be customized to suit individual TME requirements.

HP Insight Integration for Tivoli version 4.6 also provides tasks and predefined database schemas that enable detailed hardware data collection for HP ProLiant servers, which can be displayed and queried by the inventory tools delivered with Tivoli Configuration Manager. Additional data for managed HP servers is also available through the HP System Management Homepage, HP Systems Insight Manager, and HP Lights-Out management tools using integrated browser-based tasks.

Product features

- Works with the TEC 3.7.x, 3.8, and 3.9
- Installs into all tier-1 Tivoli platforms (HP-UX, AIX, Solaris, and Windows®) running Tivoli Framework 3.7.x through 4.1.1
- Provides functionality to install the Insight Integration kit using GUI from the Tivoli Desktop and through CLI using an installation script
- Provides custom tasks to configure the Tivoli SNMP Adapter and Tivoli Event Server to receive and translate HP SNMP notifications and Fibre Channel Management SNMP notifications as TEC events
- Contains over 1,100 SNMP trap definitions for HP ProLiant servers and HP storage platforms
- Translates and displays SNMP events from all Tivoli Managed Nodes and Endpoints that have Insight Management Agents installed, including Microsoft® Windows NT®, Windows® 2000, Windows® 2003, NetWare, Linux, Tru64, and Open VMS

- Provides predefined event class definitions and rules that identify correlate nearly 650 HP ProLiant and Fibre Channel Management SNMP events
- Includes integrated tasks to launch HP Systems Insight Manager, HP System Management Homepage, HP Lights-Out management, and the HP Storage Management Appliance from the Tivoli Desktop and the TEC
- Provides support to receive SNMP/HTTP events and WBEM/WMI indications that are forwarded from HP SIM as SNMP events
- Provides support to receive HP Virtual Connect events as defined in the MIB file FCMGMT-MIB
- Offers predefined tasks and database schemas for Microsoft® SQL and Oracle® that enable HP ProLiant hardware asset data to be collected, stored, queried, and displayed by Tivoli Configuration Manager inventory tools
- Includes comprehensive documentation

Changes in revision 4.6

- Tivoli Class Definition Statement Files (.CDS) and BAROC class definitions updated to support HP Insight Management Agents 8.10 for ProLiant servers
- Expanded rules for Tivoli event servers (nearly 650) with automated correlation that can be customized to meet individual requirements

Availability

Obtain the HP Insight Integration for Tivoli by registering and downloading it from the HP Management Integration Solutions website (http://www.hp.com/servers/integration).

Preinstallation requirements

Before installing the HP Insight Integration for Tivoli, be sure that you have read and understood the installation information provided in this chapter. You must also meet these additional installation requirements:

- To access the complete functionality provided with Insight Integration, the target Tivoli environment must be fully configured and operational before installation.
- The Tivoli Framework/Desktop and the TEC are the only required Tivoli components.
- Tivoli Configuration Manager is required to utilize the HP inventory collection tasks.
- Verify that the correct levels of the Tivoli Framework, the TEC, and related patches have been installed. See Tivoli Enterprise support and requirements (on page 13) for a listing of the Tivoli software requirements.
- The Tivoli software versions and patches installed on Gateway and Managed Node devices must match those installed on the associated TMR server.
- SNMP services must be installed and configured on all HP managed systems.
- A Tivoli administrator login is needed to perform many of the features provided with Insight Integration. For information on administrator login and access rights, see the *Tivoli Framework User's Guide*.

HP hardware support

The Insight Integration has been developed to install and operate on HP ProLiant servers, configured as Tivoli TMR and Managed Node systems on supported UNIX® and Windows® platforms, including HP-UX, Windows® 2000, and Solaris, and as Tivoli Endpoint devices on platforms that support Tivoli and HP Insight Management Agents, including Windows® 2000, Windows® 2003, Windows NT®, NetWare, and Linux. For a more complete listing of Endpoint platform support, see HP Insight Management Agent platforms (on page 11).

The following sections provide examples of the minimum configuration requirements for HP ProLiant servers configured as Tivoli TMR and TEC servers and as Tivoli Managed Nodes or Endpoint systems.

HP ProLiant server configured as a TMR server

HP recommends the following minimum configuration:

- Windows® 2000 with SP4 or greater
- 128 MB RAM
- TCP/IP installed and configured
- Tivoli Framework 3.7.1 or later
- Oracle®, Sybase, Microsoft® SQL Server, Informix, or RDBMS

HP ProLiant server configured as a TEC server

HP recommends the following minimum configuration:

- Windows® 2000 with SP4 or greater
- 512 MB RAM and 512 MB free drive space, without RIM and event database
- 1 GB RAM and 4 GB free drive space (with RIM and event database on the same server)
- TCP/IP installed and configured
- Tivoli Framework 3.7.1 or later
- Tivoli Enterprise Console 3.7.1 or later and Event Server with the SNMP event adapter installed on a node in the environment
- Oracle®, Sybase, Microsoft® SQL Server, Informix, or DB2 RDBMS for the TEC database

ProLiant Managed Node and Endpoint configurations

HP recommends the following minimum configuration:

- 64 MB RAM
- Windows NT® 4.0 SP6a
- Novell NetWare 4.x
- SNMP service installed and configured

NOTE: Under Windows® 2000, the SNMP service is set to READ ONLY by default. Be sure that SNMP is configured for READ/WRITE to enable proper operations.

- TCP/IP installed and configured
- Insight Management Agents 5.50 or later
- Tivoli Managed Nodes—Tivoli Framework 3.7.1 or later
- Tivoli Endpoints with the Tivoli Management Agent installed

HP Insight Management Agent platforms

The following lists all platforms supported by Insight Management Agents and Insight Integration as managed Tivoli Endpoint systems:

- Windows® 2000
- Windows NT® 4.0 SP6
- Windows® 2003
- NetWare 5.x or later
- HP Tru64 UNIX® 4.0F and later
- HP OpenVMS 7.1 and later
- UnixWare 7 or later and Open UNIX® 8
- Linux
  - Red Hat
  - SUSE
  - UnitedLinux 1.0
- OS/2 Warp Version 4

Disk space and memory requirements

To install the HP Insight Integration for Tivoli 4.6, a minimum requirement of 6 MB of free hard disk space is required for a combined TMR/TEC or individual TMR and TEC server configurations.

No set memory is required. The Tivoli environment and the number of nodes being managed within the TMR determine the actual amount of memory required.

HP software requirements

The following HP software is needed to implement the full functionality of the HP Insight Integration for Tivoli.

HP Insight Management Agents

Insight Management Agents are the foundation of the HP Insight Integration for Tivoli and are required on every managed HP server. The Insight Management Agents monitor hardware instrumentation and subsystem status and generate SNMP events.

The HP Insight Integration for Tivoli 4.6 includes hardware support and SNMP event instrumentation for HP ProLiant servers up to Insight Management Agents 8.10. HP recommends that Insight Management Agents 5.50 be used as a minimum.

To view data instrumented by HP Insight Management Agents on an individual server, the Insight Integration for Tivoli includes a task to launch the System Management Homepage from the Tivoli Desktop and TEC.

Insight Management Agents for HP servers are included with HP Support Packs included with the Foundation Pack and SmartStart CDs shipped with HP ProLiant servers and can be downloaded from the ProLiant Essentials Management Software website (http://www.hp.com/servers/manage).

HP Systems Insight Manager

HP Systems Insight Manager is a web-based application that provides unified lifecycle management for HP servers, storage, and other managed infrastructure resources from HP and third-party manufacturers. HP Systems Insight Manager can be used to maximize system uptime, reduce total cost of ownership, and provide powerful systems lifecycle monitoring, inventory, and control.

The HP Insight Integration for Tivoli includes a task to launch the HP Systems Insight Manager application from the Tivoli Desktop and TEC.

HP Insight Integration for Tivoli also supports SNMP/HTTP events and WBEM/WMI indications that are forwarded as an SNMP event from HP SIM. All SNMP/HTTP events and WBEM/WMI indications that are received by HP SIM can be forwarded to the TEC as an SNMP event that subsequently appears as event 58916872 on the TEC.

HP Systems Insight Manager is not required to implement the HP Insight Integration for Tivoli, but it enables more advanced infrastructure lifecycle management from within the Tivoli environment.

HP Systems Insight Manager can be found on the Management CD included with the ProLiant Essentials Foundation Pack shipped with every ProLiant server and can be downloaded from the ProLiant Essentials Management Software website (http://www.hp.com/servers/manage).

NOTE: The download file size for HP Systems Insight Manager is approximately 720 MB.

HP Remote Server Management

HP ProLiant servers include an HP iLO management processor or can utilize a RILOE plug-in option. HP management processors virtualize system controls to enable routine system administration, maintenance and troubleshooting over a network regardless of the server's state of operation. Administrators can access HP iLO and RILOE management processors using standard browser applications or command line options.

The HP Insight Integration for Tivoli includes a task to launch the browser-based interface of HP iLO and RILOE management processors from the Tivoli Desktop and TEC.

HP iLO and RILOE management processors must be configured before use with the HP Insight Integration for Tivoli.

HP Storage Management Appliance

The HP Storage Management Appliance is a centralized monitoring and management solution for SAN. Connected directly to the network fabric, it performs advanced independent management functions between computers and storage devices.

The HP Insight Integration for Tivoli includes a task to launch the agents associated with the HP Storage Management Appliance from the Tivoli Desktop and TEC.

The HP Storage Management Appliance is not required to implement the HP Insight Integration for Tivoli, but it provides advanced SAN management from within the broader Tivoli enterprise environment.

Tivoli Enterprise support and requirements

The HP Insight Integration for Tivoli has been developed to work with the following applications:

- Tivoli Enterprise Management Framework/Desktop (required)
- Tivoli Enterprise Console
- Tivoli Inventory in Tivoli Configuration Manager

The HP Insight Integration for Tivoli 4.6 has been developed and tested with the following:

- Tivoli Framework/Desktop 3.7.x, 4.1, and 4.1.1
- Tivoli Enterprise Console 3.7.x, 3.8, and 3.9
- Inventory tools in Tivoli Configuration Manager 4.2

Tivoli patch requirements

The following minimum Tivoli patch levels are required to implement the HP integration. However, HP recommends that the latest available patches from IBM be applied for proper functioning.

Tivoli Framework 3.7.x

- Tivoli Framework 3.7.1-TMF-00097
- Tivoli Framework 3.7.1-TMF-00099

Tivoli Enterprise Console 3.7.x

- Tivoli Enterprise Console 3.7.1-TEC-FP04

Tivoli Framework 4.1

- Tivoli Framework 4.1-TMF-0013

Tivoli Enterprise Console 3.8

- Tivoli Enterprise Console 3.8, Fixpack1

Tivoli Framework 4.1.1

- Tivoli Framework 4.1.1-TMF-0060

Tivoli Enterprise Console 3.9

- Tivoli Enterprise Console 3.9-TEC-FP05

Tivoli SNMP Adapter

The HP Insight Integration for Tivoli has been developed to integrate over 1100 HP ProLiant SNMP traps generated by HP Insight Management Agents and Virtual Connect into the TEC and includes event translation and automated event correlation. The Tivoli SNMP Adapter is needed to help provide this capability.

At least one system on the network must have a Tivoli SNMP Adapter installed and configured to forward the HP and the Fibre Channel Management SNMP traps to the TEC. All managed HP servers must be configured to forward SNMP traps to the Managed Node or Endpoint device containing the Tivoli SNMP Adapter.

Both Tivoli non-TME and TME ACF SNMP Adapters are supported by the HP Insight Integration for Tivoli.

For more details on how to configure the Tivoli SNMP Adapter to receive HP ProLiant and Fibre Channel Management SNMP events, see "Installing the HP Insight Integration with the TEC (on page 17)."

Tivoli operating environments

The HP Insight Integration for Tivoli is designed to integrate into the following Tivoli platforms.

NOTE: Includes all operating systems supported by the respective Tivoli Framework and TEC versions.

Tivoli Enterprise TMR Server and Managed Nodes

The following operating systems are Tivoli tier-1 platforms:

- HP-UX 11i
- AIX 5.2 and greater
- Solaris 8, 9, and 10
- Windows® 2000
- Windows® 2003

Tivoli Endpoints

The following platforms are supported as Endpoint systems:

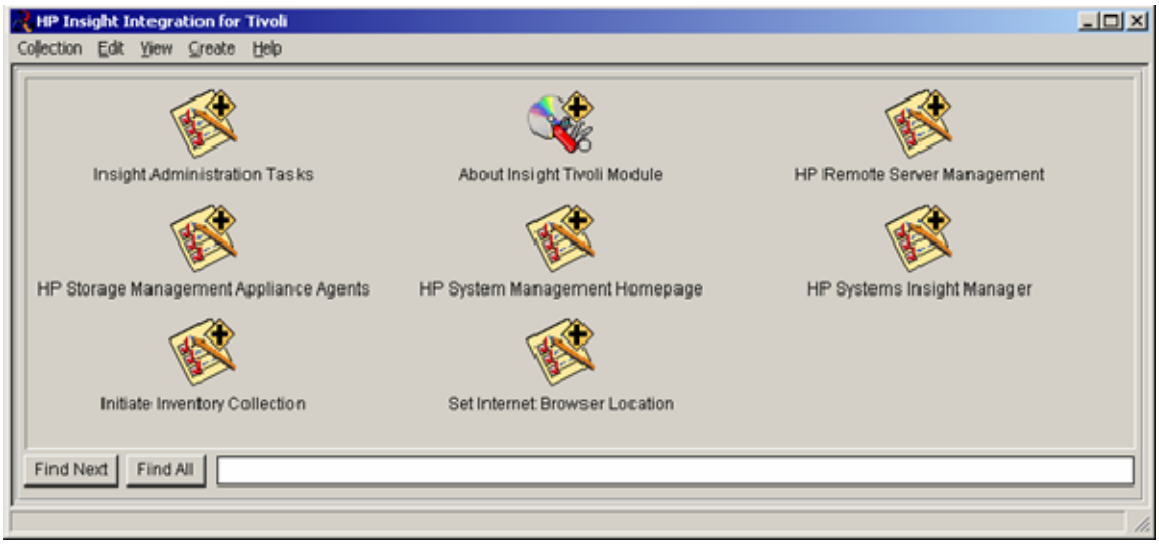
- Windows® 2000
- Windows® 2003
- Windows NT® 4.0 SP6
- NetWare 5.x or later
- HP Tru64 UNIX® 4.0F and later
- HP OpenVMS 7.1 and later
- UnixWare 7 or later and Open UNIX® 8
- Linux
  - Red Hat
  - SUSE

- UnitedLinux 1.0
- OS/2 Warp Version 4

Insight Integration groups and tasks

The HP Insight Integration for Tivoli provides the following groups and tasks for configuration and operations with the Tivoli environment, as shown in the following figure.

Further details on using each task are provided in the chapters "Installing the HP Insight Integration with the TEC (on page 17)" and "Using the HP Insight Integration for Tivoli (on page 45)."



- Insight Administration Tasks—Predefined tasks for configuring the TEC SNMP Adapter and the TEC Event Server with HP Insight event definitions, classes, rules, and filters.
- About Insight Tivoli Module—Displays revision details for the installed HP Insight Integration for Tivoli.
- HP Remote Server Management
  - Embedded task to launch the browser interface for the HP Lights-Out management processor on a specified HP server
  - Provides multiple ways to configure, update, and operate servers remotely, irrespective of system status or operating system platform
- HP Storage Management Appliance Agents—Embedded task to launch the HP Storage Management Appliance for advanced storage management and administration.
- HP System Management Homepage
  - Embedded task to launch the System Management Homepage on a specified HP server
  - Provides in-depth hardware configuration and subsystem status data instrumented by HP Insight Management Agents
- HP Systems Insight Manager—Embedded task to launch the browser-based HP Systems Insight Manager application for unified management of HP servers, storage, and other infrastructure hardware resources.
- Initiate Inventory Collection—Embedded task to execute the HP Inventory Collector (COLLECT.EXE) on specified nodes. This task creates and saves HP hardware asset data to a specified location using

a .MIF file format. The Inventory tools provided with the Tivoli Configuration Manager can be used to import HP .MIF files into an existing Tivoli inventory database.

- Set Internet Browser Location—A predefined task to configure the Insight Integration browser environment, enabling HP web-based management tools to be launched from the Tivoli Desktop and Event Console.

Insight Integration directories and files

The HP Insight Integration for Tivoli is provided as a compressed file for both UNIX®- and Windows®-based Tivoli platforms (INSTEC46.zip and INSTEC46.tar). The compressed file expands to /hpq as the default location.

The expanded integration consists of the directories and files listed in the following table.

Directory	**Contents**
/hpq	Root location for the expanded Insight Integration files
/hpq/Docs	User documentation and release notes
/hpq/Plus	File packages and scripts used to install HP Insight Integration for Tivoli on the Tivoli Desktop and the TEC host systems
/hpq/Plus/Utils	Predefined scripts for installing and uninstalling the HP Insight Integration for Tivoli
/hpq/Plus/Cfg	HP Insight Integration for Tivoli configuration files
/hpq/TEC	Files (.cds, .oid, .rls, .baroc), release notes, and scripts for performing a manual installation of the HP Insight Integration for Tivoli
/hpq/Inventory	Files (.sql, .sh) for creating HP specific schemas and queries, plus the HP Inventory Collector utility (collect.exe)
/hpq/MIBs	Contains information about FCMGMT-MIB and HP SNMP MIB files associated with the HP Insight Integration for Tivoli

Installing the HP Insight Integration with the TEC

Overview of HP Insight Integration with the TEC

This section describes the primary elements and operations of the TEC, as well as the requirements and procedures used to install the HP Insight Integration for Tivoli into an existing TME.

TEC components and Insight Integration

Operation of the TEC relies on the following three major components:

- Event adapters
- Event Server
- Event Console

Event adapters

Tivoli event adapters gather data from managed resources in the TME. Event adapters enable the TEC to retrieve events from a variety of sources, including the Windows® Event Log, SNMP messages, log files, and other management platforms such as Tivoli NetView or HP OpenView.

HP Insight Integration for Tivoli provides predefined event object definitions and classes (.cds and .oid files) for over 1,100 events that integrate with both non-TME and TME ACF SNMP Adapters. This functionality enables events generated by HP Insight Management Agents and HP Virtual Connect to be translated, prioritized, and appear in the TEC.

Event Server

The Event Server is a central system that arbitrates all SNMP events in the distributed environment and delivers updates to the TEC. The Event Server creates an entry in the Tivoli database for each incoming event and evaluates each one against a set of rules to determine how to respond. Using an event rule base, administrators can automate common tasks and actions based on incoming events.

HP Insight Integration for Tivoli provides a comprehensive set of over 1,100 predefined BAROC event class definitions and over 260 rules. These classes and rules enable automated processing and correlation of SNMP events generated by HP Insight Management Agents and HP Virtual Connect, and they can easily be customized to suit individual TME requirements.

Event Console

The Event Console is a graphical user interface that displays incoming events received at the Event Server. Multiple Event Consoles can be configured within a single TME as required.

System administrators can use the Event Console to retrieve, filter, and correlate incoming events or to escalate SNMP traps to other Event Consoles for further processing.

This chapter describes how to display SNMP events for HP ProLiant servers and storage platforms using a variety of TEC versions, which enables you to simplify IT operations procedures by viewing and managing events for your hardware infrastructure, operating systems, and application platforms from within a common TEC interface.

Installation overview and prerequisites

The following process provides an overview of the major steps and suggested sequence for installing the HP Insight Integration for Tivoli:

1. Confirm the full installation and operation of the target TME, including the TMR server and associated Tivoli Gateways.
2. Ensure that TEC has been installed and the required revision and patch levels have been applied. For more information, see "Tivoli Enterprise support and requirements (on page 13)."
3. Confirm that the Tivoli SNMP Adapter, TEC Event Server, and TEC components have been configured in preparation for the Insight Integration installation.
4. Verify that SNMP services have been installed and are operational on all HP servers to be managed.
5. Download HP Insight Integration from the Management Integration Solutions website (http://www.hp.com/servers/integration).
6. Expand the downloaded Insight Integration on the target TMR server where the Tivoli Desktop is located.
7. Confirm that you have administrator-level authority in the TME before installing Insight Integration for TEC.
8. Install the Link Binaries to the target TMR, TEC servers, and associated gateways.
9. From the Tivoli desktop or command line, install Insight Integration files on the target TMR, TEC servers, and associated gateways.
10. Assign Tivoli administration resources and roles to permit correct access and operations of Insight Integration.
11. Configure the Tivoli SNMP Adapters to include HP Insight SNMP event definitions and classes.
12. Configure the TEC Event Server with the HP Insight BAROC files and rules.
13. Configure the Tivoli Event Console to display the Fibre Channel Management and HP Insight SNMP events.
14. Configure Insight Integration tasks that enable access to the System Management Homepage, Systems Insight Manager, interface of HP iLO and RILOE management processor, and the agents associated with the HP Storage Management Appliance (if applicable) from the Tivoli Desktop and TEC console, as appropriate.

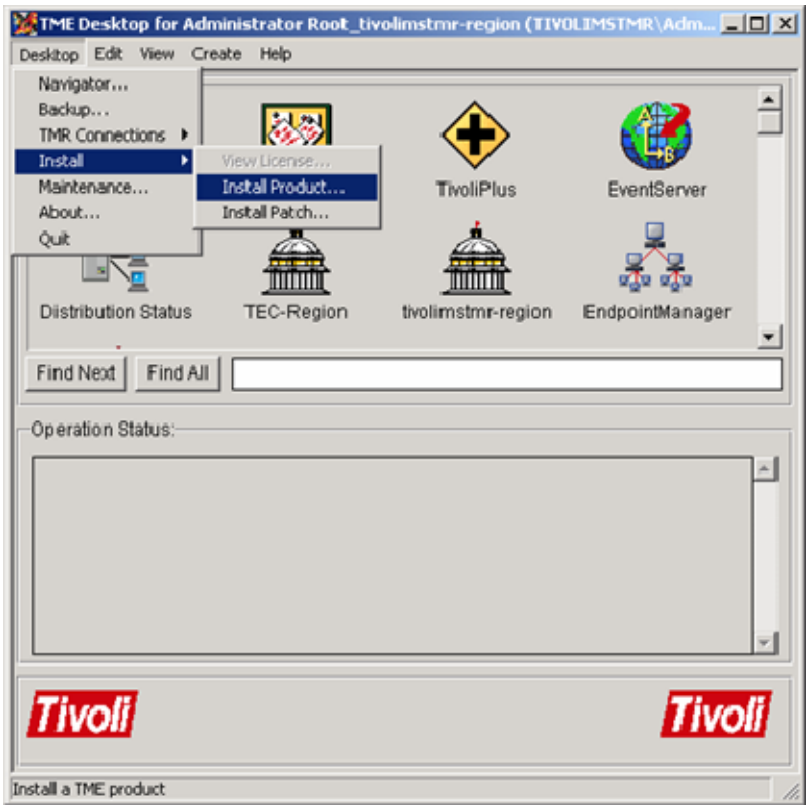
Installing the HP Insight Integration for Tivoli

The HP Insight Integration for Tivoli enables scripted and manual installation. The following section describes the individual steps to complete a fully scripted installation and command line installation of the files provided with the HP Insight Integration for Tivoli into an existing TME.

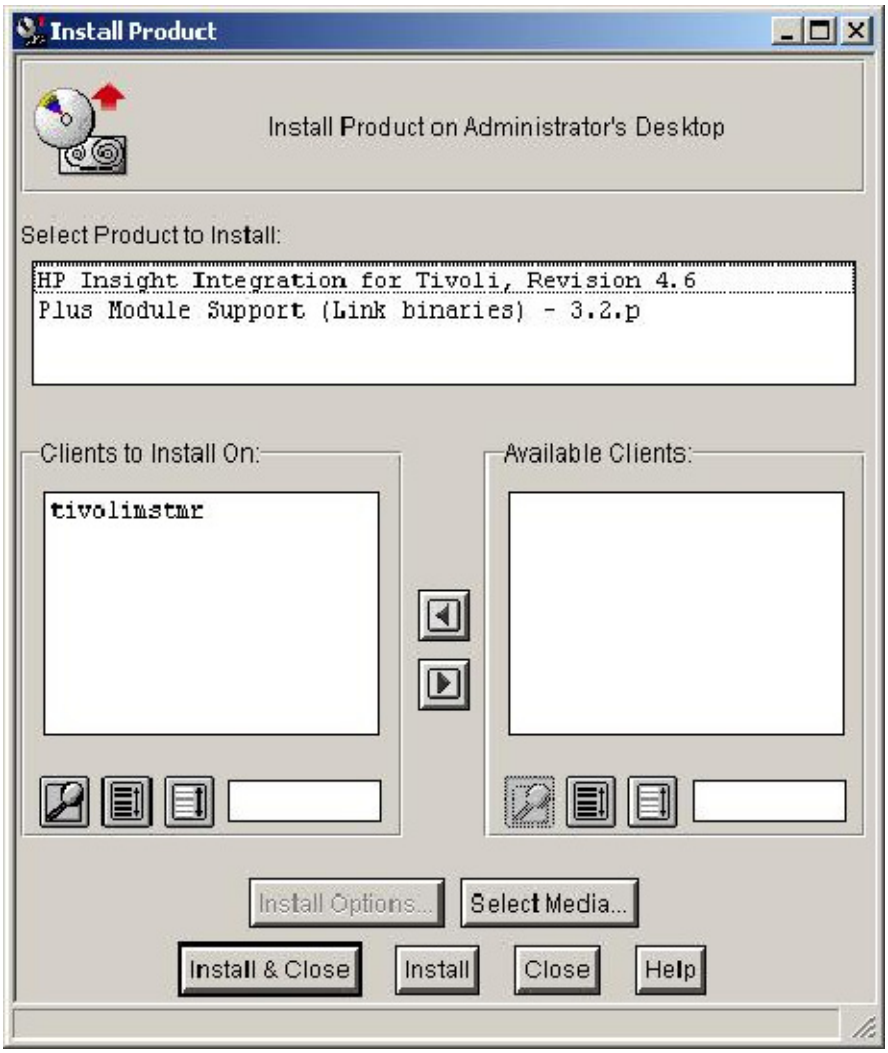
NOTE: The text and graphics provided are based on a Tivoli Management Framework 3.7.1 configuration. Some menu item names might differ for other Tivoli Framework platforms, but the general procedures are identical. For additional details and guidance, see your Tivoli documentation. For manual installation procedures, see "Manually configuring the HP Insight Integration for Tivoli (on page 40)."

Installing from the Tivoli desktop

1. Confirm that the target Tivoli environment has been correctly configured and is operational and that the correct applications and patch levels have been installed.
2. Download the HP Insight Integration for Tivoli from the HP Management Integration Solutions website (http://www.hp.com/servers/integration).
3. Expand the downloaded Insight Integration file (INSTEC46.zip or INSTEC46.tar) on the target TMR server with administrator authority.
4. Select **Desktop>Install>Install Product.**



The Install Product screen appears.



5. To set the media location, click **Select Media,** and then locate the media. By default, the media is located in the /hpq/Plus directory and is identified by the presence of a contents.lst file.
6. Click **Set Media>Close.**
7. From the Select Product to Install list, select **Plus Module Support (Link binaries)**. If this option is not listed, select a media location.

   NOTE: The installation process described presumes that the Plus Module Support Link Binaries are not already present. If Plus Module support Link Binaries already exist on the TMR, then use the **Install Patch** option under the **Desktop/Install** option, instead of the **Install Product** selection.

8. Populate the Clients to Install On list with the designated target systems. Use the left and right arrow buttons to move machine names from Available Clients to Clients to Install On. Install the Insight Integration in sequence to the following systems:
   - TMR server
   - TEC server
   - Associated gateways

9. Click **Install.** The Product Install window appears, which logs the installation as it runs, initially listing the tasks that take place during the installation. To begin the installation, click **Continue Install,** or to cancel the installation, click **Cancel.**
10. After the installation is complete, click **Close.**
11. From the Select Product to Install list, select **HP Insight Integration for Tivoli 4.6.** If this option is not listed, click the **Select Media** button, and then locate the media (by default the media is located in the /hpq/Plus directory and is identified by the presence of a contents.lst file). After the media location is found, select **Set Media>Close.**
12. Populate the Clients to Install On list with the designated target systems. Use the left and right arrow buttons to move machine names from Available Clients to Clients to Install On. Install the Insight Integration in sequence to the following systems:
    - TMR server
    - TEC server
    - Associated gateways
13. Click **Install.** The Product Install window appears, which logs the installation as it runs, initially listing the tasks that take place during the installation. To begin the installation, click **Continue Install,** or to cancel the installation, click **Cancel.**
14. After the installation is complete, click **Close.**

> **NOTE:** The approximate time to install the HP Insight Integration for Tivoli is 10 to 15 minutes, depending on the overall TME configuration.

Installing from the command line

The HP Insight Integration for Tivoli 4.6 can be installed from the command line using the hptiv_install.sh script. This script is present in the hpq/Plus/Utils directory and installs the Plus Module Support (Link Binaries) and the HP Insight Integration for Tivoli into the TMR servers. The following procedure describes installing Insight Integration from a command line:

1. Run the script from a command line in a Tivoli managed environment, for example, `sh hptiv_install.sh`.
2. When prompted, provide full path to the hpq directory where Insight Integration for Tivoli files are extracted, for example, /Tivoli/IM/hpq on UNIX® platform and C:/Progra~1/Tivoli/IM/hpq on Windows® platform.
3. The installation process installs Plus Module Support (Link Binaries) into the TMR servers and managed nodes. HP Insight Integration for Tivoli cannot be installed without Link binaries already installed in the TMR server or managed node. Select **y** to proceed with the installation of Link binaries, or select **n** to skip installation if Link binaries already exist.
4. After Link Binaries are installed, HP Insight Integration for Tivoli is installed into the TMR servers. Select **y** to proceed with installation, or select **n** to exit without installation.

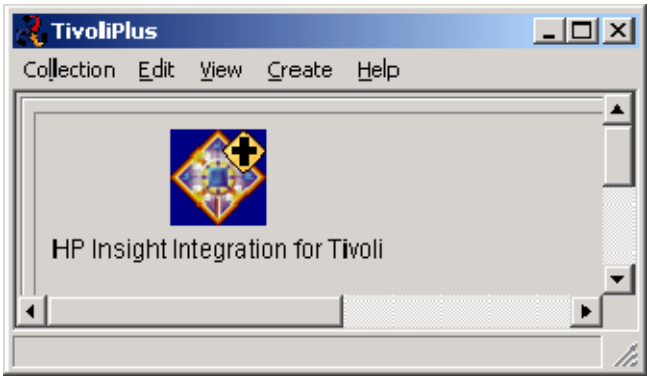
By default, the script installs the Link Binaries and Insight Integration for Tivoli files on all the available Managed Nodes. The script file can be customized for installation on specific Managed Nodes.

To install a different revision of the HP Insight Integration for Tivoli, uninstall the current revision of using steps, and then install the new revision of the HP Insight Integration for Tivoli following the procedures described in this section.

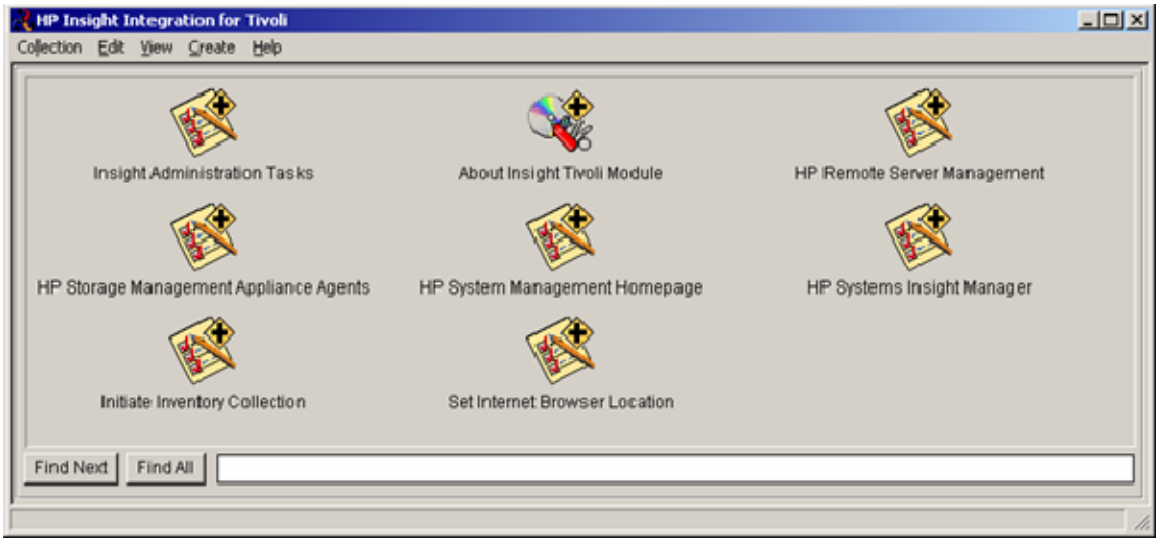
Confirming installation and product details

Use the following procedure to confirm the installation of the HP Insight Integration for Tivoli 4.6.

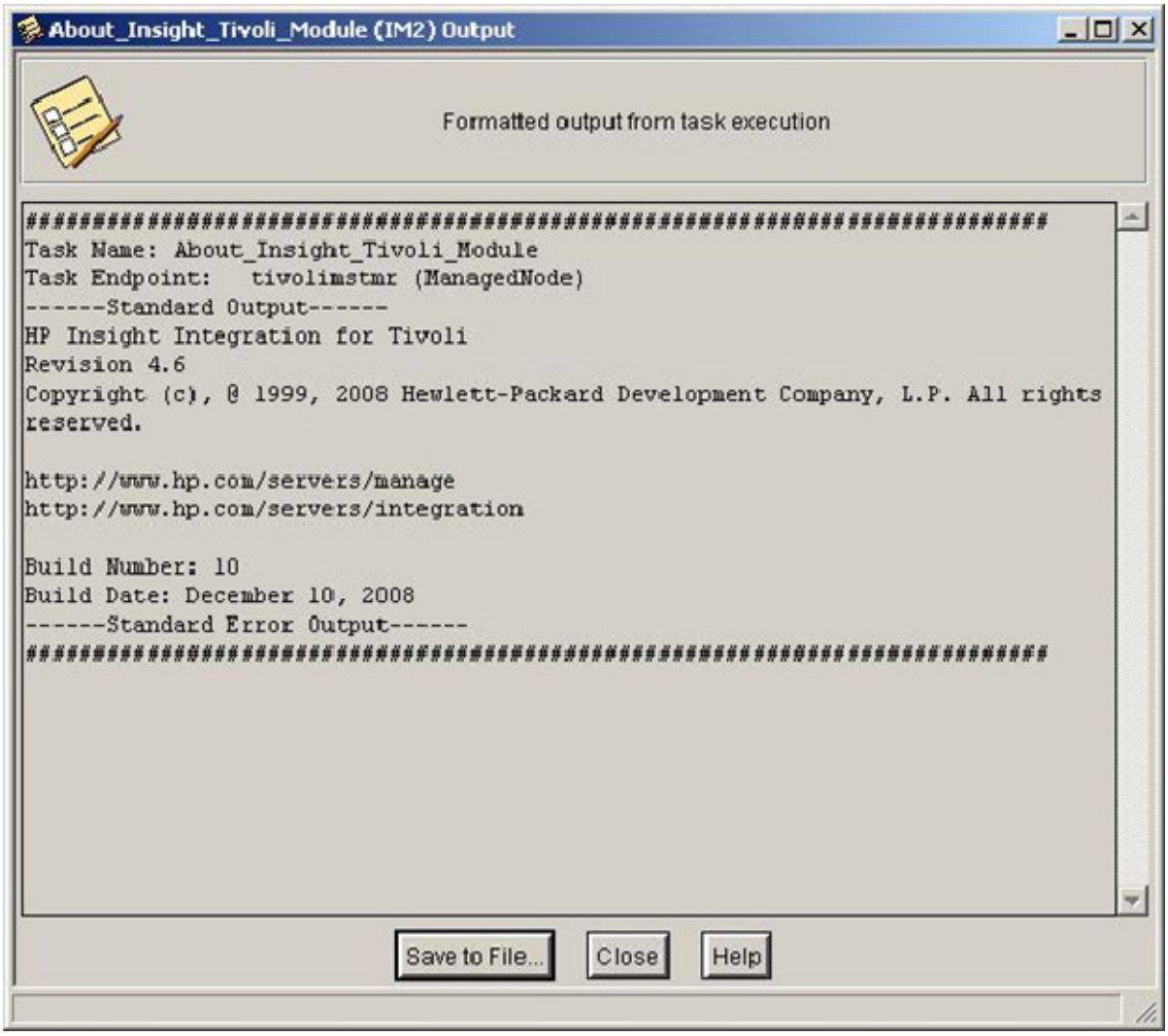
1. From the Tivoli Desktop, select **TivoliPlus>Open,** or double-click the **TivoliPlus** icon. The TivoliPlus window appears.



2. Right-click **HP Insight Integration for Tivoli,** and select **Open,** or double-click the icon to display the HP Insight Integration for Tivoli window.



3. Right-click **About Insight Tivoli Module,** and then select **Run,** or double-click the icon to display the product revision details.

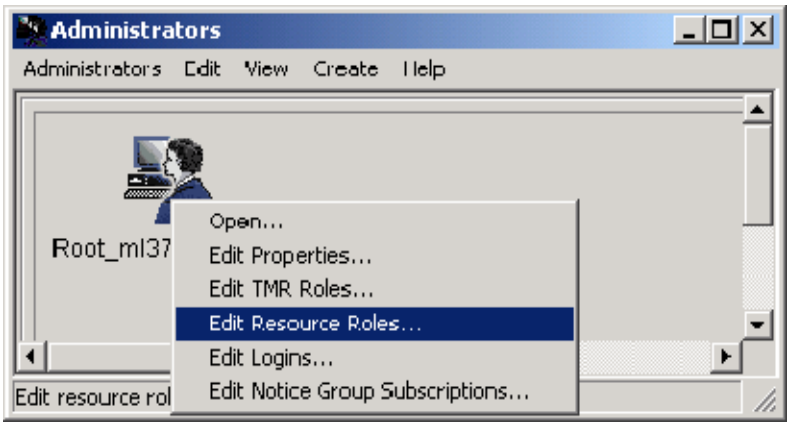


Assigning Tivoli administrator resources

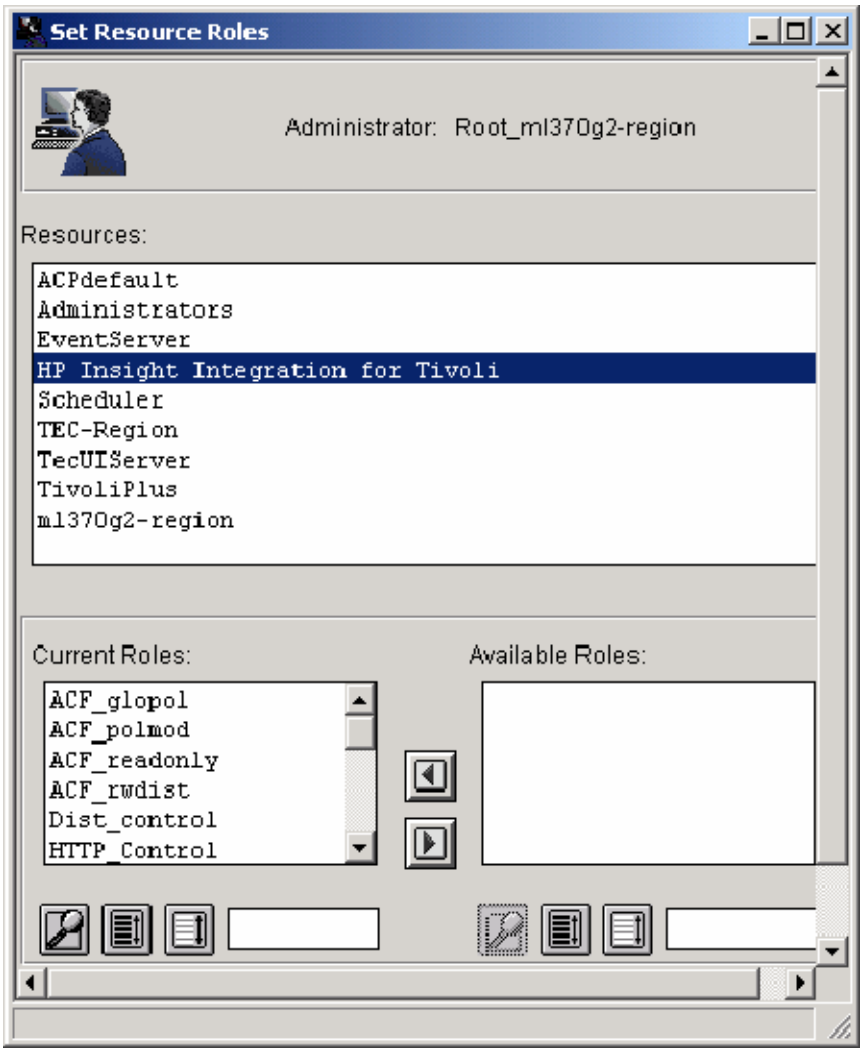
After you have completed the installation of the HP Insight Integration for Tivoli files, assign administrator resources to enable correct access and operations by performing the following procedure:

1. On the Tivoli Desktop, right-click the **Administrators** icon, and then select **Open,** or double-click the icon to display the Administrators window.

2. Right-click the administrator that you want to assign access rights for Insight Integration, and then select **Edit Resource Roles.**



The Set Resource Roles window appears.



3. Be sure that **HP Insight Integration for Tivoli** is included in the Resources list.
4. Select **Change and Close** to complete the selection.
5. Close and reopen the desktop to confirm application of the new settings.

Configuring a Tivoli SNMP Adapter

The HP Insight Integration for Tivoli provides a scripted task, Configure SNMP Adapter, to simplify the integration of Insight SNMP events with Tivoli Non-TME and Tivoli TME ACF adapters.

The Configure SNMP Adapter task is used to copy the Insight SNMP event definition file (ins_evt.cds) and the Insight object identifier file (ins_evt.oid) to defined target systems and amends the existing tecad_snmp.cds and tecad_snmp.oid files. This task enables the Tivoli SNMP Adapters to identify and interpret traps generated by HP Virtual Connect and the Insight Management Agents. The shell script Config_snmp.sh is used to complete this task.

NOTE: The TME must include at least one SNMP Adapter. This user documentation includes instructions for configuring both non-TME and TME ACF SNMP Adapters. For additional details on configuring Tivoli SNMP Adapters, see your Tivoli documentation.

Preinstallation considerations

To ensure a successful integration with the TEC:

- HP recommends running the Configure SNMP Adapter task provided with the Insight Integration before the setting up the TEC Event Server.
- The Tivoli non-TME or TME ACF adapters must be installed on the target systems before running the Configure SNMP Adapter task provided with the Insight Integration.
- The SNMP service on all HP Managed Nodes and Endpoints must be configured to send SNMP traps to the Tivoli SNMP Adapter.
- The TEC application must be fully installed and operational before running the Configure SNMP Adapter task provided with Insight Integration.

NOTE: The port number that TEC uses to receive events is usually 5529 for Windows®-based systems and 0 for UNIX® environments.

The Configure SNMP Adapter task supports Tivoli tier-1 platforms (HP-UX, AIX, Solaris, and Windows®) and defines events from HP Virtual Connect and all environments supported by Insight Management Agents. For a list of supported operating platforms, see the "Product overview (on page 8)" chapter.

Incoming events correspond to standard HP SNMP traps covering the following hardware platforms and subsystems:

- System hardware health, power supply, and environmental status
- Fibre Channel, IDE, ATA, SCSI, SAS, and Drive Array (RAID) subsystems
- StorageWorks and SANWorks storage configurations
- Clustered and Standby Recovery Server configurations
- Predefined and user-defined hardware threshold settings
- Hardware prefailure monitors
- Network interface controllers
- Remote Insight Lights-Out Edition (RILOE) and Insight Lights-Out (iLO) technology
- Management Agent services

- SNMP/HTTP events and WBEM/WMI indications forwarded as SNMP event from HP SIM

The following third-party SNMP traps provide support for some HP hardware platforms and subsystems:

- Fibre Channel Management (FCMGMT-MIB) supporting HP Virtual Connect

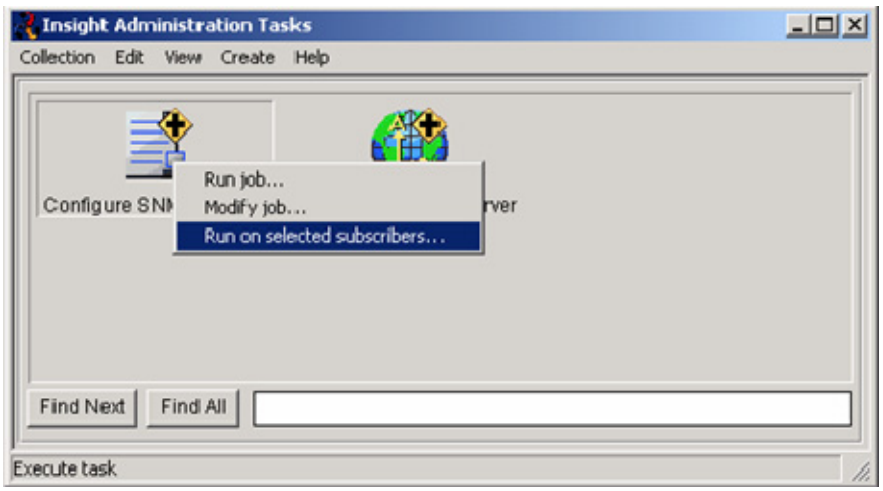
Each defined event has been assigned severity and correlation conditions, which can be customized to suit individual requirements.

Configuring a Tivoli non-TME SNMP Adapter

To configure a Tivoli non-TME SNMP Adapter:

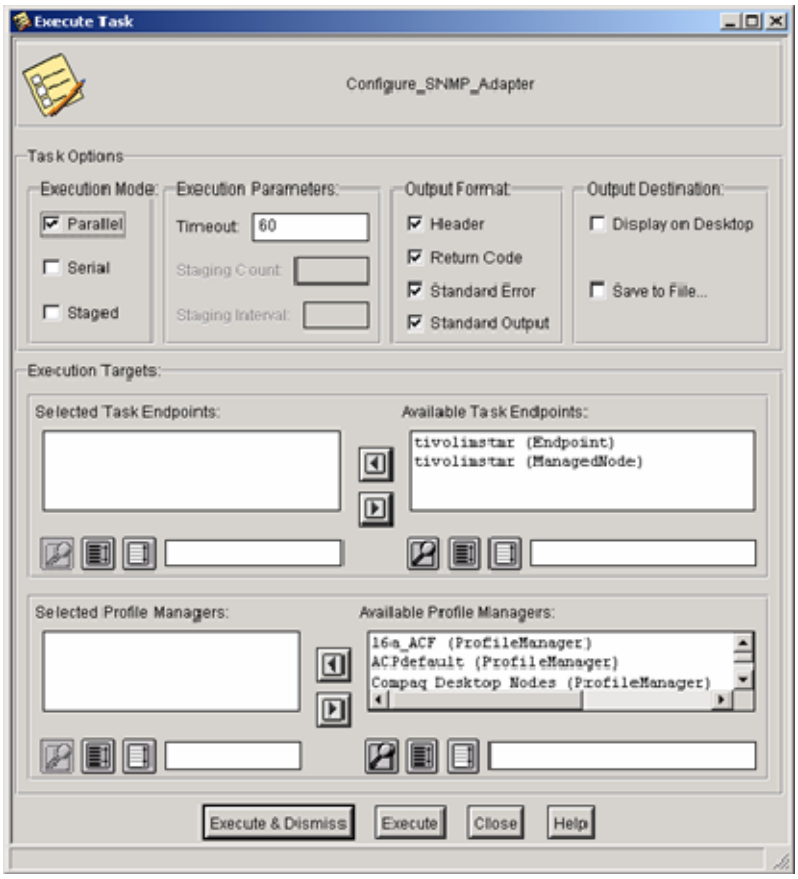
1. Confirm that the TME is configured and operating correctly before attempting to configure the SNMP Adapter (TMR server, Tivoli Gateways, and the TEC application).
2. Confirm that a Tivoli non-TME Adapter is installed on at least one Managed Node or Endpoint within the TME.
3. Confirm that the adapter class definition file provided with the Insight Integration, ins_evt.cds, has been copied to the /etc directory of the system hosting the Tivoli non-TME adapter.
4. From the HP Insight Integration for Tivoli window on the Tivoli Desktop, double-click **Insight Administration Tasks,** and then right-click the **Configure SNMP Adapter** icon.
5. Select **Run on selected subscribers.** The Execute Task window appears.

NOTE: The following example is based on a default Tivoli installation. To make changes to an existing configuration, select the **Modify job** option.



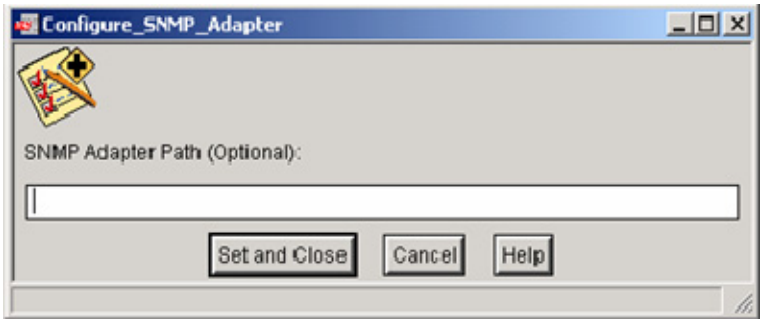
6. Use the arrow buttons to select the target systems that contain the Tivoli non-TME Adapter from the list of available options. Be sure that the selected targets are included in the selection windows on the left.

NOTE: The TME requires only a single non-TME SNMP Adapter for use with the TEC. Configure the SNMP services on HP Managed Nodes and Endpoints to send traps to the Tivoli SNMP Adapter.



7. When the target selections are complete, choose one of the following to display the Configure_SNMP_Adapter window:
   - To display the Configure Administrative Tasks window after the Configure_SNMP_Adapter window closes, click **Execute & Dismiss.**
   - To display the Executive Task window after the Configure_SNMP_Adapter window closes, click **Execute.** This enables further configuration.

   NOTE: Clicking either **Execute** or **Execute & Dismiss** displays the Configure_SNMP_Adapter window. However, clicking **Execute** displays the Execute Task window after closing the Configure_SNMP_Adapter window, enabling further configuration, while clicking **Execute & Dismiss** displays the Configure Administrative Tasks window.



The Configure SNMP Adapter window provides the option to enter a specific path for the Tivoli non-TME SNMP Adapter. If the path is left blank, the default location is used.

NOTE: For non-TME adapters, the default UNIX® configuration path is usr/tecad. For Windows® platforms, the default path is C:\tecsnmp.

8. Select **Set and Close** to complete the configuration process and initiate the Config_snmp.sh script. This script amends the existing tecad_snmp.cds and tecad_snmp.oid files on the target systems with the Fibre Channel Management and the Insight SNMP event classes and definitions and initiates the TEC SNMP Adapter.

Configuring a Tivoli ACF SNMP Adapter

The Tivoli ACF enables easier remote deployment and configuration of an SNMP Adapter. One advantage of using ACF with the Insight Integration is the deployment of the HP event definitions file (ins_evt.cds). The ins_evt.cds file contains the HP ProLiant and Fibre Channel Management SNMP to Tivoli event mappings and HP ProLiant and Fibre Channel Management trap definitions.

When using a non-TME adapter, the HP event definition file is copied to the target location as part of the Configure SNMP Adapter task supplied with the Insight Integration. When using the ACF method, the HP event definition file is copied to the target location during the creation of the adapter. This method ensures that the ins_evt.cds file is always in the correct location before running the Configure SNMP Adapter task provided with the Insight Integration.

NOTE: Although the ACF is supported on both Tivoli Managed Nodes and Endpoints, the ACF SNMP Adapter is supported only on Endpoint (TMA) systems and cannot be configured on Tivoli Managed Nodes.

To configure a Tivoli ACF SNMP Adapter:

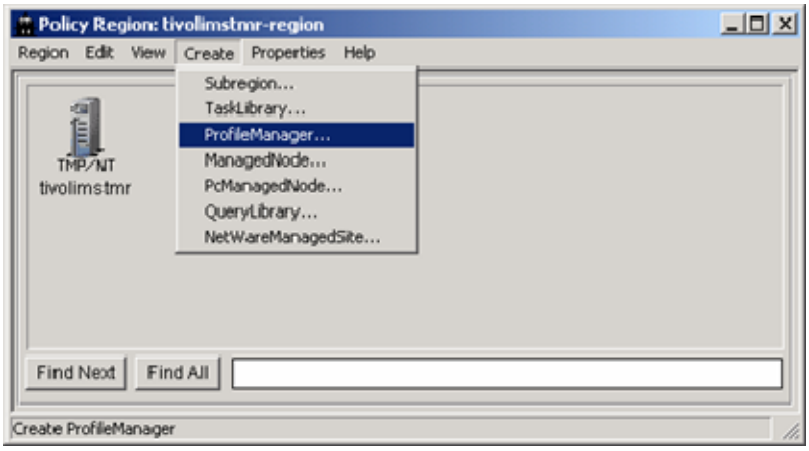
1. Configure the Tivoli environment (TMR server, gateways, and TEC).
2. Install the ACF on the TMR server and gateways.
3. Configure the TMA Endpoints.
4. Install the HP Insight Integration for Tivoli. For installation instructions, see "Installing the HP Insight Integration for Tivoli (on page 18)."
5. Create a dataless ACF profile manager and ACP.
6. Populate the newly created profile with the target Endpoints.
7. Edit the profile to configure the adapter type. The profile must include the tecad_snmp entry, location and port definitions for the Event Server, and location of the HP event definitions file (ins_evt.cds).
8. Distribute the profile to deploy the ACF Adapter to the target Endpoints.
9. Modify the **Configure SNMP Adapter** task provided with the Insight Integration to set the profile as a subscriber.
10. Run the **Configure SNMP Adapter** job provided with Insight Integration to amend the tecad_snmp.cds and tecad_snmp.oid files with the HP event classes and definitions.

NOTE: The ACF Adapter is supported only on Tivoli Endpoint systems.

Deploying and configuring an ACF SNMP Adapter

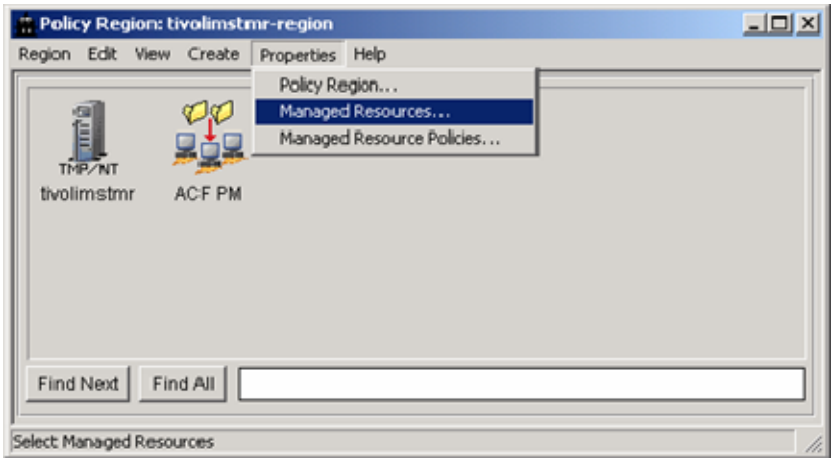
1. Confirm that the TME is configured and operating correctly before attempting to configure the SNMP Adapter (TMR server, Tivoli Gateways, and the TEC application).

2. Confirm that the ACF is installed on the TMR server and associated Tivoli Gateways.
3. On the Tivoli Desktop, double-click the **<hostname>-region** icon to select the target policy region, where **<hostname>** refers to the name of your TMR host. The Policy Region window appears.

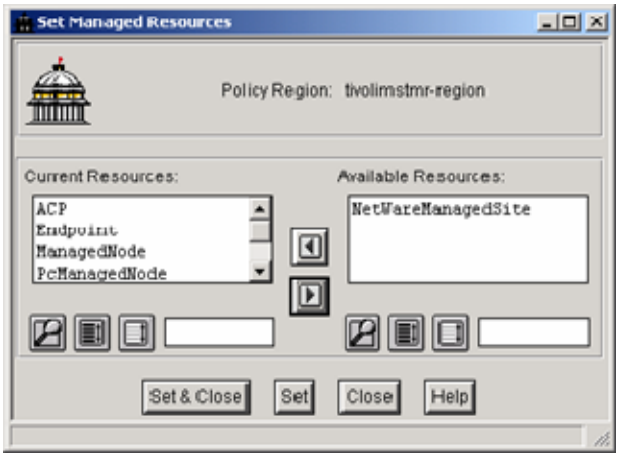


4. On the menu bar, click **Create,** and then select **ProfileManager.** The Create Profile Manager window appears.

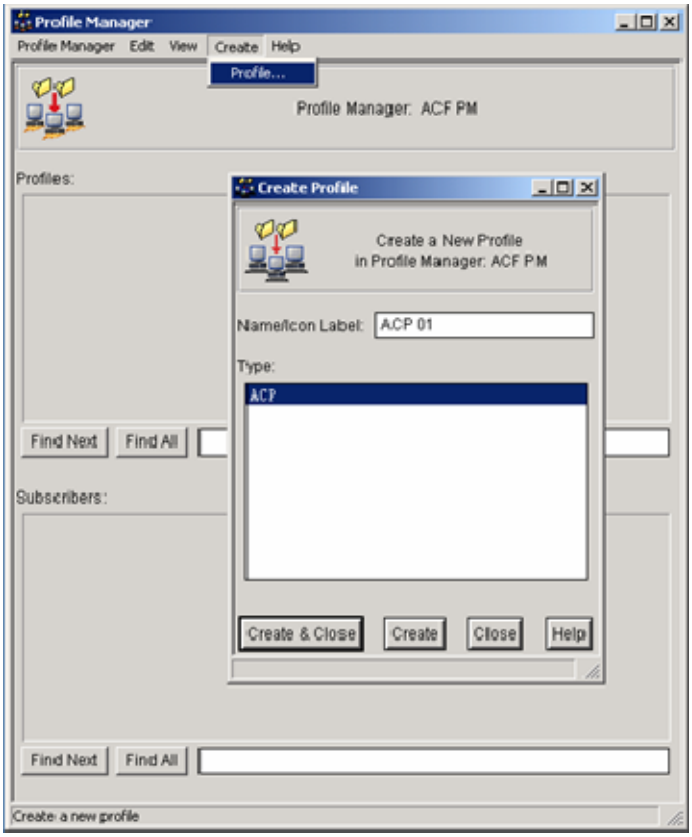
5. Enter a name in the Name/Icon Label textbox to accurately identify the new profile manager, and then select the **Dataless Endpoint Mode** checkbox.
6. Click **Create and Close.**
7. In the Policy Region window, click **Properties>Managed Resources.**



The Set Managed Resources window appears.

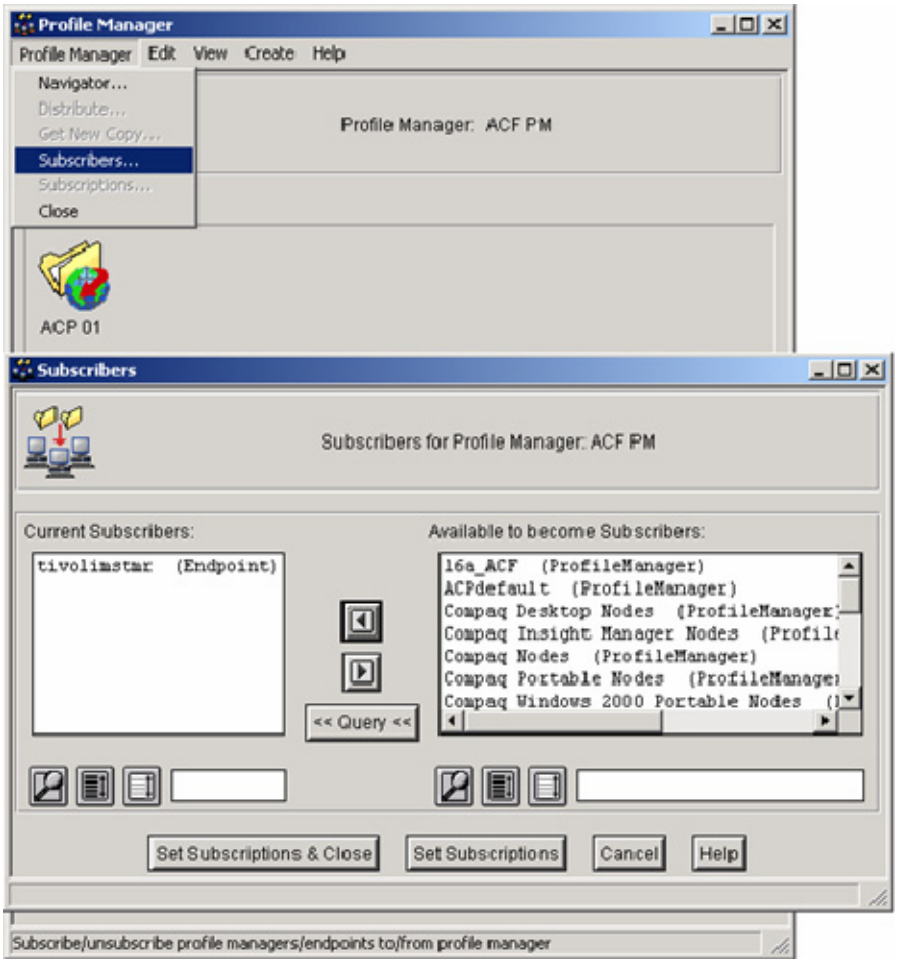


8. Using the left and right arrows, verify that the Policy Region includes ACP in the Current Resources section.
9. To confirm the settings, click **Set & Close**.
10. In the Profile Manager window, double-click the profile manager icon previously created.
11. In the Profile Manager window, select **Create** from the menu bar, and then select **Profile.**



12. Enter a name in the Name/Icon Label textbox to accurately identify the new profile.
13. From the Type window, select **ACP.**
14. Click **Create & Close**.

15. From the Profile Manager window, select **Profile Manager>Subscribers.** The Subscribers window appears.

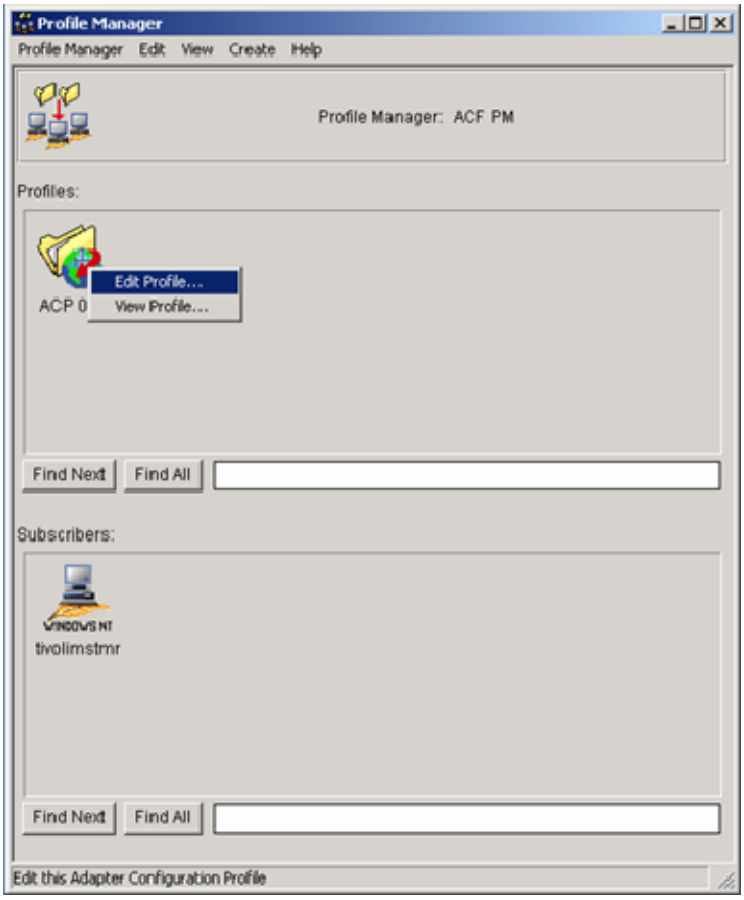


16. Using the arrow buttons, select the required subscribers for the profile manager. Subscribers can be individual Endpoints or another subscription profile.

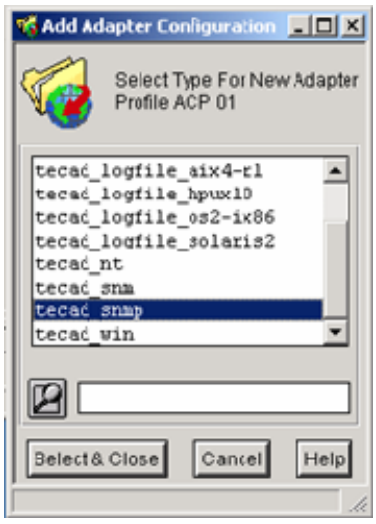
> **NOTE:** The TME requires only a single non-TME SNMP Adapter for use with the TEC. Configure the SNMP services on HP Managed Nodes and Endpoints to send traps to the Tivoli SNMP Adapter.

17. To save the subscription profile, click **Set Subscriptions & Close.**

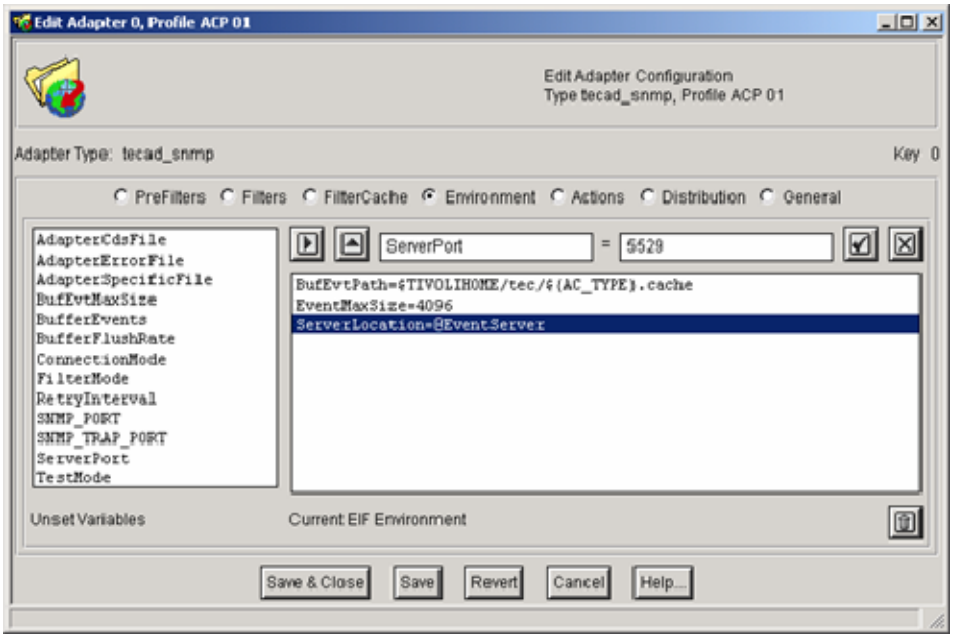
18. In the Profile Manager window, right-click the previously created profile, and then select **Edit Profile.** The Adapter Configuration Profile window appears.



19. Click **Add Entry.** The Add Adapter Configuration window appears.



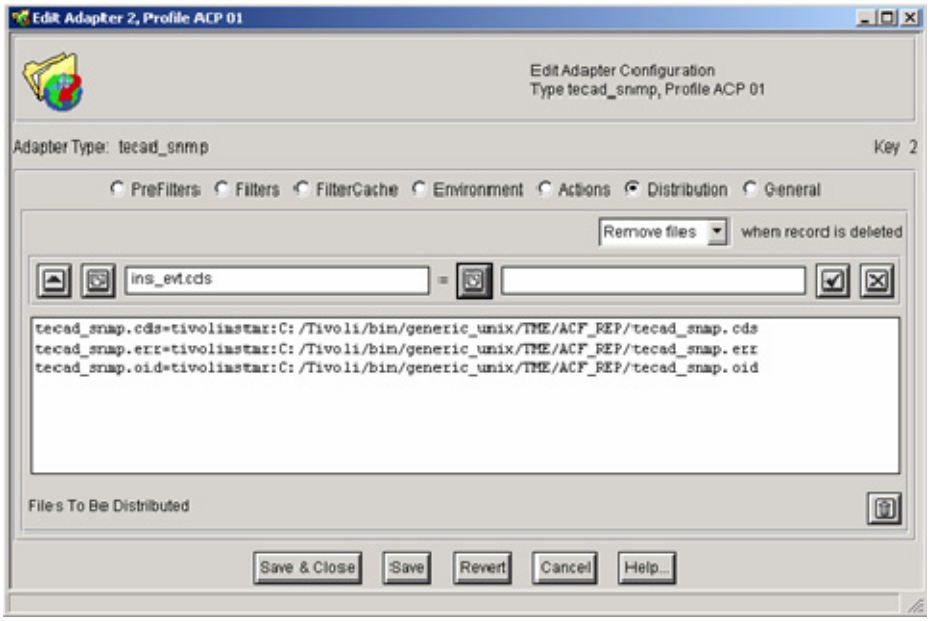
20. Select **tecad_snmp,** and then click **Select & Close,** which saves the adapter type configuration. The Edit Adapter window appears, enabling you to edit the adapter configuration.



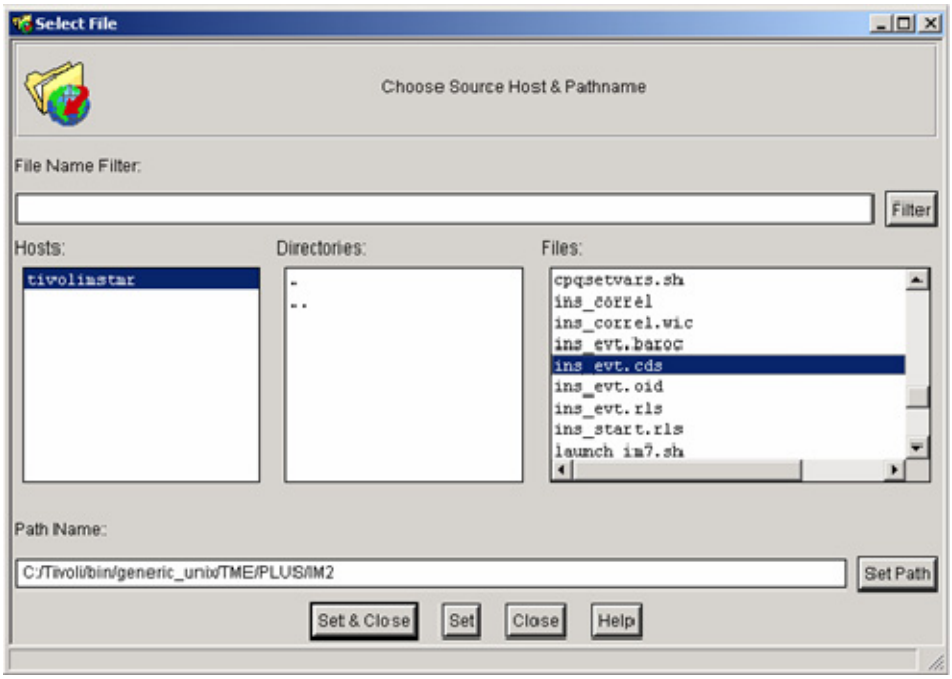
21. Select the **Environment** radio button.
22. Double-click the **ServerLocation** variable, and enter the name of the Event Server in the textbox to the right of the equal sign. To confirm the settings, click the check icon located to the right of the textbox.
23. Double-click the **ServerPort** item, and then enter the port number in the textbox to the right of the equal sign. Click the check icon to confirm the setting.

> **NOTE:** The port number that TEC uses to receive events is usually 5529 for Windows®-based systems and 0 for UNIX® environments.

24. Select the **Distribution** radio button. The Edit Adapter window appears.

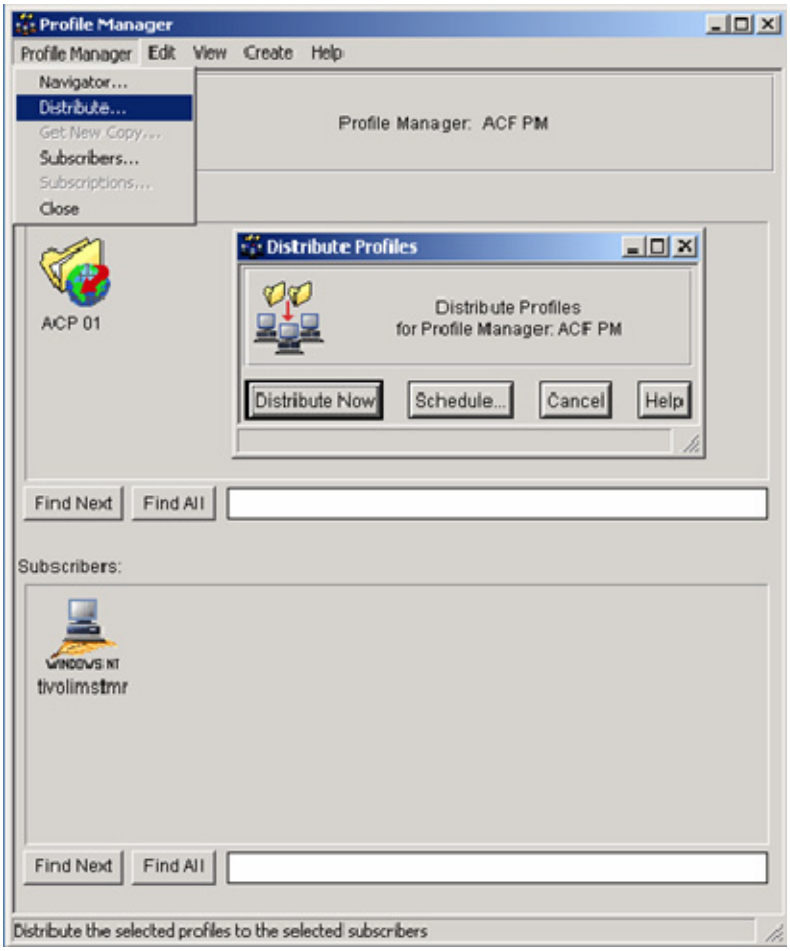


25. In the textbox to the left of the equal sign, enter the file name ins_evt.cds, and then to display the Select File window, click the browse icon to the right of the equal sign.



26. Browse to and then select the ins_evt.cds file. The default location is /Tivoli/bin/generic_unix/TME/PLUS/IM2 on the TMR server for both Windows® and UNIX® versions of the HP Insight Integration for Tivoli.
27. To confirm the selection, click **Set & Close.**
28. At the Edit Adapter window, to confirm the settings, select the checkbox to the right side of the window.
29. To save the configuration settings, click **Save & Close.**
30. Choose one of the following options:
    - To distribute the ACF Adapter to the subscribers defined in step 15, in the Profile Manager window, click **Profile Manager>Distribute.**

- T complete the creation and deployment of the ACF adapter, drag the **Profile** icon from the Profile Manager window, and drop it onto the icon that appears in the Subscribers area.



31. Use the **Configure SNMP Adapter** task provided with the Insight Integration to amend the Insight event classes and trap definitions (ins_evt.cds and ins_evt.oid) to the Tivoli environment. Follow the steps in the "Configuring a Tivoli non-TME SNMP Adapter (on page 26)" section.

Configuring the TEC Event Server

The configuration of the TEC Event Server can either be performed manually or using the scripted task provided with the Insight Integration. This section describes the scripted procedures for installation. Manual configuration is detailed in the "Manually configuring the HP Insight Integration for Tivoli (on page 40)" section.

The Insight Integration task, Setup TEC Event Server, automatically adds the HP BAROC event class definitions and rules into the target TEC Event Server rule base. This task enables events generated by HP Insight Management Agents and HP Virtual Connect to be correctly interpreted and processed. During the setup process, you can elect to use an existing rule base or create a new one by cloning an existing rule base and adding the HP rules.

Preinstallation considerations

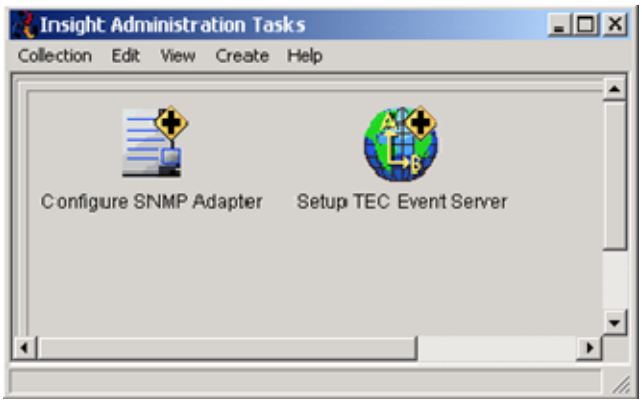
- The TEC application must be fully installed and operational before performing the Insight Integration tasks, including implementing and configuring SNMP services.

- The TEC requires that a database, such as Oracle®, Sybase, MSSQL, Informix, or DB2 RDBMS, be installed and available.
- A working Tivoli Event Console must already be present.
- A TEC SNMP Adapter must be configured to accept HP ProLiant and Fibre Channel Management SNMP events.
- All HP Managed Nodes and Endpoints must be configured to send SNMP traps to a designated TEC SNMP Adapter.

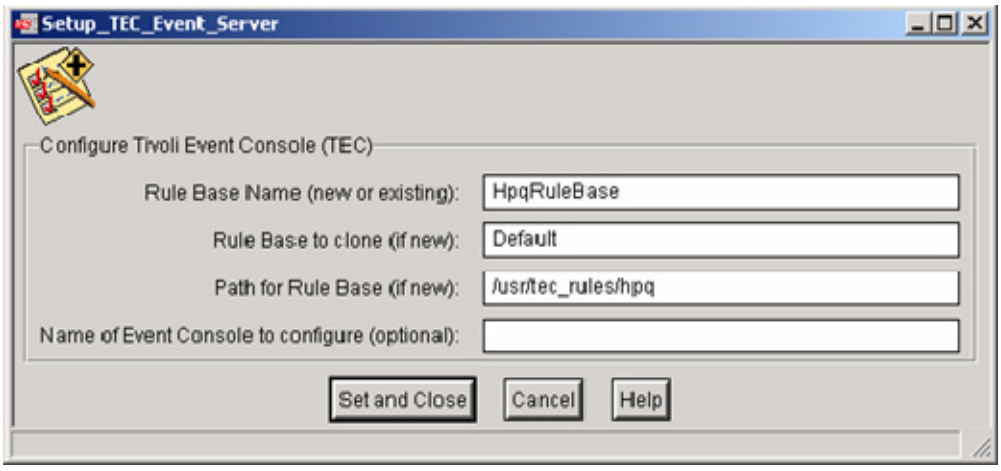
> **NOTE:** For details on configuring the Tivoli SNMP Adapter, see "Configuring a Tivoli SNMP Adapter (on page 25)."

Creating the HP rule base

1. From the HP Insight Integration for Tivoli window, double-click **Insight Administration Tasks.** The Insight Administration Tasks window appears.



2. Choose one of the following options to display the Setup_TEC_Event_Server window:
   - Double-click the **Setup TEC Event Server** icon.
   - Right-click the **Setup TEC Event Server** icon, and then select **Run Job.**



3. In the Rule Base Name field, enter the name of an existing rule base or the name of a new rule base. By default, the Insight Integration creates the new rule base (HpqRuleBase) if the specified name does not match an existing rule base.

4. In the Rule Base to Clone field, enter the name of an existing rule base to clone. The system ignores this field if an existing rule base is entered in the first field.

   NOTE: If you are creating a new rule base, enter Default (case sensitive) in the Rule Base to Clone field. The rule base to clone should be the current active rule base.

5. In the Path for Rule Base field, enter the path to the new rule base. This field is ignored if an existing rule base was entered in the first field.

   NOTE: If you are creating a new rule base, enter the path to store the files created by the setup task.

   You can leave the Name of Event Console to Configure field blank. The current active Event Console is used. In a TEC 3.7, 3.8, or 3.9 environment, leave this field blank. Event consoles for these versions are designed to be configured manually.

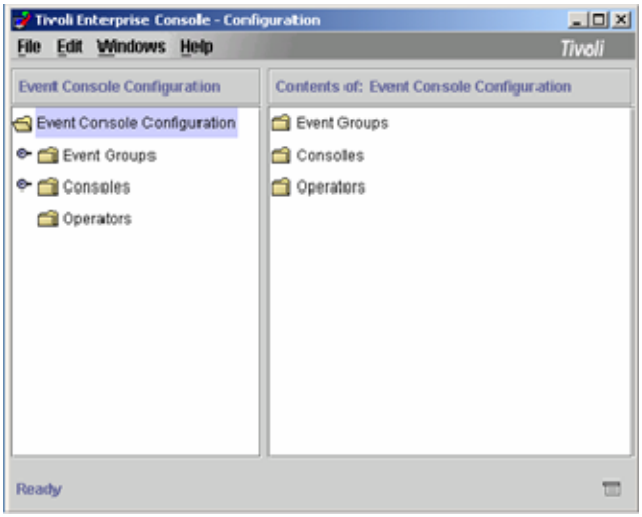
6. To confirm the values and complete the configuration, click **Set and Close.**

Configuring the Tivoli Event Console (version 3.7, 3.8, and 3.9)

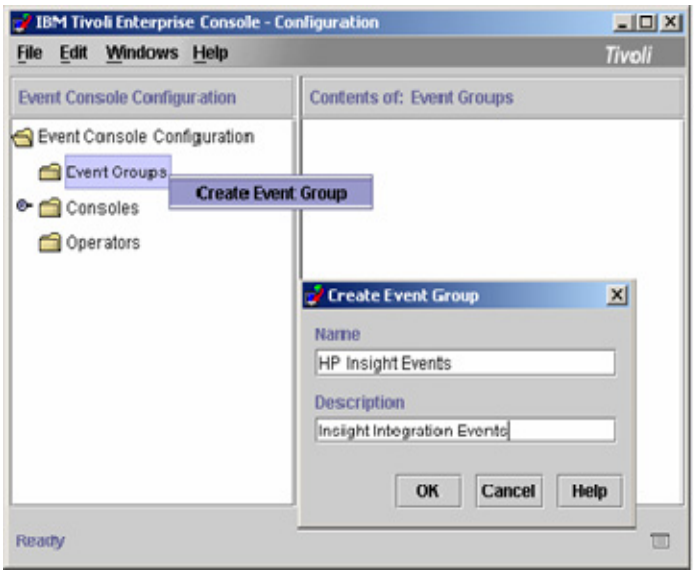
Before the events can be viewed properly within the Tivoli Event Console (version 3.7 and greater), you must configure the console component to assign the required event groups and access permissions.

The following procedures describe how to set up a new event group only for HP ProLiant and Fibre Channel Management events and assign them to a console. For an existing configuration, you can choose not to create a new group and to amend an existing group. By default, all HP ProLiant and Fibre Channel Management SNMP events appear in the Event Console. For more details on Event Console configuration, see the *Tivoli Enterprise Console User's Guide*.

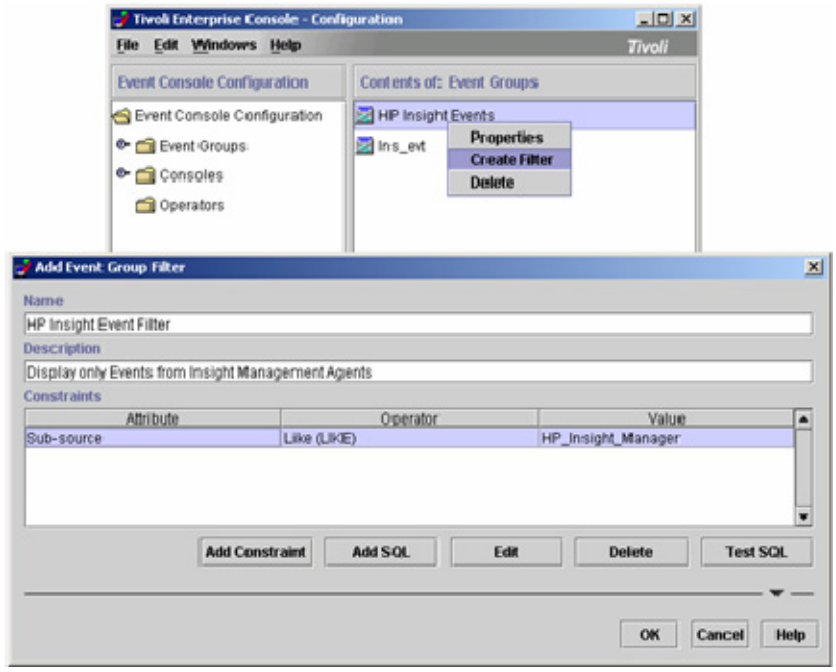
1. From a command line in the Tivoli environment, to open the Tivoli Enterprise Console - Configuration window, issue the `tec_console` command.



2. Right-click **Event Groups,** and then select **Create Event Group.**

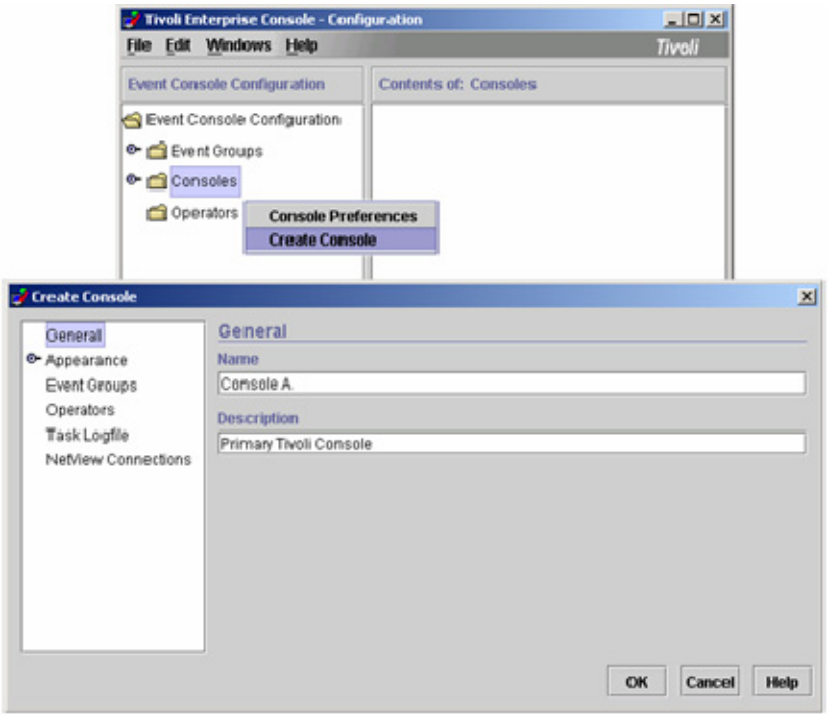


3. Enter a distinguishing name and description to identify the new event group (in this example, HP Insight Events is used). Click **OK** to save the event group. You can assign a filter to this event group that only displays events generated by Insight Management Agents. If you do not want a filter, proceed to step 9.
4. Right-click the newly created event group, and then select **Create Filter.** The Add Event Group Filter window appears.



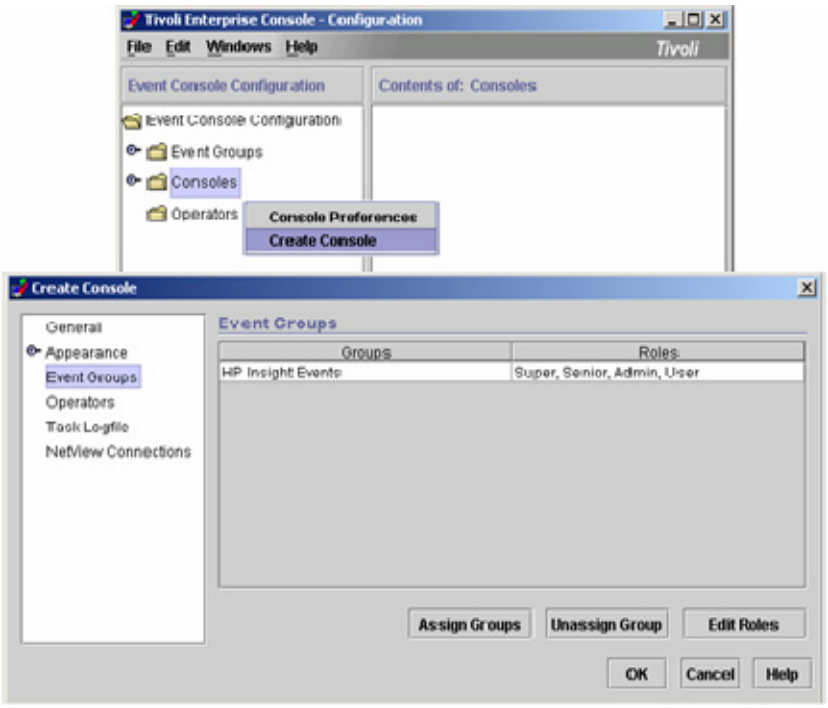
5. Create a corresponding name and description for the filter (in this example, HP Insight Event Filter is used).
6. Click **Add Constraint.**
7. In the Attribute listings, select the **Sub-source** value, and then enter `HP_Insight_Manager` in the Value field.
8. To save the constraint settings, click **OK.**

9. Configure the console so that events monitored by the newly created event group appear. For this example, a new console is created, but under production environments, an existing console entry is amended.
10. In the Tivoli Enterprise Console - Configuration window, right-click the **Console** folder, and select **Create Console.** The Create Console window appears.



11. Click the **General** tab, and then assign the console name and description (in this example, the name Console A is used).
12. Click the **Appearance** tab, and then select the type and format used to display events.

13. Click the **Event Groups** tab, and use the **Assign Groups** button to select the event groups and roles associated with the console (in this example, HP Insight Events group is used).



14. Click the **Operators** tab, and assign current operators from the list of available operators.
15. Finish configuring the remaining tabs based on your specific organization requirements, and then click **OK** to save the console.

Manually configuring the HP Insight Integration for Tivoli

The HP Insight Integration for Tivoli was developed for easy installation using predefined scripts and tasks. To provide maximum flexibility with existing Tivoli environments and to meet individual customer needs, some elements of Insight Integration can be configured manually.

The following sections describe how to manually configure the following elements of the TEC application to receive and display HP SNMP and Fibre Channel Management events:

- Tivoli SNMP Adapter
- Tivoli Event Server

Manually updating the Tivoli SNMP Adapter on a Managed Node

The following process can be used to manually update an existing SNMP Adapter to receive the HP ProLiant event definitions and classes provided with HP Insight Integration for Tivoli 4.6. The event definitions support Insight Management Agents up to version 8.10.

1. Shut down the TECSNMPAdapter service.

2. Make a copy of the existing tecad_snmp.cds and tecad_snmp.oid files, and then store them in a separate location. This precaution enables you to restore the original configuration if needed.
3. Open the existing **tecad_snmp.cds** file for editing. By default, the file for non-TME adapters is located in the /tecsnmp/etc directory. For the ACF adapter, this file is located in $LCFDIR /TME/TEC/adapters/etc, where $LCFDIR represents the Endpoint directory environment.
4. If a previous version of the Compaq Insight Manager Integration for Tivoli Enterprise is installed, delete all existing entries that begin with CIM_.
5. If a previous version of the Insight Integration for TEC is installed, delete all existing entries that begin with IM_.
6. Append all entries from the ins_evt.cds file located in hpq/TEC to the original tecad_snmp.cds.
7. Save the updated tecad_snmp.cds file.
8. Open the **tecad_snmp.oid** file for editing.
9. If a previous version of the Compaq Insight Manager Insight Integration for Tivoli or Insight Integration for TEC was installed, delete all existing entries that begin with cpq.
10. Add all entries from the file ins_evt.oid file located in hpq/TEC to the original tecad_snmp.oid file.
11. Be sure that the OID entries are in numerical order.
12. Save the updated tecad_snmp.oid file.
13. Restart the TECSNMPAdapter service.

Manually copying existing SNMP Adapter files to another Managed Node

When there are multiple systems in a TME that require a configured SNMP Adapter, instead of running the HP configuration task on each target Managed Node or Endpoint, the associated .cds and .oid files can be configured once and copied to each target system.

The following process presumes that the Configure SNMP Adapter task supplied with the Insight Integration has already been run on the TMR server and that the updated tecad_snmp.cds and tecad_snmp.oid files have already been created.

1. Be sure that the target Managed Node or Endpoint is installed with a Tivoli non-TME adapter. By default, the non-TME adapter installation creates the following directories:
   - C:\Tecsnmp\etc
   - C:\Tecsnmp\bin

   NOTE: A UNIX® configuration uses the /etc/Tivoli/tecad reference.
2. On the target Managed Node, stop the TECSNMPAdapter service.
3. Make backup copies of the current tecad_snmp.cds and tecad_snmp.oid files. This precaution preserves the working configuration, and the adapter can be easily restored, if required.
4. Replace the existing tecad_snmp.cds and tecad_snmp.oid files in the C:\Tecsnmp\etc directory with the files already created using the Configure SNMP Adapter task provided with the Insight Integration.
5. Restart the TECSNMPAdapter service to complete the process and initiate the newly updated event classes and definitions on the Managed Node.

Manually configuring the Event Server rule base

The following section describes how to configure the Tivoli Event Server manually using the command line.

Configuring the TEC rule base from a command line

The HP Insight Integration for Tivoli includes the file Tec37_cliconfig, located in the hpq/TEC directory that is provided to help manually configure the TEC rule base from a command line. This file details the steps required to configure the Event Server manually and can be edited and used as deployment scripts.

> **NOTE:** This file must be edited to set environment-specific conditions before being used as deployment scripts, and it must be run from the command line of a configured Tivoli environment where the TEC server is hosted. This file includes details on setting the environment settings.

Configuring TEC Rule Base from the Tivoli Desktop

To install manually from the Tivoli Desktop, use the files located in the /hpq/TEC directory and the following processes to install the HP rule set, event group classes, and filters provided with Insight Integration into an existing TEC server.

The rules provided with HP Insight Integration for Tivoli 4.6 support events definitions delivered with HP Insight Management Agents up to version 8.10 and event definitions for HP Virtual Connect.

> **NOTE:** If the TEC Event Server has already been installed with event classes and rules provided with Compaq Insight Manager for Tivoli Enterprise (revision 1.5 or 1.60) or previous versions of Insight Integration, these files must be removed before installing HP Insight Integration for Tivoli 4.6.

1. Create a directory, and then copy the compiled TEC fact file ins_correl.wic to the default location, /usr/tec_rules/factfile. If the location is changed, the corresponding entry in the ins_start.rls file must also be changed to match the location.
2. Close the TEC Event Server.
3. Right-click the **Event Server** icon, and then select **Rule Bases.**
4. Click **Create**, and then from the menu bar, select the **Rule Base** option.
5. Name the new rule base, and then set the file path location.
6. Right-click the active rule base, and then select **Copy.**
7. In the Destination Rule Base textbox, select the name of the new rule base.
8. Select the **Copy Rules** and **Copy Classes** checkboxes.
9. Click **Copy and Close**.
10. Right-click the new rule base, and then select **Import.**
11. From the Rule Sets section, select the **Insert After** option.
12. Select the **Import Rule Set** checkbox.
13. In the Position to Insert Imported Rule Set textbox, select the last .RLS file entry.
14. For every .RLS file in the hpq/TEC directory:
    a. Enter the location and name of the file in Directory Path.
    b. Click **Import.**

15. In the Class Definitions section, select the **Insert After** option.
16. Select the **Import Class Definitions** checkbox.
17. Confirm the tecad_snmp.baroc file is present. If not, import the file.
18. In the Position to insert import class file text box, select the last .BAROC file entry.
19. For every .BAROC file in the hpq/TEC directory:
    a. Enter the location and name of the file in Directory Path.
    b. Click **Import.**
    c. Click **Close.**
20. Right-click the new rule base, and then select **Compile.**
21. Select the **Trace Rules** checkbox.
22. Click **Compile.**
23. Ensure there were no errors during the compile.
24. Click **Close.**
25. Right-click the new rule base, and then select **Load.**
26. Select **Load, but activate only when server restarts.**
27. Click **Load and Close.**
28. Restart the TEC Event Server to complete the process and initiate the Event Server with the new HP rule base.

Installation logs

The HP Insight Installation for Tivoli creates the IM2_PLUS.LOG file that contains detailed information about the overall installation status.

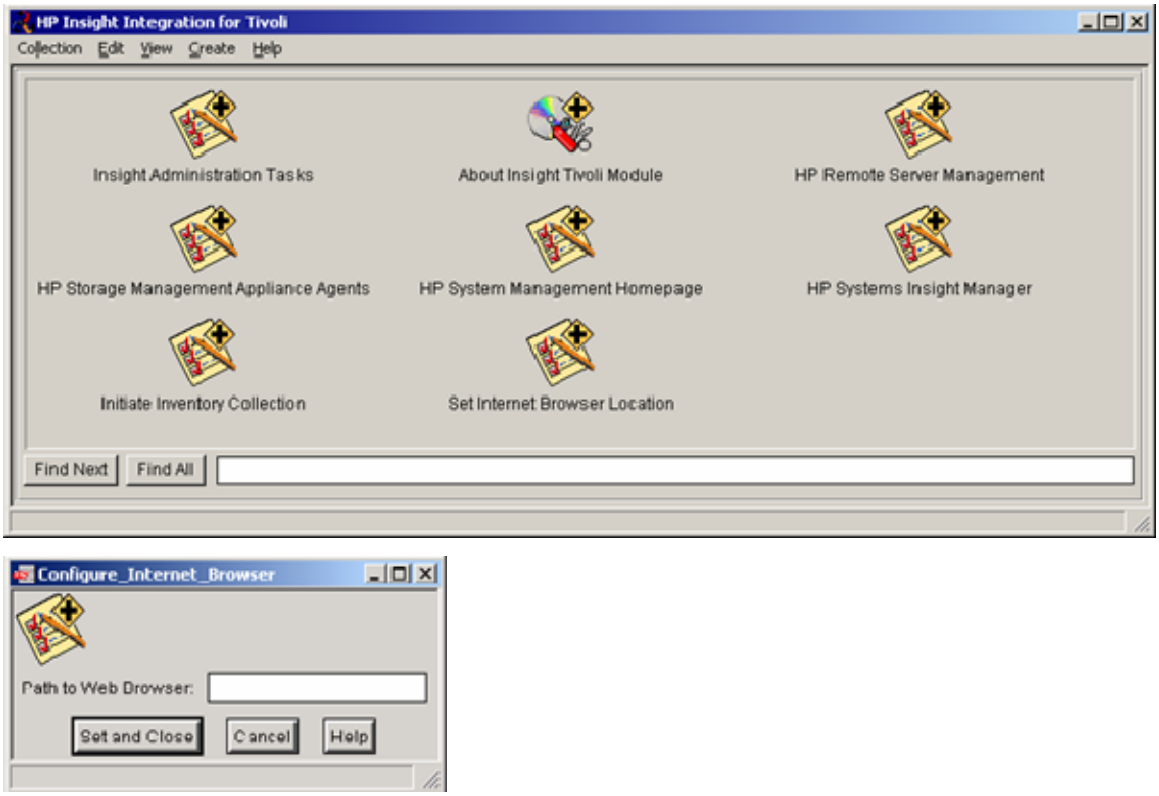
When the installation is complete, the IM2_PLUS.LOG file is created in the directory Tivoli\db\host_name.db\tmp, where the host_name entry references the name of the TMR server on which the Insight Integration has been installed. Review this log file to help confirm a successful installation and identify any potential installation problems.

The Insight Integration also creates a debug log. See the "Troubleshooting (on page 68)" section in Appendix A for details on configuring and using the debug features.

Configuring the HP browser tasks

The HP Insight Integration for Tivoli includes tasks to launch selected HP web-based management tools (HP Systems Insight Manager, HP System Management Homepage, HP Remote Server Management and HP Storage Management Appliance Agents) from the Tivoli Desktop and Tivoli Event Console (version 3.7, 3.8, and 3.9). To enable these tasks, configure the browser environment for the Insight Integration as follows:

1. At the HP Insight Integration for Tivoli window, double-click **Set Internet Browser Location.** The Configure_Internet_Browser window appears.



2. In the Path to Web Browser field, enter the location of your browser executable, and then click **Set and Close** to complete the process.

Uninstalling the HP Insight Integration for Tivoli

If you uninstall the HP Insight Integration for Tivoli, a predefined script is provided in the Hpq/Plus/Utils directory of Insight Integration files to simplify the process.

To uninstall a scripted or manual installation of the HP Insight Integration for Tivoli 4.6, run the ins_cleanmod.sh script from a command line. The script ins_cleanmod_v30.sh uninstalls the Insight Integration for TEC, Revision 3.0. These scripts are located in the Hpq/Plus/Utils directory of the Insight Integration files and remove all installed components.

After the uninstallation process is complete, verify that the HP entries from tecad_snmp.cds and tecad_snmp.oid files have been removed. Alternatively, manually remove them as detailed in the section "Manually configuring the HP Insight Integration for Tivoli (on page 40)."

NOTE: These files are scripts and not executables. You must run these uninstall scripts from a command line in the configured Tivoli environment, using an interpreter such as Bash.exe or Sh.exe. An example is `sh ins_cleanmod.sh`.

Using the HP Insight Integration for Tivoli

Introduction

The integration of HP ProLiant and Fibre Channel Management SNMP events into the TEC provides valuable hardware status and event information that helps simplify the systems management environment, enabling you to proactively manage ProLiant hardware with other enterprise resources from within a common TEC environment.

The HP Insight Integration for Tivoli includes BAROC event class definitions and rules to correlate nearly 650 SNMP events. These classes and rules integrate closely with the TEC application, enabling SNMP events to be identified, processed, translated, and clearly displayed in the TEC using the native Tivoli services. Although predefined to correlate a wide variety of common hardware event conditions, the rules can be customized to suit individual TME requirements.

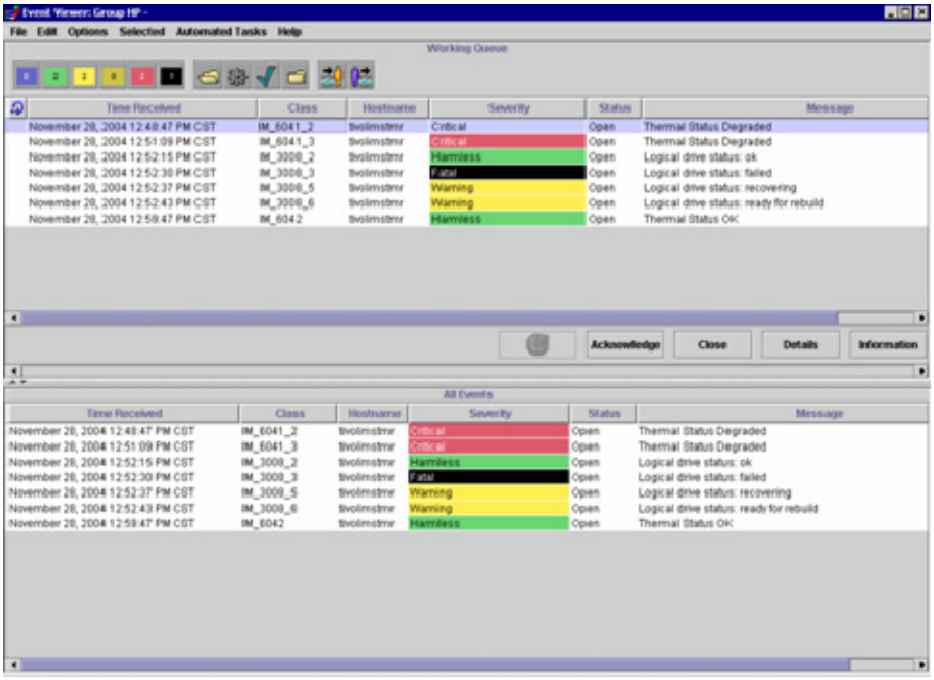
Managing SNMP events in the Tivoli Enterprise Console

The HP Insight Integration for Tivoli provides a comprehensive set of BAROC event class definitions and rules to correlate nearly 650 events. These classes and rules enable SNMP events generated by Insight Management Agents to be correctly identified, processed, and displayed by the TEC in a translated format and help automate the correlation of common system conditions.

Viewing events

HP ProLiant and Fibre Channel Management SNMP events are presented in the TEC using translated message text and corresponding color-coded severity level indicators. This interface enables you to quickly identify root cause and prioritize based on the level of criticality.

The example in the figure below shows a TEC 3.7 Event Console with a highlighted event indicating a Critical alert on the system Tivolimstmr that relates to a Thermal Status Degraded condition.

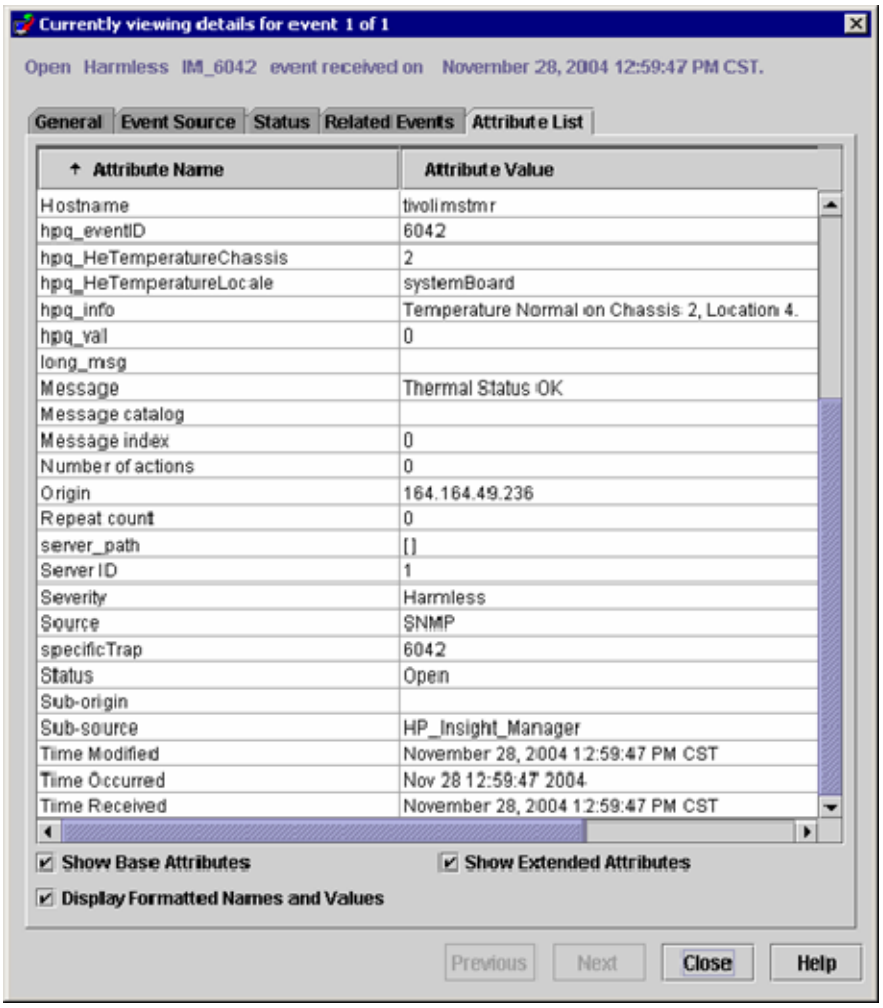


To obtain additional information, click the highlighted event to display the events details window shown in the following figure.

Under the Attributes List tab, further event details can be identified as follows:

- Under the hpq_info entry in the Attribute Name column, the corresponding data in the Attribute Value column provides a more detailed explanation of the event.
- Under the Message entry in the Attribute Name column, the corresponding data in the Attribute Value column verifies the status level.
- Under the specific Trap entry in the Attribute Name column, the corresponding data in the Attribute Value column provides the SNMP event ID.

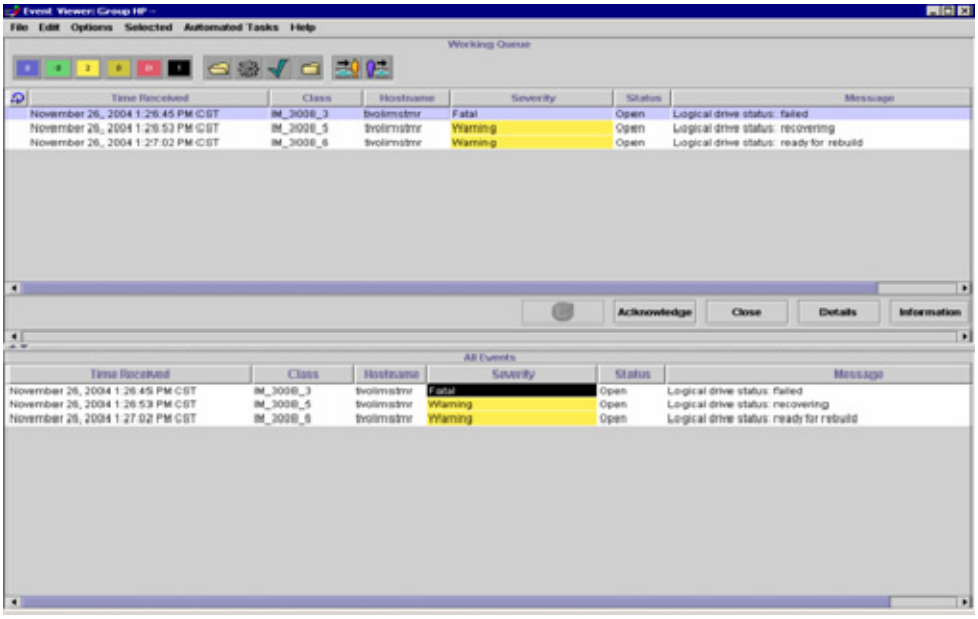
- Under the Sub-source entry in the Attribute Name column, the corresponding data in the Attribute Value column indicates that Management Agents generated the event.



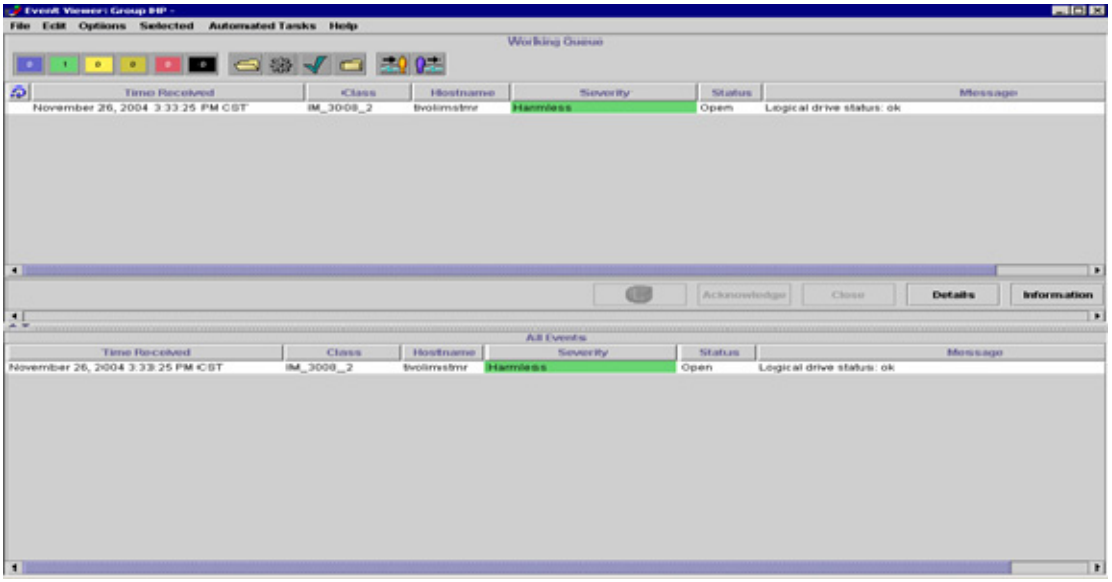
Event correlation

The HP Insight Integration for Tivoli provides rules to correlate nearly 650 SNMP events. These rules enable automated processing and correlation of HP ProLiant and Fibre Channel Management SNMP events generated by HP Insight Management Agents and HP Virtual Connect and can be easily customized to suit individual TME requirements. For a full list of HP event rules, see Appendix B: HP SNMP events (on page 70) and Appendix C: Non-HP SNMP events (on page 128).

- As an example of this functionality, the following figure displays a TEC 3.7 console with a Fatal event on the system Tivolimstmr. The event data indicated a failed hard drive in a RAID array and two Warning events for the related logical drive.



- When the failed drive is replaced, the automatic recovery process associated with the RAID array hardware commences, and HP Insight Management Agents generate additional events, indicating that the logical drive is rebuilding.
- When the rebuild is complete, a final event is generated, indicating that the Logical drive status is OK, and the HP rules close the preceding events related to the drive failure.



Launching HP web-based management tools

The HP Insight Integration for Tivoli installs several tasks to invoke selected HP web-based management tools from the Tivoli Desktop and the TEC. This feature enables you to directly access addition hardware configuration information, status data, and lifecycle management tools for ProLiant servers and storage platforms from within the Tivoli environment.

These tools include HP Systems Insight Manager, the HP System Management Homepage, HP Remote Server Management and the agents associated with the HP Storage Management Appliance.

The procedures for launching the HP browser tasks from both the Tivoli Desktop and TEC are described in the following sections.

> **NOTE:** To enable the HP browser tasks, first configure the browser environment for the Insight Integration environment. For more information, see "Configuring the HP browser tasks (on page 43)" in the "Installing the HP Insight Integration with the TEC (on page 17)" chapter.

Launching from the Tivoli Desktop

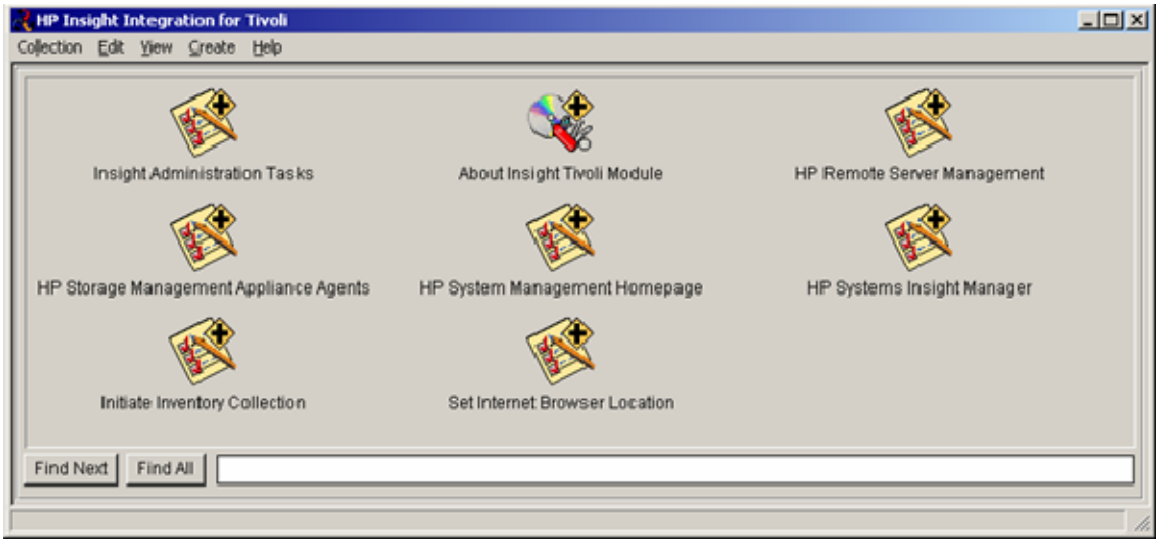
The HP Insight Integration for Tivoli installs four tasks on the Tivoli Desktop to launch HP Systems Insight Manager, HP System Management Homepage, HP Remote Server Management and the agents associated with the Storage Management Appliance.

To use each of these tasks, you must input the name or IP address of the target server. When the task executes, it invokes the chosen browser application and links to the target device. The tasks amend the appropriate secure access port for each management tool as follows:

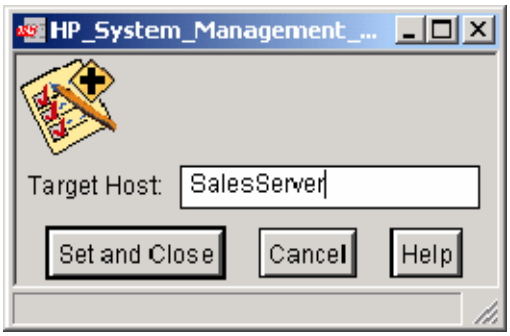
- HP Systems Insight Manager-Port 50000
- HP System Management Homepage-Port 2381
- Storage Management Appliance-Port 2381

Insight Integration provides tasks separate from the four tasks on the Tivoli Desktop that initiate the HP Inventory Collection task, which is described in the "Integrating HP Asset Information with Tivoli Inventory (on page 55)" chapter.

The following example demonstrates how to launch and display the System Management Homepage of the HP Insight Management Agents on the device named SalesServer.

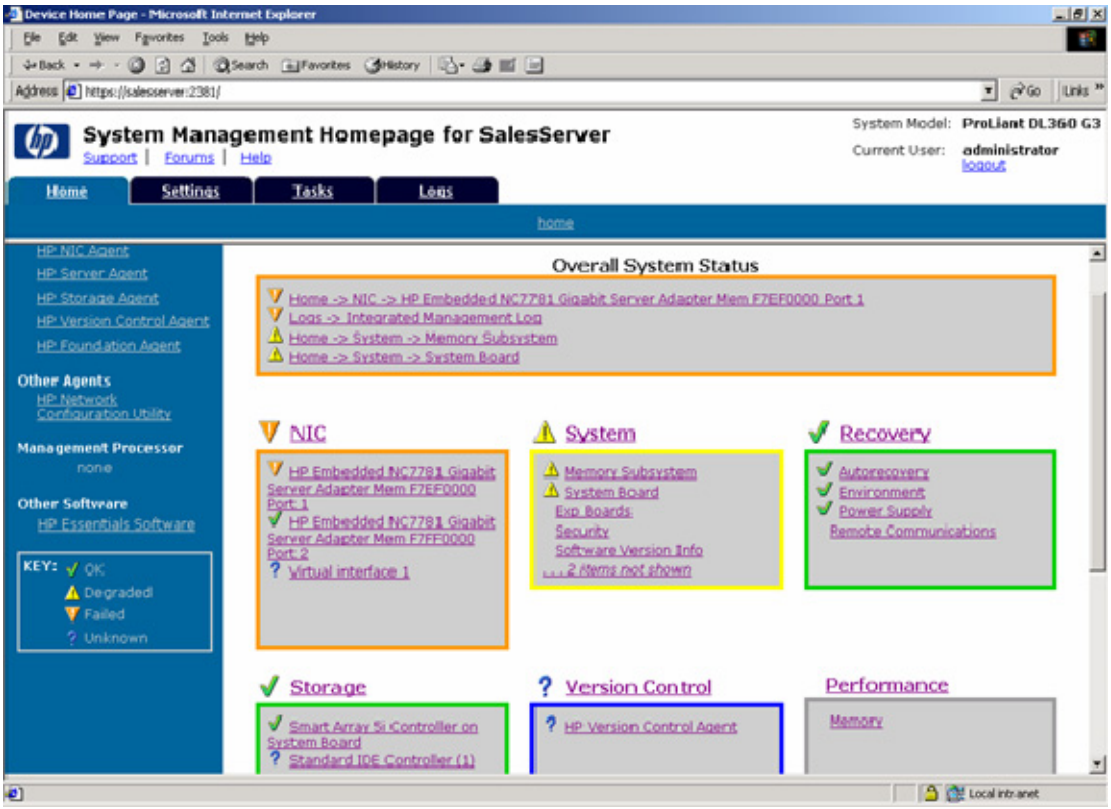


1. From the HP Insight Integration for Tivoli window, double-click the **HP System Management Homepage** task. The HP_System_Management_Homepage window appears.



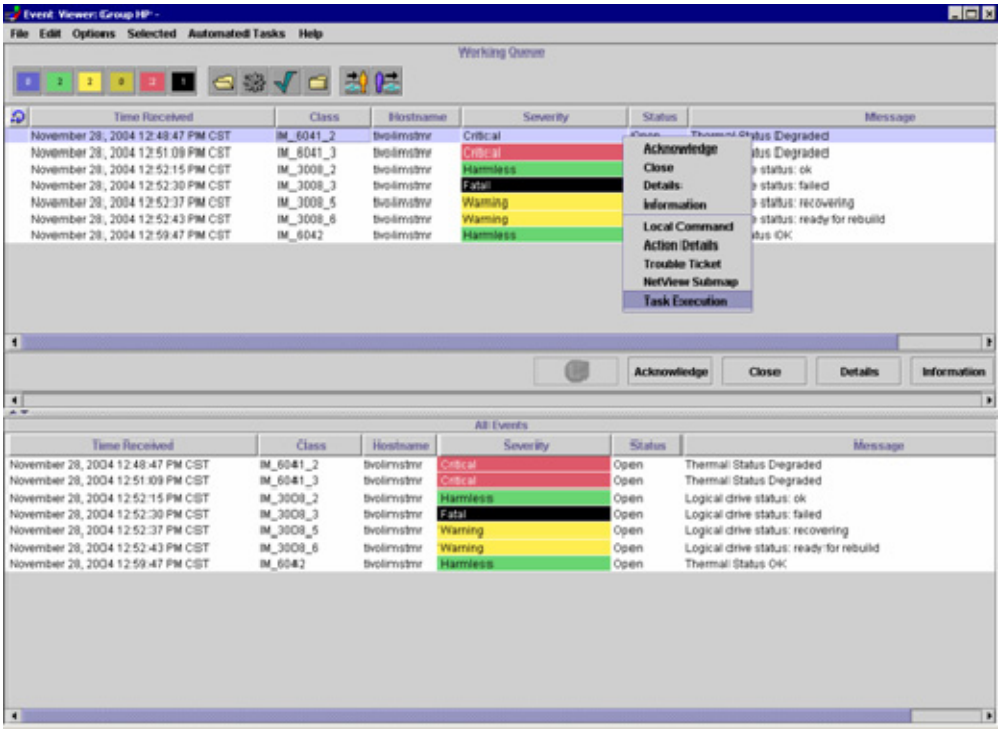
2. In the Target Host field, enter the name of the target system. In this example, the name is SalesServer.
3. To invoke the browser application and amend the secure port address 2381 to the specific server name or IP address, click **Set and Close.** The System Management Homepage for the SalesServer device appears, showing the summary data provided by HP Insight Management Agents and other plug-in tools.

NOTE: The IP address associated with HP Remote Insight or Integrated Lights-Out Edition management processors must be included in the Target Host field when using the HP Remote Server Management task.

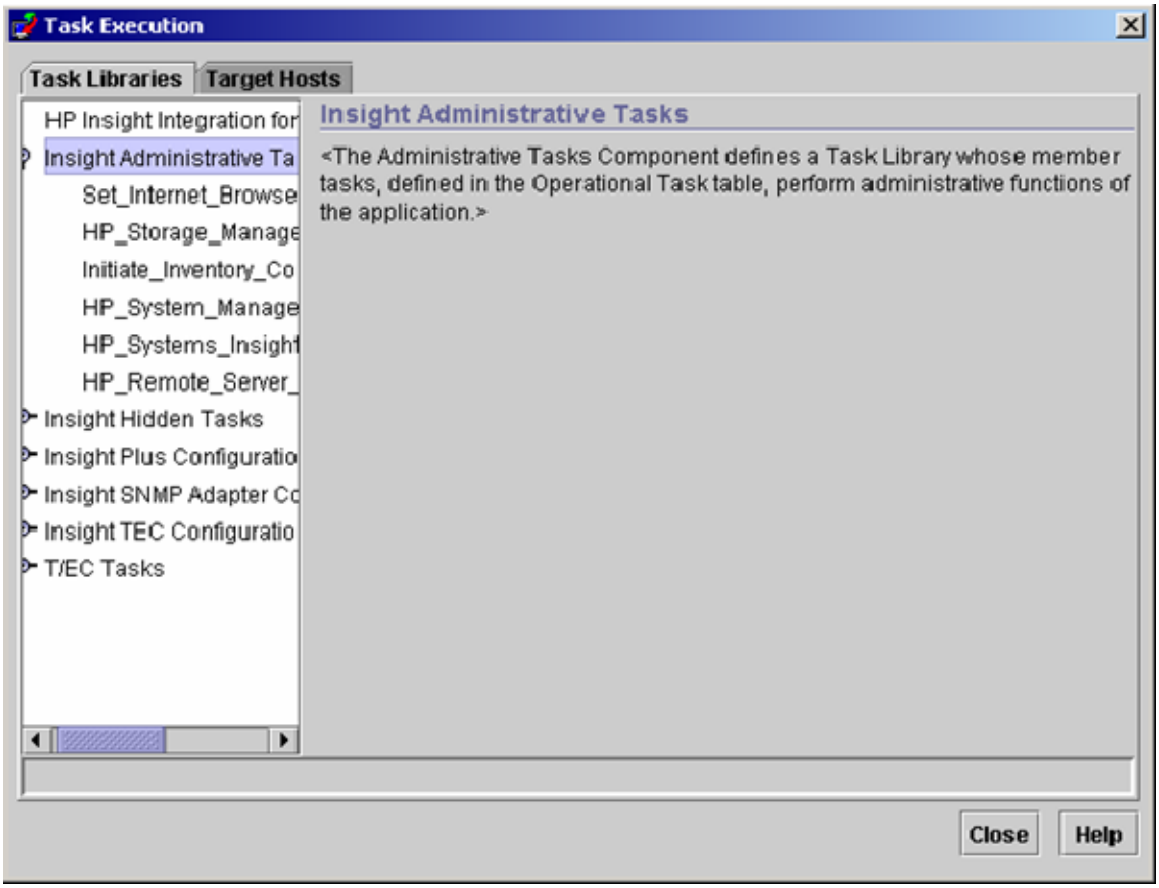


Launching from the TEC console

1. From a selected event in the TEC console, right-click the event entry to display the menu.

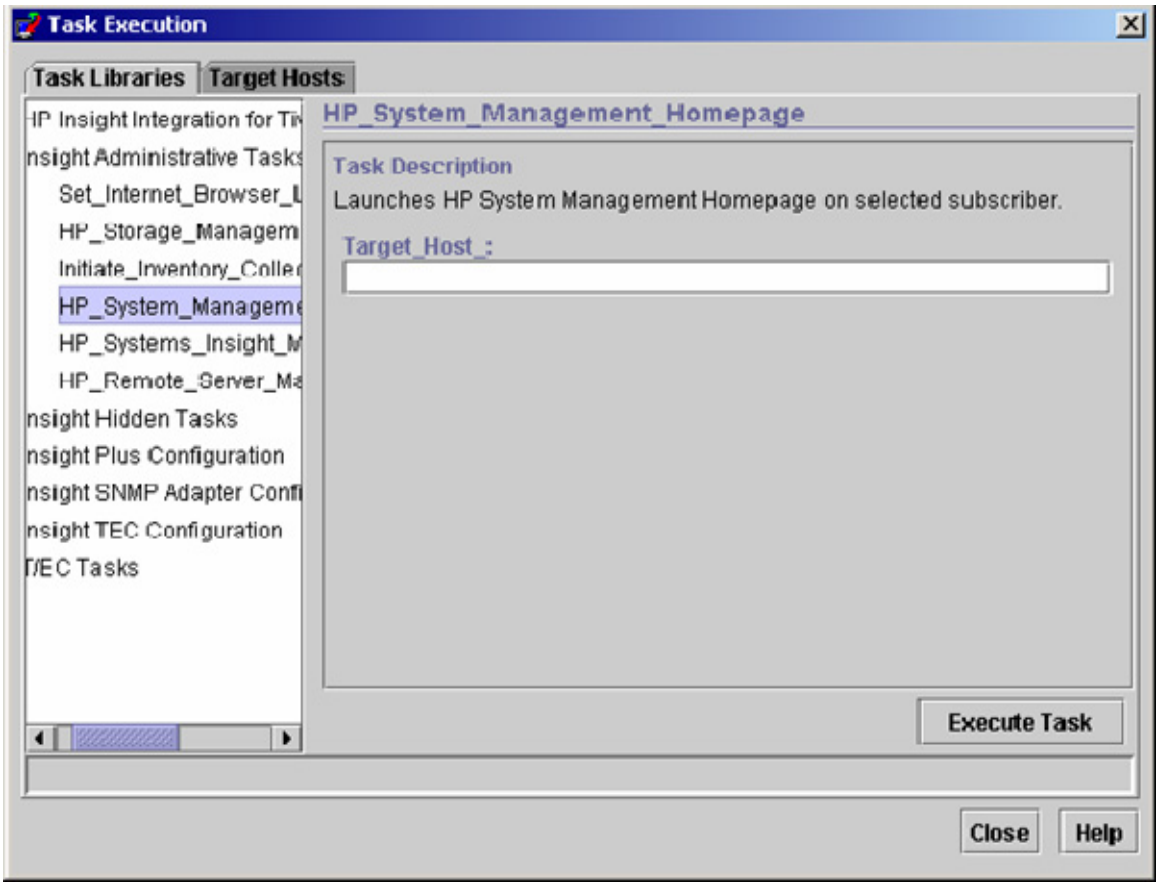


2. Select **Task Execution** to display the Task Execution window. The Task Libraries tab lists the available executable tasks, which includes several tasks associated with the HP Insight Integration for Tivoli. The Target Hosts tab lists the available hosts on which the tasks can be executed.

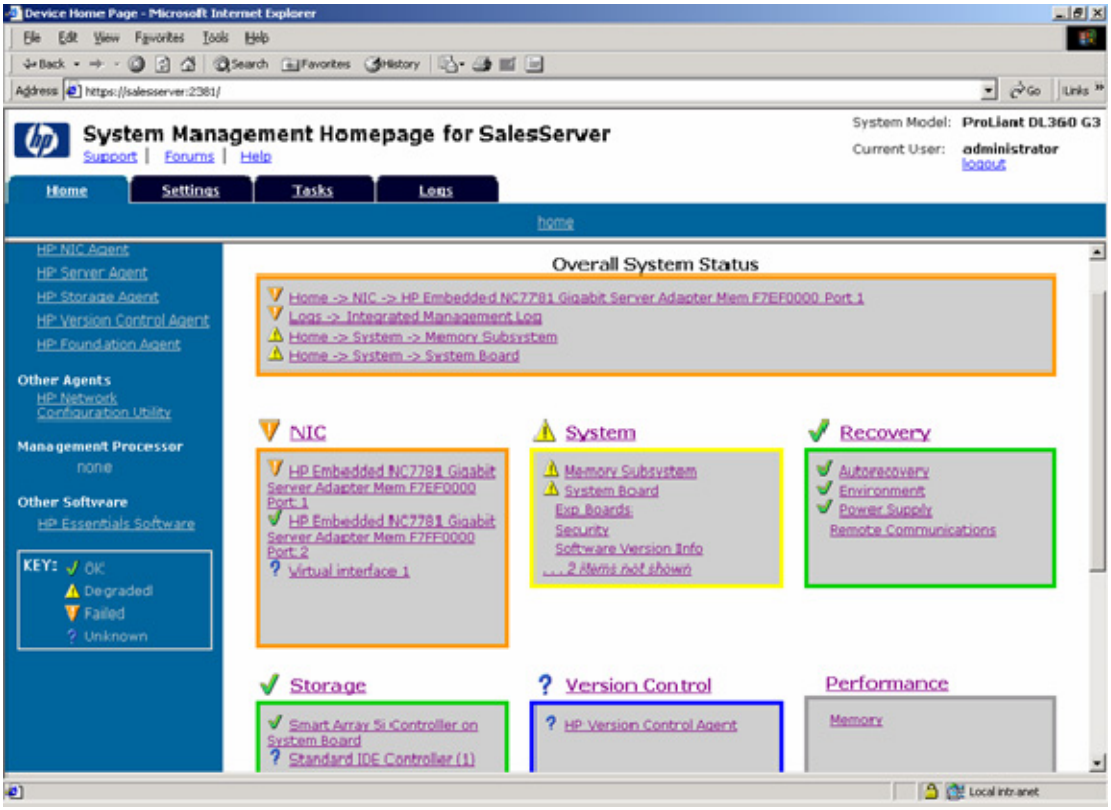


3. Select **HP_System_Management_Homepage** under the Task Libraries tab.

4. In the Target_Host field, enter the name of the target server or related IP address.



5. Click **Execute Task** to complete task. This action invokes the browser application and amends the secure port address 2381 to the specific server name or IP address. The System Management Homepage for the SalesServer device appears, showing data provided by HP Insight Management Agents and other plug-in tools.



Integrating HP asset information with Tivoli Inventory

Overview

The HP Insight Integration for Tivoli includes a task and predefined database schemas that enable detailed hardware data for HP ProLiant servers to be collected, displayed and queried by the inventory tools delivered with Tivoli Configuration Manager.

The HP Inventory Collection task is designed to run the HP Inventory Collector (Collect.exe) on user-selected nodes and then save the output of each system to a local .MIF file on the target systems. The resultant .MIF file can be imported into other applications such as Tivoli Inventory.

> **NOTE:** The HP Inventory Collector is supported only on Microsoft® Windows® operating systems.

This chapter provides information on the HP Inventory Collection task and demonstrates how to configure a more comprehensive, automated hardware inventory data collection process of HP ProLiant hardware into Tivoli Inventory. For those Tivoli environments in which hardware inventory management is of extra importance, this data can be used to produce detailed reports of HP hardware using the Tivoli Inventory Query Facility and build additional Tivoli Subscription and Software Distribution lists.

You can accomplish this level of integration by performing the following steps:

1. Add HP specific tables to the existing Tivoli Inventory Database
2. Add HP specific views to the existing Tivoli Inventory Database
3. Create an HP query library and HP queries
4. Customize an inventory profile to run the HP Inventory Collector (Collect.exe) to gather and save HP inventory data in an .MIF file

HP Inventory Collector requirements

The information provided in this chapter is for system administrators who use the HP Insight Management Agents and HP Systems Insight Manager to manage the operation and asset management of HP systems within the TME.

Before implementing this solution, you must be familiar with the configuration and operation of the Tivoli Management Framework, Tivoli Inventory (part of the Tivoli Configuration Manager), HP Systems Insight Manager, HP Insight Management Agents, and all associated documentation.

Before you can configure any part of the solution, the following Tivoli software must be installed:

- Tivoli Management Framework 3.7.1 or later
- Tivoli Inventory 4.2 or later

Also, before attempting any configuration, ensure that Tivoli Policy Regions, Profile Managers, Profiles, and associated resource rights have been created or assigned in the appropriate locale to match the Logical Architecture standards of the environment.

The HP Inventory Collector (Collect.exe) 7.2.22 or later is also required. This utility works with HP Insight Management Agents to gather in-depth asset information for HP ProLiant servers and is supplied with the HP Insight Integration for Tivoli 4.6 in the hpq\Inventory directory.

The HP Inventory Collection utility gathers several hundred hardware asset attributes. The actual amount of data gathered is dependent on the type of system being scanned and the number of configured options.

Initiate Inventory Collection task

The HP Insight Integration for Tivoli includes the task "Initiate Inventory Collection," which runs the HP Inventory Collector (Collect.exe) to gather hardware asset data on selected subscribers and save the output in an .MIF format suitable for import into the Tivoli Inventory database. The resultant .MIF file is saved in a specified location on selected subscribers.

NOTE: Importing the collected HP data into the Tivoli Inventory Database is a separate process to the Initiate Inventory Collection task and is described later in this chapter.

NOTE: The required SNMP services and HP Insight Management Agents must be installed and configured on all HP systems designated to be managed with this task.

HP recommends using Insight Management Agents 5.50 or later.

The Initiate Inventory Collection task provided with the HP Insight Integration for Tivoli runs the `Collect.exe /f <path>\hp.mif /tpem` executable and can be used with the variables listed in the following table:

Command line variable	Description
/f	Instructs the output to be saved as single file. Without this parameter, each MIB collection is saved as a separate file.
Path	Specifies the location for the resultant .MIF file provided by the user.
hp.mif	Specifies the name of the resultant .MIF file.
/tpem	Defines the format of the output fields. This switch translates spaces in the attribute and group names to underscores and removes several unnecessary statements in the .MIF output file. This process makes the MIF file format suitable for importing into Microsoft® SQL Server, Sybase, and Oracle® databases.

The resultant .MIF file contains hardware asset data and is saved locally on each target system as HP.MIF in the path specified by the user. If no path is specified, the file is saved in \Tivoli\db*Host_name*.db, where *Host_name* refers to the name of the target system.

The output HP.MIF file is provided in a format that can be imported into Microsoft® SQL, Sybase, and Oracle® database applications.

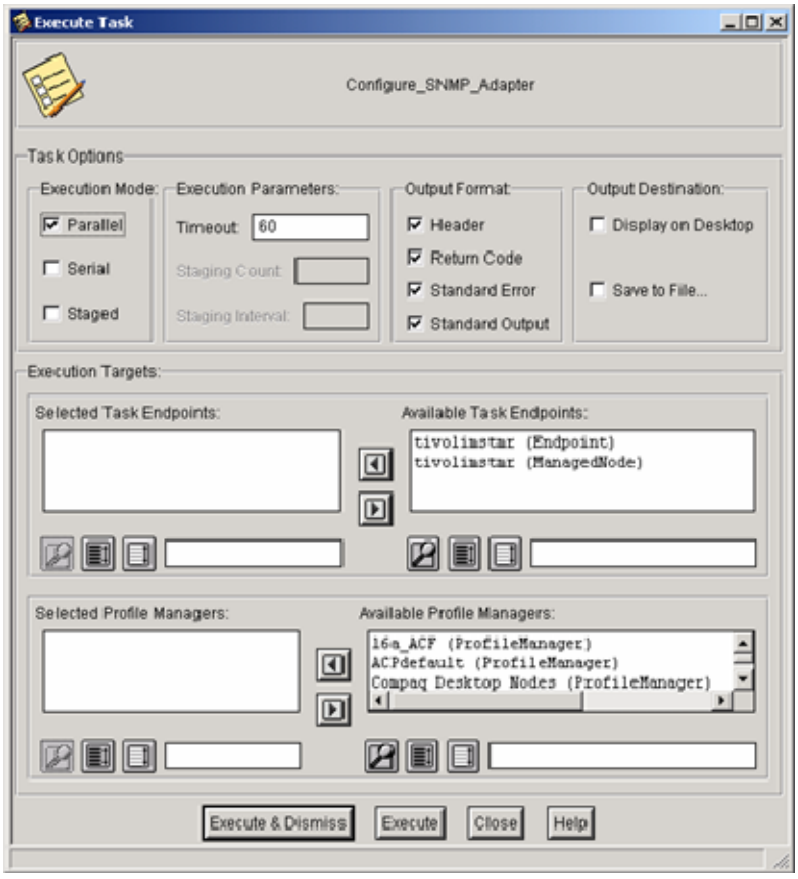
IMPORTANT: The Inventory Collector utility (Collect .exe) is provided with the HP Insight Integration download image and is located by default in the \hpq\Inventory directory. See the "Product overview (on page 8)" chapter for details on the contents of the download image and the associated directory contents.

Updates to the HP Inventory Collector utility are provided on the download page for the HP Insight Integration for Tivoli at the HP Enterprise Management Integration Solutions page (http://www.hp.com/servers/integration/microsoft).

Configuring and running the Initiate Inventory Collection task

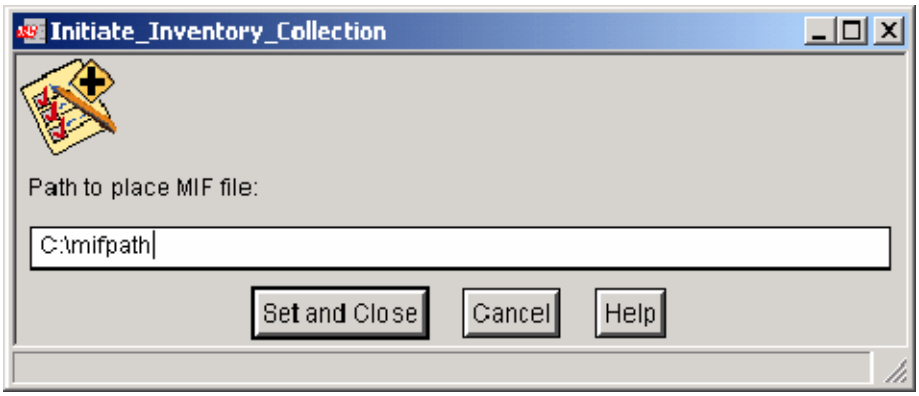
1. From the HP Insight Integration for Tivoli window, right-click the **Initiate Inventory Collection** icon.

2. Select **Run on selected Subscribers.** The Execute Task window appears.



3. In the Output Destination area, select the **Display on Desktop** checkbox.
4. Using the arrow buttons, select the required targets from the Available Task Endpoint list, and enter them into the Selected Task Endpoint window.

5. Click **Execute & Dismiss.** The window to specify the location of the .MIF file appears.



6. In the Path to place MIF file field, enter the path where the .MIF file should be placed. If no path is specified, the file is saved in \Tivoli\db\Host_name.db, where Host_name refers to the name of the target system.
7. To complete the configuration and execute the task, click **Set and Close.**

Integrating HP data into the Tivoli Inventory Database

The following sections contain information about integrating HP data into the Tivoli Inventory Database.

Insight Integration scripts

The following scripts referenced in this document enable the creation of HP Inventory Tables and Views for Microsoft® SQL Server and Oracle® databases. These scripts are included with the HP Insight Integration for Tivoli 4.6 and are located in the hpq\Inventory directory.

> **NOTE:** The scripts provided with the HP Insight Integration for Tivoli also works for other database vendors supported by the Tivoli Inventory product such as Sybase and can be used as examples.

- Microsoft® SQL Server
  - hp_mssql_schema.sql
  - hp_mssql_views.sql
- Oracle®
  - hp_oracle_schema.sql
  - hp_oracle_views.sql

The following script creates the Tivoli Query Library and HP specific queries referenced in this document. The script is included with the HP Insight Integration for Tivoli and is located in the \hpq\Inventory directory:

hptiv_queries.sh

The following scripts create the HP-specific history tables and queries:

- h_hp_mssql_schema.sql

- h_hp_mssql_views.sql
- h_hp_oracle_schema.sql
- h_hp_oracle_views.sql
- h_hptiv_queries.sh

Extending the Tivoli Inventory Database

Tivoli Inventory generates hardware and software .MIF files during an associated hardware or software scan. The information in these .MIF files is stored in predefined tables within the configuration repository of the database schema in the RDBMS. HP provides predefined scripts that will automatically extend an associated Tivoli Inventory Database with the necessary HP tables in Microsoft® SQL and Oracle® environments.

If you plan to use custom .MIF files, they must meet certain requirements that include creating tables and columns in the Tivoli Inventory configuration repository to store the custom information.

When creating a custom table in the Tivoli Inventory configuration repository, follow these guidelines:

- Do not modify existing tables in the Tivoli Inventory configuration repository.
- The table name must be identical to the .MIF group name you use.
- The column names must be identical to the attributes you will be use.
- In each custom table, create a primary key that includes the following columns:
  - HARDWARE_SYSTEM_ID
  - CONFIG_CHANGE_TYPE

These guidelines enable tracking the configuration change history of the table by relating it to the CONFIG_CHANGE_HISTORY table. In each custom table, include the CONFIG_CHANGE_TIME column. This column does not have to be part of the primary key.

The primary key must also include any .MIF attribute that you designate as a key, for example, the CPU Number and PCI Slot number require additional primary keys.

HP database scripts

The following scripts automatically extend the Tivoli Inventory Database and add the necessary tables for a Microsoft® SQL Server or Oracle® implementation. These scripts are included with the HP Insight Integration for Tivoli and are located in the \hpq\Inventory directory.

- `hp_oracle_schema.sql`
- `hp_mssql_schema.sql`

The following scripts create the history tables for the HP specific tables for Microsoft® SQL and Oracle® implementations:

- `h_hp_oracle_schema.sql`
- `h_hp_mssql_schema.sql`

Run the scripts that apply for the configured Tivoli Inventory Database using the appropriate ISQL or SQL Plus database client. Ensure that the table permissions are set to run the script using the same Database ID configured for Tivoli. The ID configuration information can be determined by running the `wgetrim` command on the TMR Server.

Creating HP specific views

If Tivoli Inventory is used to gather custom information, the predefined views provided with the HP integration does not enable the Tivoli Inventory configuration repository to be queried for the custom HP specific information. You must create additional database views. Creating a new view requires running a database script to add the new views to the Tivoli Inventory configuration repository.

When creating a new view, note the following guidelines:

- Do not edit any predefined views.
- If the new view is to be used to query the Tivoli Inventory configuration repository and then return the results to a subscription list, ensure that the new view contains the following columns: TME_OBJECT_ID and TME_OBJECT_LABEL. This type of query can be used for Managed Nodes, Endpoints, PC Managed Nodes, or any other managed site that meets the query criteria.

The following scripts provide examples of custom view creation and are included with the HP Insight Integration for Tivoli in the \hpq\Inventory directory:

- `hp_oracle_views.sql`
- `hp_mssql_views.sql`

For HP specific views for historical data, use the following scripts:

- `h_hp_oracle_views.sql`
- `h_hp_mssql_views.sql`

Run the scripts that apply for the configured Tivoli Inventory Database using the appropriate ISQL or SQL Plus database client. Ensure that the table permissions are set to run the script using the same Database ID configured for Tivoli. The ID configuration information can be determined by running the `wgetrim` command on the TMR Server.

These scripts create new views with HP specific information. They also demonstrate how the views can contain both Tivoli collected inventory information in addition to HP Extended information.

NOTE: These sample views reflect only a relatively small number of the available HP Collected Attributes. For a working Tivoli Management Environment, it is likely that additional views will need to be created to meet individual requirements.

Create an HP query library and HP queries

To help in the creation of an HP query library and associated HP queries, the following reference script is provided with the HP Insight Integration for Tivoli and is located in the hpq\Inventory directory:

`hptiv_queries.sh`

This script creates a new query library and new queries in a Tivoli Policy Region, specified at the time of execution. These queries use the additional views that were created in previous sections of this chapter ("Extending the Tivoli Inventory Database (on page 59)" and "Creating HP specific views (on page 60)"). The queries created by this script are:

- HP CPU Information
- HP DRIVE ARRAY information
- HP FCA Information
- HP Inventory

- HP SCSI Information
- HP Slot Information
- HP Software Versions
- HP SAS Information
- HP ATA Disk Information

> **NOTE:** This script provides an example of how to create queries to leverage the HP specific inventory content. Additional Views/Queries might need to be created to meet individual requirements and TME environments. Additional views can be created through the Tivoli Desktop or a command line interface. For further details on creating queries, see the *Tivoli Inventory User's Manual.*

Queries can be run to view system-specific data by right-clicking its object, selecting **Execute Query,** and selecting the query library and the specific query.

Queries can also be executed through many other methods, such as referencing building subscription and distribution lists or by displaying the content for all systems that match the query criteria. See the *Tivoli Inventory User's Manual* for further information.

> **NOTE:** A corresponding HP specific query library and associated HP queries to retrieve historical data can be created with the help of the h_hptiv_queries.sh script. Additional queries can be created based on requirements.
>
> Ensure that the correct configuration repository has been specified by right-clicking the query name and selecting the **Edit Query** option.

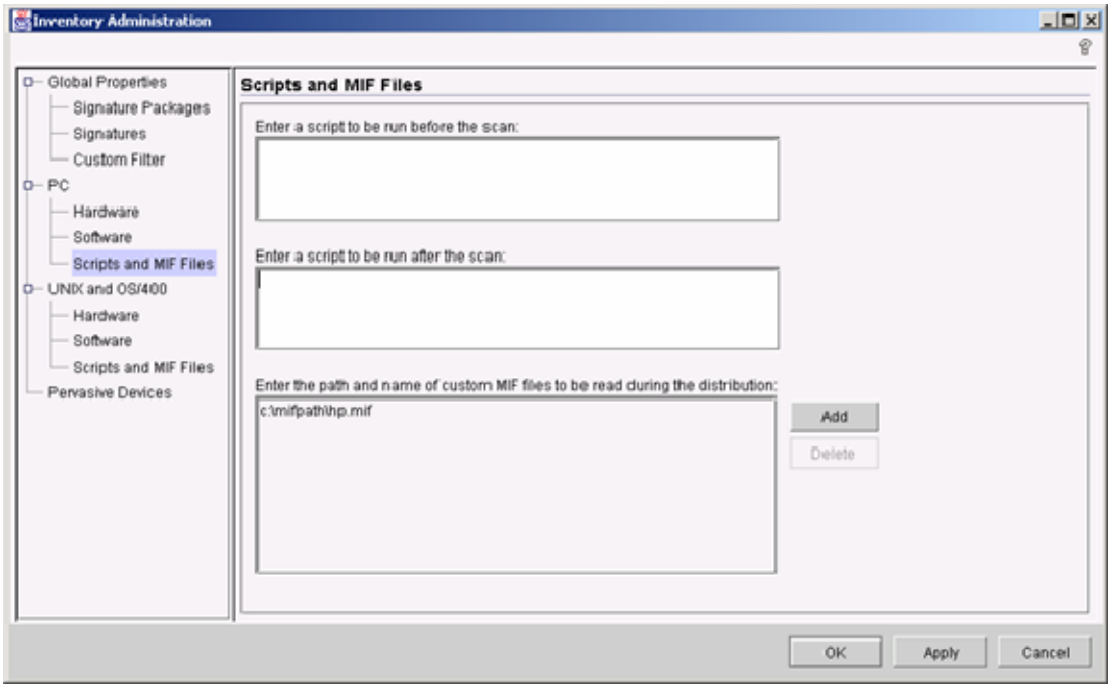
Creating and customizing the inventory profile

Creating a Tivoli inventory profile, or customizing an existing one, represents the final step in the integration of HP asset data into Tivoli Inventory. A profile can be configured to perform the following tasks automatically upon distribution:

1. Execute the HP Inventory Collector (Collect.exe) on the selected target system.
2. Create the HP .MIF file.
3. Acquire the populated HP .MIF file.
   The HP .MIF file can be created by executing Collect.exe through the Tivoli Desktop option or command line. The Collect.exe utility can also be executed locally on the target system. The path in which the file resides must be the same as the .MIF file path specified in the profile.

> **NOTE:** To execute Collect.exe through a command line, use the `run_clicollect.bat` batch command. This batch program is delivered with the HP Insight Integration for Tivoli in the hpq\Inventory directory and must be placed in the same directory as Collect.exe. The path in which to create and save the HP .MIF file must be specified in the MIFPath variable.

a. On the Tivoli Desktop, right-click the Inventory Profile, and select **Properties.** The Inventory Administration window appears.



b. Select **Scripts and .MIF files** in the navigation pane.

c. Enter the path and name of file to be read.

> **NOTE:** The syntax used for the Collect.exe utility is as follows:
>
> `Collect.exe /tpem /f <output dir>\<mif filename>`

d. Click **OK.**

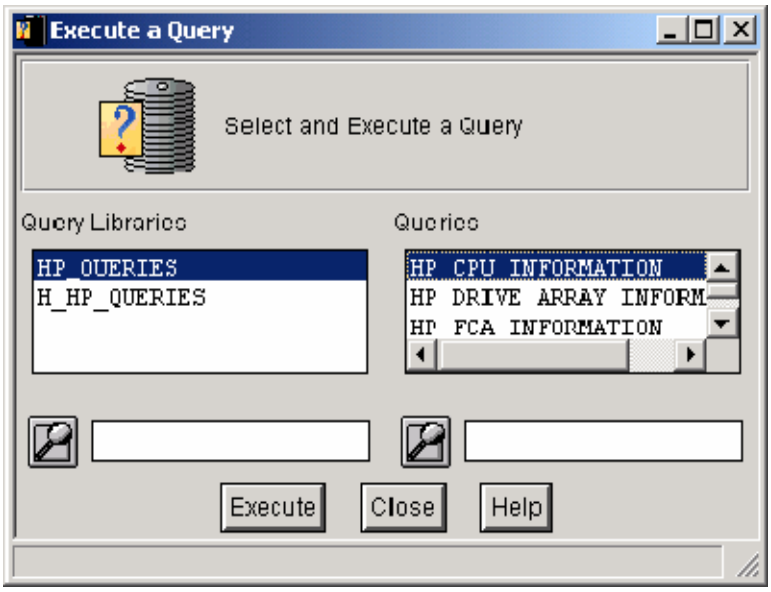
Displaying HP inventory information

The following section demonstrates the output results of the HP queries.

Running the queries

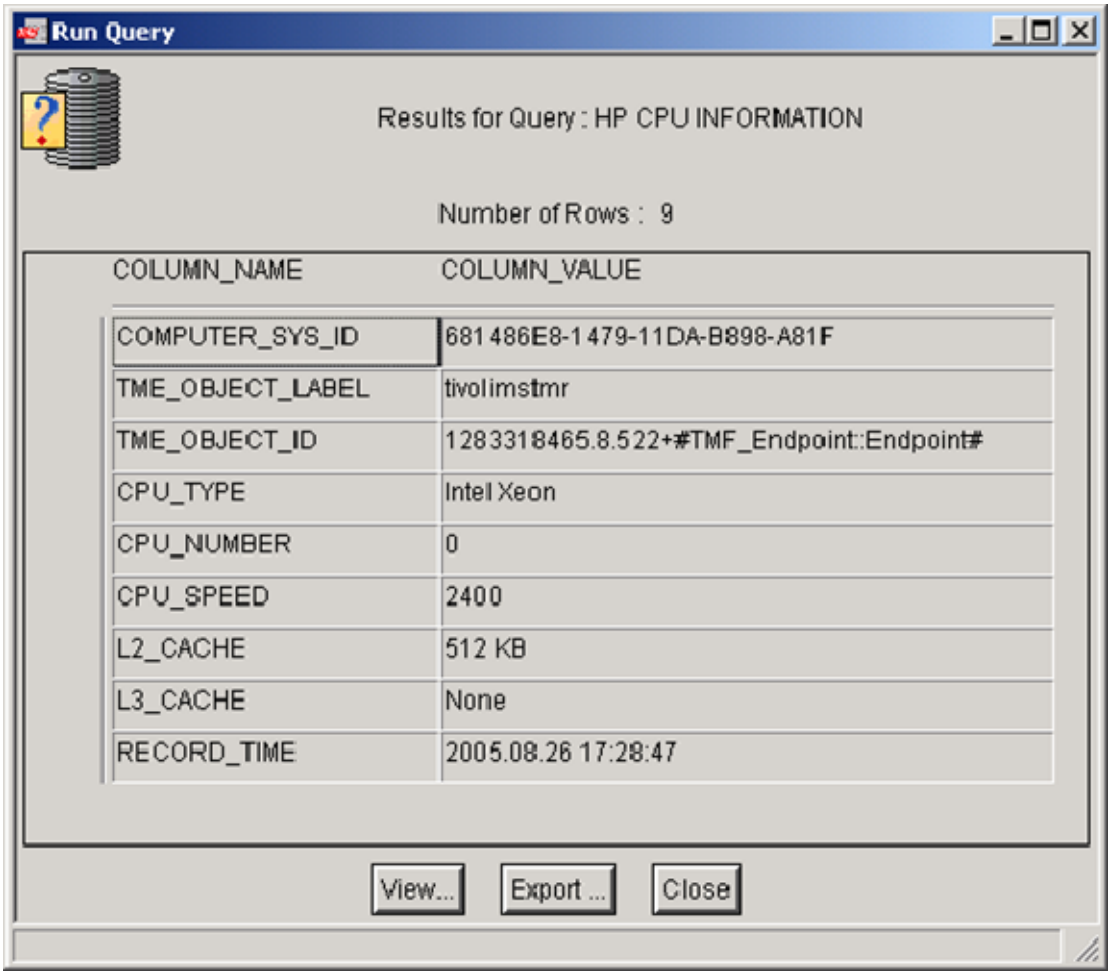
1. From the Profile Manager on the Tivoli Desktop, expand the list of subscribers to display individual systems.

2. Right-click a target system, and then to display the Execute a Query window, click **Execute Query.**

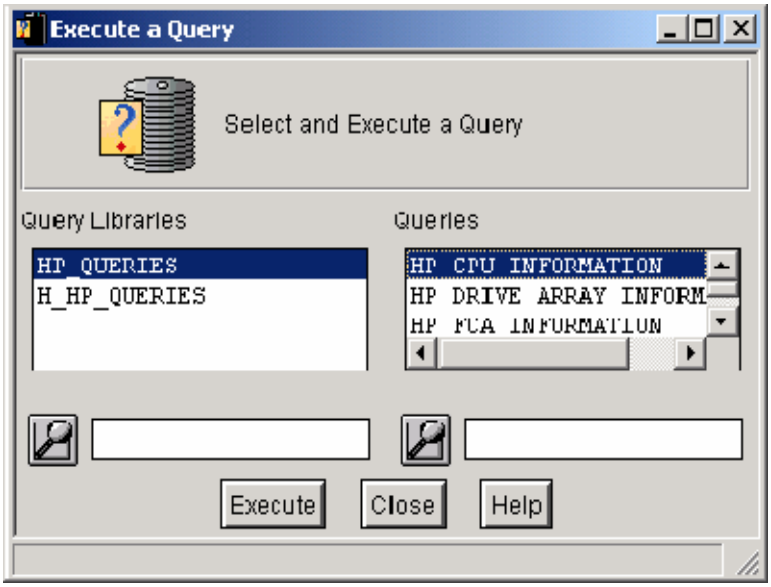


3. Select **HP_QUERIES** from the Query Libraries list, and select **HP CPU INFORMATION** from the Queries list.
4. Click the **Execute** button to run the query. Query results containing HP CPU data for the chosen target system appear.

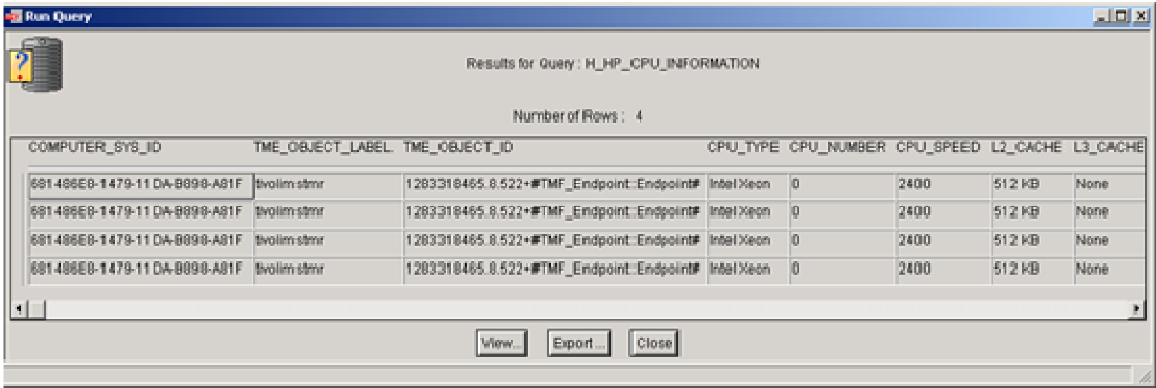
5. Click the **Close** button.



6. Selecting **H_HP_QUERIES** from the Query Libraries list for the same CPU query selection displays historical information for current and past inventory collections. HP CPU data from the historical tables appear.



7. Click the **Close** button.



Technical support

Before you contact HP

Be sure to have the following information available before you call HP:

- Technical support registration number (if applicable)
- Product serial number
- Product model name and number
- Applicable error messages
- Add-on boards or hardware
- Third-party hardware or software
- Operating system type and revision level

If you are having problems installing or configuring the HP Insight Integration for Tivoli, HP Customer Support can offer further assistance. Before calling HP Customer Support:

- Review the prerequisites and installation steps listed in the chapters "Product overview (on page 8)" and "Installing the HP Insight Integration with the TEC (on page 17)."
- See the "Troubleshooting (on page 68)" section or review the FAQ information on the HP Management Integration Solutions website (http://www.hp.com/servers/integration).
- If you need to contact HP, provide the following details to help resolve your problem quickly and accurately:
  - Details of the physical Tivoli environment
  - Any error information (Save an output file or screen shot.)
  - Copies of the following output files:
    - List of installed Tivoli applications, revisions numbers, and patches (See the `wlsinst -ah` command detailed in the "Obtaining configuration information (on page 69)" section in this chapter.)
    - Installation log file IM2_PLUS.LOG
    - Output from any other diagnostic or informational program (See the "Advanced troubleshooting and debugging (on page 69)" section in Appendix A)

HP contact information

For the name of the nearest HP authorized reseller:

- See the Contact HP worldwide (in English) webpage (http://welcome.hp.com/country/us/en/wwcontact.html).

For HP technical support:

- In the United States, for contact options see the Contact HP United States webpage (http://welcome.hp.com/country/us/en/contact_us.html). To contact HP by phone:
  - Call 1-800-HP-INVENT (1-800-474-6836). This service is available 24 hours a day, 7 days a week. For continuous quality improvement, calls may be recorded or monitored.
  - If you have purchased a Care Pack (service upgrade), call 1-800-633-3600. For more information about Care Packs, refer to the HP website (http://www.hp.com/hps).
- In other locations, see the Contact HP worldwide (in English) webpage (http://welcome.hp.com/country/us/en/wwcontact.html).

Appendix A: Troubleshooting and known issues

Troubleshooting

The following sections contain information for troubleshooting issues relating to installing and operating the HP Insight Integration for Tivoli.

Verifying the installation status of the Insight Integration

To determine if the HP Insight Integration for Tivoli has installed successfully, look at the installation log file IM2_PLUS.log.

The log file is saved to Tivoli\db*Host_Name*.db\tmp, where *Host_Name* refers to the name of the TMR where the HP Insight Integration for Tivoli has been installed. The file contains detailed information that can be used to confirm the status of the installation.

SNMP must be installed before installing Insight Management Agents

If SNMP Network Services are not available when HP Insight Management Agents are installed, then the SNMP portions of the Insight Management Agents are not implemented. Install SNMP (and configure the community, access attributes, and trap destination), and then reinstall the Insight Management Agents.

The installation of Insight Management Agents does not usually require that the system be rebooted. However, the SNMP services must be stopped and restarted to affect the change. The restart process is automatic on some platforms (for example, Windows® 2000 and Windows® 2003).

Test SNMP trap operations

To verify that the Tivoli SNMP Adapter is installed and forwarding events correctly to TEC (port 5529 for Windows® and port 0 for UNIX®), run the following generic trap from any Managed Node:

```
wsnmptrap -h hostname 1.0 1 100
```

In this example, *hostname* is the name or IP address of the system running the Tivoli SNMP Adapter. If this trap is not displayed in the TEC SNMP event group, the problem is not with the Insight Integration module, but with the SNMP Adapter, TEC, or networking components.

Simulating an Insight SNMP trap

This example command can be executed from the TMR or Managed Node to simulate an Insight SNMP trap. It is received and displayed in the SNMP event group of the TEC. Note that there are spaces before "1.3.6..." on the lines following `wsnmptrap`. Replace *hostname* with the IP address of the Managed Node running the configured Tivoli SNMP Adapter.

The following command invokes the SNMP trap Logical Drive Status:OK IM_3008:

```
wsnmptrap -h hostname 1.3.6.1.4.1.232 6 3008\
1.3.6.1.2.1.1.5 OctetString "hpqSNMPTest"\
1.3.6.1.4.1.232.11.2.11.1 Integer 0\
1.3.6.1.4.1.232.3.2.3.1.1.4 Integer 2
```

Advanced troubleshooting and debugging

The following sections contain information for advanced troubleshooting and debugging issues relating to installing and operating the HP Insight Integration for Tivoli.

Installation log

HP Insight Installation for Tivoli creates the IM2_PLUS.log in the Tivoli\db*Host_Name*.db\tmp location, where the *Host_Name* entry references the name of the TMR where the HP Insight Integration for Tivoli has been installed. It contains detailed information that can be used to confirm the status of the installation.

Installation and operational errors

Many of the installation and operational functions of the HP Insight Integration create debug output if the following directories are present:

- Managed Nodes: /tmp/debug (UNIX®) and $DBDIR/tmp/.plusdebug (Windows NT® and later)
- Endpoints: /tmp/debug (UNIX®) and C:\Program Files\Tivoli\lcf\dat\1\.plusdebug (Windows NT® and later)

When debugging is enabled, the following log files are saved. These files are always created during the installation of the Insight Integration but are not saved unless the appropriate debug directories are already created.

- IM_ALIDB_after.error
- IM_ALIDB_after.output

Obtaining configuration information

The following commands output additional information about the Tivoli environment and might prove useful when trying to troubleshoot any installation or operational problems:

- `wlsinst -ah`—Lists applications and patches installed on all TMRs and Managed Nodes
- `wgetrim tec`—Lists information regarding the tec RDBMS interface module (RIM) object
- `wgetrim inventory`—Lists information regarding the Inventory RIM object
- `wlookup -ar Gateway`—Displays the defined gateways
- `odadmin odlist`—Displays connections from TMR to Managed Nodes
- `odadmin`—Displays directory names

Appendix B: HP SNMP events

HP SNMP events

The following tables list all of the HP ProLiant SNMP definitions delivered with the HP Insight Integration for Tivoli 4.6. The events are organized according to MIB type and object identifier.

CR3500 RAID controller (CPQCR.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqCrController1FailureTrap (1)	IM_1	This event occurs when the primary controller in the subsystem has failed.	Fatal
cpqCrController1InformationTrap (2)	IM_2	This event occurs when the primary controller in the subsystem has recovered.	Harmless
cpqCrController2FailureTrap (3)	IM_3	This event occurs when the secondary controller in the subsystem has failed.	Fatal
cpqCrController2InformationTrap (4)	IM_4	This event occurs when the secondary controller in the subsystem has recovered.	Harmless
cpqCrLogDriveInformationTrap (5)	IM_5	This event occurs when a RAIDset has become optimal.	Harmless
cpqCrLogDriveFailureTrap (6)	IM_6	This event occurs when a RAIDset has failed.	Fatal
cpqCrLogDriveReconstructTrap (7)	IM_7	This event occurs when a RAIDset has started the reconstruction process.	Warning
cpqCrLogDriveReducedTrap (8)	IM_8	This event occurs when a RAIDset has become degraded.	Critical
cpqCrLogDriveInitializingTrap (9)	IM_9	This event occurs when a RAIDset is initializing.	Warning
cpqCrDiskInformationTrap (10)	IM_10	This event occurs when a disk drive has recovered.	Harmless
cpqCrDiskFailureTrap (11)	IM_11	This event occurs when a disk drive has failed.	Fatal
cpqCrDiskReconstructTrap (12)	IM_12	This event occurs when a disk member of a logical drive has begun the reconstruction process and will be available for use when reconstruction is complete.	Warning
cpqCrDiskAvailableTrap (13)	IM_13	This event occurs when a disk drive has been physically added or set to the Available state.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqCrDiskSpareTrap (14)	IM_14	This event occurs when a disk drive has been set to Spare status from Available and can be used in a RAID 1, RAID 1+0 or RAID 5 logical disk should a member device fail in one of those RAIDsets.	Harmless
cpqCrEMUNormalTrap (15)	IM_15	This event occurs when the overall condition of the primary enclosure has returned to normal.	Harmless
cpqCrEMUFanFailureTrap (16)	IM_16	This event occurs when one of the cooling fans in the primary enclosure has failed.	Fatal
cpqCrEMUFanInformationTrap (17)	IM_17	This event occurs when the cooling fan in the primary enclosure has recovered.	Harmless
cpqCrEMUPowerSupplyFailureTrap (18)	IM_18	This event occurs when one of the power supplies in the primary enclosure has failed.	Fatal
cpqCrEMUPowerSupplyInformationTrap (19)	IM_19	This event occurs when the power supply in the primary enclosure has recovered.	Harmless
cpqCrExpCabFanFailureTrap (20)	IM_20	This event occurs when one of the cooling fans in the expansion cabinet has failed.	Fatal
cpqCrExpCabFanInformationTrap (21)	IM_21	This event occurs when the cooling fan in the expansion cabinet has returned to a normal state.	Harmless
cpqCrExpCabPowerSupplyFailureTrap (22)	IM_22	This event occurs when one of the power supplies in the expansion cabinet has failed.	Fatal
cpqCrEMUTemperatureWarningTrap (23)	IM_23	This event occurs when the temperature in the primary enclosure has triggered a warning condition detected by the controller.	Warning
cpqCrEMUTemperatureCriticalTrap (24)	IM_24	This event occurs when the temperature in the primary enclosure has triggered a critical condition detected by the controller.	Critical
cpqCrEMUTemperatureInformationTrap (25)	IM_25	This event occurs when the temperature in the primary enclosure has returned to normal.	Harmless
cpqCrExpCabTemperatureWarningTrap (26)	IM_26	This event occurs when the temperature in the expansion cabinet has triggered a warning condition detected by the controller.	Warning
cpqCrExpCabTemperatureCriticalTrap (27)	IM_27	This event occurs when the temperature in the expansion cabinet has triggered a critical condition detected by the controller.	Critical
cpqCrExpCabTemperatureInformationTrap (28)	IM_28	This event occurs when the temperature in the expansion cabinet has returned to normal.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqCrExpCabPowerSupplyInformationTrap (29)	IM_29	This event occurs when the power supply in the expansion cabinet has recovered.	Harmless
cpqCrPhyDiskInformationTrap (30)	IM_30	This event occurs when a disk drive has recovered.	Harmless
cpqCrPhyDiskFailureTrap (31)	IM_31	This event occurs when a disk drive has failed.	Fatal
cpqCrPhyDiskReconstructTrap (32)	IM_32	This event occurs when a disk member of a logical drive has begun the reconstruction process and will be available for use when reconstruction is complete.	Warning
cpqCrPhyDiskAvailableTrap (33)	IM_33	This event occurs when a disk drive has been physically added or set to the Available state.	Harmless
cpqCrPhyDiskSpareTrap (34)	IM_34	This event occurs when a disk drive has been set to Spare status from Available and can be used in a RAID 1, RAID 0+1 or RAID 5 logical disk should a member device fail in one of those RAIDsets.	Harmless

Common cluster management (SVRCLU.MIB)

Tivoli types	TEC class	Description	TEC priority
svrCluMemberAdded (100)	IM_100	This event occurs when a cluster member is added.	Harmless
svrCluMemberDeleted (101)	IM_101	This event occurs when a cluster member is deleted.	Warning

Standard equipment (CPQSTDEQ.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqSeCpuThresholdPassed (1001)	IM_1001	This event occurs when an internal CPU error threshold has been passed on a particular CPU, causing it to go degraded.	Warning
cpqSePCCardThermalDegraded (1002)	IM_1002	This event occurs when the PC Card Slot Thermal Sensor threshold has been exceeded for safe operations thereby causing degraded operations.	Critical
cpqSePCCardThermalFailure (1003)	IM_1003	This event occurs when the PC Card Slot Thermal Sensor threshold has been exceeded for degraded operations, thereby causing failed operations.	Fatal
cpqSePCCardThermalSafe (1004)	IM_1004	This event occurs when the PC Card Slot Thermal Sensor threshold has been crossed, which restored the thermal status to normal operations.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqSe2CpuThresholdPassed (1005)	IM_1005	This event occurs when an internal CPU error threshold has been passed on a particular CPU causing it to go degraded.	Warning
CpqSeCpuStatusChange (1006)	—	This event occurs when the CPU status changes.	—
cpqSeCpuStatus:ok	IM_1006_2	—	Harmless
cpqSeCpuStatus:degraded	IM_1006_3	—	Critical
cpqSeCpuStatus:failed	IM_1006_4	—	Fatal
cpqSeCpuStatus:disabled	IM_1006_5	—	Warning
CpqSeCpuPowerPodstatusChange (1007)	—	This event occurs when the CPU Power Pod status changes.	—
cpqSeCpuPowerpodStatus:NotFailed	IM_1007_1	—	Harmless
cpqSeCpuPowerpodStatus:Failed	IM_1007_2	—	Fatal
cpqSeUSBStorageDeviceAttached	IM_1008	This event occurs when a USB device is inserted.	Harmless
cpqSeUSBStorageDeviceRemoved	IM_1009	This event occurs when a USB device is removed.	Harmless

Systems information (CPQSINFO.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqSiHoodRemoved (2001)	IM_2001	This event occurs when hood status has been set to removed.	Critical
cpqSiMonitorConditionOK (2002)	IM_2002	This event occurs when the Fault reporting features have returned to within their normal operating range for the monitor.	Harmless
cpqSiMonitorConditionDegraded (2003)	IM_2003	This event occurs when the monitor's condition is degraded because the internal temperature is exceeding normal operating limits.	Warning
cpqSiMonitorConditionFailed (2004)	IM_2004	This event occurs when the monitor's condition has been set to Failed because an operational feature is exceeding normal operating limits.	Critical
cpqSiCorrMemErrStatusDegraded (2005	IM_2005	This event occurs when the Correctable memory error count has exceeded the threshold for the memory module.	Warning
cpqSiCorrMemErrStatusOk (2006)	IM_2006	This event occurs when the Correctable memory error count is now below the threshold for the memory module.	Harmless
cpqSiMemConfigChange (2007)	IM_2007	This event occurs when a memory configuration change has occurred.	Harmless
cpqSiHotPlugSlotBoardRemoved (2008)	IM_2008	This event occurs when a Hot Plug Slot Board has been removed from the specified chassis and slot.	Warning

Tivoli types	TEC class	Description	TEC priority
cpqSiHotPlugSlotBoardInserted (2009)	IM_2009	This event occurs when a Hot Plug Slot Board has been inserted into the specified chassis and slot.	Harmless
cpqSiHotPlugSlotPowerUpFailed (2010)	—	This event occurs when a Hot Plug Slot Board has failed to power-up in the specified chassis and slot.	—
cpqSiHotPlugSlotErrorStatus: noError	IM_2010_1	—	Harmless
cpqSiHotPlugSlotErrorStatus: generalError	IM_2010_2	—	Critical
cpqSiHotPlugSlotErrorStatus: wrongRevision	IM_2010_3	—	Critical
cpqSiHotPlugSlotErrorStatus: wrongBoard	IM_2010_4	—	Critical
cpqSiHotPlugSlotErrorStatus: cannotConfig	IM_2010_5	—	Critical
cpqSiHotPlugSlotErrorStatus: powerFault	IM_2010_6	—	Critical
cpqSiHotPlugSlotErrorStatus: unexpectedPowerLoss	IM_2010_7	—	Critical
cpqSiHotPlugSlotErrorStatus: wrongSpeed	IM_2010_8	—	Critical
cpqSiHotPlugSlotErrorStatus: functionalFailure	IM_2010_9	—	Critical
cpqSiSysBatteryFailure (2011)	IM_2011	This event occurs when the battery indicated by cpqSiSysBatteryIndex has failed and must be replaced.	Critical
cpqSiSysBatteryChargingDegraded (2012)	IM_2012	This event occurs when Significant battery degradation has occurred and the battery can no longer be fully recharged.	Critical
cpqSiSysBatteryCalibrationError (2013)	IM_2013	This event occurs when Calibration is needed with battery and the battery cannot correctly indicate capacity.	Critical

Intelligent drive array (CPQIDA.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqDa3LogDrvStatusChange (3008)	—	This event occurs when the status of a drive array logical drive changes.	—
CpqDaLogDrvStatus:ok	IM_3008_2	—	Harmless
CpqDaLogDrvStatus:failed	IM_3008_3	—	Fatal
CpqDaLogDrvStatus:recovering	IM_3008_4	—	Warning
CpqDaLogDrvStatus:unconfigured	IM_3008_5	—	Warning
CpqDaLogDrvStatus:readyForRebuild	IM_3008_6	—	Warning

Tivoli types	TEC class	Description	TEC priority
CpqDaLogDrvStatus:rebuilding	IM_3008_7	—	Warning
CpqDaLogDrvStatus:wrongDrive	IM_3008_8	—	Warning
CpqDaLogDrvStatus:badConnect	IM_3008_9	—	Critical
CpqDaLogDrvStatus:overheating	IM_3008_10	—	Critical
CpqDaLogDrvStatus:shutdown	IM_3008_11	—	Critical
CpqDaLogDrvStatus:expanding	IM_3008_12	—	Warning
CpqDaLogDrvStatus:notAvailable	IM_3008_13	—	Warning
CpqDaLogDrvStatus:queuedForExp	IM_3008_14	—	Warning
CpqDaLogDrvStatus:multipathAccessDegraded	IM_3008_15	—	Warning
CpqDaCntlrActive (3016)	IM_3016	This event occurs when a backup array controller in a duplexed pair has switched over to the active role.	Warning
cpqDa4SpareStatusChange (3017)	—	This event occurs when the status of a drive array spare drive changes.	—
CpqDaSpareStatus:invalid	IM_3017_02	—	Warning
CpqDaSpareStatus:failed	IM_3017_03	—	Fatal
CpqDaSpareStatus:inactive	IM_3017_04	—	Harmless
CpqDaSpareStatus:building	IM_3017_05	—	Warning
CpqDaSpareStatus:active	IM_3017_06	—	Warning
cpqDaTapeLibraryDoorStatusChange (3021)	—	This event occurs when the door status of a tape library changes.	—
CpqDaTapeLibraryDoorStatus:notSupported	IM_3021_2	—	Warning
CpqDaTapeLibraryDoorStatus:closed	IM_3021_3	—	Harmless
CpqDaTapeLibraryDoorStatus:open	IM_3021_4	—	Warning
cpqDaTapeDriveCleaningRequired (3023)	IM_3023	This event occurs when a tape drive that must have a cleaning tape inserted and run.	Critical
cpqDaTapeDriveCleanTapeReplace (3024)	IM_3024	This event occurs when an autoloader tape unit has a cleaning tape that has been fully used and therefore must be replaced with a new cleaning tape.	Fatal

Tivoli types	TEC class	Description	TEC priority
cpqDa5AccelStatusChange (3025)	—	This event occurs when the status of an array accelerator cache board changes	—
CpqDa5AccelStatus:invalid	IM_3025_2	—	Warning
CpqDa5AccelStatus:enabled	IM_3025_3	—	Harmless
CpqDa5AccelStatus:tmpDisabled	IM_3025_4	—	Critical
CpqDa5AccelStatus:permDisabled	IM_3025_5	—	Critical
cpqDa5AccelBadDataTrap (3026)	IM_3026	This event occurs when an array accelerator cache board has lost battery power.	Critical
cpqDa5AccelBatteryFailed (3027)	IM_3027	This event occurs when a battery associated with the array accelerator cache board has failed.	Fatal
cpqDa5CntlrStatusChange (3028)	—	This event occurs when the status of a drive array controller changes.	—
CpqDaCntlrBoardStatus:ok	IM_3028_2	—	Harmless
CpqDaCntlrBoardStatus:generalFailure	IM_3028_3	—	Fatal
CpqDaCntlrBoardStatus:cableProblem	IM_3028_4	—	Critical
CpqDaCntlrBoardStatus:poweredOff	IM_3028_5	—	Critical
cpqDa5PhyDrvStatusChange (3029)	—	This event occurs when the status of a drive array physical drive changes.	—
CpqDaPhyDrvStatus:ok	IM_3029_2	—	Harmless
CpqDaPhyDrvStatus:failed	IM_3029_3	—	Fatal
CpqDaPhyDrvStatus:predictiveFailure	IM_3029_4	—	Critical
cpqDa5PhyDrvThreshPassedTrap (3030)	IM_3030	This event occurs when a factory threshold associated with one of the physical drive objects on a drive array has been exceeded.	Critical
cpqDa2TapeLibraryStatusChange (3031)	—	This event occurs when the status of a tape library changes.	—
CpqDaTapeLibraryStatus:ok	IM_3031_2	—	Harmless
CpqDaTapeLibraryStatus:degraded	IM_3031_3	—	Critical
CpqDaTapeLibraryStatus:failed	IM_3031_4	—	Fatal
CpqDaTapeLibraryStatus:offline	IM_3031_5	—	Warning
cpqDa2TapeDriveStatusChange (3032)	—	This event occurs when the status of a tape drive changes.	—
CpqDaTapeDrvStatus:ok	IM_3032_2	—	Harmless
CpqDaTapeDrvStatus:degraded	IM_3032_3	—	Critical
CpqDaTapeDrvStatus:failed	IM_3032_4	—	Fatal

Tivoli types	TEC class	Description	TEC priority
CpqDaTapeDrvStatus:offline	IM_3032_5	—	Critical
CpqDaTapeDrvStatus:missingWasOk	IM_3032_6	—	Warning
CpqDaTapeDrvStatus:missingWasOffline	IM_3032_7	—	Warning
cpqDa6CntlrStatusChange (3033)	—	This event occurs when the status of a drive array controller changes.	—
CpqDaCntlrBoardStatus:ok	IM_3033_2	—	Harmless
CpqDaCntlrBoardStatus:generalFailure	IM_3033_3	—	Fatal
CpqDaCntlrBoardStatus:cableProblem	IM_3033_4	—	Critical
CpqDaCntlrBoardStatus:poweredOff	IM_3033_5	—	Critical
cpqDa6LogDrvStatusChange (3034)	—	This event occurs when the status of a drive array logical drive changes.	—
CpqDaLogDrvStatus:ok	IM_3034_2	—	Harmless
CpqDaLogDrvStatus:failed	IM_3034_3	—	Fatal
CpqDaLogDrvStatus:recovering	IM_3034_4	—	Warning
CpqDaLogDrvStatus:unconfigured	IM_3034_5	—	Warning
CpqDaLogDrvStatus:readyForRebuild	IM_3034_6	—	Warning
CpqDaLogDrvStatus:rebuilding	IM_3034_7	—	Warning
CpqDaLogDrvStatus:wrongDrive	IM_3034_8	—	Warning
CpqDaLogDrvStatus:badConnect	IM_3034_9	—	Critical
CpqDaLogDrvStatus:overheating	IM_3034_10	—	Critical
CpqDaLogDrvStatus:shutdown	IM_3034_11	—	Critical
CpqDaLogDrvStatus:expanding	IM_3034_12	—	Warning
CpqDaLogDrvStatus:notAvailable	IM_3034_13	—	Warning
CpqDaLogDrvStatus:queuedForExp	IM_3034_14	—	Warning
CpqDaLogDrvStatus:multipathAccessDegraded	IM_3034_15	—	Warning
cpqDa6SpareStatusChange (3035)	—	This event occurs when the status of a drive array spare drive changes.	—
CpqDaSpareStatus:invalid	IM_3035_2	—	Warning
CpqDaSpareStatus:failed	IM_3035_3	—	Fatal
CpqDaSpareStatus:inactive	IM_3035_4	—	Harmless
CpqDaSpareStatus:building	IM_3035_5	—	Warning

Tivoli types	TEC class	Description	TEC priority
CpqDaSpareStatus:active	IM_3035_6	—	Warning
cpqDa6PhyDrvStatusChange (3036)	—	This event occurs when the status of a drive array physical drive changes.	—
CpqDaPhyDrvStatus:ok	IM_3036_2	—	Harmless
CpqDaPhyDrvStatus:failed	IM_3036_3	—	Fatal
CpqDaPhyDrvStatus:predictiveFailure	IM_3036_4	—	Critical
cpqDa6PhyDrvThreshPassedTrap (3037)	IM_3037	This event occurs when a factory threshold associated with one of the physical drive objects on a drive array has been exceeded.	Critical
cpqDa6AccelStatusChange (3038)	—	This event occurs when the status of an array accelerator cache board changes.	—
CpqDa5AccelStatus:invalid	IM_3038_2	—	Warning
CpqDa5AccelStatus:enabled	IM_3038_3	—	Harmless
CpqDa5AccelStatus:tmpDisabled	IM_3038_4	—	Critical
CpqDa5AccelStatus:permDisabled	IM_3038_5	—	Critical
cpqDa6AccelBadDataTrap (3039)	IM_3039	This event occurs when an array accelerator cache board has lost battery power.	Critical
cpqDa6AccelBatteryFailed (3040)	IM_3040	This event occurs when a battery associated with the array accelerator cache board has failed.	Critical
cpqDa6TapeLibraryStatusChange (3041)	—	This event occurs when the status of a tape library changes.	—
CpqDaTapeLibraryStatus:ok	IM_3041_2	—	Harmless
CpqDaTapeLibraryStatus:degraded	IM_3041_3	—	Critical
CpqDaTapeLibraryStatus:failed	IM_3041_4	—	Fatal
CpqDaTapeLibraryStatus:offline	IM_3041_5	—	Warning
cpqDa6TapeLibraryDoorStatusChange (3042)	—	This event occurs when the door status of a tape library changes.	—
CpqDaTapeLibraryDoorStatus:notSupported	IM_3042_2	—	Warning
CpqDaTapeLibraryDoorStatus:closed	IM_3042_3	—	Harmless
CpqDaTapeLibraryDoorStatus:open	IM_3042_4	—	Warning
cpqDa6TapeDriveStatusChange (3043)	—	This event occurs when the status of a tape drive changes.	—
CpqDaTapeDrvStatus:ok	IM_3043_2	—	Harmless
CpqDaTapeDrvStatus:degraded	IM_3043_3	—	Critical
CpqDaTapeDrvStatus:failed	IM_3043_4	—	Fatal

Tivoli types	TEC class	Description	TEC priority
CpqDaTapeDrvStatus:offline	IM_3043_5	—	Critical
CpqDaTapeDrvStatus:missingWasOk	IM_3043_6	—	Warning
CpqDaTapeDrvStatus:missingWasOffline	IM_3043_7	—	Warning
cpqDa6TapeDriveCleaningRequired (3044)	IM_3044	This event occurs when a tape drive must have a cleaning tape inserted and run.	Critical
cpqDa6TapeDriveCleanTapeReplace (3045)	IM_3045	This event occurs when an autoloader tape unit has a cleaning tape that has been fully used and therefore must be replaced with a new cleaning tape.	Fatal
cpqDa7PhyDrvStatusChange (3046)	—	This event occurs when the status of a drive array physical drive changes.	—
CpqDaPhyDrvStatus:ok	IM_3046_2	—	Harmless
CpqDaPhyDrvStatus:failed	IM_3046_3	—	Fatal
CpqDaPhyDrvStatus:predictiveFailure	IM_3046_4	—	Critical
cpqDa7SpareStatusChange (3047)	—	This event occurs when the status of a drive array spare drive changes.	—
CpqDaSpareStatus:invalid	IM_3047_2	—	Warning
CpqDaSpareStatus:failed	IM_3047_3	—	Fatal
CpqDaSpareStatus:inactive	IM_3047_4	—	Harmless
CpqDaSpareStatus:building	IM_3047_5	—	Warning
CpqDaSpareStatus:active	IM_3047_6	—	Warning

SCSI device information (CPQSCSI.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqScsi3CntlrStatusChange (5005)	—	This event occurs when the status of a SCSI controller changes.	—
CpqScsiCntlrStatus:ok	IM_5005_2	—	Harmless
CpqScsiCntlrStatus:failed	IM_5005_3	—	Fatal
cpqTape3PhyDrvCleaningRequired (5008)	IM_5008	This event occurs when a tape drive must have a cleaning tape inserted and run.	Critical
cpqTape3PhyDrvCleanTapeReplace (5009)	IM_5009	This event occurs when an autoloader tape unit has a cleaning tape that has been fully used and therefore must be replaced with a new cleaning tape.	Critical
cpqTape3LibraryDoorOpen (5013)	IM_5013	This event occurs when the door on an autoloader is open and therefore the unit is not operational.	Critical
cpqTape3LibraryDoorClosed (5014)	IM_5014	This event occurs when the door on an autoloader has closed.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqScsiCdLibraryStatusChange (5015)	—	This event occurs when the status of a CD library device changes.	—
CpqCdLibraryStatus:ok	IM_5015_2	—	Harmless
CpqCdLibraryStatus:failed	IM_5015_3	—	Critical
CpqCdLibraryStatus:offline	IM_5015_4	—	Harmless
cpqTapeLibraryStatusChange (5018)	—	This event occurs when the status of a tape library changes.	—
CpqTapeLibraryState:ok	IM_5018_2	—	Harmless
CpqTapeLibraryState:degraded	IM_5018_3	—	Warning
CpqTapeLibraryState:failed	IM_5018_4	—	Fatal
CpqTapeLibraryState:offline	IM_5018_5	—	Critical
cpqTape5PhyDrvStatusChange (5019)	—	This event occurs when the status of a tape drive changes.	—
CpqTapePhyDrvStatus:ok	IM_5019_2	—	Harmless
CpqTapePhyDrvStatus:failed	IM_5019_4	—	Fatal
CpqTapePhyDrvStatus:offline	IM_5019_5	—	Warning
CpqTapePhyDrvStatus:missingWasOk	IM_5019_6	—	Warning
CpqTapePhyDrvStatus:missingWasFailed	IM_5019_7	—	Critical
CpqTapePhyDrvStatus:missingWasOffline	IM_5019_8	—	Warning
cpqScsi5PhyDrvStatusChange (5020)	—	This event occurs when the status of a SCSI physical drive changes.	—
CpqScsiPhyDrvStatus:ok	IM_5020_2	—	Harmless
CpqScsiPhyDrvStatus:failed	IM_5020_3	—	Fatal
CpqScsiPhyDrvStatus:notConfigured	IM_5020_4	—	Warning
CpqScsiPhyDrvStatus:badCable	IM_5020_5	—	Warning
CpqScsiPhyDrvStatus:missingWasOk	IM_5020_6	—	Warning
CpqScsiPhyDrvStatus:missingWasFailed	IM_5020_7	—	Critical
CpqScsiPhyDrvStatus:predictiveFailure	IM_5020_8	—	Warning
CpqScsiPhyDrvStatus:missingWasPredictiveFailure	IM_5020_9	—	Warning
CpqScsiPhyDrvStatus:offline	IM_5020_10	—	Warning
CpqScsiPhyDrvStatus:missingwasOffline	IM_5020_11	—	Warning
CpqScsiPhyDrvStatus:hardError	IM_5020_12	—	Critical

Tivoli types	TEC class	Description	TEC priority
cpqScsi3LogDrvStatusChange (5021)	—	This event occurs when the status of a SCSI logical drive changes.	—
cpqScsiLogDrvStatus:ok	IM_5021_2	—	Harmless
cpqScsiLogDrvStatus:failed	IM_5021_3	—	Fatal
cpqScsiLogDrvStatus:unconfigured	IM_5021_4	—	Warning
cpqScsiLogDrvStatus:recovering	IM_5021_5	—	Warning
cpqScsiLogDrvStatus: readyForRebuild	IM_5021_6	—	Warning
cpqScsiLogDrvStatus: rebuilding	IM_5021_7	—	Warning
cpqScsiLogDrvStatus: wrongDrive	IM_5021_8	—	Warning
cpqScsiLogDrvStatus: badConnect	IM_5021_9	—	Critical
cpqScsiLogDrvStatus: degraded	IM_5021_10	—	Warning
cpqScsiLogDrvStatus: disabled	IM_5021_11	—	Critical
cpqSasPhyDrvStatusChange (5022)	—	This event occurs when the status of a SAS or SATA physical drive changes.	—
CpqSasPhyDrvStatus:ok	IM_5022_2	—	Harmless
CpqSasPhyDrvStatus:predictiveFailure	IM_5022_3	—	Warning
CpqSasPhyDrvStatus:offline	IM_5022_4	—	Warning
CpqSasPhyDrvStatus:failed	IM_5022_5	—	Fatal
CpqSasPhyDrvStatus:missingWasOk	IM_5022_6	—	Warning
CpqSasPhyDrvStatus: missingWasPredictiveFailure	IM_5022_7	—	Warning
CpqSasPhyDrvStatus: missingWasOffline	IM_5022_8	—	Warning
CpqSasPhyDrvStatus:missingWasFailed	IM_5022_9	—	Critical
cpqSasLogDrvStatusChange (5023)	—	This event occurs when the status of a SAS or SATA logical drive changes.	—
CpqSasLogDrvStatus:ok	IM_5023_2	—	Harmless
CpqSasLogDrvStatus:degraded	IM_5023_3	—	Warning
CpqSasLogDrvStatus:rebuilding	IM_5023_4	—	Warning
CpqSasLogDrvStatus:failed	IM_5023_5	—	Fatal
CpqSasLogDrvStatus:offline	IM_5023_6	—	Fatal
CpqSas2TapeDrvStatusChange (5025)	—	This event occurs when the status of a SAS tape drive changes.	—
cpqSasTapeDrvStatus: ok	IM_5025_2	—	Harmless
cpqSasTapeDrvStatus: offline	IM_5025_3	—	Fatal

Server health features (CPQHLTH.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqHe3CorrectableMemoryLogDisabled (6016)	—	This event occurs when the frequency of correctable memory errors is so high that the error tracking logic has been temporarily disabled.	—
cpqHeCorrMemLogStatus:notSupported	IM_6016_2	—	Warning
cpqHeCorrMemLogStatus:disabled	IM_6016_3	—	Critical
cpqHeCorrMemLogStatus:enabled	IM_6016_4	—	Harmless
cpqHe3ThermalTempFailed (6017)	IM_6017	This event occurs when the temperature status has been set to failed.	Fatal
cpqHe3ThermalTempDegraded (6018)	—	This event occurs when the server's temperature is outside of the normal operating range.	—
cpqHeThermalDegradedAction:continue	IM_6018_2	—	Critical
cpqHeThermalDegradedAction:shutdown	IM_6018_3	—	Critical
cpqHe3ThermalTempOk (6019)	IM_6019	This event occurs when the server's temperature has returned to the normal operating range.	Harmless
cpqHe3ThermalSystemFanFailed (6020)	—	This event occurs when a required system fan is not operating normally.	—
cpqHeThermalDegradedAction:continue	IM_6020_2	—	Critical
cpqHeThermalDegradedAction:shutdown	IM_6020_3	—	Critical
cpqHe3ThermalSystemFanDegraded (6021)	IM_6021	This event occurs when an optional system fan is not operating normally.	Critical
cpqHe3ThermalSystemFanOk (6022)	IM_6022	This event occurs when any of the previously non-operational system fans have returned to normal operation.	Harmless
cpqHe3ThermalCpuFanFailed (6023)	IM_6023	This event occurs when a processor fan is not operating normally.	Fatal
cpqHe3ThermalCpuFanOk (6024)	IM_6024	This event occurs when any of the previously non-operational processor fans have returned to normal operation.	Harmless
cpqHe3AsrConfirmation (6025)	IM_6025	This event occurs when the server has previously been shutdown by the Automatic Server Recovery (ASR) feature and has just become operational again.	Warning

Tivoli types	TEC class	Description	TEC priority
cpqHe3ThermalConfirmation (6026)	IM_6026	This event occurs when the server has previously been shutdown because a thermal anomaly on the server and has just become operational again.	Warning
cpqHe3PostError (6027)	IM_6027	This event occurs when Power On Self-Test (POST) errors occurred during the server restart process.	Warning
cpqHe3FltTolPwrSupplyDegraded (6028)	IM_6028	This event occurs when the fault tolerant power supply subsystem condition has been set to degraded.	Critical
cpqHe3CorrMemReplaceMemModule (6029)	IM_6029	This event occurs when a correctable memory log entry indicates a memory module must be replaced.	Warning
cpqHe3FltTolPowerRedundancyLost (6032)	IM_6032	This event occurs when the fault tolerant power supplies have lost redundancy for the specified chassis.	Critical
cpqHe3FltTolPowerSupplyInserted (6033)	IM_6033	This event occurs when a fault tolerant power supply has been inserted into the specified chassis and bay location.	Harmless
cpqHe3FltTolPowerSupplyRemoved (6034)	IM_6034	This event occurs when a fault tolerant power supply has been removed from the specified chassis and bay location.	Warning
cpqHe3FltTolFanDegraded (6035)	IM_6035	This event occurs when the fault tolerant fan condition has been set to degraded for the specified chassis and fan.	Critical
cpqHe3FltTolFanFailed (6036)	IM_6036	This event occurs when the fault tolerant fan condition has been set to failed for the specified chassis and fan.	Critical
cpqHe3FltTolFanRedundancyLost (6037)	IM_6037	This event occurs when the fault tolerant fans have lost redundancy for the specified chassis.	Critical
cpqHe3FltTolFanInserted (6038)	IM_6038	This event occurs when a fault tolerant fan has been inserted into the specified chassis and fan location.	Harmless
cpqHe3FltTolFanRemoved (6039)	IM_6039	This event occurs when a fault tolerant fan has been removed from the specified chassis and fan location.	Critical
cpqHe3TemperatureFailed (6040)	IM_6040	This event occurs when the temperature status has been set to failed in the specified chassis and location.	Fatal
cpqHe3TemperatureDegraded (6041)	—	This event occurs when the temperature status has been set to degraded in the specified chassis and location.	—
cpqHeThermalDegradedAction:continue	IM_6041_2	—	Critical
cpqHeThermalDegradedAction:shutdown	IM_6041_3	—	Critical

Tivoli types	TEC class	Description	TEC priority
cpqHe3TemperatureOk (6042)	IM_6042	This event occurs when the temperature status has been set to ok in the specified chassis and location.	Harmless
cpqHe3PowerConverterDegraded (6043)	IM_6043	This event occurs when the DC-DC power converter condition has been set to degraded for the specified chassis, slot and socket.	Critical
cpqHe3PowerConverterFailed (6044)	IM_6044	This event occurs when the DC-DC power converter condition has been set to failed for the specified chassis, slot and socket.	Fatal
cpqHe3PowerConverterRedundancyLost (6045)	IM_6045	This event occurs when the DC-DC power converters have lost redundancy for the specified chassis.	Critical
cpqHe3CacheAccelParityError (6046)	IM_6046	This event occurs when a cache accelerator parity error indicates a cache module must be replaced.	Critical
cpqHeResilientMemOnlineSpareEngaged (6047)	IM_6047	This event occurs when the Advanced Memory Protection subsystem has detected a memory fault and online spare memory has been activated.	Critical
cpqHe4FltTolPowerSupplyOk (6048)	IM_6048	This event occurs when the fault tolerant power supply condition has returned to the OK state for the specified chassis and bay location.	Harmless
cpqHe4FltTolPowerSupplyDegraded (6049)	IM_6049	This event occurs when the fault tolerant power supply condition has been set to degraded for the specified chassis and bay location.	Critical
cpqHe4FltTolPowerSupplyFailed (6050)	IM_6050	This event occurs when the fault tolerant power supply condition has been set to failed for the specified chassis and bay location.	Critical
cpqHeResilientMemMirroredMemoryEngaged (6051)	IM_6051	This event occurs when the Advanced Memory Protection subsystem has detected a memory fault and Mirrored memory has been activated.	Critical
cpqHeResilientAdvancedECCMemoryEngaged (6052)	IM_6052	This event occurs when the Advanced Memory Protection subsystem has detected a memory fault and Advanced ECC has been activated.	Critical
cpqHeResilientMemXorMemoryEngaged (6053)	IM_6053	This event occurs when the Advanced Memory Protection subsystem has detected a memory fault and XOR engine memory has been activated.	Critical
cpqHe3FltTolPowerRedundancyRestored (6054)	IM_6054	This event occurs when the fault tolerant power Supplies have returned to a redundant state for the specified chassis.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqHe3FltTolFanRedundancyRestored (6055)	IM_6055	This event occurs when the fault tolerant fans have returned to a redundant state for the specified chassis.	Harmless
cpqHe4CorrMemReplaceMemModule (6056)	IM_6056	This event occurs when the correctable memory errors have been corrected, but the memory module should be replaced.	Critical
cpqHeResMemBoardRemoved (6057)	IM_6057	This event occurs when an Advanced Memory Protection subsystem board or cartridge has been removed from the system.	Harmless
cpqHeResMemBoardInserted (6058)	IM_6058	This event occurs when an Advanced Memory Protection subsystem board or cartridge has been inserted into the system.	Harmless
cpqHeResMemBoardBusError (6059)	IM_6059	This event occurs when an Advanced Memory Protection subsystem board or cartridge bus error has been detected.	Fatal
cpqHeEventOccurred (6060)	IM_6060	This event occurs when an event has occurred.	Harmless
CpqHeManagementProcInReset (6061)	IM_6061	This event occurs when the management processor is currently being reset.	Warning
CpqHeManagementProcReady (6062)	IM_6062	This event occurs when the management processor has successfully reset and is now available again.	Harmless
CpqHeManagementProcFailedReset (6063)	IM_6063	This event occurs when the management processor was not successfully reset and is not operational.	Fatal

Storage systems information (CPQSTSYS.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqSs3FanStatusChange (8008)	—	This event occurs when the fan status of a storage system changes.	—
CpqSsBoxFanStatus:ok	IM_8008_2	—	Harmless
CpqSsBoxFanStatus:failed	IM_8008_3	—	Critical
CpqSsBoxFanStatus:noFan	IM_8008_4	—	Warning
CpqSsBoxFanStatus:degraded	IM_8008_5	—	Critical
cpqSs3TempFailed (8009)	IM_8009	This event occurs when the temperature status has been set to failed.	Fatal
cpqSs3TempDegraded (8010)	IM_8010	This event occurs when the temperature status has been set to degraded.	Critical
cpqSs3TempOk (8011)	IM_8011	This event occurs when the temperature status has been set to OK.	Harmless
cpqSs3SidePanelInPlace (8012)	IM_8012	This event occurs when the storage system side panel is in place.	Harmless
cpqSs3SidePanelRemoved (8013)	IM_8013	This event occurs when the storage system side panel is removed.	Critical

Tivoli types	TEC class	Description	TEC priority
cpqSs4PwrSupplyDegraded (8015)	—	This event occurs when a storage system power supply status has been set to degraded.	—
CpqSsBoxFltTolPwrSupplyStatus:ok	IM_8015_2	—	Harmless
CpqSsBoxFltTolPwrSupplyStatus:degraded	IM_8015_3	—	Critical
CpqSsBoxFltTolPwrSupplyStatus:failed	IM_8015_4	—	Fatal
CpqSsBoxFltTolPwrSupplyStatus:noFltTolPower	IM_8015_5	—	Warning
cpqSsExPowerSupplyUpsStatusChange (8018)	—	This event occurs when the status of an uninterruptible power supply (UPS) attached to a storage system power supply changes.	—
CpqSsPowerSupplyUpsStatus:noUps	IM_8018_2	—	Warning
CpqSsPowerSupplyUpsStatus:ok	IM_8018_3	—	Harmless
CpqSsPowerSupplyUpsStatus:powerFailed	IM_8018_4	—	Critical
CpqSsPowerSupplyUpsStatus:batteryLow	IM_8018_5	—	Warning
cpqSsExTempSensorStatusChange (8019)	—	This event occurs when the status of a storage system temperature sensor changes.	—
CpqSsTempSensorStatus:ok	IM_8019_2	—	Harmless
CpqSsTempSensorStatus:degraded	IM_8019_3	—	Critical
CpqSsTempSensorStatus:failed	IM_8019_4	—	Fatal
cpqSsEx2FanStatusChange (8020)	—	This event occurs when the fan module status of a storage system changes.	—
CpqSsFanModuleStatus:notInstalled	IM_8020_2	—	Critical
CpqSsFanModuleStatus:ok	IM_8020_3	—	Harmless
CpqSsFanModuleStatus:degraded	IM_8020_4	—	Critical
CpqSsFanModuleStatus:failed	IM_8020_5	—	Fatal
cpqSsEx2PowerSupplyStatusChange (8021)	—	This event occurs when the power supply status of a storage system changes.	—
CpqSsPowerSupplyStatus:notInstalled	IM_8021_2	—	Critical
CpqSsPowerSupplyStatus:ok	IM_8021_3	—	Harmless
CpqSsPowerSupplyStatus:failed	IM_8021_4	—	Fatal
CpqSsPowerSupplyStatus:degraded	IM_8021_5	—	Warning

Tivoli types	TEC class	Description	TEC priority
cpqSsExBackplaneFanStatusChange (8022)	—	This event occurs when the fan status of a storage system changes.	—
CpqSsBackplaneFanStatus:notInstalled	IM_8022_2	—	Warning
CpqSsBackplaneFanStatus:ok	IM_8022_3	—	Harmless
CpqSsBackplaneFanStatus:degraded	IM_8022_4	—	Critical
CpqSsBackplaneFanStatus:failed	IM_8022_5	—	Fatal
CpqSsBackplaneFanStatus:notSupported	IM_8022_6	—	Harmless
CpqSsBackplaneFanStatus:degraded-Fan1Failed	IM_8022_7	—	Critical
CpqSsBackplaneFanStatus:degraded-Fan2Failed	IM_8022_8	—	Critical
cpqSsExBackplaneTempStatusChange (8023)	—	This event occurs when the status of the temperature in a storage system changes.	—
CpqSsBackplaneTempStatus:noTemp	IM_8023_2	—	Warning
CpqSsBackplaneTempStatus:ok	IM_8023_3	—	Harmless
CpqSsBackplaneTempStatus:degraded	IM_8023_4	—	Critical
CpqSsBackplaneTempStatus:failed	IM_8023_5	—	Fatal
pqSsBackplaneTempStatus:notSupported	IM_8023_6	—	Harmless
cpqSsExBackplanePowerSupplyStatusChange (8024)	—	This event occurs when the power supply status of a storage system changes.	—
CpqSsBackplaneFtpsStatus:noFltTolPower	IM_8024_2	—	Warning
CpqSsBackplaneFtpsStatus:ok	IM_8024_3	—	Harmless
CCpqSsBackplaneFtpsStatus:degraded	IM_8024_4	—	Critical
CpqSsBackplaneFtpsStatus:failed	IM_8024_5	—	Fatal
CpqSsBackplaneFtpsStatus:notSupported	IM_8024_6	—	Harmless
CpqSsBackplaneFtpsStatus:noFltTolPower-Bay1Missing	IM_8024_7	—	Warning
CpqSsBackplaneFtpsStatus:noFltTolPower-Bay2Missing	IM_8024_8	—	Warning
cpqSsExRecoveryServerStatusChange (8025)	—	This event occurs when the recovery server option status of a storage system changes.	—
CpqSsChassisRsoStatus:notSupported	IM_8025_2	—	Warning

Tivoli types	TEC class	Description	TEC priority
CpqSsChassisRsoStatus:notConfigured	IM_8025_3	—	Warning
CpqSsChassisRsoStatus:disabled	IM_8025_4	—	Critical
CpqSsChassisRsoStatus:daemonDownDisabled	IM_8025_5	—	Critical
CpqSsChassisRsoStatus:ok	IM_8025_6	—	Harmless
CpqSsChassisRsoStatus:daemonDownActive	IM_8025_7	—	Warning
CpqSsChassisRsoStatus:noSecondary	IM_8025_8	—	Warning
CpqSsChassisRsoStatus:daemonDownNoSecondary	IM_8025_9	—	Critical
CpqSsChassisRsoStatus:linkDown	IM_8025_10	—	Warning
CpqSsChassisRsoStatus:daemonDownLinkDown	IM_8025_11	—	Warning
CpqSsChassisRsoStatus:secondaryRunningAuto	IM_8025_12	—	Warning
CpqSsChassisRsoStatus:secondaryRunningUser	IM_8025_13	—	Critical
CpqSsChassisRsoStatus:evTimeoutError	IM_8025_14	—	Critical
cpqSs5FanStatusChange (8026)	—	This event occurs when the fan status of a storage system changes.	—
CpqSsBoxFanStatus:ok	IM_8026_2	—	Harmless
CpqSsBoxFanStatus:failed	IM_8026_3	—	Critical
CpqSsBoxFanStatus:noFan	IM_8026_4	—	Warning
CpqSsBoxFanStatus:degraded	IM_8026_5	—	Critical
cpqSs5TempStatusChange (8027)	—	This event occurs when the temperature status of a storage system changes.	—
cpqSsBoxTempStatus:ok	IM_8027_2	—	Harmless
cpqSsBoxTempStatus:degraded	IM_8027_3	—	Critical
cpqSsBoxTempStatus:failed	IM_8027_4	—	Fatal
cpqSsBoxTempStatus:noTemp	IM_8027_5	—	Warning
cpqSs5PwrSupplyStatusChange (8028)	—	This event occurs when the power supply status of a storage system changes.	—
CpqSsBoxFltTolPwrSupplyStatus:ok	IM_8028_2	—	Harmless
CpqSsBoxFltTolPwrSupplyStatus:degraded	IM_8028_3	—	Critical
CpqSsBoxFltTolPwrSupplyStatus:failed	IM_8028_4	—	Fatal
CpqSsBoxFltTolPwrSupplyStatus:noFltTolPower	IM_8028_5	—	Warning

Tivoli types	TEC class	Description	TEC priority
cpqSs6FanStatusChange (8029)	—	This event occurs when the fan status of a storage system changes.	—
CpqSsBoxFanStatus:ok	IM_8029_2	—	Harmless
CpqSsBoxFanStatus:failed	IM_8029_3	—	Critical
CpqSsBoxFanStatus:noFan	IM_8029_4	—	Warning
CpqSsBoxFanStatus:degraded	IM_8029_5	—	Critical
cpqSs6TempStatusChange (8030)	—	This event occurs when the temperature status of a storage system changes.	—
cpqSsBoxTempStatus:ok	IM_8030_2	—	Harmless
cpqSsBoxTempStatus:degraded	IM_8030_3	—	Critical
cpqSsBoxTempStatus:failed	IM_8030_4	—	Fatal
cpqSsBoxTempStatus:noTemp	IM_8030_5	—	Warning
cpqSs6PwrSupplyStatusChange (8031)	—	This event occurs when the power supply status of a storage system changes.	—
CpqSsBoxFltTolPwrSupplyStatus:ok	IM_8031_2	—	Harmless
CpqSsBoxFltTolPwrSupplyStatus:degraded	IM_8031_3	—	Critical
CpqSsBoxFltTolPwrSupplyStatus:failed	IM_8031_4	—	Fatal
CpqSsBoxFltTolPwrSupplyStatus:noFltTolPower	IM_8031_5	—	Warning

Remote Insight board information (CPQSM2.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqSm2ServerReset (9001)	IM_9001	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected a server reset.	Warning
cpqSm2ServerPowerOutage (9002)	IM_9002	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected server power failure.	Fatal
cpqSm2UnauthorizedLoginAttempts (9003)	IM_9003	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected unauthorized login attempts.	Warning
cpqSm2BatteryFailed (9004)	IM_9004	This event occurs when the Remote Insight battery has failed and must be replaced.	Critical
cpqSm2SelfTestError (9005)	IM_9005	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected a Remote Insight self test error.	Critical
cpqSm2InterfaceError (9006)	IM_9006	This event occurs when the host OS has detected an error in the Remote Insight/ Integrated Lights-Out interface and the firmware is not responding.	Critical

Tivoli types	TEC class	Description	TEC priority
cpqSm2BatteryDisconnected (9007)	IM_9007	This event occurs when the Remote Insight battery cable has been disconnected.	Critical
cpqSm2KeyboardCableDisconnected (9008)	IM_9008	This event occurs when the Remote Insight keyboard cable has been disconnected.	Critical
cpqSm2MouseCableDisconnected (9009)	IM_9009	This event occurs when the Remote Insight mouse cable has been disconnected.	Critical
cpqSm2ExternalPowerCableDisconnected (9010)	IM_9010	This event occurs when the Remote Insight external power cable has been disconnected.	Critical
cpqSm2LogsFull (9011)	IM_9011	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected the logs are full.	Warning
cpqSm2SecurityOverrideEngaged (9012)	IM_9012	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected the security override jumper has been toggled to the engaged position.	Warning
cpqSm2SecurityOverrideDisengaged (9013)	IM_9013	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected the security override jumper has been toggled to the disengaged position.	Warning
cpqSm2ServerFatalError (9014)	IM_9014	This event occurs when the Remote Insight/ Integrated Lights-Out firmware has detected a server fatal error.	Fatal

Threshold management (CPQTHRSH.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqMeRisingAlarmExtended (10005)	IM_10005	This event occurs when an alarm entry has crossed its rising threshold.	Fatal
cpqMeFallingAlarmExtended (10006)	IM_10006	This event occurs when an alarm entry has crossed its falling threshold.	Fatal
cpqMeCriticalRisingAlarmExtended (10007)	IM_10007	This event occurs when an alarm entry has crossed its Critical rising threshold.	Fatal
cpqMeCriticalFallingAlarmExtended (10008)	IM_10008	This event occurs when an alarm entry has crossed its Critical falling threshold.	Fatal

Host system information (CPQHOST.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqHo2GenericTrap (11003)	IM_11003	This is a generic trap.	Critical
cpqHo2AppErrorTrap (11004)	IM_11004	This event occurs when an application has generated an exception.	Critical

Tivoli types	TEC class	Description	TEC priority
cpqHoProcessEventTrap (11011)	IM_11011	This event occurs when a monitored process has either started or stopped running.	Critical
cpqHoCriticalSoftwareUpdateTrap (11014)	IM_11014	This event occurs when the user has to be notified of a critical software update.	Critical
CpqHoCrashDumpNotEnabledTrap (11015)	IM_11015	This event occurs when the user has to be notified that the Crash Dump is not enabled.	Warning
CpqHoBootPagingFileTooSmallTrap (11016)	IM_11016	This event occurs when the boot paging file or the target volume of the memory dump file is too small.	Warning
cpqHoSWRunningStatusChangeTrap (11017)	—	This event occurs when status of running software has changed.	—
CpqHoSWRunningStatus:normal	IM_11017_2	—	Harmless
CpqHoSWRunningStatus:warning	IM_11017_3	—	Warning
CpqHoSWRunningStatus:minor	IM_11017_4	—	Warning
CpqHoSWRunningStatus:major	IM_11017_5	—	Critical
CpqHoSWRunningStatus:critical	IM_11017_6	—	Fatal
CpqHoSWRunningStatus:disabled	IM_11017_7	—	Fatal

Uninterruptible power supply (CPQUPS.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqUps2LineFailed (12006)	IM_12006	This event occurs when the UPS reports that the AC line power has failed.	Critical
cpqUps2LineOk (12007)	IM_12007	This event occurs when the UPS reports that the AC line power has returned.	Harmless
cpqUps2Shutdown (12008)	IM_12008	This event occurs when the UPS software is initiating a graceful server shutdown.	Critical
cpqUps2Confirmation (12009)	IM_12009	This event occurs when this server has previously been shutdown because a power anomaly and has just become operational again.	Harmless
cpqUps2BatteryLow (12010)	IM_12010	This event occurs when the UPS battery is low and the server will soon lose power.	Critical
cpqUpsOverload (12011)	IM_12011	This event occurs when the UPS has entered an overload condition.	Critical
cpqUpsPendingBatteryFailure (12012)	IM_12012	This event occurs when the UPS battery is about to fail.	Critical
cpqUpsGenericCritical (12013)	IM_12013	This is a generic UPS critical alarm.	Critical
cpqUpsGenericInfo (12014)	IM_12014	This is a generic UPS informational alarm.	Harmless

Recovery server information (CPQRECOV.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqRsPartnerFailed (13001)	IM_13001	This event occurs when the partner server of the Recovery server has failed.	Fatal
cpqRsStandbyCableFailure (13002)	IM_13002	This event occurs when the local serial interconnect is not connected or has failed.	Fatal
cpqRsStandbyFailure (13003)	IM_13003	This event occurs when the standby server has failed or the standby serial interconnect is not connected.	Fatal
cpqRsOnlineCableFailure (13004)	IM_13004	This event occurs when the On-Line Recovery Server serial interconnect has failed.	Critical
cpqRsFailoverFailed (13005)	IM_13005	This event occurs when an attempt to take on the operations of the partner server was attempted and failed.	Fatal

Manageable IDE drives (CPQIDE.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqIdeDriveDegraded (14001)	IM_14001	This event occurs when the IDE drive status has been set to degraded.	Critical
cpqIdeDriveOk (14002)	IM_14002	This event occurs when the IDE drive status has been set to ok.	Harmless
cpqIdeDriveUltraAtaDegraded (14003)	IM_14003	This event occurs when an IDE drive detects an excessive number of Ultra ATA data transmission errors between the hard drive and the processor.	Critical
cpqIdeAtaDiskStatusChange (14004)	—	This event occurs when the status of an ATA disk drive changes.	—
CpqIdeAtaDiskStatus:ok	IM_14004_2	—	Harmless
CpqIdeAtaDiskStatus:smartError	IM_14004_3	—	Critical
CpqIdeAtaDiskStatus:failed	IM_14004_4	—	Fatal
cpqIdeLogicalDriveStatusChange (14005)	—	This event occurs when the status of an IDE logical drive changes.	—
CpqIdeLogicalDriveStatus:ok	IM_14005_2	—	Harmless
CpqIdeLogicalDriveStatus:degraded	IM_14005_3	—	Critical
CpqIdeLogicalDriveStatus:rebuilding	IM_14005_4	—	Warning
CpqIdeLogicalDriveStatus:failed	IM_14005_5	—	Fatal

Cluster systems information (CPQCLUS.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqClusterNodeDegraded (15003)	IM_15003	This event occurs when the condition of a node in the cluster becomes degraded.	Critical
cpqClusterNodeFailed (15004)	IM_15004	This event occurs when the condition of a node in the cluster becomes failed.	Fatal
cpqClusterResourceDegraded (15005)	IM_15005	This event occurs when the condition of a cluster resource becomes degraded.	Critical
cpqClusterResourceFailed (15006)	IM_15006	This event occurs when the condition of a cluster resource becomes failed.	Fatal
cpqClusterNetworkDegraded (15007)	IM_15007	This event occurs when the condition of a cluster network becomes degraded.	Critical
cpqClusterNetworkFailed (15008)	IM_15008	This event occurs when the condition of a cluster network becomes failed.	Fatal

Fibre Channel Array information (CPQFCA.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqFcaSpareStatusChange (16002)	—	This event occurs when the status of an external array spare drive changes.	—
CpqFcaSpareStatusChange:inactive	IM_16002_02	—	Harmless
CpqFcaSpareStatusChange:failed	IM_16002_03	—	Fatal
CpqFcaSpareStatusChange:building	IM_16002_04	—	Warning
CpqFcaSpareStatusChange:active	IM_16002_05	—	Harmless
cpqFcTapeCntlrStatusChange (16008)	—	This event occurs when the status of a Fiber Channel tape controller changes.	—
CpqFcTapeCntlrStatus:ok	IM_16008_02	—	Harmless
CpqFcTapeCntlrStatus:offline	IM_16008_03	—	Critical
cpqFcaCntlrActive (16014)	IM_16014	This event occurs when the backup array controller in a duplexed pair has switched over to the active role.	Harmless
cpqFca2PhyDrvStatusChange (16016)	—	This event occurs when the status of a physical drive changes.	—
CpqFcaPhyDrvStatus:unconfigured	IM_16016_2	—	Warning
CpqFcaPhyDrvStatus:ok	IM_16016_3	—	Harmless
CpqFcaPhyDrvStatus:threshExceeded	IM_16016_4	—	Critical

Tivoli types	TEC class	Description	TEC priority
CpqFcaPhyDrvStatus:predictiveFailure	IM_16016_5	—	Critical
CpqFcaPhyDrvStatus:failed	IM_16016_6	—	Fatal
CpqFcaPhyDrvStatus:unsupported	IM_16016_7	—	Critical
cpqFca2AccelStatusChange (16017)	—	This event occurs when the status of an array accelerator cache board changes.	—
CpqFcaAccelStatus:invalid	IM_16017_2	—	Warning
CpqFcaAccelStatus:enable	IM_16017_3	—	Harmless
CpqFcaAccelStatus:tmpDisabled	IM_16017_4	—	Warning
CpqFcaAccelStatus:permDisabled	IM_16017_5	—	Critical
cpqFca2AccelBadDataTrap (16018)	IM_16018	This event occurs when an array accelerator cache board has lost battery power.	Critical
cpqFca2AccelBatteryFailed (16019)	IM_16019	This event occurs when a battery associated with the array accelerator cache board has failed.	Critical
cpqFca2CntlrStatusChange (16020)	—	This event occurs when the status of an external array controller changes.	—
CpqFcaCntlrStatus:ok	IM_16020_2	—	Harmless
CpqFcaCntlrStatus:failed	IM_16020_3	—	Fatal
CpqFcaCntlrStatus:offline	IM_16020_4	—	Critical
CpqFcaCntlrStatus:redundantPathOffline	IM_16020_5	—	Warning
CpqFcaCntlrStatus:notConnected	IM_16020_6	—	Warning
cpqFca2HostCntlrStatusChange (16021)	—	This event occurs when the status of a Fibre Channel host controller changes.	—
CpqFcaHostCntlrStatus:ok	IM_16021_2	—	Harmless
CpqFcaHostCntlrStatus:failed	IM_16021_3	—	Fatal
CpqFcaHostCntlrStatus:shutdown	IM_16021_4	—	Warning
CpqFcaHostCntlrStatus:loopDegraded	IM_16021_5	—	Critical
CpqFcaHostCntlrStatus:loopFailed	IM_16021_6	—	Fatal
CpqFcaHostCntlrStatus:notConnected	IM_16021_7	—	Warning
cpqExtArrayLogDrvStatusChange (16022)	—	This event occurs when the status of an external array logical drive changes.	—
CpqFcaLogDrvStatus:ok	IM_16022_2	—	Harmless
CpqFcaLogDrvStatus:failed	IM_16022_3	—	Fatal
CpqFcaLogDrvStatus:unconfigured	IM_16022_4	—	Warning

Tivoli types	TEC class	Description	TEC priority
CpqFcaLogDrvStatus:recovering	IM_16022_5	—	Warning
CpqFcaLogDrvStatus:readyForRebuild	IM_16022_6	—	Warning
CpqFcaLogDrvStatus:rebuilding	IM_16022_7	—	Warning
CpqFcaLogDrvStatus:wrongDrive	IM_16022_8	—	Critical
CpqFcaLogDrvStatus:badConnect	IM_16022_9	—	Critical
CpqFcaLogDrvStatus:overheating	IM_16022_10	—	Critical
CpqFcaLogDrvStatus:shutdown	IM_16022_11	—	Critical
CpqFcaLogDrvStatus:expanding	IM_16022_12	—	Warning
CpqFcaLogDrvStatus:notAvailable	IM_16022_13	—	Warning
CpqFcaLogDrvStatus:queuedForExpansion	IM_16022_14	—	Warning
CpqFcaLogDrvStatus:hardError	IM_16022_15	—	Critical
cpqExtTapeDriveStatusChange (16023)	—	This event occurs when the status of an external tape drive changes.	—
CpqFcTapeDriveStatus:ok	IM_16023_2	—	Harmless
CpqFcTapeDriveStatus:degraded	IM_16023_3	—	Critical
CpqFcTapeDriveStatus:failed	IM_16023_4	—	Fatal
CpqFcTapeDriveStatus:offline	IM_16023_5	—	Warning
CpqFcTapeDriveStatus:missingWasOk	IM_16023_6	—	Harmless
CpqFcTapeDriveStatus:missingWasOffline	IM_16023_7	—	Critical
cpqExtTapeDriveCleaningRequired (16024)	IM_16024	This event occurs when a tape drive must have a cleaning tape inserted and run.	Warning
cpqExtTapeDriveCleanTapeReplace (16025)	IM_16025	This event occurs when an autoloader tape unit has a cleaning tape that has been fully used and therefore must be replaced with a new cleaning tape.	Warning
cpqExtTapeLibraryStatusChange (16026)	—	This event occurs when the status of an external tape library changes.	—
CpqFcTapeLibraryStatus:ok	IM_16026_2	—	Harmless
CpqFcTapeLibraryStatus:degraded	IM_16026_3	—	Critical
CpqFcTapeLibraryStatus:failed	IM_16026_4	—	Fatal
CpqFcTapeLibraryStatus:offline	IM_16026_5	—	Warning
cpqExtTapeLibraryDoorStatusChange (16027)	—	This event occurs when the door status of an external tape library changes.	

Tivoli types	TEC class	Description	TEC priority
cpqFcTapeLibraryDoorStatus:notSupported	IM_16027_2	—	Warning
cpqFcTapeLibraryDoorStatus:closed	IM_16027_3	—	Harmless
cpqFcTapeLibraryDoorStatus:open	IM_16027_4	—	Harmless
cpqFca3HostCntlrStatusChange (16028)	—	This event occurs when the status of a Fibre Channel host controller changes.	—
CpqFcaHostCntlrStatus:ok	IM_16028_2	—	Harmless
CpqFcaHostCntlrStatus:failed	IM_16028_3	—	Fatal
CpqFcaHostCntlrStatus:shutdown	IM_16028_4	—	Warning
CpqFcaHostCntlrStatus:loopDegraded	IM_16028_5	—	Critical
CpqFcaHostCntlrStatus:loopFailed	IM_16028_6	—	Fatal
CpqFcaHostCntlrStatus:notConnected	IM_16028_7	—	Warning

Network Interface Card information (CPQNIC.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqNic2ConnectivityRestored (18005)	IM_18005	This event occurs when the physical adapter in a single adapter configuration returns to the OK condition or at least one physical adapter in a logical adapter group returns to the OK condition.	Harmless
cpqNic2ConnectivityLost (18006)	IM_18006	This event occurs when the adapter in a single adapter configuration fails or when the last adapter in a redundant configuration fails.	Fatal
cpqNic2RedundancyIncreased (18007)	IM_18007	This event occurs when a previously failed physical adapter in a connected logical adapter group returns to the OK condition.	Harmless
cpqNic2RedundancyReduced (18008)	IM_18008	This event occurs when a physical adapter in a logical adapter group changes to the Failed condition, but at least one physical adapter remains in the OK condition.	Critical
cpqNicVirusLikeActivityDetected (18009)	IM_18009	This event occurs when the Virus Throttle Filter Driver detects virus-like activity.	Critical
cpqNicVirusLikeActivityStopped (18010)	IM_18010	This event occurs when the Virus Throttle Filter Driver no longer detects virus-like activity.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqNic3ConnectivityRestored (18011)	IM_18011	This event occurs when the physical adapter in a single adapter configuration returns to the OK condition or at least one physical adapter in a logical adapter group returns to the OK condition.	Harmless
cpqNic3ConnectivityLost (18012)	IM_18012	This event occurs when the adapter in a single adapter configuration fails or when the last adapter in a redundant configuration fails.	Fatal
cpqNic3RedundancyIncreased (18013)	IM_18013	This event occurs when a previously failed physical adapter in a connected logical adapter group returns to the OK condition.	Harmless
cpqNic3RedundancyReduced (18014)	IM_18014	This event occurs when a physical adapter in a logical adapter group changes to the Failed condition, but at least one physical adapter remains in the OK condition.	Critical

Operating system management (CPQWINOS.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqOsCpuTimeDegraded (19001)	IM_19001	This event occurs when the Processor Time performance property is set to degraded.	Critical
cpqOsCpuTimeFailed (19002)	IM_19002	This event occurs when the Processor Time performance property is set to critical.	Critical
cpqOsCacheCopyReadHitsDegraded (19003)	IM_19003	This event occurs when the Cache CopyReadHits performance property is set to degraded.	Critical
cpqOsCacheCopyReadHitsFailed (19004)	IM_19004	This event occurs when the Cache CopyReadHits performance property is set to critical.	Critical
cpqOsPageFileUsageDegraded (19005)	IM_19005	This event occurs when the PagingFile Usage performance property is set to degraded.	Critical
cpqOsPageFileUsageFailed (19006)	IM_19006	This event occurs when the PagingFile Usage performance property is set to critical.	Critical
cpqOsLogicalDiskBusyTimeDegraded (19007)	IM_19007	This event occurs when the LogicalDisk BusyTime performance property is set to degraded.	Critical
cpqOsLogicalDiskBusyTimeFailed (19008)	IM_19008	This event occurs when the LogicalDisk BusyTime performance property is set to critical.	Critical

Rack and power management (CPQRPM.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqRPMTrapDeviceConnected (1)	IM_RPM_1	This event occurs when Device is connected.	Harmless
cpqRPMTrapConnectionLost (2)	IM_RPM_2	This event occurs when Connection is Lost.	Fatal
cpqRPMTrapLookupFailed (3)	IM_RPM_3	This event occurs when CRPM failed to find an IP address for the device hostname.	Fatal
cpqRPMTrapConnectionFailed (4)	IM_RPM_4	This event occurs when CRPM failed to connect to a drive.	Fatal
cpqRPMTrapDeviceSettingsChanged (5)	IM_RPM_5	This event occurs when Device settings have been changed by a user.	Warning
cpqRPMTrapCMCTemp1BelowMin(10001)	IM_RPM_10001	This event occurs when a CMC device reports temperature 1 is below minimum threshold.	Critical
cpqRPMTrapCMCTemp1AboveWarn(10002)	IM_RPM_10002	This event occurs when a CMC device reports temperature 1 is above warning threshold.	Warning
cpqRPMTrapCMCTemp1AboveMax(10003)	IM_RPM_10003	This event occurs when a CMC device reports temperature 1 is above maximum threshold.	Critical
cpqRPMTrapCMCTemp1Normal (10004)	IM_RPM_10004	This event occurs when a CMC device reports temperature 1 has returned to normal.	Harmless
cpqRPMTrapCMCTemp2BelowMin(10005)	IM_RPM_10005	This event occurs when a CMC device reports temperature 2 is below minimum threshold.	Critical
cpqRPMTrapCMCTemp2AboveWarn(10006)	IM_RPM_10006	This event occurs when a CMC device reports temperature 2 is above warning threshold.	Warning
cpqRPMTrapCMCTemp2AboveMax(10007)	IM_RPM_10007	This event occurs when a CMC device reports temperature 2 is above maximum threshold.	Critical
cpqRPMTrapCMCTemp2Normal (10008)	IM_RPM_10008	This event occurs when a CMC device reports temperature 2 has returned to normal.	Harmless
CpqRPMTrapCMCVoltUnder(10011)	IM_RPM_10011	This event occurs when a CMC device reports voltage is below minimum threshold.	Critical
CpqRPMTrapCMCVoltOver(10012)	IM_RPM_10012	This event occurs when a CMC device reports voltage is above maximum threshold.	Critical
CpqRPMTrapCMCVoltNormal(10013)	IM_RPM_10013	This event occurs when a CMC device reports voltage has returned to normal.	Harmless
CpqRPMTrapCMCHmdtUnder(10021)	IM_RPM_10021	This event occurs when a CMC device reports humidity is below minimum threshold.	Critical

Tivoli types	TEC class	Description	TEC priority
CpqRPMTrapCMCHmdtOver(10022)	IM_RPM_10022	This event occurs when a CMC device reports humidity is above maximum threshold.	Critical
CpqRPMTrapCMCHmdtNormal(10023)	IM_RPM_10023	This event occurs when a CMC device reports humidity has returned to normal.	Harmless
cpqRPMTrapCMCSmokeDetected(10031)	IM_RPM_10031	This event occurs when a CMC device reports smoke is detected.	Critical
cpqRPMTrapCMCSmokeCleared(10032)	IM_RPM_10032	This event occurs when a CMC device reports smoke is cleared.	Harmless
cpqRPMTrapCMCShockDetected(10041)	IM_RPM_10041	This event occurs when a CMC device reports shock is detected.	Critical
CpqRPMTrapCMCShockCleared(10042)	IM_RPM_10042	This event occurs when a CMC device reports shock is cleared.	Harmless
cpqRPMTrapCMCAux1Alarm(10051)	IM_RPM_10051	This event occurs when a CMC device has entered an alarm condition for auxiliary input 1.	Warning
cpqRPMTrapCMCAux1Cleared(10052)	IM_RPM_10052	This event occurs when a CMC device reports auxiliary input 1 alarm is cleared.	Harmless
cpqRPMTrapCMCAux2Alarm(10053)	IM_RPM_10053	This event occurs when a CMC device has entered an alarm condition for auxiliary input 2.	Warning
cpqRPMTrapCMCAux2Cleared(10054)	IM_RPM_10054	This event occurs when a CMC device reports auxiliary input 2 alarm is cleared.	Harmless
cpqRPMTrapCMCInput1Opened(10101)	IM_RPM_10101	This event occurs when a CMC device reports input 1 has been opened.	Warning
cpqRPMTrapCMCInput1Closed(10102)	IM_RPM_10102	This event occurs when a CMC device reports input 1 has been closed.	Harmless
cpqRPMTrapCMCInput2Opened(10103)	IM_RPM_10103	This event occurs when a CMC device reports input 2 has been opened.	Warning
cpqRPMTrapCMCInput2Closed(10104)	IM_RPM_10104	This event occurs when a CMC device reports input 2 has been closed.	Harmless
cpqRPMTrapCMCInput3Opened(10105)	IM_RPM_10105	This event occurs when a CMC device reports input 3 has been opened.	Warning
cpqRPMTrapCMCInput3Closed(10106)	IM_RPM_10106	This event occurs when a CMC device reports input 3 has been closed.	Harmless
cpqRPMTrapCMCInput4Opened(10107)	IM_RPM_10107	This event occurs when a CMC device reports input 4 has been opened.	Warning
cpqRPMTrapCMCInput4Closed(10108)	IM_RPM_10108	This event occurs when a CMC device reports input 4 has been closed.	Harmless
cpqRPMTrapCMCLockset1Unlocked(10111)	IM_RPM_10111	This event occurs when a CMC device reports lockset 1 has been unlocked.	Harmless
cpqRPMTrapCMCLockset1FailedToLock(10112)	IM_RPM_10112	This event occurs when a CMC device reports lockset 1 has failed to lock.	Critical
cpqRPMTrapCMCLockset1Error(10113)	IM_RPM_10113	This event occurs when a CMC device reports an error with lockset 1.	Critical

Tivoli types	TEC class	Description	TEC priority
cpqRPMTrapCMCLockset1Locked(10114)	IM_RPM_10114	This event occurs when a CMC device reports lockset 1 has been locked.	Harmless
cpqRPMTrapCMCLockset2Unlocked(10116)	IM_RPM_10116	This event occurs when a CMC device reports lockset 2 has been unlocked.	Harmless
cpqRPMTrapCMCLockset2FailedToLock(10117)	IM_RPM_10117	This event occurs when a CMC device reports lockset 2 has failed to lock.	Critical
cpqRPMTrapCMCLockset2Error(10118)	IM_RPM_10118	This event occurs when a CMC device reports an error with lockset 2.	Critical
cpqRPMTrapCMCLockset2Locked(10119)	IM_RPM_10119	This event occurs when a CMC device reports lockset 2 has been locked.	Harmless
cpqRPMTrapCMCLockset1Normal(10134)	IM_RPM_10134	This event occurs when a CMC device reports lockset 1 is normal.	Harmless
cpqRPMTrapCMCLockset2Normal(10135)	IM_RPM_10135	This event occurs when a CMC device reports lockset 2 is normal.	Harmless
cpqRPMTrapUPSInputVoltageBelowMin (20001)	IM_20001	This event occurs when a UPS device is reporting input voltage below minimum threshold.	Critical
cpqRPMTrapUPSInputVoltageAboveMax (20002)	IM_20002	This event occurs when a UPS device is reporting input voltage above maximum threshold.	Critical
cpqRPMTrapUPSInputVoltageNormal (20003)	IM_20003	This event occurs when a UPS device is reporting input voltage is normal.	Harmless
cpqRPMTrapUPSOutputVoltageBelowMin (20011)	IM_20011	This event occurs when a UPS device is reporting output voltage is below minimum threshold.	Warning
cpqRPMTrapUPSOutputVoltageAboveMax (20012)	IM_20012	This event occurs when a UPS device is reporting output voltage above maximum threshold.	Warning
cpqRPMTrapUPSOutputOverload (20014)	IM_20014	This event occurs when a UPS device is reporting an overload condition.	Critical
cpqRPMTrapUPSOutputOverloadCleared (20015)	IM_20015	This event occurs when a UPS device is reporting an overload condition has been cleared.	Harmless
cpqRPMTrapUPSBatteryDepleted (20022)	IM_20022	This event occurs when a UPS device is a depleted battery.	Critical
cpqRPMTrapUPSBatteryLevelNormal (20023)	IM_20023	This event occurs when a UPS device is reporting battery level is normal.	Harmless
cpqRPMTrapUPSOnBypass (20032)	IM_20032	This event occurs when a UPS device is being bypassed.	Warning
cpqRPMTrapUPSTemperatureLow (20101)	IM_20101	This event occurs when a UPS device is reporting temperature below minimum threshold.	Critical
cpqRPMTrapUPSTemperatureHigh (20102)	IM_20102	This event occurs when a UPS device is reporting temperature above maximum threshold.	Critical
cpqRPMTrapUPSTemperatureNormal (20103)	IM_20103	This event occurs when a UPS device is reporting temperature is normal.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqRPMTrapUPSInternalFailure (20111)	IM_20111	This event occurs when a UPS device is reporting a general UPS failure.	Fatal
cpqRPMTrapUPSInternalFailureCleared (20112)	IM_20112	This event occurs when a UPS device is reporting a general UPS failure has been cleared.	Harmless
cpqRPMTrapUPSBatteryFailure (20121)	IM_20121	This event occurs when a UPS device is reporting a battery failure.	Fatal
cpqRPMTrapUPSBatteryFailureCleared (20122)	IM_20122	This event occurs when a UPS device is reporting a battery failure has been cleared.	Harmless
cpqRPMTrapUPSDiagnosticTestFailed (20131)	IM_20131	This event occurs when a UPS device is reporting a diagnostic test failed.	Critical
cpqRPMTrapUPSDiagnosticTestSucceeded (20132)	IM_20132	This event occurs when a UPS device is reporting a diagnostic test succeeded.	Harmless
cpqRPMTrapUPSInputUnderOverFreq (20141)	IM_20141	This event occurs when measured input frequency is outside of either the upper or lower frequency limit specification for normal operation.	Harmless
cpqRPMTrapUPSInputUnderOverFreqCleared (20142)	IM_20142	This event occurs when a UPS device is reporting measured input frequency is normal.	Harmless
cppqRPMtrapUPSStartedOnBattery (20151)	IM_20151	This event occurs when a UPS device has been started while on battery power. AC input power is not present.	Harmless
cppqRPMtrapUPSStartedOnBatteryCleared (20152)	IM_20152	This event occurs when a UPS device is reporting utility power has been restored.	Harmless
cpqRPMTrapUPSBypassNotAvailable (20161)	IM_20161	This event occurs when a UPS device is reporting bypass not available.	Warning
cpqRPMTrapUPSBypassNotAvailableCleared (20162)	IM_20162	This event occurs when a UPS device is reporting bypass not available has been cleared.	Harmless
cpqRPMTrapUPSUtilityFail (20171)	IM_20171	This event occurs when the utility input power is not within predetermined limits.	Critical
cpqRPMTrapUPSUtilityFailCleared (20172)	IM_20172	This event occurs when the utility input power is within predetermined limits.	Harmless
cpqRPMTrapUPSUtilityNotPresent (20181)	IM_20181	This event occurs when the utility input is not present. The detected voltage is zero in this case.	Harmless
cpqRPMTrapUPSUtilityNotPresentCleared (20182)	IM_20182	This event occurs when the utility input is present.	Harmless
cpqRPMTrapUPSBypassManualTurnedOn (20191)	IM_20191	This event occurs when the bypass has been given a manual turn on command.	Warning
cpqRPMTrapUPSBypassManualTurnedOff (20192)	IM_20192	This event occurs when the bypass has been given a manual turn off command.	Harmless
cpqRPMTrapUPSSiteWiringFault (20201)	IM_20201	This event occurs when a UPS device is reporting a fault in input wiring, other than Phase Rotation.	Critical

Tivoli types	TEC class	Description	TEC priority
cpqRPMTrapUPSSiteWiringNormal (20202)	IM_20202	This event occurs when a UPS device is reporting a site wiring fault has been cleared.	Harmless
cpqRPMtrapUPSTemperatureOutOfRange (21007)	IM_21007	This event occurs when a UPS device is reporting temperature is out of range.	Fatal
cpqRPMtrapUPSTemperatureOutOfRangeCleared (21008)	IM_21008	This event occurs when a UPS device is reporting temperature is normal.	Harmless
cpqRPMTrapUPSShutdownPending (21011)	IM_21011	This event occurs when a UPS device is reporting a shutdown pending condition.	Critical
cpqRPMTrapUPSShutdownPendingCleared (21012)	IM_21012	This event occurs when a UPS device is reporting a shutdown pending condition has been cleared.	Harmless
cpqRPMTrapUPSShutdownImminent (21013)	IM_21013	This event occurs when a UPS device is reporting a shutdown imminent condition.	Fatal
cpqRPMTrapUPSShutdownImminentCleared (21014)	IM_21014	This event occurs when a UPS device is reporting a shutdown imminent condition has been cleared.	Harmless
cpqRPMtrapUPSOutputoutofRange (21019)	IM_21019	This event occurs when a UPS device is reporting output voltage is out of range.	Fatal
cpqRPMTrapUPSOutputVoltageNormal (21020)	IM_21020	This event occurs when a UPS device is reporting output voltage is normal.	Harmless
cpqRPMtrapUPSInputOutofRange (21021)	IM_21021	This event occurs when a UPS device is reporting input voltage is out of range.	Critical
cpqRPMtrapUPSInputOutofRangeCleared (21022)	IM_21022	This event occurs when a UPS device is reporting input voltage is normal.	Harmless
cpqRPMTrapUPSLossOfRedundancy (21023)	IM_21023	This event occurs when a UPS device is reporting a loss of redundancy.	Critical
cpqRPMTrapUPSLossOfRedundancyCleared (21024)	IM_21024	This event occurs when a UPS device is reporting a loss of redundancy cleared or configuration has changed from N+1 to Capacity.	Harmless
cpqRPMTrapUPSOnBuck (21029)	IM_21029	This event occurs when a UPS device is reporting an On Buck condition.	Warning
cpqRPMTrapUPSOnBoost (21031)	IM_21031	This event occurs when a UPS device is reporting an On Boost condition.	Warning
cpqRPMTrapUPSManualLoadDumped (21033)	IM_21033	This event occurs when the UPS has been powered off with user interaction.	Critical
cpqRPMTrapUPSManualLoadDumpedCleared (21034)	IM_21034	This event occurs when a UPS device is reporting UPS output has been restored.	Harmless
cpqRPMTrapUPSFanFailure (21035)	IM_21035	This event occurs when a UPS device is reporting a fan failure has occurred.	Fatal
cpqRPMTrapUPSFanFailureCleared (21036)	IM_21036	This event occurs when a UPS device is reporting a fan failure has been cleared.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqRPMTrapUPSEPOInitiated (21037)	IM_21037	This event occurs when a UPS device is reporting an Emergency Power Off (EPO) command has been received to shutdown the UPS immediately with out delay. This command may come from a local control panel or from a remote source.	Fatal
cpqRPMTrapUPSCheckBreaker (21041)	IM_21041	This event occurs when a UPS device is reporting an output Breaker or Relay has failed or may be stuck open or closed with this alarm.	Critical
cpqRPMTrapUPSCheckBreakerCleared (21042)	IM_21042	This event occurs when a UPS device is reporting all Breakers are functioning normally.	Harmless
cpqRPMTrapUPSCabinetDoorOpen (21045)	IM_21045	This event occurs when a UPS device is reporting a cover panel has been removed while utility power is present.	Fatal
cpqRPMTrapUPSCabinetDoorOpenCleared (21046)	IM_21046	This event occurs when a UPS device is reporting a cover panel has been replaced.	Harmless
cpqRPMtrapUPSBypassOnAuto (21047)	IM_21047	This event occurs when a UPS device is operating in auto bypass mode.	Critical
cpqRPMtrapUPSBypassOnAutoCleared (21048)	IM_21048	This event occurs when a UPS device is reporting it is no longer on auto bypass.	Harmless
cpqRPMTrapUPSBatteriesDisconnected (21053)	IM_21053	This event occurs when a UPS device is reporting batteries are not connected to the UPS.	Critical
cpqRPMTrapUPSBatteriesDisconnectedCleared (21054)	IM_21054	This event occurs when a UPS device is reporting all UPS batteries have been reconnected.	Harmless
cpqRPMTrapUPSBatteryLow (21055)	IM_21055	This event occurs when a UPS device is reporting low battery.	Fatal
cpqRPMTrapUPSBatteryLowCleared (21056)	IM_21056	This event occurs when a UPS device is reporting low battery has been cleared.	Harmless
cpqRPMTrapUPSBatteryDischarged (21057)	IM_21057	This event occurs when a UPS device is reporting batteries are completely discharged.	Critical
cpqRPMTrapUPSBatteryDischargedCleared (21058)	IM_21058	This event occurs when a UPS device is reporting all UPS batteries have been charged.	Harmless
cpqRPMtrapUPSBypassONManual (21059)	IM_21059	This event occurs when a UPS device is operating in manual bypass mode.	Critical
cpqRPMtrapUPSBypassOffManual (21060)	IM_21060	This event occurs when a UPS device is reporting it is no longer in manual bypass mode.	Harmless
cpqRPMTrapUPSOnBattery (21063)	IM_21063	This event occurs when a UPS device is reporting on battery condition.	Critical
cpqRPMTrapUPSOnUtilityPower (21064)	IM_21064	This event occurs when a UPS device is reporting on utility power condition.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqRPMTrapUPSDCStartOccurred (29998)	IM_29998	This event occurs when the UPS has been started on battery when AC input power is not present.	Harmless
cpqRPMTrapUPSDCStartOccurredCleared (29999)	IM_29999	This event occurs when the UPS has been started on utility while AC input power is present.	Harmless
CpqRPMTestTrap(50001)	IM_50001	This event occurs when a trap to test SNMP setup is sent.	Harmless
cpqPMTrapCritical (1)	IM_PM_1	This event occurs when a critical alarm has occurred.	Fatal
cpqPMTrapWarning (2)	IM_PM_2	This event occurs when a warning alarm has occurred.	Warning
cpqPMTrapInformation (3)	IM_PM_3	This event occurs when an information alarm has occurred.	Harmless
cpqPMTrapCleared (4)	IM_PM_4	This event occurs when an alarm has cleared.	Harmless

Rack enclosure information (CPQRACK.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqRackNameChanged (22001)	IM_22001	This event occurs when the rack name has changed.	Harmless
cpqRackEnclosureNameChanged (22002)	IM_22002	This event occurs when the enclosure name has changed.	Harmless
cpqRackEnclosureRemoved (22003)	IM_22003	This event occurs when an enclosure has been removed from the rack.	Harmless
cpqRackEnclosureInserted (22004)	IM_22004	This event occurs when an enclosure has been inserted into the rack.	Harmless
cpqRackEnclosureTempFailed (22005)	IM_22005	This event occurs when the enclosure temperature status has been set to failed.	Fatal
cpqRackEnclosureTempDegraded (22006)	IM_22006	This event occurs when the enclosure temperature status has been set to degraded.	Critical
cpqRackEnclosureTempOk (22007)	IM_22007	This event occurs when the enclosure temperature status has been set to ok.	Harmless
cpqRackEnclosureFanFailed (22008)	IM_22008	This event occurs when the enclosure fan status has been set to failed.	Fatal
cpqRackEnclosureFanDegraded (22009)	IM_22009	This event occurs when the enclosure fan status has been set to degraded.	Critical
cpqRackEnclosureFanOk (22010)	IM_22010	This event occurs when the enclosure fan status has been set to ok.	Harmless
cpqRackEnclosureFanRemoved (22011)	IM_22011	This event occurs when the enclosure fan has been removed.	Warning
cpqRackEnclosureFanInserted (22012)	IM_22012	This event occurs when the enclosure fan has been inserted.	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqRackPowerSupplyFailed (22013)	IM_22013	This event occurs when the power supply status has been set to failed.	Fatal
cpqRackPowerSupplyDegraded (22014)	IM_22014	This event occurs when the power supply status has been set to degraded.	Critical
cpqRackPowerSupplyOk (22015)	IM_22015	This event occurs when the power supply status has been set to ok.	Harmless
cpqRackPowerSupplyRemoved (22016)	IM_22016	This event occurs when the power supply has been removed	Warning
cpqRackPowerSupplyInserted (22017)	IM_22017	This event occurs when the power supply has been inserted.	Harmless
cpqRackPowerSubsystemNotRedundant (22018)	IM_22018	This event occurs when the rack power subsystem is no longer in a redundant state.	Critical
cpqRackPowerSubsystemLineVoltageProblem (22019)	—	This event occurs when the rack power supply detected an input line voltage problem.	—
CpqRackPowerSupplyInputLineStatus:noError	IM_22019_1	—	Harmless
CpqRackPowerSupplyInputLineStatus:lineOverVoltage	IM_22019_2	—	Critical
CpqRackPowerSupplyInputLineStatus:lineUnderVoltage	IM_22019_3	—	Critical
CpqRackPowerSupplyInputLineStatus:lineHit	IM_22019_4	—	Critical
CpqRackPowerSupplyInputLineStatus:brownout	IM_22019_5	—	Critical
CpqRackPowerSupplyInputLineStatus:linePowerLoss	IM_22019_6	—	Fatal
cpqRackPowerSubsystemOverloadCondition (22020)	IM_22020	This event occurs when the rack power subsystem overload condition.	Critical
cpqRackPowerShedAutoShutdown (22021)	IM_22021	This event occurs when the server blade was shutdown because a lack of power.	Fatal
cpqRackServerPowerOnFailedNotRedundant (22022)	IM_22022	This event occurs when there is not enough power to power on the server blade and maintain redundancy for the other blades in the enclosure.	Critical
cpqRackServerPowerOnFailedNotEnoughPower (22023)	IM_22023	This event occurs when there is not enough power to power on the server blade.	Fatal
cpqRackServerPowerOnFailedEnclosureNotFound (22024)	IM_22024	This event occurs when there is not enough power to power on the server blade (server enclosure microcontroller was not found).	Fatal
cpqRackServerPowerOnFailedPowerChassisNotFound (22025)	IM_22025	This event occurs when there is not enough power to power on the server blade (power enclosure microcontroller was not found).	Fatal

Tivoli types	TEC class	Description	TEC priority
cpqRackServerPowerOnManualOverride (22026)	IM_22026	This event occurs when the server blade was powered on by a manual override.	Critical
cpqRackFuseOpen (22027)	IM_22027	This event occurs when the fuse has been tripped.	Critical
cpqRackServerBladeRemoved (22028)	IM_22028	This event occurs when the server blade has been removed from the enclosure.	Harmless
cpqRackServerBladeInserted (22029)	IM_22029	This event occurs when the server blade has been inserted into the enclosure.	Harmless
cpqRackPowerChassisNotLoadBalanced (22030)	IM_22030	This event occurs when the power subsystem is out of balance for this power enclosure.	Critical
cpqRackPowerChassisDcPowerProblem (22031)	IM_22031	This event occurs when there is a power subsystem DC power problem for this power enclosure.	Critical
cpqRackPowerChassisAcFacilityPowerExceeded (22032)	IM_22032	This event occurs when the Power subsystem AC facility input power exceeded for this power enclosure.	Critical
cpqRackPowerUnknownPowerConsumption (22033)	IM_22033	This event occurs when there is an unknown power consumer drawing power.	Critical
cpqRackPowerChassisLoadBalancingWireMissing (22034)	IM_22034	This event occurs when the power subsystem load balancing wire is missing.	Critical
cpqRackPowerChassisTooManyPowerChassis (22035)	IM_22035	This event occurs when the maximum number of power enclosures has been exceeded.	Critical
cpqRackPowerChassisConfigError (22036)	IM_22036	This event occurs when the power subsystem has been improperly configured.	Critical
cpqRackEnclosureManagerDegraded (22037)	IM_22037	This event occurs when the Onboard Administrator status has been set to degraded.	Critical
cpqRackEnclosureManagerOk (22038)	IM_22038	This event occurs when the Onboard Administrator status has been set to OK.	Harmless
cpqRackEnclosureManagerRemoved (22039)	IM_22039	This event occurs when the Onboard Administrator has been removed.	Warning
cpqRackEnclosureManagerInserted (22040)	IM_22040	This event occurs when the Onboard Administrator has been inserted.	Harmless
cpqRackManagerPrimaryRole (22041)	IM_22041	This event occurs when the Onboard Administrator has taken the role of primary.	Critical
cpqRackServerBladeEKeyingFailed (22042)	IM_22042	This event occurs when the server blade e-keying has failed.	Critical
cpqRackServerBladeEKeyingOK (22043)	IM_22043	This event occurs when the server blade e-keying is OK.	Harmless
cpqRackNetConnectorRemoved (22044)	IM_22044	This event occurs when the interconnect has been removed from the enclosure.	Critical

Tivoli types	TEC class	Description	TEC priority
cpqRackNetConnectorInserted (22045)	IM_22045	This event occurs when the interconnect has been inserted into the enclosure.	Critical
cpqRackNetConnectorFailed (22046)	IM_22046	This event occurs when the interconnect status has been set to failed.	Fatal
cpqRackNetConnectorDegraded (22047)	IM_22047	This event occurs when the interconnect status has been set to degraded.	Critical
cpqRackNetConnectorOk (22048)	IM_22048	This event occurs when the interconnect status has been set to OK.	Harmless
cpqRackServerBladeToLowPower (22049)	IM_22049	This event occurs when the server blade is requested to low power.	Harmless
cpqRackServerBladeRemoved2 (22050)	IM_22050	This event occurs when the server blade has been removed from the enclosure.	Harmless
cpqRackServerBladeInserted2 (22051)	IM_22051	This event occurs when the server blade has been inserted into the enclosure.	Harmless
cpqRackServerBladeStatusRepaired (22052)	IM_22052	This event occurs when the server blade has been repaired.	Harmless
cpqRackServerBladeStatusDegraded (22053)	IM_22053	This event occurs when the server blade status has been set to degraded.	Critical
cpqRackServerBladeStatusCritical (22054)	IM_22054	This event occurs when the server blade status has been set to critical.	Fatal
cpqRackServerBladeGrpCapTimeout(22055)	IM_22055	This event occurs when the server blade does not respond to requests from the enclosure group capper.	Fatal

Console management controller (CPQCMC.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqCmcalarmTemp1 (153001)	—	This event occurs when the temperature at rack sensor 1 is outside the specified threshold.	—
CpqCmcStatusTemp1: normal	IM_153001_2	—	Harmless
CpqCmcStatusTemp1:warning	IM_153001_3	—	Warning
CpqCmcStatusTemp1:overMax	IM_153001_4	—	Critical
CpqCmcStatusTemp1:underMin	IM_153001_5	—	Critical
CpqCmcStatusTemp1:noSensor	IM_153001_6	—	Critical
CpqCmcStatusTemp1:error	IM_153001_7	—	Fatal
cpqCmcalarmTemp2 (153002)	—	This event occurs when the temperature at rack sensor 2 is outside the specified threshold.	—

Tivoli types	TEC class	Description	TEC priority
CpqCmcStatusTemp2:normal	IM_153002_2	—	Harmless
CpqCmcStatusTemp2:warning	IM_153002_3	—	Warning
CpqCmcStatusTemp2:overMax	IM_153002_4	—	Critical
CpqCmcStatusTemp2:underMin	IM_153002_5	—	Critical
CpqCmcStatusTemp2:noSensor	IM_153002_6	—	Critical
CpqCmcStatusTemp2:error	IM_153002_7	—	Fatal
cpqCmcalarmFan1 (153003)	—	This event occurs when the state of Fan 1 changes.	—
cpqCmcStatusFan1:autoOff	IM_153003_2	—	Harmless
cpqCmcStatusFan1:autoOn	IM_153003_3	—	Harmless
cpqCmcStatusFan1:manualOff	IM_153003_4	—	Harmless
cpqCmcStatusFan1:manualOn	IM_153003_5	—	Harmless
cpqCmcStatusFan1:smokeOff	IM_153003_6	—	Critical
cpqCmcStatusFan1:doorOff	IM_153003_7	—	Warning
cpqCmcStatusFan1:noFan	IM_153003_8	—	Critical
cpqCmcStatusFan1:error	IM_153003_9	—	Fatal
cpqCmcalarmFan2 (153004)	—	This event occurs when the state of Fan 2 changes.	—
cpqCmcStatusFan2:autoOff	IM_153004_2	—	Harmless
cpqCmcStatusFan2:autoOn	IM_153004_3	—	Harmless
cpqCmcStatusFan2:manualOff	IM_153004_4	—	Harmless
cpqCmcStatusFan2:manualOn	IM_153004_5	—	Harmless
cpqCmcStatusFan2:smokeOff	IM_153004_6	—	Critical
cpqCmcStatusFan2:doorOff	IM_153004_7	—	Warning

Tivoli types	TEC class	Description	TEC priority
cpqCmcStatusFan2:noFan	IM_153004_8	—	Critical
cpqCmcStatusFan2:error	IM_153004_9	—	Fatal
cpqCmcalarmVoltage (153005)	—	This event occurs when the AC voltage of the rack is outside the specified threshold	—
cpqCmcStatusVoltage:normal	IM_153005_2	—	Harmless
cpqCmcStatusVoltage:overMax	IM_153005_3	—	Critical
cpqCmcStatusVoltage:underMin	IM_153005_4	—	Critical
cpqCmcStatusVoltage:noVoltage	IM_153005_5	—	Warning
cpqCmcalarmHumidity (153006)	—	This event occurs when the humidity of the rack is outside the specified threshold.	—
CpqCmcStatusHumidity:normal	IM_153006_2	—	Harmless
CpqCmcStatusHumidity:overMax	IM_153006_3	—	Critical
CpqCmcStatusHumidity:underMin	IM_153006_4	—	Critical
CpqCmcStatusHumidity:noSensor	IM_153006_5	—	Warning
CpqCmcStatusHumidity:error	IM_153006_6	—	Fatal
cpqCmcalarmInput1 (153007)	—	This event occurs when the door or side panel of the rack has been opened (access point #1).	——
cpqCmcStatusInput1:closed	IM_153007_2	—	Harmless
cpqCmcStatusInput1:open	IM_153007_3	—	Warning
cpqCmcStatusInput1:noSensor	IM_153007_4	—	Warning
cpqCmcalarmInput2 (153008)	—	This event occurs when the door or side panel of the rack has been opened (access point #2).	—
cpqCmcStatusInput2:closed	IM_153008_2	—	Harmless
cpqCmcStatusInput2:open	IM_153008_3	—	Warning
cpqCmcStatusInput2:noSensor	IM_153008_4	—	Warning

Tivoli types	TEC class	Description	TEC priority
cpqCmcalarmInput3 (153009)	—	This event occurs when the door or side panel of the rack has been opened (access point #3).	—
cpqCmcStatusInput3:closed	IM_153009_2	—	Harmless
cpqCmcStatusInput3:open	IM_153009_3	—	Warning
cpqCmcStatusInput3:noSensor	IM_153009_4	—	Warning
cpqCmcalarmInput4 (153010)	—	This event occurs when the door or side panel of the rack has been opened (access point #4).	—
cpqCmcStatusInput4:closed	IM_153010_2	—	Harmless
cpqCmcStatusInput4:open	IM_153010_3	—	Warning
cpqCmcStatusInput4:noSensor	IM_153010_4	—	Warning
cpqCmcalarmLock1 (153011)	—	This event occurs when there is a rack door lock #1 alarm.	—
CpqCmcStatusLock1Lock:locked	IM_153011_2	—	Harmless
CpqCmcStatusLock1Lock:unlockedAuto	IM_153011_3	—	Warning
CpqCmcStatusLock1Lock:unlockedTime	IM_153011_4	—	Warning
CpqCmcStatusLock1Lock:unlockedSmoke	IM_153011_5	—	Critical
CpqCmcStatusLock1Lock:unlockedKey	IM_153011_6	—	Harmless
CpqCmcStatusLock1Lock:unlockedPwrFail	IM_153011_7	—	Critical
CpqCmcStatusLock1Lock:unlockedBattLow	IM_153011_8	—	Critical
CpqCmcStatusLock1Lock:unlockedNetFail	IM_153011_9	—	Critical
CpqCmcStatusLock1Lock:unlockedConnFail	IM_153011_10	—	Critical
CpqCmcStatusLock1Lock:readyToLock	IM_153011_11	—	Harmless
CpqCmcStatusLock1Lock:alarm	IM_153011_12	—	Warning
CpqCmcStatusLock1Lock:configError	IM_153011_13	—	Warning
CpqCmcStatusLock1Lock:notAvail	IM_153011_14	—	Warning

Tivoli types	TEC class	Description	TEC priority
cpqCmcalarmLock2 (153012)	—	This event occurs when there is a rack door lock #2 alarm.	—
CpqCmcStatusLock2Lock:locked	IM_153012_2	—	Harmless
CpqCmcStatusLock2Lock:unlockedAuto	IM_153012_3	—	Warning
CpqCmcStatusLock2Lock:unlockedTime	IM_153012_4	—	Warning
CpqCmcStatusLock2Lock:unlockedSmoke	IM_153012_5	—	Critical
CpqCmcStatusLock2Lock:unlockedKey	IM_153012_6	—	Harmless
CpqCmcStatusLock2Lock:unlockedPwrFail	IM_153012_7	—	Critical
CpqCmcStatusLock2Lock:unlockedBattLow	IM_153012_8	—	Critical
CpqCmcStatusLock2Lock:unlockedNetFail	IM_153012_9	—	Critical
CpqCmcStatusLock2Lock:unlockedConnFail	IM_153012_10	—	Critical
CpqCmcStatusLock2Lock:readyToLock	IM_153012_11	—	Harmless
CpqCmcStatusLock2Lock:alarm	IM_153012_12	—	Warning
CpqCmcStatusLock2Lock:configError	IM_153012_13	—	Warning
CpqCmcStatusLock2Lock:notAvail	IM_153012_14	—	Warning
cpqCmcalarmSmoke (153013)	—	This event occurs when the rack smoke detector has detected smoke.	—
CpqCmcStatusSmoke:cleared	IM_153013_2	—	Harmless
CpqCmcStatusSmoke:present	IM_153013_3	—	Critical
CpqCmcStatusSmoke:noSensor	IM_153013_4	—	Warning
cpqCmcalarmShock (153014)	—	This event occurs when the rack shock detector has detected a vibration to the rack.	—
CpqCmcStatusShock:cleared	IM_153014_2	—	Harmless
CpqCmcStatusShock:present	IM_153014_3	—	Critical
CpqCmcStatusShock:noSensor	IM_153014_4	—	Warning

Tivoli types	TEC class	Description	TEC priority
cpqCmcalarmAux1 (153015)	—	This event occurs when the rack auxiliary alarm input #1 has been triggered.	—
CpqCmcStatusAux1:ok	IM_153015_2	—	Harmless
CpqCmcStatusAux1:alarm	IM_153015_3	—	Critical
CpqCmcStatusAux1:noSensor	IM_153015_4	—	Warning
cpqCmcalarmAux2 (153016)	—	This event occurs when the rack auxiliary alarm input #2 has been triggered.	—
CpqCmcStatusAux2:ok	IM_153016_2	—	Harmless
CpqCmcStatusAux2:alarm	IM_153016_3	—	Critical
CpqCmcStatusAux2:noSensor	IM_153016_4	—	Warning
cpqCmcalarm1 (153017)	—	This event occurs when there is Alarm 1, set from Network management.	—
CpqCmcStatusAlarm1:ok	IM_153017_2	—	Harmless
CpqCmcStatusAlarm1:alarm	IM_153017_3	—	Critical
cpqCmcalarm2 (153018)	—	This event occurs when there is Alarm 2, set from Network management.	—
CpqCmcStatusAlarm2:ok	IM_153018_2	—	Harmless
CpqCmcStatusAlarm2:alarm	IM_153018_3	—	Critical
cpqCmcalarmLock1Dev (153019)	—	This event occurs when the rack door locking device #1 has failed.	
CpqCmcStatusLock1Dev:ok	IM_153019_2	—	Harmless
CpqCmcStatusLock1Dev:powerFail	IM_153019_3	—	Critical
CpqCmcStatusLock1Dev:lowBattery	IM_153019_4	—	Warning
CpqCmcStatusLock1Dev:replaceBatt	IM_153019_5	—	Critical
CpqCmcStatusLock1Dev:missingBatt	IM_153019_6	—	Warning
CpqCmcStatusLock1Dev:noConnect	IM_153019_7	—	Warning
CpqCmcStatusLock1Dev:notAvail	IM_153019_8	—	Warning

Tivoli types	TEC class	Description	TEC priority
cpqCmcalarmLock2Dev (153020)	—	This event occurs when the rack door locking device #2 has failed.	—
CpqCmcStatusLock2Dev:ok	IM_153020_2	—	Harmless
CpqCmcStatusLock2Dev:powerFail	IM_153020_3	—	Critical
CpqCmcStatusLock2Dev:lowBattery	IM_153020_4	—	Warning
CpqCmcStatusLock2Dev:replaceBatt	IM_153020_5	—	Critical
CpqCmcStatusLock2Dev:missingBatt	IM_153020_6	—	Warning
CpqCmcStatusLock2Dev:noConnect	IM_153020_7	—	Warning
CpqCmcStatusLock2Dev:notAvail	IM_153020_8	—	Warning
cpqCmcSetupChanged (153100)	IM_153100	This event occurs when the setup of console management controller has changed.	Harmless

Switch Traps (CIMTRAPS.MIB)

Tivoli types	TEC class	Description	TEC priority
switchFirmwareTransferred(161001)	IM_161001	This event occurs when the firmware image successfully transferred.	Harmless
switchConfigFileTransferred (161002)	IM_161002	This event occurs when the configuration file successfully transferred.	Harmless
switchTFTPTransferSucceeded (161003)	IM_161003	This event occurs when the TFTP transfer completed successfully.	Harmless
switchTFTPTransferFailed (161004)	IM_161004	This event occurs when the switch has failed a TFTP transfer.	Warning
switchFileInvalid (161005)	IM_161005	This event occurs when an invalid firmware or configuration image is downloaded.	Warning
switchFanFailed (161006)	IM_161006	This event occurs when the condition of switch fan has failed.	Fatal
switchFanOk (161007)	IM_161007	This event occurs when switch fan has returned to normal operation.	Harmless
switchTempSensorDegraded (161008)	IM_161008	This event occurs when the switch temperature sensor indicates high temperature.	Critical
switchTempSensorFailed (161009)	IM_161009	This event occurs when the switch temperature sensor indicates an over temperature.	Fatal
switchTempSensorOk (161010)	IM_161010	This event occurs when the switch temperature sensor indicates normal temperature.	Harmless

Tivoli types	TEC class	Description	TEC priority
switchPostSuccess (161011)	IM_161011	This event occurs when the switch has successfully completed POST.	Warning
switchLoginFailure (161012)	IM_161012	This event occurs when the switch has rejected login attempt.	Warning
switchLocationChange (161013)	IM_161013	This event occurs when the switch location has changed; trap will be sent on next boot.	Harmless
switchCubeTypeChange (161014)	IM_161014	This event occurs when the cube type is changed by customer since last boot.	Harmless
switchSNTPServiceUnavailable (161015)	IM_161015	This event occurs when the SNTP server was configured, but no SNTP servers were found.	Warning

Service Incident Information (CPQSERVICE.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqServiceInformation (164001)	—	This event occurs whenever a service incident is logged or updated.	—
cpqServiceIncidentStatus:intransit	IM_164001_2	—	Warning
cpqServiceIncidentStatus:delivered	IM_164001_3	—	Harmless
cpqServiceIncidentStatus:undelivered	IM_164001_4	—	Critical
cpqServiceIncidentStatus:assigned	IM_164001_5	—	Harmless
cpqServiceIncidentStatus:closed	IM_164001_6	—	Harmless
cpqServiceIncidentStatus:submitted_to_ISEE	IM_164001_7	—	Harmless
cpqService2Information (164002)	—	This event occurs whenever a service incident is logged or updated.	—
cpqServiceIncidentStatus:intransit	IM_164002_2	—	Warning
cpqServiceIncidentStatus:delivered	IM_164002_3	—	Harmless
cpqServiceIncidentStatus:undelivered	IM_164002_4	—	Critical
cpqServiceIncidentStatus:assigned	IM_164002_5	—	Harmless
cpqServiceIncidentStatus:closed	IM_164002_6	—	Harmless
cpqServiceIncidentStatus:submitted_to_ISEE	IM_164002_7	—	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqService3Information (164003)	—	This event occurs whenever a service incident is logged or updated.	—
cpqServiceIncidentStatus:intransit	IM_164003_2	—	Warning
cpqServiceIncidentStatus:delivered	IM_164003_3	—	Harmless
cpqServiceIncidentStatus:undelivered	IM_164003_4	—	Critical
cpqServiceIncidentStatus:assigned	IM_164003_5	—	Harmless
cpqServiceIncidentStatus:closed	IM_164003_6	—	Harmless
cpqServiceIncidentStatus:submitted_to_ISEE	IM_164003_7	—	Harmless

Power Device SNMP Management Card (CPQPOWER.MIB)

Tivoli types	TEC class	Description	TEC priority
trapCritical (Pwr_1)	IM_Pwr_1	This event occurs when a critical alarm has occurred.	Fatal
trapWarning (Pwr_2)	IM_Pwr_2	This event occurs when a warning alarm has occurred.	Warning
trapInformation (Pwr_3)	IM_Pwr_3	This event occurs when an informational alarm has occurred.	Harmless
trapCleared (Pwr_4)	IM_Pwr_4	This event occurs when an alarm has been cleared.	Harmless
trapTest (Pwr_5)	IM_Pwr_5	This event occurs when a test trap is sent to a trap receiver to check proper reception of traps.	Harmless
deviceTrapInitialization (Pwr_6)	IM_Pwr_6	This event occurs when a power device is initialized.	Harmless

StorageWorks Enterprise Array Manager (HS_AGENT.MIB)

Tivoli types	TEC class	Description	TEC priority
diskFailureTrap (1)	IM_Steam_1	This event occurs when a disk drive has failed.	Critical
diskInformationTrap (2)	IM_Steam_2	This event occurs when a disk drive has recovered.	Harmless
powerSupplyFailureTrap (3)	IM_Steam_3	This event occurs when the power supply in the specified location has failed.	Critical
powerSupplyInformationTrap (4)	IM_Steam_4	This event occurs when the power supply in the specified location has gone from bad to good.	Harmless

Tivoli types	TEC class	Description	TEC priority
fanFailureTrap (5)	IM_Steam_5	This event occurs when the fan in the specified location has failed.	Critical
fanInformationTrap (6)	IM_Steam_6	This event occurs when the fan in the specified location has recovered.	Harmless
cacheBatteryFailureTrap (7)	IM_Steam_7	This event occurs when the cache battery in specified location has failed.	Critical
cacheBatteryLowTrap (8)	IM_Steam_8	This event occurs when the cache battery in specified location has LOW state.	Warning
cacheBatteryInformationTrap (9)	IM_Steam_9	This event occurs when the cache battery in specified location has good state.	Harmless
temperatureOverThresholdTrap (10)	IM_Steam_10	This event occurs when the temperature sensor in the specified location has exceeded WARNING threshold limit.	Critical
temperatureInformationTrap (11)	IM_Steam_11	This event occurs when the temperature sensor in the specified location indicates below WARNING threshold limit.	Harmless
communicationFailureTrap (12)	IM_Steam_12	This event occurs when communication with the subsystem has failed.	Critical
communicationInformationTrap (13)	IM_Steam_13	This event occurs when communication with the subsystem has recovered.	Harmless
controllerFailureTrap (14)	IM_Steam_14	This event occurs when the secondary controller in the subsystem has failed.	Critical
controllerInformationTrap (15)	IM_Steam_15	This event occurs when the secondary controller in the subsystem has recovered.	Harmless
lunFailureTrap (16)	IM_Steam_16	This event occurs when the LUN has failed and is off-line.	Critical
lunReconstructTrap (17)	IM_Steam_17	This event occurs when the LUN has started the reconstruction process but is available for normal use.	Warning
lunReducedTrap (18)	IM_Steam_18	This event occurs when A LUN has become degraded because a member disk device failure.	Critical
lunInformationTrap (19)	IM_Steam_19	This event occurs when A LUN has become optimal because a successful completion of the reconstruction process.	Harmless
externalInputFailureTrap (20)	IM_Steam_20	This event occurs when the user-defined external input to the EMU indicates a failure.	Critical
externalInputInformationTrap (21)	IM_Steam_21	This event occurs when the user-defined external input to the EMU indicates a recovery.	Harmless
cacheBatteryStateUnknownTrap (22)	IM_Steam_22	This event occurs when the cache battery in specified location has an unknown state.	Warning

Storage Area Networks Management Appliance (CPQSANAPP.MIB)

Tivoli types	TEC class	Description	TEC priority
swFailureTrap (1)	IM_SanW_1	This event occurs when a failure event is detected.	Critical
swWarningTrap (2)	IM_SanW_2	This event occurs when a Warning event is detected.	Warning
swInformationTrap (4)	IM_SanW_4	This event occurs when an Information event is detected.	Harmless

StorageWorks Command Console (CPQSWCC.MIB)

Tivoli types	TEC class	Description	TEC priority
cpqSwccFibreDeviceStatusChange (1)	—	This event occurs when the state on one of the managed Fibre Channel devices changes.	—
cpqSwccFibreDevState:ok	IM_Fibre_1_2	—	Harmless
cpqSwccFibreDevState:degraded	IM_Fibre_1_3	—	Critical
cpqSwccFibreDevState:failed	IM_Fibre_1_4	—	Fatal
cpqSwccTapeControllerStatusChange (2)	—	This event occurs when the state on one of the managed Fibre Channel tape controller devices changes.	—
cpqSwccFibreDevState:ok	IM_Tape_2_2	—	Harmless
cpqSwccFibreDevState:degraded	IM_Tape_2_3	—	Critical
cpqSwccFibreDevState:failed	IM_Tape_2_4	—	Fatal
cpqSwccEmuDevDeviceStatusChange (1)	—	This event occurs when the state on one of the managed devices changes.	—
cpqSwccEmuDevState:ok	IM_Emu_1_2	—	Harmless
cpqSwccEmuDevState:degraded	IM_Emu_1_3	—	Critical
cpqSwccEmuDevState:failed	IM_Emu_1_4	—	Fatal
cpqSwccKzpccPhyDeviceEventTrap (1)	—	This event occurs when some event has happened to a physical device on a KZPCC controller.	——
cpqSwccKzpccEventSeverity:informational	IM_Kzpcc_1_1	—	Harmless

Tivoli types	TEC class	Description	TEC priority
cpqSwccKzpccEventSeverity:warning	IM_Kzpcc_1_2	—	Warning
cpqSwccKzpccEventSeverity:error	IM_Kzpcc_1_3	—	Fatal
cpqSwccKzpccVirtualDeviceEventTrap (2)	—	This event occurs when some event has happened to a virtual device (logical drive) on a controller.	—
cpqSwccKzpccEventSeverity:informational	IM_Kzpcc_2_1	—	Harmless
cpqSwccKzpccEventSeverity:warning	IM_Kzpcc_2_2	—	Critical
cpqSwccKzpccEventSeverity:error	IM_Kzpcc_2_3	—	Fatal
cpqSwccKzpccSubsystemEventTrap (3)		This event occurs when some event has happened to a KZPCC controller.	
cpqSwccKzpccEventSeverity:informational	IM_Kzpcc_3_1	—	Harmless
cpqSwccKzpccEventSeverity:warning	IM_Kzpcc_3_2	—	Critical
cpqSwccKzpccEventSeverity:error	IM_Kzpcc_3_3	—	Fatal

Blade Type-2 traps (BT2TRAPS.MIB)

Tivoli types	TEC class	Description	TEC priority
bt2SwPrimaryPowerSupplyFailure (1)	IM_BT2_1	This event occurs when the primary power supply failed.	Fatal
bt2SwDefGwUp(2)	IM_BT2_2	This event occurs when the default gateway is alive.	Harmless
bt2SwDefGwDown(3)	IM_BT2_3	This event occurs when the default gateway is down.	Harmless
bt2SwDefGwInService(4)	IM_BT2_4	This event occurs when the default gateway is up and in service.	Harmless
bt2SwDefGwNotInService(5)	IM_BT2_5	This event occurs when the default gateway is alive but not in service.	Harmless
bt2SwVrrpNewMaster (16)	IM_BT2_16	This event occurs when the sending agent has transitioned to 'Master' state.	Harmless
bt2SwVrrpNewBackup(17)	IM_BT2_17	This event occurs when the sending agent has transitioned to 'Backup' state.	Harmless
bt2SwVrrpAuthFailure(18)	IM_BT2_18	This event occurs when there is an authentication failure.	Critical
bt2SwLoginFailure(19)	IM_BT2_19	This event occurs when there is a login failure.	Critical

Tivoli types	TEC class	Description	TEC priority
bt2SwTempExceedThreshold (22)	IM_BT2_22	This event occurs when the switch temperature has exceeded maximum safety limits.	Fatal
bt2SwRackLocationChange(26)	IM_BT2_26	This event occurs when the rack location has been changed.	Harmless
bt2SwApplyComplete(27)	IM_BT2_27	This event occurs when a new configuration has been applied.	Harmless
bt2SwSaveComplete(28)	IM_BT2_28	This event occurs when the new configuration has been saved.	Harmless
bt2SwFwDownloadSucess(29)	IM_BT2_29	This event occurs when the firmware has been downloaded.	Harmless
bt2SwFwDownloadFailure(30)	IM_BT2_30	This event occurs when the firmware downloaded failed.	Warning
bt2SwTempReturnThreshold(31)	IM_BT2_31	This event occurs when the switch temperature has returned below maximum safety limits.	Harmless
bt2SwFanFailure(32)	IM_BT2_32	This event occurs when a fan failure has been detected.	Critical
bt2SwFanFailureFixed(33)	IM_BT2_33	This event occurs when the fan failure has been fixed.	Harmless
bt2SwUfdfoLtMFailure(34)	IM_BT2_34	This event occurs when an LtM link is down.	Critical
bt2SwUfdfoLtMUP(35)	IM_BT2_35	This event occurs when an LtM link is up.	Harmless
bt2SwUfdfoGlobalEna(36)	IM_BT2_36	This event occurs when the Global UFD is enabled.	Harmless
bt2SwUfdfoGlobalDis(37)	IM_BT2_37	This event occurs when the Global UFD is disabled.	Harmless
bt2SwUfdfoLtdAutoEna(38)	IM_BT2_38	This event occurs when an LtD link is Auto Enabled.	Harmless
bt2SwUfdfoLtdAutoDis(39)	IM_BT2_39	This event occurs when an LtD link is Auto Disabled.	Harmless
bt2SwCubeInserted(40)	IM_BT2_40	This event occurs when a cube is inserted.	Harmless
bt2SwCubeRemoved(41)	IM_BT2_41	This event occurs when a cube is removed.	Harmless
bt2SwStgNewRoot(42)	IM_BT2_42	This event occurs when the bridge has become the new root of the STG.	Harmless
bt2SwCistNewRoot(43)	IM_BT2_43	This event occurs when the bridge has become the new root of the CIST.	Harmless
bt2SwStgTopologyChanged(44)	IM_BT2_44	This event occurs when there is a STG topology change.	Harmless
bt2SwCistTopologyChanged(45)	IM_BT2_45	This event occurs when there is a CIST topology change.	Harmless
bt2SwHotlinksMasterUp (46)	IM_BT2_46	This event occurs when master interface is active.	Harmless
bt2SwHotlinksMasterDn (47)	IM_BT2_47	This event occurs when master interface is not active.	Harmless

Tivoli types	TEC class	Description	TEC priority
bt2SwHotlinksBackupUp (48)	IM_BT2_48	This event occurs when backup interface is active.	Harmless
bt2SwHotlinksBackupDn (49)	IM_BT2_49	This event occurs when backup interface is not active.	Harmless
bt2SwHotlinksNone (50)	IM_BT2_50	This event occurs when there are no active interfaces.	Harmless

HP SIM forwarded trap (HPOV-NNM.MIB)

Tivoli types	TEC class	Description	TEC priority
hpOVMessageTrap (58916872)	IM_hpOV_58916872	This event occurs when SNMP/HTTP events and WBEM/WMI indications are forwarded as SNMP trap from HP SIM.	Warning

Water Cooled Rack Monitor (CPQWCRM.MIB)

Tivoli types	TEC class	Description	TEC priority
alarmSensorInternal (1)	—	This event occurs when status of Internal sensor connected to Basic CMC changes.	—
InternalMsgStatus:notAvail	IM_WCRM_1_1	—	Critical
InternalMsgStatus:configChanged	IM_WCRM_1_2	—	Warning
InternalMsgStatus:error	IM_WCRM_1_3	—	Critical
InternalMsgStatus:ok	IM_WCRM_1_4	—	Harmless
InternalMsgStatus:alarm	IM_WCRM_1_5	—	Warning
InternalMsgStatus:warning	IM_WCRM_1_6	—	Warning
InternalMsgStatus:tooLow	IM_WCRM_1_7	—	Critical
InternalMsgStatus:tooHigh	IM_WCRM_1_8	—	Critical
InternalMsgStatus:setoff	IM_WCRM_1_9	—	Harmless
InternalMsgStatus:setOn	IM_WCRM_1_10	—	Harmless
alarmSensorWaterCoolUnit (2)	—	This event occurs when status of Water Cool Unit sensor changes.	—
WaterCoolUnitMsgStatus:notAvail	IM_WCRM_2_1	—	Critical
WaterCoolUnitMsgStatus:configChanged	IM_WCRM_2_2	—	Warning

Tivoli types	TEC class	Description	TEC priority
WaterCoolUnitMsgStatus:error	IM_WCRM_2_3	—	Critical
WaterCoolUnitMsgStatus:ok	IM_WCRM_2_4	—	Harmless
WaterCoolUnitMsgStatus:alarm	IM_WCRM_2_5	—	Warning
WaterCoolUnitMsgStatus:warning	IM_WCRM_2_6	—	Warning
WaterCoolUnitMsgStatus:tooLow	IM_WCRM_2_7	—	Critical
WaterCoolUnitMsgStatus:tooHigh	IM_WCRM_2_8	—	Critical
WaterCoolUnitMsgStatus:setoff	IM_WCRM_2_9	—	Harmless
WaterCoolUnitMsgStatus:setOn	IM_WCRM_2_10	—	Harmless
alarmInternal (5)	—	This event occurs when status of Internal sensor unit connected to Basic CMC changes.	—
CpqWcrmInternalStatus:ok	IM_WCRM_5_1	—	Harmless
CpqWcrmInternalStatus:error	IM_WCRM_5_2	—	Critical
CpqWcrmInternalStatus:changed	IM_WCRM_5_3	—	Warning
CpqWcrmInternalStatus:reset	IM_WCRM_5_4	—	Warning
CpqWcrmInternalStatus:timeout	IM_WCRM_5_5	—	Warning
CpqWcrmInternalStatus:detected	IM_WCRM_5_6	—	Warning
CpqWcrmInternalStatus:notAvail	IM_WCRM_5_7	—	Critical
CpqWcrmInternalStatus:lowPower	IM_WCRM_5_8	—	Critical
alarmWaterCoolUnit (6)	—	This event occurs when status of Water Cool Unit sensor unit changes.	—
CpqWcrmWaterCoolUnitStatus:ok	IM_WCRM_6_1	—	Harmless
CpqWcrmWaterCoolUnitStatus:error	IM_WCRM_6_2	—	Critical
CpqWcrmWaterCoolUnitStatus:changed	IM_WCRM_6_3	—	Warning
CpqWcrmWaterCoolUnitStatus:reset	IM_WCRM_6_4	—	Warning

Tivoli types	TEC class	Description	TEC priority
CpqWcrmWaterCoolUnitStatus:timeout	IM_WCRM_6_5	—	Warning
CpqWcrmWaterCoolUnitStatus:detected	IM_WCRM_6_6	—	Warning
CpqWcrmWaterCoolUnitStatus:notAvail	IM_WCRM_6_7	—	Critical
CpqWcrmWaterCoolUnitStatus:lowPower	IM_WCRM_6_8	—	Critical
testTrap (10)	IM_WCRM_10	This is a test trap to check proper reception on traps.	Harmless

HP Bladetype-4 Network MIBs (GbE2c-L2L3.MIB)

Tivoli types	TEC class	Description	TEC priority
bntSwDefGwUp (2)	IM_BTN4_2	This event occurs when the default gateway is up.	Harmless
bntSwDefGwDown (3)	IM_ BTN4_3	This event occurs when the default gateway is down.	Harmless
bntSwDefGwInService (4)	IM_ BTN4_4	This event occurs when the default gateway is up and in service.	Harmless
bntSwDefGwNotInService (5)	IM_ BTN4_5	This event occurs when the default gateway is up but not in service.	Harmless
bntSwLoginFailure (19)	IM_ BTN4_19	This event occurs when a valid username/password combination is not entered.	Critical
bntSwTempExceedThreshold (22)	IM_ BTN4_22	This event occurs when the switch temperature has exceeded maximum safety limits.	Fatal
bntSwApplyComplete (27)	IM_ BTN4_27	This event occurs when a new configuration has been applied.	Harmless
bntSwSaveComplete (28)	IM_ BTN4_28	This event occurs when a new configuration has been saved.	Harmless
bntSwFwDownloadSucess (29)	IM_ BTN4_29	This event occurs when the firmware has been downloaded.	Harmless
bntSwFwDownloadFailure (30)	IM_ BTN4_30	This event occurs when the firmware download fails.	Warning
bntSwTempReturnThreshold (31)	IM_ BTN4_31	This event occurs when switch temperature has returned below maximum safety limits.	Harmless
bntSwUfdfoLtMFailure (34)	IM_ BTN4_34	This event occurs when an LtM link is down.	Critical
bntSwUfdfoLtMUP (35)	IM_ BTN4_35	This event occurs when an LtM link is up.	Harmless
bntSwUfdfoGlobalEna (36)	IM_ BTN4_36	This event occurs when the Global UFD is enabled.	Harmless

Tivoli types	TEC class	Description	TEC priority
bntSwUfdfoGlobalDis (37)	IM_ BTN4_37	This event occurs when the Global UFD is disabled.	Harmless
bntSwUfdfoLtDAutoEna (38)	IM_ BTN4_38	This event occurs when an LtD link is Auto Enabled.	Harmless
bntSwUfdfoLtDAutoDis (39)	IM_ BTN4_39	This event occurs when an LtD link is Auto Disabled.	Harmless
bntSwStgNewRoot (42)	IM_ BTN4_42	This event occurs when the bridge has become the new root of the STG.	Harmless
bntSwCistNewRoot (43)	IM_ BTN4_43	This event occurs when the bridge has become the new root of the CIST.	Harmless
bntSwStgTopologyChanged (44)	IM_ BTN4_44	This event occurs when there is a STG topology change.	Harmless
bntSwCistTopologyChanged (45)	IM_ BTN4_45	This event occurs when there is a CIST topology change.	Harmless
bntSFPInserted (51)	IM_ BTN4_51	This event occurs when a XFP is inserted.	Harmless
bntSFPRemoved (52)	IM_ BTN4_52	This is a test trap to check proper reception on traps.	Harmless

HP Bladetype-5 Network MIBs (GbE2c-1-10G-L2L3.MIB)

Tivoli types	TEC class	Description	TEC priority
bntSwDefGwUp (2)	IM_BTN5_2	This event occurs when the default gateway is up.	Harmless
bntSwDefGwDown (3)	IM_BTN5_3	This event occurs when the default gateway is down.	Harmless
bntSwDefGwInService (4)	IM_BTN5_4	This event occurs when the default gateway is up and in service.	Harmless
bntSwDefGwNotInService (5)	IM_BTN5_5	This event occurs when the default gateway is up but not in service.	Harmless
bntSwLoginFailure (19)	IM_BTN5_19	This event occurs when a valid username/password combination is not entered.	Critical
bntSwTempExceedThreshold (22)	IM_ BTN5_22	This event occurs when the switch temperature has exceeded maximum safety limits.	Fatal
bntSwApplyComplete (27)	IM_BTN5_27	This event occurs when a new configuration has been applied.	Harmless
bntSwSaveComplete (28)	IM_BTN5_28	This event occurs when a new configuration has been saved.	Harmless
bntSwFwDownloadSucess (29)	IM_BTN5_29	This event occurs when the firmware has been downloaded.	Harmless
bntSwFwDownloadFailure (30)	IM_BTN5_30	This event occurs when the firmware download fails.	Warning

Tivoli types	TEC class	Description	TEC priority
bntSwTempReturnThreshold (31)	IM_BTN5_31	This event occurs when switch temperature has returned below maximum safety limits.	Harmless
bntSwUfdfoLtMFailure (34)	IM_BTN5_34	This event occurs when an LtM link is down.	Critical
bntSwUfdfoLtMUP (35)	IM_BTN5_35	This event occurs when an LtM link is up.	Harmless
bntSwUfdfoGlobalEna (36)	IM_BTN5_36	This event occurs when the Global UFD is enabled.	Harmless
bntSwUfdfoGlobalDis (37)	IM_BTN5_37	This event occurs when the Global UFD is disabled.	Harmless
bntSwUfdfoLtDAutoEna (38)	IM_BTN5_38	This event occurs when an LtD link is Auto Enabled.	Harmless
bntSwUfdfoLtDAutoDis (39)	IM_BTN5_39	This event occurs when an LtD link is Auto Disabled.	Harmless
bntSwStgNewRoot (42)	IM_BTN5_42	This event occurs when the bridge has become the new root of the STG.	Harmless
bntSwCistNewRoot (43)	IM_BTN5_43	This event occurs when the bridge has become the new root of the CIST.	Harmless
bntSwStgTopologyChanged (44)	IM_BTN5_44	This event occurs when there is a STG topology change.	Harmless
bntSwCistTopologyChanged (45)	IM_BTN5_45	This event occurs when there is a CIST topology change.	Harmless
bntSFPInserted (51)	IM_BTN5_51	This event occurs when a XFP is inserted.	Harmless
bntSFPRemoved (52)	IM_BTN5_52	This is a test trap to check proper reception on traps.	Harmless

HP Bladetype-6 Network MIBs (GbE2c-10G-L2L3.MIB)

Tivoli types	TEC class	Description	TEC priority
bntSwDefGwUp (2)	IM_BTN6_2	This event occurs when the default gateway is up.	Harmless
bntSwDefGwDown (3)	IM_BTN6_3	This event occurs when the default gateway is down.	Harmless
bntSwDefGwInService (4)	IM_BTN6_4	This event occurs when the default gateway is up and in service.	Harmless
bntSwDefGwNotInService (5)	IM_BTN6_5	This event occurs when the default gateway is up but not in service.	Harmless
bntSwLoginFailure (19)	IM_BTN6_19	This event occurs when a valid username/password combination is not entered.	Critical
bntSwTempExceedThreshold (22)	IM_ BTN6_22	This event occurs when the switch temperature has exceeded maximum safety limits.	Fatal
bntSwApplyComplete (27)	IM_BTN6_27	This event occurs when a new configuration has been applied.	Harmless

Tivoli types	TEC class	Description	TEC priority
bntSwSaveComplete (28)	IM_BTN6_28	This event occurs when a new configuration has been saved.	Harmless
bntSwFwDownloadSucess (29)	IM_BTN6_29	This event occurs when the firmware has been downloaded.	Harmless
bntSwFwDownloadFailure (30)	IM_BTN6_30	This event occurs when the firmware download fails.	Warning
bntSwTempReturnThreshold (31)	IM_BTN6_31	This event occurs when switch temperature has returned below maximum safety limits.	Harmless
bntSwUfdfoLtMFailure (34)	IM_BTN6_34	This event occurs when an LtM link is down.	Critical
bntSwUfdfoLtMUP (35)	IM_BTN6_35	This event occurs when an LtM link is up.	Harmless
bntSwUfdfoGlobalEna (36)	IM_BTN6_36	This event occurs when the Global UFD is enabled.	Harmless
bntSwUfdfoGlobalDis (37)	IM_BTN6_37	This event occurs when the Global UFD is disabled.	Harmless
bntSwUfdfoLtDAutoEna (38)	IM_BTN6_38	This event occurs when an LtD link is Auto Enabled.	Harmless
bntSwUfdfoLtDAutoDis (39)	IM_BTN6_39	This event occurs when an LtD link is Auto Disabled.	Harmless
bntSwStgNewRoot (42)	IM_BTN6_42	This event occurs when the bridge has become the new root of the STG.	Harmless
bntSwCistNewRoot (43)	IM_BTN6_43	This event occurs when the bridge has become the new root of the CIST.	Harmless
bntSwStgTopologyChanged (44)	IM_BTN6_44	This event occurs when there is a STG topology change.	Harmless
bntSwCistTopologyChanged (45)	IM_BTN6_45	This event occurs when there is a CIST topology change.	Harmless
bntSFPInserted (51)	IM_BTN6_51	This event occurs when a XFP is inserted.	Harmless
bntSFPRemoved (52)	IM_BTN6_52	This is a test trap to check proper reception on traps.	Harmless

MSA2000 - TRAPS (MSA2000TRAPS.MIB)

Tivoli types	TEC class	Description	TEC priority
msaEventInfoTrap (3001)	IM_3001	This event occurs when a harmless event has been generated by the storage array.	Harmless
msaEventWarningTrap (3002)	IM_3002	This event occurs when a warning event has been generated by the storage array.	Warning
msaEventErrorTrap (3003)	IM_3003	This event occurs when a critical event has been generated by the storage array.	Critical
msaEventCriticalTrap (3004)	IM_3004	This event occurs when a fatal event has been generated by the storage array.	Fatal

HP Dynamic smart cooling (HPDSCCS.MIB)

Tivoli types	TEC class	Description	TEC priority
trapDscTest (1)	IM_DSCS_1	This is a test trap to check proper reception on traps.	Harmless
trapDscCritical (2)	IM_DSCS_2	This event occurs when a critical alarm has occurred.	Fatal
trapDscWarning (3)	IM_DSCS_3	This event occurs when a warning alarm has occurred.	Warning
trapDscInformation (4)	IM_DSCS_4	This event occurs when an informational alarm has occurred.	Harmless

HP HTTP management (HPNETCTZ.MIB)

Tivoli types	TEC class	Description	TEC priority
hpHttpMgHealthTrap (1)	IM_HTTP_1	This event occurs when the device status has changed.	Harmless
hpHttpMgShutdown (2)	IM_HTTP_2	This event occurs when the agent is about to shut down.	Warning
hpHttpMgUnknownHealthTrap (3)	IM_HTTP_3	This event occurs when the device health status has changed to unknown.	Warning
hpHttpMgOKHealthTrap (4)	IM_HTTP_4	This event occurs when the device health status has changed to ok.	Harmless
hpHttpMgWarningHealthTrap (5)	IM_HTTP_5	This event occurs when the device health status has changed to warning.	Warning
hpHttpMgCriticalHealthTrap (6)	IM_HTTP_6	This event occurs when the device health status has changed to critical.	Critical
hpHttpMgNonRecoverableHealthTrap (7)	IM_HTTP_7	This event occurs when the device health status has changed to un-recoverable.	Fatal
hpHttpMgDeviceAddedTrap (8)	IM_HTTP_8	This event occurs when a device has been added to the MIB.	Harmless
hpHttpMgDeviceRemovedTrap (9)	IM_HTTP_9	This event occurs when has been removed from the MIB.	Warning

LSI Logic SCSI Storage Adapters (SYMTRAP.MIB)

Tivoli types	TEC class	Description	TEC priority
symSCSI1 (101)	IM_SYM_101	This event occurs when the Symbios SCSI agent is up.	Harmless
symSCSI2 (102)	IM_SYM_102	This event occurs when the Symbios SCSI agent is down.	Harmless
symSCSI3 (108)	IM_SYM_108	This event occurs when a new SCSI controller has been discovered.	Harmless
symSCSI4 (109)	IM_SYM_109	This event occurs when a SCSI controller has been replaced by another adapter of different family type.	Critical

Tivoli types	TEC class	Description	TEC priority
symSCSI5 (110)	IM_SYM_110	This event occurs when a SCSI controller has failed.	Fatal
symSCSI6 (111)	IM_SYM_111	This event occurs when a previously failed SCSI adapter has recovered.	Harmless
symSCSI7 (112)	IM_SYM_112	This event occurs when an attached SCSI device has failed.	Fatal
symSCSI8 (113)	IM_SYM_113	This event occurs when a previously unknown device has been found.	Harmless
symSCSI9 (114)	IM_SYM_114	This event occurs when a previous failed device has started working again.	Harmless
symSCSI10 (115)	IM_SYM_115	This event occurs when a SCSI device swapped by another SCSI device. This event is generated even if the replaced device is identical.	Harmless
symSCSI11 (116)	IM_SYM_116	This event occurs when a SMART event has occurred in the SCSI device.	Critical
symSCSI12 (117)	IM_SYM_117	This event occurs when an internal error has occurred.	Warning

Appendix C: Non-HP SNMP events

Non-HP SNMP events

The following table lists all of the Non-HP SNMP definitions delivered with the HP Insight Integration for Tivoli 4.6. The events are organized according to MIB type and object identifier.

Fibre Channel Management (FCMGMT-MIB)

Tivoli types	TEC class	Description	TEC priority
connUnitStatusChange (1)	—	This event occurs when overall status of the connectivity unit has changed.	—
connUnitStatus:unused	FC_1_2	—	Warning
ConnUnitStatus:ok	FC_1_3	—	Harmless
connUnitStatus:warning	FC_1_4	—	Warning
connUnitStatus:failed	FC_1_5	—	Critical
connUnitDeletedTrap (3)	FC_3	This event occurs when the connectivity unit has been deleted from the agent.	Warning
connUnitEventTrap (4)	FC_4	This event occurs when an event has been generated by the connectivity unit.	Harmless
connUnitSensorStatusChange (5)	—	This event occurs when overall status of sensor of the connectivity unit has changed.	—
connUnitSensorStatus:other	FC_5_2	—	Warning
connUnitSensorStatus:ok	FC_5_3	—	Harmless
connUnitSensorStatus:warning	FC_5_4	—	Warning
connUnitSensorStatus:failure	FC_5_5	—	Critical
connUnitPortStatusChange (6)	—	This event occurs when overall status of port of the connectivity unit has changed.	—
connUnitPortStatus:unused	FC_6_2	—	Warning
connUnitPortStatus:ready	FC_6_3	—	Harmless
connUnitPortStatus:warning	FC_6_4	—	Warning
connUnitPortStatus:failure	FC_6_5	—	Critical
connUnitPortStatus:notparticipating	FC_6_6	—	Critical
connUnitPortStatus:initializing	FC_6_7	—	Warning
connUnitPortStatus:initializing	FC_6_8	—	Warning
connUnitPortStatus:initializing	FC_6_9	—	Critical
connUnitPortStatus:initializing	FC_6_10	—	Warning

Appendix D: Insight SNMP rules

Insight SNMP rules

The following tables list all of the HP rules delivered with the HP Insight Integration for Tivoli 4.6 that relate to specific SNMP events. The rules and corresponding events are organized by MIB type and object identifier.

Common cluster management (SVRCLU.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
SvrCluMemberAdded	100	—	—	—
SvrCluMemberDeleted	101	—	—	—

Standard equipment (CPQSTDEQ.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSeCpuThresholdPassed	1001	—	—	—
CpqSePCCardThermalDegraded	1002	—	1004	—
CpqSePCCardThermalFailure	1003	—	1004	—
CpqSePCCardThermalSafe	1004	—	—	—
CpqSe2CpuThresholdPassed	1005	—	—	—
CpqSeCpuStatusChange	1006	—	—	—
CpqSeCpuStatus:ok	_2	—	—	—
CpqSeCpuStatus:Degraded	_3	—	1006_2	—
CpqSeCpuStatus:Failed	_4	—	1006_2	—
CpqSeCpuStatus:Disabled	_5	—	1006_2	—
CpqSeCpuPowerPodstatusChange	1007	—	—	—
CpqSeCpuPowerPodstatus:Notfailed	_1	—	—	—
CpqSeCpuPowerPodstatus:Failed	_2	—	1007_1	—
CpqSeUSBStorageDeviceAttached	1008	—	1009	—
CpqSeUSBStorageDeviceRemoved	1009	—	—	—

Systems information (CPQSINFO.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSiHoodRemoved	2001	—	—	—
CpqSiMonitorConditionOK	2002	—	—	—
CpqSiMonitorConditionDegraded	2003	—	2002	—
CpqSiMonitorConditionFailed	2004	—	2002	—
CpqSiCorrMemErrStatusDegraded	2005	—	2006	—
CpqSiCorrMemErrStatusOK	2006	—	—	—
CpqSiMemConfigChange	2007	—	—	—
CpqSiHotPlugSlotBoardRemoved	2008	—	2009	—
CpqSiHotPlugSlotBoardInserted	2009	—	—	—
CpqSiHotPlugSlotPowerUpFailed	2010	—	—	—
cpqSiHotPlugSlotErrorStatus: noError	_1	—	—	—
cpqSiHotPlugSlotErrorStatus: generalError	_2	—	2010_1	—
cpqSiHotPlugSlotErrorStatus: wrongRevision	_3	—	2010_1	—
cpqSiHotPlugSlotErrorStatus: wrongBoard	_4	—	2010_1	—
cpqSiHotPlugSlotErrorStatus: cannotConfig	_5	—	2010_1	—
cpqSiHotPlugSlotErrorStatus: powerFault	_6	—	2010_1	—
cpqSiHotPlugSlotErrorStatus: unexpectedPowerLoss	_7	—	2010_1	—
cpqSiHotPlugSlotErrorStatus: wrongSpeed	_8	—	2010_1	—
cpqSiHotPlugSlotErrorStatus: functionalFailure	_9	—	2010_1	—
CpqSiSysBatteryFailure	2011	—	—	—
CpqSiSysBatteryChargingDegraded	2012	—	—	—
CpqSiSysBatteryCalibrationError	2013	—	—	—

Intelligent drive array (CPQIDA.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqDa3LogDrvStatusChange	3008	—	—	—
CpqDaLogDrvStatus:ok	_2	—	—	—
CpqDaLogDrvStatus:failed	_3	—	3008_2	—
CpqDaLogDrvStatus:recovering	_5	—	3008_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqDaLogDrvStatus:readyForRebuild	_6	—	3008_2	—
CpqDaLogDrvStatus:rebuilding	_7	—	3008_2	—
CpqDaLogDrvStatus:wrongDrive	_8	—	3008_2	—
CpqDaLogDrvStatus:badConnect	_9	—	3008_2	—
CpqDaLogDrvStatus:overheating	_10	—	3008_2	—
CpqDaLogDrvStatus:shutdown	_11	—	3008_2	—
CpqDaLogDrvStatus:expanding	_12	—	3008_2	—
CpqDaLogDrvStatus:notAvailable	_13	—	3008_2	—
CpqDaLogDrvStatus:queuedForExp	_14	—	3008_2	—
CpqDaLogDrvStatus:multipathAccessDegraded	_15	—	3008_2	—
CpqDaCntlrActive	3016	—	—	—
CpqDa4SpareStatusChange	3017	—	—	—
CpqDaSpareStatus:invalid	_2	—	3017_6	—
CpqDaSpareStatus:failed	_3	—	3017_6	—
CpqDaSpareStatus:inactive	_4	—	3017_6	—
CpqDaSpareStatus:building	_5	—	3017_6	—
CpqDaSpareStatus:active	_6	—	—	—
CpqDaTapeLibraryDoorStatusChange	3021	—	—	—
CpqDaTapeLibraryDoorStatus:notSupported	_2	—	3021_3	—
CpqDaTapeLibraryDoorStatus:closed	_3	—	—	—
CpqDaTapeLibraryDoorStatus:open	_4	—	3021_3	—
CpqDaTapeDriveCleaningRequired	3023	—	—	—
CpqDaTapeDriveCleanTapeReplace	3024	—	—	—
CpqDa5AccelStatusChange	3025	—	—	—
CpqDa5AccelStatus:invalid	_2	—	3025_3	—
CpqDa5AccelStatus:enabled	_3	—	—	—
CpqDa5AccelStatus:tmpDisabled	_4	—	3025_3	—
CpqDa5AccelStatus:permDisabled	_5	—	3025_3	—
CpqDa5AccelBadDataTrap	3026	—	—	—
CpqDa5AccelBatteryFailed	3027	—	—	—
CpqDa5CntlrStatusChange	3028	—	—	—
CpqDaCntlrBoardStatus:ok	_2	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqDaCntlrBoardStatus:generalFailure	_3	—	3028_2	—
CpqDaCntlrBoardStatus:cableProblem	_4	—	3028_2	—
CpqDaCntlrBoardStatus:poweredOff	_5	—	3028_2	—
CpqDa5PhyDrvStatusChange	3029	—	—	—
CpqDaPhyDrvStatus:ok	_2	—	—	—
CpqDaPhyDrvStatus:failed	_3	—	3029_2	—
CpqDaPhyDrvStatus:predictiveFailure	_4	—	3029_2	—
CpqDa5PhyDrvThreshPassedTrap	3030	—	—	—
CpqDa2TapeLibraryStatusChange	3031	—	—	—
CpqDaTapeLibraryStatus:ok	_2	—	—	—
CpqDaTapeLibraryStatus:degraded	_3	—	3031_2	—
CpqDaTapeLibraryStatus:failed	_4	—	3031_2	—
CpqDaTapeLibraryStatus:offline	_5	—	3031_2	—
CpqDa2TapeDriveStatusChange	3032	—	—	—
CpqDaTapeDrvStatus:ok	_2	—	—	—
CpqDaTapeDrvStatus:degraded	_3	—	3032_2	—
CpqDaTapeDrvStatus:failed	_4	—	3032_2	—
CpqDaTapeDrvStatus:offline	_5	—	3032_2	—
CpqDaTapeDrvStatus:missingWasOk	_6	—	3032_2	—
CpqDaTapeDrvStatus:missingWasOffline	_7	—	3032_2	—
CpqDa6CntlrStatusChange	3033	—	—	—
CpqDaCntlrBoardStatus:ok	_2	—	—	—
CpqDaCntlrBoardStatus:generalFailure	_3	—	3033_2	—
CpqDaCntlrBoardStatus:cableProblem	_4	—	3033_2	—
CpqDaCntlrBoardStatus:poweredOff	_5	—	3033_2	—
CpqDa6LogDrvStatusChange	3034	—	—	—
CpqDaLogDrvStatus:ok	_2	—	—	—
CpqDaLogDrvStatus:failed	_3	—	3034_2	—
CpqDaLogDrvStatus:recovering	_4	—	3034_2	—
CpqDaLogDrvStatus:unconfigured	_5	—	3034_2	—
CpqDaLogDrvStatus:readyForRebuild	_6	—	3034_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqDaLogDrvStatus:rebuilding	_7	—	3034_2	—
CpqDaLogDrvStatus:wrongDrive	_8	—	3034_2	—
CpqDaLogDrvStatus:badConnect	_9	—	3034_2	—
CpqDaLogDrvStatus:overheating	_10	—	3034_2	—
CpqDaLogDrvStatus:shutdown	_11	—	3034_2	—
CpqDaLogDrvStatus:expanding	_12	—	3034_2	—
CpqDaLogDrvStatus:notAvailable	_13	—	3034_2	—
CpqDaLogDrvStatus:queuedForExp	_14	—	3034_2	—
CpqDaLogDrvStatus:multipathAccessDegraded	_15	—	3034_2	—
CpqDa6SpareStatusChange	3035	—	—	—
CpqDaSpareStatus:invalid	_2	—	3035_6	—
CpqDaSpareStatus:failed	_3	—	3035_6	—
CpqDaSpareStatus:inactive	_4	—	3035_6	—
CpqDaSpareStatus:building	_5	—	3035_6	—
CpqDaSpareStatus:active	_6	—	—	—
CpqDa6PhyDrvStatusChange	3036	—	—	—
CpqDaPhyDrvStatus:ok	_2	—	—	—
CpqDaPhyDrvStatus:failed	_3	—	3036_2	—
CpqDaPhyDrvStatus:predictiveFailure	_4	—	3036_2	—
CpqDa6PhyDrvThreshPassedTrap	3037	—	—	—
CpqDa6AccelStatusChange	3038	—	—	—
CpqDa5AccelStatus:invalid	_2	—	3038_3	—
CpqDa5AccelStatus:enabled	_3	—	—	—
CpqDa5AccelStatus:tmpDisabled	_4	—	3038_3	—
CpqDa5AccelStatus:permDisabled	_5	—	3038_3	—
CpqDa6AccelBadDataTrap	3039	—	—	—
CpqDa6AccelBatteryFailed	3040	—	—	—
CpqDa6TapeLibraryStatusChange	3041	—	—	—
CpqDaTapeLibraryStatus:ok	_2	—	—	—
CpqDaTapeLibraryStatus:degraded	_3	—	3041_2	—
CpqDaTapeLibraryStatus:failed	_4	—	3041_2	—
CpqDaTapeLibraryStatus:offline	_5	—	3041_2	—
CpqDa6TapeLibraryDoorStatusChange	3042	—	—	—
CpqDaTapeLibraryDoorStatus:notSupported	_2	—	3042_3	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqDaTapeLibraryDoorStatus:closed	_3	—	—	—
CpqDaTapeLibraryDoorStatus:open	_4	—	3042_3	—
CpqDa6TapeDriveStatusChange	3043	—	—	—
CpqDaTapeDrvStatus:ok	_2	—	—	—
CpqDaTapeDrvStatus:degraded	_3	—	3043_2	—
CpqDaTapeDrvStatus:failed	_4	—	3043_2	—
CpqDaTapeDrvStatus:offline	_5	—	3043_2	—
CpqDaTapeDrvStatus:missingWasOk	_6	—	3043_2	—
CpqDaTapeDrvStatus:missingWasOffline	_7	—	3043_2	—
CpqDa6TapeDriveCleaningRequired	3044	—	—	—
CpqDa6TapeDriveCleanTapeReplace	3045	—	—	—
CpqDa7PhyDrvStatusChange	3046	—	—	—
CpqDaPhyDrvStatus:ok	_2	—	—	—
CpqDaPhyDrvStatus:failed	_3	—	3046_2	—
CpqDaPhyDrvStatus:predictiveFailure	_4	—	3046_2	—
CpqDa7SpareStatusChange	3047	—	—	—
CpqDaSpareStatus:invalid	_2	—	3047_6	—
CpqDaSpareStatus:failed	_3	—	3047_6	—
CpqDaSpareStatus:inactive	_4	—	3047_6	—
CpqDaSpareStatus:building	_5	—	3047_6	—
CpqDaSpareStatus:active	_6	—	—	—

SCSI device information (CPQSCSI.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqScsi3CntlrStatusChange	5005	—	—	—
CpqScsiCntlrStatus:ok	_2	—	—	—
CpqScsiCntlrStatus:failed	_3	—	5005_2	—
CpqTape3PhyDrvCleaningRequired	5008	—	—	—
CpqTape3PhyDrvCleanTapeReplace	5009	—	—	—
CpqTape3LibraryDoorOpen	5013	—	5014	—
CpqTape3LibraryDoorClosed	5014	—	—	—
CpqScsiCdLibraryStatusChange	5015	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCdLibraryStatus:ok	_2	—	—	—
CpqCdLibraryStatus:failed	_3	—	5015_2	—
CpqCdLibraryStatus:offline	_4	—	5015_2	—
CpqTapeLibraryStatusChange	5018	—	—	—
CpqTapeLibraryState:ok	_2	—	—	—
CpqTapeLibraryState:degraded	_3	—	5018_2	—
CpqTapeLibraryState:failed	_4	—	5018_2	—
CpqTapeLibraryState:offline	_5	—	5018_2	—
CpqTape5PhyDrvStatusChange	5019	—	—	—
CpqTapePhyDrvStatus:ok	_2	—	—	—
CpqTapePhyDrvStatus:failed	_4	—	5019_2	—
CpqTapePhyDrvStatus:offline	_5	—	5019_2	—
CpqTapePhyDrvStatus:missingWasOk	_6	—	5019_2	—
CpqTapePhyDrvStatus:missingWasFailed	_7	—	5019_2	—
CpqTapePhyDrvStatus:missingWasOffline	_8	—	5019_2	—
cpqScsi5PhyDrvStatusChange	5020	—	—	—
CpqScsiPhyDrvStatus:ok	_2	—	—	—
CpqScsiPhyDrvStatus:failed	_3	—	5020_2	—
CpqScsiPhyDrvStatus:notConfigured	_4	—	5020_2	—
CpqScsiPhyDrvStatus:badCable	_5	—	5020_2	—
CpqScsiPhyDrvStatus:missingWasOk	_6	—	5020_2	—
CpqScsiPhyDrvStatus:missingWasFailed	_7	—	5020_2	—
CpqScsiPhyDrvStatus:predictiveFailure	_8	—	5020_2	—
CpqScsiPhyDrvStatus:missingWasPredictiveFailure	_9	—	5020_2	—
CpqScsiPhyDrvStatus:offline	_10	—	5020_2	—
CpqScsiPhyDrvStatus:missingwasOffline	_11	—	5020_2	—
CpqScsiPhyDrvStatus:hardError	_12	—	5020_2	—
CpqScsi3LogDrvStatusChange	5021	—	—	—
cpqScsiLogDrvStatus:ok	_2	—	—	—
cpqScsiLogDrvStatus:failed	_3	—	5021_2	—
cpqScsiLogDrvStatus:unconfigured	_4	—	5021_2	—
cpqScsiLogDrvStatus:recovering	_5	—	5021_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqScsiLogDrvStatus: readyForRebuild	_6	—	5021_2	—
cpqScsiLogDrvStatus: rebuilding	_7	—	5021_2	—
cpqScsiLogDrvStatus: wrongDrive	_8	—	5021_2	—
cpqScsiLogDrvStatus: badConnect	_9	—	5021_2	—
cpqScsiLogDrvStatus: degraded	_10	—	5021_2	—
cpqScsiLogDrvStatus: disabled	_11	—	5021_2	—
CpqSasPhyDrvStatusChange	5022	—	—	—
CpqSasPhyDrvStatus:ok	_2	—	—	—
CpqSasPhyDrvStatus:predictiveFailure	_3	—	5022_2	—
CpqSasPhyDrvStatus:offline	_4	—	5022_2	—
CpqSasPhyDrvStatus:failed	_5	—	5022_2	—
CpqSasPhyDrvStatus:missingWasOk	_6	—	5022_2	—
CpqSasPhyDrvStatus: missingWasPredictiveFailure	_7	—	5022_2	—
CpqSasPhyDrvStatus: missingWasOffline	_8	—	5022_2	—
CpqSasPhyDrvStatus:missingWasFailed	_9	—	5022_2	—
CpqSasLogDrvStatusChange	5023	—	—	—
CpqSasLogDrvStatus:ok	_2	—	—	—
CpqSasLogDrvStatus:degraded	_3	—	5023_2	—
CpqSasLogDrvStatus:rebuilding	_4	—	5023_2	—
CpqSasLogDrvStatus:failed	_5	—	5023_2	—
CpqSasLogDrvStatus:offline	_6	—	5023_2	—
CpqSas2TapeDrvStatusChange		—	5025	—
CpqSasTapeDrvStatus:ok	_2	—	—	—
CpqSasTapeDrvStatus:offline	_3	—	5025_2	—

Server health features (CPQHLTH.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqHe3CorrectableMemoryLogDisabled	6016	—	—	—
cpqHeCorrMemLogStatus:notSupported	_2	—	6016_4	—
cpqHeCorrMemLogStatus:disabled	_3	—	6016_4	—
cpqHeCorrMemLogStatus:enabled	_4	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqHe3ThermalTempFailed	6017	—	6019, 6026	—
CpqHe3ThermalTempDegraded	6018	—	—	—
cpqHeThermalDegradedAction:continue	_2	—	6019	—
cpqHeThermalDegradedAction:shutdown	_3	—	6019	—
CpqHe3ThermalTempOk	6019	—	—	—
CpqHe3ThermalSystemFanFailed	6020	—	—	—
cpqHeThermalDegradedAction:continue	_2	—	6022	—
cpqHeThermalDegradedAction:shutdown	_3	—	6022	—
CpqHe3ThermalSystemFanDegraded	6021	—	6022, 6026	—
CpqHe3ThermalSystemFanOk	6022	—	—	—
CpqHe3ThermalCPUFanFailed	6023	—	6024, 6026	—
CpqHe3ThermalCPUFanOk	6024	—	—	—
CpqHe3AsrConfirmation	6025	—	—	—
CpqHe3ThermalConfirmation	6026	—	—	—
CpqHe3PostError	6027	—	—	—
CpqHe3FltTolPwrSupplyDegraded	6028	—	6033	—
CpqHe3CorrMemReplaceMemModule	6029	—	—	—
CpqHe3FltTolPowerRedundancyLost	6032	6034	6033, 6054	—
CpqHe3FltTolPowerSupplyInserted	6033	—	—	—
CpqHe3FltTolPowerSupplyRemoved	6034	—	6033	—
CpqHe3FltTolFanDegraded	6035	—	6038	—
CpqHe3FltTolFanFailed	6036	—	6038	—
CpqHe3FltTolFanRedundancyLost	6037	6036 or 6039	6038	—
CpqHe3FltTolFanInserted	6038	—	—	—
CpqHe3FltTolFanRemoved	6039	—	6038	—
CpqHe3TemperatureFailed	6040	—	6042	—
CpqHe3TemperatureDegraded	6041	—	—	—
CpqHeThermalDegradedAction:continue	_2	—	6042	—
CpqHeThermalDegradedAction:shutdown	_3	—	6042	—
CpqHe3TemperatureOk	6042	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqHe3PowerConverterDegraded	6043	—	—	—
CpqHe3PowerConverterFailed	6044	—	—	—
CpqHe3PowerConverterRedundancyLost	6045	6044	—	—
CpqHe3CacheAccelParityError	6046	—	—	—
cpqHeResilientMemOnlineSpareEngaged	6047	—	—	—
cpqHe4FltTolPowerSupplyOk	6048	—	—	—
cpqHe4FltTolPowerSupplyDegraded	6049	—	6048	—
cpqHe4FltTolPowerSupplyFailed	6050	—	6048	—
cpqHeResilientMemMirroredMemoryEngaged	6051	—	—	—
cpqHeResilientAdvancedECCMemoryEngaged	6052	—	—	—
cpqHeResilientMemXorMemoryEngaged	6053	—	—	—
cpqHe3FltTolPowerRedundancyRestored	6054	—	—	—
cpqHe3FltTolFanRedundancyRestored	6055	—	—	—
cpqHe4CorrMemReplaceMemModule	6056	—	—	—
cpqHeResMemBoardRemoved	6057	—	—	—
cpqHeResMemBoardInserted	6058	—	—	—
cpqHeResMemBoardBusError	6059	—	—	—
cpqHeEventOccurred	6060	—	—	—
CpqHeManagementProcInReset	6061	—	6062	—
CpqHeManagementProcReady	6062	—	—	—
CpqHeManagementProcFailedReset	6063	—	6062	—

Storage systems information (CPQSTSYS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSs3FanStatusChange	8008	—	—	—
CpqSsBoxFanStatus:ok	_2	—	—	—
CpqSsBoxFanStatus:failed	_3	—	8008_2	—
CpqSsBoxFanStatus:noFan	_4	—	8008_2	—
CpqSsBoxFanStatus:degraded	_5	—	8008_2	—
CpqSs3TempFailed	8009	—	8011	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSs3TempDegraded	8010	—	8011	—
CpqSs3TempOk	8011	—	—	—
CpqSs3SidePanelInPlace	8012	—	—	—
CpqSs3SidePanelInRemoved	8013	—	8012	—
CpqSs4PwrSupplyDegraded	8015	—	—	—
CpqSsBoxFltTolPwrSupplyStatus:ok	_2	—	—	—
CpqSsBoxFltTolPwrSupplyStatus:degraded	_3	—	8015_2	—
CpqSsBoxFltTolPwrSupplyStatus:failed	_4	—	8015_2	—
CpqSsBoxFltTolPwrSupplyStatus:noFltTolPower	_5	—	8015_2	—
CpqSsExPowerSupplyUpsStatusChange	8018	—	—	—
CpqSsPowerSupplyUpsStatus:noUps	_2	—	8018_3	—
CpqSsPowerSupplyUpsStatus:ok	_3	—	—	—
CpqSsPowerSupplyUpsStatus:powerFailed	_4	—	8018_3	—
CpqSsPowerSupplyUpsStatus:batteryLow	_5	—	8018_3	—
CpqSsExTempSensorStatusChange	8019	—	—	—
CpqSsTempSensorStatus:ok	_2	—	—	—
CpqSsTempSensorStatus:degraded	_3	—	8019_2	—
CpqSsTempSensorStatus:failed	_4	—	8019_2	—
CpqSsEx2FanStatusChange	8020	—	—	—
CpqSsFanModuleStatus:notInstalled	_2	—	8020_3	—
CpqSsFanModuleStatus:ok	_3	—	—	—
CpqSsFanModuleStatus:degraded	_4	—	8020_3	—
CpqSsFanModuleStatus:failed	_5	—	8020_3	—
CpqSsEx2PowerSupplyStatusChange	8021	—	—	—
CpqSsPowerSupplyStatus:notInstalled	_2	—	8021_3	—
CpqSsPowerSupplyStatus:ok	_3	—	—	—
CpqSsPowerSupplyStatus:failed	_4	—	8021_3	—
CpqSsExBackplaneFanStatusChange	8022	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSsBackplaneFanStatus:notInstalled	_2	—	8022_3	—
CpqSsBackplaneFanStatus:ok	_3	—	—	—
CpqSsBackplaneFanStatus:degraded	_4	—	8022_3	—
CpqSsBackplaneFanStatus:failed	_5	—	8022_3	—
CpqSsBackplaneFanStatus:notSupported	_6	—	8022_3	—
CpqSsBackplaneFanStatus:degraded-Fan1failed	_7	—	8022_3	—
CpqSsBackplaneFanStatus:degraded-Fan2Failed	_8	—	8022_3	—
CpqSsExBackplaneTempStatusChange	8023	—	—	—
CpqSsBackplaneTempStatus:noTemp	_2	—	8023_3	—
CpqSsBackplaneTempStatus:ok	_3	—	—	—
CpqSsBackplaneTempStatus:degraded	_4	—	8023_3	—
CpqSsBackplaneTempStatus:failed	_5	—	8023_3	—
CpqSsBackplaneTempStatus:notSupported	_6	—	8023_3	—
CpqSsExBackplanePowerSupplyStatusChange	8024	—	—	—
CpqSsBackplaneFtpsStatus:noFltTolPower	_2	—	8024_3	—
CpqSsBackplaneFtpsStatus:ok	_3	—	—	—
CpqSsBackplaneFtpsStatus:degraded	_4	—	8024_3	—
CpqSsBackplaneFtpsStatus:failed	_5	—	8024_3	—
CpqSsBackplaneFtpsStatus:notSupported	_6	—	8024_3	—
CpqSsBackplaneFtpsStatus:noFltTolPower-Bay1Missing	_7	—	8024_3	—
CpqSsBackplaneFtpsStatus:noFltTolPower-Bay2Missing	_8	—	8024_3	—
CpqSsExRecoveryServerStatusChange	8025	—	—	—
CpqSsChassisRsoStatus:notSupported	_2	—	8025_6	—
CpqSsChassisRsoStatus:notConfigured	_3	—	8025_6	—
CpqSsChassisRsoStatus:disabled	_4	—	8025_6	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSsChassisRsoStatus:daemonDownDisabled	_5	—	8025_6	—
CpqSsChassisRsoStatus:ok	_6	—	—	—
CpqSsChassisRsoStatus:daemonDownActive	_7	—	8025_6	—
CpqSsChassisRsoStatus:noSecondary	_8	—	8025_6	—
CpqSsChassisRsoStatus:daemonDownNoSecondary	_9	—	8025_6	—
CpqSsChassisRsoStatus:linkDown	_10	—	8025_6	—
CpqSsChassisRsoStatus:daemonDownLinkDown	_11	—	8025_6	—
CpqSsChassisRsoStatus:secondaryRunningAuto	_12	—	8025_6	—
CpqSsChassisRsoStatus:secondaryRunningUser	_13	—	8025_6	—
CpqSsChassisRsoStatus:evTimeoutError	_14	—	8025_6	—
CpqSs5FanStatusChange	8026	—	—	—
CpqSsBoxFanStatus:ok	_2	—	—	—
CpqSsBoxFanStatus:failed	_3	—	8026_2	—
CpqSsBoxFanStatus:noFan	_4	—	8026_2	—
CpqSsBoxFanStatus:degraded	_5	—	8026_2	—
CpqSs5TempStatusChange	8027	—	—	—
cpqSsBoxTempStatus:ok	_2	—	—	—
cpqSsBoxTempStatus:degraded	_3	—	8027_2	—
cpqSsBoxTempStatus:failed	_4	—	8027_2	—
cpqSsBoxTempStatus:noTemp	_5	—	8027_2	—
CpqSs5PwrSupplyStatusChange	8028	—	—	—
CpqSsBoxFltTolPwrSupplyStatus:ok	_2	—	—	—
CpqSsBoxFltTolPwrSupplyStatus:degraded	_3	—	8028_2	—
CpqSsBoxFltTolPwrSupplyStatus:failed	_4	—	8028_2	—
CpqSsBoxFltTolPwrSupplyStatus:noFltTolPower	_5	—	8028_2	—
cpqSs6FanStatusChange	8029	—	—	—
CpqSsBoxFanStatus:ok	_2	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSsBoxFanStatus:failed	_3	—	8029_2	—
CpqSsBoxFanStatus:noFan	_4	—	8029_2	—
CpqSsBoxFanStatus:degraded	_5	—	8029_2	—
cpqSs6TempStatusChange	8030	—	—	—
cpqSsBoxTempStatus:ok	_2	—	—	—
cpqSsBoxTempStatus:degraded	_3	—	8030_2	—
cpqSsBoxTempStatus:failed	_4	—	8030_2	—
cpqSsBoxTempStatus:noTemp	_5	—	8030_2	—
cpqSs6PwrSupplyStatusChange	8031	—	—	—
CpqSsBoxFltTolPwrSupplyStatus:ok	_2	—	—	—
CpqSsBoxFltTolPwrSupplyStatus:degraded	_3	—	8031_2	—
CpqSsBoxFltTolPwrSupplyStatus:failed	_4	—	8031_2	—
CpqSsBoxFltTolPwrSupplyStatus:noFltTolPower	_5	—	8031_2	—

Remote Insight board information (CPQSM2.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSm2ServerReset	9001	—	—	—
CpqSm2ServerPowerOutage	9002	—	—	—
CpqSm2UnauthorizedLoginAttempts	9003	—	—	—
CpqSm2BatteryFailed	9004	—	—	—
CpqSm2SelfTestError	9005	—	—	—
CpqSm2InterfaceError	9006	—	—	—
CpqSm2BatteryDisconnected	9007	—	—	—
CpqSm2KeyboardCableDisconnected	9008	—	—	—
CpqSm2MouseCableDisconnected	9009	—	—	—
CpqSm2ExternalPowerCableDisconnected	9010	—	—	—
CpqSm2LogsFull	9011	—	—	—
CpqSm2SecurityOverrideEngaged	9012	—	—	—
CpqSm2SecurityOverrideDisengaged	9013	—	—	—
CpqSm2ServerFatalError	9014	—	—	—

Threshold management (CPQTHRSH.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqMeRisingAlarmExtended	10005	—	—	—
CpqMeFallingAlarmExtended	10006	—	—	—
CpqMeCriticalRisingAlarmExtended	10007	—	—	—
CpqMeCriticalFallingAlarmExtended	10008	—	—	—

Host system information (CPQHOST.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqHo2GenericTrap	11003	—	—	—
CpqHo2AppErrorTrap	11004	—	—	—
CpqHoProcessEventTrap	11011	—	—	—
CpqHoCriticalSoftwareUpdateTrap	11014	—	—	—
CpqHoCrashDumpNotEnabledTrap	11015	—	—	—
CpqHoBootPagingFileTooSmallTrap	11016	—	—	—
cpqHoSWRunningStatusChangeTrap	11017	—	—	—
cpqHoSWRunningStatus:normal	_2	—	—	—
cpqHoSWRunningStatus:warning	_3	—	11017_2	—
cpqHoSWRunningStatus:minor	_4	—	11017_2	—
cpqHoSWRunningStatus:major	_5	—	11017_2	—
cpqHoSWRunningStatus:critical	_6	—	11017_2	—
cpqHoSWRunningStatus:disabled	_7	—	11017_2	—

Uninterruptible power supply (CPQUPS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqUps2LineFailed	12006	—	12007	—
CpqUps2LineOk	12007	—	—	—
CpqUps2Shutdown	12008	—	12009	—
CpqUps2Confirmation	12009	—	—	—
CpqUps2BatteryLow	12010	—	—	—
CpqUpsOverload	12011	—	—	—
CpqUpsPendingBatteryFailure	12012	—	—	—
CpqUpsGenericCritical	12013	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqUpsGenericInfo	12014	—	—	—

Recovery server information (CPQRECOV.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqRsPartnerFailed	13001	—	—	—
CpqRsStandbyCableFailure	13002	—	—	—
CpqRsStandbyFailure	13003	—	—	—
CpqRsOnlineCableFailure	13004	—	—	—
CpqRsFailoverFailed	13005	—	—	—

Manageable IDE drives (CPQIDE.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqIdeDriveDegraded	14001	—	14002	—
CpqIdeDriveOk	14002	—	—	—
CpqIdeDriveUltraAtaDegraded	14003	—	14002	—
CpqIdeAtaDiskStatusChange	14004	—	—	—
CpqIdeAtaDiskStatus:ok	_2	—	—	—
CpqIdeAtaDiskStatus:smartError	_3	—	14004_2	—
CpqIdeAtaDiskStatus:failed	_4	—	14004_2	—
CpqIdeLogicalDriveStatusChange	14005	—	—	—
CpqIdeLogicalDriveStatus:ok	_2	—	—	—
CpqIdeLogicalDriveStatus:degraded	_3	—	14005_2	—
CpqIdeLogicalDriveStatus:rebuilding	_4	—	14005_2	—
CpqIdeLogicalDriveStatus:failed	_5	—	14005_2	—

Cluster systems information (CPQCLUS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqClusterNodeDegraded	15003	—	—	—
CpqClusterNodeFailed	15004	—	—	—
CpqClusterResourceDegraded	15005	—	—	—
CpqClusterResourceFailed	15006	—	—	—
CpqClusterNetworkDegraded	15007	—	—	—
CpqClusterNetworkFailed	15008	—	—	—

Fibre Channel array information (CPQFCA.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqFcaSpareStatusChange	16002	—	—	—
CpqFcaSpareStatusChange:inactive	_2	—	16002_5	—
CpqFcaSpareStatusChange:failed	_3	—	16002_5	—
CpqFcaSpareStatusChange:building	_4	—	16002_5	—
CpqFcaSpareStatusChange:active	_5	—	—	—
CpqFcTapeCntlrStatusChange	16008	—	—	—
CpqFcTapeCntlrStatus:ok	_2	—	—	—
CpqFcTapeCntlrStatus:offline	_3	—	16008_2	—
CpqFcCntlrActive	16014	—	—	—
CpqFca2PhyDrvStatusChange	16016	—	—	—
CpqFcaPhyDrvStatus:unconfigured	_2	—	16016_3	—
CpqFcaPhyDrvStatus:ok	_3	—	—	—
CpqFcaPhyDrvStatus:threshExceeded	_4	—	16016_3	—
CpqFcaPhyDrvStatus:predictiveFailure	_5	—	16016_3	—
CpqFcaPhyDrvStatus:failed	_6	—	16016_3	—
CpqFcaPhyDrvStatus:unsupported	_7	—	16016_3	—
CpqFca2AccelStatusChange	16017	—	—	—
pqFcaAccelStatus:invalid	_2	—	16017_3	—
CpqFcaAccelStatus:enable	_3	—	—	—
CpqFcaAccelStatus:tmpDisabled	_4	—	16017_3	—
CpqFcaAccelStatus:permDisabled	_5	—	16017_3	—
CpqFca2AccelBadDataTrap	16018	—	—	—
CpqFca2AccelBatteryFailed	16019	—	—	—
CpqFca2CntlrStatusChange	16020	—	—	—
CpqFcaCntlrStatus:ok	_2	—	—	—
CCpqFcaCntlrStatus:failed	_3	—	16020_2	—
CpqFcaCntlrStatus:offline	_4	—	16020_2	—
CpqFcaCntlrStatus:redundantPathOffline	_5	—	16020_2	—
CpqFcaCntlrStatus:notConnected	_6	—	16020_2	—
CpqFca2HostCntlrStatusChange	16021	—	—	—
CpqFcaHostCntlrStatus:ok	_2	—	—	—
CpqFcaHostCntlrStatus:failed	_3	—	16021_2	—
CpqFcaHostCntlrStatus:shutdown	_4	—	16021_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqFcaHostCntlrStatus:loopDegraded	_5	—	16021_2	—
CpqFcaHostCntlrStatus:loopFailed	_6	—	16021_2	—
CpqFcaHostCntlrStatus:notConnected	_7	—	16021_2	—
CpqExtArrayLogDrvStatusChange	16022	—	—	—
CpqFcaLogDrvStatus:ok	_2	—	—	—
CpqFcaLogDrvStatus:failed	_3	—	16022_2	—
CpqFcaLogDrvStatus:unconfigured	_4	—	16022_2	—
CpqFcaLogDrvStatus:recovering	_5	—	16022_2	—
CpqFcaLogDrvStatus:readyForRebuild	_6	—	16022_2	—
CpqFcaLogDrvStatus:rebuilding	_7	—	16022_2	—
CpqFcaLogDrvStatus:wrongDrive	_8	—	16022_2	—
CpqFcaLogDrvStatus:badConnect	_9	—	16022_2	—
CpqFcaLogDrvStatus:overheating	_10	—	16022_2	—
CpqFcaLogDrvStatus:shutdown	_11	—	16022_2	—
CpqFcaLogDrvStatus:expanding	_12	—	16022_2	—
CpqFcaLogDrvStatus:notAvailable	_13	—	16022_2	—
CpqFcaLogDrvStatus:queuedForExpansion	_14	—	16022_2	—
CpqFcaLogDrvStatus:hardError	_15	—	16022_2	—
CpqExtTapeDriveStatusChange	16023	—	—	—
CpqFcTapeDriveStatus:ok	_2	—	—	—
CpqFcTapeDriveStatus:degraded	_3	—	16023_2	—
CpqFcTapeDriveStatus:failed	_4	—	16023_2	—
CpqFcTapeDriveStatus:offline	_5	—	16023_2	—
CpqFcTapeDriveStatus:missingWasOk	_6	—	16023_2	—
CpqFcTapeDriveStatus:missingWasOffline	_7	—	16023_2	—
CpqExtTapeDriveCleaningRequired	16024	—	—	—
CpqExtTapeDriveCleanTapeReplace	16025	—	—	—
CpqExtTapeLibraryStatusChange	16026	—	—	—
CpqFcTapeLibraryStatus:ok	_2	—	—	—
CpqFcTapeLibraryStatus:degraded	_3	—	16026_2	—
CpqFcTapeLibraryStatus:failed	_4	—	16026_2	—
CpqFcTapeLibraryStatus:offline	_5	—	16026_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqExtTapeLibraryDoorStatusChange	16027	—	—	—
CpqFca3HostCntlrStatusChange	16028	—	—	—
CpqFcaHostCntlrStatus:ok	_2	—	—	—
CpqFcaHostCntlrStatus:failed	_3	—	16028_2	—
CpqFcaHostCntlrStatus:shutdown	_4	—	16028_2	—
CpqFcaHostCntlrStatus:loopDegraded	_5	—	16028_2	—
CpqFcaHostCntlrStatus:loopFailed	_6	—	16028_2	—
CpqFcaHostCntlrStatus:notConnected	_7	—	16028_2	—

Network interface card information (CPQNIC.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqNic2ConnectivityRestored	18005	—	—	—
CpqNic2ConnectivityLost	18006	—	18005	—
CpqNic2RedundancyIncreased	18007	—	—	—
CpqNic2RedundancyReduced	18008	—	18007	—
CpqNicVirusLikeActivityDetected	18009	—	—	—
CpqNicVirusLikeActivityStopped	18010	—	18009	—
CpqNic3Connectivity Restored	18011	—	—	—
CpqNic3ConnectivityLost	18012	—	18012	—
CpqNic3RedundancyIncreased	18013	—	—	—
CpqNic3RedundancyReduced	18014	—	18013	—

Operating system management (CPQWINOS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqOsCpuTimeDegraded	19001	—	—	—
CpqOsCpuTimeFailed	19002	—	—	—
CpqOsCacheCopyReadHitsDegraded	19003	—	—	—
CpqOsCacheCopyReadHitsFailed	19004	—	—	—
CpqOsPageFileUsageDegraded	19005	—	—	—
CpqOsPageFileUsageFailed	19006	—	—	—
CpqOsLogicalDiskBusyTimeDegraded	19007	—	—	—
CpqOsLogicalDiskBusyTimeFailed	19008	—	—	—

Rack and power management (CPQRPM.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqRPMTrapDeviceConnected	RPM_1	—	—	—
cpqRPMTrapConnectionLost	RPM_2	—	RPM_1	—
cpqRPMTrapLookupFailed	RPM_3	—	—	—
cpqRPMTrapConnectionFailed	RPM_4	—	—	—
cpqRPMTrapDeviceSettingsChanged	RPM_5	—	—	—
cpqRPMTrapCMCTemp1BelowMin	RPM_10001	—	RPM_10004	—
cpqRPMTrapCMCTemp1AboveWarn	RPM_10002	—	RPM_10004	—
cpqRPMTrapCMCTemp1AboveMax	RPM_10003	—	RPM_10004	—
cpqRPMTrapCMCTemp1Normal	RPM_10004	—	—	—
cpqRPMTrapCMCTemp2BelowMin	RPM_10005	—	RPM_10008	—
cpqRPMTrapCMCTemp2AboveWarn	RPM_10006	—	RPM_10008	—
cpqRPMTrapCMCTemp2AboveMax	RPM_10007	—	RPM_10008	—
cpqRPMTrapCMCTemp2Normal	RPM_10008	—	—	—
CpqRPMTrapCMCVoltUnder	RPM_10011	—	RPM_10013	—
CpqRPMTrapCMCVoltOver	RPM_10012	—	RPM_10013	—
CpqRPMTrapCMCVoltNormal	RPM_10013	—	—	—
CpqRPMTrapCMCHmdtUnder	RPM_10021	—	RPM_10023	—
CpqRPMTrapCMCHmdtOver	RPM_10022	—	RPM_10023	—
CpqRPMTrapCMCHmdtNormal	RPM_10023	—	—	—
cpqRPMTrapCMCSmokeDetected	RPM_10031	—	RPM_10032	—
cpqRPMTrapCMCSmokeCleared	RPM_10032	—	—	—
cpqRPMTrapCMCShockDetected	RPM_10041	—	RPM_10042	—
CpqRPMTrapCMCShockCleared	RPM_10042	—	—	—
cpqRPMTrapCMCAux1Alarm	RPM_10051	—	RPM_10052	—
cpqRPMTrapCMCAux1Cleared	RPM_10052	—	—	—
cpqRPMTrapCMCAux2Alarm	RPM_10053	—	RPM_10054	—
cpqRPMTrapCMCAux2Cleared	RPM_10054	—	—	—
cpqRPMTrapCMCInput1Opened	RPM_10101	—	RPM_10102	—
cpqRPMTrapCMCInput1Closed	RPM_10102	—	—	—
cpqRPMTrapCMCInput2Opened	RPM_10103	—	RPM_10104	—
cpqRPMTrapCMCInput2Closed	RPM_10104	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqRPMTrapCMCInput3Opened	RPM_10105	—	RPM_10106	—
cpqRPMTrapCMCInput3Closed	RPM_10106	—	—	—
cpqRPMTrapCMCInput4Opened	RPM_10107	—	RPM_10108	—
cpqRPMTrapCMCInput4Closed	RPM_10108	—	—	—
cpqRPMTrapCMCLockset1Unlocked	RPM_10111	—	RPM_10114	—
cpqRPMTrapCMCLockset1FailedToLock	RPM_10112	—	RPM_10114	—
cpqRPMTrapCMCLockset1Error	RPM_10113	—	RPM_10114	—
cpqRPMTrapCMCLockset1Locked	RPM_10114	—	—	—
cpqRPMTrapCMCLockset2Unlocked	RPM_10116	—	RPM_10119	—
cpqRPMTrapCMCLockset2FailedToLock	RPM_10117	—	RPM_10119	—
cpqRPMTrapCMCLockset2Error	RPM_10118	—	RPM_10119	—
cpqRPMTrapCMCLockset2Locked	RPM_10119	—	—	—
cpqRPMTrapCMCLockset1Normal	RPM_10134	—	—	—
cpqRPMTrapCMCLockset2Normal	RPM_10135	—	—	—
cpqRPMTrapUPSInputVoltageBelowMin	20001	—	20003	—
cpqRPMTrapUPSInputVoltageAboveMax	20002	—	20003	—
cpqRPMTrapUPSInputVoltageNormal	20003	—	—	—
cpqRPMTrapUPSOutputVoltageBelowMin	20011	—	21020	—
cpqRPMTrapUPSOutputVoltageAboveMax	20012	—	21020	—
cpqRPMTrapUPSOutputOverload	20014	—	20015	—
cpqRPMTrapUPSOutputOverloadCleared	20015	—	—	—
cpqRPMTrapUPSBatteryDepleted	20022	—	20023	—
cpqRPMTrapUPSBatteryLevelNormal	20023	—	—	—
cpqRPMTrapUPSOnBypass	20032	—	—	—
cpqRPMTrapUPSTemperatureLow	20101	—	20103	—
cpqRPMTrapUPSTemperatureHigh	20102	—	20103	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqRPMTrapUPSTemperatureNormal	20103	—	—	—
cpqRPMTrapUPSInternalFailure	20111	—	20111	—
cpqRPMTrapUPSInternalFailureCleared	20112	—	—	—
cpqRPMTrapUPSBatteryFailure	20121	—	20122	—
cpqRPMTrapUPSBatteryFailureCleared	20122	—	—	—
cpqRPMTrapUPSDiagnosticTestFailed	20131	—	20132	—
cpqRPMTrapUPSDiagnosticTestSucceeded	20132	—	—	—
cpqRPMTrapUPSInputUnderOverFreq	20141	—	20142	—
cpqRPMTrapUPSInputUnderOverFreqCleared	20142	—	—	—
cppqRPMtrapUPSStartedOnBattery	20151	—	20152	—
cppqRPMtrapUPSStartedOnBatteryCleared	20152	—	—	—
cpqRPMTrapUPSBypassNotAvailable	20161	—	20162	—
cpqRPMTrapUPSBypassNotAvailableCleared	20162	—	—	—
cpqRPMTrapUPSUtilityFail	20171	—	20172	—
cpqRPMTrapUPSUtilityFailCleared	20172	—	—	—
cpqRPMTrapUPSUtilityNotPresent	20181	—	20182	—
cpqRPMTrapUPSUtilityNotPresentCleared	20182	—	—	—
cpqRPMTrapUPSBypassManualTurnedOn	20191	—	20192	—
cpqRPMTrapUPSBypassManualTurnedOff	20192	—	—	—
cpqRPMTrapUPSSiteWiringFault	20201	—	20202	—
cpqRPMTrapUPSSiteWiringNormal	20202	—	—	—
cpqRPMtrapUPSTemperatureOutOfRange	21007	—	21008	—
cpqRPMtrapUPSTemperatureOutOfRangeCleared	21008	—	—	—
cpqRPMTrapUPSShutdownPending	21011	—	21012	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqRPMTrapUPSShutdownPendingCleared	21012	—	—	—
cpqRPMTrapUPSShutdownImminent	21013	—	21014	—
cpqRPMTrapUPSShutdownImminentCleared	21014	—	—	—
cpqRPMtrapUPSOutputoutofRange	21019	—	21020	—
cpqRPMTrapUPSOutputVoltageNormal	21020	—	—	—
cpqRPMtrapUPSInputOutofRange	21021	—	21022	—
cpqRPMtrapUPSInputOutofRangeCleared	21022	—	—	—
cpqRPMTrapUPSLossOfRedundancy	21023	—	21024	—
cpqRPMTrapUPSLossOfRedundancyCleared	21024	—	—	—
cpqRPMTrapUPSOnBuck	21029	—	—	—
cpqRPMTrapUPSOnBoost	21031	—	—	—
cpqRPMTrapUPSManualLoadDumped	21033	—	21034	—
cpqRPMTrapUPSManualLoadDumpedCleared	21034	—	—	—
cpqRPMTrapUPSFanFailure	21035	—	21036	—
cpqRPMTrapUPSFanFailureCleared	21036	—	—	—
cpqRPMTrapUPSEPOInitiated	21037	—	—	—
cpqRPMTrapUPSCheckBreaker	21041	—	21042	—
cpqRPMTrapUPSCheckBreakerCleared	21042	—	—	—
cpqRPMTrapUPSCabinetDoorOpen	21045	—	21046	—
cpqRPMTrapUPSCabinetDoorOpenCleared	21046	—	—	—
cpqRPMtrapUPSBypassOnAuto	21047	—	21048	—
cpqRPMtrapUPSBypassOnAutoCleared	21048	—	—	—
cpqRPMTrapUPSBatteriesDisconnected	21053	—	21054	—
cpqRPMTrapUPSBatteriesDisconnectedCleared	21054	—	—	—
cpqRPMTrapUPSBatteryLow	21055	—	21056	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqRPMTrapUPSBatteryLowCleared	21056	—	—	—
cpqRPMTrapUPSBatteryDischarged	21057	—	21058	—
cpqRPMTrapUPSBatteryDischargedCleared	21058	—	—	—
cpqRPMtrapUPSBypassONManual	21059	—	21060	—
cpqRPMtrapUPSBypassOffManual	21060	—	—	—
cpqRPMTrapUPSOnBattery	21063	—	21064	—
cpqRPMTrapUPSOnUtilityPower	21064	—	—	—
cpqRPMTrapUPSDCStartOccurred	29998	—	29999	—
cpqRPMTrapUPSDCStartOccurredCleared	29999	—	—	—
cpqRPMTestTrap	50001	—	—	—
cpqPMTrapCritical	PM_1	—	—	—
cpqPMTrapWarning	PM_2	—	—	—
cpqPMTrapInformation	PM_3	—	—	—
cpqPMTrapCleared	PM_4	—	—	—

Rack enclosure information (CPQRACK.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqRackNameChanged	22001	—	—	—
CpqRackEnclosureNameChanged	22002	—	—	—
CpqRackEnclosureRemoved	22003	—	22004	—
CpqRackEnclosureInserted	22004	—	—	—
CpqRackEnclosureTempFailed	22005	—	22007	—
CpqRackEnclosureTempDegraded	22006	—	22007	—
CpqRackEnclosureTempOk	22007	—	—	—
CpqRackEnclosureFanFailed	22008	—	22010	—
CpqRackEnclosureFanDegraded	22009	—	22010	—
CpqRackEnclosureFanOk	22010	—	—	—
CpqRackEnclosureFanRemoved	22011	—	22012	—
CpqRackEnclosureFanInserted	22012	—	—	—
CpqRackPowerSupplyFailed	22013	—	22015	—
CpqRackPowerSupplyDegraded	22014	—	22015	—
CpqRackPowerSupplyOk	22015	—	—	—
CpqRackPowerSupplyRemoved	22016	—	22017	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqRackPowerSupplyInserted	22017	—	—	—
CpqRackPowerSubsystemNotRedundant	22018	—	—	—
CpqRackPowerSubsystemLineVoltageProblem	22019	—	—	—
CpqRackPowerSupplyInputLineStatus:noError	_1	—	—	—
CpqRackPowerSupplyInputLineStatus: lineOverVoltage	_2	—	22019_1	—
CpqRackPowerSupplyInputLineStatus: lineUnderVoltage	_3	—	22019_1	—
CpqRackPowerSupplyInputLineStatus:lineHit	_4	—	22019_1	—
CpqRackPowerSupplyInputLineStatus:brownout	_5	—	22019_1	—
CpqRackPowerSupplyInputLineStatus: linePowerLoss	_6	—	22019_1	—
CpqRackPowerSubsystemOverloadCondition	22020	—	—	—
CpqRackPowerShedAutoShutdown	22021	—	—	—
CpqRackServerPowerOnFailedNotRedundant	22022	—	—	—
CpqRackServerPowerOnFailedNotEnoughPower	22023	—	—	—
CpqRackServerPowerOnFailedEnclosure NotFound	22024	—	—	—
CpqRackServerPowerOnFailedPower ChassisNotFound	22025	—	—	—
CpqRackServerPowerOnManualOverride	22026	—	—	—
CpqRackFuseOpen	22027	—	—	—
CpqRackServerBladeRemoved	22028	—	22029	—
CpqRackServerBladeInserted	22029	—	—	—
CpqRackPowerChassisNotLoadBalanced	22030	—	—	—
CpqRackPowerChassisDcPowerProblem	22031	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqRackPowerChassisAcFacilityPowerExceeded	22032	—	—	—
CpqRackPowerUnknownPowerConsumption	22033	—	—	—
CpqRackPowerChassisLoadBalancingWireMissing	22034	—	—	—
CpqRackPowerChassisTooManyPowerChassis	22035	—	—	—
CpqRackPowerChassisConfigError	22036	—	—	—
cpqRackEnclosureManagerDegraded	22037	—	22038	—
cpqRackEnclosureManagerOk	22038	—	—	—
cpqRackEnclosureManagerRemoved	22039	—	22040	—
cpqRackEnclosureManagerInserted	22040	—	—	—
cpqRackManagerPrimaryRole	22041	—	—	—
cpqRackServerBladeEKeyingFailed	22042	—	22043	—
cpqRackServerBladeEKeyingOK	22043	—	—	—
cpqRackNetConnectorRemoved	22044	—	22045	—
cpqRackNetConnectorInserted	22045	—	—	—
cpqRackNetConnectorFailed	22046	—	22048	—
cpqRackNetConnectorDegraded	22047	—	22048	—
cpqRackNetConnectorOk	22048	—	—	—
cpqRackServerBladeToLowPower	22049	—	—	—
cpqRackServerBladeRemoved2	22050	—	22051	—
cpqRackServerBladeInserted2	22051	—	—	—
cpqRackServerBladeStatusRepaired	22052	—	—	—
cpqRackServerBladeStatusDegraded	22053	—	22052	—
cpqRackServerBladeStatusCritical	22054	—	22052	—
cpqRackServerBladeGrpCapTimeout	22055	—	—	*

Console management controller (CPQCMC.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCmcalarmTemp1	153001	—	—	—
CpqCmcStatusTemp1:normal	_2	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCmcStatusTemp1:warning	_3	—	153001_2	—
CpqCmcStatusTemp1:overMax	_4	—	153001_2	—
CpqCmcStatusTemp1:underMin	_5	—	153001_2	—
CpqCmcStatusTemp1:noSensor	_6	—	153001_2	—
CpqCmcStatusTemp1:error	_7	—	153001_2	—
CpqCmcalarmTemp2	153002	—	—	—
CpqCmcStatusTemp2:normal	_2	—	—	—
CpqCmcStatusTemp2:warning	_3	—	153002_2	—
CpqCmcStatusTemp2:overMax	_4	—	153002_2	—
CpqCmcStatusTemp2:underMin	_5	—	153002_2	—
CpqCmcStatusTemp2:noSensor	_6	—	153002_2	—
CpqCmcStatusTemp2:error	_7	—	153002_2	—
CpqCmcalarmFan1	153003	—	—	—
CpqCmcStatusFan1:autoOff	_2	—	153003_3	—
CpqCmcStatusFan1:autoOn	_3	—	—	—
CpqCmcStatusFan1:manualOff	_4	—	153003_5	—
CpqCmcStatusFan1:manualOn	_5	—	—	—
CpqCmcStatusFan1:smokeOff	_6	—	—	—
CpqCmcStatusFan1:doorOff	_7	—	—	—
CpqCmcStatusFan1:noFan	_8	—	—	—
CpqCmcStatusFan1:error	_9	—	—	—
CpqCmcalarmFan2	153004	—	—	—
CpqCmcStatusFan2:autoOff	_2	—	153004_3	—
CpqCmcStatusFan2:autoOn	_3	—	—	—
CpqCmcStatusFan2:manualOff	_4	—	153004_5	—
CpqCmcStatusFan2:manualOn	_5	—	—	—
CpqCmcStatusFan2:smokeOff	_6	—	—	—
CpqCmcStatusFan2:doorOff	_7	—	—	—
CpqCmcStatusFan2:noFan	_8	—	—	—
CpqCmcStatusFan2:error	_9	—	—	—
CpqCmcalarmVoltage	153005	—	—	—
CpqCmcStatusVoltage:normal	_2	—	—	—
CpqCmcStatusVoltage:overMax	_3	—	153005_2	—
CpqCmcStatusVoltage:underMin	_4	—	153005_2	—
CpqCmcStatusVoltage:noVoltage	_5	—	153005_2	—
CpqCmcalarmHumidity	153006	—	—	—
CpqCmcStatusHumidity:normal	_2	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCmcStatusHumidity:overMax	_3	—	153006_2	—
CpqCmcStatusHumidity:underMin	_4	—	153006_2	—
CpqCmcStatusHumidity:noSensor	_5	—	153006_2	—
CpqCmcStatusHumidity:error	_6	—	153006_2	—
CpqCmcalarmInput1	153007	—	—	—
CpqCmcStatusInput1:closed	_2	—	—	—
CpqCmcStatusInput1:open	_3	—	153007_2	—
CpqCmcStatusInput1:noSensor	_4	—	—	—
CpqCmcalarmInput2	153008	—	—	—
CpqCmcStatusInput2:closed	_2	—	—	—
CpqCmcStatusInput2:open	_3	—	153008_2	—
CpqCmcStatusInput2:noSensor	_4	—	—	—
CpqCmcalarmInput3	153009	—	—	—
CpqCmcStatusInput3:closed	_2	—	—	—
CpqCmcStatusInput3:open	_3	—	153009_2	—
CpqCmcStatusInput3:noSensor	_4	—	—	—
CpqCmcalarmInput4	153010	—	—	—
CpqCmcStatusInput4:closed	_2	—	—	—
CpqCmcStatusInput4:open	_3	—	153010_2	—
CpqCmcStatusInput4:noSensor	_4	—	—	—
CpqCmcalarmLock1	153011	—	—	—
CpqCmcStatusLock1Lock:locked	_2	—	—	—
CpqCmcStatusLock1Lock:unlockedAuto	_3	—	153011_2	—
CpqCmcStatusLock1Lock:unlockedTime	_4	—	153011_2	—
CpqCmcStatusLock1Lock:unlockedSmoke	_5	—	153011_2	—
CpqCmcStatusLock1Lock:unlockedKey	_6	—	153011_2	—
CpqCmcStatusLock1Lock:unlockedPwrFail	_7	—	153011_2	—
CpqCmcStatusLock1Lock:unlockedBattLow	_8	—	153011_2	—
CpqCmcStatusLock1Lock:unlockedNetFail	_9	—	153011_2	—
CpqCmcStatusLock1Lock:unlockedConnFail	_10	—	153011_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCmcStatusLock1Lock:readyToLock	_11	—	153011_2	—
CpqCmcStatusLock1Lock:alarm	_12	—	153011_2	—
CpqCmcStatusLock1Lock:configError	_13	—	153011_2	—
CpqCmcStatusLock1Lock:notAvail	_14	—	153011_2	—
CpqCmcalarmLock2	153012	—	—	—
CpqCmcStatusLock2Lock:locked	_2	—	—	—
CpqCmcStatusLock2Lock:unlockedAuto	_3	—	153012_2	—
CpqCmcStatusLock2Lock:unlockedTime	_4	—	153012_2	—
CpqCmcStatusLock2Lock:unlockedSmoke	_5	—	153012_2	—
CpqCmcStatusLock2Lock:unlockedKey	_6	—	153012_2	—
CpqCmcStatusLock2Lock:unlockedPwrFail	_7	—	153012_2	—
CpqCmcStatusLock2Lock:unlockedBattLow	_8	—	153012_2	—
CpqCmcStatusLock2Lock:unlockedNetFail	_9	—	153012_2	—
CpqCmcStatusLock2Lock:unlockedConnFail	_10	—	153012_2	—
CpqCmcStatusLock2Lock:readyToLock	_11	—	153012_2	—
CpqCmcStatusLock2Lock:alarm	_12	—	153012_2	—
CpqCmcStatusLock2Lock:configError	_13	—	153012_2	—
CpqCmcStatusLock2Lock:notAvail	_14	—	153012_2	—
CpqCmcalarmSmoke	153013	—	—	—
CpqCmcStatusSmoke:cleared	_2	—	—	—
CpqCmcStatusSmoke:present	_3	—	153013_2	—
CpqCmcStatusSmoke:noSensor	_4	—	153013_2	—
CpqCmcalarmShock	153014	—	—	—
CpqCmcStatusShock:cleared	_2	—	—	—
CpqCmcStatusShock:present	_3	—	153014_2	—
CpqCmcStatusShock:noSensor	_4	—	153014_2	—
CpqCmcalarmAux1	153015	—	—	—
CpqCmcStatusAux1:ok	_2	—	—	—
CpqCmcStatusAux1:alarm	_3	—	153015_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCmcStatusAux1:noSensor	_4	—	153015_2	—
CpqCmcalarmAux2	153016	—	—	—
CpqCmcStatusAux2:ok	_2	—	—	—
CpqCmcStatusAux2:alarm	_3	—	153016_2	—
CpqCmcStatusAux2:noSensor	_4	—	153016_2	—
CpqCmcalarm1	153017	—	—	—
CpqCmcStatusAlarm1:ok	_2	—	—	—
CpqCmcStatusAlarm1:alarm	_3	—	153017_2	—
CpqCmcalarm2	153018	—	—	—
CpqCmcStatusAlarm2:ok	_2	—	—	—
CpqCmcStatusAlarm2:alarm	_3	—	153018_2	—
CpqCmcalarmLock1Dev	153019	—	—	—
CpqCmcStatusLock1Dev:ok	_2	—	—	—
CpqCmcStatusLock1Dev:powerFail	_3	—	153019_2	—
CpqCmcStatusLock1Dev:lowBattery	_4	—	153019_2	—
CpqCmcStatusLock1Dev:replaceBatt	_5	—	153019_2	—
CpqCmcStatusLock1Dev:missingBatt	_6	—	153019_2	—
CpqCmcStatusLock1Dev:noConnect	_7	—	153019_2	—
CpqCmcStatusLock1Dev:notAvail	_8	—	153019_2	—
CpqCmcalarmLock2Dev	153020	—	—	—
CpqCmcStatusLock2Dev:ok	_2	—	—	—
CpqCmcStatusLock2Dev:powerFail	_3	—	153020_2	—
CpqCmcStatusLock2Dev:lowBattery	_4	—	153020_2	—
CpqCmcStatusLock2Dev:replaceBatt	_5	—	153020_2	—
CpqCmcStatusLock2Dev:missingBatt	_6	—	153020_2	—
CpqCmcStatusLock2Dev:noConnect	_7	—	153020_2	—
CpqCmcStatusLock2Dev:notAvail	_8	—	153020_2	—
CpqCmcSetupChanged	153100	—	—	—

CR3500 RAID controller (CPQCR.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCrController1FailureTrap	1	—	2	—
CpqCrController1InformationTrap	2	—	—	—
CpqCrController2FailureTrap	3	—	4	—
CpqCrController2InformationTrap	4	—	—	—
CpqCrLogDriveInformationTrap	5	—	—	—
CpqCrLogDriveFailureTrap	6	—	5	—
CpqCrLogDriveReconstructTrap	7	—	5	—
CpqCrLogDriveReducedTrap	8	—	5	—
CpqCrLogDriveInitializingTrap	9	—	5	—
CpqCrDiskInformationTrap	10	—	—	—
CpqCrDiskFailureTrap	11	—	10	—
CpqCrDiskReconstructTrap	12	—	13, 14	—
CpqCrDiskAvailableTrap	13	—	14	—
CpqCrDiskSpareTrap	14	—	—	—
CpqCrEMUNormalTrap	15	—	—	—
CpqCrEMUFanFailureTrap	16	—	17	—
CpqCrEMUFanInformationTrap	17	—	—	—
CpqCrEMUPowerSupplyFailureTrap	18	—	19	—
CpqCrEMUPowerSupplyInformationTrap	19	—	—	—
CpqCrExpCabFanFailureTrap	20	—	21	—
CpqCrExpCabFanInformationTrap	21	—	—	—
CpqCrExpCabPowerSupplyFailureTrap	22	—	29	—
CpqCrEMUTemperatureWarningTrap	23	—	25	—
CpqCrEMUTemperatureCriticalTrap	24	—	25	—
CpqCrEMUTemperatureInformationTrap	25	—	—	—
CpqCrExpCabTemperatureWarningTrap	26	—	28	—
CpqCrExpCabTemperatureCriticalTrap	27	—	28	—
CpqCrExpCabTemperatureInformationTrap	28	—	—	—
CpqCrExpCabPowerSupplyInformationTrap	29	—	—	—
CpqCrPhyDiskInformationTrap	30	—	—	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqCrPhyDiskFailureTrap	31	—	30	—
CpqCrPhyDiskReconstructTrap	32	—	33	—
CpqCrPhyDiskAvailableTrap	33	—	—	—
CpqCrPhyDiskSpareTrap	34	—	—	—

HP Storage Management Appliance (CPQSANAPP.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
swFailureTrap (1)	SanW_1	—	SanW_4	—
swWarningTrap (2)	SanW_2	—	SanW_4	—
swInformationTrap (4)	SanW_4	—	—	—

StorageWorks Command Console (CPQSWCC.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSwccKzpccPhyDeviceEventTrap	Kzpcc_1	—	—	—
cpqSwccKzpccEventSeverity:informational	_1	—	—	—
cpqSwccKzpccEventSeverity:warning	_2	—	—	—
cpqSwccKzpccEventSeverity:error	_3	—	—	—
CpqSwccKzpccVirtualDeviceEventTrap	Kzpcc_2	—	—	—
cpqSwccKzpccEventSeverity:informational	_1	—	—	—
cpqSwccKzpccEventSeverity:warning	_2	—	—	—
cpqSwccKzpccEventSeverity:error	_3	—	—	—
CpqSwccKzpccSubsystemEventTrap	Kzpcc_3	—	—	—
cpqSwccKzpccEventSeverity:informational	_1	—	—	—
cpqSwccKzpccEventSeverity:warning	_2	—	—	—
cpqSwccKzpccEventSeverity:error	_3	—	—	—
CpqSwccFibreDeviceStatusChange	Fibre_1	—	—	—
cpqSwccFibreDevState:ok	_2	—	—	—
cpqSwccFibreDevState:degraded	_3	—	_2	—
cpqSwccFibreDevState:failed	_4	—	_2	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
CpqSwccTapeControllerStatusChange	Tape_2	—	—	—
cpqSwccFibreDevState:other	_1	—	—	—
cpqSwccFibreDevState:ok	_2	—	—	—
cpqSwccFibreDevState:degraded	_3	—	_2	—
cpqSwccFibreDevState:failed	_4	—	_2	—
CpqSwccEmuDevDeviceStatusChange	Emu_1	—	—	—
cpqSwccEmuDevDevState:ok	_2	—	—	—
cpqSwccEmuDevDevState:degraded	_3	—	_2	—
cpqSwccEmuDevDevState:failed	_4	—	_2	—

Switch Traps (CIMTRAPS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
switchFirmwareTransferred	161001	—	—	—
switchConfigFileTransferred	161002	—	—	—
switchTFTPTransferSucceeded	161003	—	—	—
switchTFTPTransferFailed	161004	—	161003	—
switchFileInvalid	161005	—	—	—
switchFanFailed	161006	—	161007	—
switchFanOk	161007	—	—	—
switchTempSensorDegraded	161008	—	161010	—
switchTempSensorFailed	161009	—	161010	—
switchTempSensorOk	161010	—	—	—
switchPostSuccess	161011	—	—	—
switchLoginFailure	161012	—	—	—
switchLocationChange	161013	—	—	—
switchCubeTypeChange	161014	—	—	—
switchSNTPServiceUnavailable	161015	—	—	—

StorageWorks Enterprise Array Manager (HS_AGENT.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
diskFailureTrap	Steam_1	—	Steam_2	—
diskInformationTrap	Steam_2	—	—	—
powerSupplyFailureTrap	Steam_3	—	Steam_4	—
powerSupplyInformationTrap	Steam_4	—	—	—
fanFailureTrap	Steam_5	—	Steam_6	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
fanInformationTrap	Steam_6	—	—	—
cacheBatteryFailureTrap	Steam_7	—	Steam_9	—
cacheBatteryLowTrap	Steam_8	—	Steam_9	—
cacheBatteryInformationTrap	Steam_9	—	—	—
temperatureOverThresholdTrap	Steam_10	—	—	—
temperatureInformationTrap	Steam_11	—	—	—
communicationFailureTrap	Steam_12	—	Steam_13	—
communicationInformationTrap	Steam_13	—	—	—
controllerFailureTrap	Steam_14	—	Steam_15	—
controllerInformationTrap	Steam_15	—	—	—
lunFailureTrap	Steam_16	—	Steam_19	—
lunReconstructTrap	Steam_17	—	Steam_19	—
lunReducedTrap	Steam_18	—	Steam_19	—
lunInformationTrap	Steam_19	—	—	—
externalInputFailureTrap	Steam_20	—	Steam_21	—
externalInputInformationTrap	Steam_21	—	—	—
cacheBatteryStateUnknownTrap	Steam_22	—	Steam_9	—

Blade Type-2 traps (BT2TRAPS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
bt2SwPrimaryPowerSupplyFailure	BT2_1	—	—	—
bt2SwDefGwUp	BT2_2	—	—	—
bt2SwDefGwDown	BT2_3	—	BT2_2	—
bt2SwDefGwInService	BT2_4	—	—	—
bt2SwDefGwNotInService	BT2_5	—	BT2_4	—
bt2SwVrrpNewMaster	BT2_16	—	—	—
bt2SwVrrpNewBackup	BT2_17	—	—	—
bt2SwVrrpAuthFailure	BT2_18	—	—	—
bt2SwLoginFailure	BT2_19	—	—	—
bt2SwTempExceedThreshold	BT2_22	—	BT2_31	—
bt2SwRackLocationChange	BT2_26	—	—	—
bt2SwApplyComplete	BT2_27	—	—	—
bt2SwSaveComplete	BT2_28	—	—	—
bt2SwFwDownloadSucess	BT2_29	—	—	—
bt2SwFwDownloadFailure	BT2_30	—	BT2_29	—
bt2SwTempReturnThreshold	BT2_31	—	—	—
bt2SwFanFailure	BT2_32	—	BT2_33	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
bt2SwFanFailureFixed	BT2_33	—	—	—
bt2SwUfdfoLtMFailure	BT2_34	—	BT2_35	—
bt2SwUfdfoLtMUP	BT2_35	—	—	—
bt2SwUfdfoGlobalEna	BT2_36	—	—	—
bt2SwUfdfoGlobalDis	BT2_37	—	BT2_36	—
bt2SwUfdfoLtdAutoEna	BT2_38	—	—	—
bt2SwUfdfoLtdAutoDis	BT2_39	—	BT2_38	—
bt2SwCubeInserted	BT2_40	—	—	—
bt2SwCubeRemoved	BT2_41	—	BT2_40	—
bt2SwStgNewRoot	BT2_42	—	—	—
bt2SwCistNewRoot	BT2_43	—	—	—
bt2SwStgTopologyChanged	BT2_44	—	—	—
bt2SwCistTopologyChanged	BT2_45	—	—	—
bt2SwHotlinksMasterUp	BT2_46	—	—	—
bt2SwHotlinksMasterDn	BT2_47	—	BT2_46	—
bt2SwHotlinksBackupUp	BT2_48	—	—	—
bt2SwHotlinksBackupDn	BT2_49	—	BT2_48	—
bt2SwHotlinksNone	BT2_50	—	BT2_46	—

Service incident information (CPQSERVICE.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqServiceInformation	164001	—	—	—
cpqServiceIncidentStatus:intransit	_2	—	164001_3	—
cpqServiceIncidentStatus:delivered	_3	—	—	—
cpqServiceIncidentStatus:undelivered	_4	—	164001_3	—
cpqServiceIncidentStatus:assigned	_5	—	164001_3	—
cpqServiceIncidentStatus:closed	_6	—	164001_3	—
cpqServiceIncidentStatus:submitted_to_ISEE	_7	—	164001_3	—
cpqService2Information	164002	—	—	—
cpqServiceIncidentStatus:intransit	_2	—	164002_3	—
cpqServiceIncidentStatus:delivered	_3	—	—	—
cpqServiceIncidentStatus:undelivered	_4	—	164002_3	—
cpqServiceIncidentStatus:assigned	_5	—	164002_3	—
cpqServiceIncidentStatus:closed	_6	—	164002_3	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqServiceIncidentStatus:submitted_to_ISEE	_7	—	164002_3	—
CpqService3Information	164003	—	—	—
cpqServiceIncidentStatus:intransit	_2	—	164003_3	—
cpqServiceIncidentStatus:delivered	_3	—	—	—
cpqServiceIncidentStatus:undelivered	_4	—	164003_3	—
cpqServiceIncidentStatus:assigned	_5	—	164003_3	—
cpqServiceIncidentStatus:closed	_6	—	164003_3	—
cpqServiceIncidentStatus:submitted_to_ISEE	_7	—	164003_3	—

Power Device SNMP Management Card (CPQPOWER.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
trapCritical	Pwr_1	—	Pwr_4	—
trapWarning	Pwr_2	—	Pwr_4	—
trapInformation	Pwr_3	—	Pwr_4	—
trapCleared	Pwr_4	—	—	—
trapTest	Pwr_5	—	—	—
deviceTrapInitialization	Pwr_6	—	—	—

HP OpenView - Network Node Manager (HPOV-NNM.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
hpOVMessageTrap	hpOV_5891 6872	—	—	—

Water Cooled Rack Monitor (CPQWCRM.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
alarmSensorInternal	WCRM_1	—	—	—
internalMsgStatus:notAvail	_1	—	WCRM_1_4	—
internalMsgStatus:configChanged	_2	—	WCRM_1_4	—
internalMsgStatus:error	_3	—	WCRM_1_4	—
internalMsgStatus:ok	_4	—	—	—
internalMsgStatus:alarm	_5	—	WCRM_1_4	—
internalMsgStatus:warning	_6	—	WCRM_1_4	—
internalMsgStatus:tooLow	_7	—	WCRM_1_4	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
internalMsgStatus:tooHigh	_8	—	WCRM_1_4	—
internalMsgStatus:setOff	_9	—	WCRM_1_10	—
internalMsgStatus:setOn	_10	—	—	—
alarmSensorWaterCoolUnit	WCRM_2	—	—	—
waterCoolUnitMsgStatus:notAvail	_1	—	WCRM_2_4	—
waterCoolUnitMsgStatus:configChanged	_2	—	WCRM_2_4	—
waterCoolUnitMsgStatus:error	_3	—	WCRM_2_4	—
waterCoolUnitMsgStatus:ok	_4	—	—	—
waterCoolUnitMsgStatus:alarm	_5	—	WCRM_2_4	—
waterCoolUnitMsgStatus:warning	_6	—	WCRM_2_4	—
waterCoolUnitMsgStatus:tooLow	_7	—	WCRM_2_4	—
waterCoolUnitMsgStatus:tooHigh	_8	—	WCRM_2_4	—
waterCoolUnitMsgStatus:setOff	_9	—	WCRM_2_10	—
waterCoolUnitMsgStatus:setOn	_10	—	—	—
alarmInternal	WCRM_5	—	—	—
cpqWcrmInternalStatus:ok	_1	—	—	—
cpqWcrmInternalStatus:error	_2	—	WCRM_5_1	—
cpqWcrmInternalStatus:changed	_3	—	WCRM_5_1	—
cpqWcrmInternalStatus:reset	_4	—	WCRM_5_1	—
cpqWcrmInternalStatus:timeout	_5	—	WCRM_5_1	—
cpqWcrmInternalStatus:detected	_6	—	WCRM_5_1	—
cpqWcrmInternalStatus:notAvail	_7	—	WCRM_5_1	—
cpqWcrmInternalStatus:lowPower	_8	—	WCRM_5_1	—
alarmWaterCoolUnit	WCRM_6	—	—	—
cpqWcrmWaterCoolUnitStatus:ok	_1	—	—	—
cpqWcrmWaterCoolUnitStatus:error	_2	—	WCRM_6_1	—
cpqWcrmWaterCoolUnitStatus:changed	_3	—	WCRM_6_1	—
cpqWcrmWaterCoolUnitStatus:reset	_4	—	WCRM_6_1	—
cpqWcrmWaterCoolUnitStatus:timeout	_5	—	WCRM_6_1	—
cpqWcrmWaterCoolUnitStatus:detected	_6	—	WCRM_6_1	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
cpqWcrmWaterCoolUnitStatus:notAvail	_7	—	WCRM_6_1	—
cpqWcrmWaterCoolUnitStatus:lowPower	_8	—	WCRM_6_1	—
testTrap	WCRM_10	—	—	—

HP Bladetype-4 Network MIBs (GbE2c-L2L3.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
bntSwDefGwUp	BTN4_2	—	—	*
bntSwDefGwDown	BTN4_3	—	BTN4_2	*
bntSwDefGwInService	BTN4_4	—	—	*
bntSwDefGwNotInService	BTN4_5	—	BTN4_4	*
bntSwLoginFailure	BTN4_19	—	—	*
bntSwTempExceedThreshold	BTN4_22	—	BTN4_31	*
bntSwApplyComplete	BTN4_27	—	—	*
bntSwSaveComplete	BTN4_28	—	—	*
bntSwFwDownloadSucess	BTN4_29	—	—	*
bntSwFwDownloadFailure	BTN4_30	—	BTN4_29	*
bntSwTempReturnThreshold	BTN4_31	—	—	*
bntSwUfdfoLtMFailure	BTN4_34	—	BTN4_35	*
bntSwUfdfoLtMUP	BTN4_35	—	—	*
bntSwUfdfoGlobalEna	BTN4_36	—	—	*
bntSwUfdfoGlobalDis	BTN4_37	—	BTN4_36	*
bntSwUfdfoLtDAutoEna	BTN4_38	—	—	*
bntSwUfdfoLtDAutoDis	BTN4_39	—	BTN4_38	*
bntSwStgNewRoot	BTN4_42	—	—	*
bntSwCistNewRoot	BTN4_43	—	—	*
bntSwStgTopologyChanged	BTN4_44	—	—	*
bntSwCistTopologyChanged	BTN4_45	—	—	*
bntSFPInserted	BTN4_51	—	—	*
bntSFPRemoved	BTN4_52	—	BTN4_51	*

HP Bladetype-5 Network MIBs (GbE2c-1-10G-L2L3.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
bntSwDefGwUp	BTN5_2	—	—	*
bntSwDefGwDown	BTN5_3	—	BTN5_2	*
bntSwDefGwInService	BTN5_4	—	—	*
bntSwDefGwNotInService	BTN5_5	—	BTN5_4	*

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
bntSwLoginFailure	BTN5_19	—	—	*
bntSwTempExceedThreshold	BTN5_22	—	BTN5_31	*
bntSwApplyComplete	BTN5_27	—	—	*
bntSwSaveComplete	BTN5_28	—	—	*
bntSwFwDownloadSucess	BTN5_29	—	—	*
bntSwFwDownloadFailure	BTN5_30	—	BTN5_29	*
bntSwTempReturnThreshold	BTN5_31	—	—	*
bntSwUfdfoLtMFailure	BTN5_34	—	BTN5_35	*
bntSwUfdfoLtMUP	BTN5_35	—	—	*
bntSwUfdfoGlobalEna	BTN5_36	—	—	*
bntSwUfdfoGlobalDis	BTN5_37	—	BTN5_36	*
bntSwUfdfoLtDAutoEna	BTN5_38	—	—	*
bntSwUfdfoLtDAutoDis	BTN5_39	—	BTN5_38	*
bntSwStgNewRoot	BTN5_42	—	—	*
bntSwCistNewRoot	BTN5_43	—	—	*
bntSwStgTopologyChanged	BTN5_44	—	—	*
bntSwCistTopologyChanged	BTN5_45	—	—	*
bntSFPInserted	BTN5_51	—	—	*
bntSFPRemoved	BTN5_52	—	BTN5_51	*

HP Bladetype-6 Network MIBs (GbE2c-10G-L2L3.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
bntSwDefGwUp	BTN6_2	—	—	*
bntSwDefGwDown	BTN6_3	—	BTN6_2	*
bntSwDefGwInService	BTN6_4	—	—	*
bntSwDefGwNotInService	BTN6_5	—	BTN6_4	*
bntSwLoginFailure	BTN6_19	—	—	*
bntSwTempExceedThreshold	BTN6_22	—	BTN6_31	*
bntSwApplyComplete	BTN6_27	—	—	*
bntSwSaveComplete	BTN6_28	—	—	*
bntSwFwDownloadSucess	BTN6_29	—	—	*
bntSwFwDownloadFailure	BTN6_30	—	BTN6_29	*
bntSwTempReturnThreshold	BTN6_31	—	—	*
bntSwUfdfoLtMFailure	BTN6_34	—	BTN6_35	*
bntSwUfdfoLtMUP	BTN6_35	—	—	*
bntSwUfdfoGlobalEna	BTN6_36	—	—	*
bntSwUfdfoGlobalDis	BTN6_37	—	BTN6_36	*
bntSwUfdfoLtDAutoEna	BTN6_38	—	—	*

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
bntSwUfdfoLtDAutoDis	BTN6_39	—	BTN6_38	*
bntSwStgNewRoot	BTN6_42	—	—	*
bntSwCistNewRoot	BTN6_43	—	—	*
bntSwStgTopologyChanged	BTN6_44	—	—	*
bntSwCistTopologyChanged	BTN6_45	—	—	*
bntSFPInserted	BTN6_51	—	—	*
bntSFPRemoved	BTN6_52	—	BTN6_51	*

MSA2000 -TRAPS (MSA2000TRAPS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
msaEventInfoTrap	IM_3001	—	—	*
msaEventWarningTrap	IM_3002	—	—	*
msaEventErrorTrap	IM_3003	—	—	*
msaEventCriticalTrap	IM_3004	—	—	*

HP Dynamic smart cooling (HPDSCCS.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
trapDscTest	DSCS_1	—	—	—
trapDscCritical	DSCS_2	—	—	—
trapDscWarning	DSCS_3	—	—	—
trapDscInformation	DSCS_4	—	—	—

HP HTTP management (HPNETCTZ.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
hpHttpMgHealthTrap	HTTP_1	—	—	—
hpHttpMgShutdown	HTTP_2	—	—	—
hpHttpMgUnknownHealthTrap	HTTP_3	—	HTTP_4	—
hpHttpMgOKHealthTrap	HTTP_4	—	—	—
hpHttpMgWarningHealthTrap	HTTP_5	—	HTTP_4	—
hpHttpMgCriticalHealthTrap	HTTP_6	—	HTTP_4	—
hpHttpMgNonRecoverableHealthTrap	HTTP_7	—	HTTP_4	—
hpHttpMgDeviceAddedTrap	HTTP_8	—	—	—
hpHttpMgDeviceRemovedTrap	HTTP_9	—	HTTP_8	—

LSI Logic SCSI Storage Adapters (SYMTRAP.MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
symSCSI1	SYM_101	—	SYM_102	—
symSCSI2	SYM_102	—	—	—
symSCSI3	SYM_108	—	—	—
symSCSI4	SYM_109	—	—	—
symSCSI5	SYM_110	—	—	—
symSCSI6	SYM_111	—	SYM_110	—
symSCSI7	SYM_112	—	—	—
symSCSI8	SYM_113	—	—	—
symSCSI9	SYM_114	—	SYM_112	—
symSCSI10	SYM_115	—	—	—
symSCSI11	SYM_116	—	—	—
symSCSI12	SYM_117	—	—	—

Fibre Channel Management (FCMGMT-MIB)

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
connUnitStatusChange (1)	FC_1	—	—	—
connUnitStatus:unused	_2	—	FC_1_3	—
connUnitStatus:ok	_3	—	—	—
connUnitStatus:warning	_4	—	FC_1_3	—
connUnitStatus:failed	_5	—	FC_1_3	—
connUnitDeletedTrap (3)	FC_3	—	—	—
connUnitEventTrap (4)	FC_4	—	—	—
connUnitSensorStatusChange (5)	FC_5	—	—	—
connUnitSensorStatus:other	_2	—	FC_5_3	—
connUnitSensorStatus:ok	_3	—	—	—
connUnitSensorStatus:warning	_4	—	FC_5_3	—
connUnitSensorStatus:failure	_5	—	FC_5_3	—
connUnitPortStatusChange (6)	FC_6	—	—	—
connUnitPortStatus:unused	_2	—	FC_6_3	—
connUnitPortStatus:ready	_3	—	—	—
connUnitPortStatus:warning	_4	—	FC_6_3	—
connUnitPortStatus:failure	_5	—	FC_6_3	—
connUnitPortStatus:notparticipating	_6	—	FC_6_3	—
connUnitPortStatus:initializing	_7	—	FC_6_3	—
connUnitPortStatus:bypass	_8	—	FC_6_3	—
connUnitPortStatus:ols	_9	—	FC_6_3	—

Trap name	OID (IM_)	Caused by	Cleared by	New in Revision 4.6
connUnitPortStatus:other	_10	—	FC_6_3	—

Acronyms and abbreviations

ACF

Adapter Configuration Facility

ACP

Adapter Configuration Profile

ATA

Advanced Technology Attachment

BAROC

Basic Recorder of Objects in C

CLI

Command Line Interface

CPU

central processing unit

HP SIM

HP Systems Insight Manager

IDE

integrated device electronics

iLO

Integrated Lights-Out

MIB

management information base

MIF

Management Information Format

OID

object identifier

PCI

peripheral component interface

RAID

redundant array of inexpensive (or independent) disks

RAM

random access memory

RDBMS

Relational Database Management Systems

RILOE

Remote Insight Lights-Out Edition

RIM

RDBMS (Relational Data-Base Management System) Interface Module

SAN

storage area network

SCSI

small computer system interface

SNMP

Simple Network Management Protocol

SQL

structured query language

TEC

Tivoli Enterprise Console

TMA

Tivoli Management Agent

TME

Tivoli Management Environment

TMR

Tivoli Management Region

VMS

Virtual Memory System

WBEM

Web-Based Enterprise Management

WMI

Windows Management Instrumentation

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