Marvel-Run User Guide

Notice

About this information

The Marvel Monitoring Enterprise Portal User's Guide describes the Marvel Enterprise Portal features for working with your Marvel Monitoring products.

Users of this book should be familiar with performance monitoring concepts. If you use the Marvel Data Warehouse, you need to be familiar with the operating system that hosts the warehouse.

The document assumes no previous experience with Marvel Monitoring. To learn more about this family of products:

Preface

Foreword

Welcome to the Marvel Monitoring Enterprise Portal User's Guide. This document is designed to provide you with comprehensive information about the Marvel Enterprise Portal features for effectively working with your Marvel Monitoring products. Whether you are a new user or seeking to enhance your understanding of the portal, this guide will serve as a valuable resource.

To make the most of this guide, it is recommended that users have a basic familiarity with performance monitoring concepts. This foundational knowledge will enable you to grasp the concepts and functionalities discussed throughout the document, empowering you to leverage the full potential of the Marvel Monitoring Enterprise Portal.

If you are utilizing the Marvel Data Warehouse, it is important to note that familiarity with the operating system hosting the warehouse is necessary. Understanding the operating system will facilitate a deeper comprehension of the integration between the Marvel Monitoring products and the warehouse.

It is worth emphasizing that this user's guide is tailored for individuals with no prior experience using Marvel Monitoring. The document has been structured to provide clear and concise explanations, ensuring that users can easily follow along and apply the information to their specific monitoring needs.

By leveraging the insights and instructions outlined in this guide, you will gain a comprehensive understanding of the Marvel Enterprise Portal features and how they can be effectively utilized in conjunction with your Marvel Monitoring products. We encourage you to explore the various sections of this document, acquaint yourself with the portal's capabilities, and harness its power to enhance your performance monitoring processes.

Thank you for choosing the Marvel Monitoring Enterprise Portal User's Guide. We are confident that it will equip you with the necessary knowledge and skills to maximize the value and potential of your Marvel Monitoring products.

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Chapter

1

Introduction

Topics:

- Getting Started
- New in this Release
- Marvel Management Services Architecture
- Monitoring Agents
- Features
- Marvel Enterprise Portal Tour

The Marvel Enterprise Portal is the window into your Marvel monitored environment. The portal lets you explore your enterprise in the same way that your browser lets you explore the Internet. Consult the topics here to answer the questions, Where do I start? and What can I do here?

New in this Release

The following enhancements have been made to the Marvel Enterprise Portal for Version 6.3.

Application Property Installation attribute group

The Application Property Installation attribute group

provides information related to the self-describing agent

installation process.

ITM Historical Collection attribute group

The ITM Historical Collection attribute group provides

information about the active historical collections that are exporting data from a location, including the metrics

about each historical collection.

Historical Export Statistics workspaceThe Historical Export Statistics workspace displays the

enterprise and private historical exports to a Warehouse Proxy agent instance performed by a selected managed system. This workspace is available for monitoring

servers and monitoring agents.

Historical situations Historical Exports Critical, Historical Exports Failure,

Historical_Exports_Warning, and

Historical_RowsCorrupted help you manage your

historical exports.

Define symbol name/value pairs for physical or

logical navigator nodes

You can now define symbol name/value pairs for physical or logical navigator nodes. You can then create Take Action commands that reference these symbols.

Connect points in plot charts

The plot points are connected with lines even when gaps

in time are present. This feature is only available for plot charts. Use the Always connects points option on the

Style tab.

Marvel Enterprise Portal browser support for 32 bit

and 64 bit browsers

The Marvel Enterprise Portal browser client now supports both 32 bit and 64 bit Firefox and Internet Explorer browsers on both Windows and Linux platforms. Support for the most current Extended Support Release versions of the Firefox browser is now available. Support for earlier versions of Firefox prior to

version 3.6 are no longer supported in the IBM Marvel

Monitoring 6.3 release.

Java[™] 7 support

The Marvel Enterprise Portal now uses IBM Java 7

as the default JRE for all deployment modes: desktop, browser, and Java WebStart. Use of IBM Java 5 is no longer supported in the IBM Marvel Monitoring 6.3

release.

It is now possible to connect the Marvel Enterprise Portal to multiple IBM Marvel Monitoring domains from a single browser instance. Prior to release 6.3, if you needed to manage multiple domains using the Marvel Enterprise Portal, you were required to either launch separate browser instances (one for each domain), or use alternate client deployment modes (such as a desktop client or Java WebStart). Minor changes were also made to the Marvel Enterprise Portal for content improvements. New features and capability enhancements were made to the Marvel Management Services. For more information, see the following publications on the Marvel Monitoring Information Center.

Marvel Management Services Architecture

The Marvel Enterprise Portal is based on a client-server-agent architecture. It comprises server hosts, delivers, and manages most of the resources and services to be consumed by the client. The agent collects the monitored data and passes it to the Marvel Enterprise Monitoring Server. A high-level representation of client-server-agent architecture is shown in the following figure.

Client-Server-Agent Architecture

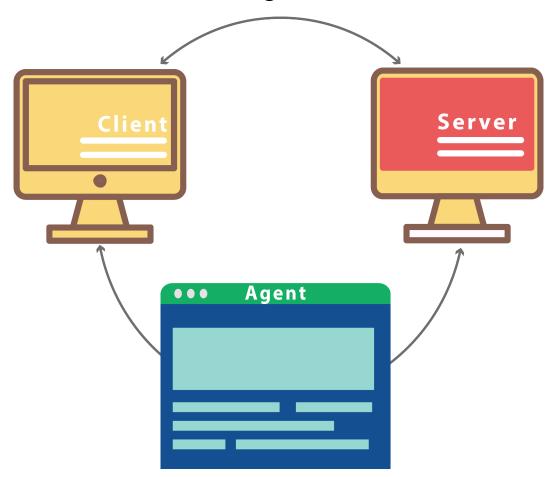


Figure 1: Client server agent architecture

Client

The Marvel Enterprise Portal client is a Java-based user interface for viewing and monitoring your enterprise network. Depending on how it was installed, you can start Marvel Enterprise Portal as a desktop application, a web application through your browser, or Java Webstart, which downloads the installable software from the Marvel Enterprise Portal Server, installs it, and then makes it available as a desktop application.

Server

The Marvel Enterprise Portal client connects to its application server, the Marvel Enterprise Portal Server. The Marvel Enterprise Portal Server is a collection of software services for the client that enables retrieval, manipulation and analysis of data from the monitoring agents on your enterprise. This server connects to the Marvel Enterprise Monitoring Server, which acts as a collection and control point for alerts received from the monitoring agents, and collects performance and availability data. The main, or hub, Marvel Enterprise Monitoring Server correlates the monitoring data collected by agents and remote servers and passes it to the Marvel Enterprise Portal Server for presentation and your evaluation.

Agent

Marvel Enterprise Monitoring Agents are installed on the systems whose applications or resources you want to monitor. The monitoring agent collects the monitored data, and passes it to the Marvel Enterprise Monitoring Server to which it is connected. The client gathers the current values of the monitored properties, or attributes, and displays them in views. It can also test the values against a threshold and display an event indicator when that threshold is exceeded.

Monitoring Agents

Marvel Enterprise Monitoring Agents are installed where you have resources you want to monitor. The agents and the operating system, subsystem or computer that they are running on are referred to as managed systems. The Navigator Physical view shows the types of agents installed and running on each managed system.

Some agents also have subagents. In such instances the agent is the managing agent. For example, the WebSphere® MQ Integrator Series agent has MQSI Broker subagents. Subagents are displayed in the Navigator below the managing agent and its attribute groups.

- MQSI Agent- KQIA
- MQSI Components
- Product Events
- MQSI Broker MQSIBroker1::KQIB
 - 星 Broker Events
 - ■ Flow Events
 - Broker Information
 - Broker Statistics
 - Execution Group Statistics
 - Message Flow Statistics
 - Neighbors
 - Topics

The agent gathers the current values of the attributes (elements) specified in a view. Gathered attribute values can also be tested against a threshold and display an event indicator when conditions exceed the threshold. Some agents have fewer than 100 attributes, and many have several hundred. These attribute values are displayed in the table and chart views of workspaces at the system, agent, and attribute group level of the Navigator Physical view. When an

attribute value (or range of values) is specified in a situation, as a table threshold, or as a chart or table view filter, Marvel Enterprise Portal compares the current value with the value specified and does the following:

- 1. If the comparison in the situation is met, then the situation is true and event indicators are displayed in the Navigator.
- 2. If the compared value exceeds the threshold specified for the table, the cell is highlighted in red, yellow, or blue.
- 3. If the compared value meets the filter condition, it is included in the chart or table display.

Features

The Marvel Enterprise Portal gives you a single point of control for managing the resources your applications rely on, including a range of operating systems, servers, databases, platforms, and web components. For example, a typical IT network might have a web server on Windows, an application server and database on UNIX, and a transaction processor on CICS® on the mainframe. The Marvel Enterprise Portal brings all these views together in a single window so that you can see when any aspect of your network is not working as expected. Your IBM Marvel Monitoring products use the portal interface with these major features, and you can find demos for many of them on developer works in the Media Gallery.

Table 1: Features

Feature	Description
Customizing workspaces	Marvel Enterprise Portal presents information in a single pane of glass called a workspace, which consists of one or more views. Monitoring data is retrieved at regular intervals and the results sent to the workspace in the form of chart and table views. You can start monitoring activity and system status immediately with the predefined workspaces. With just a few clicks of the mouse, you can tailor your own workspaces to look at specific conditions, display critical threshold values in red, and filter incoming data so you see only what matters.
Customizing workspace views	● In the charts display data that the monitoring agents have gathered from the systems where they are running. They can also show data from any ODBC-compliant database you write a custom query for.
	The notepad view opens a simple text editor for writing text that can be saved with the workspace.
	The table view displays data that the monitoring agents have gathered from the systems where they are running.
	The message log shows the status of all situations distributed to the managed systems in your enterprise.
	The universal message console view shows situation and policy activity, and messages received as the result of universal message generation.

Marvel Enterprise Portal Tour

Welcome to the Marvel Enterprise Portal tour. In under 10 minutes, this hands-on practice introduces you to some of the major features.

Situations

In addition to providing a map of your enterprise, the Navigator can alert you of changing conditions in the systems you are monitoring. When a condition changes, the associated item is marked with an icon:

⊗	Fatal
	Critical
	Minor
<u>↑</u>	Warning
	Harmless
	Informational Unknown
?	UIKIIOWII

The Navigator places one of these icons, called *alert indicator* or *event indicator*, at every level of the hierarchy so you can see an alert even if a Navigator branch is closed.

If you see any of these icons in the Navigator now, move the mouse pointer over an event indicator to open a flyover listing of the situations that caused the events at that level of the Navigator and below.

Marvel Enterprise Portal runs tests called situations on systems where monitoring agents are installed. When the conditions of a situation have been met, an event occurs and an event indicator is displayed over the applicable items in the Navigator.

Procedure

To open the Situation editor, the user ID must have permission to View Situations.

To open a situation,

- Right-click a system name in the Navigator and click Situations.
 The Situation editor opens with a list of situations on the left. This is where you can view and edit situations or create new ones.
- 2. Click a situation name in the tree to see the Situation editor tabs.
 - Formula to view, add, and change the conditions being tested.
 - Distribution to view and specify the systems on which to run the situation.
 - • Expert Advice to write comments or instructions to be read in the event results workspace.
 - F Action to send a command to the managed system.
 - • Until to close the event after a period of time or when another situation is true.
- 3. Click Cancel to close the Situation editor.

Properties

Use Properties editor to edit the appearance and content of the views chosen for a workspace.

User account must have necessary permissions to view the Properties editor.

To open a Properties,

1. Click Properties.

The **Properties** editor opens with a list of the views on the left, grouped by type. On the right, the general workspace properties appear.

2. Select one of the views in the **Properties** tree.

3. Click Cancel to close the Properties editor.

Chapter

2

Using the Navigator

Topics:

- Navigator Overview
- Types of Navigator Views
- Expanding the Navigator in Increments
- Collapsing and Expanding the Navigator
- Finding Navigator Items
- Removing an Offline Managed System Navigator Item

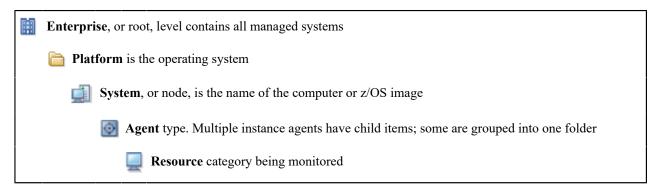
The Navigator provides a hierarchical view of your enterprise. At the highest level you can get a high level overview of the status of your monitored environment. From there you can navigate to specific monitored resources to check activity and investigate problems.

Types of Navigator Views

Navigator Physical View

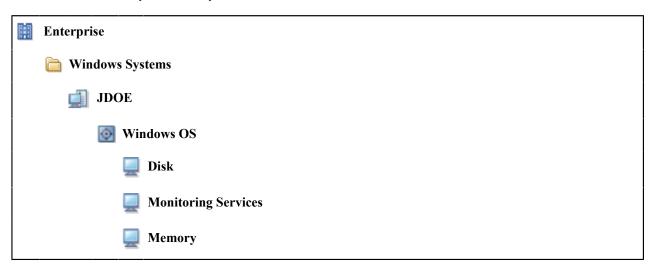
The default Navigator view is Physical and shows the hierarchy of your monitored enterprise. The Navigator Physical view is a discovered view: as new managed systems come online or when they become disconnected, the view is adjusted accordingly.

Table 2: Hierarchy of monitored enterprise



Here is an example of a system named JDOE, running on Windows, with the Windows OS agent.

Table 3: JDOE enterprise example



You can collapse the tree by double-clicking the Enterprise item, and expand it by double-clicking again.

Custom Navigator Views

Your Marvel Enterprise Portal configuration can also have custom-designed Navigator views. These views are selectable from the Navigator toolbar, navigable and show event indicators (described below) in the same way as the

Your user ID can be assigned to all or a subset of the defined Navigator views, and your access in any of these views can be restricted to a certain branch. To see the list of available Navigator views, click the list box in the Navigator toolbar.

A small white cross over a Navigator item icon means one or more other Navigator items share the characteristics of that item. This happens when an item from one Navigator view has been copied to another Navigator view. All the managed systems, workspaces, link definitions, situations, and policies associated with the original (source) item are applied to the new item. And from then on, changes to one item (such as a new workspace is added) are applied to the other. Right-click a Navigator item and click Show Navigator List to see the other Navigator views it is contained in.

Navigator Logical View

Users initially have one custom Navigator view called Logical with a single Navigator item for Enterprise. Click the list box and select the Navigator Logical view from the list.

Expanding the Navigator in Increments

* More indicators in the Navigator keep the tree compact. Click the indicator to open that branch of the tree. You can specify how many items to expand at one time.

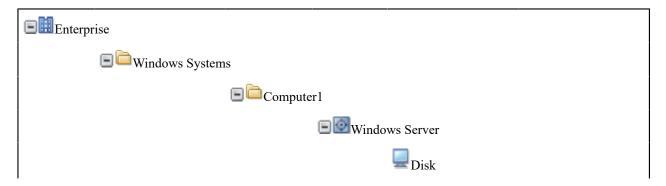
When clicking **Expand** on a Navigator branch of more than, by default, 25 child items, you are prompted to enter the number to expand at one time.

- 1. Set the number of items to expand:
 - a) If the **Expand child items** window is not open, right-click the **Navigator** item whose child items you want to expand incrementally and click **Expand**.
 - b) Enter the number to expand and click **OK** to open that number of child items.
 - c) Click Morewhen you want to open the next group of child items.
- 2. Expand child items.

You can expand all the child items of a Navigator item. The entire branch does not expand, just the children of the selected item. If the **Expand child items** window is not open, right-click the **Navigator** item whose child items you want to expand and click **Expand Child Items**.

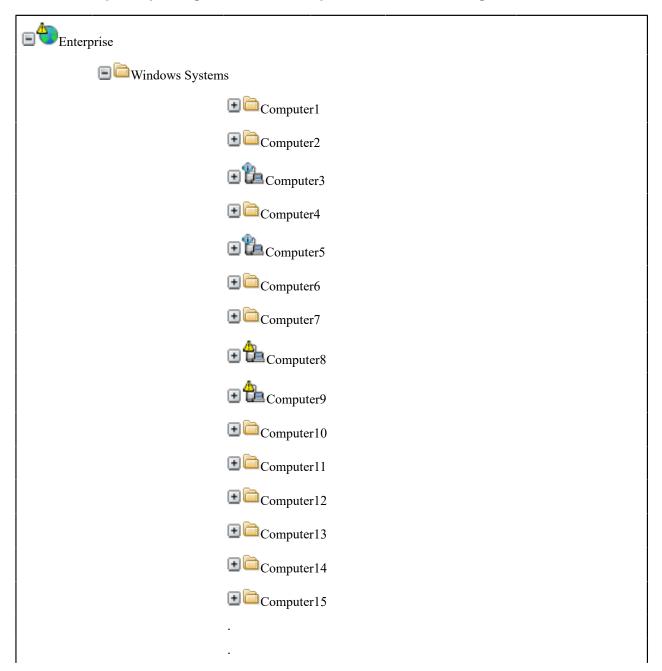
In large managed environments the expand feature helps you control the Navigator display and its performance. In this example, the expansion limit of 4 was chosen for the Windows Server child items:

Table 4: Example: Expansion limit of 4 for the Windows Server child items



This example illustrates the result of selecting Expand Child Items at the platform level of the Navigator. The site is monitoring 500 Windows-based systems. The user can quickly see which systems have situation events and at what severity.

Table 5: Example: Expanding Child Items at the platform level of the Navigator



Logical and Custom Navigator Views

A custom Navigator view can be designed to show the same managed system more than once. If you have a managed system repeated somewhere else in the Navigator view, when you use the expand feature on one Navigator item for that managed system, any other items for that managed system will expand at the same time.

Collapsing and Expanding the Navigator

To provide more space for workspace views, you can hide the Navigator, then restore it when you want to see it.

You can also can save the workspace with the **Navigator** minimized.

- Click the * Collapse bar on the right border to collapse the Navigator view.
 You can also drag the right border if you prefer to manually adjust the Navigator width. The adjacent workspace views expand to fill the gap and the status bar shows the Navigator view icon and name in the right-most section.
- Either click the **Expand** bar on the left border or click **<< Navigator name>** in the status bar to restore the Navigator view.

There is an additional option to open a different Navigator view instead of restoring the original by right-clicking <**Navigator name>** to see and select from a list of available Navigator views.

Finding Navigator Items

The Navigator shows all the managed systems that run on an operating system and this list can get very long. Use the **Find** tool to locate **Navigator** items based on properties such as IP address or associated situations.

To find a Navigator item:

- 1. Click \(\) Find in the Navigator toolbar.
- 2. Select the Navigator item from the For Navigator list if the item to search for is in a different Navigator view.
- 3. Enter the values of the properties to search by:

Properties	Value
IP Address	(Distributed systems only) If you know the IP address, you can enter it here. Example: SCAN == 9.55.1* finds computers that start with 9.55.1, such as 9.55.105.180 and 9.55.110.180
Hostname	(Distributed systems only) Specify all or part of the host name here. Example: SCAN == MYHOST?? finds computers that start with MYHOST and have two trailing characters, such as MYHOSTEL and MYHOST33 but not MYHOSTA or myhostess.
SMFID Name	(z/OS-based systems only) Find the item by the session ID value.
Sysplex Name	(z/OS-based systems only) Specify the item by system complex name.

Properties	Value
Product Code	Select the product name from the list to specify the managed system type to find.
Managed System Name	The managed system name is often the same as the host name. Example: SCAN == *UAGENTO? finds Universal Agents Navigator items such as onionASFSdp:UAGENT00 and garlicASFSdp:UAGENT05.
Associated Situation Name	Enter a situation name to find the Navigator items that the situation is associated with. (For an alert indicator to display in the Navigator for a situation that has become true, the situation must be associated with a Navigator item.)

- **4.** Tick the □ **Include only managed system items** check box to show the found Navigator items at the agent level (and subagent if applicable) but to exclude the child Navigator items (attribute level), .
- 5. Click **Advanced** and specify the page size to control the number of Navigator items to list per page in the find results.

The default is 100 rows per page. By reducing the number, you can have the results displayed more quickly and in smaller, more manageable pages; then move through the pages with Page down and Page up. By increasing the number, you increase the processing time but you can see all the results on one table page.

- 6. Click Find. The Find results area is appended to the window with a list of Navigator items that meet the criteria.
- 7. Click a Navigator item in the Find results area and click **Switch to** after selecting any or none of the following check boxes:
 - □ Open workspace in new window

Keep the current workspace open and open the workspace at the selected Navigator item in a new window (or separate tab if you are in browser mode and your browser is configured for tabbed windows).

• □Close after switching to workspace

Close the **Find** window after opening the workspace for the selected Navigator item.

The default workspace for the selected Navigator item is opened.

In this example, the find criteria looks on the MySystem computers for Navigator items with associated situations that have "CPU" in the situation name.

Table 6: Find criteria

Properties	Value
IP Address	
Hostname	abc == 'MySystem?'
SMFID Name	
Sysplex Name	
Product Code	
Managed System Name	
Associated Situation Name	abc == '*CPU*'

Table 7: Find results

Item	View	Item Path
Process	Physical	WindowsOS/MySystem1/ Windows Systems/ Enterprise
Processor	Physical	WindowsOS/MySystem1/ Windows Systems/ Enterprise
Process	Physical	WindowsOS/MySystem2/ Windows Systems/ Enterprise
Processor	Physical	WindowsOS/MySystem2/ Windows Systems/ Enterprise

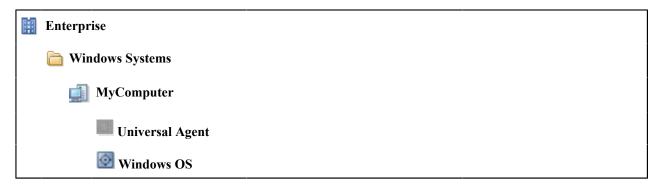
You can keep the window open to switch between one found Navigator item and another or to change the criteria and find other Navigator items.

Removing an Offline Managed System Navigator Item

Use the Managed System Status workspace to clear offline managed systems from the Navigator view.

When a monitoring agent goes offline or its host name gets changed, its branch is dimmed in the Navigator, as in the following example, and its status is shown as *OFFLINE in any table view that uses the Current Managed Systems status query.

Table 8: Hierarchy of monitored enterprise



Procedure

- 1. Click the **Enterprise Navigator** item. The default workspace opens.
- 2. Click Workspace gallery, scroll to Managed System Status, and click the workspace.
- 3. Right-click an *OFFLINE row, then click ▶ Clear offline entry.

The offline entry is now cleared from the Navigator until the managed system comes online.

If this is a custom Navigator view with only one managed system, it is possible for the item to continue to appear in the view. This is possible when the item was added using drag-and-drop in the Navigator editor. Use the Navigator editor to manually remove the item, described in Deleting a Navigator view or item. If the managed system comes

online again, it does not appear in the custom Navigator view. If you want it to appear there, assign the managed system in the Navigator item properties as described in Navigator item properties.

What to do Next

If this is a custom Navigator view with only one managed system, it is possible for the item to continue to appear in the view. This is possible when the item was added using drag-and-drop in the Navigator editor. Use the Navigator editor to manually remove the item, described in Deleting a Navigator view or item. If the managed system comes online again, it does not appear in the custom Navigator view. If you want it to appear there, assign the managed system in the Navigator item properties as described in Navigator item properties.

Chapter

3

Workspaces

Topics:

- Using Workspaces
- Opening a workspace
- Opening a New Window
- Tabbed Workspaces
- Refreshing a Workspace
- Suspending and Stopping Refresh
- Linking to a Workspace
- View Title Bar and Toolbar

Using Workspaces

The workspace is the working area of the Marvel Enterprise Portal window, divided into panes to show different types of views. You can start monitoring activity and system status immediately with the predefined workspaces.

You can tailor your own workspaces to give you summary overviews or to look at specific conditions.

Workspace Characteristics

Every Navigator item has at least one predefined workspace that you can open. Every workspace characteristics such as editable properties and views.

Views

A view is a windowpane, or frame, in the workspace containing a chart or table showing data from one or more monitoring agents. Other types of views such as the topology view and graphic view can give a broader overview of the network. Specialized view such as the browser view and terminal view are also available. You can increase the number of views in a workspace by splitting a view into two separate views.

The data for a table, chart, or relational table-based topology view is chosen by the query it uses. Collectively, they are called query-based views. The query specifies the attributes to include in the view. Although each view uses one query, you can add more views to the workspace, and each can use a different query. The queries can be for different monitoring agents, including those for the Marvel Enterprise Monitoring Server for showing information that is common to your monitored environment (such as all the managed systems and all the situation events). You can also include queries of JDBC or ODBC data sources by writing custom SQL queries.

Every workspace has a set of properties associated with it: general properties that apply to the entire workspace, and properties for each view in the workspace. Use the Properties editor to customize the workspace characteristics and to change the style and content of each view.

You can also keep the original workspace intact and create another workspace for the same item in the Navigator, customizing it for the types of views you want and the information reported in charts and tables.

Changes you make to a workspace are available only to your user ID. System administrators can work in Administration mode to create and edit workspaces that will be available to all users on the managed network.

The link feature enables you to define a link from one workspace to another. Then you can quickly jump to a related or more detailed workspace to investigate system conditions.

Properties

Links

The simplest type of a link originates from the Navigator item: When you right-click that Navigator item, the popup menu shows the defined links for the item. Select one to open the linked workspace.

A more specific link originates from a table or from a chart data point to another workspace. Information from one of the attributes in the selected row, bar, pie segment, or plot point is used to determine the content of the target workspace.

You can also define more complex links and use the predefined links that come with your Marvel Monitoring product.

The monitoring agents available for reporting in a workspace are those assigned to that branch of the Navigator. If you are not sure which monitoring agents are included, do one of the following:

- · Expand the branch of the Navigator
- Right-click the Navigator item and select Properties to see which managed systems are assigned.
- Open one of the workspaces at the enterprise, platform, or system level of the Navigator Physical view

This same principle applies to attribute groups. The lowest level of the Navigator Physical view, for example, is the attribute level. The views you can show for the workspaces at that level can draw only from the attribute groups represented by that level. If you were to build a workspace for the Disk Navigator item, for example, you could create a chart with data from the Logical Disk attributes and another with data from the Physical Disk attributes.

Organization of Predefined Workspaces

The Enterprise Navigator item has workspaces that query the Marvel Enterprise Monitoring Server. Use these predefined workspaces to get status information about the monitoring server and monitoring agents and about situations and policies.

Use the **Workspace Gallery** to see what is available for the Navigator item. These are the Enterprise Navigator item workspaces and the workspaces they link to:

Enterprise Status

The default workspace is Enterprise Status, which gives an overview of the situation event status throughout your enterprise.

- Event Details Similar by Situation Name
- Event Details Similar by Source
- Event Details Similar by Resource

Navigator level

Manage Marvel Enterprise Monitoring Servers

The Manage Marvel Enterprise Monitoring Servers workspaces provide a visual health check of the monitoring servers in your enterprise and the application support that has been applied.

- Installed Catalogs Enterprise View
- Installed Catalogs Remote Server
- Protocols
- Situation Status
- System Information

Managed System Status

The Managed System Status is a list of monitoring agents in your managed network and their ONLINE or OFFLINE status. The linked workspaces are only available for online managed systems.

- Audit Log
- Agent Operations Log
- [™] History Exports

EIB Change Log

This workspaces displays entries in the Enterprise Information Base (EIB) log. The EIB is a database used by the Marvel Enterprise Monitoring Server to store situation, policy, user definitions, and configuration information.

Self-Monitoring Topology

The Self-Monitoring Topology workspace provides a high level overview of your managed infrastructure and its health.

Deploy Depot Package List

The Deploy Depot Package List workspace shows the installation packages that are available in the agent depot.

Deployment Status Summary

The Deployment Status Summary workspace shows summary status information about remote agent deployments.

- Deployment Status by Deploy Group
- Deployment Status by Product

Deployment Status Summary by Transaction

The Deployment Status Summary by Transaction workspace shows summary status information about remote agent deployments, sorted by transaction.

Opening a workspace

Use the Navigator to open the default workspace for the selected item, then the Workspace Gallery to see and select from a thumbnail display of available workspaces.

As well as a convenient way to open workspaces, you can also move the workspaces around the gallery to change their order. The changes you make are saved with the workspace definition for the Navigator item. If you are in workspace administration mode when you reorder the thumbnail graphics, the reorganization will be reflected in the workspace gallery of all Marvel Enterprise Portal clients connected to this Marvel Enterprise Portal Server.

Every item in the Navigator has a workspace associated with it, called the *default workspace*. Some items have multiple workspaces that you can open, although only one workspace can be open in the Marvel Enterprise Portal window at one time. Some workspaces are only accessible by linking to them from another workspace.

Procedure

Click the item name or icon in the Navigator to open the default workspace:

- Physical view: , , , , , or .
- Logical view or other custom Navigator view: .

The default workspace for that item is displayed, replacing the workspace of the previously selected item. If the workspace shows no data for a chart or table view, it means there is no data to display. This can occur with monitoring data that is not constantly generated, such as Archive Errors, which collects data only when archive errors occur.

To open another workspace associated with the Navigator item:

- 1. Click Workspace gallery.
- 2. Click the thumbnail graphic of the workspace to open.



Note: To open the workspace in a new window instead of replacing the current workspace, use Ctrl + Shift + click the thumbnail graphic.

If this is a new installation, you will see the splash screen instead of a thumbnail version of the workspace in the gallery until you or another user who is logged on to the same Marvel Enterprise Portal Server opens the workspace for the first time. A workspace have a workspace name indicates that it is the default workspace for this Navigator item. You can reorder the workspaces in your copy of the gallery by clicking a thumbnail graphic and dragging it on top of the workspace to swap positions with.

Related concepts

Tabbed Workspaces on page 30

Use the tabbed pages capability of your browser to open workspaces, linked workspaces, and Navigator views in new tabs.

Related tasks

Opening a New Window on page 29

Have multiple workspaces open on your desktop at the same time by opening multiple Tivoli Enterprise Portal windows.

Opening a New Window

Have multiple workspaces open on your desktop at the same time by opening multiple Tivoli Enterprise Portal windows.

You can add more dashboard views to your desktop by opening more Tivoli Enterprise Portal windows. Any changes you make these window are saved with the application.

- Click New Window to open a new window in the desktop client.
- Press Ctrl + N to open a new window in the browser client running in Internet Explorer.
- Click Workspace gallery and press Ctrl + Shift + click the workspace to open another workspace in a new window and keep the original intact in this window.

The new window is opened as a duplicate of the original; any changes you make to the new window are independent of the original.

Any previously visited workspaces are retained from the parent window; use • and • to revisit them. Further navigation to other workspaces in either window, however, is independent of the other window.

You can close duplicate windows (click **File** > **Close**) or the original; the work session remains active as long as one window is open.

Related concepts

Tabbed Workspaces on page 30

Use the tabbed pages capability of your browser to open workspaces, linked workspaces, and Navigator views in new tabs.

Related tasks

Opening a Workspace on page 29

Use the Navigator to open the default workspace for the selected item, then the Workspace Gallery to see and select from a thumbnail display of available workspaces.

Tabbed Workspaces

Use the tabbed pages capability of your browser to open workspaces, linked workspaces, and Navigator views in new tabs.

Browser client	t and	browser	settings
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When your browser supports tabbed web pages, the Marvel Enterprise Portal browser client uses the browser's tab settings to determine how to open a workspace: When tabs are enabled, the workspace is opened in a new tab. You can set the properties of a workspace or the target of a workspace link to always open in a new tab, or you can open a workspace in a new tab by holding down the Ctrl + Shift keys while selecting the workspace with a mouse click. Then use the Ctrl + Tab keys to switch focus to the next tabbed workspace.

The desktop client and Java Web Start client use these same features to open a workspace, but it is always opened in a new window.

Workspace properties

Every Marvel Enterprise Portal workspace has properties that control the access and method of display when it is opened. The workspace will open in a new tab on browsers that are set to use tabbed pages when Always open workspace in new window is enabled.

Link target

The link wizard Target Workspace page has an option to Always open target workspace in new window.

It shows in the link wizard Parameters page as *popenTargetInNewWindow*. When enabled, this option opens the targeted workspace in a new tab if you are logged on from a tab-enabled browser.

Navigator item find

☐ Find in the Navigator toolbar enables you to locate any Navigator item using simple or advanced search criteria.

The Find window has an option to **Open workspace in new window** that will open the default workspace for the found Navigator item in a new tab if you are logged on from a tab-enabled browser.

On demand

You can open a workspace in a new tab from any context.

Open a Workspace

- Ctrl + Shift + click a Navigator item to open its default workspace.
- Click Workspace gallery and Ctrl + Shift + click the workspace.
- Right-click the active Navigator item, point to Workspace, and Ctrl + Shift + click the workspace that you want to open.
- View > Workspace > Ctrl + Shift + click the workspace that you want to open.

Link to a Workspace

- Ctrl + Shift + click the link anchor.
 - If there are multiple choices, click the one you want.
- Right-click the source of a defined link (Navigator item, table view row, pie chart slice, bar chart bar, plot chart point, area chart point), point to Link to, and Ctrl + Shift + click the link name.

Open a Found Navigator Item at its Default Workspace

- 1. In the Navigator view toolbar, click \(\text{Find} \), enter the find criteria and click Find.
- 2. Point to a row and Ctrl + Shift + click from the list of Navigator items that is displayed in the Find results area to open the default workspace for that Navigator item in a new tab.

Open a Navigator View at its Default Workspace

- In the Navigator view toolbar, click the **View** list box and Ctrl + Shift + click the Navigator view.
- View > Navigator View > Ctrl + Shift + click the Navigator view.
- Ctrl + Shift + click a Navigator tab.

Troubleshooting

If the workspace or Navigator view opens in a new window rather than a new tab, review the tab options in your browser to ensure that the tab feature is enabled. If you are using Microsoft Internet Explorer 7, be aware that tabbed workspaces are treated as pop-ups: In the Tabbed Browsing Settings window (Tools > Internet Options > General > Tabs > Settings), Always open pop-ups in a new tab must be selected.

Refreshing a Workspace

You can refresh the data that is displayed in the workspace on demand or at a set interval.

The Marvel Enterprise Portal client receives monitoring data from monitoring agents whenever you open a workspace that includes query-based views. The default setting for most predefined workspaces is *On Demand*, which means retrieved data remains static until you refresh manually

- Click Refresh Now to refresh a workspace manually, .
- Click View > Refresh Every, and select one of the following to set a refresh interval.

- 30 seconds
- **6**0 seconds
- 0 5 minutes
- • 15 minutes
- • 60 minutes
- On Demand



Note: In order for your refresh settings to persist, you must save the workspace and optionally select **Assign** as default for this **Navigator item** in the **Save Workspace As** dialog.

If the workspace includes any plot charts or area charts, you can refresh those views independent of the rest of the workspace by editing the Style properties of the plotted area to specify a refresh rate.

Be aware that the more frequent the automatic refresh, the more network traffic you create. These requests travel from the portal client to the portal server and to the hub monitoring server before reaching the monitoring agent. They might also pass through a remote monitoring server to reach the monitoring agent. The information is returned by the same route.

Related tasks

Suspending and Stopping Refresh on page 32

If the workspace is set to refresh automatically at timed intervals or it includes event status views, you can suspend refreshes to keep the data from changing while you investigate a problem.

Suspending and Stopping Refresh

If the workspace is set to refresh automatically at timed intervals or it includes event status views, you can suspend refreshes to keep the data from changing while you investigate a problem.

When you open a workspace that includes table or chart views, the Marvel Enterprise Portal receives the most recently sampled monitoring data from the agents. Take one of these steps to suspend data refreshes or to stop receiving the data that populates the workspace.

- Click Pause Refresh to suspend automatic refreshing of the workspace; click Resume Refresh to turn on automatic refresh again.
- Click Stop to stop loading the workspace.

Related tasks

Refreshing a Workspace on page 31

You can refresh the data that is displayed in the workspace on demand or at a set interval.

Linking to a Workspace

Use these steps to link to a workspace that has been targeted from the current Navigator item or view.

Many monitoring agent products have workspace links available through their predefined workspaces. You can also create and use links to workspaces that follow a logical progression of investigation into performance and operation issues

- 1. Open the workspace from where you will launch the link to open the source workspace.
- 2. Do one of the following, depending on where the link originates:
 - Right-click the current (highlighted) Navigator item.
 - Click the link indicator on a table row or the graphic view, then skip to step 4. A dimmed link indicator means the link is not available from that row.
 - Right-click a pie chart slice, bar chart bar, plot chart point, table row, graphic view icon, or TMS Infrastructure object.
- 3. Click Link To and click the target workspace in the / list.

The target filter or link expression is used to select the information displayed in the views of the target workspace. If, instead of the workspace opening, you get a Target not found message, the definition of the target workspace could not be resolved.

4. Note: If there is more than one workspace you can link to, the Select Target window opens.

Select the Navigator item for the workspace and click **OK**.

5. Click **OK** if a message asks you to select a leaf node, then select an item deeper in the tree hierarchy.

The target workspace is displayed. If the link was defined to open the workspace in a new window, it is opened in its own window. If you are using the browser client and your browser supports tabs, the workspace is in a new tab next to the source workspace.



Note: Navigation using • and • to visited workspaces retains the link context. As an example, consider a link to a workspace from a table row. The row from which you linked is remembered when you revisit the target workspace.

View Title Bar and Toolbar

Every workspace view and the Navigator view has a title bar with some or all of these controls.

Table 9: Title bar controls

/	Opens the Properties editor to the properties for the view.
* *	Shows or hides the view toolbar. This button does not display if the view has no toolbar.
	Splits the Navigator horizontally to create a new workspace view.
	Maximizes a view for a closer look. Click Restore to return to the original size. You can save the workspace with the view maximized.
×	Removes a view. There is no undo for this action except to open a different workspace and answer No when a message asks if you want to save the workspace; -OR- Select File > Save As to keep the original workspace with the view intact and create a new workspace without this view.

Most view types have a toolbar for performing specific actions in the view. A common tool is **\infty** Find, which is available for finding values in the browser view, notepad view, table view, message log view, and the event console views. Another tool, **\infty** Time span, is for specifying the time period to be displayed in a query-based view when historical data is being collected for it.

Chapter



Custom Workspaces

Topics:

- Customizing Workspaces
- Custom Workspace Options and Guidelines
- Tutorial: Defining a workspace

Marvel Enterprise Portal product comes with a set of predefined workspaces for every item in the Navigator Physical view. Use these as a starting point for creating and customizing new workspaces to suit your environment.

Custom Workspace Options and Guidelines

The Marvel Enterprise Portal has over a dozen types of views that you can populate a workspace with. Over half of the views are query-based and have a number of embellishments that you can use to observe potential and existing threshold conditions and other metrics.

Workspace Changes

- Split a view horizontally or vertically into two separate views.
- Change the dimensions of the views by dragging the borders between them.
- Rearrange views by clicking a view's title bar and dragging it another view space.
- When you release the mouse button, the views switch position.
- Maximize the view and, if you like, save the workspace while it is still full-screen.
- Change a view to a different type, such as from a pie chart to a gauge.
- Edit the workspace properties, such as to make it the default workspace.
- Edit the properties of the individual views to control their styles and, in table and chart views, what data they display.
- Build a link to another workspace so that you can jump to it from this one quickly.
- Save a copy of the current workspace and edit the copy.

Any changes you make to a workspace are available only to you; no one else will see your changes. The exception is with workspaces that were updated by an administrator while in workspace administration mode, where the changes to that workspace are shared with all users who log on to the same portal server.

Predefined workspaces are protected from editing. You must use **File** > **Save As** to create your own copy for customization.

Design Guidelines

- Display a view full screen.
- Resize views by dragging the borders.
- Swap location with another view by dragging by its title bar to the new position.
- Workspace link definitions.
- Arrange the order of workspaces in the workspace gallery. This gets saved with all workspaces for a Navigator item.

Here are some guidelines to plan workspaces:

- Tailor the content of a workspace to the Navigator level: Workspaces at the top of the hierarchy show summary information; those at lower levels provide more in-depth information.
- Provide summary information at the agent level of the Navigator Physical view.
- Use custom queries that pre-filter the data used in a table or chart to ensure fastest data retrieval and not see extraneous data. And use as few different queries as possible in one workspace.
- Design for a specific monitor resolution. To create in workspace administration mode for multiple users, use 1024 x 768, which is the lowest resolution on which the Tivoli Enterprise Portal can run.
- Do not crowd too much information in one workspace. Instead, have multiple workspaces at one level or links from one workspace to the next.

- For table views with many columns, arrange them so the important ones are visible. Consider removing some columns by pre-filtering (Properties Query) or post-filtering (Properties Filters).
- Consider combining tables with charts in a workspace for the most effective style layout.

Tips

- To edit a predefined workspace or one created in administration mode, restore the original through **File** > **Restore Original Workspace**. The customized version is overwritten by the original. To keep both the customized workspace and the original, save the customized workspace with a new name before restoring the original.
- The managed systems available for reporting are those assigned to the **Navigator** item. If unsure which are assigned, select the **Navigator** item, right-click the item, and click **Properties**.
- The CLI has several tacmds specific to workspaces:
 - deleteWorkspace to delete a workspace by its objectid from the Marvel Enterprise Portal Server.
 - listWorkspaces to list all of the workspaces, including objectid, on the portal server.
 - exportWorkspaces to export one or more portal workspace definitions to a file.
 - importWorkspaces to import the workspaces definitions in a file into the portal server.

Workspace Author Mode Permission

The user ID requires Workspace Author Mode permission to create and maintain workspaces, including links. If the main toolbar is disabled (except **Refresh**, **Back**, **Forward and Stop**), as well as the **split** and **remove** buttons on the **view** title bar, the user does not have this permission.

Tutorial: Defining a workspace

Use the tutorial to get hands on practice and experience defining a workspace.

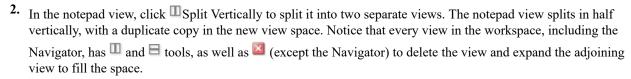
In the tutorial exercises you will add new views to an undefined workspace, tailor them with the Properties editor, save the workspace, and, finally, edit the workspace properties.

If the split view and view tools are disabled (dimmed), the user ID does not have Workspace Author Mode permission and is restricted from completing the tutorial.

Split a View

1. Open an undefined workspace.

An undefined workspace is one that has not been provided with your monitored application or defined by you or an administrator. You can find undefined workspaces initially at the system level (computer or image name is displayed) of the Navigator Physical view, and, if you have custom Navigator views, wherever you have created child Navigator items. A workspace that has not been defined yet will have a browser view with links to this lesson and other relevant topics, and it will have a notepad view.



Change the View Type

Change the new view to a table view:

- 1. Click Table.
- 2. Click inside the notepad view.

As you move inside the workspace the mouse pointer changes to the table view icon (Linux shows a hand icon). After you click, the new table view replaces the notepad view. Because a query has never been associated with this view, no data is displayed in the table. You will need to select a query from the Properties editor.

3. When a message asks you to assign the query now, click No.

Now add a message log view to the original notepad view:

- 1. Click Message Log.
- 2. Click inside the notepad view.

The message log replaces the notepad view.



Tip:

If you select the wrong view or change your mind about the view you chose, press **Escape** or click somewhere in the toolbar.

Swap Views

You can easily move a view to a new position by dragging it by its title bar to the view space it should occupy. When you release the mouse button, the views swap position.

- 1. Point to the message log view's title bar.
- **2.** Click and drag it to the table view. As you drag the view, it appears semi-transparent.

Edit View Properties

Edit the properties for the table view to select what data must display.

- 1. In the table view title bar, click **Properties**.
- 2. In the Query tab, Click here to assign a query.

 Queries determine from which attribute group to draw data. The Select Query window opens.
- 3. In the Query tree, expand the Marvel Enterprise Monitoring Server branch, then Managed System.
- 4. Select U Current Managed Systems Status and click **OK**. Back in the Query tab, you can see a preview of the table.
- 5. Click the Filters tab and clear the boxes for these columns (attributes): HostAddress, Affinities, Host Info. Filters is where you specify the attributes to include in the table and, if you like, show only those values that fall within a range.
- **6.** 6. Click **Test** to see a preview of your changes.
- 7. Click the Thresholds tab to specify a threshold.
- 8. In row 1, click the colored column and select Informational. This will be the background color of the cell when the threshold expression becomes true.
- 9. In row 1, click the **Status** cell, then the rarrow, and select **OFFLINE** from the list. Any managed systems that are offline will have this background color.
- 10. Click the 4 Style tab to change the appearance of the table.
- 11. In the Header, type the following title in the Title text box: Marvel Enterprise Monitoring Agent Status.
- 12. Click OK.

Save a New Workspace

1. Select Save Workspace As from the File menu.

If you are running Marvel Enterprise Portal in browser mode, be sure to select its **File** menu and not browser's **File** menu.

- 2. Type My Workspace in the Name field.
- 3. Select Assign as default for this Navigator Item.
- 4. Click OK.
- 5. Take note of which Navigator item My Workspace is associated with.
- 6. Now test your workspace by opening another workspace, then clicking this Navigator item again.

Edit Workspace Properties

The workspace properties can be edited by completing the following procedure:

- 1. With My Workspace open, click Properties.
 - When you open the Properties editor for a workspace from the toolbar as opposed to the pop-up menu, the properties for the workspace display.
- 2. Clear Assign as default for this Navigator Item.
- 3. Click OK.
- 4. Click Save.
- 5. Test the new setting by opening another workspace, then clicking this Navigator item again.
 - My Workspace does not display. Instead, you see the original undefined workspace, which is the default workspace for this Navigator item.
- 6. To open My Workspace, right-click the Navigator item, click **Workspace**, and select **My Workspace** from the list.

Opening a New Window

In the desktop mode, click New Window.

The new window is a duplicate of the original. Any previously visited workspaces are retained from the parent window; use Go back and Go forward to revisit them. Further navigation to other workspaces in either window, however, is independent of the other window.

Note that you can close duplicate windows (click **File** > **Close**) or the original; the work session remains active as long as one window is open.



Note: To view two workspaces at the same time, create a new window. Any changes you make in this or the other window (or windows, if you open more) are saved with the application.



Tip: You can set the properties of a workspace to open in a new window automatically whenever it is selected. If you are running the Tivoli Enterprise Portal in browser mode from a browser that is enabled for tabs, the workspace opens in a new tabbed page.

Conclusion

In this lesson you learned some of the techniques used to define and customize workspaces:

- · Split a view.
- Change to a different view: table and message log.
- Swapping views by dragging one view over the other.
- Edit the properties for a view: Select a query for the table, then filter it and add a threshold and title.
- Save the workspace, making the new workspace the default for the Navigator item.
- Edit the properties of the workspace to remove the default status.

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