IBM Tivoli Monitoring for Virtual Environments Agent for VMware VI 7.3 Fix Pack 5

Troubleshooting Guide

Note

Before using this information and the product it supports, read the information in “Notices” on page 47.

This edition applies to agent version 07.30.05 of IBM® Tivoli® Monitoring for Virtual Environments Agent for VMware VI (product number 5724-L92) and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Chapter 1. Troubleshooting basics

To troubleshoot a problem, gather information about the problem for IBM Software Support, use logging data, and consult the lists of identified problems and workarounds.

For general troubleshooting information, see the *IBM Tivoli Monitoring Troubleshooting Guide*. For other problem-solving options, see Chapter 4, “Support information,” on page 41.

You can resolve some problems by ensuring that your system matches the system requirements. The most up-to-date requirements are in the Software product compatibility reports (http://publib.boulder.ibm.com/infocenter/prodguid/v1r0/clarity/index.html).

The following activities can help you find a solution to the problem you are having:

Gathering product information for IBM Software Support

Before contacting IBM Software Support about a problem you are experiencing with this product, gather the information shown in Table 1 on page 1.

Table 1. Information to gather before contacting IBM Software Support

Information type	**Description**
Log files	Collect trace log files from failing systems. Most logs are located in a logs subdirectory on the host computer. See “Principal trace log files” on page 4 for lists of all trace log files and their locations. For general information about the IBM Tivoli Monitoring environment, see the *Tivoli Enterprise Portal User's Guide*.
VMware Virtual Infrastructure information	Version number and patch level
Operating system	Operating system version number and patch level
Messages	Messages and other information displayed on the screen
Version numbers for IBM Tivoli Monitoring	Version number of the following members of the monitoring environment: • IBM Tivoli Monitoring. Also provide the patch level, if available. • VMware VI agent
Screen captures	Screen captures of incorrect output, if any
(UNIX systems only) Core dump files	If the system stops on UNIX systems, collect the core dump file from the *install_dir*/bin directory, where *install_dir* is the directory where you installed the monitoring agent.

You can use the pdcollect tool to collect the most commonly used information from a system. This tool gathers log files, configuration information, version information, and other data. For more information about using this tool, see "pdcollect tool" in the *IBM Tivoli Monitoring Troubleshooting Guide*.

For information about working with IBM Software Support, see IBM Support Portal Service Requests and PMRs (http://www.ibm.com/support/entry/portal/Open_service_request/Software/Software_support_(general)).

Using logging

Logging is the primary troubleshooting feature in the monitoring agent. *Logging* refers to the text messages and trace data that is generated by the agent. Messages and trace data are sent to a file.

Trace data captures transient information about the current operating environment when a component or application fails to operate as designed. IBM Software Support personnel use the captured trace information to determine the source of an error or unexpected condition. See Chapter 2, "Trace logging," on page 3 for more information.

Consulting the lists of identified problems and workarounds

Known problems are organized into types such as those in the following list to make them easier to locate:

- Installation, configuration, uninstallation
- Remote deployment
- Agent
- Workspace
- Situation
- Take Action commands
- Discovery Library Adapter
- Tivoli Common Reporting

See Chapter 3, "Problems and workarounds," on page 15 for information about symptoms and detailed workarounds for these types of problems.

For general troubleshooting information, see the *IBM Tivoli Monitoring Troubleshooting Guide*.

Chapter 2. Trace logging

Trace logs are used to capture information about the operating environment when component software fails to operate as designed.

The principal log type is the RAS (Reliability, Availability, and Serviceability) trace log. These logs are in the English language only. The RAS trace log mechanism is available for all components of IBM Tivoli Monitoring. Most logs are in a logs subdirectory on the host computer. See the following information to learn how to configure and use trace logging:

Note: The documentation refers to the RAS facility in IBM Tivoli Monitoring as "RAS1."

IBM Software Support personnel use the information captured by trace logging to trace a problem to its source or to determine why an error occurred. All components in the IBM Tivoli Monitoring environment have a default tracing level. The tracing level can be changed on a per-component level to adjust the type of trace information collected, the degree of trace detail, the number of trace logs to be kept, and the amount of disk space used for tracing.

Overview of log file management

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Knowing the naming conventions for log files helps you to find the files.

Agent log file naming conventions

Table 2 on page 4 provides the names, locations, and descriptions of IBM Tivoli Monitoring general RAS1 log files. The log file names for the VMware VI agent adhere to the following naming convention:

Windows systems

hostname_productcode_instance-name_program_HEXtimestamp-nn.log

Linux® and UNIX systems

hostname_productcode_instance-name_program_HEXtimestamp-nn.log

Where:

hostname
Host name of the computer where the monitoring component is running.

productcode
Two-character product code. For IBM Tivoli Monitoring for Virtual Environments Agent for VMware VI, the product code is vm.

instance-name
Instance name of the agent.

program
Name of the program being run.

HEXtimestamp
Hexadecimal time stamp representing the time at which the program started.

nn
Rolling log suffix.

Principal trace log files

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Trace log files are located on various systems.

Table 2 on page 4 contains locations, file names, and descriptions of trace logs that can help determine the source of problems with agents.

Table 2. Trace log files for troubleshooting agents

System where log is located	File name and path	Description
On the Tivoli Enterprise Monitoring Server	• **Windows:** The `IBM Tivoli Monitoring timestamp.log` file in the `install_dir\InstallITM` path • **UNIX:** The `candle_installation.log` file in the `install_dir/logs` path • **Linux:** The `candle_installation.log` file in the `install_dir/logs` path	Provides details about products that are installed. **Note:** Trace logging is enabled by default. A configuration step is not required to enable this tracing.
On the Tivoli Enterprise Monitoring Server	The `Warehouse_Configuration.log` file is in the following location on Windows systems: `install_dir\InstallITM`	Provides details about the configuration of data warehousing for historical reporting.

Table 2. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description

On the Tivoli Enterprise Monitoring Server	The name of the RAS log file is as follows:
	• **Windows:**
	`install_dir\logs\hostname_ms_timestamp-nn.log`
	• **UNIX:**
	`install_dir/logs/hostname_ms_timestamp-nn.log`
	• **Linux:**
	`install_dir/logs/hostname_ms_timestamp-nn.log`
	Note: File names for RAS1 logs include a hexadecimal time stamp.
	Also on UNIX systems, a log with a decimal time stamp is provided:
	`hostname_vm_timestamp.log`
	and
	`hostname_vm_timestamp.pidnnnnn`
	in the
	`install_dir/logs`
	path, where *nnnnn* is the process ID number.
		Traces activity on the monitoring server.

Table 2. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description

On the Tivoli Enterprise Portal Server	The name of the RAS log file is as follows:
	• **Windows:**
	`install_dir\logs\hostname_cq_HEXtimestamp-nn.log`
	• **UNIX:**
	`install_dir/logs/hostname_cq_HEXtimestamp-nn.log`
	• **Linux:**
	`install_dir /logs/hostname_cq_HEXtimestamp-nn.log`
	Note: File names for RAS1 logs include a hexadecimal time stamp.
	Also on UNIX systems, a log with a decimal time stamp is provided:
	`hostname_vm_timestamp.log`
	and
	`hostname_vm_timestamp.pidnnnnn`
	in the
	`install_dir/logs`
	path, where *nnnnn* is the process ID number.
		Traces activity on the portal server.

On the Tivoli Enterprise Portal Server	The `teps_odbc.log` file is located in the following path:
	• **Windows:**
	`install_dir\InstallITM`
	• **UNIX:**
	`install_dir/logs`
	• **Linux:**
	`install_dir/logs`
		When you enable historical reporting, this log file traces the status of the warehouse proxy agent.

Table 2. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description

On the computer that hosts the monitoring agent	The RAS1 log files are as follows:
	• **VMware VI agent log:**
	`hostname_vm_instance_HEXtimestamp-nn.log`
	.
	• **VMware VI Data Provider log:**
	`kvm_data_provider_instance_n.log`
	.
		Traces activity of the monitoring agent.

On the computer that hosts the monitoring agent	The agent operations log files are as follows: *instance_hostname_VM*.LG0 is the current log created when the agent is started. *instance_hostname_VM*.LG1 is the backup of the previous log. These logs are in the following directory depending on the operating system that you are using: • **Windows:** *install_dir*\tmaitm6\logs • **Linux:** *install_dir*/logs • **UNIX:** *install_dir*/logs	Shows whether the agent could connect to the monitoring server. Shows which situations are started and stopped, and shows other events while the agent is running. A new version of this file is generated every time the agent is restarted. IBM Tivoli Monitoring generates one backup copy of the *.LG0 file with the tag .LG1. View the .LG1 tag to learn the following details regarding the *previous* monitoring session: • Status of connectivity with the monitoring server • Situations that were running • The success or failure status of Take Action commands
On the computer that hosts the monitoring agent	The Take Action command log files are as follows: • `host_vm_instance_takeactioncommand.log`	Traces activity each time a Take Action command runs. For example, when a hypothetical **start_command** Take Action command runs, IBM Tivoli Monitoring generates a start_command.log file.

Table 2. Trace log files for troubleshooting agents (continued)		
System where log is located	**File name and path**	**Description**

On the computer that hosts the monitoring agent	The Take Action command log files are as follows:
	• `kvm_data_provider_actions_instance_n.log`
	The logs are in the following directories:
	• **Windows**:
	`install_dir\tmaitm6\logs`
	• **UNIX**:
	`install_dir/logs`
	• **Linux**:
	`install_dir/logs`
		Traces activity each time a Take Action command runs. All predefined Take Action commands are logged into this file.

Definitions of variables: • *timestamp* is a time stamp with a format that includes year (y), month (m), day (d), hour (h), and minute (m), as follows: **yyyymmdd hhmm** • *HEXtimestamp* is a hexadecimal representation of the time at which the process was started. • *install_dir* represents the directory path where you installed the IBM Tivoli Monitoring component. *install_dir* can represent a path on the computer that hosts the monitoring system, the monitoring agent, or the portal. • *instance* refers to the name of the database instance that you are monitoring. • *instance_name* refers to the name of the agent instance. • *hostname* refers to the name of the computer on which the IBM Tivoli Monitoringcomponent runs. • *nn* represents the circular sequence in which logs are rotated. this value includes a range from 1 - 5, by default. The first is always retained because it includes configuration parameters.		

For more information about the complete set of trace logs that are maintained on the monitoring server, see the *IBM Tivoli Monitoring Installation and Setup Guide*.

Examples: Using trace logs

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You can open trace logs in a text editor to learn some basic facts about your IBM Tivoli Monitoring environment.

IBM Software Support applies specialized knowledge to analyze trace logs to determine the source of problems. The following examples are from the Tivoli Enterprise Monitoring Server log.

Example one

This excerpt shows the typical log for a failed connection between a monitoring agent and a monitoring server with the host name **server1a**:

```
(Thursday, August 11, 2005, 08:21:30-{94C}kdcl0cl.c,105,"KDCL0_ClientLookup")
status=1c020006,
 "location server unavailable", ncs/KDC1_STC_SERVER_UNAVAILABLE
(Thursday, August 11, 2005, 08:21:35-{94C}kraarreg.cpp,1157,"LookupProxy") Unable to
connect to
 broker at ip.pipe:: status=0, "success", ncs/KDC1_STC_OK
(Thursday, August 11, 2005, 08:21:35-{94C}kraarreg.cpp,1402,"FindProxyUsingLocalLookup")
```

```
Unable
 to find running CMS on CT_CMSLIST <IP.PIPE:#server1a>
```

Example two

The following excerpts from the trace log *for the monitoring server* show the status of an agent, identified here as "Remote node." The name of the computer where the agent is running is **SERVER5B**:

```
(42C039F9.0000-6A4:kpxreqhb.cpp,649,"HeartbeatInserter") Remote node SERVER5B:VM is ON-LINE.
. . .
(42C3079B.0000-6A4:kpxreqhb.cpp,644,"HeartbeatInserter") Remote node SERVER5B:VM is OFF-
LINE.
```

See the following key points about the preceding excerpts:

- The monitoring server appends the two-character product code to the server name to form a unique name (for example, SERVER5B:vm) for this instance of the agent. By using this unique name, you can distinguish multiple monitoring products that might be running on **SERVER5B**.
- The log shows when the agent started (ON-LINE) and later stopped (OFF-LINE) in the environment.
- For the sake of brevity, an ellipsis (...) represents the series of trace log entries that were generated while the agent was running.
- Between the ON-LINE and OFF-LINE log entries, the agent was communicating with the monitoring server.
- The ON-LINE and OFF-LINE log entries are always available in the trace log. All trace levels that are described in “Setting RAS trace parameters by using the GUI” on page 10 provide these entries.

On Windows systems, you can use the following alternate method to view trace logs:

1. In the Windows **Start** menu, click **Program Files** > **IBM Tivoli Monitoring** > **Manage Tivoli Enterprise Monitoring Services**. The **Manage Tivoli Enterprise Monitoring Services** window is displayed.
2. Right-click a component and click **Advanced** > **View Trace Log** in the menu. For example, if you want to view the trace log for the agent, right-click the name of that agent in the window. You can also use the viewer to access remote logs.

   Note: The viewer converts time stamps in the logs to a format that is easier to read.

   Note: The kvmviclient log is not listed in the Manage Tivoli Enterprise Monitoring Services **View Trace Log** option. Each instance of the Monitoring Agent for VMware VI creates 2 log files:

   - The kvmagent log, *hostname*_vm_*instance*_HEXtimestamp-nn.log, shows in the Windows Manage Tivoli Enterprise Monitoring Services interface when you right-click on the Monitoring Agent for VMware VI instance and select **Advanced - View Trace Log**.
   - The kvmviclient log, *hostname*_vm_kvmviclient_HEXtimestamp-nn.log , is not listed. This log is created by the VMware VI custom data provider, and typically contains the most useful information.

RAS trace parameters

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Pinpoint a problem by setting detailed tracing of individual components of the monitoring agent and modules

See “Overview of log file management” on page 3 to ensure that you understand log rolling and can reference the correct log files when you manage log file generation.

Setting RAS trace parameters by using the GUI

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On Windows systems, you can use the graphical user interface to set trace options.

The IBM Tivoli Monitoring for Virtual Environments Agent for VMware VI uses RAS1 tracing and generates the logs described in Table 2 on page 4. The default RAS1 trace level is ERROR.

1. Open the **Manage Tivoli Enterprise Monitoring Services** window.
2. Select **Advanced** > **Edit Trace Parms**. The **Tivoli Enterprise Monitoring Server Trace Parameters** window is displayed.
3. Select a new trace setting in the pull-down menu in the **Enter RAS1 Filters** field or type a valid string.
   - General error tracing. KBB_RAS1=ERROR
   - Intensive error tracing. KBB_RAS1=ERROR (UNIT:kvm ALL)
   - Maximum error tracing. KBB_RAS1=ERROR (UNIT:kvm ALL) (UNIT:kra ALL)

   Note: As this example shows, you can set multiple RAS tracing options in a single statement.
4. Modify the value for Maximum Log Size Per File (MB) to change the log file size (changes LIMIT value).
5. Modify the value for Maximum Number of Log Files Per Session to change the number of log files per startup of a program (changes COUNT value).
6. Modify the value for Maximum Number of Log Files Total to change the number of log files for all startups of a program (changes MAXFILES value).
7. Optional: Click Y (Yes) in the **KDC_DEBUG Setting** menu to log information that can help you diagnose communications and connectivity problems between the monitoring agent and the monitoring server. The **KDC_DEBUG** setting and the **Maximum error tracing** setting can generate a large amount of trace logging. Use these settings only temporarily, while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.
8. Click **OK**. You see a message reporting a restart of the monitoring agent so that your changes take effect.

Monitor the size of the `logs` directory. Default behavior can generate a total of 45 - 60 MB for each agent that is running on a computer. For example, each database instance that you monitor can generate 45 - 60 MB of log data. See the "Procedure" section to learn how to adjust file size and numbers of log files to prevent logging activity from occupying too much disk space.

Regularly prune log files other than the RAS1 log files in the `logs` directory. Unlike the RAS1 log files that are pruned automatically, other log types can grow indefinitely, for example, the logs in Table 2 on page 4 that include a process ID number (PID).

Use collector trace logs as an additional source of troubleshooting information.

Note: The **KDC_DEBUG** setting and the **Maximum error tracing** setting can generate a large amount of trace logging. Use these settings only temporarily while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.

Manually setting RAS trace parameters

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You can manually edit the RAS1 trace logging parameters.

Agents use RAS1 tracing and generate the logs described in Table 2 on page 4. The default RAS1 trace level is ERROR.

1. Open the trace options file:
   - **Windows systems:**

     install_dir\tmaitm6\KVMENV_*instance name*
   - **UNIX systems:**

install_dir /config/vm_*instance name*.config

2. Edit the line that begins with **KBB_RAS1=** to set trace logging preferences. For example, if you want detailed trace logging, set the **Maximum Tracing** option: KBB_RAS1=ERROR (UNIT:kvm ALL) (UNIT:kra ALL)
3. Edit the line that begins with **KBB_RAS1_LOG=** to manage the generation of log files:
   - **MAXFILES**: The total number of files that are to be kept for all startups of a specific program. When this value is exceeded, the oldest log files are discarded. The default value is 9.
   - **LIMIT**: The maximum size, in megabytes (MB) of a RAS1 log file. The default value is 5.
   - IBM Software Support might guide you to modify the following parameters:
     - **COUNT**: The number of log files to keep in the rolling cycle of one program startup. The default is 3.
     - **PRESERVE**: The number of files that are not to be reused in the rolling cycle of one program startup. The default value is 1.

     Note: The **KBB_RAS1_LOG** parameter also provides for the specification of the log file directory, log file name, and the inventory control file directory and name. Do not modify these values or log information can be lost.
4. Restart the monitoring agent so that your changes take effect.

Monitor the size of the logs directory. Default behavior can generate a total of 45 - 60 MB for each agent that is running on a computer. For example, each database instance that you monitor can generate 45 - 60 MB of log data. See the "Procedure" section to learn how to adjust file size and numbers of log files to prevent logging activity from occupying too much disk space.

Regularly prune log files other than the RAS1 log files in the logs directory. Unlike the RAS1 log files that are pruned automatically, other log types can grow indefinitely, for example, the logs in Table 2 on page 4 that include a process ID number (PID).

Use collector trace logs as an additional source of troubleshooting information.

Note: The **KDC_DEBUG** setting and the **Maximum error tracing** setting can generate a large amount of trace logging. Use these settings only temporarily while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.

Dynamic modification of trace settings

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You can dynamically modify the trace settings for an IBM Tivoli Monitoring component, such as, Tivoli Enterprise Monitoring Server, Tivoli Enterprise Portal Server, most monitoring agents, and other components. You can access these components, except for a few monitoring agents, from the tracing utility.

Dynamic modification of the trace settings is the most efficient method, because you can do it without restarting the component. Settings take effect immediately. Modifications by this method are not persistent.

Note: When the component is restarted, the trace settings are read again from the .env file. Dynamically modifying these settings does not change the settings in the .env files. To modify these trace settings permanently, modify them in the .env files.

ras1

Run this command to modify the trace settings for a Tivoli Monitoring component.

The syntax is as follows:

```
ras1 set|list (UNIT|COMP: class_name ANY|ALL|Detail|ERROR|Flow|INPUT|Metrics|OUTPUT|STATE)
{(UNIT|COMP: class_name ANY|ALL|Detail|ERROR|Flow|INPUT|Metrics|OUTPUT|STATE)}
```

You can specify more than one component class to which to apply the trace settings.

Command options

set
Turns on or off tracing depending upon the value of its parameters. If the parameter is **ANY**, it turns it off. All other parameters turn on tracing based on the specified type or level.

list
Displays the default level and type of tracing that is set by default.

Parameters

The parameters that determine the component classes to which to apply the trace settings are as follows:

COMP: ***class_name***
Modifies the trace setting for the name of the component class, as specified by *class_name* , for example, `COMP:KDH`. The output contains trace for the specified class.

UNIT: ***class_name***
Modifies the trace setting for any unit that starts with the specified *class_name* value, for example, `UNIT: kra`. The output contains trace for any unit that begins with the specified filter pattern.

The parameters that determine the trace level and type are as follows:

ALL
Displays all trace levels, including every trace point defined for the component. This setting might result in a large amount of trace, so specify other parameters to exclude unwanted trace. You might require the **ALL** parameter to isolate a problem, which is the equivalent to setting "`Error Detail Flow State Input Output Metrics`".

ANY
Turns off tracing.

Detail
Displays detailed information about each function.

When entered with the `list` option, the trace is tagged with `Det`.

ERROR
Logs internal error conditions.

When entered with the `list` option, the trace is tagged with ER. The output can also be tagged with EVERYE+EVERYU+ER.

Flow
Displays control flow data for each function entry and exit.

When entered with the `list` option, the trace is tagged with `Fl`.

INPUT
Displays input data for each function.

When entered with the `list` option, the trace is tagged with `IN`.

Metrics
Displays metrics on each function.

When entered with the `list` option, the trace is tagged with `ME`.

OUTPUT
Displays output data for each function.

When entered with the `list` option, the trace is tagged with `OUT`.

State
Displays the status for each function.

When entered with the `list` option, the trace is tagged with `St`.

Example

If you enter `ras1 set (COMP:KDH ALL) (COMP:ACF1 ALL) (COMP:KDE ALL)`, the trace utility turns on all levels of tracing for all the files and functions for which KDH, ACF1, and KDE are the classes.

```
kbbcre1.c, 400, May 29 2007, 12:54:43, 1.1, *
kbbcrn1.c, 400, May 29 2007, 12:54:42, 1.1, *
kdhb1de.c, 400, May 29 2007, 12:59:34, 1.1, KDH
kdh0med.c, 400, May 29 2007, 12:59:24, 1.1, KDH
kdhsrej.c, 400, May 29 2007, 13:00:06, 1.5, KDH
kdhb1fh.c, 400, May 29 2007, 12:59:33, 1.1, KDH
kdhb1oe.c, 400, May 29 2007, 12:59:38, 1.2, KDH
kdhs1ns.c, 400, May 29 2007, 13:00:08, 1.3, KDH
kbbacdl.c, 400, May 29 2007, 12:54:27, 1.2, ACF1
kbbaclc.c, 400, May 29 2007, 12:54:27, 1.4, ACF1
kbbac1i.c, 400, May 29 2007, 12:54:28, 1.11, ACF1
vkdhsfcn.c, 400, May 29 2007, 13:00:11, 1.1, KDH
kdhserq.c, 400, May 29 2007, 12:59:53, 1.1, KDH
kdhb1pr.c, 400, May 29 2007, 12:59:39, 1.1, KDH
kdhsgnh.c, 400, May 29 2007, 12:59:49, 1.1, KDH
kdh0uts.c, 400, May 29 2007, 12:59:23, 1.1, KDH
kdhsrsp.c, 400, May 29 2007, 13:00:13, 1.2, KDH
kdhs1rp.c, 400, May 29 2007, 13:00:12, 1.1, KDH
kdhscsv.c, 400, May 29 2007, 12:59:58, 1.9, KDH
kdebbac.c, 400, May 29 2007, 12:56:50, 1.10, KDE
...
```

Setting trace parameters for the Tivoli Enterprise Console server

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In addition to the trace information captured by IBM Tivoli Monitoring, you can also collect additional trace information for the Tivoli Enterprise Console components that gather event server metrics.

To collect this information, modify the `.tec_diag_config` file on the Tivoli Enterprise Console event server. Use the steps in the following procedure to modify the event server trace parameters.

1. Open the `$BINDIR/TME/TEC/.tec_diag_config` file in an ASCII editor.
2. Locate the entries that configure trace logging for the agent components on the event server. Two entries are included, one for `tec_reception` and one for `tec_rule`:

```
# to debug Agent Utils
tec_reception Agent_Utils  error   /tmp/tec_reception
SP
# to debug Agent Utils
tec_rule Agent_Utils   error   /tmp/tec_rule
```

3. To gather additional trace information, modify these entries to specify a trace level of `trace2`:

```
# to debug Agent Utils
tec_reception Agent_Utils   trace2  /tmp/tec_reception
SP
# to debug Agent Utils
tec_rule Agent_Utils       trace2  /tmp/tec_rule
```

4. In addition, modify the `Highest_level` entries for `tec_rule` and `tec_reception`:

```
tec_reception Highest_level  trace2
SP
tec_rule Highest_level trace2
```

Chapter 3. Problems and workarounds

The known problems and workarounds are organized into types of problems that might occur with an agent, for example installation and configuration problems and workspace problems.

You can resolve some problems by ensuring that your system matches system requirements. The most up-to-date requirements are in the Software product compatibility reports (http://publib.boulder.ibm.com/infocenter/prodguid/v1r0/clarity/index.html).

For general troubleshooting information, see the *IBM Tivoli Monitoring Troubleshooting Guide*.

Installation and configuration troubleshooting

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Problems can occur during installation, configuration, and uninstallation of the agent.

See Table 3 on page 15 and Table 4 on page 18 for information about these problems and solutions.

Table 3. Problems and solutions for installation and configuration

Problem	Solution
(*UNIX only*) During a command-line installation, you choose to install a component that is currently installed, and you see the following warning: `WARNING - you are about to install the SAME version of "component_name"` where *component_name* is the name of the component that you are attempting to install. **Note:** This problem affects UNIX command-line installations. If you monitor only Windows environments, you see this problem if you choose to install a product component (for example, a monitoring server) on a UNIX system.	You must exit and restart the installation process. You cannot return to the list where you selected components to install. When you run the installer again, do not attempt to install any component that is currently installed.
Diagnosing problems with product browse settings (Windows systems only).	When you have problems with browse settings, complete the following steps: 1. Click **Start** > **Programs** > **IBM Tivoli Monitoring** > **Manage Tivoli Enterprise Monitoring Services**. The **Manage Tivoli Enterprise Monitoring Services** window is displayed. 2. Right-click the Windows agent and select **Browse Settings**. A text window is displayed. 3. Click **Save As** and save the information in the text file. If requested, you can forward this file to IBM Software Support for analysis.

Table 3. Problems and solutions for installation and configuration (continued)

Problem	Solution
A message similar to "`Unable to find running CMS on CT_CMSLIST`" in the log file is displayed.	If a message similar to "`Unable to find running CMS on CT_CMSLIST`" is displayed in the log file, the agent cannot connect to the monitoring server. Confirm the following points: • Do multiple network interface cards (NICs) exist on the system? • If multiple NICs exist on the system, find out which one is configured for the monitoring server. Ensure that you specify the correct hostname and port settings for communication in the IBM Tivoli Monitoring environment.
Data source certificate is lost after upgrading from version 6.1 of the VMware agent to a later version.	Certificates in configured data sources must be added again after upgrading to display data in the Tivoli Enterprise Portal.
While installing the VMware agent in silent mode where a *candle_home* directory exists, the InstallShield application (installer) ignores the path of the installation directory mentioned in the response file (Windows systems only).	If any IBM Tivoli Monitoring component is already installed on a computer using Windows, all subsequent IBM Tivoli Monitoring installations go into the existing *candle_home* directory, regardless of what you specify.
Installation on RHEL Linux 64-bit systems uses the **`install.sh`** command script. Running this script fails with a `runGSkit failure: Return error code: 99`.	GSkit is called by **`install.sh`** and fails when runGSkit calls verifyInstall. Review the `<InstallDirectory>/logs/candle_installation.log` file and look for references to runGSkit. For example, output similar to the following might be present: `runGSkit: ----- Running command: /opt/IBM/ITM/li6243/gs/bin/ private_verifyinstall /opt/IBM/ITM/li6243/gs/bin/gsk7ver: error while loading shared libraries: libstdc++.so.5: cannot open shared object file: No such file or directory Error: Verify Failed Expected Details of gskit in /opt/IBM/ITM/li6243/gs runGSkit: return code from command is 99 runGSkit: ----- End of running command ----- runGSkit: error Return error code: 99 runGSkit: error GSKit check failure, script: /opt/IBM/ITM/li6243/gs/bin/ private_verifyinstall runGSkit: error li6243 - GSK check error, verifyInstall test failed` In the previous example, the 32-bit version of the `libstdc++.so.5` file is not present. This file comes from the `compat-libstdc++-33-3.2.3-XX.i686.rpm` package, which is not installed on 64-bit RHEL systems by default. When this package is installed, the problem no longer occurs.

Table 3. Problems and solutions for installation and configuration (continued)

Problem	Solution
After installation, the VMware VI agent instance fails to start. The following message is displayed in the agent log: `(4CF55620.003F-1:kbbssge.c,52,"BSS1_GetEnv") KBB_SIG1="-asyncoff -syncoff -dumpoff" (4CF55620.0040-1:signalmanager.cpp,170, "startManagerThread") Error starting signal manager thread. Return code = 11; Resource temporarily unavailable. Use the return code and message to investigate the failure. Agent is terminating`	The probable cause of the problem is the public domain Korn shell, **pdksh**. Uninstall the **pdksh** shell and install the **ksh** rpm that is included on the Linux installation media.
When you run the prerequisite checker on a computer with the Linux operating system where an instance of the VMware VI agent is running, the result displays the memory requirement for the VMware VI agent as 512 MB. **Note:** The expected memory requirement for the Linux operating system must be 0 MB when an instance of the VMware VI agent is running. The memory requirement for the Linux operating system must be 512 MB when the VMware VI agent instance is not running.	No solution is available for this problem.
By default, on Linux and Windows systems, the communication protocols, Transport Layer Security version 1.0 (TLSv1.0) and Transport Layer Security version 1.1 (TLSv1.1) are disabled by Java Runtime Environment (JRE).	To resolve this issue, complete the following steps on vCenter Server 6.0 and its earlier versions that use TLSv1.0 or TLSv1.1 protocols: 1. Go to the following directory: On a Linux system: `<CANDLE_HOME>/JRE/lx8266/lib/security` On a Windows system: `<CANDLE_HOME>\java\java80_x64\jre\lib\security` 2. Edit `java.security` file, and search for `jdk.tls.disabledAlgorithms` 3. Delete TLSv1.0 and TLSv1.1 from the list.

Table 4. General problems and solutions for uninstallation	
Problem	**Solution**
On Windows systems, uninstallation of IBM Tivoli Monitoring fails to uninstall the entire environment.	Be sure that you follow the general uninstallation process described in the *IBM Tivoli Monitoring Installation and Setup Guide*: 1. Remove Tivoli Enterprise Monitoring Server Application support by completing the following steps: a. Use Manage Tivoli Enterprise Monitoring Services. b. Select **Tivoli Enterprise Monitoring Server**. c. Right-click and select **Advanced**. d. Select **Remove TEMS application support**. e. Select the agent to remove its application support. 2. Uninstall the monitoring agents first, as in the following examples: • Uninstall a single monitoring agent for a specific database. -OR- • Uninstall all instances of a monitoring product, such as IBM Tivoli Monitoring for Databases. 3. Uninstall IBM Tivoli Monitoring.
The way to remove inactive managed systems (systems whose status is OFFLINE) from the Navigator tree in the portal is not obvious.	Use the following steps to remove, but not uninstall, an offline managed system from the Navigator tree: 1. Click the **Enterprise** icon in the Navigator tree. 2. Right-click, and then click **Workspace** > **Managed System Status**. 3. Right-click the offline managed system, and select **Clear offline entry**. To uninstall the monitoring agent, use the procedure described in the *IBM Tivoli Monitoring Installation and Setup Guide*.

Table 4. General problems and solutions for uninstallation (continued)

Problem	Solution
IBM Tivoli Monitoring might not be able to generate a unique name for monitoring components because of the truncation of names that the product automatically generates.	If the agent supports multiple instances, IBM Tivoli Monitoring automatically creates a name for each monitoring component by concatenating the subsystem name, hostname, and product code separated by colons (*subsystem_name*:*hostname*:KVM). **Note:** When you monitor a multinode system, such as a database, IBM Tivoli Monitoring adds a subsystem name to the concatenated name, typically a database instance name. The length of the name that IBM Tivoli Monitoring generates is limited to 32 characters. Truncation can result in multiple components having the same 32-character name. If this problem happens, shorten the *hostname* portion of the name as follows: 1. Open the configuration file for the monitoring agent, which is located in the following path: • **On Windows:** *install_dir*\tmaitm6\K*product_code*CMA.INI. For example, the product code for the Monitoring Agent for Windows OS is NT. The file name is `KNTCMA.INI`. • **On UNIX and Linux:** `itm_home/config/`*`product_code`*`.ini` and *`product_code`*`.config`. For example, the file names for the Monitoring Agent for UNIX OS is `ux.ini` and `ux.config`. 2. Find the line that begins with `CTIRA_HOSTNAME=`. 3. Type a new name for hostname that is a unique, shorter name for the host computer. The final concatenated name including the subsystem name, new hostname, and KVM, cannot be longer than 32 characters. **Note:** You must ensure that the resulting name is unique with respect to any existing monitoring component that was previously registered with the Tivoli Enterprise Monitoring Server. 4. Save the file. 5. Restart the agent.

Table 4. General problems and solutions for uninstallation (continued)	
Problem	**Solution**
When configuring multiple instances of the monitoring agent, multiple instances that have the same instance name and monitor the same ESX Server (directly or through a Virtual Center) do not have a unique ESX subnode name created. Only one of the instances is displayed in the Tivoli Enterprise Portal. For example: Instance ABC on Host1 monitors ESX1. Instance ABC on Host2 monitors the VC that Manages ESX1 Both instances have an ESX subnode called VM:ABC-ESX1:ESX.	During configuration of an instance, ensure that the instance name is unique. For example, include the hostname of the system in the instance name.
The software inventory tag for the agent on UNIX and Linux systems is not removed during uninstallation of the agent.	After uninstalling the agent, manually remove the file named *full name of agent*.cmptag from the $CANDLEHOME/properties/version/ directory.
When configuring multiple instances of the monitoring agent, multiple instances that have the same instance name and monitor the same ESX Server (directly or through a Virtual Center) do not have a unique ESX subnode name created. Only one of the instances is displayed in the Tivoli Enterprise Portal. For example: Instance ABC on Host1 monitors ESX1. Instance ABC on Host2 monitors the VC that Manages ESX1 Both instances have an ESX subnode called VM:ABC-ESX1:ESX.	During configuration of an instance, ensure that the instance name is unique. For example, include the hostname of the system in the instance name.
After installation, the VMware VI agent instance fails to start. The following message appears in the agent log: `(4CF55620.003F-1:kbbssge.c, 52,"BSS1_GetEnv") KBB_SIG1="-asyncoff -syncoff -dumpoff" (4CF55620.0040-1:signalmanager.cpp,170 , "startManagerThread") Error starting signal manager thread. Return code = 11; Resource temporarily unavailable. Use the return code and message to investigate the failure. Agent is terminating.`	The probable cause of the problem is the public domain Korn shell, **pdksh**. Uninstall the **pdksh** shell and install the **ksh** rpm that is included on the Linux installation media.

Remote deployment troubleshooting

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Problems can occur with remote deployment and removal of agent software using the Agent Remote Deploy process.

Table 5 on page 21 contains problems and solutions related to remote deployment.

Table 5. Remote deployment problems and solutions

Problem	Solution
While you are using the remote deployment feature to install the IBM Tivoli Monitoring for Virtual Environments Agent for VMware VI, an empty command window is displayed on the target computer. This problem occurs when the target of remote deployment is a Windows computer. (For more information about the remote deployment feature, see the *IBM Tivoli Monitoring Installation and Setup Guide*.)	Do not close or modify this window. It is part of the installation process and is dismissed automatically.
The removal of a monitoring agent fails when you use the remote removal process in the Tivoli Enterprise Portal desktop or browser.	This problem might occur when you attempt the remote removal process immediately after you restart the Tivoli Enterprise Monitoring Server. You must allow time for the monitoring agent to refresh its connection with the Tivoli Enterprise Monitoring Server before you begin the remote removal process.
Remote deployment reports success, but the VMware VI agent does not connect to the Tivoli Enterprise Monitoring Server. Also, the agent is deployed to the Tivoli Enterprise Monitoring Agent, but cannot be started locally. Remote deployment in silent mode fails if Instance Name contains illegal characters. No windows are displayed and success is claimed, but the remote instance does not start. Manually restarting the agent on the remote computer gives the following error: `"Unable to start service, see EventLog for information". No trace is generated.`	Instance names can be 1 – 32 characters in length, and only alphanumeric characters are allowed. (a-z A-Z and 0-9). No spaces, dashes, underscores, or other characters are allowed. Illegal characters in the instance name cause the deployed agent to be nonfunctional.
The remotely deployed VMware VI agent instance is deployed and the instance connects to the Tivoli Enterprise Monitoring Server, but no ESX server subnodes are discovered. The VMware VI agent is configured to communicate with the data source using SSL=YES.	The SSL signer certificate for the data source must be added to the `kvm.truststore` file on the agent system to be able to connect to the data source using SSL.
The remotely deployed VMware VI agent instance is deployed and the instance connects to the Tivoli Enterprise Monitoring Server, but no ESX server subnodes are discovered. The VMware VI agent is configured to communicate with the data source using SSL=NO.	By default, VMware Virtual Infrastructure only supports using the https (SSL) protocol for communication. See your VMware Virtual infrastructure documentation for details about Enabling http (non-SSL) access on the VMware Virtual Center or ESX Server.
No option is available to remotely deploy a second instance of the VMware VI agent to Windows systems through the portal.	Use the command line to remotely deploy a second instance of the VMware VI agent.

Table 5. Remote deployment problems and solutions (continued)	
Problem	**Solution**
Remote deployment of the agent to a 64-bit Windows server fails with a "time out" problem. Subsequent retries fail with a "file not transmitted" error.	The 64-bit Window OS agent was installed at the endpoint using the IBM Tivoli Monitoring local installer instead **createNode** command. If an **addSystem** command is used to deploy a 64-bit agent, the installation process loops continuously. This looping is caused by a perceived 32/64 bit compatibility (AC) component not being installed correctly. The install process running at the endpoint must be manually terminated. The remote deployment can now be executed by installing the AC component either locally or remotely. The agent can now be successfully deployed by running the **addSystem** command. If the agent installation is done locally, a pop-up menu is displayed indicating the 32/64 compatability component must be installed.

Agent troubleshooting

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A problem can occur with the agent after it has been installed.

Table 6 on page 22 contains problems and solutions that can occur with the agent after it is installed.

Table 6. Agent problems and solutions	
Problem	**Solution**
Log data accumulates too rapidly.	Check the RAS trace option settings, which are described in "Setting RAS trace parameters by using the GUI" on page 10. The trace option settings that you can set on the KBB_RAS1= and KDC_DEBUG= lines potentially generate large amounts of data.
The VMware VI agent connects to the Tivoli Enterprise Monitoring Server, and is displayed in the Tivoli Enterprise Portal navigation tree, but only the top-level nodes are displayed: VMware VI Agent, Monitored Servers, and Events. No Monitored Servers are discovered and no ESX Server subnodes are displayed in the navigation tree. No row is displayed in the Agent Events table stating that an SSL error occurred in the Connection subsystem.	Verify the environment variable: 1. Verify that the **KFW_TOPOLOGY_MUST_USE_FULL_NAME_AFFINITIES** environment variable has been added to the Tivoli Enterprise Portal Server Environment Configuration File and the Tivoli Enterprise Portal Server has been restarted. 2. See "Agent installation and configuration" in the *IBM Tivoli Monitoring for Virtual Environments Agent for VMware VI Installation and Configuration Guide*.

Table 6. Agent problems and solutions (continued)

Problem	Solution
The VMware VI agent connects to the Tivoli Enterprise Monitoring Server, and is displayed in the Tivoli Enterprise Portal navigation tree, but only the top-level nodes are displayed: VMware VI Agent, Monitored Servers, and Events. No Monitored Servers are discovered and no ESX Server subnodes are displayed in the navigation tree. A row is displayed in the Agent Events table stating that an SSL error occurred in Connection subsystem.	Verify SSL enablement: 1. Verify that the VMware data source certificates have been added to the certificate truststore for the agent. 2. Use the **keytool -list** command to see the certificates that have been added to the certificate truststore for the agent. Windows: `keytool -list -v -keystore %CANDLE_HOME%\tmaitm6\kvm.truststore -storepass ITMVMWAREVI` Linux: `keytool -list -v -keystore` *`install_dir`*`/li6263/vm/etc/kvm.truststore -storepass ITMVMWAREVI` For more information, see "Enabling SSL communication with VMware VI data sources" in the Installation and Configuration Guide for the VMware VI agent.
Informational log entries are displayed in the Virtual Center System Log (vxpd) when requesting data from the Virtual Center through the Virtual Infrastructure API.	These entries can be eliminated by selecting only log warnings and errors; otherwise, these information logs accumulate and can cause the log to wrap more than is typical.
The VMware VI agent is configured not to use SSL. No ESX Subnodes are discovered.	By default, VMware Virtual infrastructure only supports using the https (SSL) protocol for communication. See your VMware Virtual infrastructure documentation for details on Enabling http (non-SSL) access.
The log for the Monitoring Agent for VMware VI has many occurrences of "Received a NULL SNTEntry for subnode *ESX Managed System Name*. Skipping."	This message is an indication that data was received from a Virtual Center for an ESX Server that is no longer connected. You can eliminate this message by ensuring that ESX Servers that are no longer managed by a Virtual Center are "removed" from the Virtual Center.

Table 6. Agent problems and solutions (continued)	
Problem	**Solution**
The Tivoli Enterprise Portal suddenly shows ESX Servers as offline.	The Monitoring Agent for VMware VI might query the VMware Virtual Center or VMware ESX Server for large amounts of data, depending on the size of the VMware environment. Keep the number of Monitoring Agent for VMware VI instances that is configured for the same VMware Virtual Center or VMware ESX Server data source to a minimum, preferably one. Keeping this number to a minimum keeps the VMware servers from running out of connection resources. In large VMware environments, it might be necessary to increase the number of ephemeral ports available to the VMware Virtual Center application, and decrease the TIMED_WAIT value for TCP connections. KB 1003679 describes this problem that occurs with the 2.0.2 Virtual Center and has been fixed in the 2.5 version.
The Monitoring Agent for VMware VI cannot connect, or can no longer connect to an ESX Server data source.	The ESX Server hostd process might have gone down. If so, restart the hostd process using the **`service vmware-mgmt restart`** command. WMware SR 1102374551 describes this problem.
The IBM Systems Director workspace might not render IBM Systems Director web UI scrollbars correctly.	This problem occurs when a Systems Director dialog box is displayed in front of a base view and causes a dialog box (foreground) scroll bar to render on top of the base (background) scroll bar. In this scenario, the foreground scroll bar actions are passed to the background view. Moving the foreground dialog box so these scroll bars are no longer on top of each other resolves this situation. It might be necessary to resize the **Tivoli Enterprise Portal** window to ensure that the dialog box can be moved far enough.
The Monitoring Agent for VMware VI is not configured to connect to its data source using SSL. No ESX subnodes are discovered.	Check the RAS trace option settings, which are described in “Setting RAS trace parameters by using the GUI” on page 10. The trace options settings that you can set on the KBB_RAS1= and KDC_DEBUG= lines potentially generate large amounts of data. Setting the data provider log level to FINE, FINER, FINEST, or ALL can create this problem.
When using the **`itmcmd agent`** commands to start or stop this monitoring agent, you receive the following error message: `MKCIIN0201E Specified product is not configured.`	Include the command option **`-o`** to specify the instance to start or stop. The instance name must match the name used for configuring the agent. For example: `./itmcmd agent -o Test1 start` *`two-letter_product_code`* For more information about using the itmcmd commands, see the *IBM Tivoli Monitoring Command Reference*.

Table 6. Agent problems and solutions (continued)	
Problem	**Solution**
A configured and running instance of the monitoring agent is not displayed in the Tivoli Enterprise Portal, but other instances of the monitoring agent on the same system are displayed in the portal.	IBM Tivoli Monitoring products use Remote Procedure Call (RPC) to define and control product behavior. RPC is the mechanism that a client process uses to make a subroutine call (such as GetTimeOfDay or ShutdownServer) to a server process somewhere in the network. Tivoli processes can be configured to use TCP/UDP, TCP/IP, SNA, and SSL as the protocol (or delivery mechanism) for RPCs that you want. IP.PIPE is the name given to Tivoli TCP/IP protocol for RPCs. The RPCs are socket-based operations that use TCP/IP ports to form socket addresses. IP.PIPE implements virtual sockets and multiplexes all virtual socket traffic across a single physical TCP/IP port (visible from the **netstat** command). A Tivoli process derives the physical port for IP.PIPE communications based on the configured, well-known port for the hub Tivoli Enterprise Monitoring Server. (This well-known port or BASE_PORT is configured by using the 'PORT:' keyword on the **KDC_FAMILIES / KDE_TRANSPORT** environment variable and defaults to '1918'.) The physical port allocation method is defined as (BASE_PORT + 4096*N), where N=0 for a Tivoli Enterprise Monitoring Server process and N={1, 2, ..., 15} for another type of monitoring server process. Two architectural limits result as a consequence of the physical port allocation method: • No more than one Tivoli Enterprise Monitoring Server reporting to a specific Tivoli Enterprise Monitoring Server hub can be active on a system image. • No more than 15 IP.PIPE processes can be active on a single system image. A single system image can support any number of Tivoli Enterprise Monitoring Server processes (address spaces) if each Tivoli Enterprise Monitoring Server on that image reports to a different hub. By definition, one Tivoli Enterprise Monitoring Server hub is available per monitoring enterprise, so this architecture limit has been reduced to one Tivoli Enterprise Monitoring Server per system image.

Table 6. Agent problems and solutions (continued)	
Problem	**Solution**
Continued from previous row.	No more than 15 IP.PIPE processes or address spaces can be active on a single system image. With the first limit expressed earlier, this second limitation refers specifically to Tivoli Enterprise Monitoring Agent processes: no more than 15 agents per system image. This limitation can be circumvented (at current maintenance levels, IBM Tivoli Monitoring V6.1, Fix Pack 4 and later) if the Tivoli Enterprise Monitoring Agent process is configured to use the EPHEMERAL IP.PIPE process. (This process is IP.PIPE configured with the 'EPHEMERAL:Y' keyword in the **KDC_FAMILIES / KDE_TRANSPORT** environment variable). The number of ephemeral IP.PIPE connections per system image has no limitation. If ephemeral endpoints are used, the Warehouse Proxy agent is accessible from the Tivoli Enterprise Monitoring Server associated with the agents using ephemeral connections either by running the Warehouse Proxy agent on the same computer or by using the Firewall Gateway feature. (The Firewall Gateway feature relays the Warehouse Proxy agent connection from the Tivoli Enterprise Monitoring Server computer to the Warehouse Proxy agent computer if the Warehouse Proxy agent cannot coexist on the same computer.)
I cannot find my queries.	Agents that include subnodes display their queries within the element in the Query Editor list that represents the location of the attribute group. The queries are most often found under the name of the subnode, not the name of the agent.
No data is available on the Tivoli Enterprise Portal. The Java™ data provider stopped responding and you observe the following details: • The agent data provider log file, `kvm_data_provider_`*`INSTANCE_NAME`*`_0.log`, displays `java.lang.OutOfMemoryError` exceptions. • The agent data provider startup log file, `kvm_data_provider_`*`INSTANCE_NAME`*`_startup.log`, displays the following error: `JVMDUMP006I Processing dump event "systhrow", detail "java/lang/OutOfMemoryError" - please wait. - Java data provider creates a file named javacore.date.time.number.txt in the CANDLEHOME\tmaitm6 directory, and this file contains the string java/lang/OutOfMemoryError`	To resolve this problem, complete the following steps: 1. Stop the agent instance, and check whether the data provider Java process is stopped. **Important:** If the Java process that is running the data provider does not stop, end the Java process specific to the data provider. 2. Increase the heap size for the Java data provider. 3. Restart agent instance.

Table 6. Agent problems and solutions (continued)

Problem	Solution

In the data provider logs, you will see out of memory exception and if agent seems to be down then it indicates that data provider is struggling to get the essential resources of memory/CPU and allocation of heap size need to be increase for an instance.	To reconfigure the heap size allocation: linebreak
	1. Stop the agent instance.
	2. Edit the file.
	Windows System
	32-bit Agent system architecture: `TMAITM6`
	64-bit Agent system architecture: `TMAITM6_x64`
	a. Go to the
	`CANDLE_HOME\<architecture>\KVMENV_INSTANCE_NAME`
	file.
	b. Search for the ENVIRONMENT VARIABLES SPECIFIC TO THE AGENT section and add the following variable: *SET KVM_CUSTOM_JVM_ARGS=-Xmx512m*
	On Linux System
	32-bit Agent system architecture: `li6263`
	64-bit Agent system architecture: `lx8266`
	a. Go to the
	`$CANDLEHOME/config/vm/bin/vm_INSTANCE_NAME.config`
	file.
	b. Search for the Agent Specific Environment Variables section and add the following variable: *KVM_CUSTOM_JVM_ARGS='-Xmx512m'*
	Note: The value *512m* in *-Xmx512m* states that the current configured heap size is 512 MB, you can increase the heap size according to the requirement.
	3. Restart the agent.

While upgrading the agent from previous version, agent is not using upgraded executable file.	VMware agent with version 7.3 Fix Pack 1 comes with enhancements to avoid this issue.
In the event of connection failure, the agent would continuously attempt connection to data source without limit every 30 seconds. Such agent behavior remains even though user has removed the environment variable **KVM_DATA_PROVIDER_CONNECTION_RETRY_COUNT** or set it to 0.	To have a limited number of connection attempts, the environment variable **KVM_DATA_PROVIDER_CONNECTION_RETRY_COUNT** must be set to a valid non-zero value.

Table 6. Agent problems and solutions (continued)	
Problem	**Solution**
FQDN field of the virtual machine attribute group takes longer than expected time to return the value due to network condition.	Update the environment variable KVM_VIRTUAL_MACHINE_IP_TIMEOUT to configure the agent waiting time before returning the value of FQDN. 1. Stop all the agent instances. 2. Locate the environment variable file KVMENV_instance_name, where instance_name is the agent instance name. 3. Update environment variable according to the requirement and save the file. KVM_VIRTUAL_MACHINE_IP_TIMEOUT Example: `KVM_VIRTUAL_MACHINE_IP_TIMEOUT=200` The environment variable KVM_VIRTUAL_MACHINE_IP_TIMEOUT in attribute group Virtual Machines allows the agent to wait for the configured duration (in milliseconds) before returning the value of FQDN and subsequently all other attributes. If this field is not configured or if this field is set to 0, the timeout functionality is disabled and attribute group collection follows the default behavior. 4. Start the agent instances.
Strings are wrapped at the unexpected positions for double bytes languages, such as zh_CN (Chinese Simplified), zh_TW (Chinese Traditional) and ja (Japanese).	Adjust the window size to display the strings accordingly.

Workspace troubleshooting

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Problems can occur with general workspaces and agent-specific workspaces.

Table 7 on page 29 contains problems and solutions related to workspaces.

Table 7. Workspace problems and solutions

Problem	Solution
The process application components are available, but the Availability status shows PROCESS_DATA_NOT_ AVAILABLE.	This problem occurs because the PerfProc performance object is disabled. When this condition exists, IBM Tivoli Monitoring cannot collect performance data for this process. Use the following steps to confirm that this problem exists and to resolve it: 1. In the Windows **Start** menu, click **Run**. 2. Type `perfmon.exe` in the **Open** field of the **Run** window. The **Performance** window is displayed. 3. Click the plus sign (+) in the toolbar. The **Add Counters** window is displayed. 4. Look for **Process** in the **Performance object** menu. 5. Complete one of the following actions: • If you see **Process** in the menu, the PerfProc performance object is enabled and the problem is coming from a different source. You might need to contact IBM Software Support. • If you do not see **Process** in the menu, use the Microsoft utility from the Microsoft.com Operations website to enable the PerfProc performance object. The **Process** performance object becomes visible in the **Performance object** menu of the **Add Counters** windows, and IBM Tivoli Monitoring is able to detect Availability data. 6. Restart the monitoring agent.
The name of the attribute does not display in a bar chart or graph view.	When a chart or graph view that includes the attribute is scaled to a small size, a blank space is displayed instead of a truncated name. To see the name of the attribute, expand the view of the chart until sufficient space is available to display all characters of the attribute name.
At the end of each view, you see the following Historical workspace KFWITM220E error: `Request failed during execution`.	Ensure that you configure all groups that supply data to the view. In the Historical Configuration view, ensure that data collection is started for all groups that supply data to the view.

Table 7. Workspace problems and solutions (continued)

Problem	Solution
You start collection of historical data but the data cannot be seen.	Use the following managing options for historical data collection: • Basic historical data collection populates the Warehouse with raw data. This type of data collection is turned off by default. For information about managing this feature including how to set the interval at which data is collected, see "Managing historical data" in the *IBM Tivoli Monitoring Administrator's Guide*. By setting a more frequent interval for data collection, you reduce the load on the system incurred every time data is uploaded. • Use the Summarization and Pruning agent to collect specific amounts and types of historical data. Historical data is not displayed until the Summarization and Pruning monitoring agent begins collecting the data. By default, this agent begins collection at 2 a.m. daily. At that point, data is visible in the workspace view. For information about how to modify the default collection settings, see "Managing historical data" in the *IBM Tivoli Monitoring Administrator's Guide*.
Historical data collection is unavailable because of incorrect queries in the Tivoli Enterprise Portal.	The Sort By, Group By, and First/Last functions column are not compatible with the historical data collection feature. Use of these advanced functions makes a query ineligible for historical data collection. Even if data collection has started, you cannot use the time span feature if the query for the chart or table includes column functions or advanced query options (Sort By, Group By, First / Last). To ensure support of historical data collection, do not use the Sort By, Group By, or First/Last functions in your queries. For information about the historical data collection function, See "Managing historical data" in the *IBM Tivoli Monitoring Administrator's Guide* or the Tivoli Enterprise Portal online help .
When you use a long process name in the situation, the process name is truncated.	Truncation of process or service names for situations in the Availability table in the portal display is the expected behavior. The maximum name length is 100 bytes.
Regular (non-historical) monitoring data fails to be displayed.	Check the formation of the queries you use to gather data. For example, look for invalid SQL statements.

Table 7. Workspace problems and solutions (continued)

Problem	Solution
The VMware VI agent does not display aggregate metrics for CPU on SMP virtual machines.	VMware Virtual Infrastructure does not provide detailed aggregate virtual machine CPU metrics. The OS agents provide aggregated CPU metrics for SMP systems. You can install the IBM Tivoli Monitoring OS agent on the virtual machine to get these metrics.
The Virtual Center Events view in the Events Workspace does not return data.	If the VMware VI agent instance is configured with only ESX Server data sources, no data is returned in the Virtual Center Events view. Only VMware Events and Alarms related to a Virtual Center are displayed in this view. ESX Server Events and Alarms are displayed in the Events view in the ESX Server workspace.
The Virtual Machine Partitions View in the Disk workspace shows only one partition on a Linux Virtual machine.	The VMware VI agent appears to return only data for physical, non-removable devices for this property. The agent displays only the data returned from VMware. Install the IBM Tivoli Monitoring: Linux OS Agent on the Linux Virtual System for access to complete File System metrics.
The workspace for the VMware VI Agent Navigator node is undefined.	When multiple instances of the VMware VI agent are defined on a system, the top-level node becomes VMware VI Agent. The VMware VI Agent workspace is undefined at this node. A node for each instance is created called *Instance*:*Hostname*:VM. A workspace that is called *Instance*:*Hostname*:VM is associated with the instance node. This workspace is comparable to the VMware VI Agent workspace.
No ESX Server subnodes are displayed in the navigation tree.	See Table 6 on page 22.
The dynamic links that connect to the OS agent workspaces are disabled.	When the OS type cannot be determined for the virtual machine, VMware Tools might not be installed or running. Ensure that VMware Tools is installed on the virtual machine. On Linux systems, the VMware Tools do not start until at least the first login to the virtual machine, so ensure that you have logged in to the virtual machine.
Clicking a dynamic link returns the following message: `KFWITM081E: The link target cannot be found. The link definition might be incorrect or the target is unavailable.`	Ensure that the appropriate OS monitoring agent (on Windows or Linux systems) is installed on the targeted virtual machine. Next, verify that the OS monitoring agent is running and that it is configured to connect to the same Tivoli Enterprise Monitoring Server to which the VMware VI agent is connected. You can navigate to the OS monitoring agent for the virtual machines directly in the same Tivoli Enterprise Portal from which you access the VMware VI agent.

Table 7. Workspace problems and solutions (continued)

Problem	**Solution**
A delay occurs in seeing workspace data when the VMware VI agent is first started.	When the VMware VI agent is first started, it collects information about the hierarchy and organization of the virtualized environments it monitors. This information includes which ESX servers, virtual machines, resource pools, data stores, and clusters are available and how they are related to one another. This information is referred to as the *data source inventory*. Depending on the size of the monitored environment, network bandwidth and the computational power of the agent system, and the VMware data source, this initial collection of the inventory can take anywhere from a few seconds to a few minutes. After initial collection is complete, a message displays in the data provider log stating how long initial inventory collection took, and attribute group data collection can proceed. Collecting inventory information when the agent is started significantly decreases the amount of time subsequent data collections take and also reduces the overall network utilization of the agent.
A metric value on a workspace is suddenly unavailable.	At times, not all requested ESX server properties are returned by the Virtual Center. This issue has been limited to a particular ESX Server and is not a persistent condition.
When different versions of the VMware VI agent are configured to the same Tivoli Enterprise Monitoring Server, certain workspace links might not function as expected.	This problem is a limitation in VMware VI V6.1.2. All links function as expected for 6.2.1 versions of the agent.

Table 7. Workspace problems and solutions (continued)

Problem	Solution
Workspace links for the Linux OS agent running on ESX hosts return an error even though a Linux OS agent is installed and running on the ESX server and the Linux OS agent is listed as ONLINE in the Managed System list shown in the Tivoli Enterprise Portal client from which the VMware VI agent is visible. The following error is displayed: `KFWITM081E The link target cannot be found. The link definition might be incorrect or the target is unavailable.`	If you have installed a version of the IBM Tivoli Monitoring: Linux OS agent before IBM Tivoli Monitoring V6.2.0, you might encounter truncated Managed System names. If so, you can either uninstall the earlier Linux OS agent and reinstall the 6.2.0 version, or use the following instructions to restore the expected Managed System name for the truncated Managed System name of the Linux OS agent. IBM Tivoli Monitoring might not be able to generate a unique name for monitoring components because of the truncation of names that the product automatically generates. IBM Tivoli Monitoring automatically creates a name for each monitoring component by concatenating the host name and product code separated by colons (*hostname*:LZ). **Note:** When you monitor a multinode system, such as a database,IBM Tivoli Monitoring adds a subsystem name to the concatenated name, typically a database instance name. The length of the name that IBM Tivoli Monitoring generates is limited to 32 characters. Truncation can result in multiple components having the same 32-character name. If this problem happens, shorten the *hostname* portion of the name as follows: 1. Open the configuration file for the monitoring agent, which is located in the following path: *install_dir*/config/lz.ini. **Note:** When you modify the `lz.ini` file, your configuration changes affect only the instance of the Monitoring Agent for Linux OS that is running on the computer. If you want your configuration changes to affect all agents that run on the computer, modify the *install_dir*/config/env.config file. 2. Find the line the begins with CTIRA_HOSTNAME=. 3. Type a new name for the host name that is a unique, shorter name for the host computer. The final concatenated name including the subsystem name, new host name, and LZ cannot be longer than 32 characters. **Note:** You must ensure that the resulting name is unique with respect to any existing monitoring component that was previously registered with the Tivoli Enterprise Monitoring Server. 4. Save the file and restart the agent.

Table 7. Workspace problems and solutions (continued)	
Problem	**Solution**
Continued	If you cannot find the CTIRA_HOSTNAME environment variable, you must add it to the configuration file of the monitoring agent: • On Windows systems, use the **Advanced** > **Edit Variables** option. • On UNIX and Linux systems, add the variable to the `config/`*`product_code`*`.ini` file.

Situation troubleshooting

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Problems can occur with situations and situation configuration.

Table 8 on page 34 contains problems and solutions for situations.

Table 8. Situation problems and solutions	
Problem	**Solution**
Monitoring activity requires too much disk space.	Check the RAS trace logging settings that are described in "Setting RAS trace parameters by using the GUI" on page 10. For example, trace logs grow rapidly when you apply the ALL logging option.
Monitoring activity requires too many system resources.	See the information about disk capacity planning for historical data in the Reference guide for the agent for a description of the performance impact of specific attribute groups. If possible, decrease your use of the attribute groups that require greater system resources.
A formula that uses mathematical operators appears to be incorrect. For example, if you were monitoring a Linux system, the formula that calculates when **Free Memory** falls under 10 percent of **Total Memory** does not work: `LT #'Linux_VM_Stats.Total_Memory' / 10`	This formula is incorrect because situation predicates support only logical operators. Your formulas cannot have mathematical operators. **Note:** The Situation Editor provides alternatives to math operators. In the example, you can select the **% Memory Free** attribute and avoid the need for math operators.
You want to change the appearance of situations when they are displayed in the navigation tree.	1. Right-click an item in the navigation tree. 2. Click **Situations** in the menu. The **Situation Editor** window is displayed. 3. Select the situation that you want to modify. 4. Use the **State** menu to set the status and appearance of the Situation when it triggers. **Note:** The **State** setting is not related to severity settings in the Tivoli Enterprise Console.

Table 8. Situation problems and solutions (continued)	
Problem	**Solution**
The VMware VI agent group in the Situation Editor is empty.	The VMware VI node in the Situation Editor contains all the default KVM situations because they use attributes from the attribute groups that are associated with the VMware VI subnodes. By default, the VMware VI agent node in the Situation Editor is empty because no default KVM situations use attributes from the attribute groups that are associated with the VMware VI agent subnodes.
When a situation is triggered in the Event Log attribute group, it remains in the Situation Event Console as long as the event ID entry is present in the Event Log workspace. When this event ID entry is removed from the Event Log workspace on the Tivoli Enterprise Portal, the situation is also cleared even if the actual problem that caused the event is not resolved, and the event ID entry is also present in the Windows Event Viewer.	A timeout occurs on the cache of events for the NT Event Log group. Increase the cache time of Event Log collection to meet your requirements by adding the following variable and timeout value to the K*pc*ENV file for the agent (where *pc* is the two-letter product code): `CDP_NT_EVENT_LOG_CACHE_TIMEOUT=3600` This variable determines how long events from the NT Event Log are kept.
For a situation that uses the 'MISSING' operator and is distributed to a remote agentless monitoring subnode, no indication is displayed in the Tivoli Enterprise Portal or in the Situation Event Console when the situation becomes true.	The MISSING predicate is currently not supported on subnodes. If a situation with a MISSING predicate is distributed to a subnode, the agent cannot tell which subnode or node the event is occurring on. It inserts the system name as the origin node for the event and returns. When the event reaches the Tivoli Enterprise Portal Server, the origin node does not match the system name of the subnode where the situation is associated, so the event is dropped.
The situation for a specific agent is not visible in the Tivoli Enterprise Portal.	Open the Situation Editor. Access the All managed servers view. If the situation is not displayed, confirm that the monitoring server has been seeded for the agent. If not, seed the server, as described in the *IBM Tivoli Monitoring Installation and Setup Guide*.
The monitoring interval is too long.	Access the Situation Editor view for the situation that you want to modify. Check the **Sampling interval** area in the **Formula** tab. Adjust the time interval as required.
The situation did not activate at startup.	Manually recycle the situation as follows: 1. Right-click the situation and select **Stop Situation**. 2. Right-click the situation and select **Start Situation**. **Note:** You can permanently avoid this problem by selecting the **Run at Startup** check box of the Situation Editor view for a specific situation.

Table 8. Situation problems and solutions (continued)

Problem	Solution
The situation is not displayed.	Click the **Action** tab and check whether the situation has an automated corrective action. This action can occur directly or through a policy. The situation might be resolving so quickly that you do not see the event or the update in the graphical user interface.
An Alert event did not occur even though the predicate was correctly specified.	Check the logs, reports, and workspaces.
A situation fires on an unexpected managed object.	Confirm that you distributed and started the situation on the correct managed system.
The product did not distribute the situation to a managed system.	Click the **Distribution** tab and check the distribution settings for the situation.

Table 8. Situation problems and solutions (continued)

Problem	Solution

The situation does not fire.	This problem can be caused when incorrect predicates are present in the formula that defines the situation. For example, the managed object shows a state that normally triggers a monitoring event, but the situation is not true because the wrong attribute is specified in the formula.
	
	In the **Formula** tab, analyze predicates as follows:
	
	1. Click the **fx** icon in the **Formula** area. The **Show formula** window is displayed.
	   a. Confirm the following details in the **Formula** area of the window:
	   • The attributes that you intend to monitor are specified in the formula.
	   • The situations that you intend to monitor are specified in the formula.
	   • The logical operators in the formula match your monitoring goal.
	   • The numeric values in the formula match your monitoring goal.
	   b. (Optional) Select the **Show detailed formula** check box to see the original names of attributes in the application or operating system that you are monitoring.
	   c. Click **OK** to dismiss the **Show formula** window.
	2. (Optional) In the **Formula** area of the **Formula** tab, temporarily assign numeric values that immediately trigger a monitoring event. The triggering of the event confirms that other predicates in the formula are valid.
	
	Note: After you complete this test, you must restore the numeric values to valid levels so that you do not generate excessive monitoring data based on your temporary settings.
	
	For additional information about situations that do not fire, see "Situations are not firing" in the *IBM Tivoli Monitoring Troubleshooting Guide*.

Situation events are not displayed in the Events Console view of the workspace.	Associate the situation with a Navigator item. **Note:** The situation does not need to be displayed in the workspace. It is sufficient that the situation is associated with any Navigator item.

Table 8. Situation problems and solutions (continued)	
Problem	**Solution**
You do not have access to a situation.	**Note:** You must have administrator privileges to complete these steps. 1. Click **Edit** > **Administer Users** to access the **Administer Users** window. 2. In the **Users** area, select the user whose privileges you want to modify. 3. In the **Permissions** tab, **Applications** tab, and **Navigator Views** tab, select the permissions or privileges that correspond to the user role. 4. Click **OK**.
A managed system seems to be offline.	1. Select **Physical View** and click the Enterprise Level of the navigator tree. 2. Click **View** > **Workspace** > **Managed System Status** to see a list of managed systems and their status. 3. If a system is offline, check network connectivity and the status of the specific system or application.
When the KVM_Server_VMotion_Event situation is triggered and you click the link for the situation to view the situation details, the situation does not open in the Tivoli Enterprise Portal.	Upgrade IBM Tivoli Monitoringto version 6.3

Take Action commands troubleshooting

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Problems can occur with Take Action commands.

Table 9 on page 38 contains problems and solutions that can occur with Take Action commands.

When each Take Action command runs, it generates a log file listed in Table 2 on page 4.

Table 9. Take Action commands problems and solutions	
Problem	**Solution**
Take Action commands often require several minutes to complete.	Allow several minutes. If you do not see a message advising you of completion, try to run the command manually.
Situations fail to trigger Take Action commands.	Attempt to manually run the Take Action command in the Tivoli Enterprise Portal. If the Take Action command works, look for configuration problems in the situation. See "Situation troubleshooting" on page 34. If the Take Action command fails, for general information about troubleshooting Take Action commands, see the *IBM Tivoli Monitoring Troubleshooting Guide*.

Discovery Library Adapter for the agent troubleshooting

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Problems can occur when using the Discovery Library Adapter for the agent.

Table 10 on page 39 contains problems and solutions that can occur with an agent that is using a Discovery Library Adapter. For additional information about troubleshooting for the Discovery Library Adapter, see the IBM Tivoli Application Dependency Discovery Manager Information Center (http://publib.boulder.ibm.com/infocenter/tivihelp/v10r1/topic/com.ibm.taddm.doc_7.2/welcome_page/welcome.html).

Table 10. Discovery Library Adapter for an agent problems and solutions

Problem	Solution
Importing DLA into a clear (no data) IBM Tivoli Application Dependency Discovery Manager (TADDM) server does not create the relationship and associations between the Virtual Center and the ESX servers. The Application Infrastructure Topology does not show the ESX Servers.	DLAs do not create the logical relationships required to populate the Application Infrastructure Topology. To create logical relationships, run the appropriate sensor to discover or create them in TADDM.
When running the **loadidml** command to load the DLA book into TADDM when the DLA book is generated for a VMware agent running on Windows 2000, the command fails with a parsing error.	If you are monitoring Windows 2000 systems with non-OS agents that have DLA templates, you cannot use the IBM Tivoli Monitoring DLA.
When running the **loadidlml** command to load the DLA book into TADDM when the DLA book is generated for a VMware agent running on a system other than Windows 2000, the command fails with a parsing error.	You must have an OS agent installed and running on the same system on which the VMware agent is installed.

Table 10. Discovery Library Adapter for an agent problems and solutions (continued)

Problem	Solution

After loading the IDML book for the VMware VI agent into Tivoli Business Service Manager, the VMware entities are not automatically displayed in the Tivoli Business Service Manager console.	CDM classes for the VMware VI agent are currently not available in Tivoli Business Service Manager V4.2.1 Fix Pack 1. As a result, after loading the IDML book for the VMware VI agent into Tivoli Business Service Manager, the VMware entities are not automatically displayed in the Tivoli Business Service Manager console, but require that you add VMware VI agent classes to Tivoli Business Service Manager manually as follows:
	1. Open the Tivoli Business Service Manager console, click **Administration** > **Service Configuration**, and select the Service Component Repository from the drop-down list in the right panel.
	2. In the Service Navigation panel, click **Component Registry** > **Servers** > **Clusters**.
	3. Click **Clusters**.
	4. In the Service Editor panel, click the **Additional** tab and edit the **classnamefilter** text box to add comma-separated fields for the VMware classes you want to add. The string might look something like the following:
	`'cdm:sys.ComputerSystem',`
	`'cdm:sys.vmware.VmwareUnitaryComputerSyste m',`
	`'cdm:sys.vmware.VMWareESX',`
	`'cdm:sys.vmware.VirtualCenter',`
	`'cdm:sys.vmware.DataCenter',`
	`'cdm:sys.vmware.DataStore'`
	5. Click **Save** to save the setting changes. The VMware entities (such as clusters, virtual centers, and virtual machines) are displayed in the Tivoli Business Service Manager console.

Chapter 4. Support information

If you have a problem with your IBM software, you want to resolve it quickly.

IBM provides the following ways for you to obtain the support you need:

Online

The following websites contain troubleshooting information:

- Go to the IBM Software Support website (http://www.ibm.com/support/entry/portal/software) and follow the instructions.
- Go to the Application Performance Management Wiki (http://www.ibm.com/developerworks/servicemanagement/apm/index.html). Feel free to contribute to this wiki.

IBM Support Assistant

The IBM Support Assistant (ISA) is a free local software serviceability workbench that helps you resolve questions and problems with IBM software products. The ISA provides quick access to support-related information and serviceability tools for problem determination. To install the ISA software, go to the IBM Support Assistant website (http://www.ibm.com/software/support/isa).

Chapter 5. Informational, warning, and error messages overview

Messages relay information about how the system or application is performing and can alert you to exceptional conditions when they occur.

Messages are sent to an output destination, such as a file, database, or console screen.

If you receive a warning or error message, you can do one of the following actions:

- Follow the instructions listed in the Detail window of the message if this information is included there.
- Consult the message details listed in this topic to see what action you can take to correct the problem.
- Consult the message log for message ID, text, time, and date of the message, as well as other data you can use to diagnose the problem.

Message format

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The message format contains a message ID and text, an explanation, and an operator response.

Agent messages have the following format:

Message ID and text
Explanation
Operator Response

The message ID has the following format:

```
CCC####severity
```

where:

CCC
Prefix that indicates the component to which the message applies. The following components are used:

K*XX*
Three-character product code for the agent.

####
Number of the message

severity
Severity of the message. Three levels of severity are used:

I
Informational messages provide feedback about something that happened in the product or system that might be important. These messages can provide guidance when you are requesting a specific action from the product.

W
Warning messages call your attention to an exception condition. The condition might not be an error but can cause problems if not resolved.

E
Error messages indicate that an action cannot be completed because of a user or system error. These messages require user response.

The *Text* of the message provides a general statement regarding the problem or condition that occurred. The *Explanation* provides additional information about the message and the possible cause for the

condition. The *Operator Response* provides actions to take in response to the condition, particularly for error messages (messages with the "E" suffix).

Note: Many message texts and explanations contain variables, such as the specific name of a server or application. Those variables are represented in this topic as symbols, such as "&1." Actual messages contain values for these variables.

Agent messages

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The following messages apply to IBM Tivoli Monitoring for Virtual Environments Agent for VMware VI.

KVM5001I

`The request to power on the virtual machine was sent successfully.`

Explanation:
The virtual machine was successfully powered on, or it is in the process of powering on.

Operator response:
None.

KVM5002I

`The virtual machine is already powered on.`

Explanation:
The virtual machine is already powered on.

Operator response:
None.

KVM5003E

`Could not perform the requested power on action.`

Explanation:
The task could not be performed as requested.

Operator response:
Check whether one or both of these connections exist: the Virtual Center has a connection to the ESX Server, or there is a network connection between the monitoring agent and the Virtual Center or ESX Server.

KVM5004I

`The request to power off the virtual machine was sent successfully.`

Explanation:
The virtual machine was successfully powered off, or it is in the process of powering off.

Operator response:
None.

KVM5005I

`The virtual machine is powered off.`

Explanation:
The virtual machine is powered off.

Operator response:
None.

KVM5006E

`Could not perform the requested power off action.`

Explanation:
The task could not be performed as requested.

Operator response:
Check whether one or both of these connections exist: the Virtual Center has a connection to the ESX Server, or there is a connection between the agent and the Virtual Center or ESX Server.

KVM5007E
`The ESX server name specified is invalid or could not be found.`

Explanation:
The task could not be performed as requested.

Operator response:
Check the name of the ESX server and ensure that it is specified correctly when executing this action.

KVM5008E
`One of the required parameters for this action was not specified.`

Explanation:
The task could not be performed as requested.

Operator response:
Check that both the ESX server name and the name of the virtual machine were specified.

KVM5009E
`An unknown action was specified for this request.`

Explanation:
The task could not be performed as requested.

Operator response:
Check that the action was specified correctly.

KVM5040E
`Data source not found in the environment.`

Explanation:
At least one data source must be defined or configured.

Operator response:
Check the configuration of the agent and restart.

KVM5041E
`Unable to log in to data source.`

Explanation:
The user ID or password supplied were not authenticated by the data source.

Operator response:
Check the user ID and password in the agent configuration and restart.

KVM5042E
`The data source host could not be found on the network or a connection could not be made.`

Explanation:
A connection could not be made to a data source configured for data collection.

Operator response:
Check the host name of the data sources configured for the agent. Ensure that a good network connection exists.

KVM5043E
`Monitored server unavailable.`

Explanation:
A data collection request was issued for a server that is no longer available.

Operator response:
This condition is typically temporary and clears itself. If it does not clear, contact your support representative.

KVM5044E

`Data provider is recovering from a communications error.`

Explanation:

A communications error occurred with a data source. The agent is resetting.

Operator response:

None.

KVM5045E

`The specified virtual machine was not found.`

Explanation:

The task could not be performed as requested.

Operator response:

Check that the name of the virtual machine was specified correctly.

Notices

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