IBM Tivoli Composite Application Manager Agent for Sybase ASE

7.1 Fix Pack 1

Troubleshooting Guide

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Note
Before using this information and the product it supports, read the information in "Notices" on page 41.

This edition applies to version 6.2 of IBM Tivoli Composite Application Manager Agent for Sybase ASE (product number 5724-I45) and to all subsequent releases and modifications until otherwise indicated in new editions.

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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 37.

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"
- "Using logging" on page 2
- "Consulting the lists of identified problems and workarounds" on page 2

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.

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 5 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*.
Sybase Server 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. • Sybase ASE 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
- Agent
- Tivoli Enterprise Portal
- Remote deployment
- Workspace
- Situation
- Sybase

See Chapter 3, "Problems and workarounds," on page 13 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 capture information about the operating environment when component software fails to operate as intended. 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 located in a `logs` subdirectory on the host computer. See the following sections 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 uses the information captured by trace logging to trace a problem to its source or to determine why an error occurred. The default configuration for trace logging, such as whether trace logging is enabled or disabled and trace level, depends on the source of the trace logging. Trace logging is always enabled.

Overview of log file management

Table 2 on page 5 provides the names, locations, and descriptions of RAS1 log files. The log file names adhere to the following naming convention:

hostname_product_adaptiveservername_program_timestamp-nn.log

where:

- *hostname* is the host name of the computer on which the monitoring component is running.
- *product* is the two-character product code. For Sybase agent, the product code is oy.
- *adaptiveservername* is the name of a database server instance that is being monitored.
- *program* is the name of the program being run.
- *timestamp* is an 8-character hexadecimal timestamp representing the time at which the program started.
- *nn* is a rolling log suffix. See "Examples of trace logging" for details of log rolling.

Examples of trace logging

For example, if a Sybase Server database "dbinst02" is running on computer "server01", the RAS log file for the Sybase agent might be named as follows:

```
server01_oy_dbinst02_koyagent_437fc59-01.log
```

For long-running programs, the *nn* suffix is used to maintain a short history of log files for that startup of the program. For example, the koyagent program might have a series of log files as follows:

```
server01_oy_koyagent_437fc59-01.log
server01_oy_koyagent_437fc59-02.log
server01_oy_koyagent_437fc59-03.log
```

As the program runs, the first log (*nn*=01) is preserved because it contains program startup information. The remaining logs "roll." In other words, when the set of numbered logs reach a maximum size, the remaining logs are overwritten in sequence. Each time a program is started, a new timestamp is assigned to maintain a short program history. For example, if the Sybase agent is started twice, it might have log files as follows:

```
server01_oy_koyagent_437fc59-01.log
server01_oy_koyagent_437fc59-02.log
server01_oy_koyagent_437fc59-03.log

server01_oy_koyagent_537fc59-01.log
server01_oy_koyagent_537fc59-02.log
server01_oy_koyagent_537fc59-03.log
```

Each program that is started has its own log file. For example, the Sybase agent would have agent logs in this format:

```
server01_oy_koyagent_437fc59-01.log
```

Other logs, such as logs for collector processes and Take Action commands, have a similar syntax, as in the following example:

```
server01_oy_koysql_447fc59-01.log
```

where **koyesql** is the name of a program.

Note: When you communicate with IBM Software Support, you must capture and send the RAS1 log that matches any problem occurrence that you report.

Principal trace log files

Table 2 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 computer that hosts the monitoring agent See Definitions of variables for descriptions of the variables in the file names in column two.	Traces activity of the monitoring agent. **Note:** Other logs, such as logs for collector processes and Take Action commands (if available), have a similar syntax and are located in this directory path.	
	On Windows: The collector trace log file is named *hostname*_oy_*adaptiveservername*_col.out. The file is located in the *install_dir*\tmaitm6\logs path. **On UNIX:** The collector trace log file is named *hostname*_oy_*adaptiveservername*_col.log and is located in the *install_dir*/logs path. **Note:** A *hostname*_oy_*adaptiveservername*_col.out log file also exists and contains **stderr** and **stdout** messages.	A collector trace log file is produced by the Sybase agent. New log files are created each time the agent is started. The log file is not pruned. One backup copy is renamed from the following file, and kept for historical purposes: • **On Windows:** *.out to *.ou1 • **On UNIX:** *.log to *.lo1 See "Enabling detailed tracing in the collector trace log" on page 7 for information about how to change the default behavior of this type of logging.
	On Windows: The "agt" trace log file is named *hostname*_OY_*adaptiveservername*_agt.out. The file is located in the *install_dir*\tmaitm6\logs path. **On UNIX:** The "agt" trace log file is named *hostname*_oy_*adaptiveservername*_agt.log and is located in the *install_dir*/logs path. See Definitions of variables.	Traces activity of the monitoring agent. • **On Windows:** New log files are created each time the agent is started. One backup copy, renamed from *.out to *.ou1, is kept for historical purposes. The log file is not pruned. • **On UNIX:** New log files are created each time the agent is started. One backup copy, renamed from *.log to *.lg1 is kept for historical purposes.
	The *SYB.LG0 file is located in the following path: • **On Windows:** *install_dir*\tmaitm6\logs • **On UNIX:** *install_dir*/logs	A new version of this file is generated every time the agent is restarted. IBM Tivoli Monitoring generates one backup copy of the *SYB.LG0 file with the tag .LG1. View *SYB.LG0 to learn the following details regarding the current monitoring session: • Status of connectivity with the monitoring server • Situations that were running, including historical data collection situations • Success or failure status of Take Action commands

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 See Definitions of variables for descriptions of the variables in the file names in column two.	**On UNIX:** The `candle_installation.log` file in the *install_dir*`/logs` path. **On Windows:** The file in the *install_dir*`\InstallITM` path. Unlike RAS1 log files, the name of the file displays a *decimal* time stamp. *	Provides details about products that are installed. **Note:** Trace logging is enabled by default. A configuration step is not required to enable this tracing.
	The `Warehouse_Configuration.log` file is located in the following path on Windows: *install_dir*`\InstallITM`.	Provides details about the configuration of data warehousing for historical reporting.
	The RAS1 log file is named *hostname*`_ms_`*timestamp*-*nn*`.log` and is located in the following path: • **On Windows:** *install_dir*`\logs` • **On UNIX:** *install_dir*`/logs` **Note:** File names for RAS1 logs include a hexadecimal time stamp **Also on UNIX, a log with a decimal time stamp is provided:** *hostname*`_ms_`*timestamp*`.log` and *hostname*`_ms_`*timestamp*`.pid`*nnnnn* in the *install_dir*`/`*logs* path, where *nnnnn* is the process ID number.	Traces activity on the monitoring server.
On the Tivoli Enterprise Portal Server See Definitions of variables for descriptions of the variables in the file names in column two.	The RAS1 log file is named *hostname*`_cq_`*timestamp*-*nn*`.log` and is located in the following path: • **On Windows:** *install_dir*`\logs` • **On UNIX:** *install_dir*`/logs` **Note:** File names for RAS1 logs include a hexadecimal time stamp **Also on UNIX, a log with a decimal time stamp is provided:** *hostname*`_cq_`*timestamp*`.log` and *hostname*`_cq_`*timestamp*`.pid`*nnnnn* in the *install_dir/logs* path, where *nnnnn* is the process ID number.	Traces activity on the portal server.
	The `TEPS_ODBC.log` file is located in the following path on Windows: *install_dir*`\InstallITM`.	When you enable historical reporting, this log file traces the status of the warehouse proxy agent.
Definitions of variables for RAS1 logs: • *hostname* is the host name of the computer on which the agent is running. • *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 server, the monitoring agent, or the portal server. • *product* is the two-character product code. For Sybase agent, the product code is oy. • *adaptiveservername* refers to the name of the database server instance that you are monitoring. • *program* is the name of the program being run. • *timestamp* is an eight-character hexadecimal time stamp representing the time at which the program started. • *nn* is a rolling log suffix. See "Examples of trace logging" on page 3 for details of log rolling.		

See the *IBM Tivoli Monitoring Installation and Setup Guide* for more information on the complete set of trace logs that are maintained on the monitoring server.

Examples: using trace logs

Typically IBM Software Support applies specialized knowledge to analyze trace logs to determine the source of problems. However, you can open trace logs in a text editor to learn some basic facts about your IBM Tivoli Monitoring environment.

Example one

This excerpt shows the typical .LG0 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:KOY is ON-LINE.
. . .
(42C3079B.0000-6A4:kpxreqhb.cpp,644,"HeartbeatInserter") Remote node SERVER5B:KOY is OFF-LINE.
```

Key points regarding the preceding excerpt:

- The monitoring server appends the **KOY** product code to the server name to form a unique name (`SERVER5B:KOY`) for this instance of Sybase agent. This unique name enables you to 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” on page 9 provide these entries.

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

1. In the Windows **Start** menu, choose **Program Files > IBM Tivoli Monitoring > Manage Tivoli Monitoring Service**. The Manage Tivoli Enterprise Monitoring Services window is displayed.
2. Right-click a component and select **Advanced > View Trace Log** in the pop-up menu. The program displays the Select Log File window that lists the RAS1 logs for the monitoring agent.
3. Select a log file from the list and click **OK**. You can also use this viewer to access remote logs.

Note: The viewer converts time stamps in the logs to a readable format.

Enabling detailed tracing in the collector trace log

Collector trace logs are generated by a database monitoring agent. You can use the following options to modify collector trace logging.

Option one: modify the settings file

About this task

Perform the following steps to enable detailed logging for the collector trace log:

Procedure

1. Open the `koytrac.ctl` file. The file is located in the following path:
   - **On Windows:** *install_dir*`\tmaitm6`
   - **On UNIX systems:** *install_dir*`/misc`

   Where *install_dir* is the location of the IBM Tivoli Monitoring component.
2. Remove the two semicolons (**;;**) from the beginning of the line that contains **trace_all;**.
3. Save the file.
4. Restart the monitoring agent for the database server instance that you want to trace. Logging goes to a collector trace log file that is named in Table 2 on page 5 The log file is stored in the following path:
   - **On Windows:** *install_dir*`\tmaitm6\logs`
   - **On UNIX systems:** *install_dir*`/logs`

   Where *install_dir* is the path where you installed IBM Tivoli Monitoring.
5. When you complete an analysis of detailed trace logs, turn off detailed logging as follows, because trace logs can consume a large amount hard disk space.
   a. Open the `koytrac.ctl` file mentioned in Step 1.
   b. Type two semicolons (**;;**) at the beginning of the line that contains **trace_all;**.
   c. Save the file.
   d. Restart the monitoring agent for the database server instance that you have been tracing.

Option two: modify the environment variables

About this task

You can modify trace logging for the collector log by setting the following environment variables:

COLL_WRAPLINES
: By default, new collector log files are created each time you start the agent or when the log file reaches the limit specified by the **COLL_WRAPLINES** environment variable.
COLL_WRAPLINES defines the number of lines in the col.out file and is 30,000 lines by default (about 2 MB).

COLL_NUMOUTBAK
: By default, the product creates one backup copy of the collector log file. The file tag is changed from *.out to *.ou1. You can configure the product to create up to nine backup files by defining **COLL_NUMOUTBAK** to be an integer from one to nine.

Set the environment variables as follows:

- **On UNIX:** Use a text editor to enter a new integer value for the variables in the *hostname*`_oy_`*adaptiveservername_name*`.cfg` file in the *install_dir*`/config` directory. (If you want your changes to affect all monitoring agents that are running on the computer, modify the `oy.ini` file.) Save your changes and restart the agent.
- **On Windows:**
  1. In the Windows **Start** menu, choose **Program Files > IBM Tivoli Monitoring > Manage Tivoli Monitoring Service**. The Manage Tivoli Enterprise Monitoring Services window is displayed.
  2. Right-click the row that contains the name of the monitoring agent whose environment variables you want to set.
  3. Select **Advanced > Edit Variables** in the pop-up menu.
  4. If the agent is running, accept the prompt to stop the agent. A restart is necessary so that the environment variable that you create takes effect.
  5. The list dialog is displayed. When only the default settings are in effect, there are no variables displayed. The variables are listed after you override them.

6. Override the variable settings as follows:
   a. Click **Add**.
   b. Select the variable you want to modify in the **Variable** pull-down menu. For example, select **COLL_NUMOUTBAK**.
   c. Type a value in the Value field. For example, type the number **9**, the maximum number of backup files that can be generated.
   d. Select **OK** two times.
   e. Restart the agent.

Setting RAS trace parameters

Objective

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

Background Information

Sybase agent uses RAS1 tracing and generates the logs described in Table 2 on page 5. The default RAS1 trace level is ERROR.

RAS1 tracing has control parameters to manage to the size and number of RAS1 logs. Use the procedure described in this section to set the parameters.

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.

Before you begin

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 are managing log file generation.

After you finish

Monitor the size of the **logs** directory. Default behavior can generate a total of 45 to 60 MB for each agent that is running on a computer. For example, each database server instance that you monitor could generate 45 to 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 which are pruned automatically, other log types can grow indefinitely, for example, the logs in Table 2 on page 5 that include a process ID number (PID).

Consider using collector trace logs (described in Table 2 on page 5) 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 them only temporarily, while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.

Procedure

About this task

Specify RAS1 trace options in the *install_dir*\tmaitm6\KOYENV file on Windows or the *install_dir*/config/oy.ini file on UNIX systems.

Note: On UNIX, the trace options that you set in the `oy.ini` file apply to all database server instances that you are monitoring on the computer where `oy.ini` is located. An additional trace options file, *hostname*`_oy_`*adaptiveservername*`.cfg`, exists for each database server instance. The *hostname*`_oy_`*adaptiveservername*`.cfg` file inherits its settings from the `oy.ini` file. If you want to set trace options for a specific instance only, modify options in the *hostname*`_oy_`*adaptiveservername*`.cfg` file. Use one of the following methods to modify trace options:

- **Manually edit the configuration file to set trace logging**
  1. Open the trace options file:
     - On Windows, open the *install_dir*`\tmaitm6\KOYENV` file.
     - On UNIX systems, open the `/`*install_dir*`/config/oy.ini` file.
  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:
     - On Windows,

       ```
       KBB_RAS1=ERROR (UNIT:kdd ALL) (UNIT:koy ALL) (UNIT:kra ALL)
       ```
     - On UNIX systems,

       ```
       export KBB_RAS1='ERROR (UNIT:kdd ALL) (UNIT:koy ALL) (UNIT:kra ALL)'
       ```
  3. Edit the line that begins with **KBB_RAS1_LOG=** to manage the generation of log files:
     - Edit the following parameters to adjust the number of rolling log files and their size.
       - **MAXFILES**: the total number of files that are to be kept for all startups of a given program. Once this value is exceeded, the oldest log files are discarded. Default value is 9.
       - **LIMIT**: the maximum size, in megabytes (MB) of a RAS1 log file. 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. Default value is 3.
       - **PRESERVE**: the number of files that are not to be reused in the rolling cycle of one program startup. 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.
- (*Windows only*) **Alternate method to edit trace logging parameters:**
  1. Open the Manage Tivoli Enterprise Monitoring Services window.
  2. Right-click the icon of the monitoring agent whose logging you want to modify.
  3. Select **Advanced** > **Edit Trace Parms**. The Tivoli Enterprise Monitoring Server Trace Parameters window is displayed.
  4. Select a new trace setting in the pull-down menu in the **Enter RAS1 Filters** field or type a valid string.

     The selections are as follows:
     - No error tracing. `KBB_RAS1=-none-`
     - General error tracing. `KBB_RAS1=ERROR`
     - Intensive error tracing. `KBB_RAS1=ERROR (UNIT:koy ALL)`
     - Maximum error tracing. `KBB_RAS1=ERROR (UNIT:koy ALL) (UNIT:kra ALL)`

       Note: As this example shows, you can set multiple RAS tracing options in a single statement.
  5. Modify the value for "Maximum Log Size Per File (MB)" to change the log file size (changes LIMIT value).
  6. Modify the value for "Maximum Number of Log Files Per Session" to change the number of logs files per startup of a program (changes COUNT value).

7. Modify the value for "Maximum Number of Log Files Total" to change the number of logs files for all startups of a program (changes MAXFILES value).
8. (*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.

   Note: The **KDC_DEBUG** setting and the Maximum error tracing setting can generate a large amount of trace logging. Use them only temporarily, while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.
9. Click **OK**. You see a message reporting a restart of the monitoring agent so that your changes take effect.

Chapter 3. Problems and workarounds

The following sections provide symptoms and workarounds for problems that might occur with Sybase agent:

- "Installation and configuration troubleshooting"
- "Agent troubleshooting" on page 23
- "Tivoli Enterprise Portal troubleshooting" on page 28
- "Workspace troubleshooting" on page 30
- "Remote Deployment troubleshooting" on page 29
- "Situation troubleshooting" on page 32
- "Sybase troubleshooting" on page 35

Note: You can resolve some problems by ensuring that your system matches the system requirements listed in the Prerequisites topic in the Information Center or the Software product compatibility reports (http://publib.boulder.ibm.com/infocenter/prodguid/v1r0/clarity/index.html). Search for the ITCAM for Applications product.
This chapter provides agent-specific troubleshooting information. See the *IBM Tivoli Monitoring Troubleshooting Guide* for general troubleshooting information.

Installation and configuration troubleshooting

This section provides tables that show solutions for the following types of installation, configuration, and uninstallation problems:

- Operating system problems
- Problems with database applications

Table 3. Problems and solutions for installation and configuration for agents that run on UNIX systems

Problem	Solution
When you upgrade to IBM Tivoli Monitoring, you might need to apply fix packs to Candle, Version 350, agents.	Fix packs for Candle, Version 350, are delivered as each monitoring agent is upgraded to IBM Tivoli Monitoring. **Note:** The IBM Tivoli Monitoring download image or CD provides application fix packs for the monitoring agents that are installed from that CD (for example, the agents for operating systems such as Windows, Linux, UNIX, and i5/OS). The upgrade software for other agents is located on the download image or CDs for that specific monitoring agent, such as the agents for database applications. If you do not upgrade the monitoring agent to IBM Tivoli Monitoring, the agent continues to work. However, you must upgrade to have all the functionality that IBM Tivoli Monitoring offers.
Presentation files and customized OMEGAMON® DE screens for Candle monitoring agents need to be upgraded to a new Linux on z/Series system.	The upgrade from version 350 to IBM Tivoli Monitoring handles export of the presentation files and the customized OMEGAMON DE screens.
The following message is displayed in the installation log for some Windows agents when upgrading from Tivoli OMEGAMON V350: `<REPLACELINE> Pair missing 1=[KBB_RAS1=ERROR] no 2, skipped.`	There is no workaround. The previous value of KBB_RAS1 from the OMEGAMON V350 agent is used, preserving prior customer settings for this variable. The problem has no adverse effect on the installation or subsequent operation of the monitoring agent .

Table 3. Problems and solutions for installation and configuration for agents that run on UNIX systems (continued)

Problem	Solution
Non-ASCII characters entered into the configuration window for the monitoring agent do not show up or are not the correct characters.	Enter only ASCII characters into these fields.
During the command-line installation, you choose to install a component that is already installed, and you see the following warning: `WARNING - you are about to install the SAME version of "component"` where *component* 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 would see this problem if you choose to install a product component (for example, a monitoring server) on UNIX.	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 already installed.
While installing the agent from a CD or DVD, the following message is displayed and you are not able to continue the installation: `install.sh warning: unarchive of "/cdrom/unix/filename.tar" may have failed`	This error is caused by low disk space. Although the install.sh script indicates that it is ready to install the agent software, the script considers the size of *all* tar files, not the size of all the files that are contained within the tar file.Run the **df -k** command to check whether the file systems have enough space to install agents.
Cannot locate the `KDCB0_HOSTNAME` setting.	Go to *install_dir*`/config` and edit the corresponding **.ini** file. Set the `KDCB0_HOSTNAME` parameter followed by the IP address. If you use multiple network interface cards (NICs), give the Primary IP address of the network interface.
The Sybase agent repeatedly restarts.	You can collect data to analyze this problem as follows: 1. Access the *install_dir*`/config/oy.ini` file, which is described in "Setting RAS trace parameters" on page 9. 2. Add the following line: `KBB_SIG1=trace –dumpoff`
Agents in the monitoring environment use different communication protocols. For example, some agents have security enabled and others do not.	Configure both the monitoring server and the Warehouse proxy server to accept multiple protocols, as described in the *IBM Tivoli Monitoring Installation and Setup Guide*.
Creating a firewall partition file: The partition file enables an agent to connect to the monitoring server through a firewall.	**How it works:** When the agents start, they search KDCPARTITION.TXT for the following matches: • An entry that matches the partition name **OUTSIDE**. • An entry that also includes a valid external address. For more information, see the *IBM Tivoli Monitoring Installation and Setup Guide*.
The monitoring agent does not start in a non-ASCII environment.	Check the agent configuration to ensure that all the values are correctly represented. To view these parameters, go to the Manage Tivoli Enterprise Monitoring Services window, select the agent template, and choose the Configure using defaults. From the resulting window, select and edit the database instance to view its parameters.

Table 3. Problems and solutions for installation and configuration for agents that run on UNIX systems (continued)

Problem	Solution
Text for configuration functions is displayed in English instead of native languages when installing and configuring the monitoring agent. For example, when using the **itmcmd config** command on a UNIX or Linux system.	None. You must complete configuration of the monitoring agent using English.
On UNIX and Linux systems during configuration with the CandleDBConfig or itmcmd config –A commands, the Sybase agent does not correctly identify the instance name and configuration status. For example, if 'uname -n' returns test_system_raleigh, and the instance name is test_inst, and it is fully configured, the search will indicate that the instance name is raleigh and it is not configured.	The instance can be configured and will run correctly. This is only a problem with displaying an inventory of servers on this particular screen. There is no workaround for correcting the display. The Sybase agent configuration on UNIX and Linux does not correctly identify the instance name and configuration status if either the hostname (as returned by uname -n) or the instance name contains any of the following characters: . (period) : (colon) = (equals) " (double quote) When configuring the monitoring agent, you might see the following information if any of the special characters listed above exist in the hostname. Select one of the following: 1. Confine automatic search to running databases 2. Also search for non-running databases (slower) 3. No automatic search. Manual update only. 4. Tutorial on automatic search techniques and limitations Function menu Select an option or <CR> to exit: 1 Performing initial scan for Oracle. Please wait... Scanning servers currently running or in /etc/oratab Inventory of known Oracle servers before search: X=Excluded I=Incomplete raleigh(I) Inventory of known Oracle servers after search: X=Excluded I=Incomplete raleigh(I)
You successfully upgraded from an OMEGAMON monitoring agent to IBM Tivoli Monitoring, Version 6.2.0. However, when you configure historical data collection, you see an error message that includes, `Attribute name may be invalid, or attribute file not installed for warehouse agent`.	Copy the attribute files (koy.atr) for the upgraded monitoring agent to *`install_dir`*`\tmaitm6\attrlib` on the computer where you have installed the Warehouse Proxy agent. The Warehouse Proxy agent must be able to access the short attribute names for tables and columns. That way, if the longer versions of these names exceed the limits of the Warehouse database, the shorter names can be substituted.

Table 4. Problems and solutions for installation and configuration for agents that run on Windows systems

Problem	Solution
When you upgrade to IBM Tivoli Monitoring, you might need to apply fix packs to Candle, Version 350, agents.	Fix packs for Candle, Version 350, are delivered as each monitoring agent is upgraded to IBM Tivoli Monitoring. **Note:** The IBM Tivoli Monitoring download image or CD provides application fix packs for the monitoring agents that are installed from that CD (for example, the agents for operating systems such as Windows, Linux, UNIX, and i5/OS). The upgrade software for other agents is located on the download image or CDs for that specific monitoring agent, such as the agents for database applications. If you do not upgrade the monitoring agent to IBM Tivoli Monitoring, the agent continues to work. However, you must upgrade to have all the functionality that IBM Tivoli Monitoring offers.
Presentation files and customized OMEGAMON DE screens for Candle monitoring agents need to be upgraded to a new Linux on z/Series system.	The upgrade from version 350 to IBM Tivoli Monitoring handles export of the presentation files and the customized OMEGAMON DE screens.
Diagnosing problems with product browse settings.	When you have problems with browse settings, perform the following steps: 1. Click on **Start > Programs > IBM Tivoli Monitoring > Manage Tivoli Enterprise Monitoring Services**. The Manage Tivoli Enterprise Monitoring Services 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.
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 is not able to 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 host name and port settings for communication in the IBM Tivoli Monitoring environment.
The monitoring agent does not start in a non-ASCII environment.	Check the agent configuration to ensure that all the values are correctly represented. To view these parameters, go to the Manage Tivoli Enterprise Monitoring Services window, select the agent template, and choose the Configure using defaults. From the resulting window, select and edit the database instance to view its parameters.
Text for configuration functions is displayed in English instead of native languages when installing and configuring the monitoring agent. For example, when using the Manage Tivoli Enterprise Monitoring Services GUI on a Windows system.	None. You must complete configuration of the monitoring agent using English.
You successfully upgraded from an OMEGAMON monitoring agent to IBM Tivoli Monitoring, Version 6.2.0. However, when you configure historical data collection, you see an error message that includes, `Attribute name may be invalid, or attribute file not installed for warehouse agent`	Copy the attribute files (koy.atr) for the upgraded monitoring agent to *`install_dir`*`\tmaitm6\attrlib` on the computer where you have installed the Warehouse Proxy agent. The Warehouse Proxy agent must be able to access the short attribute names for tables and columns. That way, if the longer versions of these names exceed the limits of the Warehouse database, the shorter names can be substituted.

Table 4. Problems and solutions for installation and configuration for agents that run on Windows systems (continued)

Problem	Solution
Registry entries are not removed when the agent is installed on a 64-bit Windows system.	Manually delete the registry entries from the following path before you install the agent: `HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Candle\KOY\610\`

Table 5. Problems and solutions for installation and configuration of the Sybase agent

Problem	Solution

The procedure for launching the Sybase agent: Trace Parameters window in"Setting RAS trace parameters" on page 9 fails.	This problem happens when the trace options are missing from the configuration file. You can correct the problem as follows:
	1. Edit a configuration file with the following path name:
	• On Windows systems: *install_dir*\tmaitm6\KOYENV
	• On UNIX and Linux systems: /*install_dir*/config/oy.ini
	2. Paste the following configuration setting in the file:
	• On Windows:
	`KBB_RAS1=ERROR ^> C:\IBM\ITM\tmaitm6\logs\KOYRAS1.LOG`
	• On UNIX and Linux systems:
	`export KBB_RAS1='ERROR'`
	Note: If you installed the product in a directory path other than the default, use that directory path instead.
	1. Save your changes.
	2. Repeat the "Setting RAS trace parameters" on page 9 procedure. Now the **Tivoli Enterprise Monitoring Server: Trace Parameters** window is displayed.

Collector trace logs are not receiving error information.	Review the information in Chapter 2, "Trace logging," on page 3 to ensure that you are consulting the correct log file. The file is located in the following path: *install_dir*\tmaitm6, where *install_dir* is the location of IBM Tivoli Monitoring.
After running the agent successfully, you reinstall the agent software, and collection of monitoring data stops.	Consult the list of supported versions in the configuration chapter of the agent user's guide for Sybase. Confirm that you are running a valid version of the target application. If you are monitoring a supported version of the database application, gather log files and other information and contact IBM Software Support, as described in "Gathering product information for IBM Software Support" on page 1.
Alert summary report of Tivoli Enterprise Portal shows no information.	Ensure that the COLL_ERRORLOG setting defines a valid path. Confirm that the error log file is correct. If the error log file is correct, the problem can occur because the logon account that you are using does not have sufficient permissions in the IBM Tivoli Monitoring environment.
Error counts are displayed in the Alert summary report in the Tivoli Enterprise Portal, however, error messages are not displayed in the Alert detail report.	Check the time stamp for the reports. If you have set up historical data collection for Alert summary report, it is recommended that you set up historical data collection for the Alert detail report, too.

Table 5. Problems and solutions for installation and configuration of the Sybase agent (continued)

Problem	Solution

Problems with database connectivity occur because the KOYGRANT script is not run.	Specifically, you might see an error like the following in the collector trace log:
	• **In Sybase:** The Sybase agent displays the following message:
	`YEM0155E (193633) Failed to open SYBASE Server connection \`
	`YCD0130E (193633)`
	`Unable to connect to SYBASE server:HDCHASDSTC0041,`
	`id:tivoli, Retcode= 0`
	• **In Oracle:** The Oracle agent displays -942 error in the collector log file as shown in this excerpt:
	`RPF0340T (5/19/05) Time = 2005/05/19 15:07:40 For cursor KSS5, \`
	`rows collected for insert = 1`
	`RPF0300T (5/19/05) Doing prep_l_fet for cursor KSS6`
	`RSC0200I (5/19/05) SQLCODE for PREPARE = -942`
	`RSC0205T (5/19/05) Stmt = SELECT max(bytes) MAXLOGBYTE FROM \`
	`v$log`
	`RSC0220W (5/19/05) ORACLE Message ORA-00942: table or view does \`
	`not exist for PREPARE`
	`CGN1521E (5/19/05) Interval collection failed for cursor KORSRVR`
	After installation, run the koygrant.sql script to obtain a connection ID, as described in the Installation and Configuration Guide for the agent.
	To collect data, the agent must have the **DBA select** privilege on the Sybase system tables.

After the agent starts the 'kddos isremote failed, no localization' message is displayed.	When the `tmp` directory path is inaccessible two things happen:
	• The logs are stored in the *install_dir*/`logs` directory
	• The message **kddos isremote failed, no localization** is displayed as shown in this excerpt:
	`$ ./CandleAgent start oy`
	`CandleAgent : installer level 350 / 547.`
	`CandleAgent : considering servers: name.`
	`kddexec: kddos isremote failed, no localization`
	`Collector and Agent started for name`
	You can safely ignore this message.

You see the following error message when you execute **itmcmd config**.
`Your kddos root permission is not set. This will impede database self-discovery. Please exit and have the superuser issue the following commands:`
`cd /ct99r1e/slee/AIX5`
`chown root */bin/kddos`
`chmod u+sx */bin/kddos`
`Press enter to continue, or type "exit" to exit.`
The full text of this message is provided in the next row.
	Run the **`itmcmd config -A oy`** command under *install_dir*/`bin` directory to configure the monitoring agent. It calls the **kddfind.sh** script internally. The **kddfind.sh** script is located under *install_dir*/*OS_dir*/`bin` directory. The **kddfind.sh** script uses **kddos** and **kddos64** internally. If you have not set root permissions or **setuid**, you get this error message whenever **itmcmd config** starts. You must change the owner and setuid of **kddos** (and **kddos64**) before executing **`itmcmd config -A oy`**, as in this example:
	`$su –root`
	`# cd install_dir/$OSsubdir/bin`
	`# chown root kddos`
	`# chmod u+sx kddos`
	On HP-UX and SunOS, you have to make the same settings for **kddos64**, as in this example:
	`# chown root kddos64`
	`# chmod u+sx kddos64`

Table 5. Problems and solutions for installation and configuration of the Sybase agent (continued)

Problem	Solution

Sample **itmcmd config -A oy** error message:
`$ ./itmcmd config -A oy`
`Candle DB config: Welcome to CandleDBconfig 07/07/05 8:46`
`_____`
`CandleDBconfig prepares the environment to run the OMEGAMON Monitoring Agent (OMA) for distributed databases. CandleDBconfig:`
`1. Prepares a configuration file for each monitored server, so that the OMA knows how to talk to the database.`
`2. Verifies that the installation is correct and operational.`
`CandleDBconfig finds running databases much more easily and reliably than non-running databases. If you want to monitor databases that are not currently running, you might wish to exit CandleDBConfig and start them.`
`Also, CandleDBconfig works best if you have more than 25 display lines. Both X-Windows and NT Telnet allow you to expand the number of lines without disconnecting from UNIX. You don't have to issue any UNIX commands to take advantage of the increased lines.`
`Your kddos root permission is not set. This will impede database self-discovery. Please exit and have the super-user issue the following commands:`
`cd /ct99r1e/slee/AIX5`
`chown root */bin/kddos`
`chmod u+sx */bin/kddos`
`Press enter to continue, or type "exit" to exit.`	

Unique names for monitoring components: ORIGINNODE is truncated and doesn't show the product code.	IBM Tivoli Monitoring might not be able to generate a unique name for monitoring components due to the truncation of names that the product automatically generates. IBM Tivoli Monitoring automatically creates a name for each monitoring component by concatenating the subsystem name, host name, and product code separated by colons (*subsystem_name*:*hostname*:OY). **Note:** When you monitor a multinode systems, like databases, IBM Tivoli Monitoring uses a database instance name as the subsystem 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 *subsystem_name* portion of the name as described in the steps in the following rows:

Table 5. Problems and solutions for installation and configuration of the Sybase agent (continued)

Problem	Solution
• **On Windows:** **Note:** This procedure involves editing the Windows Registry. An error in editing the Registry may cause other system errors. It is best practice to make a backup copy of the Registry prior to modifying the Registry. If you do not feel comfortable editing the Registry, contact IBM Software Support. 1. Run the Registry editor, **regedit**. Select **Start > Run**. Type **regedit** in the field and click **OK**. 2. Locate the following key: `HKEY_LOCAL_MACHINE\SOFTWARE\Candle\KOY\610\`*`instance_name`* where *instance_name* is the Sybase Server instance name that is associated with the target agent. 3. Open the **Environment** key. 4. Select the **CTIRA_SUBSYSTEM_ID** string attribute. If you do not find **CTIRA_SUBSYSTEM_ID**, add it. step 6. Type a new name for an instance name (subsystem name) For the step 4 -6, if user can't find CTIRA_SUBSYSTEM_ID, add it. 5. Right-click and select **Modify**. 6. Type a new instance name (subsystem name). Keep in mind that the final concatenated name, including the subsystem name, host name, and OY, 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. 7. Exit from the Registry editor. 8. Restart the agent. 9. A second instance in the Tivoli Enterprise Portal Navigation tree might be automatically added. If this happens, clear the old, offline agent instance navigation item using the **Managed System Status** workspace of the Enterprise Navigation tree item.	
• **On UNIX:** 1. Open the configuration file for the monitoring agent, which is located in the following path: *install_dir*/config/*hostname*_oy_*instancename*.cfg 2. Find the line the begins with `CTIRA_SUBSYSTEM_ID=`. 3. Type a new name for instance name (subsystem_name) that is a unique, shorter name for the instance name (*subsystem_name*). The final concatenated name including the subsystem name, new host name, and OY, 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. If you cannot find the **CTIRA_SUBSYSTEM_ID** environment variable, you must add it to the configuration file of the monitoring agent. Open *hostname*_oy_*instancename*.cfg and add `CTIRA_SUBSYSTEM_ID` with the new instance name.	

Table 5. Problems and solutions for installation and configuration of the Sybase agent (continued)

Problem	Solution
Bad data is displayed in the Tivoli Enterprise Portal.	A long IBM Tivoli Monitoring installation directory name on a Windows system on which a Sybase agent is running causes bad data to appear in the Tivoli Enterprise Portal when the IBM Tivoli Monitoring installation directory contains directory names that are longer than 8 characters. This problem is caused by improper handling of the "~" (tilde) character that Windows inserts into directory names longer than 8 characters when creating an 8 character directory alias. Edit the Windows registry for each agent instance on the system where the monitoring agent is running. For a 32-bit Windows environment, change the data associated with the COLL_HOME value in the HKEY_LOCAL_MACHINE\Software\Candle\KOY\610*sybase instance*\Environment key to the full directory name so the COLL_HOME data contains no "~" (tilde) character. Restart the monitoring agent after making the change. For a 64-bit Windows environment, change the data associated with the COLL_HOME value in the HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Candle\KOY\610*sybase instance*\Environment key to the full directory name so the COLL_HOME data contains no "~" (tilde) character. Restart the Sybase monitoring after making the change. **Note:** Reconfiguring an agent instance resets the registry key. These modifications must be reapplied.
For the Sybase agent, the Start, Stop, and Advanced Configuration functions do not work from the GUI.	Install the xterm program, which is available from RedHat.
If you specify the full path for the Database Server Open Client while configuring the agent, the agent fails to connect to the Sybase ASE server.	Configure the monitoring agent by specifying the short path for the Database Server Open Client. The SYBASE_OCS parameter provides the path for the Database Server Open client. To specify the short path as the value for the SYBASE_OCS parameter, complete the following steps: 1. Open the configuration file of the monitoring agent, which is located in the following path: `install_dir/config/hostname_oy_instancename.cfg` 2. For the SYBASE_OCS parameter, specify the short path for the Database Server Open Client. 3. Save the file, and restart the agent.
When the Sybase Server attempts to connect to the database, the following error message is generated due to a short wait timeout period: `The server encountered an error connecting to database <db_name> CIR1880E(021426)Open Probe pipe errno= 2.Pipe=/opt/Tivoli/ITM/tmp/sdc01psyb09.keybank.com_oy_LPKSYPD1/prb_LPKSYPD1_koy_sdc01psyb09.keybank.com_07020147_7161_pipe.Cursor=KOYPRCS`	Increase the timeout period of the Sybase Server by completing the following steps: 1. Open the configuration file for the monitoring agent, which is located in the following path: `install_dir/config/hostname_oy_instancename.cfg` 2. Specify these values of the following parameters: • COLL_WAIT_TIMEOUT=600 • WAIT_TIMEOUT=600 3. Save the file, and restart the agent.

Table 5. Problems and solutions for installation and configuration of the Sybase agent (continued)

Problem	Solution
The prerequisite checker that is integrated with the Sybase agent installer fails to run.	Run the prerequisite checker manually by using the following commands: • On Windows systems: *install_dir*\Sybase_Agent_Installer\WINDOWS\prereqchecker\prereq_checker.bat KOY • On UNIX and Linux systems: *install_dir*/Sybase_Agent_Installer/unix/prereqchecker/prereq_checker.sh KOY

Table 6. General problems and solutions for uninstallation

Problem	Solution
On Windows, uninstallation of IBM Tivoli Monitoring fails to uninstall the entire environment.	Confirm that the following problems do not exist: • Ensure that you are the only user who is logging into the computer where you are performing an uninstallation operation. If another user is performing operations during an uninstall process, the uninstall process fails. • Be sure that you follow the general uninstallation process described in the *IBM Tivoli Monitoring Installation and Setup Guide*: 1. Uninstall 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. 2. 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, then click **Workspace** > **Managed System Status**. 3. Right-click the offline managed system, and select **Clear offline entry**. If you also want to uninstall the monitoring agent, use the procedure described in the *IBM Tivoli Monitoring Installation and Setup Guide*.

Unique names for monitoring components

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 subsystem name, host name, and product code separated by colons (*subsystem_name*:*hostname*:OY).

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\KOYCMA_*instance*.ini.
   - **On UNIX and Linux:** *install_dir*/config/oy.ini.
2. Find the line that begins with **CTIRA_HOSTNAME=**.
3. Type a new name for host name that is a unique, shorter name for the host computer. The final concatenated name including the subsystem name, new host name, and OY, 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.
6. If you do not find the files mentioned in Step 1, perform the workarounds listed in the next paragraph.

If you do not find the files mentioned in the preceding steps, uninstall the monitoring agent, then reinstall.

Agent troubleshooting

This section lists problems that might occur with agents.

This chapter provides agent-specific troubleshooting information. See the *IBM Tivoli Monitoring Troubleshooting Guide* for general troubleshooting information.

Table 7. General agent problems and solutions

Problem	Solution
When you edit the configuration for an existing monitoring agent, the values displayed are not correct.	The original configuration settings might include non-ASCII characters. These values were stored incorrectly and result in the incorrect display. Enter new values using only ASCII characters.
A problem can arise when you run multiple agents on one computer and want them to communicate with multiple monitoring servers, as described in this example: • Agents are running on computer and communicating with a Tivoli Enterprise Monitoring Server, called **TEMS1**. • You install a new agent on the same computer and you want this agent to communicate with a different monitoring server, called **TEMS2**. • When you configure the new agent to communicate with **TEMS2**, all the existing agents are re-configured to communicate with **TEMS2**.	You must reconfigure the previously existing agents to restore their communication connection with TEMS1. For example, you can right-click the row for a specific agent in the Manage Tivoli Enterprise Monitoring Services, and select **Reconfigure**. See the *IBM Tivoli Monitoring Installation and Setup Guide* for more information about reconfiguration.
The system experiences high CPU usage after you install or configure Sybase agent.	View the memory usage of the KOYCMA process. If CPU usage seems to be excessive, recycle the monitoring agent.

Table 7. General agent problems and solutions (continued)

Problem	Solution
The Sybase data collector does not return data and appears to stop. When using isql you might see a message such as the following: `Space available in the log segment has fallen critically low in the tempdb database. All future modifications to this database will be suspended until the log is successfully dumped and space becomes available. The transaction log in database tempdb is almost full. Your transaction is being suspended until space is made available in the log.`	These are indications that the tempdb database is full. Custom databases do not experience this problem. Any database that encounters this problem needs to have the following option defined: `sp_dboption tempdb, "abort tran on log full", true` You can use isql to define that option for a database. This example uses tempdb as the database where the option is being set. You must set this option on each individual database that is having the problem.

Table 7. General 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 do appear in the portal.	Tivoli Monitoring products use Remote Procedure Call (RPC) to define and control product behavior. RPC is the mechanism that allows a client process 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 desired protocol (or delivery mechanism) for RPCs. "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 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 a non-Tivoli Enterprise Monitoring Server. 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 that 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) provided that each Tivoli Enterprise Monitoring Server on that image reports to a different HUB. By definition, there is one Tivoli Enterprise Monitoring Server HUB per monitoring Enterprise, so this architecture limit has been simplified to one Tivoli Enterprise Monitoring Server per system image. No more that 15 IP.PIPE processes or address spaces can be active on a single system image. With the first limit expressed above, this second limitation refers specifically to Tivoli Enterprise Monitoring Agent processes: no more that 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 EPHEMERAL IP.PIPE. (This is IP.PIPE configured with the 'EPHEMERAL:Y' keyword in the KDC_FAMILIES / KDE_TRANSPORT environment variable). There is no limitation to the number of ephemeral IP.PIPE connections per system image. 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.)
Attributes do not allow non-ASCII input in the Situation Editor.	None. Any attribute that does not include "(Unicode)" might support only ASCII characters. For example "Attribute (Unicode)" will support unicode but "Attribute" without "(Unicode)" might only support ASCII characters.

Table 7. General agent problems and solutions (continued)

Problem	Solution
Tivoli Enterprise Console events from IBM Tivoli Monitoring V6.2 for IBM Tivoli Monitoring v5.x migrated situations have parsing errors in the TEC server.	1. Ensure that you have IBM Tivoli Monitoring V6.2 Event Synchronization installed on your Tivoli Enterprise Console® server. 2. Obtain updated baroc files from the Sybase agent events. Updated baroc files are in TEMS in *install_dir*/CMS/TECLIB/itm5migr. There are updated files for koy.baroc, DataCacheRM_IXB.baroc, LocksRM_IXB.baroc, SpaceUsageRM_IXB.baroc, StateRM_IXB.baroc, SybaseAvailability_IXB.baroc, Threshold.baroc, TrafficRM_IXB.baroc, WaitsRM_IXB.baroc, and SybaseMon_tbsm_notification.baroc.
You are receiving Tivoli Business Service Manager events that cannot be associated because application_oid and application_class are not set.	This problem is caused by IBM Tivoli Monitoring V6.2 sending TEC events for IBM Tivoli Monitoring 5.x migrated situations. These events are not able to set the cited slot values. Replace the SybaseMon_IXB_tbsmfwd_itm.sh script on the Tivoli Enterprise Console server with the version of this file from the TEMS in *install_dir*/CMS/TECLIB/itm5migr.

Table 8. Agent problems and solutions on the UNIX operating system

Problem	Solution
You see an unknown instance of the monitoring agent for Sybase called **koyagent** in the Tivoli Enterprise Portal.	The verification process for the Sybase agent creates a Sybase server instance called koyagent. The system creates this instance to validate the connection to the Tivoli Enterprise Monitoring Server. The Tivoli Enterprise Portal shows an entry for this Sybase server instance, even though that instance only exists during the verification steps. To remove this instance from Tivoli Enterprise Portal, follow the standard process for removing an instance on the Tivoli Enterprise Portal.

Table 8. Agent problems and solutions on the UNIX operating system (continued)

Problem	Solution
Agent unable to connect: The agent is started, but no reports are displayed on Tivoli Enterprise Monitoring Server. The log file includes the following error: `Unable to find running CMS on CMSLIST or Endpoint unavailable`	This error message means that the agent is not able to connect to the computer where the Tivoli Enterprise Monitoring Server is running. The reason might be any one of the following: **Computer where the Tivoli Enterprise Monitoring Server is running is down** Ping the computer where the Tivoli Enterprise Monitoring Server is running and make sure that it is up and running. **Tivoli Enterprise Monitoring Server is not running** If the Tivoli Enterprise Monitoring Server is not running, recycle the Tivoli Enterprise Monitoring Server and verify whether the agent is connecting. **Multiple NIC Cards on the computer where the Tivoli Enterprise Monitoring Server is running.** If multiple NICs are installed on the computer where the Tivoli Enterprise Monitoring Server is running, identify the Primary NIC and use the *hostname* or IP address. Verify that the Tivoli Enterprise Monitoring Server has been configured with the Primary NIC's IP address or *hostname*. If you are using *hostname*, make sure that `/etc/hosts` has a valid entry for the Primary NICs host name and its IP address. On the Tivoli Enterprise Monitoring Server set the *KDCB0_HOSTNAME* variable to the primary IP address of the computer. Use the same address to configure the agent. To connect to the Tivoli Enterprise Monitoring Server, configure the agent with Primary NIC's IP address or host name of the computer where the Tivoli Enterprise Monitoring Server is running. While configuring the agent, make sure that the port number that you are connecting to is correct. If you are not using the default port number, make sure that you are using the same port number used in Tivoli Enterprise Monitoring Server.For more information, see the *IBM Tivoli Monitoring Installation and Setup Guide.* **Agent is behind the Firewall** If you use a Firewall, identify whether you have any one of the following scenarios: • Hub monitoring server INSIDE, and agents OUTSIDE • Hub and remote monitoring servers INSIDE, agents OUTSIDE • Hub monitoring server INSIDE, remote monitoring server and agents OUTSIDE See Creating a firewall partition file for information about the `KDC_PARTITION` file that enables communication across a firewall. For additional information, see the *IBM Tivoli Monitoring Installation and Setup Guide.* **Connecting to the monitoring server through a Virtual Private Network (VPN)** In some cases, the agent or a remote monitoring server needs to connect to the hub monitoring server through a VPN. You must configure the communication channel (pipe) to be ephemeral, as in the following example: `KDC_FAMILIES=ip.pipe port:port_number ephemeral:y ip use:n sna use:n`

Table 8. Agent problems and solutions on the UNIX operating system (continued)

Problem	Solution
The values for the following attributes are zero when the Sybase agent is running in a Solaris 10 non-global zone: • Total OS CPU Percent (Sybase Server Summary attribute group) • Server CPU Percent (Sybase Server Summary attribute group) • Server CPU Pct System (Sybase Process Summary attribute group) • Server CPU Percent Application (Sybase Process Summary attribute group) • Current® CPU Pct Used (Sybase Process Detail attribute group)	These attributes cannot be collected unless resources that provide CPU information are shared with the non-global zone. When the resources are shared, the monitoring agent has visibility to certain CPU characteristics that are required to determine the value of these attributes. If the Sybase agent is running in a non-global zone, which is necessary when the Sybase Server product is running in a non-global zone, then the global zone resources must be shared with the non-global zone. If this is not feasible for your environment, then these values are zero. Do not trigger situations based on the above values. In the Tivoli Enterprise Portal and in the warehouse, these attributes are zero.
The monitoring agent is installed and running normally. After rebooting the computer where the Tivoli Enterprise Monitoring Server was running, or restarting the system that hosts the Tivoli Enterprise Monitoring Server, the agent is not online or some workspaces are empty. However, when you use **CandleAgent start**, the agent starts and continues running.	This problem can occur when the agent is installed locally using a non-root user, or when the agent is installed remotely using the `Run As` option on the GUI or using the **_UNIX_STARTUP_.Username** option on the **tacmd addSystem** command line. Verify whether you have used a non-root user to install the monitoring agent. Manually start the monitoring agent using the correct user ID. For more information, see "Agent upgrade and restart using non-root" in the Installation and Configuration Guide for the Sybase agent.

Tivoli Enterprise Portal troubleshooting

Table 9 lists problems that might occur with the Tivoli Enterprise Portal. This chapter provides agent-specific troubleshooting information. See the *IBM Tivoli Monitoring Troubleshooting Guide* for general troubleshooting information.

Table 9. Tivoli Enterprise Portal problems and solutions

Problem	Solution
Historical data collection is unavailable because of incorrect queries in the Tivoli Enterprise Portal.	The column, Sort By, Group By, and First/Last functions are not compatible with the historical data collection feature. Use of these advanced functions will make a query ineligible for historical data collection. Even if data collection has been started, you cannot use the time span feature if the query for the chart or table includes any 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. See the *IBM Tivoli Monitoring Administrator's Guide* the Tivoli Enterprise Portal online Help for information on the Historical Data Collection function.

Table 9. Tivoli Enterprise Portal problems and solutions (continued)

Problem	Solution
When you use a long process name in the situation, the process name is truncated.	Truncation of process names in the portal display is the expected behavior. 64 bytes is the maximum name length.
`Collector inactive` is displayed in Sybase agent workspaces.	`Collector Inactive` usually means that the data collector is not running. The data collector is not passing data to the monitoring agent, which in turn is not passing data to the Tivoli Enterprise Monitoring Server, so the Tivoli Enterprise Portal has no data to display. Check to see if the agt.out log file is full of open pipe messages. 1. Stop the Sybase agent. 2. Define COLL_USESHM in the *hostname*_oy_*sybase servername*.cfg file in the *install_dir*/config directory. 3. Export COLL_USESHM=1 4. Restart the Sybase agent.
If you ran "Verify OMA installation" during the configuration of the Sybase agent on a UNIX system, an entry labeled **koragent** is displayed in the Navigator tree for that system on the Tivoli Enterprise Portal desktop. When the Sybase agent is started following configuration, the correct entry for the Oracle system is displayed in the Navigator tree, and the **koragent** entry remains. Eventually, the **koragent** entry turns gray, but it never disappears.	When **koragent** turns gray, use the following steps to remove it from the system: 1. Click the Enterprise Navigator item. 2. Right-click and select **Workspace** -> **Managed System Status**. 3. In the **Managed System Status** table, click the entry that starts with “koragent.” 4. Right-click **koragent**, and select **Clear offline entry**.

Remote Deployment troubleshooting

Table 10 lists problems that might occur with remote deployment. This section provides information about troubleshooting remote deployment of the monitoring agent. See the *IBM Tivoli Monitoring Troubleshooting Guide* for general troubleshooting information.

This section describes problems and solutions for remote deployment and removal of agent software Agent Remote Deploy:

Table 10. Remote deployment problems and solutions

Problem	Solution
While you are using the remote deployment feature to install Sybase agent, an empty command window is displayed on the target computer. This problem occurs when the target of remote deployment is a Windows computer. (See the *IBM Tivoli Monitoring Installation and Setup Guide* for more information on the remote deployment feature.)	Do not close or modify this window. It is part of the installation process and will be dismissed automatically.

Table 10. Remote deployment problems and solutions (continued)

Problem	Solution
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 happen when you attempt the remote removal process immediately after you have restarted 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.

Workspace troubleshooting

Table 11 shows problems that might occur with workspaces. This chapter provides agent-specific troubleshooting information. See the *IBM Tivoli Monitoring Troubleshooting Guide* for general troubleshooting information.

Table 11. Workspace problems and solutions

Problem	Solution
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 there is sufficient space to display all characters of the attribute's name.
You start collection of historical data but the data cannot be seen.	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 the Installation and Configuration Guide for the agent. By setting a more frequent interval for data collection you reduce the load on the system incurred every time data is uploaded. • You use the Summarization and Pruning monitoring agent to collect specific amounts and types of historical data. Be aware that historical data is not displayed until the Summarization and Pruning monitoring agent begins collecting the data. By default, this agent begins collection at 2 AM daily. At that point, data is visible in the workspace view. See the IBM Tivoli Monitoring Administrator's Guide to learn how to modify the default collection settings.

Table 11. Workspace problems and solutions (continued)

Problem	Solution
When support for the Sybase agent is installed on the Tivoli Enterprise Portal Server, you see the following error when you export workspaces using the tacmd exportworkspaces command: `KUICEW013E The exportWorkspaces command failed and could not successfully export all workspaces. Please consult the C:\IBM\ITM\logs\ WorkspaceImportExportCLI_0.log log file to determine the cause of the error.`	The Sybase agent supports the exporting of workspaces except for the following summarized performance workspaces: • Sybase Historical Summarized Performance • Sybase Historical Summarized Performance Weekly • Sybase Historical Summarized Performance Daily • Sybase Historical Summarized Performance Hourly You can export all workspaces for the Sybase agent except these four, or export all workspaces except those for this monitoring agent. For information about exporting workspaces other than the four workspaces that do not support export on the Tivoli Enterprise Portal Server, see "Exporting workspaces" in the Reference guide for the Sybase agent. See the *IBM Tivoli Monitoring User's Guide* for information about exporting all workspaces on the Tivoli Enterprise Portal Server except all of the workspaces for a specific monitoring agent.

Data is not displayed for the Database Detail attribute group due to lock conflicts with the SP_SPACEUSED stored procedure.	The Sybase agent provides the COLL_USE_ITM_SPACEUSED configuration item, which uses a user-defined stored procedure to avoid lock conflicts.
	
	To avoid lock conflicts, complete the following steps:
	1. Contact the Sybase administrator to create the SP_ITM_SPACEUSED stored procedure, that is a duplicate of the SP_SPACEUSED system stored procedure, with isolation level as 0.
	
	Attention: If a unique index error is displayed for the master.dbo.spt_values table while creating the stored procedure, run the following command to create a unique index on the table: **`Create unique index uni_index on master.dbo.spt_values(name, number, type)`**
	2. Complete one of the following steps:
	• On UNIX and Linux systems, append the following line to the *`install_dir`*`/config/oy.config` and *`install_dir`*`/config/oy.ini` files:
	`export COLL_USE_ITM_SPACEUSED=1`
	• On Windows systems, append the following line to Local Settings section of the *`install_dir`*`\TMAITM6\koycma.ini` file:
	`COLL_USE_ITM_SPACEUSED=1`
	3. Restart the agent.
	
	The agent now uses the user-defined stored procedure to fetch data for the Database Detail attribute group.

Table 11. Workspace problems and solutions (continued)

Problem	Solution

In some environments, the agent takes a long time to fetch data for the Segment Detail workspace.	The Sybase agent provides the COLL_USE_ITM_HELPSEGMENT configuration item, which uses a self-defined stored procedure to fetch data for the Segment Detail workspace. To configure the agent to use the user-defined stored procedure for fetching data, complete the following steps:
	1. Contact the Sybase administrator to create the SP_ITM_SEGSPACE and the SP_ITM_SEGSPACE_ALL_DBS stored procedures in the Sybase ASE server. These stored procedures are a duplicate of the SP_SEGSPACE and SP_SEGSPACE_ALL_DBS system stored procedures.
	2. Complete one of the following steps:
	• On UNIX and Linux systems, append the following line to the *install_dir*/config/oy.config and *install_dir*/config/oy.ini files:
	`export COLL_USE_ITM_HELPSEGMENT=1`
	• On Windows systems, append the following line to Local Settings section of the *install_dir*\TMAITM6\koycma.ini file:
	`COLL_USE_ITM_HELPSEGMENT=1`
	3. Restart the agent.

Situation troubleshooting

This section provides information about both general situation problems and problems with the configuration of situations. See the *IBM Tivoli Monitoring Troubleshooting Guide* for more information about troubleshooting for situations.

General situation problems

Table 12 lists problems that might occur with specific situations.

Table 12. Specific situation problems and solutions

Problem	Solution
You want to change the appearance of situations when they are displayed in a Workspace view.	1. Right-click an item in the Navigation tree. 2. Select **Situations** in the pop-up menu. The Situation Editor window is displayed. 3. Select the situation that you want to modify. 4. Use the **Status** pull-down menu in the lower right of the window to set the status and appearance of the Situation when it triggers. **Note:** This status setting is not related to severity settings in IBM Tivoli Enterprise Console.
Monitoring activity requires too much disk space.	Check the RAS trace logging settings that are described in "Setting RAS trace parameters" on page 9. For example, trace logs grow rapidly when you apply the **ALL** logging option.
A formula that uses mathematical operators appears to be incorrect. For example, if you were monitoring Sybase Server, a formula that calculates when **Total Processes Bad** falls under 10 percent of Total Processes does not work: `LT #'KOYPRCS.NUMPROCESS' / 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. Regarding the example, you can select **% Processes Bad** attribute and avoid the need for math operators.

Table 12. Specific situation problems and solutions (continued)

Problem	Solution
If you are running a version of the Sybase agent before V6.2 and you choose to alter the views to include a new attribute, data for this attribute is not displayed and you see a blank column in this view.	To enable Unicode and other features, upgrade the monitoring agent to IBM Tivoli Monitoring, Version 6.2.0.

You see the 'Unable to get attribute name' error in the Tivoli Enterprise Monitoring Server log after creating a situation.	Ensure that the agent attribute files are installed on the Tivoli Enterprise Monitoring Server.
	
	The following example shows a typical log entry when you have this problem:
	`(4320916A.0049-F60:kfaottev.c,1572,"Translate_ResultBuffer") \`
	`  Unable to get attribute name for tablename/column \`
	`  <UAG524400.UA4>. Ignored.`

Situations are triggered in the Tivoli Enterprise Monitoring Server, but events for the situation are not sent to the Tivoli Enterprise Console server. The Tivoli Enterprise Monitoring Server is properly configured for event forwarding, and events for many other situations are sent to the event server.	None. This is a limitation of the Tivoli Enterprise Monitoring Server event forwarding function. Situations that only monitor other situations do not send events to the event server. This condition can occur when a situation is only monitoring the status of other situations. The event forwarding function requires an attribute group reference in the situation in order to determine the correct event class to use in the event. When the situation only monitors other situations, no attribute groups are defined and the event class cannot be determined. Because the event class cannot be determined, no event is sent.

Problems with configuration of situations

Table 13 lists problems that might occur with situations.

This section provides information for troubleshooting for agents. Be sure to consult the *IBM Tivoli Monitoring Troubleshooting Guide* for more general troubleshooting information.

Table 13. Problems with configuring situations that you solve in the Situation Editor

Problem	Solution
Note: To get started with the solutions in this section, perform these steps: 1. Launch the Tivoli Enterprise Portal. 2. Click **Edit > Situation Editor**. 3. In the tree view, choose the agent whose situation you want to modify. 4. Choose the situation in the list. The Situation Editor view is displayed.	
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 absent, confirm that application support for Sybase agent has been added to the monitoring server. If not, add application support to 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 needed.
The situation did not activate at startup.	Manually recycle the situation as follows: 1. Right-click the situation and choose **Stop Situation**. 2. Right-click the situation and choose **Start Situation**. **Note:** You can permanently avoid this problem by placing a check mark in the **Run at Startup** option of the Situation Editor view for a specific situation.

Table 13. Problems with configuring situations that you solve in the Situation Editor (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 has not occurred even though the predicate has been properly specified.	Check the logs, reports, and workspaces.
A situation fires on an unexpected managed object.	Confirm that you have 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.
The situation does not fire. 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 upper-right corner of the Formula area. The Show formula window is displayed. a. Confirm the following details in the **Formula** area at the top 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 numerical values in the formula match your monitoring goal. b. (*Optional*) Click the **Show detailed formula** check box in the lower left of the window 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 numerical values that will 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 numerical values to valid levels so that you do not generate excessive monitoring data based on your temporary settings.

Table 14. Problems with configuration of situations that you solve in the Workspace area

Problem	Solution
Situation events are not displayed in the Events Console view of the workspace.	Associate the situation with a workspace. **Note:** The situation does not need to be displayed in the workspace. It is sufficient that the situation be associated with any workspace.
You do not have access to a situation.	**Note:** You must have administrator privileges to perform these steps. 1. Select **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's role. 4. Click **OK**.
A managed system seems to be offline.	1. Select Physical View and highlight the Enterprise Level of the navigator tree. 2. Select **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 status of the specific system or application.

Table 15. Problems with configuration of situations that you solve in the Manage Tivoli Enterprise Monitoring Services window

Problem	Solution
After an attempt to restart the agents in the Tivoli Enterprise Portal, the agents are still not running.	For UNIX, NetWare, or Windows, log on to the applicable system and perform the appropriate queries.
The Tivoli Enterprise Monitoring Server is not running.	Check the system status and check the appropriate IBM Tivoli Monitoring logs.
The managed objects you created are firing on incorrect managed systems.	Check the managed system distribution on both the situation and the managed object settings sheets.
For agents that can have multiple sub-nodes, such as database agents:	
The icon is incorrect.	Check the icon assignments in the template.
The situation is not assigned to a state in the template.	Check the situation assignments in the template of the associated managed object.
You assigned the situation to an incorrect state in the template.	Check the State settings sheet for the template.

Sybase troubleshooting

Table 16 lists problems that might occur on the system or application that you are monitoring. See the *IBM Tivoli Monitoring Troubleshooting Guide* for general troubleshooting information.

Table 16. Sybase problems and solutions

Problem	Solution
(*AIX® only*) SQL text information is not available to the IBM Tivoli Monitoring.	The default Adaptive Server setting for **max SQL text monitored** is zero (0). Do the following to change the setting to the recommended number of bytes, 1024: 1. Run the following **isql** commands: a. `sp_configure "max SQL text monitored", 1024` b. `go` 2. Restart Sybase. See the following Web document for more information: `http://manuals.sybase.com/onlinebooks/group-as/asg1250e/monbook/@ebt-link;pt=3138?target=%25N%14_3401_START_RESTART_N%25`
UTF-8 is not available.	Ensure that the UTF-8 character set is present and activated on the Sybase server. For detailed information about configuration, see the Installation and Configuration Guide for the Sybase agent.

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).

Appendix. ITCAM for Applications documentation library

Various publications are relevant to the use of ITCAM for Applications.

For information about how to access and use the publications, see **Using the publications** (http://pic.dhe.ibm.com/infocenter/tivihelp/v61r1/topic/com.ibm.itm.doc_6.3/common/using_publications.htm).

To find publications from the previous version of a product, click **Previous versions** under the name of the product in the **Contents** pane.

Documentation for this product is in the ITCAM for Applications Information Center (http://publib.boulder.ibm.com/infocenter/tivihelp/v24r1/topic/com.ibm.itcama.doc_7.2.1/welcome_apps721.html):

- Quick Start Guide
- Offering Guide
- Download instructions
- Links to Prerequisites
- Installation and Configuration Guide for each agent
- Link to Reference information for each agent
- Link to Troubleshooting Guide for each agent

Prerequisite publications

To use the information about the agents effectively, you must have some prerequisite knowledge.

See the following information at the IBM Tivoli Monitoring Information Center (http://pic.dhe.ibm.com/infocenter/tivihelp/v61r1/index.jsp) to gain prerequisite knowledge:

- *IBM Tivoli Monitoring Administrator's Guide*
- *IBM Tivoli Monitoring Installation and Setup Guide*
- *IBM Tivoli Monitoring High Availability Guide for Distributed Systems*
- IBM Tivoli Monitoring: Installation and Configuration Guides for the following agents: Operating System agents and Warehouse agents
- IBM Tivoli Monitoring: User's Guides for the following agents: Agentless OS monitors, Log file agent, System p agents, Systems Director base agent
- *IBM Tivoli Monitoring Agent Builder User's Guide*
- *IBM Tivoli Monitoring Command Reference*
- *IBM Tivoli Monitoring: Messages*
- *IBM Tivoli Monitoring Troubleshooting Guide*
- IBM Tivoli Monitoring: References for the following agents: Operating System agents and Warehouse agents
- IBM Tivoli Monitoring: Troubleshooting Guides for the following agents: Operating System agents and Warehouse agents
- *Tivoli Enterprise Portal User's Guide*

Related publications

The publications in related information centers provide useful information.

See the following information centers, which you can find by accessing Tivoli Documentation Central (https://www.ibm.com/developerworks/community/wikis/home?lang=en#!/wiki/Tivoli%20Documentation%20Central):

- Tivoli Monitoring
- Tivoli Application Dependency Discovery Manager
- Tivoli Business Service Manager
- Tivoli Common Reporting
- Tivoli Enterprise Console
- Tivoli Netcool/OMNIbus

Tivoli Monitoring Community on Service Management Connect

Service Management Connect (SMC) is a repository of technical information that is organized by communities.

Access Service Management Connect at https://www.ibm.com/developerworks/servicemanagement.

For information about Tivoli products, see the Application Performance Management community (http://www.ibm.com/developerworks/servicemanagement/apm/index.html).

Connect, learn, and share with Service Management professionals. Get access to developers and product support technical experts who provide their perspectives and expertise. You can use SMC for these purposes:

- Become involved with transparent development, an ongoing, open engagement between other users and IBM developers of Tivoli products. You can access early designs, sprint demonstrations, product roadmaps, and prerelease code.
- Connect one-on-one with the experts to collaborate and network about Tivoli and the Application Performance Management community.
- Read blogs to benefit from the expertise and experience of others.
- Use wikis and forums to collaborate with the broader user community.

Other sources of documentation

You can obtain additional technical documentation about monitoring products from other sources.

See the following sources of technical documentation about monitoring products:

- IBM Integrated Service Management Library (http://www.ibm.com/software/brandcatalog/ismlibrary/) is an online catalog that contains integration documentation as well as other downloadable product extensions.
- IBM Redbook publications (http://www.redbooks.ibm.com/) include Redbooks® publications, Redpapers, and Redbooks technotes that provide information about products from platform and solution perspectives.
- Technotes (http://www.ibm.com/support/entry/portal/software), which are found through the IBM Software Support website, provide the latest information about known product limitations and workarounds.

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