

Introduction

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Getting Started

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 workspace	The 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.

Ability to access multiple Marvel Monitoring domains from a single browser instance

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

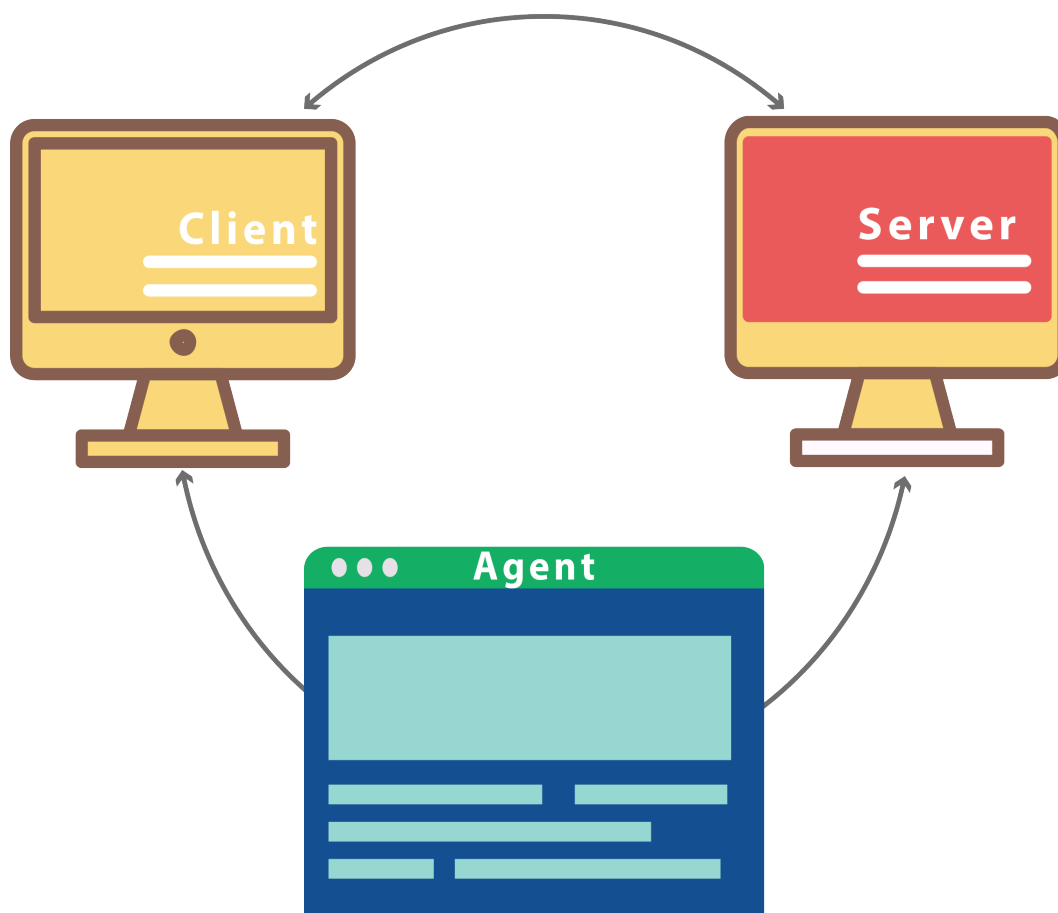


Figure 1: Client server agent architecture

More details on the architecture are provided in the following sections.

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.

Marvel Enterprise Portal Window

Use this topic to familiarize yourself with the elements of the Tivoli Enterprise Portal window.

The Marvel Enterprise Portal window displays information about monitored resources in your enterprise. On the left is the Navigator, which shows the arrangement of your monitored network and allows you to access information collected by different agents on your monitored systems. On the right is a workspace. The workspace can be divided into as many smaller frames, or panes, as you can reasonably fit inside the window. When you select an item in the Navigator, a new workspace opens with a set of views for that item.

The window comprises the following elements:

Title bar

In browser mode, the title bar shows the name of the workspace. In desktop mode, the title bar shows the name of the workspace, the name and port number of the Marvel Enterprise Portal Server, and the user name. For example, `NT Cache Details - mars:14000 - JONDO` tells us that the NT Cache Details workspace is open and the user JONDO is connected to the Marvel Enterprise Portal Server named mars through port number 14000.

Banner

The banner is displayed when you run Marvel Enterprise Portal in browser mode. You can replace it with your own .GIF graphic, such as your company logo.

Menu bar

Marvel Enterprise Portal has a menu bar that includes the following four menus:

Table 1: Menu bar menus

Menu	Function
File	The File menu has options for working with workspaces, setting a trace, and exiting the Tivoli Enterprise Portal. The Trace Options are used only as instructed by a IBM customer support representative.

Menu	Function
Edit	The Edit menu has editing options for workspace properties, historical data collection configuration, policies, situations, user IDs, queries, and object groups.
Edit	The View menu has options for opening other workspaces for a Navigator item, hiding or showing the toolbars and status bar, refreshing the data in this workspace, turning off sound for events, and for opening other Navigator views.
Help	The Help menu opens the Tivoli Enterprise Portal Help, a 10-minute tour to give you some hands-on experience, and links to the IBM website.

In browser mode you can also use the browser menu bar, which is displayed just below the title bar.





If your user ID does not have View or Modify permission for a function or does not have Workspace Author Mode permission, you will not see certain items in the menus, including the pop-up menus. For example, if you have no Workspace Author Mode permission, the **Properties** menu item is not displayed.

Browser Client Differences

The Marvel Enterprise Portal can be started as a desktop application or through your browser by entering the URL for the Marvel Enterprise Portal Server. There are a few differences in operation between the two clients..

Marvel Enterprise Portal can be used with either a desktop or a browser client. For a desktop client, the application software is installed on your system and you start it as you would any other application; for a browser client, the application software is installed on the web server that is integrated with the Marvel Enterprise Portal Server and users log on from their browsers. The software is downloaded to your system the first time you log on to Marvel Enterprise Portal, and thereafter only when software updates are available.

Portal toolbar

Marvel Enterprise Portal functionality is the same for both types of clients except for the  **Back**,  **Forward**,  **New Window**, and  **Stop** tools, which are not on the portal toolbar because they are already available browser toolbar. As well, keyboard shortcuts also used by Internet Explorer such as F1 for Help and Ctrl+H for

the History Configuration window are not available in browser mode.

Workspaces have URLs

When you are logged on to the Marvel® Enterprise Portal Server through your browser, the address bar displays a URL for each workspace. You can log on and open to the workspace of your choice by adding the workspace URL to the logon URL. You can also send the URL in an email, include it in a hypertext link in an HTML page or other document, or bookmark it.

Tabbed workspaces

Every workspace has properties that control how it accessed and displayed. One of the options enables you to open the workspace in a new window instead of replacing the previous workspace in the same window. For browsers that are enabled for tabbed web pages, the browser client uses those settings and opens the workspace in a new tab.

Launch in context and with single sign-on

You can launch products in context, such as to the IBM Marvel Application Dependency Discovery Manager from the browser client. If your environment and user ID are configured for single sign-on, you do not need to re-authenticate as you launch into other applications.

Custom banner

The browser client has a banner image and text that you can customize for your organization.



Note: As an alternative to the browser client, you can use IBM Web Start for Java to download the Java Web Start client from the Marvel Enterprise Portal Server.

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
 -  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 2: 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	     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.

Predefined Workspaces, Situations, and More

Every agent is designed to monitor specific attributes of an operating system or other type of software. With these attributes, come definitions for use with the Marvel Enterprise Portal functions.

Use the definitions that have been designed for your product to begin monitoring and visualizing data immediately. Some definitions are ready to use; others are dormant until activated:

Workspaces

The workspaces that open when you click a Navigator item or select from the  Workspace Gallery, are predefined. They provide visual feedback of real-time values from managed systems, and historical values when historical data collection has been configured. They provide a starting point for designing your own workspaces.


Queries

The predefined workspaces are populated with data gathered as a result of queries, which are also predefined. Creating your own queries from these predefined queries enables you to add or remove attributes, apply a sort order, and pre-filter the data to keep data retrieval at a manageable level and to enable you to more easily see data of interest.

Take action commands

Some agents have predefined take action commands, such as the Windows OS agent Start Service and Stop Service commands. They are available for selection and they provide examples of the kinds of actions that you might want to define for maintaining managed systems.

Situations

The tests for conditions that you want to be alerted for are available in the predefined situations. To avoid an overwhelming number of events opening in a newly managed environment and, conversely to avoid missing important events because the comparison criteria was set too low, many of the predefined situations for an agent are not set to start automatically. They remain stopped until you either start them manually or set them to ☒ **Run at startup**. A good way to find out which situations are set to run at startup and which ones are not, is to filter the Situation editor tree with  Show Situations, which is available when the Situation editor is opened from the Navigator pop-up menu. As agents report monitoring data, and especially when that data is being collected and stored in a Tivoli Data Warehouse, you can better determine the values and circumstances that are worthy of an alert, such as high CPU activity on a transaction server at peak times.

Policies

The predefined policies that are available with some products are not set to start automatically. This is primarily because policies automate activities, as described in the policy workflow.

Managed system groups

The Tivoli Enterprise Monitoring Server and every IBM Tivoli Monitoring product has at least one predefined managed system group, indicated by an asterisk at the beginning of the list name, such as *NT_SYSTEM for the Windows OS agent. When you assign one of these managed system groups to a situation, policy, historical collection configuration, or custom Navigator, all managed systems with that agent installed are selected.

Navigator views

Some products have custom Navigator views for access to special features.

Related concepts


[Using Workspaces](#)

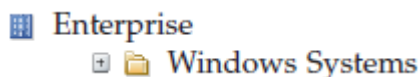
Marvel Enterprise Portal Tour

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

Navigator

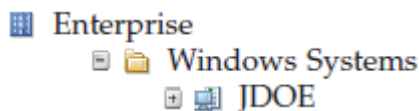
The Navigator Physical view shows the physical hierarchy of your network, with *enterprise* at the top, followed by the *operating platform*, and so on. Have a look at the levels of the Navigator.

1. Click  to open the operating platform level (Linux Systems, UNIX Systems, Windows Systems, or z/OS Systems).

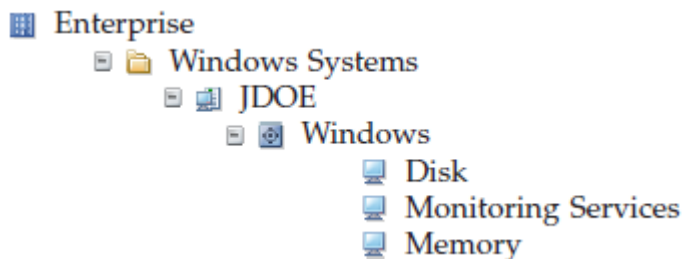




Opening a level in the Navigator reveals the next level in that branch.

2. Open the operating platform level to see the names for the *systems* running on that platform.



3. Open any system to see the monitoring *agents* installed on that system for monitoring applications and resources, and, below agents, the elements, or *attributes*, for which the agent can collect data for reporting and testing.





 Expand and  Collapse enable you to open and close levels in the Navigator without selecting an item.




Tip: You can close the tree entirely by double-clicking the Enterprise item. To expand the tree, double-click again.


Workspaces

Every item in the Navigator has a default workspace that opens when you select it. Multiple workspaces can also be accessed from a single navigator item. After you log into the Marvel Enterprise Portal Server, the Marvel Enterprise Portal window opens. The top item in the Navigator,  Enterprise, is selected and its workspace is displayed.

- Select another Navigator item by clicking the  icon for the operating platform or the name.





The workspace for the operating platform you selected replaces the one that was previously displayed. The workspace displayed when you click a Navigator item is the *default workspace* for that item. Your IBM Marvel Monitoring product might come with multiple workspaces for some items, and you can create additional workspaces of your own.

- Click  Workspace gallery to see thumbnail graphics of all the workspaces that you can open for this Navigator item.


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  check mark by 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.

Together, the Navigator and workspaces show the facets of your Marvel managed enterprise from the highest level to the most detailed.

Views

Marvel Enterprise Portal offers many different views that you can add to your workspaces. The view title bar has buttons for creating another view by splitting the view  horizontally or  vertically, for  maximizing the view, and for  deleting the view.

To add a different view complete the following steps:


1. Select a view, then click  **Split Horizontally**.

This tool divides the view space in half horizontally to create a copy of the original view.



Note: If you cannot split a view and the tools for the notepad and other views are disabled (dimmed), your user ID does not have Workspace Author Mode permission.

2. Click your desired view type from the toolbar.

For example, click  Notepad

When you click a view tool, the mouse pointer changes to an icon of the chosen view type (hand icon on Linux).

3. Click inside the view pane.

The new view replaces the previous view.

Rearrange Views

To rearrange views complete the following steps:

1. Drag the title bar of one view and drop over another view.

While dragging the title bar, you should see a semi-transparent copy of the view.

2. Release the mouse button to switch the views.






Types of Views


Following are types of views available in Marvel Portal Window.

Query-based views

The table and chart views are the first step to getting meaningful information from the data being collected.


When you understand what values and states are causing problems, you can refine your views to show what is important. For attribute groups with attributes that can be expressed meaningfully as objects and show their relationship to other attributes in the same group, there is also the *Relational Table Based* topology view.


 The table view and     chart views display data the monitoring agents have gathered from the systems where they are running.


 The topology shows the arrangement of monitored components associated with its Navigator item.


Event views


The message log view and console views (universal message, situation event, common event, and Marvel Enterprise Console) update automatically to show new events as they arrive and changes in event status as they occur. The graphic view gives you a pictorial alternative to the Navigator for indicating alerts.


 The message log view shows the status of events that have been opened on the entire monitored enterprise and can include up to 100 row entries at a time.

 The universal message console view displays situation and policy activities as they happen, such as when a situation has been created or deleted or a policy has been activated.

 The graphic view places Navigator items and their alerts as icons on a map or a picture to represent your monitored environment.


 The situation event console view shows the status of situation events that have been opened on this branch of the Navigator. The console has a toolbar for quick filtering and a menu for responding to alerts.


 The common event console view integrates events from multiple event repositories: Marvel Enterprise Monitoring Server, Marvel Enterprise Console event server, and Netcool/OMNIbus ObjectServer. This view has the same functional capabilities as the situation event console view, such as the ability to sort and filter events.


 The Marvel Enterprise Console event viewer can integrate events from the Marvel Enterprise Console Server with those from the Marvel Enterprise Monitoring Server.


Other views


Marvel Enterprise Portal workspaces can also have any of the following specialized views:

 The notepad view opens a simple text editor for writing notes or other text that can be saved with the workspace.

 The take action view enables you to send a command to a managed system.

 The terminal view starts a 3270 or 5250 session for working with z/OS applications, or a Telnet session for working with the TCP/IP network.

 The browser view opens the integrated browser for accessing web pages.

 The graphic view places Navigator items and their alerts as icons on a map or a picture to represent your monitored environment. Alerts show on these icons just as they do in the Navigator.

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



Warning



Harmless



Informational



Unknown

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,

1. 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.
-  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.

All types of views have a  **Style** tab, with different options for the type of view. The table, charts, and topology views have  **Query** and  **Filters** tabs, table and topology have a  **Thresholds** tab, and terminal emulators have a  **Configuration** tab. Whenever you want to change the data elements that display for a chart or table or change the styling of a view, go to the Properties editor.

3. Click **Cancel** to close the Properties editor.

Conclusion

You now know the basics on the main functionality of the Tivoli Enterprise Portal. For practice, try splitting this view and apply a  Browser view.

Troubleshooting

This list provides some general debugging information.

1. When you start the Marvel Run Portal be sure that you direct the output into a local log file where you can examine it. The log file often contains useful information. Examine it when you have a problem, and be prepared to answer questions about it when you talk to a support person.
2. If the Marvel Run Portal appears to have started correctly (which you can determine from the log file), try running `lmstat -a` and `lmdiag` to see if that program has the same problem as your application.
3. If your application is version 1.0, you can use the `Marvel_DIAGNOSTICS` environment variable. Set `Marvel_DIAGNOSTICS` to 1, 2, or 3. A setting of 3 gives more information than 2, 2 gives more information than 1 (in particular, the feature name that was denied).
4. When you talk to a support person, be prepared with answers to the following questions:
 - What kind of system is your license server running on?
 - What version of the operating system?
 - What system and operating system is the application running on?
 - What version of Marvel Run Portal is in use?
 - What error or warning messages appear in the log file?
 - Did the server start correctly? Look for a message such as: `server xyz started for: feature1 feature2`
 - What is the output from running `lmstat -a`?
 - Are you using a combined license file or separate license files?

- Are you using three-server redundancy (i.e., there are multiple SERVER lines in your license file)?

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