

# OPTIMIZE

**MERCURY BUSINESS AVAILABILITY CENTER™**

Source Manager Administration

**MERCURY™**

BUSINESS TECHNOLOGY OPTIMIZATION



# **Mercury Business Availability Center**

Source Manager Administration

Version 6.5

Document Release Date: October 15, 2006

---

**MERCURY™**

Mercury Business Availability Center, Version 6.5  
Source Manager Administration

This document, and the accompanying software and other documentation, is protected by U.S. and international copyright laws, and may be used only in accordance with the accompanying license agreement. Features of the software, and of other products and services of Mercury Interactive Corporation, may be covered by one or more of the following patents: United States: 5,511,185; 5,657,438; 5,701,139; 5,870,559; 5,958,008; 5,974,572; 6,137,782; 6,138,157; 6,144,962; 6,205,122; 6,237,006; 6,341,310; 6,360,332; 6,449,739; 6,470,383; 6,477,483; 6,549,944; 6,560,564; 6,564,342; 6,587,969; 6,631,408; 6,631,411; 6,633,912; 6,694,288; 6,738,813; 6,738,933; 6,754,701; 6,792,460 and 6,810,494. Australia: 763468 and 762554. Other patents pending. All rights reserved.

U.S. GOVERNMENT RESTRICTED RIGHTS. This Software Documentation is a “commercial item” as defined at 48 C.F.R. 2.101 (October 1995). In accordance with 48 C.F.R. 12.212 (October 1995), 48 C.F.R. 27.401 through 27.404 and 52.227-14 (June 1987, as amended) and 48 C.F.R. 227.7201 through 227.7204 (June 1995), and any similar provisions in the supplements to Title 48 of the C.F.R. (the “Federal Acquisition Regulation”) of other entities of the U.S. Government, as applicable, all U.S. Government users acquire and may use this Documentation only in accordance with the restricted rights set forth in the license agreement applicable to the Computer Software to which this Documentation relates.

Mercury, Mercury Interactive, the Mercury logo, the Mercury Interactive logo, LoadRunner, WinRunner, SiteScope and TestDirector are trademarks of Mercury Interactive Corporation and may be registered in certain jurisdictions. The absence of a trademark from this list does not constitute a waiver of Mercury's intellectual property rights concerning that trademark.

All other company, brand and product names may be trademarks or registered trademarks of their respective holders. Mercury disclaims any responsibility for specifying which marks are owned by which companies or which organizations.

Mercury provides links to external third-party Web sites to help you find supplemental information. Site content and availability may change without notice. Mercury makes no representations or warranties whatsoever as to site content or availability.

Mercury Interactive Corporation  
379 North Whisman Road  
Mountain View, CA 94043  
Tel: (650) 603-5200  
Fax: (650) 603-5300  
<http://www.mercury.com>

© 2005-2006 Mercury Interactive Corporation, All rights reserved

If you have any comments or suggestions regarding this document, please send them by e-mail to [documentation@mercury.com](mailto:documentation@mercury.com).

---

# Table of Contents

<b>Welcome to Source Manager Administration .....</b>	<b>v</b>
How This Guide Is Organized .....	v
Who Should Read This Guide .....	vi
Getting More Information .....	vi
<b>Chapter 1: Introduction to Source Manager .....</b>	<b>1</b>
<b>Chapter 2: Working with Source Manager.....</b>	<b>5</b>
Using Source Manager.....	5
Configuring a Source Adapter .....	9
<b>Chapter 3: Default Source Adapter Description .....</b>	<b>15</b>
Business Process Monitoring .....	16
Real User Monitor.....	21
Diagnostics .....	25
SiteScope.....	27
<b>Chapter 4: Custom Source Adapter Details .....</b>	<b>33</b>
About Custom Source Adapters.....	34
BMC Patrol .....	35
CA Unicenter .....	37
Compaq Insight Manager (CIM).....	39
Generic EMS .....	46
Hewlett-Packard (HP) OpenView .....	50
HP OpenView Service Navigator .....	52
HP Systems Insight Manager (HP SIM) .....	55
Tivoli TEC .....	62
XML File .....	64

## Table of Contents

<b>Chapter 5: Working with Templates</b> .....	<b>75</b>
About Working with Templates .....	76
Modifying Adapter Templates.....	77
CI Definition Parameters.....	79
Selector Definitions .....	81
Dynamic Node Factory Definitions .....	83
Automapping – Relationships Details.....	84
Default Sources Details.....	86
Custom Sources Details .....	106
<b>Index</b> .....	<b>119</b>

---

# Welcome to Source Manager Administration

This guide describes how to work with the CMDB Administration Source Manager.

## How This Guide Is Organized

The guide contains the following chapters:

### **Chapter 1 Introduction to Source Manager**

Introduces the CMDB Administration Source Manager.

### **Chapter 2 Working with Source Manager**

Describes how to work with the Source Manager tab and where to configure the source adapters that map source data to objects used by Mercury Business Availability Center.

### **Chapter 3 Default Source Adapter Description**

Describes the default source adapters that are automatically preconfigured and activated when Mercury Business Availability Center starts, using the default template for each source adapter.

## **Chapter 4 Custom Source Adapter Details**

Describes how to work with custom source adapters. The custom source adapters include adapter templates used to communicate with third-party sources.

## **Chapter 5 Working with Templates**

Describes how to modify the XML template of a source adapter.

## **Who Should Read This Guide**

This guide is intended for the following users of Mercury Business Availability Center:

- ▶ Mercury Business Availability Center administrators
- ▶ Mercury Business Availability Center platform administrators
- ▶ Mercury Business Availability Center application administrators
- ▶ Mercury Business Availability Center data collector administrators

Readers of this guide should be knowledgeable about enterprise system administration, have familiarity with ITIL concepts, and be knowledgeable about Mercury Business Availability Center in general and Discovery technology specifically.

## **Getting More Information**

For information on using and updating the Mercury Business Availability Center Documentation Library, reference information on additional documentation resources, typographical conventions used in the Documentation Library, and quick reference information on deploying, administering, and using Mercury Business Availability Center, refer to *Getting Started with Mercury Business Availability Center*.



# 1

---

## Introduction to Source Manager

The CMDB Administration Source Manager enables you to define and manage the source adapters used by Mercury Business Availability Center.

Source Manager predefined definitions provide all of the tools required to harness data from the data sources used by Mercury Business Availability Center, and enable you to use the received information to build views for the Mercury Business Availability Center applications.

The source adapters format the data arriving from the external data sources (collected by Mercury Business Availability Center data collectors, or supplied by other external resources) using predefined templates.

The template for each source adapter defines the information needed for creating CIs in the Mercury Universal CMDB, and defines the relationships to be created between the CIs in order to build the CI hierarchies. The CI definitions include the KPIs, business rules, selectors, and so forth, that are needed to present the real-time monitoring data received from the data sources in a meaningful way in Dashboard and Service Level Management. The templates define the mapping between the external source objects and the Mercury Business Availability Center CIs, so that the incoming data samples are mapped to the appropriate CI.

The Source Manager contains default source adapters that are preconfigured to work immediately with the data collected by the Mercury Business Availability Center data collectors (such as SiteScope or Business Process Monitor). The Source Manager also provides predefined templates for the custom source adapters, which you can modify to work with data from EMS systems (such as Tivoli TEC or HP OpenView) and with other third-party sources.

This section includes the following topics:

- ▶ “Source Adapter Activities” on page 2
- ▶ “Dynamic Node Factory Resource” on page 2
- ▶ “Pre-Defined Monitoring Service Views” on page 3
- ▶ “Customizing the Source Adapters” on page 3
- ▶ “Using the Source Manager Tab” on page 3

### **Source Adapter Activities**

The source adapter performs the following steps:

- ▶ imports system hierarchy information from Monitor Administration, and, if applicable, from an external system. An external system can be, for example, the data source’s database, a file system, or an API
- ▶ maps components from the hierarchy to predefined CIs in Mercury Business Availability Center
- ▶ creates CIs and relationships for the imported information and stores them in the CMDB

### **Dynamic Node Factory Resource**

Some adapter templates include a Dynamic Node Factory resource. When a Dynamic Node Factory CI is included in a view, Mercury Business Availability Center dynamically builds a hierarchy for the source in run time, under the Dynamic Node Factory CI. For more information on the Dynamic Node Factory resource, see “Working with Dynamic Node Factory” in *IT Universe Manager Administration*.

## **Pre-Defined Monitoring Service Views**

For each source adapter, predefined monitoring service views, for example, the Monitors View, display the created CI hierarchies for the monitored sources. When data is received over the Bus for a defined source, you can open the monitoring view in Dashboard and view status information for the CIs. You can use the CI hierarchies created in the predefined monitoring views as the building blocks for defining your own customized views. For more information, see “Introduction to IT Universe Manager Administration” in *IT Universe Manager Administration*.

## **Customizing the Source Adapters**

Source Manager provides you with the ability to modify and add to the majority of the adapter definitions, enabling you to customize the data sampling, the way the hierarchies are constructed, the parameters used for calculations, and the way the data is presented in the applications. This allows you to present the aggregated source data in a way that is relevant for your organization’s needs.

## **Using the Source Manager Tab**

Using the Source Manager tab you can:

- ▶ modify preconfigured Mercury Business Availability Center source adapters to fit your requirements. For details, see “Editing a Source Adapter” on page 12.
- ▶ create new sources using adapters that are specific to your external source. For details, see “Configuring a Source Adapter” on page 9.
- ▶ customize the adapter template for a created source. For details, see “Modifying Adapter Templates” on page 77.



# 2

---

## Working with Source Manager

You use the Source Manager tab to configure the source adapters that map source data to objects used by Mercury Business Availability Center.

This chapter describes:	On page:
Using Source Manager	5
Configuring a Source Adapter	9

### Using Source Manager

---

**Note:** You must have at least the **Superuser** or **Administrator** role to have access to the CMDB Administration. If you have the **Superuser** role you have full viewing and editing rights for all of the CMDB Administration, including the sources. If you have the **Administrator** role, you can only view/edit views for which you have permission and you cannot edit the sources. add and view sources. To access the Permissions page, select **Admin > Platform > Users and Permissions**, and select **Permissions Management**. For details, see “Understanding Operations and Roles” in *Platform Administration*.

---

---

**Note to Mercury Managed Services customers:** You must have at least the **Superuser, Operator, Customer Super User, or Customer Administrator** role to have access to the CMDB Administration. If you have the **Customer Administrator** role, you can only view/edit views for which you have permission and you cannot edit the sources.

---

The Source Manager page is divided into two areas:

- the upper area contains the default sources, which are preconfigured sources for Mercury Business Availability Center tools. The adapters for the default sources are automatically activated as soon as you start Mercury Business Availability Center. For details, see Chapter 3, “Default Source Adapter Description”.
- the lower area lists custom sources, which list the other sources you have selected and customized. The adapters for the custom sources must be customized and manually activated. For details, see Chapter 4, “Custom Source Adapter Details”.

This section includes the following topics:

- “Information Displayed on the Source Manager Page” on page 6
- “Actions Buttons” on page 8

## Information Displayed on the Source Manager Page

The Source Manager page displays the following information:

Default sources															
Name	Type	Status	CI Count	Last Update	Next Update	Sync Duration	Actions								
<input type="checkbox"/>	Business Process ...	Business Process Monitoring	Enabled	46	12/26/05 11:36 PM	12/27/05 12:36 AM	1 sec								
<input type="checkbox"/>	Real User Monitor	Real User Monitor	Enabled	7	12/26/05 11:36 PM	12/27/05 12:36 AM	1 sec								
<input type="checkbox"/>	SiteScope	SiteScope	Enabled	1	12/26/05 11:36 PM	12/27/05 12:36 AM	1 sec								











Disable Enable Sync Now Hard Sync

The following information is included for each source.

Parameter	Description
<b>Name</b>	Name defined for the source adapter
<b>Type</b>	Adapter type used for the source
<b>Status</b>	<p>Current status of the communication link with the external system. Possible statuses include:</p> <ul style="list-style-type: none"> <li>▶ <b>Enabled.</b> Communication between the Mercury Universal CMDB and the external system is enabled, so that Source Manager retrieves updates to the hierarchy data.</li> <li>▶ <b>Disabled.</b> Communication between the CMDB and the external system is disabled, so no new hierarchy data is retrieved.</li> <li>▶ <b>Synchronizing.</b> Polling the external system for configuration data. While this status is held, the entry cannot be edited or deleted.</li> <li>▶ <b>Failed.</b> Synchronization with the external system failed and the configuration data is not updated.</li> </ul>
<b>CI Count</b>	The number of CIs in the hierarchical tree for the source (groups, monitors, and so forth), as received from the external system. (Note that a Dynamic Node Factory CI is counted as a single CI.)
<b>Last Update</b>	The start date and time of the last update (synchronization) to the source CIs in the CMDB from the data sources.
<b>Next Update</b>	The scheduled date and time for the next update to the source CIs in the CMDB from the data sources.
<b>Sync Duration</b>	The time taken to perform the update.

## Actions Buttons

Use the **Actions** buttons to the right of each source adapter in the table to perform various functions for that source adapter. You can also perform actions on two or more source adapters at once by selecting the check box to the left of each required entry in the source adapter list and using the corresponding buttons under the relevant source adapters area. The buttons are:

Actions Button	Description
	<p>Opens the Edit Source dialog box where you can edit the source adapter. For details, see “Editing a Source Adapter” on page 12.</p>
 	<p>(Only applicable for custom source adapters - you cannot delete default source adapters.)  Removes the source adapter(s) from the list of source adapters in the Source Manager and deletes all of the CIs that were created by the source adapter from the CMDB.</p>
  	<p>Enables/disables communication between the CMDB source(s) and the external system, so that the hierarchy data is updated/not updated.  The displayed button represents the available capability. For example, if communication is enabled the Disable buttons are displayed.</p>
 	<p>Prompts the Source Manager to poll the appropriate system for updated hierarchy data. Use this button after making changes to the external source or to a source information in Monitor Administration, in order to synchronize the information in the CMDB with the information in the external system. You may also wait for the automatic synchronization to take place.</p>
 	<p>Prompts the Source Manager to re-import the complete hierarchy data. Use this button if you suspect other changes have been made since clicking the <b>Sync Now</b> button or since the last automatic synchronization. Note that the <b>Hard Sync</b> replaces only the CIs that have changed since the last <b>Hard Sync</b>.</p>



The **New Source** button enables you to add additional source adapters to the source adapters list. For details, see below.

## Configuring a Source Adapter

Use Source Manager to add new source adapters or edit existing source adapters.

You can add source adapters based on supported third-party source adapters or on default source adapters. You must then customize the newly-created source adapter, by defining the parameters required by the adapter to receive data from the appropriate source.

Where required, you can open the default adapter template for the source (for advanced users only), in order to edit the template instance according to your organization's specific needs. This will generally be necessary if you define a new source adapter based on one of the generic template types (Generic EMS or XML File). For details, see "Modifying Adapter Templates" on page 77.

This section includes the following topics:

- ▶ "Making a Default Source Adapter Available for Defining Custom Source Adapters" on page 9
- ▶ "Adding Source Adapters" on page 10
- ▶ "Editing a Source Adapter" on page 12

### **Making a Default Source Adapter Available for Defining Custom Source Adapters**

The default source adapters are available for defining new custom source adapters when you have configured Source Manager to include them. In this case, the default source appears in the list of available custom source adapters when you create a new source adapter.

**To make a default source adapter available for defining new source adapters:**

- 1** Select **Admin > Platform**.

- 2 In the Setup and Maintenance tab, click **Infrastructure Settings**.
- 3 Click **Foundations** and select the **Sources Configuration** context.
- 4 Locate the appropriate entry in the **Sources Configuration - Sources** area, and change the setting for the relevant source type (for example, Add Business Process Monitor Sources) to **true**.

---

**Note:** The change takes effect when the server is restarted.

---

## Adding Source Adapters

You add source adapters when you want to:

- ▶ receive hierarchy information from a third-party source adapter (not Business Process Monitoring, Real User Monitor, or SiteScope)
- ▶ use different hierarchies from a single data source. In such a case, you can define more than one source adapter based on a single third-party or on a default source adapter. Each new source adapter represents a different instance of the adapter used as a base, receiving hierarchy information from a single source.

If you use a default source adapter as the base for a custom source, you must first configure Source Manager to include them. For details, see “Making a Default Source Adapter Available for Defining Custom Source Adapters” on page 9.

---

**Note:** If you add source adapters based on the default sources adapters, you cannot delete them from the Source Manager tab. To remove the source adapter, you must delete it from the file system and restart Mercury Business Availability Center.

---

**To add a source adapter:**

- 1 Click **New Source** in the bottom right-corner of the Source Manager tab to open the New Source dialog box.

- 2 Select the required source adapter type from the **Type** list.




---

**Tip:** To view information about an adapter type, select it in the **Type** box, then hold the cursor over the query icon to view the description in a tooltip.

---

After selecting a source adapter type, the New Source dialog box displays the parameters required for a source using that adapter type.

- 3 Enter the required parameter information. For more information about the supported adapter types and their parameters, follow the link in the list below:
  - ◆ Default Sources
    - “Business Process Monitoring” on page 16
    - “Real User Monitor” on page 21
    - “SiteScope” on page 27
  - ◆ Custom Sources
    - “BMC Patrol” on page 35
    - “CA Unicenter” on page 37
    - “Compaq Insight Manager (CIM)” on page 39
    - “Generic EMS” on page 46
    - “Hewlett-Packard (HP) OpenView” on page 50
    - “HP OpenView Service Navigator” on page 52
    - “HP Systems Insight Manager (HP SIM)” on page 55
    - “Tivoli TEC” on page 62
    - “XML File” on page 64
- 4 If you want to modify the default adapter template, click **Edit Template**. The dialog box expands to display the template area. For details on editing the template, see “Modifying Adapter Templates” on page 77,
- 5 Click **OK** to save the changes. The new source is added to the Custom sources list in the Source Manager tab.

## Editing a Source Adapter

Edit a source adapter to customize the view adapter to change the path to a template file, to modify the corresponding view's hierarchy in the application where the view appears, and so forth.

---

### Note:

- ▶ When editing an adapter template in Source Manager, if you add a KPI definition to any CI template, the KPI is attached to all CIs generated by that template, but does not propagate up to the parents of the generated CIs. A KPI that is manually attached to a CI in the **Admin > Dashboard > KPIs** page does propagate up to the parent CI.
- ▶ You cannot edit a source while its status is **Synchronizing**.

---

### To edit a source adapter:



- 1** Click the **Edit Source** button to the right of the relevant source. The Edit Source dialog box opens.
- 2** After selecting a type, the Edit Source dialog box displays the parameters required for a source using that adapter type. Edit the information as required. For details on parameters that are specific to each adapter, use the following links:
  - ◆ Default Sources
    - “Business Process Monitoring” on page 16
    - “Real User Monitor” on page 21
    - “SiteScope” on page 27
  - ◆ Custom Sources
    - “BMC Patrol” on page 35
    - “CA Unicenter” on page 37
    - “Compaq Insight Manager (CIM)” on page 39
    - “Generic EMS” on page 46

- “Hewlett-Packard (HP) OpenView” on page 50
  - “HP OpenView Service Navigator” on page 52
  - “HP Systems Insight Manager (HP SIM)” on page 55
  - “Tivoli TEC” on page 62
  - “XML File” on page 64
- 3** If you want to modify the default adapter template, click **Edit Template**. The dialog box expands to display the template area. For details on editing the template, see “Modifying Adapter Templates” on page 77.
- 4** Click **OK** to save the changes.



# 3

---

## Default Source Adapter Description

This chapter describes the default source adapters that are automatically preconfigured and activated when Mercury Business Availability Center starts, using a default template for each source adapter.

<b>This chapter describes:</b>	<b>On page:</b>
Business Process Monitoring	16
Real User Monitor	21
Diagnostics	25
SiteScope	27

## Business Process Monitoring

The Business Process Monitoring source retrieves information from both the management and profile databases and builds a hierarchy that includes the profiles and transactions.

The Business Process Monitoring source can also be used to import Client Monitor data.

---

**Note:** To view Mercury Diagnostics data in Dashboard, you must re-synchronize the Business Process Monitoring source adapter. For details, refer to *Mercury Diagnostics Installation and Configuration Guide*.

---

For details about this source's template, see "Business Process Monitoring Template" on page 87.

This section includes the following topics:

- ▶ "Business Process Source Parameters" on page 16
- ▶ "Business Process Monitor Hierarchies" on page 18

### Business Process Source Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- ▶ **Type.** The name of the source adapter type: **Business Process Monitoring**.
- ▶ **Name.** The name of the new source. By default: **Business Process Monitoring**. Note that this must be a unique name.
- ▶ **Server URL.** The URL for the Centers Server.
- ▶ **Include Client Monitor profiles.** Select the check box to include Client Monitor configuration hierarchy in the Business Process Monitor configuration hierarchy. For details about the hierarchies, see below.



► **Hierarchy structure.** Select one of the following options:

- ◆ **Regular.** The hierarchy structure excludes the location breakdown information from the transaction with location CIs. This is the default. You can view Business Process profile location in the Triage report. For details about the Triage report, see “Triage Report” in *Using End User Management*.
- ◆ **Transactions/locations.** The hierarchy structure includes the transaction with location CIs. Use this option if you want to view your hierarchies organized by Business Process profile location. Use this option with caution as it creates additional CIs in the CMDB, which might cause capacity and performance issues.

If you change the hierarchy structure from Transaction/Location to Regular after attaching BPM transaction from location CIs to other views (not to End User Locations View, End User Monitors View, or Monitors View), then Location CIs are deleted from the CMDB. In addition the following happens:

- BPM Transaction from location CIs that were attached to parent CIs are deleted and then re-created so they still appear in the views where you attached them under their parent CIs but without the location information
- BPM Transaction from location CIs that were attached to Location CIs are removed along with the Location CIs.

Selecting one of the options creates different hierarchies. For details, see below.

---

**Note:** When Business Process Monitor is working in Transaction/Location hierarchy structure, then Location CIs are added to the Business Process Monitor hierarchy displayed in the End User Locations view. If you require the same geographical location for all transactions from a location, you can set the geographical location for the Location CI, and the location is automatically propagated to all BPM Transaction from Location CIs in all profiles that fall under the Location CI. You set the geographical location in the **Properties** tab on the **CMDB Administration > IT Universe Manager** page.

---

- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

## Business Process Monitor Hierarchies

Depending on the options and parameters you selected when defining a source adapter or editing it, the following hierarchies are created in the CMDB:

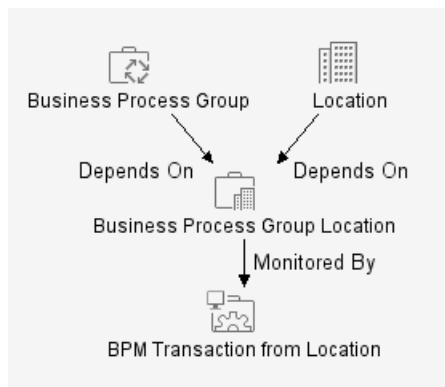
---

**Note:** Business Process Step and Location use the same instance of the Business Process Monitor transaction with location.

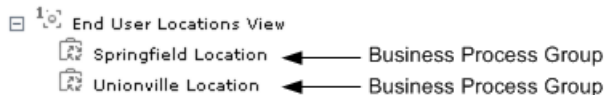
---

This section includes the following topics:

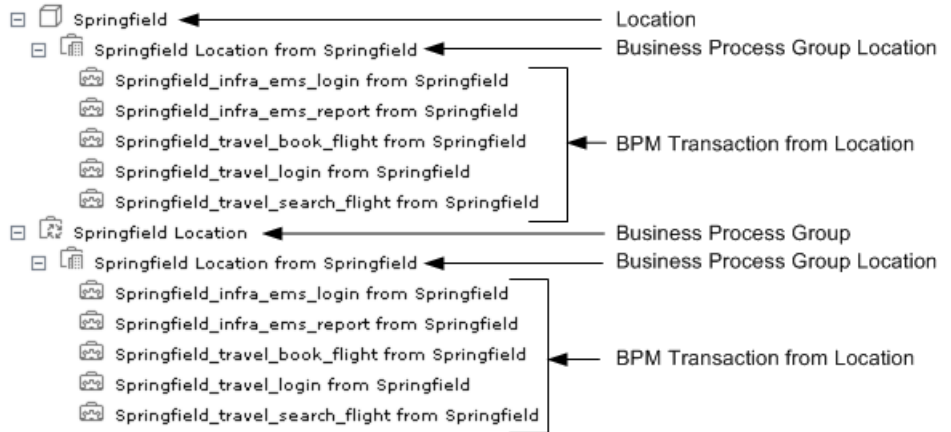
- ▶ **End User Locations View.** The End User Locations View TQL is as follows:



If you select the **Regular** hierarchy structure then the view displays only the Business Process Group CIs.

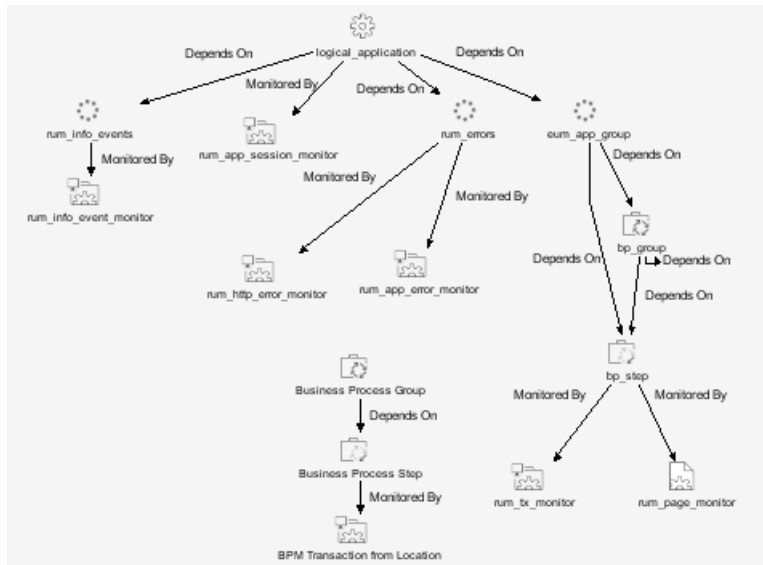


If you select the **Transaction/Location** hierarchy structure then the view displays the following CIs.

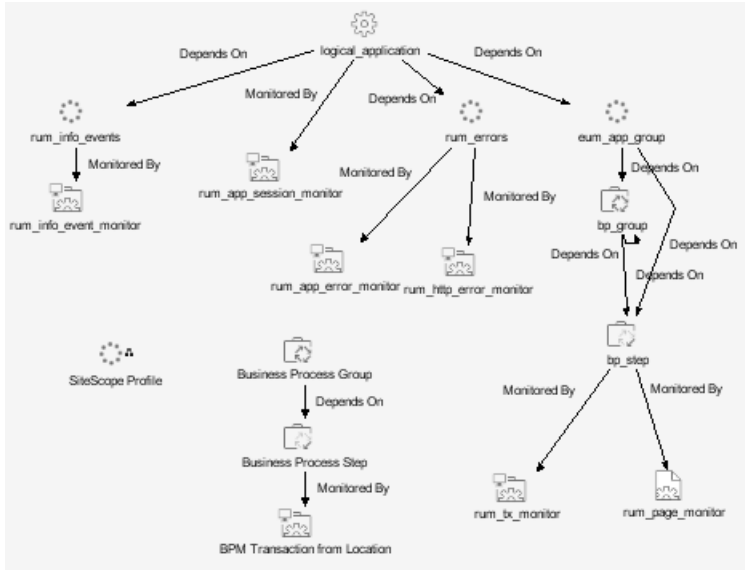


The End User Locations View provides relevant information (apart from a list of Business Process Group CIs) only if you select the **Transaction/Location** hierarchy structure.

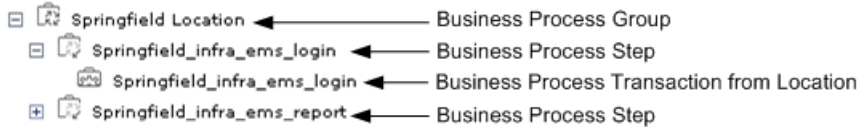
- **End User Monitors View and Monitors View.** The End User Monitors View TQL is as follows:



The Monitors View TQL is as follows:



If you select the **Regular** hierarchy structure, both the End User Monitors View and Monitors View displays the following hierarchy.



Note that the Business Process Transaction from Location CIs do not display the location information.

If you select the **Transaction/Location** hierarchy structure then the view displays the following CIs.



The Business Process Transaction from Location CIs display location information.

## Real User Monitor

The Real User Monitor source adapter retrieves real-user data information from Real User Monitor engines, and hierarchy information from Monitor Administration. The hierarchy includes applications, containers, pages, transactions, end-user, server, global statistic data, user sessions, and so forth.

For details about the source adapter's template, see "Real User Monitor Template" on page 90.

This section includes the following topics:

- "Real User Monitor Source Parameters" on page 21
- "Real User Monitor Hierarchies" on page 22

### Real User Monitor Source Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- **Type.** The name of the type of source: **Real User Monitor**.
- **Name.** The name of the new source. By default: **Real User Monitor**. Note that this must be a unique name.
- **Enable breakdown of location to end users subrange monitors.** Select this option to view data collected for all end users (configured and non-configured) accessing the server(s) being monitored. The data is broken down by location. It can be drilled down to the end users subrange monitors.

Select this option only when **Show unconfigured users on the dashboard** and **Enable end users breakdown to subrange monitor** are also selected.

- **Show unconfigured users on the dashboard.** Select this option to view data collected for all end users (configured and non-configured) accessing the server(s) being monitored.

If **Enable end users breakdown to subrange monitor** is not selected the single monitor for all non-configured end users is displayed.

---

**Note:** Selecting the **Show unconfigured users on the dashboard** option greatly increases the number of CIs included in the views using the Real User Monitor source. This can mean delays while a view hierarchy is rebuilt after a change is made to the configuration in Real User Monitor, and may cause other performance issues in Mercury Business Availability Center.

---

- ▶ **Enable end users breakdown to subrange monitor.** Select this option to view data collected for configured end users accessing the server(s) being monitored. By default, only this parameter is set.

---

**Note:** Configured end users are the users belonging to End User Groups. For details about End User Groups, see “Configuring End-User Groups” in *End User Management Data Collector Configuration*.

---

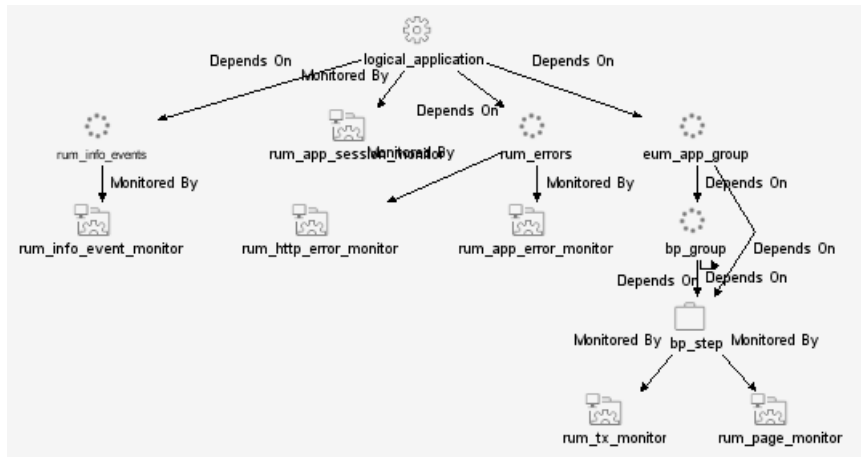
- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** To enable or disable the Real User Monitor source adapter.

### **Real User Monitor Hierarchies**

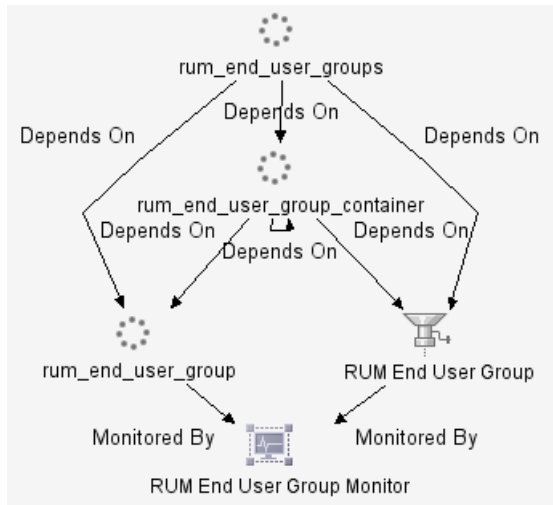
The Real User Monitor adapter builds hierarchies that are displayed in the following views:

- ▶ **All RUM Monitors view.** Includes all of the view hierarchies below

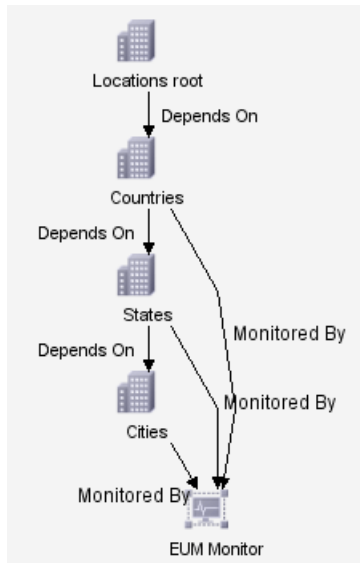
► Real User Applications view



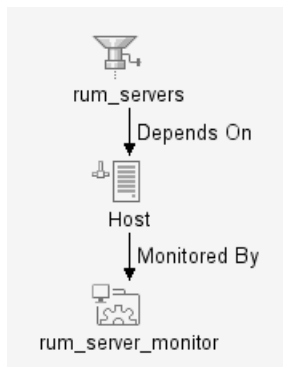
► Real User End Users view



► **Real User Locations view**



► **Real User Servers View**



For more details about the Real User Monitor views, see “Real User Monitor Views in Dashboard” in *Using Dashboard*.



## Diagnostics

The Diagnostics source adapter retrieves information about the real user traffic to the Web services and operations from the Diagnostics server that processed and stored it.

The hierarchy that is built includes Diagnostics Probe and Diagnostics Probe Group CIs.

For details about the source adapter's template, see "Diagnostics Template" on page 99.

This section includes the following topics:

- ▶ "Diagnostics Source Parameters" on page 25
- ▶ "Diagnostics Hierarchies" on page 26

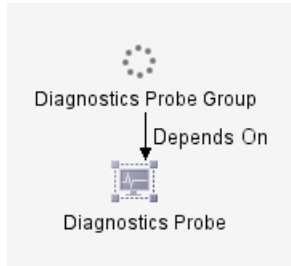
### Diagnostics Source Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- ▶ **Type.** The name of the type of source: **Diagnostics**.
- ▶ **Name.** The name of the new source. By default: **Diagnostics**. Note that this must be a unique name.
- ▶ **Basic Authentication user name.** The name of the user you use to access Mercury Business Availability Center
- ▶ **Basic Authentication password.** The password of the user you use to access Mercury Business Availability Center
- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** To enable or disable the Diagnostics source adapter.

## Diagnostics Hierarchies

The Diagnostics adapter builds hierarchies that are displayed in the Diagnostics View.



The Diagnostics View includes:

- ▶ **Diagnostics Probe Group CIs.** Containers that includes Diagnostics Probe CIs.
- ▶ **Diagnostics Probe CIs.** Represent the Diagnostics probes that are installed on the monitored system.

For more details about Diagnostics, see *Mercury Diagnostics User's Guide*.

## SiteScope

The SiteScope source retrieves system information from a SiteScope system, and builds a hierarchy that includes the machines, SiteScope groups, monitors, and measurements.

For more details about the source adapter template, see “SiteScope Template” on page 101.

This section includes the following topics:

- “Working with the SiteScope Source Adapter” on page 27
- “SiteScope Source Parameters” on page 29
- “SiteScope Hierarchies” on page 30

### Working with the SiteScope Source Adapter

Note that:

- ◆ You can define logging options in SiteScope to determine which monitor and measurement data is sent to the Mercury Business Availability Center database. For example, if SiteScope is sending only the monitor level, the monitors will be set as monitors in the CMDB. For more information, see “Registering SiteScope to Mercury Business Availability Center” in *SiteScope Administration*.
- ◆ When you attach SiteScope to Mercury Business Availability Center for the first time, and you have defined monitors for SiteScope, the status of each SiteScope monitor is automatically changed to **Do not report to Mercury Business Availability Center**. This option is used when you do not want the SiteScope monitor and measurements for the subject monitor to be transferred to Mercury Business Availability Center. Select another logging option for the monitors whose information you need. For details on this option, see “Common Monitor Settings” in *Configuring SiteScope Monitors*.

- ◆ After a SiteScope profile is defined in the Monitors tab (**Admin > Monitors**) and a SiteScope monitor is connected to it, the SiteScope configuration remains in the CMDB until the SiteScope profile is deleted and the next synchronization has been performed (manually or automatically, by default, every 60 minutes). For details about synchronizing the SiteScope profile, see “Synchronizing Profile Data” in *Working with Monitor Administration*.
- ◆ When using Dashboard to view SiteScope data, note that the default decay (timeout) period for a CI in Dashboard is 15 minutes. If you have a SiteScope monitor with a schedule longer than 15 minutes, the corresponding CIs in Dashboard will change to decay status until the SiteScope monitor runs again and updates Mercury Business Availability Center.

To avoid this, you can do one of the following:

- set run schedules for the monitors in SiteScope or in Monitor Administration for less than 15 minutes in the Frequency parameter. For details, see **Frequency** in Monitor Administration or in SiteScope “Common Monitor Settings” in *Configuring SiteScope Monitors*.
- for each SiteScope item in Dashboard, change the decay timeout period parameter to a value greater than the schedule for the SiteScope monitor by modifying the **No Data Timeout** parameter for the appropriate rule. For details, see “Dashboard Business Rules Detailed Description” in *Repositories Administration*.
- in the rule parameters for the SiteScope source adapter template in Dashboard, change the decay timeout parameter to a value greater than the schedules used for the SiteScope monitors. For details, see “Changing the Decay Timeout Value” on page 105

You can also set the decay timeout parameter to **-1**, meaning no decay timeout. This is the required value if the SiteScope monitor is event based (meaning that data is sent to the Mercury Business Availability Center Bus only when the monitor reports a change in status), but is not recommended for monitors sending data according to a schedule.

## SiteScope Source Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- **Type.** The name of the type of source: **SiteScope**.
- **Name.** The name of the source. By default: **SiteScope**. Note that this must be a unique name.
- **Server URL.** The URL for the Centers Server.
- **Exclude profiles.** The list of SiteScope profiles you want to exclude from display in the CMDB. Use commas as delimiters.

Because the CMDB may include a large number of SiteScope profiles, you might want to restrict the display by excluding some of those profiles.

---

**Note:** You cannot exclude a SiteScope profile whose name includes a comma (,).

---

- Use the **Include measurements** and the **Include machines** to create different hierarchies:
  - ◆ **Include measurements.** Select the check box to include the measurement level for SiteScope monitors in the hierarchy. Default is check box not selected. If the check box is not selected (default setting), the lowest hierarchy level included for SiteScope configuration is the monitor level.
  - ◆ **Include machines.** Select the check box to include the machine level (the monitor target) in the hierarchy. Default is check box not selected.

For details, see “SiteScope Hierarchies” on page 30.

---



**Note:** Including the measurement level greatly increases the number of CIs included in the views using the SiteScope source. This can mean delays while a view hierarchy is rebuilt after a change is made to the configuration in SiteScope, and may cause other performance issues in Mercury Business Availability Center.


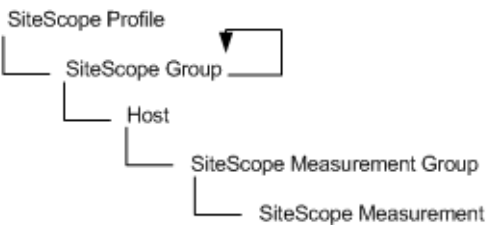
---

- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

### SiteScope Hierarchies

Depending on the parameters you selected when defining a source or editing it, the following hierarchies are displayed.

Include measurements	Include machines	Hierarchy
Not selected	Not selected	
Not selected	Selected	

Include measurements	Include machines	Hierarchy
Selected	Not selected	 <pre> graph TD     A[SiteScope Profile] --&gt; B[SiteScope Group]     B --&gt; C[SiteScope Measurement Group]     C --&gt; D[SiteScope Measurement]     A --&gt; B   </pre>
Selected	Selected	 <pre> graph TD     A[SiteScope Profile] --&gt; B[SiteScope Group]     B --&gt; C[Host]     C --&gt; D[SiteScope Measurement Group]     D --&gt; E[SiteScope Measurement]     A --&gt; B   </pre>



The curved arrow indicates that the hierarchy element is recursive; the CI type is the child of the level above in the hierarchy, but it can also be a child of the CI type itself. For example, a SiteScope Group CI type is the child of a SiteScope Profile CI type, but can also be the child of a SiteScope Group CI type too.





# 4

---

## Custom Source Adapter Details

This chapter describes the custom source adapters. The custom source adapters include adapter templates used to communicate with third-party sources.

<b>This chapter describes:</b>	<b>On page:</b>
About Custom Source Adapters	34
BMC Patrol	35
CA Unicenter	37
Compaq Insight Manager (CIM)	39
Generic EMS	46
Hewlett-Packard (HP) OpenView	50
HP OpenView Service Navigator	52
HP Systems Insight Manager (HP SIM)	55
Tivoli TEC	62
XML File	64

## About Custom Source Adapters

Custom Sources include adapter templates used to communicate with third-party sources and, if you have added one of those default sources to your customized sources, with Business Process Monitoring, Real User Monitor, and SiteScope.

You can add a third-party source adapter and customize it. For details on how to do this, see Chapter 2, “Working with Source Manager”.

You can edit the adapter XML template. For details, see Chapter 5, “Working with Templates.”

The Source Manager contains source adapters for the following third-party sources:

- “BMC Patrol” on page 35
- “CA Unicenter” on page 37
- “Compaq Insight Manager (CIM)” on page 39
- “Hewlett-Packard (HP) OpenView” on page 50
- “HP OpenView Service Navigator” on page 52
- “HP Systems Insight Manager (HP SIM)” on page 55
- “Tivoli TEC” on page 62

The Source Manager also provides the following predefined generic source adapters:

- “Generic EMS” on page 46
- “XML File” on page 64

## BMC Patrol

The BMC Patrol source retrieves system information from a BMC Patrol system, and builds a hierarchy that includes application and machine items. Supported versions: BMC Patrol 3.3, 3.4, 3.5, and 3.6.

For details about the source template, see “BMC Patrol Template” on page 107.

This section includes the following topics:

- ▶ “Working with the BMC Patrol Source Adapter”
- ▶ “BMC Patrol Parameters”
- ▶ “BMC Patrol Hierarchies”

### Working with the BMC Patrol Source Adapter

To enable the BMC Patrol source to receive data from the BMC Patrol Metrics monitor you must make sure that the configure the monitor properly.

To display the hierarchy corresponding to this source adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the BMC Patrol View to the appropriate application(s). For details, see “Working with Pattern Views” in *View Manager Administration*.

### BMC Patrol Parameters

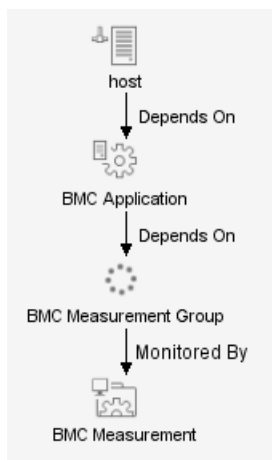
The source parameters in the **New Source** or **Edit Source** dialog box are:

- ▶ **Type.** The name of the type of source: **BMC Patrol**.
- ▶ **Name.** The name of the new source. By default: **BMC Patrol**. Note that this must be a unique name.
- ▶ **SiteScope hostname.** The name of the SiteScope host for the SiteScope machine monitoring the BMC Patrol system.
- ▶ **SiteScope port.** The port used by the SiteScope machine monitoring the BMC Patrol system to send data to Mercury Business Availability Center (default: **8888**).

- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

## BMC Patrol Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy, and pattern view are created in the CMDB. You can then view the hierarchy in the BMC Patrol View in the View Manager tab in CMDB Administration.



## CA Unicenter

The CA Unicenter source adapter retrieves information from a Computer Associates (CA) Unicenter system and dynamically builds the hierarchy in Dashboard using the Dynamic Node Factory template. Supported versions: CA Unicenter TNG 2.0 and Unicenter TND 3.0.

This is a Dynamic Node Factory source. For details, see “Dynamic Node Factory Definitions” on page 83.

For details about the source’s template, see “CA Unicenter Template” on page 108.

This section includes the following topics:

- “Working with the CA Unicenter Source Adapter” on page 37
- “CA Unicenter Parameters” on page 37
- “CA Unicenter Hierarchies” on page 38

### Working with the CA Unicenter Source Adapter

To enable the CA Unicenter source to receive data from the CA Unicenter Event monitor you must make sure that the monitor is set properly.

To display the hierarchy corresponding to this adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the CA Unicenter View to the appropriate application(s). For details, see “Creating a Pattern View” in *View Manager Administration*.

### CA Unicenter Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- **Type.** The name of the type of source: **CA Unicenter**.
- **Name.** The name of the new source. By default: **CA Unicenter**. Note that this must be a unique name.

- ▶ **Path.** The path to the DNode definition file. Do not change the default path: **<Mercury Business Availability Center server root directory>\CMDB\adapters\Dnodes.**

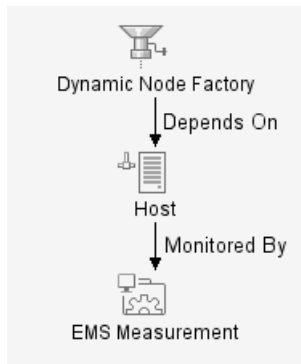
For example, for this adapter, the path may be:

D:\<MercuryAM\CMDB\adapters\Dnodes\CA\_Unicenter.xml

- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

## CA Unicenter Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy, and pattern view are created in the CMDB. You can then view the hierarchy in the CA Unicenter View in the View Manager tab in CMDB Administration.



## Compaq Insight Manager (CIM)

The Compaq Insight Manager source retrieves system information from a Compaq Insight Manager system, and builds a hierarchy that includes machine and device items. Supported versions: Compaq Insight Manager 7.0.

---

**Note:** In order to use this source, you must create a Data Source Name (DSN) on the Centers Server machine. For details, see “Creating a DSN for the HP Systems Insight Manager Adapters” on page 57.

---

For details about the source’s template, see “Creating a DSN for Compaq Insight Manager Adapters” on page 41.

This section includes the following topics:

- “Working with the Compaq Insight Manager Source Adapter” on page 39
- “CIM Parameters” on page 40
- “CIM Hierarchies” on page 41
- “Creating a DSN for Compaq Insight Manager Adapters” on page 41

### **Working with the Compaq Insight Manager Source Adapter**

To enable the Compaq Insight Manager source to receive data from the Compaq Insight Manager Event monitor you must make sure that the monitor is set properly.

To display the hierarchy corresponding to this adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the Compaq Insight Manager View to the appropriate application(s). For details, see “Creating a Pattern View” in *View Manager Administration*.

When creating a source using the Compaq Insight Manager adapter, you define the database connection URL and a database driver. In order to use the default JDBC:ODBC database driver, you must create a Data Source Name (DSN) on the Centers Server machine. The procedure for creating a DSN is described in “Creating a DSN for Compaq Insight Manager Adapters” on page 41.

---

**Notes:** If the default JDBC:ODBC database driver is not sufficient for connecting to your database, you must set a dedicated driver instead. To use an alternative driver, you must save the jar file in the **<Mercury Business Availability Center server root directory>\CMDB\adapters\classes** directory and restart the system.

As every driver requires different configuration, it is recommended that you contact Mercury Customer Support for assistance with setting the alternative driver.

The Compaq Insight Manager adapter does not support NT authentication.

---

## **CIM Parameters**

After the DSN is registered, enter the following information in the source parameters in the **New Source** or **Edit Source** dialog box:

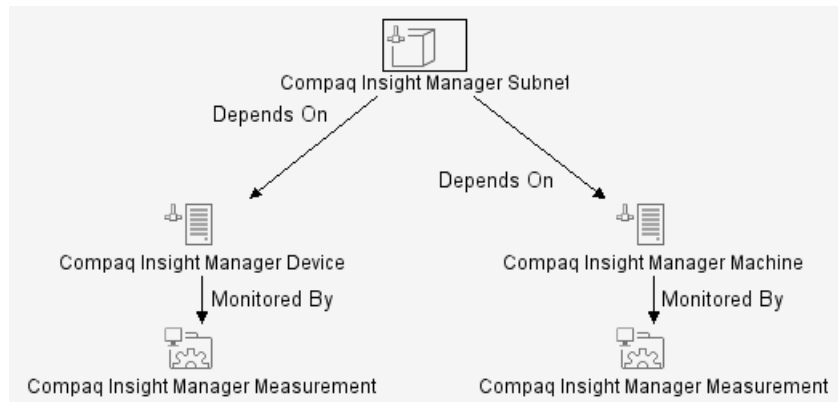
- **Type.** The name of the type of source: **Compact Insight Manager**.
- **Name.** The name of the new source. By default: **Compact Insight Manager**. Note that this must be a unique name.
- **Database connection URL.** The URL for connecting to the CIM database. The default is **jdbc:odbc:<DSN name>**.
- **Database driver.** The default database driver is the **jdbc:odbc** driver, for example: **sun.jdbc.odbc.JdbcOdbcDriver**.
- **Username.** The username defined when creating the DSN.
- **Password.** The password defined when creating the DSN.



- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

## CIM Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy, and pattern view are created in the CMDB. You can then view the hierarchy in the Compaq Insight Manager View in the View Manager tab in CMDB Administration.



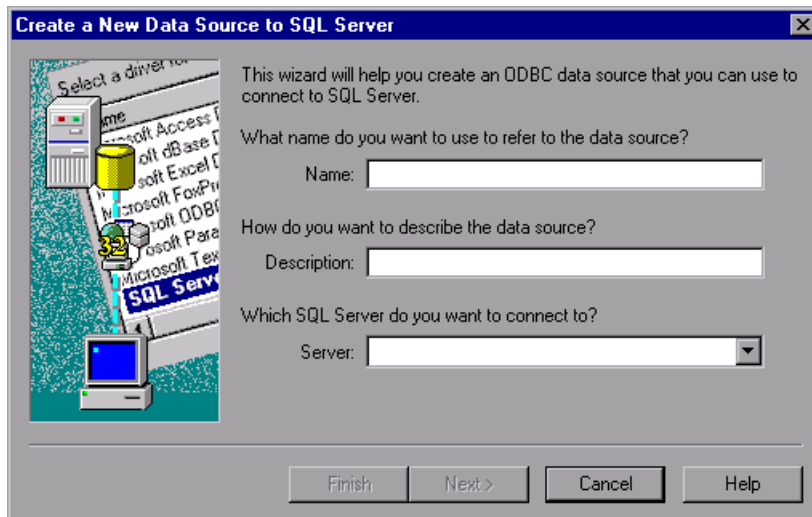
## Creating a DSN for Compaq Insight Manager Adapters

You must create a Data Source Name (DSN) on the Centers server machine to use the default JDBC:ODBC database driver.

**To create a DSN for Compaq Insight Manager Adapters:**

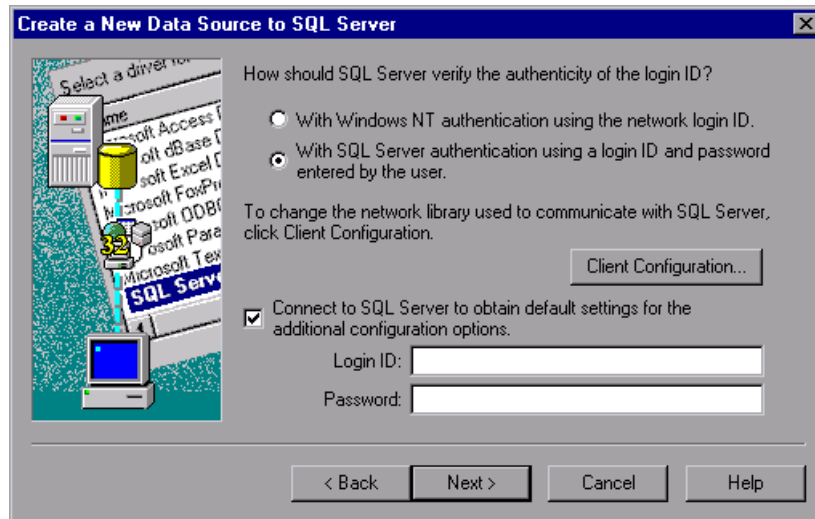
- 1** On the Centers Server machine, select **Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC)**. The ODBC Data Source Administrator dialog box opens.
- 2** Select the **System DSN** tab and click **Add**. The Create New Data Source dialog box opens.
- 3** Select **SQL Server** from the list and click **Finish**.

- 4 In the Create a New Data Source to SQL Server dialog box:
  - a Enter a name and description for the DSN, and enter the SQL Server name.



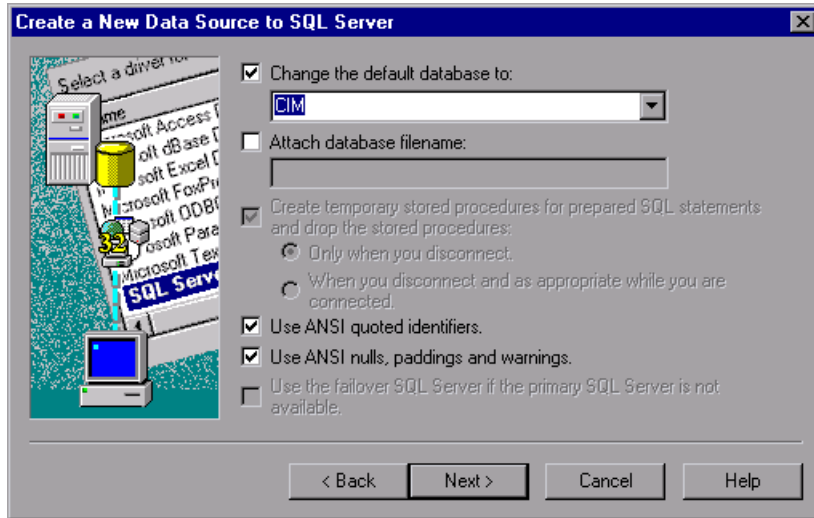
- b Click Next.

- 5 In the next Create a New Data Source to SQL Server dialog box:
- Select to verify the login ID with SQL Server authentication.



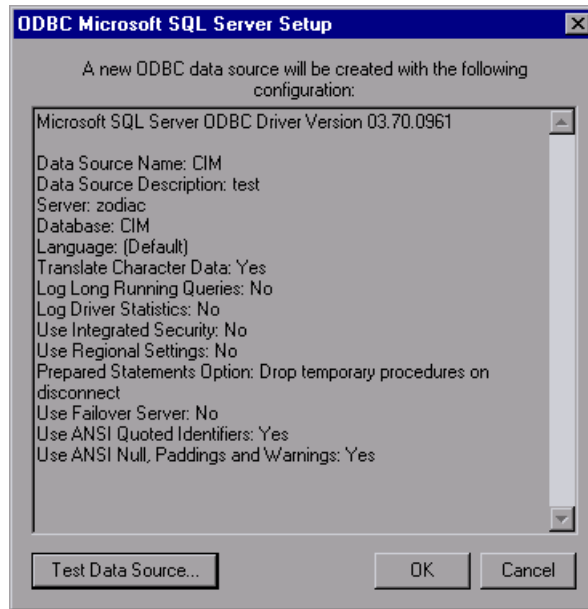
- Under **Connect to SQL Server to obtain default settings**, enter the login ID and password for SQL Server authentication.
- Click **Next**.

- 6 In the next Create a New Data Source to SQL Server dialog box:
  - a Select the **Change the database default to** check box and select the **CIM** database from the list.



- b Click **Next**.
- 7 In the next Create a New Data Source to SQL Server dialog box, click **Finish**.

- 8 The ODBC Microsoft SQL Server Setup dialog box displays the configuration for the new data source.



- a Click the **Test Data Source** button at the bottom of the dialog box to check the data source configuration. The **Test Results** should display: **TESTS COMPLETED SUCCESSFULLY!**
- 9 Click **OK** to close the **Test Results**, then click **OK** in the ODBC Microsoft SQL Server Setup dialog box to create the data source.

## Generic EMS

The Generic EMS source retrieves a generic hierarchy for enterprise management systems (EMS), via SiteScope.

To display the hierarchy corresponding to this adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the Generic EMS view to the appropriate application(s). For details, see “Creating a Pattern View” in *View Manager Administration*.

This is a Dynamic Node Factory source. For details, see “Dynamic Node Factory Definitions” on page 83.

You can use this adapter when you want to perform an EMS integration that sends samples with the Event type.

For details about the source’s template, see “Generic EMS Template” on page 111.

Use this source adapter when your site includes more than one third-party source. The Generic EMS Adapter enables you to integrate all of the hierarchies of all of the third-party sources.

This section includes the following topics:

- ▶ “Generic EMS Parameters” on page 46
- ▶ “Generic EMS Hierarchies” on page 47
- ▶ “When to Use Generic EMS” on page 48

### Generic EMS Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- ▶ **Type.** The name of the type of source: **Generic EMS**
- ▶ **Name.** The name of the new source. By default: **Generic EMS**. Note that this must be a unique name.
- ▶ **Path.** The path to the location of the Generic EMS XML file. Do not change the default path:  
**<Mercury Business Availability Center server root directory>\  
CMDB\adapters\Dnodes.**

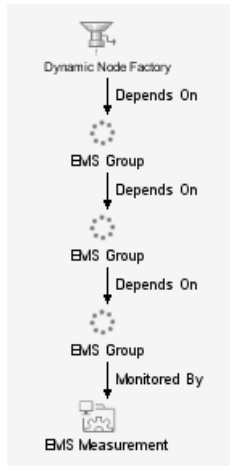
For example, for this adapter, the path may be:

D:\<MercuryAM>\CMDB\adapters\Dnodes\Generic\_EMS.xml

- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

## Generic EMS Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy are created in the CMDB. You can then view the hierarchy in the Generic EMS view in the View Manager tab in CMDB Administration.



## When to Use Generic EMS

It is recommended to use the Generic EMS source adapter when you want to perform an EMS integration that sends samples with Event type. The Generic EMS source adapter is useful for demos, or to view which EMS source adapters have been enabled.

When the Generic EMS source adapter and other EMS source adapters are enabled, two or more views are created: the Generic EMS view and the view(s) corresponding to the other EMS source adapter(s).

The Generic EMS view displays information about each EMS source adapter in a hierarchy where each CI above the monitor CI level is represented by an EMS Group type CI. In addition, separate view(s) are created for each one of the other EMS source adapter(s) using that source adapter's specific hierarchy.

The top level of the Generic EMS source adapter view displays the EMS source adapters present in the system. The hierarchy appearing below that level is specific to each EMS source adapter but each one of them has the EMS Group type except for the monitor CI level. Some additional EMS Group type CIs might be created to fill in the different levels of the Generic EMS hierarchy.

In the Generic EMS view, the rules and KPIs applied to each CI level (except the measurement CI level) are the rules and KPIs attached to the EMS Group type CI. In the other EMS source adapter views, the rules and KPIs applied to each CI level (except for the measurement CI level) are the rules and KPIs defined for the relevant CI type.

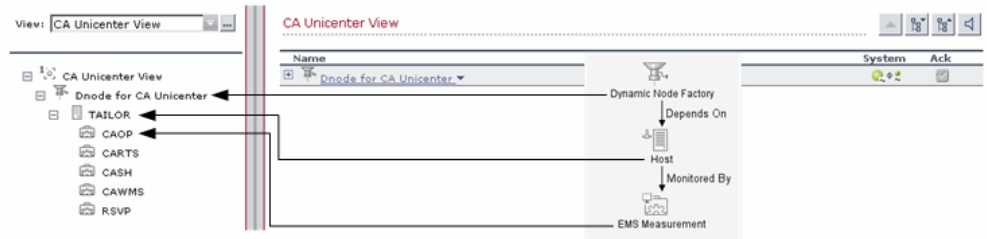
The samples that are caught by the Generic EMS DNode and by a specific EMS source adapter DNode do not create the same monitor CIs (the CIs are duplicated in the CMDB) though their values are updated from the same sample.



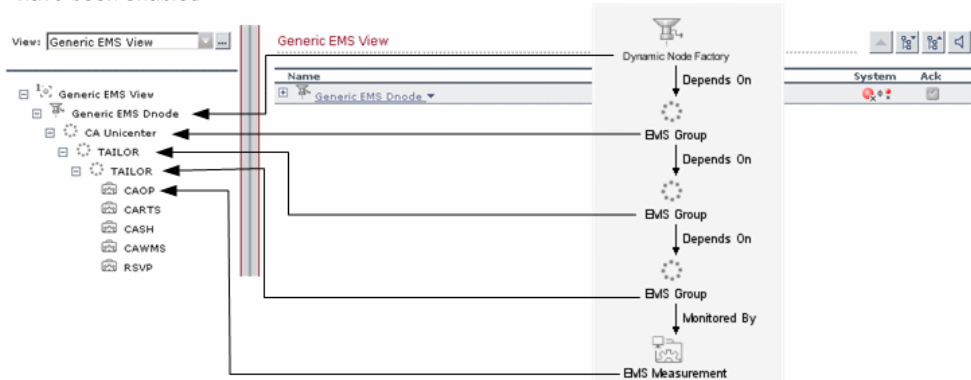
If you want to check the status of a specific CI in Dashboard, it is recommended to go to the view appropriate for the EMS source adapter as the Generic EMS source adapter view might display a different status appropriate for its view but that might not represent the appropriate status. In the same way, if you want to use one of the EMS source adapter CIs in a specific view, make sure to use the CIs from the view appropriate for the EMS source adapter and not the CIs from the Generic EMS source adapter.

For example: the CA Unicenter and Generic EMS source adapters are enabled. The Generic EMS source adapter uses a Dynamic Node Factory to catch the same samples as the CA Unicenter source adapter but creates a different hierarchy and view from the other source adapter.

Hierarchy of the CA Unicenter view



Hierarchy of the Generic EMS view when both Generic EMS and CA Unicenter source adapters have been enabled



The CA Unicenter source adapter maps the sample as follows:

Sample Item	CI type	Value
	Dynamic Node Factory	Dnode for CA Unicenter
target-name	host	TAILOR
instance	EMS measurement	CAOP

The Generic EMS source adapter maps the sample as follows:

Sample Item	CI type	Value
datasource	EMS Group	CA Unicenter
subject	EMS Group	TAILOR
instance	EMS Group	TAILOR
instance	EMS measurement	CAOP

## Hewlett-Packard (HP) OpenView

The Hewlett-Packard (HP) Open View source retrieves information from a Hewlett-Packard OpenView system and dynamically builds the hierarchy in Dashboard using the Dynamic Node Factory template. This adapter builds a hierarchy that displays information for specific HP parameters (not including services or measurements). Supported versions: HP OpenView 6.0 and 7.0.

This is a Dynamic Node Factory source. For details, see “Dynamic Node Factory Definitions” on page 83.

For details about the source’s template, see “Hewlett-Packard (HP) OpenView Template” on page 111.

This section includes the following topics:

- “Working with the Hewlett-Packard (HP) Open View Source Adapter” on page 51
- “HP OpenView Parameters” on page 51
- “HP OpenView Hierarchies” on page 52

## Working with the Hewlett-Packard (HP) Open View Source Adapter

To enable the HP Open View source to receive data from the HP OVO Event monitor you must make sure that the monitor is set properly.

To display the hierarchy corresponding to this adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the HP OpenView view to the appropriate application(s). For details, see “Creating a Pattern View” in *View Manager Administration*.

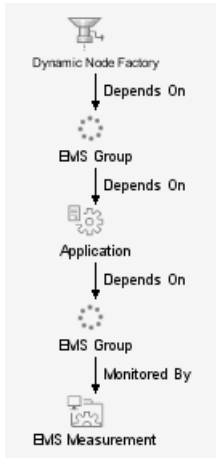
### HP OpenView Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- **Type.** The name of the type of source: **HP OpenView**.
- **Name.** The name of the new source. By default: **HP OpenView**. Note that this must be a unique name.
- **Path.** The path to the location of the DNode definition file. Do not change the default path:  
**<Mercury Business Availability Center server root directory>\CMDB\adapters\Dnodes.**  
 For example, for the HP OpenView adapter, the path may be:  
 D:\<MercuryAM\CMDB\adapters\Dnodes\HP\_OpenView.xml
- **Sync interval.** Define the interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- **Enable.** Select the check box to enable communication between the adapter and the external system.

## HP OpenView Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy, and pattern view are created in the CMDB. You can then view the hierarchy in the HP OpenView View in the View Manager tab in CMDB Administration.



## HP OpenView Service Navigator

The HP OpenView Service Navigator source retrieves system information from an XML file produced by the Hewlett-Packard OpenView Service Navigator. This adapter imports service and measurement resource items into Dashboard, and includes an option to dynamically build a hierarchy of additional information for each service (excluding measurement items). Supported versions: HP OpenView 6.0 and 7.0.

For details about the source's template, see "HP OpenView Service Navigator Template" on page 112.

This section includes the following topics:

- ▶ “Working with the HP OpenView Service Navigator Source Adapter” on page 53
- ▶ “HP OpenView Service Navigator Parameters” on page 53
- ▶ “HP OpenView Service Navigator Hierarchies” on page 54

## **Working with the HP OpenView Service Navigator Source Adapter**

To enable the HP Open View source to receive data from the HP OVO Event monitor you must make sure that the monitor is set properly. Use the XML file from the Service Navigator application that describes the hierarchy.

To display the hierarchy corresponding to this adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the HP OpenView Service Navigator view to the appropriate application(s). For details, see “Creating a Pattern View” in *View Manager Administration*.

## **HP OpenView Service Navigator Parameters**

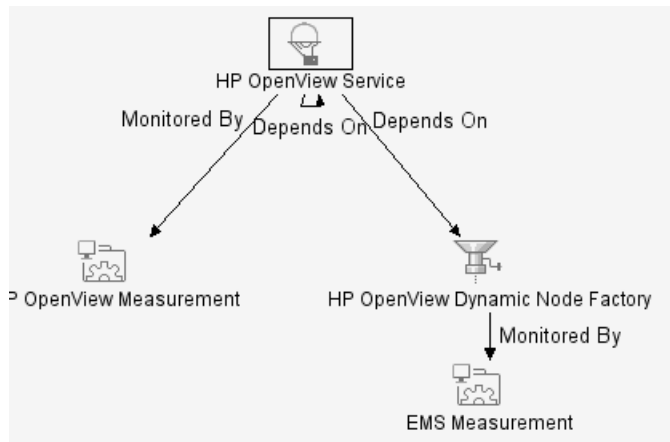
The source parameters in the **New Source** or **Edit Source** dialog box are:

- ▶ **Type.** The name of the type of source: **HP Open Service Navigator**.
- ▶ **Name.** The name of the new source. By default: **HP Open Service Navigator**. Note that this must be a unique name.
- ▶ **Path.** The path to the location of the topology data XML file. The source template uses this file to create the data hierarchy instead of receiving the information from the external EMS system. This file is created from the HP Service Navigator system. The default path is generally: C:\.
- ▶ **Generate additional levels using Dynamic Node Factory.** Clear the check box if you want the adapter to create a hierarchy based on imported service and measurement resource items (without a Dynamic Node Factory hierarchy). Select the check box if you want the source adapter to use the Dynamic Node Factory to import services, and to dynamically build a hierarchy of additional information for each service (excluding measurement items).

- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

## HP OpenView Service Navigator Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy, and pattern view are created in the CMDB. You can then view the hierarchy in the HP OpenView Service Navigator View in the View Manager tab in CMDB Administration.



HP OpenView Service is recursive. The curved arrow indicates that the hierarchy element is recursive; HP OpenView Service can be the top level parent in the hierarchy, but it can also be the child of the HP OpenView Service CI type itself.

## HP Systems Insight Manager (HP SIM)

The HP Systems Insight Manager source retrieves system information from a Hewlett-Packard SIM system, and builds a hierarchy that includes machines and devices for each subnet mask.

For details about the source's template, see "HP Systems Insight Manager (HP SIM) Template" on page 114.

This section includes the following topics:

- ▶ "Working with the HP Systems Insight Manager Source Adapter" on page 55
- ▶ "HP SIM Parameters" on page 56
- ▶ "HP Systems Insight Manager Hierarchies" on page 57
- ▶ "Creating a DSN for the HP Systems Insight Manager Adapters" on page 57

### Working with the HP Systems Insight Manager Source Adapter

To enable the HP SIM source to receive data from the HP SIM Event monitor you must make sure that the monitor is set properly.

To display the hierarchy corresponding to this adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the HP Systems Insight Manager view to the appropriate application(s). For details, see "Creating a Pattern View" in *View Manager Administration*.

When creating a source using the HP Systems Insight Manager adapter, you define the database connection URL and a database driver. In order to use the default JDBC:ODBC database driver, you must create a Data Source Name (DSN) on the Centers Server machine. The procedure for creating a DSN is described in "Working with the Compaq Insight Manager Source Adapter" on page 39.

**Notes:** If the default JDBC:ODBC database driver is not sufficient for connecting to your database, you must set a dedicated driver instead. To use an alternative driver, you must save the jar file in the **<Mercury Business Availability Center server root directory>\CMDB\adapters\classes** directory and restart the system.

As every driver requires different configuration, it is recommended that you contact Mercury Customer Support for assistance with setting the alternative driver.

The HP Systems Insight Manager adapter does not support NT authentication.

---

## HP SIM Parameters

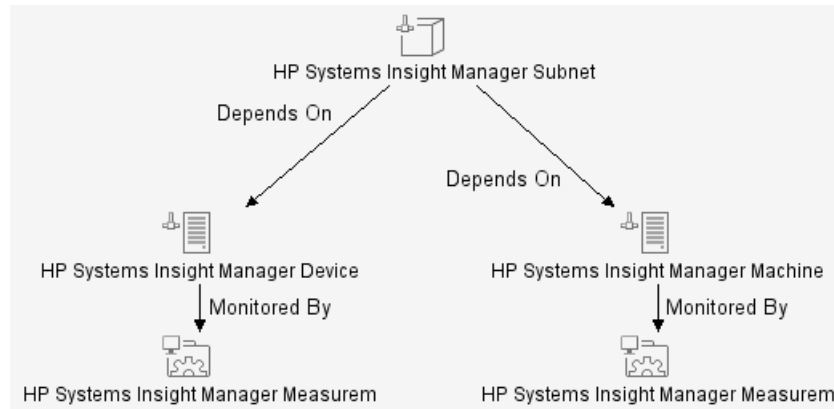
After the DSN is registered, enter the following information in the source parameters in the **New Source** or **Edit Source** dialog box:

- **Type.** The name of the type of source: **HP Systems Insight Manager**.
- **Name.** The name of the new source. By default: **HP Systems Insight Manager**. Note that this must be a unique name.
- **Database Connection URL.** The URL for connecting to the HP SIM database. The default is **jdbc:odbc:<DSN name>**.
- **Database Driver.** The URL for connecting to the HP SIM database. The default is **jdbc:odbc:<DSN name>**.
- **Username.** The username defined when creating the DSN.
- **Password.** The password defined when creating the DSN.
- **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- **Enable.** Select the check box to enable communication between the adapter and the external system.



## HP Systems Insight Manager Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy, and pattern view are created in the CMDB. You can then view the hierarchy in the HP Systems Insight Manager View in the View Manager tab in CMDB Administration.



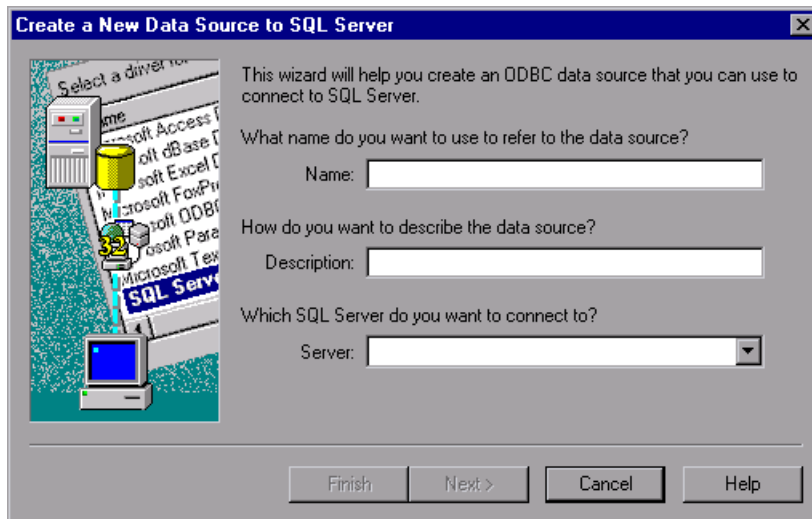
## Creating a DSN for the HP Systems Insight Manager Adapters

You must create a Data Source Name (DSN) on the Centers server machine to use the default JDBC:ODBC database driver.

**To create a DSN for the HP Systems Insight Manager Adapter:**

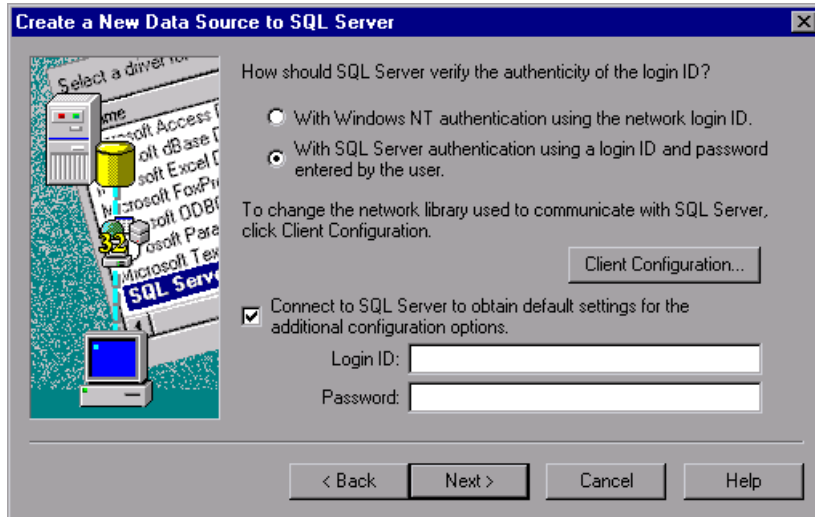
- 1** On the Centers Server machine, select **Start > Settings > Control Panel > Administrative Tools > Data Sources (ODBC)**. The ODBC Data Source Administrator dialog box opens.
- 2** Select the **System DSN** tab and click **Add**. The Create New Data Source dialog box opens.
- 3** Select **SQL Server** from the list and click **Finish**.

- 4 In the Create a New Data Source to SQL Server dialog box:
  - a Enter a name and description for the DSN, and enter the SQL Server name.



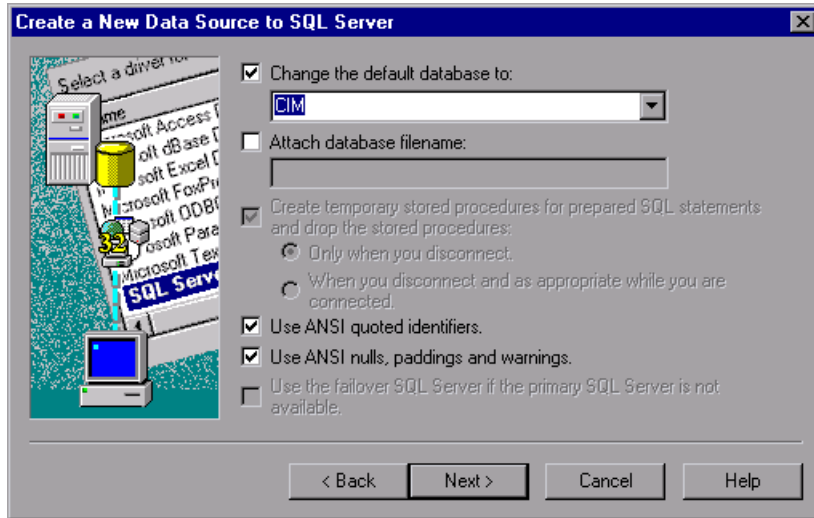
- b Click **Next**.
- 5 In the next Create a New Data Source to SQL Server dialog box:

- a Select to verify the login ID with SQL Server authentication.



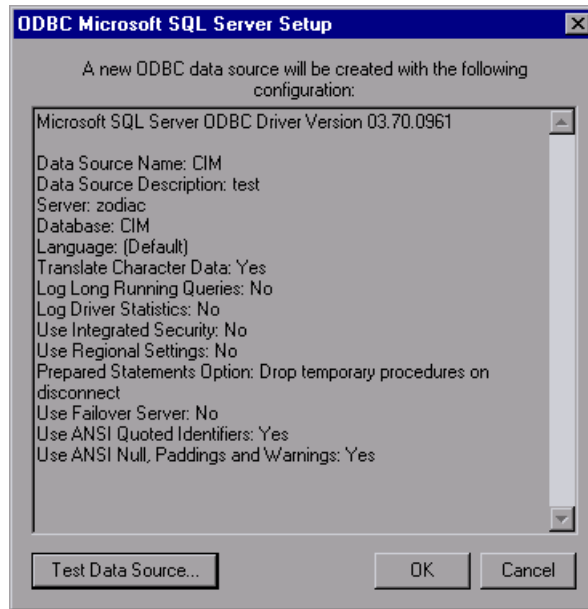
- b Under **Connect to SQL Server to obtain default settings**, enter the login ID and password for SQL Server authentication.
- c Click **Next**.

- 6 In the next Create a New Data Source to SQL Server dialog box:
  - a Select the **Change the database default to** check box and select the **CIM** database from the list.



- b Click **Next**.
- 7 In the next Create a New Data Source to SQL Server dialog box, click **Finish**.

- 8 The ODBC Microsoft SQL Server Setup dialog box displays the configuration for the new data source.



- a Click the **Test Data Source** button at the bottom of the dialog box to check the data source configuration. The **Test Results** should display: **TESTS COMPLETED SUCCESSFULLY!**
  - 9 Click **OK** to close the **Test Results**, then click **OK** in the ODBC Microsoft SQL Server Setup dialog box to create the data source.

## Tivoli TEC

The Tivoli TEC source retrieves information from an IBM Tivoli Enterprise Console system and dynamically builds the hierarchy in Dashboard using the Dynamic Node Factory template. Supported versions: Tivoli DM 3.6, 3.7, 3.8 and 3.9, and ITM 5.1.1.

For details about the source's template, see "Tivoli TEC Template" on page 117.

This section includes the following topics:

- ▶ "Working with the Tivoli TEC Source Adapter" on page 62
- ▶ "Tivoli TEC Parameters" on page 62
- ▶ "Tivoli TEC Hierarchies" on page 63

### Working with the Tivoli TEC Source Adapter

To enable the Tivoli TEC source to receive data from the Tivoli TEC Event monitor you must make sure that the monitor is set properly.

To display the hierarchy corresponding to this adapter in IT Universe Manager, Dashboard, or Service Level Management, you must assign the Tivoli TEC View to the appropriate application(s). For details, see "Creating a Pattern View" in *View Manager Administration*.

This is a Dynamic Node Factory source. For details, see "Dynamic Node Factory Definitions" on page 83.

### Tivoli TEC Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- ▶ **Type.** The name of the type of source: **Tivoli TEC**.
- ▶ **Name.** The name of the new source. By default: **Tivoli TEC**. Note that this must be a unique name.
- ▶ **Path.** The path to the location of the DNode definition file. Do not change the default path:  
**<Mercury Business Availability Center server root directory>\  
CMDB\adapters\Dnodes.**

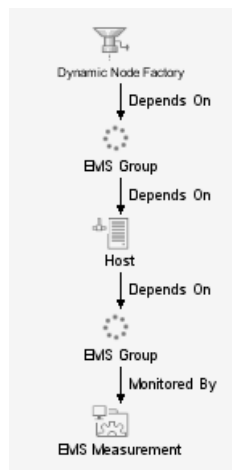
For example, for this adapter, the path may be:

D:\MercuryAM\CMDB\adapters\Dnodes\Tivoli\_TEC.xml

- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

## Tivoli TEC Hierarchies

When you select this source adapter and enable it, the relevant CIs, hierarchy, and pattern view are created in the CMDB. You can then view the hierarchy in the Tivoli TEC View in the View Manager tab in CMDB Administration.



## XML File

The XML File source retrieves topology information from an XML file produced by an external system that you define. The XML file contains the definition of CIs. This source includes a predefined generic adapter.

For more details about the source's template, see "XML File Template" on page 118.

### XML File Parameters

The source parameters in the **New Source** or **Edit Source** dialog box are:

- ▶ **Type.** The name of the type of source: **XML File**.
- ▶ **Name.** The name of the new source. By default: **XML File**. Note that this must be a unique name.
- ▶ **Path.** The path to the location of the user-defined XML file. The file describes the data topology.
- ▶ **Sync interval.** The interval (in minutes) between each automatic synchronization of the adapter with the external system. The default value is **60** minutes.
- ▶ **Enable.** Select the check box to enable communication between the adapter and the external system.

### When to Use XML File Source Adapter

Use the XML File source adapter when you want to create a hierarchy that is different from the hierarchies offered by the other source adapters.

The user with the appropriate permissions that creates an XML File source adapter must know how the data is stored in the CMDB (using the CI Type manager).

### Limitations

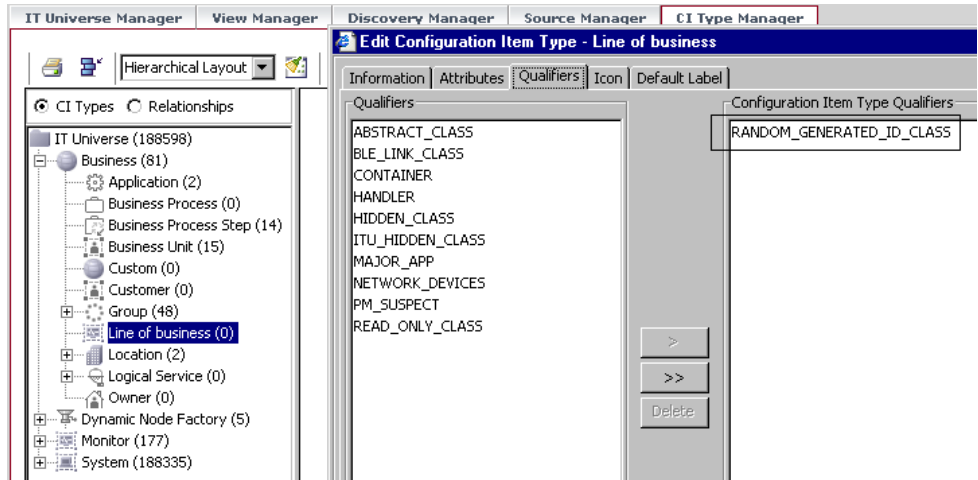
Some of the CMDB configuration item types (CITs) cannot be configured in the xml file used by the XML adapter because their ID is randomly generated, and the XML adapter cannot synchronize it. For example, such a class is Line of Business.



To find out if the ID of a CIT is randomly generated:

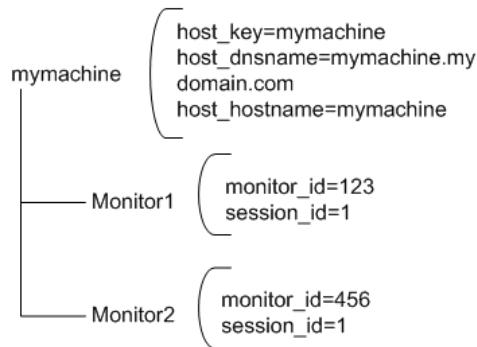
- 1 Select **Admin > CMDB**, and click the **CI Type Manager** tab.
- 2 Right click the required CI, and select **Edit CIT**.
- 3 In the Edit Configuration Item dialog box, click the **Qualifiers** tab.

In the Configuration Item Type Qualifier pane, you can see whether the CI ID is randomly generated. For details, see *CI Type Manager Administration*.

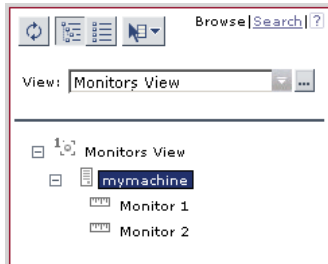


## Scenario

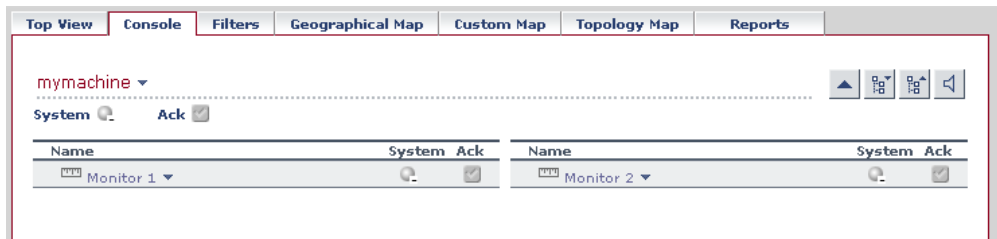
You want to create a hierarchy and a view that includes hosts and monitors as follows:



The hierarchy is as follows:



The view is as follows:



The steps to follow to create such a hierarchy are:

- ▶ Create an XML File template. For details, see “Writing the XML File Template” on page 67.
- ▶ Create a configuration file. For details, see “Writing the Configuration File” on page 69.
- ▶ Create the XML File source adapter. For details, see “Creating an XML File Source Adapter That Monitors Hosts and Monitors” on page 73.

## Writing the XML File Template

Use the following XML File template:

```

<adapterTemplate>
  <description>Customized XML Adapter</description>
  <type>XML File</type>
  <logicType>User Experience</logicType>

  <classPath>com.mercury.topaz.tdm.adapters.XMLFileAdapter.XMLFileAdapterImp
l</classPath>
  <autoMapEntities>true</autoMapEntities>
<autoMappingEntities>
<entity id="monitor">
  <basicEntity>Mercury:sitescope_monitor</basicEntity>
  <contextmenu>ssMonitorMenu</contextmenu>
<dimensions>
<dimension id="1">
<logics>
  <logic id="4" />
</logics>
<selectors type="AND">
  <selector key="sampleType" operator="EQ" value="ss_monitor_t"
dataType="String" readOnly="true" />
  <selector key="u_iConnectionId" operator="EQ" value="" dataType="Long"
reference="true" referencedProperty="monitor_id" />
  <selector key="u_iSessionId" operator="EQ" value="" dataType="Long"
reference="true" referencedProperty="session_id" />
</selectors>
</dimension>
</dimensions>
</entity>
<entity id="machine">
  <basicEntity>host</basicEntity>
  <contextmenu>groupMenu</contextmenu>
<dimensions>
<dimension id="1">
<logics>
  <logic id="1" />
</logics>
</dimension>
</dimensions>
</entity>

```

```

</autoMappingEntities>
<autoMappingLinks>
  <link type="Mercury:monitored_by" src_obj_type="host" dest_obj_type=
  "Mercury:sitescope_monitor" weight="1" />
</autoMappingLinks>
<displayNameMapping />
</adapterTemplate>

```

The template maps the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
monitor	Mercury: sitescope_ monitor	ssMonitorMenu – SiteScope Monitor Menu	1 – System	4 – SiteScope Monitor
machine	host	groupMenu – Group Menu	1 – System	1 – Worst Child

The monitor entity has the following selectors:

```

<selectors type="AND">
  <selector key="sampleType" operator="EQ" value="ss_monitor_t"
  dataType="String" readOnly="true" />
  <selector key="u_iConnectionId" operator="EQ" value="" dataType="Long"
  reference="true" referencedProperty="monitor_id" />
  <selector key="u_iSessionId" operator="EQ" value="" dataType="Long"
  reference="true" referencedProperty="session_id" />
</selectors>

```

The following relationships are defined:

```

<autoMappingLinks>
  <link type="Mercury:monitored_by" src_obj_type="host"
  dest_obj_type="Mercury:sitescope_monitor" weight="1" />
</autoMappingLinks>

```

## Writing the Configuration File

Use the following `xmlFile.xml` file where one host is monitored by two monitors:

```
<?xml version="1.0" encoding="UTF-8" ?>
<extSysGraph>
  <generalData>
    <properties />
  </generalData>
  <entities>
    <entity type="monitor">
      <name>Monitor 1</name>
      <idProperties>
        <property dataType="Long" key="monitor_id" value="123" />
        <property dataType="Long" key="session_id" value="1" />
      </idProperties>
      <children />
      <parents>
        <idProperties>
          <property dataType="String" key="host_key" value="mymachine" />
        </idProperties>
      </parents>
    </entity>
    <entity type="monitor">
      <name>Monitor 2</name>
      <idProperties>
        <property dataType="Long" key="monitor_id" value="456" />
        <property dataType="Long" key="session_id" value="1" />
      </idProperties>
    </entity>
  </entities>
</extSysGraph>
```

```

<children />
<parents>
<idProperties>
<property dataType="String" key="host_key" value="mymachine" />
</idProperties>
</parents>
</entity>
<entity type="machine">
<name>mymachine</name>
<idProperties>
<property dataType="String" key="host_key" value="mymachine" />
</idProperties>
<properties>
<property dataType="String" key="host_dnsname" value="mymachine.mydo-
main.com" />
<property dataType="String" key="host_hostname" value="mymachine" />
</properties>
<children>
<idProperties>
<property dataType="Long" key="monitor_id" value="123" />
<property dataType="Long" key="session_id" value="1" />
</idProperties>
<idProperties>
<property dataType="Long" key="monitor_id" value="456" />
<property dataType="Long" key="session_id" value="1" />
</idProperties>
</children>
<parents />
</entity>
</entities>
</extSysGraph>

```

The guidelines to create a configuration file are as follows:

- ▶ You must write this file in such a way that each CI type has at least one unique property in its **idProperties** definition (so that it is unique in the CMDB)—for more details about CI types, see *CI Type Manager Administration*.

For example for Monitor1 the **idProperties** are `monitor_id=123` and `session_id=1`:

```
<entity type="monitor">
  <name>Monitor 1</name>
  <idProperties>
    <property dataType="Long" key="monitor_id" value="123" />
    <property dataType="Long" key="session_id" value="1" />
  </idProperties>
```

For example for Monitor2 the **idProperties** are `monitor_id=456` but the `session_id` is the same as for Monitor1: `session_id=1`:

```
<entity type="monitor">
  <name>Monitor 1</name>
  <idProperties>
    <property dataType="Long" key="monitor_id" value="456" />
    <property dataType="Long" key="session_id" value="1" />
  </idProperties>
```

- ▶ Regular properties (between the **<properties>** and **</properties>** tags) can have similar values. For example for the `mymachine` host, the properties are: `host` key, `host dsname`, and the name of the host as follows:

```
<idProperties>
  <property dataType="String" key="host_key" value="mymachine" />
</idProperties>
<properties>
  <property dataType="String" key="host_dnsname"
value="mymachine.mydomain.com" />
  <property dataType="String" key="host_hostname" value="mymachine" />
</properties>
```

- ▶ You must specify the parent for each item, if any. It is recommended to also write the reverse relation, that is to specify the children of each item.

For example, you specify that the parent of entity `Monitor1` is: `mymachine` (`host_key=mymachine`):

```
<entity type="monitor">
<name>Monitor 1</name>
...
<parents>
<idProperties>
<property dataType="String" key="host_key" value="mymachine" />
</idProperties>
</parents>
```

You must also specify that the entity `machine` has the following children: `Monitor1` (`monitor_id=123`) and `Monitor2` (`monitor_id=456`):

```
<entity type="machine">
...
<children>
<idProperties>
<property dataType="Long" key="monitor_id" value="123" />
<property dataType="Long" key="session_id" value="1" />
</idProperties>
<idProperties>
<property dataType="Long" key="monitor_id" value="456" />
<property dataType="Long" key="session_id" value="1" />
</idProperties>
</children>
```

You must do the same for entity `Monitor2`.



## Creating an XML File Source Adapter That Monitors Hosts and Monitors

To create an XML File source adapter that monitors hosts and monitors you must modify the default source adapter template, save the configuration file in the appropriate location, and you must create a view.

**To create an XML File source adapter that monitors hosts and monitors:**

- 1** In the Source Manager tab, click the **New Source** button to open the New Source dialog box.
- 2** In the **Type** box, select the XML File source adapter.
- 3** Click **Edit Template**. The dialog box expands to display the adapter template in the **Template** box.

---

**Note:** In the **Template** box, use the dialog box scrollbar and the **Template** box scrollbar to display the areas of the template you want to modify. You can also highlight the text, copy it to a text editor, make the appropriate changes and copy the text back into the **Template** box.

---

- 4** Copy the first part of the XML File template provided in the example above from `<autoMappingEntities>` to `</autoMappingEntities>` (tags included) and insert it in the XML File template between `<autoMappingEntities bac-version="BAC 6.5">` and `</autoMappingEntities>` and erase the rest of the file.
- 5** Copy the second part of the XML File template provided in the example above from `<autoMappingLinks>` to `</autoMappingLinks>` (tags included) and insert it in the XML File template after `</autoMappingEntities>` (included).

Save the `xmlFile.xml` file (shown above) in a specific location; for example: `<Mercury Business Availability Center server root directory>\CMDB\adapters\templates\xmlFile.xml` and enter the path in the **Path** box in the source adapter definition.

- 6 Create a pattern specific for the structure that is used in the **xmlFile.xml** file. For details, see “Working with Pattern Views” in *View Manager Administration*.

# 5

---

## Working with Templates

This chapter describes how to modify the XML template of a default or custom source.

<b>This chapter describes:</b>	<b>On page:</b>
About Working with Templates	76
Modifying Adapter Templates	77
CI Definition Parameters	79
Selector Definitions	81
Dynamic Node Factory Definitions	83
Automapping – Relationships Details	84
Default Sources Details	86
Custom Sources Details	106

## About Working with Templates

The source adapter templates define all necessary information needed to present aggregated data from the various data sources.

Each source adapter uses a template that maps the entities in the data source to the configuration items (CIs) stored in the CMDB and defines the resources to be used in CMDB for a CI, such as KPIs, and business rules.

Advanced users can customize the source adapter templates themselves, or can modify the KPIs, rules, and selector definitions in the Dashboard Administration Repositories page, in order to meet their organization's needs. Making modifications to the Repositories is described in "Introduction to Mercury Business Availability Center Repositories" in *Repositories Administration*.

Mercury Services offers best practice consulting; it is recommended that you use this service before making any changes to the templates or repositories. For information on how to obtain this service, contact Mercury Customer Support.

This chapter includes the following sections:

- ▶ "Modifying Adapter Templates" on page 77
- ▶ "CI Definition Parameters" on page 79
- ▶ "Selector Definitions" on page 81
- ▶ "Dynamic Node Factory Definitions" on page 83
- ▶ "Automapping – Relationships Details" on page 84
- ▶ "Default Sources Details" on page 86
- ▶ "Custom Sources Details" on page 106

## Modifying Adapter Templates

Most of the templates used by the source adapters follow a basic format, with specific variations for each adapter. The Dynamic Node Factory templates are somewhat different. For details, see “Dynamic Node Factory Definitions” on page 83.

Each source adapter uses a template that maps the entities in the data source to the configuration items (CIs) stored in the CMDB and defines the resources to be used in CMDB for a CI, such as KPIs, and business rules. The template is used to create the source adapter’s XML file.

You can modify an adapter template by changing the XML code used to specify:

- ▶ mapping of source entities to CIs.
- ▶ the relationships between CIs
- ▶ the rules to be applied to the appropriate CIs/KPIs data before it is displayed in the views. The business rules resources are defined in the Dashboard repositories, described in “Introduction to Mercury Business Availability Center Repositories” in *Repositories Administration*.
- ▶ the context menus to be used for the CI in the Dashboard application
- ▶ the KPIs assigned to each CI. The KPIs resources are defined in the repositories, described in “Introduction to Mercury Business Availability Center Repositories” in *Repositories Administration*.
- ▶ the selectors required by each business rule to identify and catch the appropriate samples that relate to the relevant CIs and KPIs.

The group CIs, for example, groups or machines, have the simplest level of definitions. The monitor CIs use a higher level of definitions; they require selectors in order to check data samples from the source and present the data from the bus as KPI status in Dashboard.

- ▶ the predefined Dynamic Node Factory CIs included in the adapter templates or the new Dynamic Node Factory CIs that you add to your view to generate a hierarchy that fits your organization's needs. For more details, see "Dynamic Node Factory Definitions" on page 83 or "About the Topology Map" in *IT Universe Manager Administration*.
- ▶ the relationships between CIs. For details, see "Automapping – Relationships Details" on page 84.

---

**Note:** It is recommended to perform a backup of the source before you modify it as follows: access the <**Mercury Business Availability Center root directory**>\CMDB\adapters\adapters directory, find the file that corresponds to the adapter you want to back up, copy that file to another directory (not under <**Mercury Business Availability Center root directory**>). When you want to restore the original source, copy the original file back to the <**Mercury Business Availability Center root directory**>\CMDB\adapters\adapters directory and restart Mercury Business Availability Center.

---

**To modify an adapter template:**

- 1** In the Source Manager tab, click the **New Source** button to open the New Source dialog box and select the appropriate source adapter in the **Type** box, or click the **Edit Source** button for the source you want to edit to open the Edit Source dialog box.
- 2** Click **Edit Template**. The dialog box expands to display the adapter template in the **Template** box.

---

**Note:** Use the dialog box scrollbar and the **Template** box scrollbar to display the areas of the template you want to modify. You can also highlight the text in the **Template** box, copy it to a text editor, make the appropriate changes and copy the text back into the **Template** box.

---

- 3 Make the required changes. For details about the source adapter template parameters, see “CI Definition Parameters” on page 79.
- 4 Click **OK**.

## CI Definition Parameters

The example shows the mapping of an entity named `measurement` mapped to a CIT named `Mercury:sitescope_measurement` in the CMDB.

```
<entity id="measurement">
  <basicEntity>Mercury:sitescope_measurement</basicEntity>
  <contextmenu>ssMeasurementMenu</contextmenu>
  <dimensions>
    <dimension>
      <id>1</id>
      <logics>
        <logic>
          <id>3</id>
        </logic>
      </logics>
      <selectors type="AND">
        <selector dataType="String" key="sampleType"
          operator="EQ" readOnly="true" reference="false"
          referencedProperty="sampleType" value="ss_t"/>
        <selector dataType="Long" key="u_iMeasurementId"
          operator="EQ" readOnly="false" reference="true" referencedProperty="measurement_id"/>
        <selector dataType="Long" key="u_iSessionId"
          operator="EQ" readOnly="false" reference="true" referencedProperty="session_id"/>
      </selectors>
      <removeDimensionIfObsolete>true</removeDimensionIfObsolete>
      <dnodeAwareDimension>>false</dnodeAwareDimension>
    </dimension>
  </dimensions>
</entity>
```

An adapter mapping definition includes some the following information:

- ▶ **entity id.** The name of the source item.
- ▶ **basicEntity.** The name of the configuration item (CI) in Mercury Business Availability Center. The CIs are defined in the IT Universe Manager tab in CMDB Administration, described in “Introduction to IT Universe Manager Administration” in *IT Universe Manager Administration*.
- ▶ **contextmenu.** The internal name of the context menu to be used for the item in the Dashboard application. The context menus are defined in the Context Menus repository, described in “Context Menus Repository”, in *Repositories Administration*.
- ▶ **dimension.** The ID of a KPI to be used for the CI. If you change the KPI, you should make sure that the KPI is applicable for the item class. The KPI are defined in the KPI repository, described in “Dashboard KPIs Detailed Description” in *Repositories Administration*.
- ▶ **logic.** The ID of a business rule to be used with the KPI. If you change the rule, you should make sure that the rule is applicable for the KPI. The business rules are defined in the Rules repository, described in “Dashboard Business Rules Detailed Description” in *Repositories Administration*.

---

**Note:** In a source adapter, you can assign to a KPI only a leaf rule and not a group rule. You can assign a group rule to a KPI only in the repositories. For details, see “KPIs Repository” in *Repositories Administration*.

---

- ▶ **parameters.** Additional parameters for the CI’s KPI, or parameter values to override the parameter values defined for the business rule.
- ▶ **selectors.** (For monitor CIs only) use the selectors to build complex logical expressions using AND and OR logical operators. Those logical expressions are used to catch the appropriate samples brought in by the adapter, for the item. For more details, see “Selector Definitions” on page 81.



- ▶ **removeDimensionIfObsolete.** Set to **true** so that KPIs for the CI are removed from the view if they are no longer in use. Do not modify the value of this parameter (it should remain set to **true**).
- ▶ **dnodeAwareDimension.** Set to **false** for definitions not using the Dynamic Node Factory. For details, see “Dynamic Node Factory Definitions” on page 83.

## Selector Definitions

For monitor CIs, the adapter template includes the selectors required by the business rule to identify and catch the samples in the Mercury Business Availability Center Bus that relate to the CI and KPI.

You can build complex logical expressions in the selector definitions using AND and OR logical operators. The principles for defining selector blocks using the logical operators are the same as described for defining selectors for individual KPIs. For more information about the selectors, see “Selectors for KPIs” in *Application Administration*.

The selector definitions in the adapter template contain additional information that is not viewed in the Selector areas when configuring individual KPIs.

The following example shows the selectors used in the adapter template definition for the Performance KPI of a Business Process Monitor measurement:

```
<selectors type="AND">
  <selector dataType="String" key="sampleType"
    operator="EQ" readOnly="true" reference="false"
    referencedProperty="sampleType" value="trans_t"/>
  <selector dataType="Long" key="u_iTransactionId"
    operator="EQ" readOnly="false" reference="true"
    referencedProperty="tx_id"/>
  <selector dataType="Long" key="u_iSessionId"
    operator="EQ" readOnly="false" reference="true"
    referencedProperty="session_id"/>
</selectors>
```

This section includes the following topics:

- “Defining Selectors” on page 82
- “Selector Parameters” on page 83

## Defining Selectors

If you want to define your own selectors in an adapter template, you should first use the default definitions to create the hierarchy; you can then use the properties from the samples caught in the Bus as a reference for the new selectors. Note that all selector fields and values are case sensitive and must be defined exactly as they are used in the samples, or the selector will fail. The recommended method is to open the samples log and take the fields and values from there. The samples log is located in **<Mercury Business Availability Center root directory> \log\EJBContainer\Trinity.log**.

Note that the samples are written to this log at the **debug** log level, while the default log level is **error**, meaning that only log entries of level error and above are displayed. Therefore, to view the sample entries you must change the log level, as described in the following procedure.

**To change the samples log level:**

- 1** Open the file **<Mercury Business Availability Data Processing server root directory>\conf\core\Tools\log4j\EJB\ble.properties**.
- 2** Look for:  
**log4j.category.Trinity.BLE\_Samples = \${loglevel}, jmdrv.samples.appender**  
Change the line to:  
**log4j.category.Trinity.BLE\_Sample = DEBUG, jmdrv.samples.appender**
- 3** Save and close the file. The change will take effect after about one minute.

## Selector Parameters

---

**Note:** If you want to modify selectors, contact Mercury Customer Support.

---

Each selector may include the following information:

- ▶ **dataType.** The type of data can be: **Long**, **Integer**, **Boolean**, **String**.
- ▶ **key.** The field to be checked in the sample from the data source.
- ▶ **operator.** The relational operator used by the selector expression when checking the value in the key field, for example, **EQ** or **IN**.
- ▶ **readOnly.** This flag is set to **true** if the value for this selector is fixed (defined in the selector **value** field), **false** if the value can change.
- ▶ **reference.** Indicates whether the selector should use the referenced property or not. The selector uses the referenced property if the reference flag is set to **true**, and ignores the referenced property if the reference flag is set to **false**.
- ▶ **referencedProperty.** The value of the entity specified for this parameter is compared with the value of the field specified in the **key** parameter. This parameter is used only when the **reference** parameter is set to **true**.
- ▶ **value.** The fixed value to be used by the selector.

## Dynamic Node Factory Definitions

Advanced users can customize the Dynamic Node Factory (DNode) definitions included in some adapter templates, in order to generate a hierarchy that fits your organization's needs. You can also add and customize Dynamic Node Factory CIs directly in your views. For details, see "Defining/Editing Properties for a Dynamic Node Factory CI" in *IT Universe Manager Administration*.

A Dynamic Node Factory source does not have a fixed topology; its topology is built from the samples themselves. The template defines the way the samples are matched to each CI created by the Dynamic Node Factory.

You can modify the mapping to the samples that create the hierarchy, and the rules and logic used to import the data and present it in Dashboard. For more information about customizing a Dynamic Node Factory template, see “DNode Definition Key Property” in *IT Universe Manager Administration*.

## Automapping – Relationships Details

Attaching one CI to another CI creates a hierarchical relationship between them, so that one CI may be dependent on or influenced by the other.

In all adapter templates, except for the XML File adapter template, only the **depends on** or **monitored by** types of relationships are used.

The automapping code is usually located at the end of the template file.

In the XML File template you can use all of the available types of relationships, as defined in the CI Type Manager. For details, see “Relationship Definitions” in *CI Type Manager Administration*.

---

**Note:** If you add or remove a relationship, you might have to modify the corresponding view in View Manager, to reflect the change. For details, see *View Manager Administration*.

---

The following example shows the relationships used in the SiteScope adapter template definition:

```
<autoMappingLinks bac-version="BAC 6.0">
  <link dest_obj_type="host" src_obj_type="sitescope_group"
    type="Mercury:depends_on" weight="1"/>
</autoMappingLinks>
```

Each relationship may include the following information:

- ▶ **dest\_obj\_type.** The configuration item type (CIT) that is the higher level in a relationship; for example, a monitor.
- ▶ **src\_obj\_type.** The CIT that is the lower level of a relationship; for example, a group.
- ▶ **type.** The type of relationship. For details, see “Relationship Definitions” in *CI Type Manager Administration*.

For example, type can be **depends\_on** or **monitored by**.

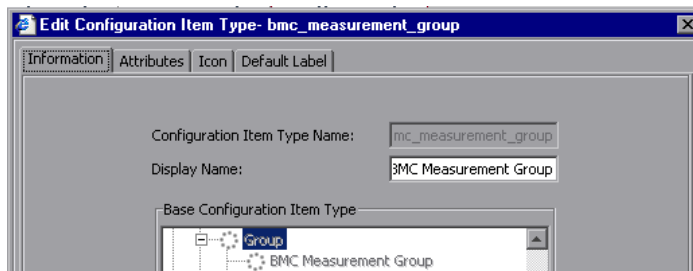


Both **dest\_obj\_type** and **src\_obj\_type** identify a CIT. If you want to add a new relationship, you must use the CIT internal name in the code. For details on how to find out the internal name of a CIT, see below.

- ▶ **weight.** The weight assigned to the relationship. For details, see “Percentage Rule” in *Repositories Administration*.

**To find the internal name of a CIT:**

- 1** Select **Admin > CMDB > CI Type Manager**.
- 2** Right-click the appropriate CIT in View Explorer and select **Edit CIT** to open the Edit Configuration Item Type <CIT\_name> page.
- 3** Click the **Information** tab, and view the name of the CIT in the **Configuration Item Type Name** box. For details, see *CI Type Manager Administration*.



## Default Sources Details

You can modify the templates of the following default sources:

- “Business Process Monitoring Template” on page 87
- “Real User Monitor Template” on page 90
- “Diagnostics Template” on page 99
- “SiteScope Template” on page 101

The table headers in the Template Elements sections represent the tags used for specifying the entities, CIs, context menus, KPIs, and rules in the template (for more information about the tags, see “CI Definition Parameters” on page 79). The following information is provided in the table:

- **entity id.** The name of the source item.
- **basicEntity.** The internal name of the configuration item (CI) in Mercury Business Availability Center.
- **contextmenu.** The internal name of the context menu to be used for the item in the Dashboard application followed by the external name of the context menu.
- **dimension.** The ID of a KPI to be used for the CI followed by the name of the KPI. For details about the KPIs, see “Dashboard KPIs Detailed Description” in *Repositories Administration*.
- **logic.** The ID of a business rule to be used with the KPI followed by the name of the business rule. For details about the business rules, see “Dashboard Business Rules Detailed Description” in *Repositories Administration*.

The table headers in the Relationships sections represent the tags used in the template for specifying the relationship information. For more information about the tags, see “Automapping – Relationships Details” on page 84.

## Business Process Monitoring Template

The Business Process Monitoring source adapter template includes template elements, relationships, and selectors. For more details about this source, see “Business Process Monitoring” on page 16.

This section includes the following topics:

- “Template Elements” on page 87
- “Relationships” on page 89
- “Selectors” on page 90

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
diagnostics Transaction	bpm_tx_from_ location	diagnostics MenuForBPM	1075 - Application	1075 - Diagnostics for J2EE/.Net General
			7 – Availability (Dashboard)	5 – Transaction Availability Rule
			6 – Performance (Dashboard)	13 – Transaction Performance Rule
transaction	bpm_tx_from_ location	txMeasurement Menu – Transaction Measurement Menu	7 – Availability (Dashboard)	5 – Transaction Availability Rule
			6 – Performance (Dashboard)	13 – Transaction Performance Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
diagnostic Transaction Group	bp_step	txGroupMenu WithLayers View	1075 - Application	1 – Worst Child Rule
			7 – Availability (Dashboard)	1 – Worst Child Rule
			6 – Performance (Dashboard)	1 – Worst Child Rule
crossProfile Location	location	txgroupMenu – Group Menu	7 – Availability (Dashboard)	1 – Worst Child Rule
			6 – Performance (Dashboard)	1 – Worst Child Rule
profileLocation	bp_group_location	txgroupMenu – Group Menu	7 – Availability (Dashboard)	1 – Worst Child Rule
			6 – Performance (Dashboard)	1 – Worst Child Rule
Diagnostics Profile	bp_group	txGroupMenu	1075 - Application	1 – Worst Child Rule
			7 – Availability (Dashboard)	1 – Worst Child Rule
			6 – Performance (Dashboard)	1 – Worst Child Rule
diagnostics Transaction Location	bpm_tx_from Location	diagnostics MenuForBPM	1075 - Application	1075 - Diagnostics for J2EE/.Net General
			7 – Availability (Dashboard)	5 – Transaction Availability Rule
			6 – Performance (Dashboard)	13 – Transaction Performance Rule



entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
transaction Location	bpm_tx_from_location	txMeasurement Menu – Transaction Measurement Menu	7 – Availability (Dashboard)	5 – Transaction Availability Rule
			6 – Performance (Dashboard)	13 – Transaction Performance Rule
customer – Not in use	Group	groupMenu – Group Menu	7 – Availability (Dashboard)	1 – Worst Child Rule
			6 – Performance (Dashboard)	1 – Worst Child Rule
profile	bp_group	txgroupMenu – Group Menu	7 – Availability (Dashboard)	1 – Worst Child Rule
			6 – Performance (Dashboard)	1 – Worst Child Rule
transaction Group	bp_step	txgroupMenu – Group Menu	7 – Availability (Dashboard)	1 – Worst Child Rule
			6 – Performance (Dashboard)	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

## Relationships

The template uses the following elements:

dest_obj_type	src_obj_type	type	weight
bp_group_location	location	Mercury:depends_on	1
bp_step	bp_group	Mercury:depends_on	1
bp_group_location	bp_group	Mercury:parent	1
bpm_tx_from_location	bp_step	Mercury:monitored_by	1

dest_obj_type	src_obj_type	type	weight
bpm_tx_from_location	bp_group_location	Mercury:monitored_by	1

For details on how to modify the relationships or add new relationships, see “Automapping – Relationships Details” on page 84.

### **Selectors**

To modify or add selectors, see “Selector Definitions” on page 81.

### **Real User Monitor Template**

The Real User Monitor source retrieves end-user experience information from Mercury Real User Monitor engines. This adapter builds a separate hierarchy for each engine, with branches for end-users, pages, and transactions.

For more details about this source, see “Real User Monitor” on page 21.

This section includes the following topics:

- “Template Elements” on page 91
- “Relationships” on page 98
- “Selectors” on page 99

## Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
eum_app_group	Mercury:eum_app_group	rumGroup Menu – RUM Group menu	1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Latency of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_unconfigured_end_user_group_monitor	Mercury:rum_end_user_group_monitor	RUMEndUser GroupMenu	1050 – Volume	72 – RUM Session Monitor Volume Rule
			1077 – Latency	82 – RUM Latency Rule
			7 – Availability	52 - RUM Session Monitor Availability Rule
			6 – Performance	62 - RUM Session Monitor Performance Rule
rum_end_user_root	Mercury:rum_end_user_group	RUMEndUser GroupsMenu – RUM End User Group menu	1050 – Volume	74 – Sum of Volume Rule
			1077 – Latency	83 – Average Latency of Weighted Volume
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
rum_tx_monitor	Mercury:rum_tx_monitor	RUMTrx MonitorMenu – RUM Transactions Monitor menu	1050 – Volume	71 – RUM Transaction Monitor Volume Rule
			7 – Availability	51 – RUM Transaction Monitor Availability Rule
			6 – Performance	61 - RUM Transaction Monitor Performance Rule
rum_http_error_monitor	Mercury:rum_http_error_monitor	RUMHttpError MonitorMenu – RUM HTTP Error Monitor menu	1050 – Volume	73 – RUM Event Monitor Volume Rule
rum_unconfigured_end_user_group_with_breakdown	Mercury:rum_end_user_group_factory	RUMEndUser Group Container Menu – RUM End User Group menu	1050 – Volume	74 – Sum of Volume Rule
			1077 – Latency	83 – Average Latency of Weighted Volume
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_page_monitor	Mercury:rum_page_monitor	RUMPage MonitorMenu – RUM Page Monitor menu	1050 – Volume	70 – RUM Page Monitor Volume Rule
			7 – Availability	49 – RUM Page Monitor Availability Rule
			6 – Performance	60 - RUM Page Monitor Performance Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
rum_non_usa_unconfigured_eu_location	Mercury:rum_locations		1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_usa_configured_eu_location	Mercury:rum_locations		1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_errors	Mercury:rum_errors	RUMErrorMenu – RUM Errors menu	1050 – Volume	74 – Sum of Volume Rule
rum_usa_unconfigured_eu_location	Mercury:rum_locations		1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
rum_info_events	Mercury:rum_info_events	RUM Informational Events Menu – RUM Informational Event Monitor menu	1050 – Volume	74 – Sum of Volume Rule
bp_step	Mercury:bp_step	RUMGroup Menu – RUM Group menu	1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	63 - Average of Converted Performance Results in %
rum_non_usa_location	Mercury:rum_locations		1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_info_event_monitor	Mercury:rum_info_event_monitor	RUM Informational EventMonitor Menu – RUM Informational Event Monitor menu	1050 – Volume	73 – RUM Event Monitor Volume Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
rum_servers	Mercury:rum_servers	RUMServers Menu – RUM Servers menu	54 – Bandwidth	30 – Summary of Values Rule
			53 – Component Availability	1 – Worst Child Rule
rum_app_error_monitor	Mercury:rum_app_error_monitor	RUM Application ErrorMonitor Menu – RUM Application Error Monitor menu	1050 – Volume	73 – RUM Event Monitor Volume Rule
rum_end_user_group_container	Mercury:rum_end_user_group_container	RUMEndUser Group Container Menu – RUM End User Group Container menu	1050 – Volume	74 – Sum of Volume Rule
			1077 – Latency	83 – Average Latency of Weighted Volume
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
logical_application	Mercury:logical_application	RUM Application Menu	7 – Availability	1 - Worst Child Rule
			6 – Performance	1 - Worst Child Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
rum_end_user_group_no_breakdown	Mercury:rum_end_user_group	RUMEndUser Group Container Menu – RUM End User Group Container menu	1050 – Volume	74 – Sum of Volume Rule
			1077 – Latency	83 – Average Latency of Weighted Volume
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_usa_location	Mercury:rum_locations		1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_app_session_monitor	Mercury:rum_app_session_monitor	RUMSession MonitorMenu – RUM Session Monitor menu	1050 – Volume	72 – RUM Session Monitor Volume Rule
			7 – Availability	52 – RUM Session Monitor Availability Rule
			6 – Performance	62 - RUM Session Monitor Performance Rule



entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
rum_non_usa_configured_eu_location	Mercury:rum_locations		1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
bp_group	Mercury:bp_group	RUMGroup Menu – RUM Group menu	1050 – Volume	74 – Sum of Volume Rule
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %
rum_end_user_group_monitor	Mercury:rum_end_user_group_monitor	RUMEndUser Group Container Menu – RUM End User Group Container menu	1050 – Volume	72 – RUM Session Monitor Volume Rule
			1077 – Latency	82 – RUM Latency Rule
			7 – Availability	52 – RUM Session Monitor Availability Rule
			7 – Availability	52 – RUM Session Monitor Availability Rule
			6 – Performance	62 - RUM Session Monitor Performance Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
rum_end_user_group_with_breakdown	Mercury:rum_end_user_group_factory	RUMEndUser Group Container Menu – RUM End User Group Container menu	1050 – Volume	74 – Sum of Volume Rule
			1077 – Latency	83 – Average Latency of Weighted Volume
			7 – Availability	55 – Average Availability of Weighted Volume
			6 – Performance	64 - Average Performance of Weighted Volume in %

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Relationships

The template uses the following elements:

dest_obj_type	src_obj_type	type	weight
rum_end_user_group	rum_end_user_group_container	Mercury:depends_on	1
rum_end_user_group_factory	rum_end_user_group_container	Mercury:depends_on	1
rum_end_user_group_container	rum_end_user_groups	Mercury:depends_on	1
bp_step	bp_group	Mercury:depends_on	1
rum_page_monitor	bp_step	Mercury:monitored_by	1
rum_errors	logical_application	Mercury:depends_on	1
rum_http_error_monitor	rum_errors	Mercury:monitored_by	1
rum_end_user_group_factory	rum_end_user_groups	Mercury:depends_on	1

dest_obj_type	src_obj_type	type	weight
bp_group	eum_app_group	Mercury:depends_on	1
bp_group	bp_group	Mercury:depends_on	1
rum_app_errors_monitor	rum_errors	Mercury:monitored_by	1
rum_info_event_monitor	rum_info_events	Mercury:monitored_by	1
rum_app_session_monitor	logical_application	Mercury:monitored_by	1
rum_end_user_group_monitor	rum_end_user_group" type	Mercury:monitored_by	1
rum_end_user_group_container	rum_end_user_group_container	Mercury:depends_on	1
rum_end_user_group	rum_end_user_groups	Mercury:depends_on	1
eum_app_group	logical_application	Mercury:depends_on	1
rum_info_events	logical_application	Mercury:depends_on	1
bp_step	eum_app_group	Mercury:depends_on	1
rum_tx_monitor	bp_step	Mercury:monitored_by	1

For details on how to modify the relationships or add new relationships, see “Automapping – Relationships Details” on page 84.

### Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

### Diagnostics Template

The Diagnostics source adapter retrieves information about the real user traffic to the Web services and operations from the Diagnostics server that processed and stored it. The hierarchy that is built includes Diagnostics Probe and Diagnostics Probe Group CIs.

For more details about this source, see “Diagnostics” on page 25.

This section includes the following topics:

- “Template Elements” on page 91

- “Relationships” on page 98
- “Selectors” on page 99

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
webserv	webservice	webservice Menu	7 – Availability	1 – Worst Child Rule
			400 – Throughput	1 – Worst Child Rule
			6 – Performance	1 – Worst Child Rule
operation	webservice_operation	webservice Operation Menu	7 – Availability	1 – Worst Child Rule
			400 – Throughput	1 – Worst Child Rule
			6 – Performance	1 – Worst Child Rule
monitor	Mercury: diagnostics_ webservice_monitor	diagnostics MonitorMenu	7 – Availability	1300 - WS Operation Availability Rule
			400 – Throughput	1303 - Diagnostics WS Operation Throughput Rule
			6 – Performance	1301 - Diagnostics WS Operation Performance Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

## Relationships

The template uses the following elements:

dest_obj_type	src_obj_type	type	weight
diagnostics_webservice_monitor	webservice_operation	container_f	1
webservice_operation	webservice	container_f	1

For details on how to modify the relationships or add new relationships, see “Automapping – Relationships Details” on page 84.

## Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

## SiteScope Template

The SiteScope source retrieves system information from a SiteScope system, and builds a hierarchy that includes the machines, SiteScope groups, monitors, and measurements.

For more details about this source, see “SiteScope” on page 27.

This section includes the following topics:

- “Template Elements” on page 102
- “Relationships” on page 104
- “Selectors” on page 105
- “Changing the Decay Timeout Value” on page 105

## Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Siebel Measurement Regular	Mercury: sitescope_measurement	ssMeasurement Menu – SiteScope Measurement Menu	300 - Siebel	3 - Sitescope Measurement Rule
group	Mercury: sitescope_group	ssGroupMenu – SiteScope Group Menu	1 – System	1 – Worst Child Rule
target	Mercury: sitescope_target	ssGroupMenu – SiteScope Group Menu	1 – System	1 – Worst Child Rule
SiebelTasks Measurement Complex	Mercury: sitescope_measurement	ssMeasurement Menu – SiteScope Measurement Menu	301 – Tasks in Error	3 – Sitescope Measurement Rule
monitorEvent Measurement	Mercury: sitescope_monitor	ssMonitorMenu – SiteScope Monitor Menu	1 – System	0 – EMS Simple Rule
profile	Mercury: sitescope_profile	ssGroupMenu – SiteScope Group Menu	1 – System	1 – Worst Child Rule
measurement	Mercury: sitescope_measurement	ssMeasurement Menu – SiteScope Measurement Menu	1 – System	3 – Sitescope Measurement Rule
monitor Measurement	Mercury: sitescope_monitor	ssMonitorMenu – SiteScope Monitor Menu	1 – System	4 – Sitescope Monitor Availability Rule

<b>entity id</b>	<b>basicEntity</b>	<b>contextmenu</b>	<b>dimension (KPI)</b>	<b>logic (business rule)</b>
SAPMonitor	Mercury: sitescope_ measurement_ group	ssGroupMenu – SiteScope Group Menu	1 – System	1 – Worst Child Rule
SiebelMonitor	Mercury: sitescope_ measurement_ group	ssGroupMenu – SiteScope Group Menu	1 – System	1 – Worst Child Rule
SiebelSession Measurement Complex	Mercury: sitescope_ measurement_ group	ssMeasurement Menu – SiteScope Measurement Menu	304 - Sessions	3 – Sitescope Measurement Rule
SAP Measurement Regular	Mercury: sitescope_ measurement	ssMeasurement Menu – SiteScope Measurement Menu	1 – System	3 – Sitescope Measurement Rule
monitor	Mercury: sitescope_ measurement_ group	ssGroupMenu – SiteScope Group Menu	1 – System	1 – Worst Child Rule
SAP Measurement Complex	Mercury: sitescope_ measurement	ssMeasurement Menu – SiteScope Measurement Menu	305 – SAP	1108 – SiteScope Vertical Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
monitorFor SLM	Mercury: sitescope_measurement_group	ssGroupMenu – SiteScope Group Menu	1 – System	4 – SiteScope Monitor Availability Rule
measurement ForSLM	Mercury: sitescope_measurement	ssMeasurement Menu – SiteScope Measurement Menu	N/A	N/A

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Relationships

The template uses the following elements:

dest_obj_type	src_obj_type	type	weight
sitescope_group	sitescope_profile	Mercury:depends_on	1
sitescope_measurement_group	sitescope_group	Mercury:depends_on	1
sitescope_monitor	sitescope_group	Mercury:monitored_by	1
sitescope_measurement	sitescope_measurement_group	Mercury:monitored_by	1
sitescope_group	sitescope_group	Mercury:depends_on	1
sitescope_monitor	sitescope_target	Mercury:monitored_by	1
sitescope_measurement_group	sitescope_target	Mercury:depends_on	1
sitescope_target	sitescope_group	Mercury:depends_on	1

For details on how to modify the relationships or add new relationships, see “Automapping – Relationships Details” on page 84.



## Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

## Changing the Decay Timeout Value

When using Dashboard to view SiteScope data, the default decay (timeout) period for a CI in Dashboard is 15 minutes. If you have a SiteScope monitor with a schedule longer than 15 minutes, the corresponding CIs in Dashboard will have time to change to decay status until the SiteScope monitor runs again and updates Mercury Business Availability Center.

In the rule parameters for the SiteScope source adapter template in Dashboard, change the decay timeout parameter to a value greater than the schedules used for the SiteScope monitors. To modify the decay timeout value in the template, add the following in the relevant <logic> section after the logic ID (the value is in seconds, 900 is the default):

```
<parameters>
  <param key="No data timeout" value="777"
    dataType="Long" reference="false"/>
</parameters>
```

For example:

```
<logic>
  <id>4</id>
  <parameters>
    <param key="No data timeout" value="777"
      dataType="Long" reference="false"/>
  </parameters>
</logic>
```

## Custom Sources Details

You can modify the templates of the following custom sources:

- “BMC Patrol Template” on page 107
- “CA Unicenter Template” on page 108
- “Compaq Insight Manager (CIM) Template” on page 109
- “Hewlett-Packard (HP) OpenView Template” on page 111
- “HP OpenView Service Navigator Template” on page 112
- “HP Systems Insight Manager (HP SIM) Template” on page 114
- “Tivoli TEC Template” on page 117

You can also modify the templates of the following predefined generic adapters:

- “Generic EMS Template” on page 111
- “XML File Template” on page 118

The table headers in the Template Elements sections represent the tags used for specifying the entities, CIs, context menus, KPIs, and rules in the template (for more information about the tags, see “CI Definition Parameters” on page 79).

The following information is provided in the table:

- **entity id.** The name of the source item.
- **basicEntity.** The internal name of the configuration item (CI) in Mercury Business Availability Center.
- **contextmenu.** The internal name of the context menu to be used for the item in the Dashboard application followed by the external name of the context menu.
- **dimension.** The ID of a KPI to be used for the CI followed by the name of the KPI.
- **logic.** The ID of a business rule to be used with the KPI followed by the name of the business rule.

The table headers in the Relationships sections represent the tags used in the template for specifying the relationship information. For more information about the tags, see “Automapping – Relationships Details” on page 84.

## BMC Patrol Template

---

**Note:** The BMC Patrol source adapter is deprecated from version 6.5. The BMC Patrol source adapter is still supported for existing BMC Patrol Event or BMC Patrol Metrics monitors. If you create new monitors for a BMC Patrol system from version 6.5, you must use the Generic EMS source adapter.

---

The BMC Patrol source retrieves system information from a BMC Patrol system, and builds a hierarchy that includes application and machine items.

For more details about this source, see “BMC Patrol” on page 35.

This section includes the following topics:

- “Template Elements” on page 107
- “Selectors” on page 109

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
agent	host	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
instance	Mercury:bmc_measurement_group	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
counter	Mercury:bmc_measurement	bmc Measurement Menu – BMC Measurement menu	1 – System	0 – EMS Simple Rule
application	Mercury:bmc_application	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

### CA Unicenter Template

---

**Note:** The CA Unicenter source adapter is deprecated from version 6.5. The CA Unicenter source adapter is still supported for existing CA Unicenter Event monitors. If you create new monitors for a CA Unicenter system from version 6.5, you must use the Generic EMS source adapter.

---

The CA Unicenter source retrieves information from a CA Unicenter system and dynamically builds the hierarchy in Dashboard using the Dynamic Node Factory template.

For more details about this source, see “CA Unicenter” on page 37.

This section includes the following topics:

- “Template Elements” on page 109
- “Selectors” on page 110

## Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Dnode	Mercury:node_factory	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

## Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

## Compaq Insight Manager (CIM) Template

---

**Note:** The Compaq Insight Manager source adapter is deprecated from version 6.5. The Compaq Insight Manager source adapter is still supported for existing Compaq Insight Manager Event monitors. If you create new monitors for a Compaq Insight Manager system from version 6.5, you must use the Generic EMS source adapter.

---

The Compaq Insight Manager source retrieves system information from a Compaq Insight Manager system, and builds a hierarchy that includes machine and device items.

For more details about this source, see “Compaq Insight Manager (CIM)” on page 39.

This section includes the following topics:

- “Template Elements” on page 110
- “Selectors” on page 111

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
device Measurement	Mercury:cim_measurement	cim Measurement Menu – CIM Measurement Menu	1 – System	0 – EMS Simple Rule
subnet	Mercury:cim_subnet	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Server	Mercury:cim_machine	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Other	Mercury:cim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Management Processor	Mercury:cim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

## Generic EMS Template

The Generic EMS source retrieves a generic hierarchy for enterprise management systems (EMS), via SiteScope.

For more details about this source, see “Generic EMS” on page 46.

This section includes the following topics:

- “Template Elements” on page 111
- “Selectors” on page 112

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Dnode	Mercury:node_factory	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

## Hewlett-Packard (HP) OpenView Template

---

**Note:** The Hewlett-Packard (HP) Open View source adapter is deprecated from version 6.5. The Hewlett-Packard (HP) Open View source adapter is still supported for existing HP OVO Event monitors. If you create new monitors for a Hewlett-Packard (HP) Open View system from version 6.5, you must use the Generic EMS source adapter.

---

The Hewlett-Packard Open View source retrieves information from a Hewlett-Packard OpenView system and dynamically builds the hierarchy in Dashboard using the Dynamic Node Factory template.

For more details about this source, see “Hewlett-Packard (HP) OpenView” on page 50.

This section includes the following topics:

- “Template Elements” on page 112
- “Selectors” on page 113

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Dnode	Mercury:node_factory	groupMenu – Group Menu	12 – HP System	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

### HP OpenView Service Navigator Template

The HP OpenView Service Navigator source retrieves system information from Hewlett-Packard OpenView Service Navigator.

For more details about this source, see “HP OpenView Service Navigator” on page 52.

This section includes the following topics:

- “Template Elements” on page 113
- “Selectors” on page 116



## Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Service	Mercury:hpov_service	groupMenu – Group Menu	12 – HP System	1 – Worst Child Rule
Service Measurement	Mercury:hpov_measurement	ems Measurement Menu – EMS Measurement Menu	12 – HP System	22 – HP OpenView Service Navigator Rule
ServiceDnode	Mercury:hpov_node_factory	groupMenu – Group Menu	12 – HP System	23 – HP Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

## Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

## HP Systems Insight Manager (HP SIM) Template

---

**Note:** The HP Systems Insight Manager source adapter is deprecated from version 6.5. The HP Systems Insight Manager source adapter is still supported for existing HP Systems Insight Manager Event monitors. If you create new monitors for a HP Systems Insight Manager system from version 6.5, you must use the Generic EMS source adapter.

---

The HP Systems Insight Manager source retrieves system information from a Hewlett-Packard SIM system, and builds a hierarchy that includes machines and devices for each subnet mask.

For more details about this source, see “HP Systems Insight Manager (HP SIM)” on page 55.

This section includes the following topics:

- ▶ “Template Elements” on page 114
- ▶ “Selectors” on page 116

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Switch	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Router	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Power Supply	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Remove Access Device	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

<b>entity id</b>	<b>basicEntity</b>	<b>contextmenu</b>	<b>dimension (KPI)</b>	<b>logic (business rule)</b>
Partition	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
UPS	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Environmental Monitor	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Complex	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Printer	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Thin Client	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
KVM Switch	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
device Measurement	Mercury:hpsim_measurement	cimMeasurement Menu – CIM Measurement Menu	1 – System	0 – EMS Simple Rule
Workstation	Mercury:hpsim_machine	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Desktop	Mercury:hpsim_machine	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Hub	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Power Distribution Unit	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Unknown	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Unmanaged	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
subnet	Mercury:hpsim_subnet	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Storage Device	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Handheld	Mercury:hpsim_machine	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Server	Mercury:hpsim_machine	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Notebook Cluster	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Other	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule
Management Processor	Mercury:hpsim_device	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Selectors

The template does not include selectors.

## Tivoli TEC Template

---

**Note:** The Tivoli TEC source adapter is deprecated from version 6.5. The Tivoli TEC source adapter is still supported for existing Tivoli TEC Event and Tivoli DM Metrics monitors. If you create new monitors for a Tivoli TEC system from version 6.5, you must use the Generic EMS source adapter.

---

The Tivoli TEC source retrieves information from an IBM Tivoli Enterprise Console system and dynamically builds the hierarchy in Dashboard using the Dynamic Node Factory template.

For more details about this source, see “Tivoli TEC” on page 62.

This section includes the following topics:

- “Template Elements” on page 117
- “Selectors” on page 117

### Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Dnode	Mercury:node_factory	groupMenu – Group Menu	1 – System	1 – Worst Child Rule

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

### Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

## XML File Template

The XML File source retrieves information from an XML file produced by an external system that you define.

For more details about this source, see “XML File” on page 64.

An XML File example is provided in `<Mercury Business Availability Center server root directory>/CMDB/adapters/templates/tivoli.config.xml`.

For details on how to modify the template, see “Modifying Adapter Templates” on page 77.

This section includes the following topics:

- ▶ “Template Elements” on page 118
- ▶ “Selectors” on page 118

## Template Elements

The template uses the following elements:

entity id	basicEntity	contextmenu	dimension (KPI)	logic (business rule)
Group Entity	Mercury:bp_group	txgroupMenu	7 – Availability	1 – Worst Child Rule
			6 – Performance	1 – Worst Child Rule
External Entity Type	Mercury:bpm_tx_from_location		6 – Performance	13 - Transaction Performance Rule

## Selectors

To modify or add selectors, see “Selector Definitions” on page 81.

---

# Index

## A

- adapter templates
  - modifying 77
  - overview 76
  - relationships 84

## B

- BMC Patrol
  - adapter 35
  - adapter template details 107
  - hierarchies 36
  - source details 35
- Business Process Monitoring
  - adapter template details 87
  - hierarchies 18
  - source details 16

## C

- CA Unicenter
  - adapter 11, 12, 37
  - adapter template details 108
  - hierarchies 38
  - source details 37
- CI definition parameters 79
- CIM
  - adapter 39
  - adapter template 109
  - Compaq Insight Manager 39
  - source details 39
- Compaq Insight Manager
  - adapter 39
  - adapter template 109
  - adapter, creating DSN for 41
  - CIM 39

- hierarchies 41

- source details 39

- Compaq Insight Manager adapter
  - creating DSN for 57

- Computer Associates Unicenter
  - adapter 11, 12, 37

- adapter template details 108

- custom sources

- adapter template details 106

- adapters overview 34

- details 33

- making the source available to create
  - new sources 9

## D

- Dashboard

- configuring source adapters 9

- sources 5

- templates 75

- data sources, for Dashboard 5

- Decay Timeout

- changing the value 105

- default source adapters

- description 15

- template details 86

- Diagnostics

- adapter template details 99

- source description 25

- Diagnostics Probe CI 26

- Diagnostics Probe Group CIs 26

- Diagnostics View 26

- DSN, defining for Compaq Insight Manager
  - source 41, 57

- Dynamic Node Factory

- definitions 83

## G

- Generic EMS
  - adapter 46
  - adapter template details 111
  - hierarchies 47
  - source details 46
  - when to use 48

## H

- Hard Sync button 8
- Hewlett-Packard OpenView
  - adapter 11, 13, 50
  - adapter template details 111
  - source details 50
- HP OpenView
  - adapter template details 111
  - hierarchies 52
  - source details 50
- HP OpenView Service Navigator
  - adapter 52
  - adapter template details 112
  - hierarchies 54
  - source details 52
- HP SIM
  - HP Systems Insight Manager 55
- HP Systems Insight Manager
  - adapter 55
  - adapter template details 114
  - hierarchies 57
  - HP SIM 55
  - source details 55

## K

- KPI
  - assigning group rule 80
  - assigning leaf rule 80

## R

- Real User Monitor
  - adapter template details 90
  - hierarchies 22, 26
  - source description 21
- relationships details 84

## S

- selector parameters 83
- selectors
  - defining 82
  - definitions 81
- SiteScope
  - adapter template details 101
  - hierarchies 30
  - source description 27
- SiteScope source adapter
  - customizing 105
- source adapter template
  - assigning rule to KPI 80
  - customizing 80
- source adapters
  - adding 10
  - editing 12
- Source Manager
  - overview 1
  - tab 5
  - using 5
- sources. *See* Dashboard sources
- Sync Now button 8
- synchronizing
  - Dashboard sources, hard sync 8
  - Dashboard sources, soft sync 8

## T

- templates
  - adapter 77
  - Dynamic Node Factory 83
  - for Dashboard 75
- Tivoli TEC
  - adapter 62
  - adapter template details 117
  - hierarchies 63
  - source details 62

## V

- views
  - Diagnostics View 26



**X**

XML File

adapter 46

adapter template details 118

source details 64

