Mercury Business Availability Center

Using Problem Isolation for Mercury Business Availability Center Standalone

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Using Problem Isolation for Mercury Business Availability Center Standalone

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Problem Isolation for Mercury Business Availability Center Standalone

This chapter includes the main concepts of working with Problem Isolation for Mercury Business Availability Center Standalone and how it differs from Problem Isolation for Mercury Business Availability Center with Mercury Application Mapping.

This chapter describes:	On page:
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About Using Problem Isolation for Mercury Business Availability Center Standalone

When you use Problem Isolation for Mercury Business Availability Center with Mercury Application Mapping, you configure correlation rules in the Mercury Application Mapping TQLs that define which CIs are triggers (that is, a CI that can cause something to happen to another CI) and which CIs are affected by triggers.

When you use Problem Isolation for Mercury Business Availability Center Standalone, you use the new Topology Builder to create Problem Isolation topologies that define the relationships between CIs and to edit on-demand monitor topologies. You use a naming convention to define the role of a CI in the Problem Isolation topology. For details, see "Problem Isolation Topology CI Naming Conventions" on page 7.

Changes to CIs, that appear in a number of Problem Isolation user interface pages and reports, are a function of Mercury Application Mapping and are therefore not available when working with Problem Isolation for Mercury Business Availability Center Standalone. For details, see "Displaying Changes to CIs in User Interface Pages" on page 10 and "Suspect Weighting" on page 10.

Problem Isolation Topology CI Naming Conventions

When you work with Problem Isolation for Mercury Business Availability Center Standalone, you use a naming convention to define the role of a CI in the Problem Isolation topologies. The following table lists the different CI roles that you can define in each Problem Isolation topology and the naming convention that you must use:

CI Role	Description	Problem Isolation Topology	Naming Convention
Contained CI	A CI in the contained sub-graph of a given Suspect CI (for example, hardware components of a host).	PM_CONTAINS_system	CI Name (Contained CI)
Dependant CI	A CI on which a Suspect CI depends (for example, a license server required by a Suspect CI).	PM_DEPENDS_system	CI Name (Dependant CI)
Impacted CI	A CI that depends on a given Suspect CI and therefore is expected to be impacted by its status (for example, an application server impacted by a database server).	PM_IMPACTS_system	CI Name (Impacted CI)

CI Role	Description	Problem Isolation Topology	Naming Convention
Problematic CI	A Business type CI (application, server, or other) for which you initiate isolation triage to analyze a problem associated with it.	All PM_SUSPECT_ Topologies	CI Name (Problematic CI)
Suspect CI	A System type CI that is part of the underlying infrastructure (hardware and software), comprising the problematic applications.	All PM_SUSPECT_ Topologies	CI Name (Suspect CI)

Changes to Existing Problem Isolation Components

A number of Problem Isolation components differ between using Problem Isolation for Mercury Business Availability Center Standalone and Problem Isolation for Mercury Business Availability Center with Mercury Application Mapping.

This section includes the following topics:

- "Accessing User Interface Pages" on page 9
- "Displaying Changes to CIs in User Interface Pages" on page 10
- "Suspect Weighting" on page 10
- "Tasks" on page 10

Accessing User Interface Pages

The following user interface pages are the same when working with Problem Isolation for Mercury Business Availability Center Standalone or Problem Isolation for Mercury Business Availability Center with Mercury Application Mapping, but the way you access them is different when using Problem Isolation for Mercury Business Availability Center Standalone:

- **Monitor Profile Configuration page.** The new path for accessing this page is **Admin** > **Problem Isolation** > **On-demand Monitors** > **Monitor Profiles**.
- **Suspect CI Monitor Configuration page.** The new path for accessing this page is **Admin** > **Problem Isolation** > **On-demand Monitors** > **Suspect Monitor Configuration**.

Displaying Changes to CIs in User Interface Pages

The following user interface pages are the same when working with Problem Isolation for Mercury Business Availability Center Standalone or Problem Isolation for Mercury Business Availability Center with Mercury Application Mapping, but do not show changes to CIs when using Problem Isolation for Mercury Business Availability Center Standalone:

- **System Status report.** Displayed in the System Status pane of the Layers Analysis page.
- **Category Status for a Tier.** Accessed by clicking a bar in the System Status report.
- **Suspects page.** Accessed by clicking the **Suspects** option in the Problem Isolation flow bar on any Problem Isolation page.
- **Correlation Graph.** Accessed by clicking the **Show Correlation Graph** button on the Suspects page.

In the Systems Status report, Category Status for a Tier, and Suspects pages, the time range bar that is used to select a time range for the included data does not appear when using Problem Isolation for Mercury Business Availability Center Standalone. The time range is relevant to CI changes and since such information is not included in these pages when using Problem Isolation for Mercury Business Availability Center Standalone, the time range bar is irrelevant.

Suspect Weighting

The calculation used for weighting Suspect CIs does not include the Changes and Dependencies Changes weights, configured in Problem Isolation infrastructure settings, when you work with Problem Isolation for Mercury Business Availability Center Standalone.

Tasks

The task for Deploying Problem Isolation is different when you work with Problem Isolation for Mercury Business Availability Center Standalone and comprises the following steps:

1. Associate problems with suspects. For details, see "Associate Problems with Suspects Page" on page 16.
2. Configure the CIs that are impacted by a Suspect CI. For details, see "Suspect Impact Page" on page 18.
3. Configure the CIs that are dependents of a Suspect CI. For details, see "Suspect Infrastructure Page" on page 19.
4. Configure the CIs of which a Suspect CI is a dependent. For details, see "Suspect Dependencies Page" on page 20.
5. Configure the monitor profiles for on-demand monitors. For details, see "New Monitor Profile Page" in *Using Problem Isolation*, in the Mercury Business Availability Center Documentation Library.
6. Configure suspect monitor topologies, where you model the structure of Suspect CIs which are used to pass parameters to the on-demand monitors. For details, see "Suspect Monitor Topologies Page" on page 21.
7. Configure the on-demand monitors to run on Suspect CIs. For details, see "Suspect CI Monitor Configuration Wizard" in *Using Problem Isolation*, in the Mercury Business Availability Center Documentation Library.

Differences Between the Problem Isolation Topology Builder and Working with Pattern Views in Mercury Business Availability Center

Using the Problem Isolation Topology Builder to create topologies is similar, but not identical, to creating and editing pattern views in Mercury Business Availability Center. When referring to the documentation on working with pattern views while using the Problem Isolation Topology Builder, you must take into account the following differences between Problem Isolation topologies and pattern views:

- A generated pattern view is continuously updated by the CMBD, whereas the results of a Problem Isolation topology are only updated when it is run.
- All references to a pattern view in the pattern views documentation refer to a Problem Isolation topology when using the Problem Isolation Topology Builder.
- The following sections in the pattern view documentation are not applicable when working in the Problem Isolation Topology Builder:
  - Creating a Pattern View
  - Merging Identical Instances
  - Grouping CIs
  - Adding Folding Rules to Relationships
  - Defining Multiple Relationship Rules
  - Editing a Pattern View

For details on working with pattern views, see "Working with Pattern Views" in *View Manager Administration*, part of the Mercury Business Availability Center Documentation Library.

New User Interface Pages

When working with Problem Isolation for Mercury Business Availability Center Standalone, there are a number of new user interface pages in Problem Isolation Administration, which you use to configure on-demand monitors and problem suspects. For details on the new user interface pages, see "Problem Isolation for Mercury Business Availability Center Standalone User Interface" on page 15.

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Problem Isolation for Mercury Business Availability Center Standalone User Interface

This chapter includes the new pages and dialog boxes that are part of the Problem Isolation user interface when you work with Problem Isolation for Mercury Business Availability Center Standalone.

This chapter describes:	On page:
Associate Problems with Suspects Page	16
Suspect Impact Page	18
Suspect Infrastructure Page	19
Suspect Dependencies Page	20
Suspect Monitor Topologies Page	21
Topology Builder	22

Associate Problems with Suspects Page

Description	Displays the topologies that define the links between business CIs and their related infrastructure CIs. Enables you to edit existing topologies and configure new ones. **To access:** Select **Admin** > **Problem Isolation** > **Problem Suspect Topologies** > **Associate Problems with Suspects**
Important Information	➤ Topologies created and edited on this page are saved in the **PM** folder of the Universal CMDB and a prefix of **PM_SUSPECTS*** is automatically added to their name. ➤ When creating or editing a Suspect Topology in the Topology Builder, you must add **(Problematic CI)** to the name of a problematic CI, and **(Suspect CI)** to a Suspect CI. For example, **IT Universe (Problematic CI)** or **System (Suspect CI)**. Examples of the naming convention can be seen in the **PM_SUSPECTS-generic** topology. For details on naming conventions, see "Problem Isolation Topology CI Naming Conventions" on page 7.
Included in Tasks	"Deploy Problem Isolation" on page 7

The Associate Problems with Suspects page includes the following elements (listed alphabetically):

GUI Element	Description
	Click to display and edit an existing Suspect Topology's name and description.
	Click to access the **Topology Builder**, where you edit an existing Suspect Topology. For details on working with the Topology Builder, see "Topology Builder" on page 22.
	Click to clone an existing Suspect Topology and save it under a different name.

GUI Element	Description
	Click to delete an existing Suspect Topology.
New Topology	Click the **New Topology** button to open the **New Topology** dialog box, where you enter the name of a new Suspect Topology and click **OK**. The **Topology Builder** opens, where you build the associations between problematic business CIs and their infrastructure suspects. For details on working with the Topology Builder, see "Topology Builder" on page 22.
Problematic CIs	Displays the name of the problematic CI.
Suspects	Displays the name of the suspect CIs associated with the problematic CI.
Topology Name	Displays the name of the Suspect Topology.

Suspect Impact Page

Description	Opens the **PM_IMPACTS_system** topology in the Topology Builder, where you can edit the CIs impacted by a Suspect CI. For details on working with the Topology Builder, see "Topology Builder" on page 22. **To access:** Select **Admin** > **Problem Isolation** > **Problem Suspect Topologies** > **Suspect Impact**
Important Information	➤ You can only edit the **PM_IMPACTS_system** topology and cannot delete it. ➤ When editing the **PM_IMPACTS_system** topology in the Topology Builder, you must add **(Impacted CI)** to the name of an impacted CI, and **(Suspect CI)** to a Suspect CI. For example, **Business (Impacted CI)** or **System_lower (Suspect CI)**. For details on naming conventions, see "Problem Isolation Topology CI Naming Conventions" on page 7.
Included in Tasks	"Deploy Problem Isolation" on page 7

Suspect Infrastructure Page

Description	Opens the **PM_CONTAINS_system** topology in the Topology Builder, where you can edit the CIs that are in the contained sub-graph of a Suspect CI. For details on working with the Topology Builder, see "Topology Builder" on page 22. **To access:** Select **Admin** > **Problem Isolation** > **Problem Suspect Topologies** > **Suspect Infrastructure**
Important Information	➤ You can only edit the **PM_CONTAINS_system** topology and cannot delete it. ➤ When editing the **PM_CONTAINS_system** topology in the Topology Builder, you must add **(Contained CI)** to the name of an contained CI, and **(Suspect CI)** to a Suspect CI. For example, **IT Universe (Contained CI)** or **System_upper (Suspect CI)**. For details on naming conventions, see "Problem Isolation Topology CI Naming Conventions" on page 7.
Included in Tasks	"Deploy Problem Isolation" on page 7

Suspect Dependencies Page

Description	Opens the **PM_DEPENDS_system** topology in the Topology Builder, where you can edit the CIs on which a Suspect CI depends. For details on working with the Topology Builder, see "Topology Builder" on page 22. **To access:** Select **Admin** > **Problem Isolation** > **Problem Suspect Topologies** > **Suspect Dependencies**
Important Information	➤ You can only edit the **PM_DEPENDS_system** topology and cannot delete it. ➤ When editing the **PM_DEPENDS_system** topology in the Topology Builder, you must add **(Dependant CI)** to the name of a CI of which a suspect is a dependent, and **(Suspect CI)** to a Suspect CI. For example, **IT Universe (Dependant CI)** or **System_root (Suspect CI)**. For details on naming conventions, see "Problem Isolation Topology CI Naming Conventions" on page 7.
Included in Tasks	"Deploy Problem Isolation" on page 7

Suspect Monitor Topologies Page

Description	Displays the existing Suspect Topologies (used in Suspect Monitor configurations) which model the structure of Suspect CIs, which are used to pass parameters to the on-demand monitors. Enables you to edit existing Suspect Topologies and configure new ones. **To access:** Select **Admin** > **Problem Isolation** > **On-demand Monitors** > **Suspect Monitor Topologies**
Important Information	Topologies created and edited on this page are saved in the **PM_DIAGNOSTICS** folder of the Universal CMDB and a prefix of **PM_*** is automatically added to their name. For details on naming conventions, see "Problem Isolation Topology CI Naming Conventions" on page 7.
Included in Tasks	"Deploy Problem Isolation" on page 7

The Suspect Monitor Topologies page includes the following elements (listed alphabetically):

GUI Element	Description
	Click to display and edit an existing Suspect Topology's name and description.
	Click to access the **Topology Builder**, where you edit an existing Suspect Topology. For details on working with the Topology Builder, see "Topology Builder" on page 22.
	Click to clone an existing Suspect Topology and save it under a different name.
	Click to delete an existing Suspect Topology.

GUI Element	Description
New Topology	Click the **New Topology** button to open the **New Topology** dialog box, where you enter the name of a new Suspect Topology and click **OK**. The **Topology Builder** opens, where you build the associations between problematic business CIs and their infrastructure suspects. For details on working with the Topology Builder, see "Topology Builder" on page 22.
Topology Description	Displays the description of the Suspect Topology.
Topology Name	Displays the name of the Suspect Topology.

Topology Builder

Description	You use the Problem Isolation Topology Builder to create and edit the topologies that define the relationships between CIs. **To access:** ➤ Click the **Edit** button for an existing topology in: ➤➤ Associate Problems with Suspects Page (for details, see page 16). ➤➤ Suspect Monitor Topologies Page (for details, see page 21). ➤ Automatically opens when you access: ➤➤ Suspect Impact Page (for details, see page 18). ➤➤ Suspect Infrastructure Page (for details, see page 19). ➤➤ Suspect Dependencies Page (for details, see page 20).

Important Information	➤ Specific naming conventions must be used when configuring CIs in the Problem Isolation Topology Builder. For details, see, "Problem Isolation Topology CI Naming Conventions" on page 7. ➤ Creating and editing topologies in the Problem Isolation Topology Builder is similar to creating and editing pattern views in Mercury Business Availability Center, except for a number of differences. For details on working with the Problem Isolation Topology Builder, see "Working with Pattern Views" in *View Manager Administration*, part of the Mercury Business Availability Center Documentation Library. For details on the differences between the Problem Isolation Topology Builder and working with pattern views in Mercury Business Availability Center, see "Differences Between the Problem Isolation Topology Builder and Working with Pattern Views in Mercury Business Availability Center" on page 12
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