

HP Universal CMDB

for the Windows and Solaris operating systems

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CI Attribute Customization

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Table of Contents

Welcome to This Guide

This guide describes how to manage CITs (for example, create and edit CITs and edit relationships between CITs).

This chapter describes:	On page:
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How This Guide Is Organized

The guide contains the following chapters:

Part I CI Attribute Customization Reference

Describes how to create new CI types and relationships and edit existing ones. You can modify the CI type description and its attributes and qualifiers.

Part II CI Attribute Customization User Interface

Describes, in detail, the pages and dialog boxes that are used to work with CIT customization.

Who Should Read This Guide

This guide is intended for the following users of HP Universal CMDB:

- HP Universal CMDB administrators
- HP Universal CMDB platform administrators
- HP Universal CMDB application administrators
- HP Universal CMDB data collector administrators

Readers of this guide should be knowledgeable about enterprise system administration, have familiarity with ITIL concepts, and be knowledgeable about HP Universal CMDB.

Getting More Information

For a complete list of all online documentation included with HP Universal CMDB, additional online resources, information on acquiring documentation updates, and typographical conventions used in this guide, see the *HP Universal CMDB Deployment Guide* PDF.

Part I

CI Attribute Customization Reference

1

CI Type Manager

This chapter includes the main concepts, tasks, and reference information for CI Type Manager.

This chapter describes:	On page:
Concepts	
CI Types Overview	12
CIT Relationships	13
Tasks	
Create a CI Type	13
General Reference	
Viewing Descriptions for CITs and Relationships	15

Note: CI Type Manager is read-only for HP Managed Software Solutions customers.

CI Types Overview

A CI can represent hardware, software, services, business processes, or any component of your IT infrastructure. CIs with similar properties are grouped under a CI type (CIT). Each CIT provides a template for creating a CI and its associated properties.

Every CI must belong to a CI type. The following are the main categories of CITs:

- ▶ **Business.** CITs that correspond to the logical elements of your business, such as processes and organizational groups.
- ▶ **IT Process.** CITs that correspond to changes that occur in your IT infrastructure.
- ▶ **Monitor.** CITs that handle incoming metrics collected from your business universe.
- ▶ **System.** CITs that correspond to the physical elements (hardware and software) installed in your business environment.

The CITs are arranged in a tree structure under these categories. You can browse the CI Type model by expanding the tree in the CI Types pane. You can also define new CITs to match your business needs. For details on defining new CITs, see “Create Configuration Item Type Wizard” on page 29.

CI Type Attributes

Every CI type has attributes which define it such as name, description and default value. The CITs grouped under other CITs in the CI Type tree inherit attributes from the higher-level CITs. You can view the inheritance relationships between the CITs by selecting a CIT in the CI Types pane. The selected CIT appears in the topology map along with its neighbors.

When you define a new CI type, you first select a Base Configuration Item Type from a list of existing CITs. Your new CIT inherits the attributes of that CIT. You can then set the attributes for it using the Attributes page of the Create Configuration Item Type Wizard. You can edit the attributes of an existing CIT by selecting a CIT from the tree and selecting **Edit CIT** from the context menu. For details on CIT attributes, see “Attributes Page” on page 31.

Every CIT must have at least one key attribute. A key attribute is an attribute that is used as an identifier of the CIT. Key attributes must be defined for CIs of that type. You can assign as many key attributes as you want to a given CIT. If you do not assign a key attribute when defining a new CIT, the CIT is created, but it remains abstract, that is, you are unable to create instances of it (you are prompted to include the `ABSTRACT_CLASS` qualifier on the Qualifier page of the wizard).

CIT Relationships

A relationship defines the link between two CIs. Relationships represent the dependencies and connections between the entities in your IT environment. The same attributes defined for CITs are also defined for relationships. You can also assign key attributes for relationships but it is not required. For details on defining new relationship types, see “Create Configuration Item Type Wizard” on page 29.

Create a CI Type

You create a CIT using the Create CI Type wizard, according to the following workflow:

Define the CI Type

Enter the name, description and base configuration item type for the new CIT. For details, see “Information Page” on page 30.

Set the CIT Attributes

Edit the attributes of the new CIT and define key attributes for it. For details, see “Attributes Page” on page 31.

Assign Qualifiers to the CIT

Assign qualifiers to the definition of the new CIT. For details, see “Qualifiers Page” on page 33.

Assign an Icon to the CIT

Select an icon to assign to the new CIT. For details, see “Icon Page” on page 34.

Customize the CIT Menu

Select the menu items and commands to appear in the shortcut menu for the new CIT. For details, see “Menu Page” on page 36.

Define the CIT Default Label

Define the attributes to appear in the CIT label. For details, see “Default Label Page” on page 38.

Viewing Descriptions for CITs and Relationships

You can view a complete list of available CI types in tree format in the left pane of CI Type Manager. You can search incrementally for a specific CI type as described in “CI Type Manager” on page 27. To see a description for a particular CIT, select it from the tree and hold the pointer over the icon which corresponds to it in the topology map. A tooltip containing a description of the CIT is displayed.



For relationships, select **Relationship Tree** in the left pane and search incrementally by the first letter of the relationship. Select the relationship you want and hold the pointer over its icon in the topology map to display a tooltip containing a description of the relationship.

You can also view a list of relationships in “Relationship Definitions” in *Reference Information*.

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System Type Manager

This chapter includes the main concepts, tasks, and references for System Type Manager.

This chapter describes:	On page:
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Sample Enumeration Definition	18

System Type Manager Overview

System Type Manager enables you to create a predefined list whose values define an attribute type. You can create a definition for the following attribute types:

- ▶ **List.** Enables you to create a predefined list of values, for example, Location.
- ▶ **Enumeration.** Enables you to create a predefined list of values, as well as assign each value a color. Enumerations are designed to be used as severity value lists by states. For details on states, see “State Manager User Interface” in *IT World Model Management*.

Create List and Enumeration Definitions

This section describes the processes for creating List and Enumeration definitions.

Create a List Definition

Create a **List** definition of predefined values. For example, a List definition called Location might contain:

- New York
- Boston
- Baltimore

For details, see “Create/Update List/Enumeration Definition Dialog Box” on page 41.


Create an Enumeration Definition

Create an **Enumeration** definition, which enables you to assign a color for each value on the list. For details, see “Create/Update List/Enumeration Definition Dialog Box” on page 41. For an example of an Enumeration definition, see “Sample Enumeration Definition” on page 18.

Sample Enumeration Definition

You can create an Enumeration definition that describes a severity list for a state. For more details, see “Create/Update List/Enumeration Definition Dialog Box” on page 41.

To create a severity list:

- 1** Select **Admin > Modeling > CI Type Manager**.
-  **2** In the toolbar, click the **System Type Manager** button to open the System Type Manager dialog box.
- 3** Click the **Add** button to open the Create List/Enumeration Definition dialog box.

Note: Alternatively, you can select **Admin > Settings > State Manager** and then click the **New Enumeration** button to open the Create List/Enumeration Definition dialog box.

4 Select **Enumeration**.

5 In the **Name** box, enter the required name.

6 (Optional) In the **Display Name** box, enter the required display name.

This example describes how to create the following severity list:

Key	Value	Severity Represented
0	Green	Normal
1	Orange	Major
2	Red	Critical



7 Click the **Add** button to create a new row.

8 In the **Value** box, enter **Normal**.

9 In the **Key** box, enter **0**.

10 In the **Color** section, select **Green**.



11 Click the **Add** button to create another row.

12 In the **Value** box, enter **Major**.

13 In the **Key** box, enter **1**.

14 In the **Color** section, select **Orange**.



15 Click the **Add** button to create another row.

16 In the **Value** box, enter **Critical**.

17 In the **Key** box, enter **2**.

18 In the **Color** section, select **Red**.

The following image shows the Enumeration Definition section after the changes:

Name:

Display Name:

List Enumeration

Enumeration Definition

<input checked="" type="checkbox"/> Normal	Value: <input type="text" value="Normal"/>
<input type="checkbox"/> Major	Key: <input type="text" value="0"/>
<input type="checkbox"/> Critical	

Color

- Green
- Light Olive
- Yellow
- Orange
- Red
- Gray

19 Click **OK** to save your changes.

Part II

CI Attribute Customization User Interface

3

CI Type Manager User Interface

This chapter includes the pages and dialog boxes that are part of the CI Type Manager user interface.

This chapter describes:	On page:
Add/Edit Attribute Dialog Box	24
Add/Remove Relationship Dialog Box	26
CI Type Manager	27
Create Configuration Item Type Wizard	29
Edit Configuration Item Type Dialog Box	40

Note: CI Type Manager is read-only for HP Managed Software Solutions customers.

Add/Edit Attribute Dialog Box

Description	<p>Enables you to define a new attribute to add to a CIT or to edit an existing attribute of a CIT.</p> <p>To access: In the CIT Manager, in the Attributes page of the Create Configuration Item Type wizard, select an attribute and click the Add or Edit button, or double-click the attribute.</p>
Important Information	<p>In Edit mode, fields that cannot be changed are disabled.</p>

The Add Attribute dialog box includes the following elements (listed alphabetically):

GUI Element	Description
Advanced	<p>You can set the following optional parameters:</p> <ul style="list-style-type: none"> ▶ Index. Select to accelerate the attribute retrieval performance. This option is recommended for attributes that are used frequently in search conditions. For example, IP address is usually an index attribute of a host. ▶ Lower Case. When this option is selected, the attribute value remains in lower case. ▶ Required. Select to define this attribute as a required one, if its value is required for the creation of the CIT. ▶ Visible. Select to display this attribute in the Attributes page in the topology map. ▶ Editable. Select to enable future editing of the attribute. Only attributes that are marked as Editable (or ones that have values) are displayed in the Attributes page. ▶ Password. When this option is selected, the attribute value appears as asterisks (a hidden value).
Attribute Name	<p>Enter a unique name for the new attribute.</p> <p>Note: Do not include spaces in the attribute name.</p>

GUI Element	Description
Attribute Type	<p>Select one of the following options:</p> <ul style="list-style-type: none"> ▶ Primitive. Choose from one of the following field types: boolean, bytes, date number, double number, float number, integer, list of integers, long number, string, list of strings, xml. ▶ Enumeration/List. Contains a list of Enumerations and Lists defined in the Enumeration Manager dialog box. This option enables you to define an attribute with a predefined value. For example, a location attribute might be defined by a location list containing the following values: Singapore, Paris, New York.
Configuration Management Only	<p>Select one of the following, optional configuration management parameters:</p> <ul style="list-style-type: none"> ▶ Select Change Monitored to define attributes whose values are being marked as Change Monitored in CI Type Manager. For every change in an attribute defined as Change Monitored, you are notified by a Change event in the Topology View. ▶ Select Comparable to enable this attribute to be used for comparing compound CIs. ▶ Select Asset Data to display the attribute value in the Asset Report.
Default Value	<p>Enter or select a default value for the attribute. This value appears when the new CIT is defined and there is no runtime value for the attribute. The options for the Default Value field vary depending on the attribute type you selected.</p> <p>Note: If you select the list of integers or list of strings Primitive attribute type, you can enter multiple values.</p>
Description	<p>Enter a description for the new attribute.</p> <p>Note: This field is optional.</p>

GUI Element	Description
Display Name	Enter a name for the new attribute to identify it in HP Universal CMDB. Note: This field is optional.
Value Size	Enter a value for the maximum physical size of the new attribute. (Enabled for bytes and string only).

Add/Remove Relationship Dialog Box

Description	Enables you to add or remove default or new relationships between CITs, which define their physical or logical connections. To access: In the CIT Manager, right-click a CIT or two CITs and select Add/Remove Relationship from the context menu.
Important Information	To add a relationship between two CITs, select the two CITs to be linked by holding down CTRL and clicking the CIT names. To add a relationship between a CIT and itself, click the CIT name.




The Add/Remove Relationship dialog box includes the following elements (listed alphabetically):

GUI Element	Description
<node1 to node2>	Select the relationships to add in the direction of the first node to the second.
<node2 to node1>	Select the relationships to add in the direction of the second node to the first.
Relationship Name	A list of the possible relationships.

CI Type Manager

Description	<p>Enables you to view the information in the CI Type model, which contains the definitions of all configuration item types (CITs) defined in the system and the relationships that define the connections between them. Each CIT has its own attributes, as well as the attributes inherited from its parent CIT.</p> <p>To access: Select Admin > Modeling > CI Type Manager.</p>
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CI Type Manager includes the following elements (listed alphabetically):

GUI Element	Description
	Select Node Tree to display the CI types in the CIT model.
	Select Relationship Tree to display the relationships in the CIT model.
	Click the New button to open the Create Configuration Item Type Wizard which enables you to define a new CI Type. For details, see “Create Configuration Item Type Wizard” on page 29.
<Toolbar>	For details, see Chapter 7, “Toolbar Options.”

GUI Element	Description
<p>CI Types Pane</p>	<p>A hierarchical tree structure of the CI Type model containing the inheritance relationships among CITs, and displaying the number of instances of each CIT in the UCMDB. All CITs included in the CI Type model are classified as either a CIT or a relationship. You can drill down and view the relationships and neighbors of the selected CIT in the topology map. You can search incrementally in the list of CITs or relationships. Enter the first letter of the CIT or relationship repeatedly until you reach the required selection, or type in the full name of the CIT or relationship.</p> <p>Note: Each CIT definition type is represented by a unique icon. (If the CIT does not have a defined icon, it gets the icon of its ancestor.)</p>
<p>Topology Map</p>	<p>Displays various layouts of the CI Type model, including the CITs and the relationships between them. When you point to a CIT, a tooltip displays the display name of the CIT and its description.</p>


Context Menu

CI Type Manager includes the following context menu options available by right clicking a folder or CI type in the CI Types pane or the Topology Map (listed alphabetically):

GUI Element	Description
<p>Add/Remove Relationship</p>	<p>Opens the Add/Remove Relationship dialog box, which enables you to add or remove relationships from CITs. For details, see “Add/Remove Relationship Dialog Box” on page 26.</p>
<p>Delete</p>	<p>Deletes the selected CI type. This option is only available for CI types that have no children and no instances.</p>
<p>Edit CIT</p>	<p>Opens the Edit Configuration Item Type dialog box which enables you to edit existing CI Types.</p>
<p>Export</p>	<p>Enables you to export a CIT as an XML file. Use this option to move CITs from one workstation to another.</p>

GUI Element	Description
New	Opens the Create Configuration Item Type Wizard which enables you to define a new CI Type. For details, see “Create Configuration Item Type Wizard” on page 29.
Show CIT Instances	Opens the Show All Instances window, which displays all instances of the selected CIT. For details, see “Element Instances Dialog Box” in <i>Reference Information</i> .

Create Configuration Item Type Wizard

Description	<p>Enables you to define a new configuration item type or relationship.</p> <p>To access:</p> <ul style="list-style-type: none"> ▶ Click a CI type or relationship in the topology map or CI Types pane of the CIT Manager and select New from the context menu. ▶ Click the New button  in the CI types pane.
Wizard Map	The Create Configuration Item Type Wizard contains: Information Page > Attributes Page > Qualifiers Page > Icon Page > Menu Page > Default Label Page

The Create Configuration Item Type wizard includes the following tabs:

- ▶ “Information Page” on page 30
- ▶ “Attributes Page” on page 31
- ▶ “Qualifiers Page” on page 33
- ▶ “Icon Page” on page 34
- ▶ “Menu Page” on page 36
- ▶ “Default Label Page” on page 38

Information Page

Description	Enables you to enter basic information about the new CI Type you are defining. The first step of the Create Configuration Item Type Wizard.
Important Information	For general information about the Create Configuration Item Type Wizard, see “Create Configuration Item Type Wizard” on page 29.
Wizard Map	The Create Configuration Item Type Wizard contains: Information Page > Attributes Page > Qualifiers Page > Icon Page > Menu Page > Default Label Page





The Information page of the Create Configuration Item Type Wizard includes the following elements (listed alphabetically):



GUI Element	Description
Base Configuration Item Type	Select a base CIT for the CIT you are creating. The new CIT inherits the base CIT’s attributes.
Configuration Item Type Description	A description for the new CIT. Note: This field is optional.
Configuration Item Type Name	The name of the new CIT. The name must be unique. Do not use a blank space or an underscore as part of the CIT name. You can use lower and upper case, but you cannot use the same name with different cases for two CITs.
Display Name	The name of the CIT as it appears in the HP Universal CMDB interface.

Attributes Page

Description	Enables you to edit the attributes of the CIT. The second step of the Create Configuration Item Type Wizard.
Wizard Map	The Create Configuration Item Type Wizard contains: Information Page > Attributes Page > Qualifiers Page > Icon Page > Menu Page > Default Label Page

The Attributes page of the Create Configuration Item Type Wizard includes the following elements (listed alphabetically):

GUI Element	Description
	To define an attribute as a key attribute, click in the left column beside the attribute name. A key icon appears in the cell. A key attribute is an attribute that must be defined for CIs of that CI Type. To remove the key attribute definition, click in the left column again. The key icon disappears. For more information on key attributes, see “CI Type Attributes” on page 12.
	Denotes a static attribute. A static attribute takes the same value for all the CIs of that type. If it is changed, all the CIs of that type are affected and automatically display the new value. A static attribute cannot be defined as a key attribute. Note: You cannot define an attribute as static using the CIT Manager, but only by deploying the relevant package. Static attributes are for internal use only.
	Click the Add button to define a new attribute. For details, see “Add/Edit Attribute Dialog Box” on page 24.
	Select a row and click the Edit button to open the Edit Attribute dialog box. For details, see “Add/Edit Attribute Dialog Box” on page 24. Note: If you modify an attribute belonging to a CIT’s parent, the text turns light blue. If you modify an attribute belonging to the CIT itself, the text turns dark blue.

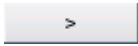
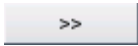

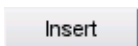
GUI Element	Description
	Click the Delete button to delete a selected attribute. This option is only active for newly defined attributes.
	Click the Reset button to reset the attribute settings after editing a pre-existing attribute.
<Attributes>	Displays all attributes associated with the new CIT. Attributes appearing in black are ones that the new CIT inherits from the base CIT. Attributes appearing in light blue are ones that have been modified for the new CIT.
Asset Data	Select to display the attribute value in the Asset Report. For details see “Asset Report User Interface” in <i>IT World Model Management</i> . Note: When this qualifier is selected for a given attribute, the attribute appears as a visible column in the Element Instances dialog box. For details, see “Element Instances Dialog Box” in <i>Reference Information</i> .
Change Monitored	Select to define attributes whose values are being marked as Change Monitored in CI Type Manager. Note: When this qualifier is selected for a given attribute, the attribute appears as a visible column in the Element Instances dialog box. For details, see “Element Instances Dialog Box” in <i>Reference Information</i> .
Comparable	Select to enable this attribute to be used for comparing compound CIs. Note: When this qualifier is selected for a given attribute, the attribute appears as a visible column in the Element Instances dialog box. For details, see “Element Instances Dialog Box” in <i>Reference Information</i> .
Default Value	The default value for the attribute. This value appears when the new CIT is defined and there is no runtime value for the attribute.
Description	A description of the attribute.
Display Name	The attribute name that appears in the HP Universal CMDB interface.

GUI Element	Description
Editable	Select to enable future editing of the attribute. Only attributes that are marked as Editable (or ones that have values) are displayed in the Attributes page.
Index	Select to accelerate the attribute retrieval performance. This option is recommended for attributes that are used frequently in search conditions. For example, IP address is usually an index attribute of a host.
Lower Case	Select to keep the attribute value in lower case.
Name	The actual name of the attribute (compare to Display Name).
Required	Select to define this attribute as a required one, if its value is required for the creation of the CIT.
Type	The type of the attribute.
Visible	Select to display this attribute in the Attributes page in the topology map.

Qualifiers Page

Description	Enables you to assign qualifiers to a CIT definition. The third step of the Create Configuration Item Type Wizard.
Important Information	Qualifiers enable you to define added attribute definitions to the CIT. In the Qualifiers list, select the required qualifiers using the Add buttons to move your selections to the Configuration Item Type Qualifiers list. You can make multiple selections by holding down the CTRL key.
Wizard Map	The Create Configuration Item Type Wizard contains: Information Page > Attributes Page > Qualifiers Page > Icon Page > Menu Page > Default Label Page

The Qualifiers page of the Create Configuration Item Type Wizard includes the following elements (listed alphabetically):



GUI Element	Description
	Select the qualifier and click this button to add the qualifier to the Configuration Item Type Qualifiers list. Select multiple qualifiers by holding down the CTRL key.
	Click this button to move all qualifiers to the Configuration Item Type Qualifiers list.
	To remove a qualifier, select the qualifier from the Configuration Item Type Qualifiers list and click the Delete button.
	To define a new, custom qualifier, enter the qualifier name in the window and click Insert . The qualifier appears in the Configuration Item Type Qualifiers list.
<Configuration Item Type Qualifiers>	List of qualifiers that define attributes of the new CIT. For example, you can use a qualifier to define a CIT as abstract, meaning you cannot create instances from it.
<Qualifiers>	For a list of the available qualifier options, see “Qualifier Tab” in <i>Reference Information</i> .

Icon Page

Description	<p>Enables you to select an icon to assign to the new CI Type.</p> <p>The fourth step of the Create Configuration Item Type Wizard.</p> <p>Note: This step of the wizard is not relevant for relationships.</p>
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Important Information	Each CIT is displayed with a default icon. However, you can attach different icons to the same CIT when certain conditions apply. For example, you can associate different icons with the same CIT when one of its attribute values changes.
Wizard Map	The Create Configuration Item Type Wizard contains: Information Page > Attributes Page > Qualifiers Page > Icon Page > Menu Page > Default Label Page





The Icon page of the Create Configuration Item Type Wizard includes the following elements (listed alphabetically):

GUI Element	Description
	Click to add a row. Note: Only active if Advanced is selected.
	Click to remove a row. Note: Only active if Advanced is selected.
Advanced	Enables you to assign an icon for each attribute value. For example, you could define two values for the City attribute: if City=London, one icon is displayed. If City=Beijing, another icon is displayed. Note: If you change the icon of a CIT that appears in an existing view, the CIT's icon is not updated in the view.
Attribute Name	Select an attribute to determine the icon assigned to the CIT.
Configuration Item Type Main Icon	Select the group to which the CIT belongs. Note: You can assign icons to CI Types, but not to relationships.
Icon	Select an icon to associate with the value you entered in the Value column.
Value	Enter a value corresponding to the attribute you selected. You can add a new line for each value you enter.

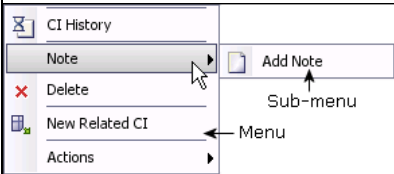
Menu Page

Description	Enables you to customize the shortcut menu of a CI by adding menu items and commands (for example, ping, run a program, open a URL). The customized menu is displayed when you right-click a CI instance in IT Universe Manager. The fifth step of the Create Configuration Item Type Wizard.
Important Information	If a CIT does not have a method defined specifically for it, the CIT inherits all the menus from its parent CIT or the nearest ancestor that does have a method defined for it. If you create or modify a menu, the change occurs only in the specific CIT that is being edited.
Wizard Map	The Create Configuration Item Type Wizard contains: Information Page > Attributes Page > Qualifiers Page > Icon Page > Menu Page > Default Label Page

The Menu page of the Create Configuration Item Type wizard includes the following elements (listed alphabetically):

GUI Element	Description
	Select a menu item from the tree and click the button. A new entry appears under the selected item.
	Click to remove a menu item.
 	To change the order of the menu items, select an item and use the arrows to move it to a different location in the menu.
<Tree>	Hierarchical tree containing the default menu items. Caution: It is not recommended to edit the definitions of the default menu items.

GUI Element	Description
Command	<p>To connect to a specific location on the World Wide Web, select URL, and enter the exact Internet address, for example, <code>http://www.hp.com/go/software</code>. (Available only if you select the URL or Execute command type options.)</p> <p>Note: If you use a variable in the command field, use the format <code>command name %1</code> and define the CIT attributes as described in Parameters. The parameter values replace %1 according to their order in the list. For example, %1 is replaced by the first parameter in the list, %2 is replaced by the second parameter in the list, and so on.</p>
Description	Enter a description for the method. (This is for internal use only and does not appear on the menu.)
Existing Method	Select to choose a command from a list of defined methods inherited from the IT World CIT and all its ancestors.
Icon	<p>Select the icon to appear next to the menu option in the topology map.</p> <p>Note: This field is optional.</p>
Menu Item Name	Enter a name for the new menu item as it should appear on the menu.
Method	<p>Enables you to add a command to the menu.</p> <p>Note: To create a method and not override the existing method, it is recommended to create a new menu item and place the new method there.</p>
Method Name	Enter a name for the command.
New Method	Select to add an action (for example, ping) to the menu item.
Parameters	<p>To add attributes to the command or URL, click the Add Parameter button and select the attribute from the list.</p> <p>To delete an existing entry, select it and click the Remove Parameter button.</p>
Require user confirmation	Select the check box for users to confirm access to a menu item before the item is displayed.


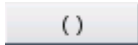
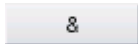

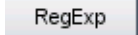
GUI Element	Description
Separator	To place a separator between two menu items: Click OK to place a separator underneath the selected menu option.
Shortcut	Press any key combination to create a shortcut for the menu item, for example, CTRL+H. Note: This field is optional.
Sub-Menu	Select to create a sub-menu under the selected menu option. 
Type	Choose a command type: <ul style="list-style-type: none"> ▶ URL. Opens a web page to the specified URL. ▶ Inner Process. Displays a list of internal HP Universal CMDB actions.
URL	Enter the URL of a Web page for the command to open.

Default Label Page

Description	Enables you to define attributes that appear in the CIT label. You can include more than one attribute by using the function buttons. The final step of the Create Configuration Item Type Wizard.
--------------------	---

Important Information	The label appears as the title under a CI of the new CI Type. Label definition can be customized to include different attribute values. For example, if in host the function label is composed of hostname and network, the displayed label is: server1 10.0.65.0.
Wizard Map	The Create Configuration Item Type Wizard contains: Information Page > Attributes Page > Qualifiers Page > Icon Page > Menu Page > Default Label Page

The Default Label page of the Create Configuration Item Type wizard includes the following elements (listed alphabetically):

GUI Element	Description
	Selects the attributes to appear in the Format box. Use the following function buttons to display multiple attributes in the label.
	Adds parentheses to the formatted text (use in conjunction with the other functions).
	Places an AND operator between two attributes in the formatted text. For example, network_netaddr&network_domain displays the network address and the domain of a node.
	Places an OR operator between two attributes in the formatted text.
	Adds a regular expression (using regular expression syntax) to the label definition. The structure of the entry is (v1 , v2 , v3), where v1 represents the selected attribute, v2 represents the regular expression itself (which divides the value into groups), and v3 represents the number of the selected group. For example, if the selected attribute was a name, consisting of a first name, a space, and a last name, the regular expression could be (name, (\S*)(\s*)(\S*), 3), which would indicate that the last name would be used for the name attribute in the default label. For examples of how to use regular expression syntax, see “Regular Expression Examples” in <i>Reference Information</i> .

GUI Element	Description
Attribute Name	Displays the available options of attributes to be included in the CIT label.
Format	<p>Displays the attributes that you select to appear in the CIT label.</p> <p>For example, to label a host by its host name and operating system, choose the host_hostname and host_os attributes. The CIT label is host1 UNIX.</p> <p>You can define conditions using AND and OR combinations.</p> <p>Note: To delete an attribute from the Format box, highlight it and press the DELETE key.</p>

Edit Configuration Item Type Dialog Box

Description	<p>Enables you to edit an existing CIT or relationship.</p> <p>To access: Right-click the selected CIT or relationship in the topology map or the CI Types pane of the CIT Manager and select Edit CIT.</p>
--------------------	---

The dialog box tabs are similar to those in the Create Configuration Item Type dialog box but only editable fields are enabled.

For details on a tab, see:

- “Information Page” on page 30
- “Attributes Page” on page 31
- “Qualifiers Page” on page 33
- “Icon Page” on page 34
- “Menu Page” on page 36
- “Default Label Page” on page 38

4

System Type Manager User Interface

This chapter includes the pages and dialog boxes that are part of the System Type Manager user interface.

This chapter describes:	On page:
Create/Update List/Enumeration Definition Dialog Box	41
System Type Manager Dialog Box	44

Create/Update List/Enumeration Definition Dialog Box

Description	Enables you to define a new List or Enumeration or edit an existing one. To access: Click the Add button in the System Type Manager dialog box.
--------------------	--

The Create/List/Enumeration Definition dialog box includes the following elements (listed alphabetically):



GUI Element	Description
Display Name	Enter the name you want to appear in the list of System Type Definitions. If you leave this field empty, the entry in the Name field is used.
Enumeration	Enables you to create a predefined list of values, as well as assign each value a color. For details, see “Enumeration Definition Area” on page 43.

GUI Element	Description
List	Enables you to create a predefined list of values. For more details, see “List Definition Area” on page 42.
Name	Enter a unique name for the definition.

List Definition Area

Description	<p>Create a predefined list of values. For example, a Location attribute might be defined by a location list containing the following values:</p> <ul style="list-style-type: none"> ➤ New York ➤ Boston ➤ Baltimore <p>To access: Select List in the Create List/Enumeration Definition dialog box.</p>
--------------------	---



The List Definition Area includes the following elements (listed alphabetically):

GUI Element	Description
	Add a List definition. Double-click inside the row and either select a date from the calendar that appears (if you chose the type Date) or type the required value.
	Delete a List definition.
Type	<p>Choose one of following field types:</p> <ul style="list-style-type: none"> ➤ Date ➤ Double ➤ Integer ➤ Long ➤ String

Enumeration Definition Area


Description	<p>Enables you to create a list from a predefined list of values (similar to List), with capabilities such as assigning a color for every value. Enumerations are designed to be used as severity value lists by states. You can use Enumerations for lists that require key values.</p> <p>To access: Select Enumeration in the Create List/Enumeration Definition dialog box.</p>
Useful Links	“Sample Enumeration Definition” on page 18

The Enumeration Definition area includes the following elements (listed alphabetically):

GUI Element	Description
	<p>Add an Enumeration definition. Double-click inside the row and either select a date from the calendar that appears (if you chose the type Date) or type the required value.</p>
	<p>Remove an Enumeration definition.</p>
Color	<p>Select a color that indicates the severity level.</p>

GUI Element	Description
<p>Key</p>	<p>Type a number to create an enumeration that describes a severity list for a category.</p> <p>Assign key values according to the following rules:</p> <ul style="list-style-type: none"> ▶ The list of key values must always begin with zero (0). (Zero represents the Normal state.) Otherwise, it does not appear in the State Manager (for details, see “State Manager User Interface” in <i>IT World Model Management</i>). ▶ The list must always be numbered consecutively. <p>For an example of an Enumeration definition, see “Sample Enumeration Definition” on page 18.</p>
<p>Value</p>	<p>Type a value, either a string or a number, for example, Red or my value. The value appears in the tooltip for the CI in IT Universe. For details, see <i>IT World Model Management</i>.</p>

System Type Manager Dialog Box

<p>Description</p>	<p>Displays the attribute types you defined in the Create List/Enumeration Definition dialog box.</p> <p>To access: Click the System Type Manager  button in the CI Type Manager.</p>
<p>Included in Tasks</p>	<p>“Create List and Enumeration Definitions” on page 18</p>
<p>Useful Links</p>	<p>“Sample Enumeration Definition” on page 18</p>

The System Type Manager dialog box includes the following elements (listed alphabetically):

GUI Element	Description
Add	<p>Create a predefined list whose values define an attribute type. You can create a definition for the following attribute types:</p> <ul style="list-style-type: none"> ▶ List definition. ▶ Enumeration definition. <p>For a description of these attribute types, see “Create/Update List/Enumeration Definition Dialog Box” on page 41.</p>
Delete	<p>Deletes an existing definition. Select the system type definition you want to delete and click the Delete button.</p>
Edit	<p>Enables you to edit an existing definition. For details, see “Create/Update List/Enumeration Definition Dialog Box” on page 41.</p>
System Type Definitions	<p>The list of Enumeration and list definitions created in the System Type Manager.</p>

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