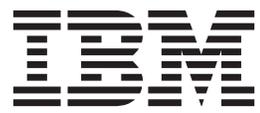IBM Agent Builder
Version 6.3.1

Troubleshooting Guide

IBM

IBM Agent Builder
Version 6.3.1

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IBM

Chapter 1. Gathering product information for IBM Software Support

Gather certain product information before you contact IBM® Software Support.

About this task

Gather the product information that is detailed in: Table 1.

Procedure

Gather the following information before you contact IBM Software Support:

Table 1. Information to gather before you contact IBM Software Support

Information type	Description
Log files	Collect trace log files from failing systems. Most logs are in a logs subdirectory on the host computer. See Chapter 2, "Agent Builder Trace logging," on page 3 for lists of all trace log files and their locations.
Operating system	Operating system version number and patch level
Messages	Messages and other information that is displayed on the screen
Version numbers for an IBM Tivoli® Monitoring environment	Version number of the following members of the monitoring environment • Tivoli Monitoring. Also, provide the patch level, if available. • Tivoli Monitoring: Windows OS Agent • Tivoli Monitoring: UNIX OS Agent • Tivoli Monitoring: Linux OS Agent
Version numbers for an IBM Performance Management environment	Version number of the following members of the monitoring environment • Operating System agent installed on the monitored system. • Monitoring Infrastructure Node (if installed on your premises). **Tip:** If you are using IBM Performance Management (SaaS), you do not install the Monitoring Infrastructure Node on your premises. Instead, a version hosted in the cloud is used. In this case, you do not need to provide the version number for this component.
Screen captures	Screen captures of incorrect output, if any
`itm_agent_toolkit.xml` file	When an agent exhibits a problem, send a small non-confidential agent `.xml` file of a special case or sample test scenario that illustrates the problem.

Chapter 2. Agent Builder Trace logging

Trace logging is built into the software to assist IBM Software Support in gathering information to determine why a problem is occurring.

Note: Trace logs contain detailed internal information and require an internal understanding. These logs are for use only by IBM Software Support.

If you encounter an issue, IBM Software Support might request that you obtain the trace logs, to review the information. Here Trace logging is introduced with an explanation on how to locate the appropriate files.

Trace logging captures information about the operating environment when the code fails to operate as intended.

The IBM Agent Builder supports tracing through the Java™ Logging (JLog) Toolkit. The trace logger is configurable through the Eclipse plug-in preferences. For more information about configuration of the Trace logging, see ("Logging configuration" on page 5).

Agent Builder Trace logging overview

Trace logs capture information about the operating environment when component code fails to operate as intended. These logs are in the English language only. IBM Software Support uses the information that is captured by trace loggers to trace a problem to its source or to determine why an error occurred. Generally, this information is not enabled by default, but logging can be enabled without stopping the application.

Trace log location

Trace logging is kept in a configurable number of rotating log files. The log file names follow the format `traceKQZ.log`, `traceKQZ1.log...` where `traceKQZ.log` is the most recent log file.

You can retrieve trace logs in the following location:

`workspace_directory/.metadata/tivoli/KQZ/logs`

Where:

workspace_directory
    Identifies the workspace directory that you specified when you initially ran the Agent Builder.

To save the log data, you must select the Enable Trace logging to files option on the Output page of the Tivoli Monitoring Agent Builder preferences. For information about the Output page, see ("Customize trace file settings" on page 6).

Trace log format

The trace log record format is as follows:

`[Date]-Level-Server-Thread-FileName.Method-LogText Exception(StackTrace)`

Where:

Date

    Time the log was produced specified in milliseconds, since January 1st 1970, for example, 1015343592000.

Server

    host name on which the program is running.

Level

    The level of detail the trace represents, which can be one of the following options:

    ERROR

        error message.

    WARN

        Warning.

    INFO

        Informational message.

    MIN

        The minimum level of tracing provides some information about the program state with only a minimal affect on the performance of the program.

    MID

        The medium level of tracing follows the paths of some high-level APIs and their parameters.

    MAX

        The maximum level of tracing follows the paths of most of the code and provide a detailed program flow. This level includes minimum and medium levels of tracing as well.

    For more information about setting these levels, see ("Configuration by using the IBM Java Logging Toolkit" on page 5).

FileName

    Name of the file or class to which the trace refers.

Method

    The method in the class to which the trace refers.

Thread

    Thread to which the trace refers. Thread element that refers to the operating system-specific notion of a thread.

LogText

    A description of the error

Exception

    Exception element depends upon the specific language or platform. For Java, it is a stack trace.

Trace log example

The following text shows an example of a trace that is recorded in the trace log:

```
[2007-08-17T17:50:17.527-04:00] -  MIN  - myhost - main - AgentXMLDocument.parseAgent
 - begin parsing document
```

Where:

2007-08-17

    Specifies the date that the log entry was produced.

17:50:17.527

    Specifies the time that the log entry was produced.

-04:00
Specifies the Coordinated Universal Time offset.

MIN
Specifies the level of detail the trace entry represents, in this case, minimum debug level.

myhost
Specifies the host name of the system that produced the trace entry.

main
Specifies name of the thread to which the trace entry refers.

AgentXMLDocument
Specifies name of the file or class to which the trace refers.

parseAgent
Specifies the method in the class to which the trace refers.

begin parsing document
Specifies the description of the condition or error.

Logging configuration

You can configure logging on components of the Tivoli Monitoring Agent Builder.

About this task

IBM Agent Builder logging options can be configured after installation. If you are experiencing problems, IBM Software Support might request that you configure logging and tracing information. The following steps explain how to configure the product to provide logging data.

Configuration by using the IBM Java Logging Toolkit

You can configure trace logs by using the IBM Java Logging Toolkit to set the trace level for the appropriate component of the Tivoli Monitoring Agent Builder.

About this task

You can do all logging configuration in the IBM Java Logging Toolkit. Access the Eclipse preference window by using the following steps:

Procedure

1. Select **Window** > **Preferences** to display the **Window** toolbar menu.
2. Click **IBM Java Logging Toolkit** to display the IBM Java Logging Toolkit window.

   The Logger Configuration table displays the trace configuration for the following components:

   JLog   IBM Tivoli Monitoring Logger Trace Logger

   KQZGeneratorTrace
       IBM Tivoli Monitoring Generator Trace Logger

   KQZTrace
       IBM Tivoli Monitoring Agent Builder Trace Logger

   The trace level for each component can be set independently to one of the following values. Selecting a trace level causes trace entries of that level and all higher levels to be included in the log file.
   - **Error** - error messages.
   - **Warning** - Warnings.
   - **Information** - Informational messages.

- **Minimum** - The Minimum level of tracing provides some information about the program state with only a minimal affect on the performance of the program.
- **Medium** - The Medium level of tracing follows the paths of some high-level APIs and their parameters.
- **Maximum** - The Maximum level of tracing follows the paths of most of the code and provide a detailed program flow.

Logging for each component can also be enabled or disabled by selecting **On** or **Off** for Logging.

3. By expanding the IBM Java Logging Toolkit, you can set the following Trace Attributes for each component:
   - **Log file Directory**
   - **Maximum number of revolving trace files**
   - **Maximum size of each trace file (in KB)**
   - **Enable trace logging to files**
   - **Enable trace logging to console**
   - **Restore Defaults**

Customize trace file settings

Use the appropriate output windows to customize the trace file settings.

About this task

Access the Eclipse output page by doing the following steps:

Procedure

1. Click **Window** to display the **Window** toolbar menu.
2. Click **Preferences** to display the Preferences window.
3. Click the plus sign next to the IBM Java Logging Toolkit to display the output windows.
4. Click the appropriate output window to display the output settings for that component.

   The window displays the following information:

   Log file directory
   Specifies the location of the log file directory.

   Maximum number of revolving trace files
   Specifies the number of trace files that are used and reused to store the trace data.

   Maximum size of each trace file (in Kilobytes)
   Specifies the maximum size in KB for each of the revolving trace files.

   Enable trace logging to files
   Check this box to store the trace log data.

   Enable logging to console
   Check this box to send logging information to a development console.

   Note: If you enable this option, you must restart the IBM Agent Builder as described in the following procedure:
   a. Close the IBM Agent Builder.
   b. Modify the *install_dir*/agentbuilder.ini file.
      - On Windows systems, change *install_dir*/_jre/jre/bin/javaw.exe to *install_dir*/_jre/jre/bin/java.exe.
      - On Linux or AIX® systems, change *install_dir*/_jre/jre/bin/javaw to *install_dir*/_jre/jre/bin/java.

c. Relaunch the IBM Agent Builder.

Chapter 3. Configuring and Tuning data collection

When an Agent Builder agent is created, you can configure and tune its data collection to achieve the best results.

How you configure and tune your agent can be different for different Agent Builder agents and even between attribute groups in a single agent. Agent Builder agents can include two types of data and they support two basic methods of data collection for the most common type of data.

Data types

An agent collects two types of data:

1. Most Tivoli Monitoring attribute groups represent snapshots of data. Someone asks for the data and it is returned. Agents use this type of data to represent configuration, performance, status, and other information where a one time collection of a set of data makes sense. This data is called *sampled data*.

2. Some Tivoli Monitoring data represents events. In this case, an event happens and the agent must forward data to Tivoli Monitoring. Examples of events are SNMP Traps, Windows Event Log entries, and new records that are written to a log file. For simplicity, these types of data are grouped and referred to as *event data*.

Sampled data

When sampled data is required, a request is sent to the agent for a specific attribute group. The request might be initiated by clicking a workspace in the Tivoli Enterprise Portal. Other things that might initiate a request are a situation that is running, a data collection for the Warehouse, or a SOAP request. When the agent receives the request, the agent returns the current data for that attribute group. Tivoli Enterprise Portal requests target a specific attribute group in a particular Managed System Name (MSN). Situations and historical requests are more interesting, especially in an agent which includes subnodes. When a situation needs data for an attribute group in a subnode, the agent receives one request with a list of the targeted subnodes. The agent must respond with all the data for the requested attribute group for all of the subnodes before Tivoli Monitoring can work on the next request.

The most straightforward way for an agent to satisfy a request is to collect data every time it receives a request from Tivoli Monitoring. Agent Builder agents do not collect data every time. Data is not collected every time because it often takes time or uses resources to collect data. And in many cases the same data is requested many times in a short period. For example, a user might define several situations that run at the same interval on an attribute group and the situations can signal several different conditions. Each of these situations results in a request to the agent, but you might prefer each of the situations to see the same data. It is likely that as each situation sees the same data, more consistent results are obtained, minimizing the demand for system resources by the monitoring agent.

The agent developer can configure agents to optimize data collection by choosing to run the collection in one of the following two modes:

1. **On-demand collection**: The agent collects data when it receives a request and returns that data.

2. **Scheduled collection**: The agent runs data collection in the background on scheduled intervals and returns the most recently collected data when it receives a request.

The agent uses a short-term cache in both of these modes. If another request for data is received while the cache is valid, the agent returns data from the cache without collecting new data for each request. Using data from the cache solves the problem that is caused by multiple concurrent situations (and other types of) requests. The amount of time the data remains valid, the scheduled collection interval, the

number of threads that are used for collection and whether the agent runs in on demand or scheduled mode are all defined by environment variables. Using the environment variables, you can tune each agent for the best operation in its environment.

See the following examples that illustrate how the agent works in both modes:

- Agent 1 (*on-demand* collection): A simple agent that collects a small amount of data that is normally accessed only by situations or on an infrequent basis in the Tivoli Enterprise Portal. Data collection is reasonably fast, but it can use up computing and networking resources. This agent is normally defined to run on demand. If no situations are running or no one clicks the Tivoli Enterprise Portal, the agent does nothing. When data is needed, it is collected and returned. The data is placed into the short-term cache so that further requests at about the same time return the same data. This type of collection is likely the most efficient way for this agent to run because it collects data only when someone actually needs it.

- Agent 2 (*scheduled* collection): A complex agent that includes subnodes and collects data from multiple copies of the monitored resource. Many copies of the resource can be managed by one agent. It is normal to run situations on the data on a relatively frequent basis to monitor the status and performance of the monitored resource. This agent is defined to run a *scheduled* collection. One reason for running a *scheduled* collection is the way that situations are evaluated by Tivoli Monitoring agents. Because situations are running on the attribute groups in the subnodes, the agent receives one request for the data from all of the subnodes simultaneously. The agent cannot respond to other requests until all of the data is returned for a situation. If the agent collected all of the data when the request arrived, the agent would freeze when you click one of its workspaces in theTivoli Enterprise Portal. To avoid freezing the agent, the agent builder automatically defines all subnode agents to run as scheduled collection. The agent developer tunes the number of threads and refresh interval to collect the data at a reasonable interval for the data type. For example, the refresh interval can be one time a minute, or one time every 5 minutes.

Environment variables

An agent determines which mode to use and how the scheduled data collection runs based on the values of a set of environment variables. These environment variables can be set in the definition of the agent on the Environment Variables panel. Each environment variable is listed in the menu along with the default values. The environment variables can also be set or modified for an installed agent by editing the agent's environment (`env`) file on Windows or initialization (`ini`) file on UNIX. The environment variables that control data collections for sampled attribute groups are:

- `CDP_DP_CACHE_TTL`=<validity period for the cached data - default value 55 seconds>
- `CDP_DP_THREAD_POOL_SIZE`=<number of threads to use for concurrent collection - default value 15 for subnode agents>
- `CDP_DP_REFRESH_INTERVAL`=<number of seconds between collections - default value 60 seconds for subnode agents>
- `CDP_DP_IMPATIENT_COLLECTOR_TIMEOUT`=<amount of time to wait for new data after validity period expires - default value 5 seconds>

The most important of these variables are `CDP_DP_CACHE_TTL`, `CDP_DP_REFRESH_INTERVAL`, and `CDP_DP_THREAD_POOL_SIZE`.

If `CDP_DP_THREAD_POOL_SIZE` has a value greater than or equal to 1 or the agent includes subnodes, the agent operates in *scheduled* collection mode. If `CDP_DP_THREAD_POOL_SIZE` is not set or is 0, the agent runs in *on-demand* collection mode.

If the agent is running in *scheduled* mode, then the agent automatically collects all attribute groups every `CDP_DP_REFRESH_INTERVAL` seconds. It uses a set of background threads to do the collection. The number of threads is set by using `CDP_DP_THREAD_POOL_SIZE`. The correct value for the `CDP_DP_THREAD_POOL_SIZE` varies based on what the agent is doing. For example:

- If the agent is collecting data from remote systems by using SNMP, it is best to have `CDP_DP_THREAD_POOL_SIZE` similar to the number of remote systems monitored. By setting the pool size

similar to the number of monitored remote systems, the agent collects data in parallel, but limits the concurrent load on the remote systems. SNMP daemons tend to throw away requests when they get busy. Discarding requests forces the agent into a try-again mode and it ends up taking more time and more resources to collect the data.

- If the agent includes a number of attribute groups that take a long time to collect, use enough threads so that long data collections can run in parallel. You can probably add a few more for the rest of the attribute groups. Use threads in this way if the target resource can handle it. Examples of when attribute groups can take a long time to collect are if the script runs for a long time, or a JDBC query takes a long time.

Running an agent with a larger thread pool causes the agent to use more memory (primarily for the stack that is allocated for each thread). It does not however increase the processor usage of the process or increase the actual working set size of the process noticeably. The agent is more efficient with the correct thread pool size for the workload. The thread pool size can be tuned to provide the wanted behavior for a particular agent in a particular environment.

When data is collected, it is placed in the internal cache. This cache is used to satisfy further requests until new data is collected. The validity period for the cache is controlled by `CDP_DP_CACHE_TTL`. By default the validity period is set to 55 seconds. When an agent is running in scheduled mode, it is best to set the validity period to the same value as `CDP_DP_REFRESH_INTERVAL`. Set it slightly larger if data collection can take a long time. When set the validity period in this way, the data is considered valid until its next scheduled collection.

The final variable is `CDP_DP_IMPATIENT_COLLECTOR_TIMEOUT`. This variable comes into play only when `CDP_DP_CACHE_TTL` expires before new data is collected. When the cache expires before new data is collected, the agent schedules another collection for the data immediately. It then waits for this collection to complete up to `CDP_DP_IMPATIENT_COLLECTOR_TIMEOUT` seconds. If the new collection completes, the cache is updated and fresh data is returned. If the new collection does not complete, the existing data is returned. The agent does not clear the cache when `CDP_DP_CACHE_TTL` completes to prevent a problem that is seen with the Universal Agent. The Universal Agent always clears its data cache when the validity period ends. If the Universal Agent clears its data cache before the next collection completes, it has an empty cache for that attribute group and returns no data until the collection completes. Returning no data becomes a problem when situations are running. Any situation that runs after the cache cleared but before the next collection completes sees no data and any of the situations that fire are cleared. The result is floods of events that fire and clear just because data collection is a little slow. The Agent Builder agents do not cause this problem. If the 'old' data causes a situation to fire generally the same data leaves that situation in the same state. After the next collection completes, the situation gets the new data and it either fires or clears based on valid data.

Attribute groups

Agent Builder agents include two attribute groups that you can use to inspect the operation of data collection and to tune the agent for your environment. The attribute groups are Performance Object Status and Thread Pool Status. When these attribute groups are used to tune data collection performance, the most useful data is:

- `Performance Object Status, Average Collection Duration` attribute. This attribute shows you how long each attribute group is taking to collect data. Often a small percentage of the attribute groups in an agent represents most of the processor usage or time that is used by the agent. You might be able to optimize the collection for one or more of these attribute groups. Or you can modify the collection interval for one or more groups, if you do not need some data to be as up-to-date as other data. For more information, see ("Examples and advanced tuning" on page 13).
- `Performance Object Status, Intervals Skipped` attribute. This attribute shows you how many times the agent tried to schedule a new collection for the attribute group and it found that the previous collection was still on the queue, waiting to be run, or already running. In a normally behaved agent this attribute value is zero for all attribute groups. If this number starts growing, you tune the data collection, by adding threads, lengthening the interval between collections, or optimizing the collection.

- `Thread Pool Status, Thread Pool Avg Active Threads` attribute. You can compare this value to the Thread Pool Size attribute group to see how well your thread pool is being used. Allocating a thread pool size of 100 threads when the average number of active threads is 5 is probably just wasting memory.
- `Thread Pool Status, Thread Pool Avg Job wait and Thread Pool Avg Queue Length attributes.` These attributes represent the time an average data collection spends waiting on the queue to be processed by a thread and the average number of collections on the queue. Because of the way this data is collected, even an idle system indicates that at least an average of one job is waiting on the queue. A larger number of waiting jobs or a large average wait time indicates that collections are being starved. You can consider adding threads, lengthening the interval between collections or optimizing the collection for one or more attribute groups.

Event data

Agent Builder agents can expose several types of event data. Some behavior is common for all event data. The agent receives each new event as a separate row of data. When a row of event data is received, it is sent immediately to Tivoli Monitoring for processing, and added to an internal cache in the agent. Situations and historical collection are performed by Tivoli Monitoring when each row is sent to Tivoli Monitoring. The cache is used to satisfy Tivoli Enterprise Portal or SOAP requests for the data. The agent can use the cache to perform duplicate detection, filtering, and summarization if defined for the attribute group. The size of the event cache for each attribute group is set by `CDP_PURE_EVENT_CACHE_SIZE`. This cache contains the most recent `CDP_PURE_EVENT_CACHE_SIZE` events with the most recent event returned first. There are separate caches for each event attribute group. When the cache for an attribute group fills, the oldest event is dropped from the list.

The Agent Builder agent can expose events for:
- Windows Event Log entries
- SNMP Traps or Informs
- Records added to log files
- JMX MBean notifications
- JMX monitors
- Events from a Java API provider or socket provider.
- Joined attribute groups (where one of the data sources is an event data source)

These events are handled in the most appropriate way for each of the sources. SNMP Traps and Informs, JMX notifications and events from the Java API and socket providers are received asynchronously and forwarded to Tivoli Monitoring immediately. There is no requirement tune these collectors. The agent subscribes to receive Windows Event Log entries from the operating system by using the Windows Event Log API. If the agent is using the older Event Logging API, it polls the system for new events by using the thread pool settings. For joined attribute groups where one of the data sources is an event data source, there is no tuning to apply to the joined attribute group. Though the joined attribute group does benefit from any tuning applied to the event source group.

File monitoring is more complicated. The agent must monitor the existence of the files and when new records are added to the files. The agent can be configured to monitor files by using patterns for the file name or a static name. As the set of files that matches the patterns can change over time, the agent checks for new or changed files every `KUMP_DP_FILE_SWITCH_CHECK_INTERVAL` seconds. This global environment variable governs all file monitoring in an agent instance. When the agent determines the appropriate files to monitor, it must determine when the files change. On Windows systems, the agent uses Operating System APIs to listen for these changes. The agent is informed when the files are updated and processes them immediately. On UNIX systems, the agent checks for file changes every `KUMP_DP_EVENT` seconds. This global environment variable governs all file monitoring in an agent instance. When the agent notices that a file changed, it processes all of the new data in the file and then waits for the next change.

Examples and advanced tuning
Example

Environment variables that are used for more advanced tuning are defined at the agent level. You set the following variables one time and they apply to the all of the attribute groups in the agent:

- CDP_DP_CACHE_TTL
- CDP_DP_IMPATIENT_COLLECTOR_TIMEOUT
- KUMP_DP_FILE_SWITCH_CHECK_INTERVAL
- KUMP_DP_EVENT

You can make the following variables apply to individual attribute groups. They still have a global setting that applies to all other attribute groups in the agent:

- CDP_DP_REFRESH_INTERVAL
- CDP_PURE_EVENT_CACHE_SIZE

If you defined an agent to include the following six attribute groups:

- EventDataOne
- EventDataTwo
- EventDataThree
- SampledDataOne
- SampledDataTwo
- SampledDataThree

You might set the following default variables:

- CDP_DP_CACHE_TTL=55
- CDP_DP_IMPATIENT_COLLECTOR_TIMEOUT=2
- CDP_DP_REFRESH_INTERVAL=60
- CDP_PURE_EVENT_CACHE_SIZE=100

As a result, all of the attribute groups which contain sampled data (SampledDataOne, SampledDataTwo, and SampledDataThree) would be collected every 60 seconds. Each of the event attribute groups (EventDataOne, EventDataTwo, and EventDataThree) would store the last 100 events in their cache.

These settings might work perfectly, or there might be reasons that you must control the settings at a more granular level. For example, what if EventDataOne generally receives 10 times as many events as EventDataTwo and EventDataThree? To further complicate things, there really is a link between EventDataOne and EventDataTwo. When one event is received for EventDataTwo, there are always multiple events for EventDataOne and users want to correlate these events. There is not a single correct setting for the cache size. It would be nice to be able to have EventDataOne store a larger number of events and EventDataTwo store a smaller number. You can achieve this storage by setting CDP_PURE_EVENT_CACHE_SIZE to the size that makes sense for most of the event attribute groups, 100 seems good. Then, you can set CDP_EVENTDATAONE_PURE_EVENT_CACHE_SIZE to 1000. That way all of the corresponding events are visible in the Tivoli Enterprise Portal.

The same thing can be done with CDP_DP_REFRESH_INTERVAL. Set a default value that works for the largest number of attribute groups in the agent. Then set CDP_*attribute group name*_REFRESH_INTERVAL for the attribute groups which must be collected differently. To optimize collection, set the default CDP_DP_REFRESH_INTERVAL to match the CDP_DP_CACHE_TTL value. CDP_DP_CACHE_TTL is a global value so if set to a value less than a refresh interval, unexpected collections might occur.

Chapter 4. List of environment variables

Use environment variables to control the behavior of the agent at run time.

Environment variables can be built into the agent by using the Environment Variables page. On Windows systems, environment variables are defined in the agent *KXX*ENV file. On UNIX and Linux systems, these variables can be defined in the agent $CANDLEHOME/config/*XX*.ini file. *XX* is the two-letter product code. The agent must be restarted for the new settings to take effect.

Note: Environment variables are not set correctly on a remote system that runs C Shell. Use a different shell if you want to use environment variables.

Table 2. Environment variables

Environment variable	Default value	Valid values	Description
CDP_*ATTRIBUTE_GROUP_* REFRESH_INTERVAL	Not Applicable	Any non-negative integer	The interval in seconds at which a particular specified attribute group is updated in the background. This variable works in the same way as CDP_DP_REFRESH_INTERVAL, except it targets only the specified attribute group. The attribute group name in the variable name must be in uppercase, even if the actual attribute group name is not.
CDP_DP_CACHE_TTL	55	Any integer greater than or equal to 1.	Data that is collected for an attribute group is cached for this number of seconds. Multiple requests for the same data in this time interval receive a cached copy of the data. This value applies to all attribute groups in the agent. (You cannot set different values for each attribute group.)
CDP_DP_IMPATIENT_ COLLECTOR_TIMEOUT	5 if subnodes are defined, otherwise not set	Any positive integer	The number of seconds to wait for a data collection before a timeout and cached data is returned, even if the cached data is stale. (Cached data is stale if older than CDP_DP_CACHE_TTL seconds). If this variable is not set, the agent waits until the data collection completes. The wait at times can make the Tivoli Enterprise Portal timeout and give up waiting. If no thread pool is configured, this variable is ignored and data collection is done synchronously.
CDP_DP_REFRESH_INTERVAL	60 if subnodes are defined, otherwise not set	Any non-negative integer	The interval in seconds at which attribute groups are updated in the background. If this variable is not set or is set to 0, background updates are disabled. If a thread pool is configured (see variable CDP_DP_THREAD_POOL_SIZE), then the attribute groups can be refreshed in parallel. If there is no thread pool, the updates happen serially, which can take a long time. Logically equivalent to a thread pool size of 1.

Table 2. Environment variables (continued)

Environment variable	Default value	Valid values	Description
CDP_DP_THREAD_POOL_SIZE	15 if subnodes are defined, otherwise not set	Any non-negative integer	The number of threads that are created to run background data collections at an interval that is defined by CDP_DP_REFRESH_INTERVAL. If this variable is not set or is set to 0, there is no thread pool. The Thread Pool Status attribute group shows how the thread pool is running. Use the Thread Pool Status to adjust the thread pool size and refresh interval for best results. By default, the query for this attribute group is not displayed on the agent Navigator tree. You might not remember to include the query in a custom workspace for the agent. However, you can easily view it by assigning the Thread Pool Status query to a base agent level workspace view.
CDP_JDBC_MAX_ROWS	1000	Any positive integer	The maximum number of rows of data that the JDBC data provider returns. A result set that contains more than this number of rows is processed only up to this maximum value. Queries can be developed to prevent too much data from being returned to IBM Tivoli Monitoring.
CDP_NT_EVENT_LOG_GET_ALL _ENTRIES_FIRST_TIME	NO	YES, NO	If set to YES, the agent sends an event for every event in the Windows event log. If set to NO, only new events in the Windows event log are sent.
CDP_NT_EVENT_LOG_CACHE _TIMEOUT	3600	Any integer greater than or equal to 300.	The number of seconds Windows Event log events are cached by the agent. All cached events are returned when the event log attribute group is queried. **Note:** This variable is no longer used. Use the CDP_PURE_EVENT_CACHE_SIZE variable.
CDP_PURE_EVENT_CACHE_SIZE	100	Any positive integer greater than or equal to 1.	Maximum number of events to cache for a log file data source that is configured to process new records, for the Windows Event Log attribute group. And also for JMX monitors and notifications. Each new record in the log causes an event to be sent. This environment variable defines how many events are remembered in a cache by the agent. The cached values are returned when the attribute group is queried.
CDP_DP_ACTION_TIMEOUT	20 seconds	Any positive integer greater than or equal to 1.	The number of seconds to wait for a Take Action that is being handled by the agent to complete.
CDP_DP_SCRIPT_TIMEOUT	30 seconds	Any positive integer greater than or equal to 10.	The number of seconds to wait for the program started by a script-based attribute group to complete.

Table 2. Environment variables (continued)

Environment variable	Default value	Valid values	Description
CDP_DP_PING_TIMEOUT	30 seconds	Any positive integer greater than or equal to 10.	The number of seconds to wait for the program started by a command return code to complete. **Note:** This variable is not related to the ICMP ping data provider.
CDP_SNMP_MAX_RETRIES	2	Any positive integer	The number of times to try sending the SNMP request again. The total number of requests that are sent to the SNMP agent is this value plus one if no responses are received.
CDP_SNMP_RESPONSE_TIMEOUT	2 seconds	Any positive integer	The number of seconds to wait for each SNMP request to timeout. Each row in an attribute group is a separate request. This timeout value is the number of seconds to wait for a response before you try again. The total timeout for a single row of data is (CDP_SNMP_MAX_RETRIES + 1) * CDP_SNMP_RESPONSE_TIMEOUT. The total default timeout value is (2+1) * 2 = 6 seconds.
CDP_DP_HOSTNAME	Name of the first installed network interface	An IP address or host name	Sets the preferred host name (network interface) on a multiple interface system. Use this environment variable if the agent binds its listening ports to a non-default network interface address. Used by the SNMP data provider. For Socket data sources, this variable applies if CDP_DP_ALLOW_REMOTE is also set.
CDP_SNMP_ALLOW_DECREASING_OIDS	NO	YES, NO	If set to YES, the SNMP data providers do not check whether returned OIDs are increasing. Set to YES with caution because the monitored agent might have problems that this check would normally catch.
KUMP_DP_COPY_MODE_SAMPLE_INTERVAL	60	Wait time in seconds	For a log file data provider, specifies how long to wait before it rereads the contents of a file when the agent is defined to **Process all records when the file is sampled**. The time is specified in seconds.
KUMP_MAXPROCESS	100%	5-100%	For a log file data provider, specifies the maximum processor usage to use to process file data. Values range from 5 to 100 percent. The default is 100 percent.
KUMP_DP_SAMPLE_FACTOR	5	Any non-negative integer	For a log file data provider, sets the sampling factor when you select **Process all records when the file is sampled** on the Agent Builder. This wait time ensures that patterns that span multiple records are written before scans are logged for the pattern.
KUMP_DP_EVENT	5	Any non-negative integer	For a log file data provider, sets the sampling frequency for Event data, in seconds.

Table 2. Environment variables (continued)

Environment variable	Default value	Valid values	Description
KUMP_DP_FILE_EXIST_WAIT	YES	YES, NO	For a log file data provider, specifies that the file monitoring thread continues to run if it detects that the monitored file is absent or empty. The thread waits for the file to exist, rechecks every few seconds, and starts or restarts monitoring when the file becomes available.
KUMP_DP_FILE_SWITCH_ CHECK_INTERVAL	600	Any non-negative integer	The frequency in seconds that the log file Data Provider searches for a different monitoring file to switch to when dynamic file name support is enabled.
KUMP_DP_FILE_ROW_ PAUSE_INCREMENT	None	Any non-negative integer	For a log file data provider, specifies how many file records are read before the file monitoring thread pauses. The pause is so that previous updates can be processed. Use this environment variable only if the monitored file receives high-volume bursts of new records and you are concerned that some record updates might be lost.
CDP_COLLECTION_TIMEOUT	60 seconds	Any positive integer	The number of seconds that the agent waits for a response from a data collector that was started in another process. JMX, JDBC, HTTP, and SOAP data collectors are examples.
CDP_SSH_TEMP_DIRECTORY	. (period)	Any valid path string on the remote system	For an SSH enabled Script data provider, specifies the location on the remote system to upload the script files that are provided with the agent to. A relative location is relative to the user's home directory. The default of . (period) denotes the user's home directory.
CDP_SSH_DEL_COMMAND	rm -Rf	Any valid delete command string on the remote system	For an SSH enabled Script data provider, specifies the command to start to delete the uploaded script files that are provided with the agent.
CDP_SNMP_SEND_DELAY_ FACTOR	0 milliseconds	Any positive integer	The initial SNMP send is delayed from 0 to the number of milliseconds specified. This variable is only enabled if the thread pool is also enabled. The delay does not apply to all sends, only to the first send made by an attribute group. This variable is useful if the device that is being monitored has difficulty to respond when multiple requests are received simultaneously.

Table 2. Environment variables (continued)

Environment variable	Default value	Valid values	Description
CDP_ICMP_PING_REFRESH_INTERVAL	60 seconds	Any integer greater than or equal to 1	The systems in a device list file are pinged at this interval. If the pings use too much time, there is always a delay of at least CDP_PING_MIN_INTERVAL_DELAY seconds before the pings begin again. Data is refreshed no more frequently than this setting. Data can be refreshed less frequently based on the number of entries in the device list file and the time it takes to receive responses.
CDP_ICMP_PING_MIN_INTERVAL_DELAY	30 seconds	Any integer greater than or equal to 1 and less than the CDP Ping refresh interval	After the devices in a device list file are pinged, the next ping refresh interval does not begin until at least this number of seconds elapses.
CDP_ICMP_PING_BURST	10	Any integer greater than or equal to 0	The number of pings that are sent before the agents pauses for the amount of time that is specified by the CDP_ICMP_PING_BURST_DELAY variable. A value of 0 disables this function.
CDP_ICMP_PING_BURST_DELAY	10	Any integer greater than or equal to 0	The amount of time in milliseconds to wait after a set number of pings are sent as defined by the CDP_ICMP_PING_BURST variable. A value of 0 disables this function.
CDP_ICMP_PING_TIMEOUT	2000 milliseconds	Any integer greater than or equal to 1	The number of milliseconds to wait for a ping response. This setting applies to each ping attempt that is made. Ping attempts are made 3 times for each host. If no response is received from any of the 3 attempts, the total time waited for a reply is CDP_ICMP_PING_TIMEOUT multiplied by 3. By default, this value is 6000 milliseconds. Changing the value for CDP_ICMP_PING_TIMEOUT causes the default TIMEOUT enumeration for the Current Response Time attribute to no longer apply. Change the TIMEOUT enumeration to the new value of CDP_ICMP_PING_TIMEOUT multiplied by 3.
CDP_JDBC_CONNECTIONLESS	false	true, false	If set to true, JDBC connections are closed after each data collection attempt. That is, all attribute groups attempt to create their own connection each time data is collected. Connections are not reused if this variable is enabled. If set to false, one connection to the database is made and that connection is shared among the attribute groups.
CDP_SSH_EXCLUDED_ENVIRONMENT_VARIABLES	None	A comma-separated list of environment variable names	For an SSH enabled Script data provider, specifies the set of local environment variables that must not be set in the environment of the remote system.

Table 2. Environment variables (continued)

Environment variable	Default value	Valid values	Description
`CDP_DP_EVENT_LOG_MAX_BACKLOG_TIME`	0 seconds	0, 1, or any integer greater than 1	If set to 0, and `CDP_DP_EVENT_LOG_MAX_BACKLOG_EVENTS` is not set to 1 or a greater integer, does not process events that are generated while the agent is shut down. 0 is the default. If set to 1, and `CDP_DP_EVENT_LOG_MAX_BACKLOG_EVENTS` is not set to an integer greater than 1, processes all events that are generated while the agent is shut down. If set greater than 1, and `CDP_DP_EVENT_LOG_MAX_BACKLOG_EVENTS` is not set greater than 1, processes events that are generated within that value in seconds of the current computer time. For example, if the value is set to 300, at startup, the agent processes all events that are generated within 300 seconds of the current time. Where a value greater than 1 is entered for both `CDP_DP_EVENT_LOG_MAX_BACKLOG_TIME` and `CDP_DP_EVENT_LOG_MAX_BACKLOG_EVENTS` variables, either that time interval of events or that number of events is processed. Which variable is chosen depends on which is matched first.

Table 2. Environment variables (continued)

Environment variable	Default value	Valid values	Description
CDP_DP_EVENT_LOG_ MAX_BACKLOG_EVENTS	0 events	0, 1, or any integer greater than 1	If set to 0, and CDP_DP_EVENT_LOG_MAX_BACKLOG _TIME variable is not set to 1 or a greater integer, does not process events that are generated while the agent is shut down. 0 is the default. If set to 1, and the CDP_DP_EVENT_LOG_MAX_BACKLOG _TIME variable is not set to an integer greater than 1, processes all events that are generated while the agent is shut down. If set greater than 1, and CDP_DP_EVENT_LOG_MAX_BACKLOG _TIME is not set greater than 1, processes at most that number of events that are generated while the agent is shut down. For example, if the value is set to 200, then at startup of the agent the 200 events that generated directly before startup are processed. Where a value greater than 1 is entered for both CDP_DP_EVENT_LOG_MAX_BACKLOG _EVENTS and CDP_DP_EVENT_LOG_MAX_BACKLOG _TIME, either that number of events or that time interval of events is processed. Which variable is chosen depends on which is matched first.
CDP_HTTP_READ_TIMEOUT	10	Any positive integer	The number of seconds to wait for a reply to the HTTP request.
CDP_JAT_THREAD_POOL_SIZE	15	Any positive integer	The number of threads that are used by the Java providers for handling data collection requests. JMX, JDBC, HTTP, and SOAP data providers are the providers that can benefit from this thread pool.
CDP_HTML_OBJECTS_THREAD_ POOL_SIZE	10	Any positive integer	The number of threads that are used to download page objects that are found in URLs monitored with the HTTP data provider.
CDP_HTTP_SOAP_MAX_ROWS	500	Any positive integer	The maximum number of rows that are returned by the HTTP SOAP data provider.
CDP_DP_ALLOW_REMOTE	NO	NO, YES	If set to Yes, the agent allows remote socket connections. If set to No, the agent allows only socket connections from the local host. No is the default.
CDP_DP_INITIAL_COLLECTION_ DELAY	varies	Any positive integer	The number of seconds, after the agent starts, until the thread pool begins its scheduled data collections.

Chapter 5. Informational, warning, and error messages overview

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

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

If you receive a warning or error message, you can do one of the following actions:
- Follow the instructions that are listed in the Detail window of the message if this information is included there.
- Consult the message details that are listed in here to see what action you can take to correct the problem.
- Consult the message log for message ID, text, time, and date of the message, and other data that you can use to diagnose the problem.

Message format

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

IBM Agent Builder messages return in the form of *<CCCYYYnnnS><message text>*.

The following example shows a typical message and explains its identifying components:

```
KQZ0010E The field_name must be an integer between -32768 and 32767.
```

Where:

KQZ0010E

The message ID of the message. This ID is composed of the following parts:

KQZ   Identifies the message as belonging to IBM Agent Builder.

0010   Identifies the unique serial number of the message.

E   Identifies the severity of the message as one of the following options:

    I   *Informational messages* provide feedback about something that happened in the product or system that might be important. These messages can provide guidance when you are requesting a specific action from the product. Informational messages are not documented.

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

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

The *field_name* **must be an integer between −32768 and 32767.**

The log text of the error message.

The *Text* of the message provides a general statement that relates to the problem or condition that occurred. The *Explanation* provides further information about the message and the possible cause for the condition. The *Operator Response* provides actions to take in response to the condition, particularly for error messages (messages with the "E" suffix).

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

Agent messages

The following messages apply to IBM Agent Builder.

KQZ0005E **Unable to log on to the** *namespace* **namespace.**

Explanation: Agent Builder could not connect to the WMI namespace.

Operator response: Ensure that WMI is running on the computer you specified, that the namespace exists, and that you have the proper credentials to log on to the namespace.

KQZ0007I **Gathering the system Perfmon information.**

Explanation: This is an informational message only.

KQZ0009E **The** *field_name* **field must start with an alphabetic character and can contain only alphanumeric and underscored characters.**

Explanation: String values can contain only alphabetic and underscored characters.

Operator response: Enter only alphabetic and underscored characters for the value.

KQZ0011E **The** *field_name* **must be an integer between 0 and 4294967295.**

Explanation: The integer must contain only decimal digits and must be between 0 and 4294967295.

Operator response: Enter an valid integer.

KQZ0012E **The agent file** *file_name* **could not be read.**

Explanation: Agent Builder could not read the agent definition file.

Operator response: If the file contains a valid agent definition, rename the file to itm_toolkit_agent.xml.

KQZ0013E **Unable to access the** *file_name* **file.**

Explanation: Agent Builder cannot read the contents of the file.

Operator response: Ensure that you have permission to access the file. You might have deleted the file from outside of Eclipse and failed to refresh the project.

KQZ0014E **Unable to generate the agent in** *dir_name***.**

Explanation: Agent Builder cannot generate the agent.

Operator response: Ensure that the output directory exists and that you have permission to write to it.

KQZ0015E **Error saving** *file_name***.**

Explanation: Agent Builder could not save the agent file.

Operator response: Ensure that you have write permissions to the file and that the disk is not full.

KQZ0018I **Generating the agent**

Explanation: This is an informational message only.

KQZ0021E **The** *filename* **file was not found.**

Explanation: The selected file does not exist.

Operator response: Specify an existing file.

KQZ0022E **Unexpected error parsing MIB file** *filename***.**

Explanation: The syntax of the MIB file is incorrect.

Operator response: Correct the syntax of the MIB file and rerun the import action.

KQZ0025I **Loading the initial MIB data. This operation may take a few moments.**

Explanation: This is an informational message only.

KQZ0026I **Agent Builder successfully generated the files for agent** *agent_name***.**

Explanation: This is an informational message only.

KQZ0027E **No attributes are defined for the** *datasource* **attribute group.**

Explanation: This is an informational message only.

KQZ0028E **An attribute with identifier** *id* **was defined previously.**

Explanation: This is an informational message only.

KQZ0029E　**A attribute group with identifier** *id* **was defined previously.**

Explanation:　This is an informational message only.

KQZ0030E　**Cannot remove attribute** *attr* **because it is referenced in derived attribute** *derived_attr***.**

Explanation:　This is an informational message only.

KQZ0031E　*file_name* **is the name of an existing file, not a directory.**

Explanation:　The name of a file was specified instead of a directory.

Operator response:　Specify the correct name of a project directory.

KQZ0032E　**The** *dir_name* **directory does not exist.**

Explanation:　The program could not find the specified directory.

Operator response:　Ensure that the directory exists and that you entered the path to it correctly.

KQZ0033E　**The following exception was caught while trying to run:** *command***:**

Explanation:　This error message is generic.

Operator response:　Access the stack trace to investigate the problem.

KQZ0034E　**The** *directory* **directory does not contain an agent XML file,** *agent_XML_file***.**

Explanation:　The program could not find the specified file.

Operator response:　Ensure that the file exists and that you entered the path to it correctly.

KQZ0035E　**A file named** *directory* **already exists. Do you want to continue and overwrite the contents of the file?**

Explanation:　The file that Agent Builder is trying to generate already exists.

Operator response:　Select Yes to continue and overwrite the file or No to cancel and select a new directory.

KQZ0036E　**The agent project contains errors as listed in the Problems view. The errors must be corrected before the agent can be generated.**

Explanation:　The Agent Builder project contains errors as listed in the Problems view.

Operator response:　Correct the errors and save the agent.

KQZ0038I　**The file** *exception_message* **has changed on the file system. Do you want to load the changes?**

Explanation:　This is an informational message only.

KQZ0039E　**Agent** *agent_name* **was modified. You must save the agent before you can generate it.**

Explanation:　This is an informational message only.

KQZ0040E　**Agent Builder was unable to load required libraries for the browsing features. Follow the instructions in the documentation for copying the required libraries to the correct location on your system.**

Explanation:　Agent Builder requires native libraries to perform browsing functions.

Operator response:　Follow the instructions in the documentation for copying the required libraries to the correct location on your system.

KQZ0041E　**No instances were found for the** *object_name* **Performance Monitor object.**

Explanation:　This is an informational message only.

KQZ0042E　**Cannot remove the message because it is referenced in command return code data source** *func_test***.**

Explanation:　This is an informational message only.

KQZ0043W　**The selected object has more than** *max_properties* **properties. Attributes are created for the first** *max_properties* **properties only.**

Explanation:　This is an informational message only.

KQZ0048E　**A version of the agent to be generated is currently running on the system. You must stop the agent before you can generate.**

Explanation:　This is an informational message only.

KQZ0049E　**An error occurred while generating the agent.**

Explanation:　Agent Builder encountered errors while attempting to generate the agent.

Operator response:　Check the details view of the error

dialog for exception information, or examine the Eclipse and Agent Builder trace files to see the cause of the error.

KQZ0050E **A file with the name** *directory* **exists. Either delete the file or specify another output directory.**

Explanation: This is an informational message only.

KQZ0054E **A return code with value** *rc* **was defined previously.**

Explanation: This is an informational message only.

KQZ0058I **Generating contents of** *agent_XML_file***.**

Explanation: This is an informational message only.

KQZ0059E **No sources were found for the** *logName* **Windows Event Log.**

Explanation: This is an informational message only.

KQZ0061I **Getting namespaces for** *host_name*

Explanation: This is an informational message only.

KQZ0062W **Agent Builder was unable to determine if an instance of the agent is currently running. Ensure that an instance of the agent is not running before continuing.**

Explanation: Native libraries needed to determine if an instance of the agent is running could not be loaded. Follow the instructions in the documentation for copying the required libraries to the correct location on your system.

Operator response: Ensure an instance of the agent is not currently running.

KQZ0063I **The specified output directory does not exist. Would you like to create it?**

Explanation: This is an informational message only.

KQZ0071E **Agent Builder was unable to import a file due to an internal error.**

Explanation: An invalid parameter was specified in the file import software.

Operator response: Report this problem to IBM.

KQZ0073W **This agent project contains warnings which are indications of potential problems. Attempting to run an agent that contains warnings may cause unpredictable results. Do you wish to continue the generation of the agent?**

Explanation: Agent Builder project generated warnings for the agent. The warnings can be viewed in the Problems View. Agents with warnings may not function properly.

Operator response: Select yes to continue generation. Select no if you wish to review the warnings. The warnings can be viewed in the Problems View. Select Window->Show View->Problems if the view is not visible.

KQZ0074W **The builder was unable to resolve the imports in the specified MIB files.**

Explanation: Agent Builder could not resolve the import in the MIB file.

Operator response: Ensure that all dependencies for the desired MIB are imported first.

KQZ0075E **No return codes defined for command** *command* **defined in Command Return Code data source "***test***".**

Explanation: There were no global or command specific return codes for the command in the specified Command Return Code data source.

Operator response: Either define a global return code or define a return code for the specific command.

KQZ0076W **The project file "***file***" is no longer referenced by the agent.**

Explanation: A file was found in the project directory not referenced in the agent.

Operator response: Either remove the file from the project or associate the file with a monitor.

KQZ0079E **The** *field_name* **must be an integer between -2147483648 and 2147483647.**

Explanation: The integer must contain only decimal digits and must be between -2147483648 and 2147483647.

Operator response: Enter an valid integer.

KQZ0080E **Could not connect to remote host** *host***. The Windows error code was** *errcode***.**

Explanation: Could not connect and authenticate with the remote host. The host might be down, the host name might have been typed incorrectly, or the user name or password could be wrong.

Operator response: Enter a correct host name, user name, and password.

KQZ0081E **The Managed System** *msys* **was not found or was not a supported operating system.**

Explanation: The Managed System that was specified either did not exist or was not a supported operating system.

Operator response: Enter a valid, running Managed System name of a supported operating system type.

KQZ0082E **The Product Code** *pc* **of Managed System** *msys* **is not supported.**

Explanation: Only the Product Codes UX (UNIX), LZ (Linux), and NT (Windows) are supported.

Operator response: Enter a valid, running Managed System name of a supported operating system.

KQZ0083E **No processes were returned from query to Managed System** *msys***.**

Explanation: The Managed System that was specified was offline or provided no data.

Operator response: Ensure that the specified system is running and accessible on the network.

KQZ0084E **The Managed System** *msys* **is offline.**

Explanation: The Managed System that was specified is offline.

Operator response: Bring the system back online or choose a different system.

KQZ0085E **Login to WMI namespace** *namespace* **for user** *user* **failed.**

Explanation: The system was unable to login to the specified WMI server with the given username and password.

Operator response: Enter a correct username and password for the WMI namespace.

KQZ0086E **Error retrieving classes in WMI namespace** *namespace***.**

Explanation: The system was unable to retrieve the classes for the specified namespace.

Operator response:

KQZ0090E **The JMX MBean name or pattern** *MBean_pattern* **is not valid.**

Explanation: The JMX MBean name or pattern does not follow the format allowed by the JMX specification.

Operator response: Correct the name so that it is a valid MBean name or MBean pattern.

KQZ0091E **Could not write to the output directory** *outputDir***.**

Explanation: The current user is not able to write to the chosen output directory.

Operator response: Agent Builder must generally be run as root in order to install directly into an ITM installation on the system.

KQZ0092E **Could not create the temporary directory** *tempdir***.**

Explanation: The current user is not able to write to the temporary directory. It may be full, or the user may not have permission.

Operator response: Free up some space in the temporary directory if it is full, or run as a user with authority to write there.

KQZ0093E **Could not set execute permission on the installation script** *script***.**

Explanation: The installation script must have execute permission set on it before it can be launched, and the attempt to set this failed.

Operator response: Make sure that the script was actually created and that the chmod executable is in the PATH.

KQZ0094E **The installation of the agent on the local system failed. For more information see the installation log in:** *log*

Explanation: The installation failed. The reason should be in the installation log.

Operator response: Consult the installation log and correct any problems found there.

KQZ0095E **Could not launch the installation script** *script*

Explanation: The builder was unable to launch the installation script. It might not be executable, or the system shell might not be found.

Operator response: Ensure that the shell (sh) is in the PATH and that the user has permission to run it.

KQZ0096E **A navigator group with identifier** *id* **was defined previously.**

Explanation: This is an informational message only.

KQZ0097E **Navigator group "***navgroup***" does not contain at least** *attribute_group_count* **attribute groups.**

Explanation: This is an informational message only.

KQZ0098E   Navigator group "*navgroup*" does not contain any attribute groups.

Explanation: This is an informational message only.

KQZ0099E   The affinity is invalid. See the documentation for rules about affinities.

Explanation: The affinity tag contains an unsupported character.

Operator response: An affinity tag must start with a letter, number, or percent.

The remaining characters can be alphanumeric.

If the affinity starts with a percent, the affinity must contain a period that is not in the second or final position.

KQZ0100E   Unknown ITM 5x interp: *interp*

Explanation: The specified ITM 5x interp is not recognized.

Operator response: Specify one of the following ITM 5x interps: aix4-r1 hpux10 linux-ix86 linux-ppc linux-s390 os2-ix86 os400 solaris2 solaris2-ix86 w32-ix86

KQZ0101W   You are about to commit this level of the agent. Only perform this action when you are done testing your agent and are ready to ship it.

Explanation: There are a limited number of versions available so only commit the level when you are ready to ship the agent.

Operator response: Click OK to commit the level or cancel to abort.

KQZ0102E   Select whether the filters are inclusive or exclusive.

Explanation: The inclusive selection causes the attribute to be processed if the attribute value matches the filter set. The exclusive selection causes the attribute to be processed if the attribute value does not match the filter set.

Operator response: Select either the Inclusive or Exclusive radio button.

KQZ0103E   Select Match all filters or Match any filter.

Explanation: Match all filters causes a match when all of the filters match the attribute value (logical and). Match any filter causes a match when any of the filters match the attribute value (logical or).

Operator response: Select either the Inclusive or Exclusive radio button.

KQZ0104E   Enter a string which separates fields in a record.

Explanation: The separator Text selection allows you to specify the string which is used to separate fields in a record.

Operator response: Enter the separator text or select another option for defining fields.

KQZ0105E   Enter two strings, one which identifies the beginning of a field and one which identifies the end of the field.

Explanation: The Begin and End Text selection allows you to specify the string which precedes the beginning of an attribute value, and one which follows the end of the attribute value.

Operator response: Enter both the begin and end separator text or select another option for defining fields.

KQZ0106E   Enter the name of the source file.

Explanation: Each source file must have a name that identifies the source file being monitored.

Operator response: Enter the name of the source file.

KQZ0107E   Enter the text found at the beginning of a line that indicates the end of the record.

Explanation: The pattern selection allows you to enter a string to identify the end of a multi-record record.

Operator response: Enter the pattern or make another selection for identifying a record in a log file. The record is used to collect a single group of attributes.

KQZ0108E   Enter the maximum number of non-blank lines that comprise a record.

Explanation: The rule selection allows you to identify the maximum number of lines that form a record. Blank lines, which contain no characters (not even space characters) are not included in the count. The record is used to collect a single group of attributes.

Operator response: Enter the maximum number of non-blank lines or make another selection for identifying a record in a log file.

KQZ0109E   The interval for creating a summary record must be from 60 to 86400 seconds (one minute to one day).

Explanation: The summary selection allows you to summarize the detailed data from a log file. You must specify the interval, in seconds, that this summary is to take place. The interval must be at least 60 seconds but not more than 86400 seconds (one day).

Operator response: Enter the summary interval or uncheck the Summary checkbox.

KQZ0110E Enter the number of records, from 1 to 5000, to be processed when file monitoring begins.

Explanation: With the selection "Process existing records from the file", a fixed number of records of the file are processed when monitoring begins. That number must be from 1 to 5000.

Operator response: Enter a number from 1 to 5000 or make a different record processing selection.

KQZ0111E Cannot remove attribute *attr* because it was created in a previous version of the agent.

Explanation: This is an informational message only.

KQZ0112E Cannot remove attribute group *name* because it was created in a previous version of the agent.

Explanation: This is an informational message only.

KQZ0113E Cannot remove navigator group *name* because it contains an attribute group that was created in a previous version of the agent.

Explanation: This is an informational message only.

KQZ0114E Each log file must have a unique label.

Explanation: When two or more files are specified, each must have a different label. If desired, the label can be included in an attribute by itself. The label cannot contain spaces, angle brackets, or @.

Operator response: Enter a label for each file.

KQZ0115E The label cannot contain spaces, angle brackets, at sign (@), or non-ASCII characters.

Explanation: When two or more files are specified, each must have a different label. If desired, the label can be included in an attribute by itself. The label cannot contain spaces, angle brackets, @ or non-ASCII characters.

Operator response: Remove the space from the label.

KQZ0116E Label *label* is entered more than once.

Explanation: When two or more files are specified, each must have a different label. If desired, the label can be included in an attribute by itself. The label cannot contain spaces, angle brackets, or @.

Operator response: Enter a unique label for each file.

KQZ0118E No comparison string entered.

Explanation: A string filter compares an attribute value, or some portion of the attribute value, with a comparison string. The comparison string cannot be blank.

Operator response: Enter a value for the comparison string.

KQZ0119E Agent Builder encountered an error while generating file *name*.

Explanation: The builder encountered an unexpected error.

Operator response: Ensure you have the correct permissions to the output directory. If the error persists, try restarting Agent Builder.

KQZ0120W Agent Builder determined that a TEMS is not installed in directory *directory*. Manually install the TEMS support files after the agent installation completes.

Explanation: A TEMS server is not present in the specified directory.

Operator response: Generate a zip file, transfer it to the TEMS system and run the TEMS installation script.

KQZ0121W Agent Builder determined that a TEPS is not installed in directory *directory*. Manually install the TEPS support files after the agent installation completes.

Explanation: A TEPS server is not present in the specified directory.

Operator response: Generate a zip file, transfer it to the TEPS system and run the TEPS installation script.

KQZ0122E Enter a value to compare with the attribute.

Explanation: A number filter compares an attribute value with a comparison value. The comparison value cannot be blank.

Operator response: Enter a value for the comparison number.

KQZ0123E No regular expression entered.

Explanation: A regular expression filter compares an attribute value, or some portion of the attribute value, with a regular expression. The regular expression cannot be blank.

Operator response: Enter a value for the regular expression.

KQZ0124E   The filter cannot contain the character sequence "*string*".

Explanation: A filter is a function applied to an attribute value that returns TRUE or FALSE. Filters can be combined together to form a filter set. The combined results of the filters in the filter set, along with filter sets from other attributes in the attribute group, determine whether the current sample is presented to TEMS or discarded.

A filter cannot contain certain sequences of characters as that would make the resulting filter statement ambiguous when parsed at runtime.

Operator response: Remove the offending sequence from the expression in the filter.

KQZ0125E   No replacement string entered.

Explanation: Regular expression matches can have the matched portion of the attribute value replaced with a different value. If you want this replacement to take place, you must specify a replacement string.

Operator response: Enter a replacement string or uncheck the replacement value checkbox.

KQZ0126E   Offset must be a number.

Explanation: The offset is the number of characters at the beginning of the attribute value that do not participate in the filter's matching operation. An offset of 0 means that the entire attribute value is used in the filter.

Operator response: Enter an offset.

KQZ0127E   An attribute can be added only when the attribute type has been set to a string or numeric type.

Explanation: Different types of filters are applied to string vs. numeric attributes. Therefore the attribute type must be set before a filter can be defined.

Operator response: Return to the basic attribute information and select an attribute type.

KQZ0130E   The affinity tag is invalid. See the documentation for rules about affinity tags.

Explanation: The affinity tag contains an unsupported character.

Operator response: An affinity tag must start with AFF_ and contain only letters.

KQZ0134E   An agent with product code "*pc*" has already been defined in project "*project_name*".

Explanation: Product codes must be unique

Operator response: Enter a unique product code.

KQZ0135E   An agent with affinity "*affinity*" has already been defined in project "*project_name*".

Explanation: Affinities must be unique

Operator response: Enter a unique affinity.

KQZ0136E   An agent with affinity tag "*tag*" has already been defined in project "*project_name*".

Explanation: Affinity tags must be unique

Operator response: Enter a unique affinity tag.

KQZ0138E   An agent with name "*name*" has already been defined in project "*project_name*".

Explanation: Agent names should be unique.

Operator response: Enter a unique agent name.

KQZ0139E   Navigator group "*navgroup*" contains more than *max_attr_groups* attribute groups.

Explanation: This is an informational message only.

KQZ0140E   A file with the name *name* has already been defined for this command.

Explanation: This is an informational message only.

KQZ0142E   Navigator group name *id* is reserved for internal use.

Explanation: This is an informational message only.

KQZ0143E   Enter the number of bytes to be copied into this attribute.

Explanation: The number entered determines how many bytes are copied from the record to fill this attribute. It must be a positive number up to the maximum number of bytes that this attribute can hold.

Operator response: Enter the number of characters to be read from the log file to fill this attribute value, or select a different field delimiter.

KQZ0144E   **The number of characters exceeds the maximum of** *maximum_byte_count***.**

Explanation: The number entered determines how many characters are copied from the record to fill this attribute. It must be a positive number up to the maximum number of byte that this attribute can hold.

Operator response: Reduce the number so that it is less than or equal to the maximum number of bytes in this attribute, or select a different field delimiter.

KQZ0145I   **The reference to file** *file_name* **is being removed from the agent. Do you want to remove that file from the project?**

Explanation: This is an informational message only.

KQZ0148E   **The display name must contain only ASCII characters.**

Explanation: String values can contain only ASCII characters.

Operator response: Enter only ASCII characters for the value.

KQZ0149W   **If you exit the wizard, all changes will be lost. Do you wish to exit?**

Explanation: The user clicked cancel on a wizard.

Operator response: Click Yes to exit or No to return to the wizard.

KQZ0150E   **The maximum number of lines that comprise a log file record must be from 2 to 32767.**

Explanation: The rule selection allows you to identify the maximum number of lines that form a record. The record is the portion of the file used to parse a single group of attributes.

Operator response: Enter a number between 2 and 32767 inclusive for the maximum number of lines, or make another selection for identifying a record in a log file.

KQZ0151E   **The file,** *filename***, does not appear to be an agent definition XML file.**

Explanation: Agent Builder was unable to parse the specified file.

Operator response: Specify an agent XML file.

KQZ0153E   **This action will remove** *section_count* **runtime configuration sections or properties. Do you wish to continue?**

Explanation: This is an informational message only.

KQZ0154E   **Removing runtime configuration section** *section_name* **will remove all properties defined in the section. Do you wish to continue?**

Explanation: This is an informational message only.

KQZ0155E   **A single quote cannot be included in the file name.**

Explanation: A single quote character is not permitted in the log file name specification. It may be permitted by some operating systems or file systems but is not supported for log file monitoring.

Operator response: Do not enter a single quote in the log file name specification.

KQZ0157I   **Canceling the installation may result in the agent or support files being partially installed. Are you sure you want to cancel?**

Explanation: This is an informational message only.

KQZ0158I   **The installation script** *script* **was canceled.**

Explanation: The cancel button was pressed while the installation script was running. The script may have partially run before the script was ended and the agent may be partially installed.

Operator response: Reinstall the agent before trying to run it.

KQZ0159I   **The agent generation action was canceled.**

Explanation: The cancel button was pressed while the agent files were being generated.

Operator response: Rerun the Generate Agent action to generate the agent.

KQZ0160I   **Can the attribute group to which this attribute belongs produce more than one data row?**

Explanation: A attribute group may or may not be capable of producing more than one row of data. If it can produce more than one row, key attributes allow you to tell the rows apart. A key attribute is being defined, but this attribute group is marked as being able to produce only one row. A key attribute for a attribute group that can only produce one row is not useful.

Operator response: Answer Yes to mark the attribute group as being able to produce more than one data row, or No to leave it marked as being able to produce only a single data row.

KQZ0161W **There is no agent installation script for this operating system. The agent is not supported on this operating system.**

Explanation: Agent Builder creates installation scripts only for the operating systems on which the agent is supported. The agent cannot be installed on a operating system it was not intended to run on.

Operator response: Press OK on the dialog. The installation of TEMS and TEPS support will continue normally.

KQZ0162I **Agent Builder successfully installed components for agent** *agent_name***.**

Explanation: This is an informational message only.

KQZ0163I **Agent Builder successfully created a Solution Installer project for agent** *agent_name***.**

Explanation: This is an informational message only.

KQZ0164I **Agent Builder successfully generated a mapping file for agent** *agent_name***.**

Explanation: This is an informational message only.

KQZ0165E **No agent components to install.**

Explanation: This is an informational message only.

KQZ0166E **A separator string cannot be more than** *maximum_character_count* **characters.**

Explanation: The separator Text selection allows you to specify the string which is used to separate fields in a record of the log file.

Operator response: Enter the separator text or select another option for defining fields.

KQZ0167I **Getting classes in namespace** *namespace*

Explanation: This is an informational message only.

KQZ0171I **"***operation_title***" was canceled.**

Explanation: This is an informational message only.

KQZ0174E **The** *field_name* **must contain only letters, numbers, spaces, underscores, and hyphens.**

Explanation: String values can contain only ASCII characters.

Operator response: Enter only ASCII characters for the value.

KQZ0175E **The names of files included in the agent must not be over** *max_name_length* **bytes long. The name** *file_name* **is** *actual_name_length* **bytes long.**

Explanation: The agent generator will not generate agents that include files whose names are too long. This is to prevent path names from becoming longer than what is allowed by the operating system.

Operator response: Remove the file from the agent, give it a shorter name, and add the renamed file to the agent.

KQZ0176E **The trace file** *trace_file_name* **could not be created.**

Explanation: This is an informational message only.

KQZ0177E **Changing the** *pc_or_affinity* **has invalidated the contents of the agent's support files. The files will be removed.**

Explanation: Previously created workspaces, situations, queries and take actions are associated with the agent by the product code and affinity.

Operator response: You will need to re-install the agent and recreate and re-extract any workspaces, situations, custom queries and take actions.

KQZ0179E **Make a selection for** *data_source***.**

Explanation: You must select two attribute groups in order to create a joined attribute group.

Operator response: Select one more attribute group.

KQZ0180E **Cannot join an attribute group with itself.**

Explanation: You must select two different attribute groups in order to create a joined attribute group.

Operator response: Select two different attribute groups.

KQZ0182E **Select an attribute to join on for** *attribute_group***.**

Explanation: When both selected attribute groups are defined as returning multiple rows, you must select an attribute from each in order to correlate the data.

Operator response: Select an attribute from each attribute group.

KQZ0183E **Select a key attribute for the joined attribute group.**

Explanation: By default, the keys for the base attribute groups are used as the keys for the joined attribute

group. However, you can specify one attribute to be the key.

Operator response: Select the key attribute.

KQZ0184E **The selection cannot be removed because joined attribute group** *referencing_attribute_group_name* **references attribute group** *referenced_attribute_group_name*.

Explanation: The attribute group you are trying to delete is referenced in a joined attribute group which is not being deleted.

Operator response: You must delete the joined attribute group before or along with any referenced attribute groups.

KQZ0185E **Cannot remove attribute** *attribute_name* **because it is defined as a join attribute for joined attribute group** *attribute_group_name*.

Explanation: The attribute you are attempting to delete is defined as the attribute on which to join in a joined attribute group.

Operator response: Modify or remove the joined attribute group if you would like to remove the attribute.

KQZ0186E **Cannot remove attribute** *attribute_name* **because it is defined as the key for joined attribute group** *attribute_group_name*.

Explanation: The attribute you are attempting to delete is defined as the key attribute in a joined attribute group.

Operator response: Modify or remove the joined attribute group if you would like to remove the attribute.

KQZ0187E **Cannot install the agent to** *directory* **because the Tivoli Enterprise Monitoring Agent Framework is not present in that location.**

Explanation: In order to install and run the agent, the Tivoli Enterprise Monitoring Agent Framework must be installed in the same location you wish to install the agent.

Operator response: Install the Tivoli Enterprise Monitoring Agent Framework or install the agent into a different location.

KQZ0188E **Cannot install the agent to** *directory* **because no other agents are present in that location.**

Explanation: In order to install and run the agent, at least one other agent must be installed.

Operator response: Install the another agent or install this agent in another location.

KQZ0189W **The file** *file_name* **already exists in the project. Do you want to overwrite the existing files with the one from** *new_file*?

Explanation: A file with the same name already exists.

Operator response: Click "Yes" to overwrite the file or "No" to keep the existing file.

KQZ0190E **A section with label** *section_label* **already exists.**

Explanation: Each configuration section needs to have a different label.

Operator response: Change the label to one that has not been used by another section.

KQZ0191E **A property with label** *property_label* **already exists in this section.**

Explanation: Each configuration property in a section needs to have a different label.

Operator response: Change the label to one that has not already been used by another property in this section.

KQZ0192E **A choice with label** *choice_label* **already exists in this property.**

Explanation: Each choice in a configuration property needs to have a different label.

Operator response: Change the label to one that has not already been used by another choice in this property.

KQZ0193E **A choice with value** *choice_value* **already exists in this property.**

Explanation: Each choice in a configuration property needs to have a different value.

Operator response: Change the value to one that has not already been used by another choice in this property.

KQZ0194E **Configuration section** *section_name* **does not contain any configuration properties.**

Explanation: A configuration section must contain at least one configuration property.

Operator response: Add a configuration property to the section or delete the section.

KQZ0195E **Return code** *return_code* **cannot be returned by UNIX or Linux commands, but only UNIX or Linux operating systems are selected.**

Explanation: Return codes outside the range 0 to 255 cannot be returned by UNIX or Linux commands. Only UNIX and Linux operating systems are selected so this return code can never be issued.

Operator response: Add the Windows operating system which allows a wider range of return codes (-2147483648 to 2147483647), change the return code value to be in the range 0 to 255, or remove the return code.

KQZ0196E **Return code** *return_code* **cannot be returned by UNIX or Linux commands, but only UNIX or Linux commands are defined.**

Explanation: Return codes outside the range 0 to 255 cannot be returned by UNIX or Linux commands. Only UNIX and Linux commands are defined so this return code can never be issued.

Operator response: Add a Windows command which allows a wider range of return codes (-2147483648 to 2147483647), add the Windows operating system to one of the existing commands, change the return code value to be in the range 0 to 255, or remove the return code.

KQZ0197E **The combined length of company identifier and agent identifier cannot exceed** *character_count* **characters.**

Explanation: Ensure that the combined length of the company identifier and agent identifier does not exceed 11 characters.

Operator response: Modify the company identifier and/or agent identifier to make the combined length 11 or fewer characters.

KQZ0198I **You have made changes to the configuration. Do you want to keep those changes in the agent?**

Explanation: Some changes were made to the configuration while performing some other operation, such as creating a new attribute group. The other operation is being canceled and you have a chance to keep or discard the configuration changes.

Operator response: Click Yes to keep the configuration changes or No to discard them.

KQZ0199E **The specified directory does not appear to be a valid ITM installation directory.**

Explanation: Agent Builder determined that the specified directory does not appear to be an ITM installation directory.

Operator response: Re-run the task and specify a valid ITM installation directory.

KQZ0200E **Cannot remove the final availability filter because joined attribute group** *referencing_attribute_group_name* **references the Availability group.**

Explanation: A joined attribute group exists which includes availability information.

Operator response: You need to remove the Availability Joined Attribute Group before you can remove the final availability filter.

KQZ0201E **The property environment variable** *duplicate_name* **has already been used and is being replaced with** *unique_name*.

Explanation: Configuration property environment variable names must be unique across all configuration properties in the agent. The variable name that was entered has already been used, so it was changed to a unique variable name.

Operator response: Accept the changed variable name or enter a different one.

KQZ0203E **No agent is selected for the generate operation.**

Explanation: No agent file was selected or no Agent Editor had focus.

Operator response: Select an agent file from the Navigator View or give focus to an Agent Editor and rerun the command.

KQZ0204E **The specified version of** *new_version* **is not greater than the current version of** *current_version*.

Explanation: The version specified must be greater than the current version

Operator response: Specify a version greater than the current version.

KQZ0205E   **The specified directory does not exist.**

Explanation: Agent Builder determined that the specified directory does not exist.

Operator response: Re-run the task and specify a valid ITM installation directory.

KQZ0206E   **The specified location is not a directory.**

Explanation: Agent Builder determined that the specified location is not a directory.

Operator response: Re-run the task and specify a valid ITM installation directory.

KQZ0208E   **The specified username or password is incorrect.**

Explanation: The specified username or password is incorrect.

Operator response: Specify the correct username and password.

KQZ0209E   **The Tivoli Enterprise Monitoring Server is not running.**

Explanation: The Tivoli Enterprise Monitoring Server is not running.

Operator response: Start the Tivoli Enterprise Monitoring Server and rerun the command.

KQZ0210E   **Name "*name*" has already been used by the agent or another subnode.**

Explanation: The agent display name and subnode names should be unique within an agent.

Operator response: Enter a unique name.

KQZ0211E   **A subnode with type "*type*" has already been defined.**

Explanation: Subnode types should be unique within an agent.

Operator response: Enter a unique subnode type.

KQZ0212E   **The subnode type *type* is not valid. It must be 1 to 3 characters and contain only letters and numbers.**

Explanation: The subnode type entered contained invalid characters or too many characters.

Operator response: Enter a subnode type from 1 to 3 characters consisting of letters A-Z or numbers.

KQZ0213E   **The combined length of company identifier and subnode identifier cannot exceed *character_count* characters.**

Explanation: Ensure that the combined length of the company identifier and subnode identifier does not exceed 14 characters.

Operator response: Modify the company identifier and/or subnode identifier to make the combined length 14 or fewer characters.

KQZ0214I   **The following items are selected and will be removed. Do you want to continue?**

Explanation: This is an informational message only.

KQZ0215E   **Could not launch command *script***

Explanation: The builder was unable to launch the command. It might not be executable, or the system shell might not be found.

Operator response: Ensure that the shell (sh) is in the PATH and that the user has permission to run it.

KQZ0216I   **The command *command* was canceled.**

Explanation: The cancel button was pressed while the command was running. The command may have partially run before the command was ended.

Operator response: None.

KQZ0217I   **Do you wish to cancel the command?**

Explanation: This is an informational message only.

KQZ0218I   **Based on this data, some attributes might be better represented by other data types. Do you wish to view the suggested data types?**

Explanation: Agent Builder detected a discrepency in the data types specified and the data returned.

Operator response: Click Yes to view the attributes or No to leave the data types unchaged.

KQZ0219I   **Attribute *attribute* is defined as numeric, however, the string data was returned. Do you want to change the type to string?**

Explanation: Agent Builder determined that the the data returned for the attribute is string data, however, the attribute is defined as numeric. This may cause a problem at runtime.

Operator response: Click Yes to change the type or No to leave it as numeric.

KQZ0220E **There is not a command defined for the operating system on which Agent Builder is currently running.**

Explanation: In order to test a command, you must have a command defined that will run on the operating system on which Agent Builder is currently running.

Operator response: Define a command for the current operating system and retry the action.

KQZ0222I **The command returned with a non-zero return code. Click the "Check Results" button to view the results.**

Explanation: There are already attributes defined for the script attribute group.

Operator response: Click Yes to replace the attributes or No to keep the attributes.

KQZ0223E **Could not connect to the CIM server on host** *host***.**

Explanation: Agent Builder could not connect to the server on the specified host.

Operator response: Check that the host name is typed correctly and that the CIM server is accepting connections.

KQZ0224E **An unknown error occurred when attempting to connect to the CIM server on host** *host***.**

Explanation: Agent builder could not connect to the server on the specified host.

Operator response: Check that the host name is typed correctly and that the CIM server is accepting connections.

KQZ0225E **The selection cannot be moved because joined attribute group** *referencing_attribute_group_name* **references attribute group** *referenced_attribute_group_name***.**

Explanation: A joined attribute group at the agent level (i.e. not part of a subnode definition) can only reference other attribute groups which are also at the agent level. A joined attribute group in a subnode definition can only reference other attribute groups which are in the same subnode definition or at the agent level. This move would cause a joined attribute group to be unable to reference the source attribute groups.

Operator response: If moving a joined attribute group out of a subnode, also move any referenced attribute groups out of that subnode at the same time. If moving an attribute group into a subnode, also move any

joined attriubte groups that reference it into the subnode at the same time.

KQZ0226E **Subnode definition "***subnode_name***" does not contain any attribute groups.**

Explanation: This is an informational message only.

KQZ0229E **Two attribute groups which collect event data cannot be joined together.**

Explanation: Both attribute groups selected collects event data rather than sampled data. At least one attribute group must collect sampled data.

Operator response: Choose an attribute group which collects sampled data for one or both attribute groups to be joined.

KQZ0230E **An attribute group that collects event data cannot be joined to an attribute group which can produce more than one row.**

Explanation: One selected attribute group collects event data and the other collects sampled data but can contain more than one row of data in the sample. Only an attribute group which collects a single row in its sample can be joined to an attribute group which collects event data.

Operator response: Choose an attribute group which collects a single row of sampled data instead of the attribute group which can contain more than one row in its sample.

KQZ0231I **IBM Agent Builder, Version** *version plugin_information*

Explanation: The output lists the version of Agent Builder.

Operator response: None.

KQZ0254E **The XML element which identifies data rows in this attribute group must be specified.**

Explanation: One data row will be collected for each instance of this element in the XML file. Elements and attributes within this element can be used as attribute values.

Operator response: Enter an XML element name.

KQZ0255E **The XML tag whose value is collected by this attribute must be specified.**

Explanation: Each ITM attribute in an XML file attribute group must be identified by an XML element or XML attribute name.

Operator response: Enter an XML element or attribute name.

KQZ0256E **The combined length of the agent company identifier and agent identifier cannot exceed** *character_count* **characters if the agent is to have subnodes.**

Explanation: Ensure that the combined length of the company identifier and agent identifier, does not exceed 11 characters.

Operator response: On the Agent Information page, modify the company identifier and/or agent identifier to make the combined length 11 or fewer characters, then add a subnode to the agent. If you do not want to change vital agent information, you will need to create a new agent to contain subnodes.

KQZ0257E **Collect namespace operation was canceled.**

Explanation: This is an informational message only.

KQZ0258E **Collect classes operation was canceled.**

Explanation: This is an informational message only.

KQZ0259E **Unable to list services on** *host***.**

Explanation: This is an informational message only.

KQZ0260I **Getting services on** *host***.**

Explanation: This is an informational message only.

KQZ0261I **The server connection was successful.**

Explanation: The connection to the server from the connection wizard was made successfully.

Operator response: Press "Finish" to save the connection definition for browsing the server.

KQZ0262E **The server connection was not successful:** *exception_message*

Explanation: The connection to the server from the connection wizard was not successful. The message describes the exception that occurred when attempting to make the connection.

Operator response: Modify the parameters and attempt the connection again, press "Finish" to save the connection definition, or press "Cancel" to abandon any changes you have made.

KQZ0263E **The following files already exist. Do you want to continue and overwrite the contents of the files?**

Explanation: The files that Agent Builder is trying to generate already exist.

Operator response: Select Yes to continue and overwrite the files or No to cancel and select a new directory.

KQZ0264E **The underlying file for** *file_name* **could not be found or has become corrupted. Close this editor and reopen it from the Navigator tree.**

Explanation: The file was deleted or moved while it was being edited.

Operator response: Close this editor for this agent and reopen it from the Navigator tree.

KQZ0265E **At least two return codes must be defined.**

Explanation: All return codes that the command can return should be defined. The command should return at least two distinct return codes to distinguish between states that the command detects.

Operator response: Add the return code or return codes to complete the command definition.

KQZ0266E **The selection contains at least one global return code. Do you want to continue?**

Explanation: Global return codes can apply to any command in the availability filter, not just the command you are currently editing. If you remove it, you may remove return codes that other commands depend on.

Operator response: Press OK to remove the selected return codes or Cancel to end the action without removing any return codes.

KQZ0267E **The agent definition contains errors. The errors must be corrected before the agent can be committed.**

Explanation: The agent contains errors that would prevent it from operating correctly.

Operator response: Correct the errors and save the agent.

KQZ0268E **The Tivoli Enterprise Monitoring Server logon failed.**

Explanation: This is an informational message only.

KQZ0270E **XML tag** *tag_name* **was not found in the specified file.**

Explanation: This is an informational message only.

KQZ0273E **No override filter comparison string entered.**

Explanation: Regular expression matches can have an additonal pattern that if matched overrides the previous match. You must specify a comparison string.

Operator response: Enter a comparison string or uncheck the override filter checkbox.

KQZ0274E *directory* **is a directory not a filename.**

Explanation: The user specified the name of a directory instead of the name of a file.

Operator response: Specify a file name.

KQZ0275E **No comparison string entered.**

Explanation: Regular expression matches search for a pattern that identifies the record. You must specify a comparison string.

Operator response: Enter a comparison string or select a different record identification option.

KQZ0276E **Cannot remove the Perfmon instance name because it is defined as a join attribute for joined attribute group** *attribute_group_name*.

Explanation: The Perfmon instance name you are attempting to remove is defined as the attribute on which to join in a joined attribute group.

Operator response: Modify or remove the joined attribute group if you would like to remove the attribute.

KQZ0277E **Cannot remove attribute** *attribute_name* **because it is referenced as** *joined_attribute_name* **in derived attribute** *derived_attribute_name* **in joined attribute group** *joined_attribute_group_name*.

Explanation: The attribute you are attempting to delete is defined as the key attribute in a joined attribute group.

Operator response: Modify or remove the joined attribute group if you would like to remove the attribute.

KQZ0278E **The** *tivoli_product_component* **was modified. You must save the** *tivoli_product_component* **before you can add another component.**

Explanation: This is an informational message only.

KQZ0279E **Cannot remove attribute** *attribute_name* **because it is referenced in filtered attribute group** *filtered_attribute_group_name*, **attribute** *filtered_attribute_name*.

Explanation: The attribute you are attempting to delete is defined as the key attribute in a joined attribute group.

Operator response: Modify or remove the joined attribute group if you would like to remove the attribute.

KQZ0280I **One or more event summarization attributes should be added to this attribute group. Do you wish to add them now?**

Explanation: Attribute groups that have event summaraziation enabled should have additional attributes.

Operator response: Click "OK" to add the attributes or "Cancel" continue without adding the attributes.

KQZ0281W **The command you are attempting to test on the local machine is not defined as running on the local platform. Testing the command locally may produce different results than when the command is run in the agent. It is recommended that you either test the command locally on a supported platform, or test the command remotely using SSH. Do you wish to continue testing the command on the local system?**

Explanation: Agent Builder determined that the the local platform type is not selected for the command being tested.

Operator response: You should add the local platform type to the command definition, test the command locally on a supported platform or test the command remotely using SSH.

KQZ0282E **Cannot remove automatically created attribute** *attr*.

Explanation: This attribute is needed for this attribute group to function properly. It can only be deleted if the entire attribute group is deleted.

Operator response: You must leave this attribute in

place. If you do not want it to sent to the TEMS, you can remove the checkmark from the "Display attribute in the Tivoli Enterprise Portal" flag.

KQZ0283E   The row selection XPath contains a syntax error.

Explanation: The XPath contains a syntax error.

Operator response: Edit the row selection XPath to correct the error.

KQZ0284E   The XPath for attribute *attr* contains a syntax error.

Explanation: The XPath contains a syntax error.

Operator response: Edit the XPath to correct the error.

KQZ0285E   Could not collect data from *url*.

Explanation: An error occurred while trying to collect data from the URL specified.

Operator response: Ensure the URL is correct, the user id and password is correct, and the post data, if applicable, is correct.

KQZ0286E   Error collecting data from *url*. The response received was *response*

Explanation: An error occurred while trying to collect data from the URL specified.

Operator response: Ensure the URL is correct, the user id and password is correct, and the post data, if applicable, is correct.

KQZ0287E   Cannot remove subnode *name* because it was created in a previous version of the agent.

Explanation: This is an informational message only.

KQZ0288I   The XPath specified in the *dialog* dialog does not match the XPath here. Do you wish to update the XPath?

Explanation: This is an informational message only.

KQZ0289E   The XPath contains a syntax error.

Explanation: The XPath contains a syntax error.

Operator response: Edit the XPath to correct the error.

KQZ0290E   The following configuration variables are used; however, no values are set: *var_list*.

Explanation: A configuration variable is specified, but no value for that variable was found in the test environment.

Operator response: Remove the reference to the configuration variable or set a value in the test environment.

KQZ0291W   No rows returned for the queries specified.

Explanation: This is an informational message only.

KQZ02923I   Attribute *attribute* is defined as 32-bit; however, the data returned suggests that it should be 64-bit. Do you want to update the attribute to be 64-bit?

Explanation: Agent Builder determined that the the data returned needs 64-bits to represnt it. Leaving the attribute as a 32-bit attribute may cause an overflow condition.

Operator response: Click Yes to make the attribute 64-bit or No to leave it as it is.

KQZ0292I   The scale for attribute *attribute* is *scale*; however, the data returned suggests that it should be *newscale*. Do you want to update the scale to *newscale*?

Explanation: Agent Builder determined that the the data returned should have the specified scale. This will not cause an error at runtime.

Operator response: Click Yes to change the scale or No to leave it as it is.

KQZ0298E   The selection cannot be removed because filtered attribute group *referencing_attribute_group_name* references attribute group *referenced_attribute_group_name*.

Explanation: The attribute group you are trying to delete is referenced in a filtered attribute group which is not being deleted.

Operator response: You must delete the filtered attribute group before or along with any referenced attribute groups.

KQZ0299E   The selection cannot be moved because filtered attribute group *referencing_attribute_group_name* references attribute group *referenced_attribute_group_name*.

Explanation: A filtered attribute group at the agent level (i.e. not part of a subnode definition) can only reference other attribute groups which are also at the agent level. A filtered attribute group in a subnode definition can only reference other attribute groups which are in the same subnode definition or at the agent level. This move would cause a filtered attribute

group to be unable to reference the source attribute group.

Operator response: If moving a filtered attribute group out of a subnode, also move any referenced attribute groups out of that subnode at the same time. If moving an attribute group into a subnode, also move any filtered attriubte groups that reference it into the subnode at the same time.

KQZ0300E   The selection cannot be removed because configuration section *configuration_section_name* **is required by data sources defined in this agent.**

Explanation: The configuration section you are trying to delete contains properties that are needed by data sources in this agent. It cannot be removed unless the data sources are also removed, or in some cases, configured so that the properties are not needed.

Operator response: Delete the data sources that use this configuration section if you do not wish to have it in your agent any longer.

KQZ0301E   The selection cannot be removed because configuration section *configuration_section_name* **is needed for configuration of subnode** *subnode_type*.

Explanation: The configuration section you are trying to delete contains properties that are needed when configuring a subnode. They cannot be removed unless the subnode is removed.

Operator response: Delete the subnode if you do not wish to have it in your agent any longer.

KQZ0302E   The selection cannot be removed because configuration property *configuration_property_name* **is required by data sources defined in this agent.**

Explanation: The configuration property you are trying to delete is needed by data sources in this agent. It cannot be removed unless the data sources are also removed, or in some cases, configured so that the properties are not needed.

Operator response: Delete the data sources that use this configuration property if you do not wish to have it in your agent any longer.

KQZ0303E   The selection cannot be removed because configuration property *configuration_property_name* **overrides a property of the same name in the base agent.**

Explanation: Configuration property overrides can not be added or removed from the context menu on the runtime configuration page or the outline view. fThe configuration property you are trying to delete is

needed by data sources in this agent. It cannot be removed unless the data sources are also removed, or in some cases, configured so that the properties are not needed.

Operator response: Delete the data sources that use this configuration property if you do not wish to have it in your agent any longer.

KQZ0304E   An error occurred generating the agent configuration file.

Explanation: An unknown error occurred generating the agent configuration file.

Operator response: Retry the operation.

KQZ0305I   The agent is taking a longer than expected amount of time to start. Do you want to continue to wait?

Explanation: The agent hasn't started in the expected amount of time. This could indicate an error.

Operator response: Click "Yes" to continue waiting or "No" to cancel.

KQZ0306E   The agent returned an unexpected response.

Explanation: The agent returned a response that was not expected.

Operator response: Retry the operation.

KQZ0307E   An error occurred while communicating with the agent.

Explanation: The agent returned an error condition in response to the request.

Operator response: Retry the operation.

KQZ0308W   There should be at least one configuration property in subnode *subnode_name* **that the agent can use to differentiate one instance of the subnode from another.**

Explanation: Sample code for Java API provider cannot be created if there is a sampled attribute group in a subnode and there is no configuration property in the subnode. One or more configuration properties are needed to distinguish one subnode instance from another.

Operator response: Add a configuration property to the subnode and save the agent.

KQZ0309I   The TEPS server connection was successful up to the loading of the managed system names.

Explanation: The TEPS connection was successful, but a more complete test cannot be completed until a managed system is selected.

Operator response: Select a managed system and press Test Connection again or press Finish.

KQZ0310W   The agent process *agent_process_name* **did not end as expected. You may need to end the process manually in order to test this agent again.**

Explanation: Agent Builder started an agent process in order to test the functionality of the agent. The agent process did not respond in a reasonable amount of time to the request to stop the agent. The process may eventually respond to the request to stop it (for example, after a network connection from an attempted data collection times out), or it may be in an error state and never stop on its own. The same agent cannot be tested again while this process is still running.

Operator response: Wait for a little longer if desired. If the process does not end on its own, end it manually using tools from the operating system or elsewhere.

KQZ0311W   The following agent processes did not end as expected. You may need to end the processes manually in order to test these agents again. Processes that did not end: *agent_process_names*

Explanation: Agent Builder started an agent process for each agent in order to test the functionality of the agent. The agent processes did not respond in a reasonable amount of time to the request to stop the agents. The processes may eventually respond to the request to stop it (for example, after a network connection from an attempted data collection times out), or it may be in an error state and never stop on their own. An agent cannot be tested again while its process is still running.

Operator response: Wait for a little longer if desired. If the processes do not end on their own, end them manually using tools from the operating system or elsewhere.

KQZ0312E   The selection cannot be removed because OSLC resource *referencing_attribute_group_name* **references attribute group** *referenced_attribute_group_name*.

Explanation: The attribute group you are trying to delete is referenced in an OSLC resource which is not being deleted.

Operator response: You must delete the OSLC

resource before or along with any referenced attribute groups.

KQZ0313E   Attribute group *attribute_group_name* **cannot be moved because it is part of a committed vesion of the agent.**

Explanation: Moving or removing an attribute group that was in a previous version of the agent will cause the attribute group to not work correctly when different versions of this agent are deployed.

Operator response: You must leave the attribute group in place for this and future versions of this agent.

KQZ0314E   Navigator group *navigator_group_name* **cannot be moved because it is part of a committed vesion of the agent.**

Explanation: Moving or removing a navigator group that was in a previous version of the agent will cause the navigator group to not work correctly when different versions of this agent are deployed.

Operator response: You must leave the navigator group in place for this and future versions of this agent.

KQZ0315E   Attribute *attribute_name* **cannot be moved because it is part of a committed vesion of the agent.**

Explanation: Moving or removing an attribute that was in a previous version of the agent will cause its attribute group to not work correctly when different versions of this agent are deployed.

Operator response: You must leave the attribute in place for this and future versions of this agent.

KQZ0316E   Attribute groups and navigator groups cannot be moved at the same time as other types of objects.

Explanation: Attribute groups can be moved together when being moved to a different navigator group, to a different subnode, or out of any navigator group or subnode. Attribute groups and navigator groups can be moved together when being moved to a different subnode or out any subnode. No other types of objects can be moved at the same time.

Operator response: Select only one type of object at a time to move.

KQZ0317E   Event log objects cannot be moved at the same time as other types of objects.

Explanation: Event log objects can be moved together when being moved to a different subnode or out any

subnode. No other types of objects can be moved at the same time.

Operator response: Select only one type of object at a time to move.

KQZ0318E **The selection cannot be removed because dashboard** *dashboard_title* **references attribute group** *referenced_attribute_group_name*.

Explanation: The attribute group you are trying to delete is referenced in a dashboard widget which is not being deleted.

Operator response: You must delete widget before or along with any referenced attribute groups.

KQZ0319E **The selection cannot be removed because dashboard** *dashboard_title* **references attribute** *referenced_attribute_name*.

Explanation: The attribute you are trying to delete is referenced in a dashboard widget which is not being deleted.

Operator response: You must delete widget before or along with any referenced attributes.

KQZ0320E **The file** *file_name* **given after the** *keystore_option* **option does not exist.**

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. The key to sign the JAR file comes from a Java key store file specified on the command line after the -keystore argument, but the file specified does not exist or is not a plain file.

Operator response: Obtain the key store file which contains the private key needed to sign JAR files in your organization and save it in the location specified after the -keystore argument.

KQZ0321E *keystore_option* **option not given and default key store file** *file_name* **not found.**

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. The key to sign the JAR file comes from a Java key store file specified on the command line after the -keystore argument or, without the -keystore argument, from the .keystore file in your home directory. The -keystore argument was not given and the .keystore file was not found in your home directory.

Operator response: Obtain the key store file which contains the private key needed to sign JAR files in

your organization and save it with the name .keystore in your home directory.

KQZ0322E **A key with alias** *alias* **given after the** *alias_option* **option does not exist in key store** *alias_option*.

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. The key to sign the JAR file is identified by an alias inside a Java key store. This alias specified did not correspond to any key in the key store.

Operator response: Pass the correct alias on the command line after the -alias argument of the private key needed to sign JAR files.

KQZ0323E *alias_option* **option not given and no key with default alias** *default_alias* **was found in key store file** *key_store*.

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. The key to sign the JAR file is identified by an alias inside a Java key store. The alias is specified on the command line after the -alias argument or, without the -alias argument, the default alias of "mykey" is assumed.

Operator response: Pass the correct alias on the command line after the -alias argument of the private key needed to sign JAR files.

KQZ0324E **The key store in** *key_store* **could not be loaded using the password given after the** *key_store_password_option* **option.**

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. A key from a key store is needed to sign the JAR file. The key store file is protected by a password that must be specified after the -storepass option on the command line. The key store could not be loaded using that password. Either an inorrect password was specified or the file does not contain a key store or contains a corrupted key store.

Operator response: Pass the correct password on the command line after the -storepass option.

KQZ0325E **The key store in** *key_store* **could not be loaded without a password after the** *key_store_password_option* **option.**

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. A key from a key store is needed to sign the JAR file. The key store file is protected by a password

that must be specified after the -storepass option on the command line. The key store could not be loaded because the -storepass option and a password were not specified.

Operator response: Pass the password on the command line after the -storepass option.

KQZ0326E **Private key with alias** *alias_name* **could not be loaded using the password given after the** *key_password_option* **option.**

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. A private key from a key store is needed to sign the JAR file. Each private key in the key store file is protected by a password that should be specified after the -keypass option on the command line. The key could not be loaded using that password. An inorrect password was specified

Operator response: Pass the correct password on the command line after the -keypass option.

KQZ0327E **Private key with alias** *alias_name* **could not be loaded using the key store password given after the** *key_store_password_option* **option.**

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that must be signed before it can be loaded on a SaaS server. A private key from a key store is needed to sign the JAR file. Each private key in the key store file is protected by a password. That password can be specified after the -keypass option on the command line or, without the -keypass option, the key store password is used which was specified after the -storepass option. The -keypass option was not specified and the key could not be loaded using the key store password.

Operator response: Pass the correct password on the command line after the -keypass option.

KQZ0328W **The self-describing support JAR will not be processed by the SaaS server if its not signed.**

Explanation: Generating a self-describing agent produces a JAR file containing agent support data that describes the agent to the SaaS server. If the JAR is not signed, the SaaS server will not load the support data, and data generated by the agent will not be visible.

Operator response:

KQZ0329E **No attribute groups are defined to run on the current testing operating system platform** *platform***.**

Explanation: An attempt was made to start the agent in a full agent test, but none of the attribute groups in the agent will run on the current operating system platform that is used for testing.

Operator response: Enable the testing operating system platform, either temporarily for the duration of this test, or permanently to support the testing platform in the agent.

KQZ1000E **The Eclipse preferences for the Jlog Plug-in were not found. Reverting to default preferences.**

Explanation: The preferences that control the Resource Model Builder logging behavior could not be loaded. The default values will be used instead.

Operator response: The Resource Model Builder installation may be corrupt. Reinstall the program. If this does not correct the error, contact IBM support.

KQZ1002E **An error occurred while saving the preference information.**

Explanation: Agent Builder was unable to save the user preferences.

Operator response: Check the Eclipse error log for more information

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KQZ2008W **There were no situations defined for the application. Do you wish to continue?**

Explanation: There were no situations defined.

Operator response: Select yes to continue with the operation or no to cancel.

KQZ2009E **Unable to connect to the Tivoli Enterprise Portal server on host** *hostname***.**

Explanation: Unable to connect to the TEPS on the specified host.

Operator response: Ensure that the system is up and the Tivoli Enterprise Portal Server Service is running.

KQZ2010E **Unable to extract the application support information from the Tivoli Enterprise Portal Server on host** *hostname***.**

Explanation: Unable to extract information from the TEPS on the specified host.

Operator response: Ensure that the system is up and the Tivoli Enterprise Portal Server Service is running.

KQZ2011I   There were no further operations to perform.

Explanation: There were no situations to extract and the option to import workspaces was not selected.

Operator response: Re-run the task and ensure that the options for importing situations are correct.

KQZ2013W   The operation was canceled. Would you like to continue without importing situations?

Explanation: The user canceled the operation to select the situations to import.

Operator response: Click yes to continue or no to cancel.

KQZ2014E   Error copying file *src* to *dst*.

Explanation: Could not copy the specified file.

Operator response: Ensure the disk is not full and that the tool has the required permissions.

KQZ2015W   The toolkit has determined that Fix Pack 1 is not installed on the Tivoli Enterprise Portal Server. This fix pack is required in order to export workspaces using the toolkit. Do you wish to continue and only export situations?

Explanation: Fix Pack 1 is not installed on the Tivoli Enterprise Portal Server

Operator response: Create the workspaces on a system that is running Fix Pack 1.

KQZ2016E   The toolkit has determined that Fix Pack 1 is not installed on the Tivoli Enterprise Portal Server. This fix pack is required in order to export workspaces using the toolkit.

Explanation: Fix Pack 1 is not installed on the Tivoli Enterprise Portal Server

Operator response: Create the workspaces on a system that is running Fix Pack 1.

KQZ2017I   There were no further operations to perform.

Explanation: There were no situations to extract and the option to import workspaces and queries were not selected.

Operator response: Re-run the task and ensure that the options for importing situations are correct.

KQZ2018W   There were no user defined queries for the application. Do you wish to continue?

Explanation: There were no user defined queries.

Operator response: Select yes to continue with the operation or no to cancel.

KQZ2019W   The operation was canceled. Would you like to continue without importing queries?

Explanation: The user canceled the operation to select the queries to import.

Operator response: Click yes to continue or no to cancel.

KQZ2020E   No managed systems found in response from TEPS query.

Explanation: The system queried the TEPS to get the list of all known managed systems, and none were returned.

Operator response: Start the operating system monitoring agent on the system you want to manage. Make sure it is configured to connect to the same TEMS that the TEPS connects to.

KQZ2023E   Unable to determine the Tivoli Enterprise Portal Server version on *host*.

Explanation: The Solution Installer was unable to check the TEPS version.

Operator response: Ensure that the TEPS is running on the specified system and that it is accessible from this system.

KQZ2024W   There were no user defined take actions for the application. Do you wish to continue?

Explanation: There were no user defined take actions.

Operator response: Select yes to continue with the operation or no to cancel.

KQZ2025W   The operation was canceled. Would you like to continue without importing take actions?

Explanation: The user canceled the operation to select the take actions to import.

Operator response: Click yes to continue or no to cancel.

KQZ2027E Select a TEPS host name from the drop-down list or add a new host to the list.

Explanation: You must select or define the host to contact to retrieve the desired information.

Operator response: Select or define a new TEPS host.

KQZ2028E No Windows managed systems found in response from TEPS query.

Explanation: The system queried the TEPS to get the list of all known Windows managed systems, and none were returned.

Operator response: Start the Windows system monitoring agent on the system you want to manage. Make sure it is configured to connect to the same TEMS that the TEPS connects to.

KQZ2029E Select a managed system from the drop-down list.

Explanation: You must select a managed system to retrieve the desired information.

Operator response: Select a managed system.

KQZ2030E Could not connect to the Tivoli Enterprise Portal Server on host *hostname*.

Explanation: Either the host name is incorrect or there is no TEPS server running on the host.

Operator response: Correct the host name or ensure the TEPS is running.

KQZ2032E The Tivoli Enterprise Portal Server on host *hostname* has not completed initialization.

Explanation: The Tivoli Enterprise Portal Server has started but is not yet ready to handle requests.

Operator response: Wait a few moments for the server to complete initialization and retry the operation.

KQZ2036W Establishing the connection to the Tivoli Enterprise Portal Server is taking longer than expected. Do you want to continue waiting?

Explanation: This is an informational message only.

KQZ23553I Support files for product, *project*, were found in the project. Do you wish to append to the existing files or overwrite the existing files?

Explanation: This is an informational message only.

KQZ2924E The directory *directory* already contains an agent image. Do you want to replace it with the new image?

Explanation: The directory already contains an agent image.

Operator response: Select yes to replace the agent image in the directory, or select no to cancel the operation. After canceling the operation, you can select a different directory in which to create the agent image.

KQZ2925E A file named *file_name* already exists.

Explanation: A file already exists in the directory with the specified name.

Operator response: Delete the existing file or rename the new file.

KQZ2926W The specified files will be removed from the workspace mibs directory when you click "OK" in the "Manage Custom MIBs" dialog.\n If you do not wish to delete the files, click "Cancel" in the dialog to revert the directory to it's previous contents.

Explanation: The specified MIB files will be deleted.

Operator response: Click "OK" in the dialog to delete the files or "Cancel" to keep the files.

KQZ2927E Class files from folder *folder_name* could not be found to create JAR file *JAR_file_name*.

Explanation: When an agent containing a Java API attribute group is generated, class files for the Java custom provider application are written to a JAR file when the agent is generated. The folder that should contain those class files could not be found.

Operator response: Make sure the Java source files for the Java custom provider application exist, and are being compiled without any compiler errors, and the Java output folder is named "bin".

KQZ3000E *path* is already in the list.

Explanation: The same path cannot be entered in the list twice.

Operator response: Select another path or press Cancel to keep the existing paths.

KQZ3001E File *file_path* could not be found.

Explanation: This is an informational message only.

KQZ3002E Host *hostname* **has already been defined. Either enter a new host name or select the host name from the drop down box.**

Explanation: The specified host has already been defined.

Operator response: Specify a different host name.

KQZ3003E **The maximum length of the project name is 100 characters.**

Explanation: The Eclipse project name is too long. The length is limited to prevent the maximum fully-qualified path length of files in the project from exceeding operating system limits.

Operator response: Shorten the name of the project.

KQZ3004E **Unable to run the tacmd command.**

Explanation: The program was unable to launch the IBM Tivoli Monitoring tacmd command.

Operator response: Ensure the ITM install directory is specified correctly.

KQZ3005E **A TEMA is not installed in directory** *directory*. **The agent will not be installed on this system.**

Explanation: The product requires that the Tivoli Enterprise Monitoring Agent Framework be installed on the system.

Operator response: Install the Tivoli Enterprise Monitoring Agent Framework by installing the OS agent.

KQZ3006E **The product requires ITM version** *min_ver*, **however, version** *version* **was found.**

Explanation: The product requires a version of ITM that is not present in the directory specified.

Operator response: Either change the minimum level of ITM required by the agent or upgrade the ITM installation on the system.

KQZ3007E **The product requires ITM version** *min_ver*, **however, Agent Builder was unable to determine the version of ITM installed.**

Explanation: An unexpected error occurred when trying to determine the version of ITM installed on the system.

Operator response: Either change the minimum level of ITM required by the product or upgrade the ITM installation on the system.

KQZ3008I **Cancel checking for the presence of a** *component*.

Explanation: The user clicked cancel while checking for the presence of and ITM component.

Operator response: Click Yes to cancel or No to continue waiting.

KQZ3009E **A Tivoli Enterprise Monitoring Server was not found in** *directory*.

Explanation: A TEMS is not installed in the specified directory..

Operator response: Specify a directory that contains a TEMS.

KQZ3011E **Action Failed. See the agent log file for more information.**

Explanation: This is an informational message only.

KQZ3012I **Action successfully completed.**

Explanation: This is an informational message only.

KQZ3013E **Action Failed. Monitors are not supported for this connection.**

Explanation: This is an informational message only.

KQZ3014E **Action Failed. The Object Name is invalid.**

Explanation: This is an informational message only.

KQZ3015E **Action Failed. The operation name is invalid.**

Explanation: This is an informational message only.

KQZ3016E **Action partially failed. See the agent log file for more information.**

Explanation: This is an informational message only.

KQZ3021I **Cancel logging onto the IBM Tivoli Monitoring Server?**

Explanation: This is an informational message only.

KQZ3022E **The operation does not have enough information to log on.**

Explanation: This is an informational message only.

KQZ3025I   **Cancel running the IBM Tivoli Monitoring query?**

Explanation: This is an informational message only.

KQZ3026I   **Cancel loading the queries into the the IBM Tivoli Monitoring Server?**

Explanation: This is an informational message only.

KQZ3029E   **"*prop_name*" must be unique but "*prop_value*" has already been used.**

Explanation: The property must be unique but this value has already been used in another object.

Operator response: Enter a different value for the property.

KQZ3030E   **"*prop_name*" is required.**

Explanation: A value must be entered for the property.

Operator response: Enter a value for the property.

KQZ3031E   **The specified user does not have workspace administration permission.**

Explanation: The specified user must have workspace administration permission.

Operator response: Specify a user that has workspace administration permission.

KQZ3032I   **The ITM logon operation was canceled.**

Explanation: The cancel button was pressed while attempting to login to the TEMS.

Operator response: Retry the operation.

KQZ3033E   **The specified user name or password is incorrect.**

Explanation: The specified user name or password is incorrect.

Operator response: Specify the correct user name and password.

KQZ3034E   **The Tivoli Enterprise Monitoring Server is not running.**

Explanation: The Tivoli Enterprise Monitoring Server is not running.

Operator response: Start the Tivoli Enterprise Monitoring Server and rerun the command.

KQZ3035E   **The Tivoli Enterprise Monitoring Server logon failed.**

Explanation: This is an informational message only.

KQZ3036I   **The file "*file_name*" has been changed on the file system. Do you want to overwrite the changes made on the file system?**

Explanation: The file has been changed from outside the agent editor. Those changes can be overwritten by the copy of the file currently in the agent editor, or can be retained without overwriting them.

Operator response: Select "Yes" if you want to overwrite the changes made outside the agent editor with changes from the agent editor, or "No" if you want to keep the changes on disk and not save the contents of the agent editor for that file.

KQZ3037I   **Could not create directory *dir***

Explanation: The Solution Installer was unable to create the directory.

Operator response: Ensure that the disk is not full and that the plug-in has the correct permissions.

KQZ3038E   **Error creating file *filename*.**

Explanation: Could not create the specified file.

Operator response: Ensure the disk is not full and that the tool has the required file permissions.

KQZ3039W   **The condition of the conditional operator is *actual_type* but *actual_type* is expected.**

Explanation: This is an informational message only.

KQZ3040W   **The "true" operand of the conditional operator is *actual_type* but *expected_type* is expected.**

Explanation: This is an informational message only.

KQZ3041W   **The "false" operand of the conditional operator is *actual_type* but *expected_type* is expected.**

Explanation: This is an informational message only.

KQZ3042E   **Operator *operator* must have 1 operand.**

Explanation: This is an informational message only.

KQZ3043E   Operator *operator* **is not recognized.**

Explanation: This is an informational message only.

KQZ3044E   **"***Java_identifier***" contains character "***bad_character***" which is not allowed in a Java identifier in field "***field_name***".**

Explanation: The value you entered will be used as a Java identifier, but it contains one or more characters that are not allowed in a Java identifier. Only letters, numbers, the dollar sign '$', and the underscore '_' are allowed in Java identifiers.

Operator response: Remove the character that is not allowed.

KQZ3045E   **"***Java_identifier***" starts with character "***bad_character***" which is not allowed is not allowed as the first character of a Java identifier in field "***field_name***".**

Explanation: The value you entered will be used as a Java identifier, but it starts with a character that cannot be the first character in a Java identifier. Only letters, the dollar sign '$', and the underscore '_' are allowed to start a Java identifier.

Operator response: Replace the first character with a valid one.

KQZ3046E   **Field "***field_name***" must contain a value.**

Explanation: The field does not have a value.

Operator response: Enter a value in the field.

KQZ3047W   **Field "***field_name***" value "***Java_class_name***" should start with an upper-case letter.**

Explanation: The value you entered will be used as a Java class name, but it does not start with an upper-case letter. It is recommended that Java class names start with an upper-case letter.

Operator response: Replace the first character with an upper-case letter.

KQZ3048W   **Field "***field_name***" value "***Java_package_name***" should not start with an upper-case letter.**

Explanation: The value you entered will be used as a Java package name, but it starts with an upper-case letter. It is recommended that Java package names not start with an upper-case letter.

Operator response: Replace the upper-case letter with a lower-case letter.

KQZ3049E   **Character "***bad_character***" is not allowed in file name value "***file_name***" in field "***field_name***".**

Explanation: You should enter a valid file name without any path components.

Operator response: Remove the character that is not valid.

KQZ3050E   **"***Java_package_name***" is not a valid Java package name in field "***field_name***".**

Explanation: The value you entered will be used as a Java package name, but it does not contain a valid Java identifier in each portion of the package name. The package name cannot contain a package separator character without an identifier on either side of it.

Operator response: Remove any leading or trailing dots in the package name, or dots that are next to other dots without an intervening identifier.

KQZ3051E   **Directory "***directory_name***" does not exist.**

Explanation: This is an informational message only.

KQZ3052E   **File "***file_name***" does not exist.**

Explanation: This is an informational message only.

KQZ3053E   **"***keyword***" is a Java keyword and therefore not a valid Java identifier in field Field "***field_name***".**

Explanation: The value you entered will be used as a Java identifier, but it contains one or more characters that are not allowed in a Java identifier. Only letters, numbers, the dollar sign '$', and the underscore '_' are allowed in Java identifiers.

Operator response: Remove the character that is not allowed.

KQZ3054E   **Field "***field_name***" contains an empty Java package name.**

Explanation: The package name you entered is empty or contains only whitespace.

Operator response: Enter a valid Java package name.

KQZ3505E   **Field "***field_name***" can only contain letters and digits.**

Explanation: This is an informational message only.

KQZ3506E Field "*field_name*" can only contain letters, digits and characters "*allowable_characters*".

Explanation: This is an informational message only.

KQZ3507E Field "*field_name*" can only contain letters.

Explanation: This is an informational message only.

KQZ3508E Field "*field_name*" can only contain letters and characters "*allowable_characters*".

Explanation: This is an informational message only.

KQZ3540E Field "*field_name*" can only contain digits and characters "*allowable_characters*".

Explanation: This is an informational message only.

KQZ3541E Field "*field_name*" can only contain characters "*allowable_characters*".

Explanation: This is an informational message only.

KQZ3542E Field "*field_name*" can only contain characters "*allowable_characters*".

Explanation: This is an informational message only.

KQZ3543E Field "*field_name*" must be an integer from *lower_bound* to *upper_bound*.

Explanation: This is an informational message only.

KQZ3544E Field "*field_name*" must contain Java package and class name. The class cannot be in the default package.

Explanation: The field does not have both a package and class name.

Operator response: Enter a Java package and class name in the field.

KQZ3545E No file name was specified in field "*field_name*".

Explanation: A required file name is missing.

Operator response: Enter a file name in the field.

KQZ3546E The file name "*file_name*" in field "*field_name*" must not contain leading or trailing spaces.

Explanation: The file name started with or ended with a whitespace character, and that is not allowed for this file name.

Operator response: Remove the leading or trailing spaces from the file name.

KQZ3547E The file name "*file_name*" in field "*field_name*" contains a non-printable character.

Explanation: The file name contains a non-printable character.

Operator response: Remove any non-printable character from the file name.

KQZ3548E The file name "*file_name*" in field "*field_name*" must not contain any path separators.

Explanation: The path separator / or \ was found in the file name. The field needs only a file name without path information.

Operator response: Remove the path separator characters and any path information from the file name.

KQZ3549E The file name "*file_name*" in field "*field_name*" must not contain a "*invalid_character*" character.

Explanation: The characters < > : " | ? * are not valid in file names on all files systems and therefore are not allowed in an Agent Builder file name.

Operator response: Remove the character from the file name.

KQZ3550W The file name "*file_name*" in field "*field_name*" contains a space character.

Explanation: The space character, while a legal character, can be confusing if used in a script and is discouraged on UNIX and Linux file systems

Operator response: Remove the space character from the file name.

KQZ3551W The file name "*file_name*" in field "*field_name*" does not end with "*file_type*".

Explanation: The file name does not end with the expected file type. The file type is the portion of the file name after the last period in the name.

Operator response: Enter the correct file type at the end if the file name, after a period.

KQZ3552W The file name "*file_name*" in field "*field_name*" contains only the file type.

Explanation: The file name does not contain any characters before the period and file type.

Operator response: Enter characters in the file name

before the period that separates the file name from file type.

KQZ3554E   **A project named** *project* **already exists in the workspace.**

Explanation: Project names must be unique within a workspace.

Operator response: Enter a unique project name.

KQZ3555I   **Successfully converted the Solution Install Project to an Application Support Extension Project.**

Explanation: This is an informational message only.

KQZ3556E   **The product code must start with the letter K.**

Explanation: The product code contains an unsupported character.

Operator response: An product code must contain only three characters.

The first character must be "K".

The final two characters must be alphanumeric.

KQZ3557E   **The the character "***character***" is not supported in an Agent Builder agent product code.**

Explanation: The product code contains an unsupported character.

Operator response: An product code must contain only three characters.

The first character must be "K".

The final two characters must be alphanumeric.

KQZ3558E   **The product code "***product_code***" is reserved by IBM.**

Explanation: The product code is reserved by IBM and cannot be used in an Agent Builder agent.

Operator response: An product code must contain only three characters.

The first character must be "K".

The final two characters must be alphanumeric.

KQZ3559E   **The product code must be three characters long.**

Explanation: The product code is too long or too short.

Operator response: An product code must contain only three characters.

The first character must be "K".

The final two characters must be alphanumeric.

KQZ3560E   **An Application Support Extension image for** *pc* **exists in directory** *dir***. Do you want to replace the existing image with a new one?**

Explanation: The output directory already contains an install image for this Application Support Extension.

Operator response: Click "Yes" to replace the image or "No" to cancel the operation.

KQZ3561E   **The operation was canceled.**

Explanation: The operation was canceled.

Operator response: Re-run the operation.

KQZ3562E   **Successfully created the install image for Application Support Extension** *pc***.**

Explanation: This is an informational message only.

KQZ3563W   **The filter formula in attribute group** *attribute_group_name* **evaluates to** *actual_type* **but should evaluate to** *expected_type***.**

Explanation: This is an informational message only.

KQZ3564E   **Error accessing all files needed for the consolidation of** *file_name***.**

Explanation: This is an informational message only.

KQZ3565E   **The "***file_name***" field must be set to test the connection.**

Explanation: The field is required to make a connection to a remote host.

Operator response: Set the field value and press the Test Connection button again.

KQZ3566E   **Field "***field_name***" can hold only printable ASCII characters.**

Explanation: Some fields can cause errors in an agent if they include any characters other than printable ASCII characters.

Operator response: Enter only printable ASCII characters for the value.

KQZ3567E   **Expression "***literal_token***" is not a valid string literal value.**

Explanation: This is an informational message only.

KQZ3568E   Expression "*literal_token***" is not a valid numerical value value.**

Explanation: This is an informational message only.

KQZ3569E   Selection contains objects that cannot be moved.

Explanation: Before trying to drag objects, make sure you have only attribute groups, navigator groups, or event logs selected. Other types of object cannot be moved with drag and drop operations.

Operator response: Select only one type of supported object at a time to move.

KQZ3570E   This target does not support the drop operation.

Explanation: The target node does not support dragging and dropping objects onto it.

Operator response: Select a valid target.

KQZ3571E   Field "*field_name***" can hold only contain letters, numbers, and underscores.**

Explanation: Some fields can cause errors in an agent if they include any characters other than printable ASCII characters.

Operator response: Enter only printable ASCII characters for the value.

KQZ3572E   Field "*field_name***" must be an integer greater than or equal to ***lower_bound***.**

Explanation: This is an informational message only.

KQZ3573E   Field "*field_name***" must contain a numerical value.**

Explanation: This is an informational message only.

KQZ3574E   The version is invalid. The version must be in the form V.R.M and V cannot be 0.

Explanation: The version is not in the form V.R.M with single digits for each of V, R, and M, or V is 0.

Operator response: Enter the version in the form V.R.M.

KQZ359E   Field "*field_name***" can only contain digits.**

Explanation: This is an informational message only.

KQZ4000E   The maximum length of the project name is 100 characters.

Explanation: The Eclipse project name is too long. The length is limited to prevent the maximum fully-qualified path length of files in the project from exceeding operating system limits.

Operator response: Shorten the name of the project.

KQZ4001I   Copy the selected files into the Remote Deploy project.

Explanation: This is an informational message only.

KQZ4002I   Generate the final remote deploy bundle.

Explanation: This is an informational message only.

KQZ4004E   The bundle identifier must be an alphanumeric string with a length between 3 and 31 characters that does not start with a K.

Explanation: The bundle identifier must be between 3 and 31 alphanumeric characters and cannot start with the letter K.

Operator response: Correct the bundle identifier.

KQZ4005E   The version must be 9 digits in length.

Explanation: The version is in the format VVRRMMFFF and must be 9 digits long.

Operator response: Specify a 9 digit version.

KQZ4006E   A prerequisite with identifier, ***id*, has already been defined.**

Explanation: The prerequisite is already defined.

Operator response: Specify a different prerequisite.

KQZ4007E   The bundle identifier must be an alphanumeric string with a length between 3 and 31 characters.

Explanation: The bundle identifier must be between 3 and 31 alphanumeric characters.

Operator response: Correct the bundle identifier.

KQZ4008I   Copying file ***id*.**

Explanation: This is an informational message only.

KQZ4009E   A file named *id* already exists in the project. Do you want to overwrite the file?

Explanation: The file already exists in the project.

Operator response: Click Yes to overwrite the file or No to skip.

KQZ4010E   The location specified is not a directory.

Explanation: The specified location is not a directory.

Operator response: Specify a directory.

KQZ4011I   Cancel the installation to the local TEMS depot?

Explanation: The user opted to cancel the install.

Operator response: Click Yes to cancel or No to continue.

KQZ4012E   Remote Deploy bundle, *bundle_id*, was modified. You must save the bundle information before you can generate it.

Explanation: This is an informational message only.

KQZ4013I   Successfully generated the Remote Deploy bundle in *directory*.

Explanation: This is an informational message only.

KQZ4014I   Successfully added the bundle to the local TEMS depot.

Explanation: This is an informational message only.

KQZ4015E   Error adding the bundle to the local TEMS depot.

Explanation: This is an informational message only.

KQZ4016I   The bundle generation was canceled.

Explanation: This is an informational message only.

KQZ4017I   The specified directory already contains a Remote Deploy bundle. Do you wish to continue?

Explanation: This is an informational message only.

KQZ4018I   The IBM Tivoli Monitoring Depot already contains this version of the bundle. Do you want to continue?

Explanation: This is an informational message only.

KQZ4019I   The bundle already existed so no work needed to be done.

Explanation: This is an informational message only.

KQZ4020I   The following operating systems will be added to the bundle: *new_operating_systems*.

Explanation: This is an informational message only.

KQZ4021I   The following operating systems were removed from the bundle. References to these operating systems in commands and prerequisites will also be removed: *new_operating_systems*.

Explanation: This is an informational message only.

KQZ4022E   The description cannot be empty.

Explanation: This is an informational message only.

KQZ4023E   The copy location cannot be empty.

Explanation: This is an informational message only.

KQZ4024E   No operating systems selected.

Explanation: This is an informational message only.

KQZ4025E   No files are included in the bundle.

Explanation: This is an informational message only.

KQZ4026E   No commands defined for operating systems *operating_system*

Explanation: This is an informational message only.

KQZ4027E   The command string cannot be empty.

Explanation: This is an informational message only.

KQZ4029E   Invalid command type.

Explanation: This is an informational message only.

KQZ4030E   The remote deploy bundle contains errors as listed in the Problems view. The errors must be corrected before the bundle can be generated.

Explanation: The remote deploy bundle contains errors as listed in the Problems view.

Operator response: Correct the errors and save the bundle.

KQZ4031W **This remote deploy bundle contains warnings which are indications of potential problems. Attempting to deploy a bundle that contains warnings may cause unpredictable results. Do you wish to continue the generation of the bundle?**

Explanation: Agent Builder generated warnings for the bundle. The warnings can be viewed in the Problems View. Bundles with warnings may not function properly.

Operator response: Select yes to continue generation. Select no if you wish to review the warnings. The warnings can be viewed in the Problems View. Select Window->Show View->Problems if the view is not visible.

KQZ41002I **Do you want to cancel the generation of the remote deploy bundle?**

Explanation: This is an informational message only.

KQZ41003I **Successfully created the probe bundle and the configuration bundle project**

Explanation: This is an informational message only.

KQZ41004I **Successfully added the probe bundle to the local TEMS depot and created the configuration bundle project**

Explanation: This is an informational message only.

KQZ41005E **Error adding the probe bundle to the local TEMS depot.**

Explanation: This is an informational message only.

KQZ41006E **Error creating the configuration bundle project.**

Explanation: This is an informational message only.

KQZ41007E **Error creating the Remote Deploy descriptor file for the probe bundle.**

Explanation: This is an informational message only.

KQZ41008E **Error extracting files from the package archive.**

Explanation: This is an informational message only.

KQZ4100E **Error opening the specified archive file.**

Explanation: An exception occurred while attempting to open the specified archive file.

Operator response: Ensure that you have access to the file and it is a valid archive file.

KQZ4101E **The specified file is not a valid OMNIbus install package.**

Explanation: The archive does not appear to be a valid OMNIbus install package.

Operator response: Ensure that the archive file is a valid OMNIbus install package.

KQZ6000W **Columns for the query have not been found. Continuing will create an attribute group containing no attributes.**

Explanation: An SQL query that is manually defined must be tested for attributes to be automatically created.

Operator response: Select "OK" to continue without testing the query. Select "Cancel" to return to the browser to test the query to detect attribute data.

KQZ6001E **A problem occurred running this SQL statement. Check the query for mistakes. The database server returned the following problem information:** *exception_message***.**

Explanation: The database server returned an error when it attempted to run the SQL statement.

Operator response: Modify the statement and attempt the test again. The message returned by the database server may help identify the problem.

KQZ6100W **Unable to discover the namespaces on the system. If you know the namespace, you can add it to the list by clicking the Add button next to the namespace field.**

Explanation: The Agent Bulider was unable to discover the namespaces on the system.

Operator response: If you know the namespace, add it to the list by clicking the Add button next to the namespace field.

KQZ6101E **The namespace is already defined for this host.**

Explanation: The namespace is already defined for the host.

Operator response: If this is the namespace you desire, select it from the list. Otherwise, specify a new namespace.

KQZ6102E **Namespace,** *namespace***, does not exist on the CIM server.**

Explanation: The namespace is not defined on the server.

Operator response: Specify a namespace that exists on the server.

KQZ6200E **An error code with value** *error_code* **was defined previously.**

Explanation: This is an informational message only.

KQZ6201W **The Java source folder** *folder_name* **does not exist, and Java source code for the agent cannot be written.**

Explanation: If an agent contains Java API attribute groups, Agent Builder attempts to write out Java source code that assists the agent developer in writing a Java custom provider application. If the Java source folder does not exist, the code cannot be written.

Operator response: Create the missing Java source folder:

1. In the Project explorer tree, right-click on the project node for the agent. A context menu will be displayed.

2. From the context menu, select Properties. A properties dialog will be displayed.

3. On the left of the Properties dialog, select Java Build Path from the tree. A Java Build Path panel will be displayed on the right side of the Properties dialog.

4. In the Java Build Path panel, select the Source tab.

5. Click on the Add Folder... button. A Source Folder Selection dialog will be displayed.

6. In the Source Folder Selection dialog, click on the Create New Folder... button. A New Source Folder dialog will be displayed.

7. In the New Source Folder dialog, enter the missing folder name after the "Folder name:" prompt.

8. Press Finish. This will dismiss the New Source Folder dialog.

9. Press OK. This will dismiss the Source Folder Selection dialog.

10. Press OK. This will dismiss the Properties dialog, creates the new folder, and marks it as a Java source folder.

The next time you save the agent, the Java source files will be created in this folder.

KQZ6202W **Sample Java code was not created because subnode** *subnode_name* **does not contain any configuration properties.**

Explanation: The example Java code for a sampled

Java API attribute group in a subnode depends on the subnode having at least one configuration property. Since the subnode does not have any configuration properties, Java sample code was not created.

Operator response: Add a configuration property to the subnode and save the agent.

KQZ6203E **The selection containing custom provider** *client_name***. cannot be removed because attribute group** *attribute_group* **references the provider.**

Explanation: The custom provider you are trying to delete is referenced by one or more attribute groups and cannot be removed from the agent.

Operator response: Delete the attribute group or groups that reference this custom provider if you do not wish to have them in your agent any longer.

KQZ6204E **The selection containing the Java API custom provider application cannot be removed because attribute group** *attribute_group* **references it.**

Explanation: The Java API custom provider application cannot be removed because is referenced by one or more attribute groups.

Operator response: Delete the attribute group or groups that reference the Java API application if you do not wish to have them in your agent any longer.

KQZ6205E **The selection containing the socket custom data provider cannot be removed because attribute group** *attribute_group* **references it.**

Explanation: The socket custom data provider cannot be removed because is referenced by one or more attribute groups.

Operator response: Delete the attribute group or groups that reference the socket custom data provider if you do not wish to have them in your agent any longer.

KQZ6600W **The SNMP properties cannot be tested from this dialog when field "***field_name***" contains value "***value***".**

Explanation: The Java SNMP implementation used by Agent Builder cannot use the protocol. The agent itself can use the protocol.

Operator response: Test your agent as you normally would. Connection problems caused by an incorrect property value can be detected when testing the agent but not when editing the properties.

KQZ6601W   **A selected MIB has no enterprise OID defined for the given MIB name.**

Explanation: A MIB definition contained a name for which there was no enterprise OID defined.

Operator response: Either select a different MIB, fix the MIB definition and reload it into Agent Builder, or continue with the selected MIB. If you continue with a MIB that has no OID defined, the OID filter will not be correct.

KQZ7001E   **The file name must be itm_jtk_agent.xml.**

Explanation: The JMX Agent Toolkit can only read agents whose file name is itm_jtk_agent.xml

Operator response: If the file contains a valid agent, rename the file to itm_jtk_agent.xml.

KQZ7002E   **Unable to access the file** *file_name*

Explanation: The Resource Model Builder is unable to read the contents of the resource itm_jtk_agent.xml file.

Operator response: Ensure that you have permission to access the file. It's possible you may have deleted the file from outside of Eclipse and failed to refresh the project.

KQZ7003I   **Generating the agent**

Explanation: This is an informational message only.

KQZ7004E   **A Product Service Name must start with an alphabetic character, and can contain only alphanumeric and underscore characters.**

Explanation: This is an informational message only.

KQZ7005E   **The value must be a positive integer less than or equal to 255.**

Explanation: This is an informational message only.

KQZ7006E   **An error occurred while saving the file** *file_name***.**

Explanation: An error occurred during the save operation for the specified file.

Operator response: Check the details section of this dialog for more information.

KQZ7010W   **An MBean was not selected. Continuing will close the browser and attributes will need to be created manually.**

Explanation: An MBean must be selected to determine the attributes that will be created.

Operator response: Select "OK" to close the JMX browser and define one or more attributes manually in the wizard. Select "Cancel" to return to the browser to select an MBean containing attributes.

KQZ7301W   **No resources are defined in this agent which can be a target of a relationship in** *resource_name***.**

Explanation: An OSLC relationship needs to identify a target resource type for the relationship. No other resource types were defined in this agent.

Operator response: Define other resource types in this agent and then identify the relationships in this resource.

KQZ7400E   **The name "***name***" is used in more than one dashboard component. Name found in**

Explanation: Dashboard, layout, and widget names must be unique. A name was duplicated in more than one component in the agent.

Operator response: Change this name to a different value.

KQZ7401E   **The selection cannot be removed because dashboard layout** *dashboard_layout_title* **in page** *dashboard_page_title* **references widget** *dashboard_widget_title***.**

Explanation: The widget you are trying to delete is referenced in a dashboard layout which is not being deleted.

Operator response: You must delete the layout before or along with any referenced widgets.

KQZ7402E   **Only dashboard layouts can be dropped in a dashboard page.**

Explanation: You are attempting to drop an object other than a dashboard layout in a dashboard page.

Operator response: Select dashboard layouts you want to move and drag them into the page or near other dashboard layouts.

KQZ7403E   **Dashboard layouts cannot be moved from one agent to another.**

Explanation: You are attempting to drop a dashboard layout into a different agent, and that is not supported.

Operator response: Create the dashboard layouts you want in the target agent which reference base widgets in that agent.

KQZ7404E   Dashboard layouts cannot be moved at the same time as other types of objects.

Explanation: Multiple dashboard layouts can be moved together, but other types of objects cannot be included in the move.

Operator response: Select only one type of object at a time to move.

KQZ7405E   Only dashboard pages can be dropped beside another dashboard page.

Explanation: You are attempting to drop an object other than a dashboard page before or after another dashboard page.

Operator response: Select dashboard pages you want to move and drag them near other dashboard pages.

KQZ7406E   Dashboard pages cannot be moved from one agent to another.

Explanation: You are attempting to drop a dashboard page into a different agent, and that is not supported.

Operator response: Create the dashboard pages and layouts you want in the target agent.

KQZ7407E   Dashboard pages cannot be moved at the same time as other types of objects.

Explanation: Multiple dashboard pages can be moved together, but other types of objects cannot be included in the move.

Operator response: Select only one type of object at a time to move.

KQZ7420E   Only APM UI group widgets can be dropped in an APM UI page.

Explanation: You are attempting to drop an object other than a APM UI group widget in a dashboard page.

Operator response: Select the APM UI group widgets you want to move and drag them to the page or near other dashboard group widgets.

KQZ7421E   Only APM UI widgets can be dropped inside an APM UI group widget.

Explanation: You are attempting to drop an object other than an APM UI widget in an APM UI group widget.

Operator response: Select APM UI widgets you want to move and drag them over APM UI group widgets.

KQZ7422E   APM UI group widgets cannot be moved from one agent to another.

Explanation: You are attempting to drop an APM UI group widget into a different agent, and that is not supported.

Operator response: Create the APM UI pages and group widgets you want in the target agent. You can copy a group widget from one agent and paste it into another agent.

KQZ7423E   APM UI widgets cannot be moved from one agent to another.

Explanation: You are attempting to drop an APM UI widget into a different agent, and that is not supported.

Operator response: Create the APM UI pages, group widgets, and widgets you want in the target agent. You can copy a widget from one agent and paste it into another agent.

KQZ7424E   APM UI group widgets cannot be moved at the same time as other types of objects.

Explanation: Multiple APM UI group widgets can be moved together, but other types of objects cannot be included in the move.

Operator response: Select only one type of object at a time to move.

KQZ7425E   A summary group widget cannot be removed.

Explanation: A summary group widget cannot be explicitly removed from the agent. It is required if the base agent or subnode that it represents are shown as components. If you uncheck the box to show the base agent or subnode as a component, the group widget will automatically be removed.

Operator response: If you do not wish to have the base agent or subnode shown as a component, uncheck the corresponding box on the top-level APM UI page.

KQZ7426E   APM UI widgets cannot be moved at the same time as other types of objects.

Explanation: Multiple APM UI widgets can be moved together, but other types of objects cannot be included in the move.

Operator response: Select only one type of object at a time to move.

KQZ7427E **Only APM UI group widgets can be dropped beside another group widget in an APM UI page.**

Explanation: You are attempting to drop an object other than a APM UI group widget next to another group widget in a page.

Operator response: Select the APM UI group widgets you want to move and drag them over the page or near other dashboard group widgets.

KQZ7428E **Only APM UI widgets can be dropped beside another another widget in an APM UI group widget.**

Explanation: You are attempting to drop an object other than a APM UI widget next to another widget in a group widget.

Operator response: Select the APM UI widgets you want to move and drag them over the group widget or near other widgets.

KQZ7429E **APM UI group widgets cannot be moved to the page containing summary group widgets.**

Explanation: You are attempting to drop an APM UI group widget into the page that contains summary group widgets. Only summary group widgets are put into that page, and they are created or removed automatically when you toggle the check boxes to show base agent or subnode instances as components.

Operator response: Check the box to show base agent or subnode instances as components, and add, paste, or move widgets into that group widget.

KQZ7430E **Summary APM UI group widgets cannot be moved.**

Explanation: You are attempting to move an APM UI summary group widget. Summary group widgets are created or removed automatically when you toggle the check boxes to show base agent or subnode instances as components. They must remain in the page that contains summary group widgets.

Operator response: Check or uncheck the box to show base agent or subnode instances as components to add or remove summary group widgets. When automatically removed, they are not lost, but go into a holding container called Unused Group Widgets.

KQZ7431E **APM UI widgets cannot be moved into a group widget which shows data for a different agent node.**

Explanation: A group widget can show data only from a single node (either the base agent or one subnode type). This move would cause the target

group widget to try and present data from two different nodes.

Operator response: Move the widget to a group widget which shows other data from the same node, or create a new group widget to contain this widget.

KQZ7432E **The page containing summary group widgets cannot be removed.**

Explanation: The page containing summary group widgets cannot be removed.

Operator response: Do not try to remove the page that contains summary group widgets.

KQZ7433E **Page** *page_title* **cannot be removed because it is a target of a link from group widget** *group_widget_title* **on page** *page_title***.**

Explanation: The page can be removed only if it is not linked by another object.

Operator response: Remove or change the link from the specified group widget, then remove this page.

KQZ7434E **Page** *page_title* **cannot be removed because it is a target of a link from widget** *widget_id* **in group widget** *group_widget_title* **on page** *page_title***.**

Explanation: The page can be removed only if it is not linked by another object.

Operator response: Remove or change the link from the specified widget, then remove this page.

KQZ7435E **Group widget** *group_widget_title* **cannot be removed because it is a target of a link from group widget** *group_widget_title* **on page** *page_title***.**

Explanation: The page can be removed only if it is not linked by another object.

Operator response: Remove or change the link from the specified group widget, then remove this page.

KQZ7436E **Group widget** *group_widget_title* **cannot be removed because it is a target of a link from widget** *widget_id* **in group widget** *group_widget_title* **on page** *page_title***.**

Explanation: The page can be removed only if it is not linked by another object.

Operator response: Remove or change the link from the specified widget, then remove this page.

KQZ8002E   **Agent Builder encountered an error while generating file** *name***.**

Explanation: The builder encountered an unexpected error.

Operator response: Ensure you have the correct permissions to the output directory. If the error persists, try restarting Agent Builder.

KQZ8002F   **Agent Builder encountered an error while copying imported files into the agent installation image.**

Explanation: The builder encountered an unexpected error.

Operator response: Ensure you have the correct permissions to the output directory. If the error persists, try restarting Agent Builder.

KQZ8003E   **An error occurred while generating the agent.** *internal_error_message*

Explanation: Agent Builder encountered errors while attempting to generate the agent.

Operator response: Check the details view of the error dialog for exception information, or examine the Eclipse and Agent Builder trace files to see the cause of the error.

KQZ8004E   **No version specified.**

Explanation: This is an informational message only.

KQZ8005E   **Version** *version* **is not valid.**

Explanation: This is an informational message only.

KQZ8006E   **Patch level** *patch* **is not valid.**

Explanation: This is an informational message only.

KQZ8007E   **Version** *current_version* **is less than version** *prev_version* **committed on** *date***.**

Explanation: This is an informational message only.

KQZ8008E   **No affinity specified.**

Explanation: This is an informational message only.

KQZ8009E   **Affinity "***affinity_tag***" is not valid.**

Explanation: This is an informational message only.

KQZ8010E   **Affinity tag "***affinity_tag***" is not valid.**

Explanation: This is an informational message only.

KQZ8011E   **No affinity tag specified.**

Explanation: This is an informational message only.

KQZ8012E   **No agent display name specified.**

Explanation: This is an informational message only.

KQZ8013E   **No product code specified.**

Explanation: This is an informational message only.

KQZ8014E   **Runtime configuration section name not specified.**

Explanation: This is an informational message only.

KQZ8015E   **Property name not specified**

Explanation: This is an informational message only.

KQZ8016E   **Value name not specified**

Explanation: This is an informational message only.

KQZ8107E   **Configuration element name** *name* **is not valid.**

Explanation: This is an informational message only.

KQZ8108E   **No label specified for the configuration element.**

Explanation: This is an informational message only.

KQZ8109E   **No message identifier specified**

Explanation: This is an informational message only.

KQZ8110E   **No description specified for the configuration element**

Explanation: This is an informational message only.

KQZ8111E   **Message identifier** *id* **was previously defined.**

Explanation: This is an informational message only.

KQZ8112E   **Message identifier** *id* **is not valid.**

Explanation: This is an informational message only.

KQZ8113E	**No properties defined for configuration section** *source*

Explanation: This is an informational message only.

KQZ8114E	**Property type not specified**

Explanation: This is an informational message only.

KQZ8115E	**Property type** *pc* **is not valid**

Explanation: This is an informational message only.

KQZ8116E	**The variable name "***property_variable_name***" of property "***property_label***" in section "***seciton_name***" should contain the string "PASSWORD" to ensure that it is never stored in clear text form.**

Explanation: This is an informational message only.

KQZ8117E	**The variable name "***property_variable_name***" of property "***property_label***" in section "***seciton_name***" should not contain the string "PASSWORD" to ensure that it does not get confused with a password property.**

Explanation: This is an informational message only.

KQZ8118E	**The default value "***value***" for numeric property** *prop_name* **is not valid.**

Explanation: This is an informational message only.

KQZ8119E	**No configuration values specified for property** *propname*

Explanation: This is an informational message only.

KQZ8120E	**The agent is defined as being multi-instance, but there are no configuration elements defined.**

Explanation: Multi-instance agents require configuration; otherwise, all instances would monitor the same resources.

Operator response: Either add configuration elements to the agent or turn off multi-instance support.

KQZ8121E	**Navigator group name "***navgroup_name***" is not valid.**

Explanation: The specified name contains invalid characters.

Operator response: A navigator group must start with a letter and can contain only letters, numbers or underscores.

KQZ8122E	**A navigator group with identifier** *id* **was defined previously.**

Explanation: Navigator group names must be unique.

Operator response: Enter a new name for the navigator group.

KQZ8123E	**Navigator group name** *id* **is reserved for internal use.**

Explanation: Agent Builder automatically creates navigator groups in certain situations. The name specified duplicates one of these navigator groups.

Operator response: See the User Guide for the list of reserved navigator group names.

KQZ8124E	**A return code with value** *rc* **was defined previously.**

Explanation: This is an informational message only.

KQZ8125E	**Return code "***rc***" is not numeric.**

Explanation: This is an informational message only.

KQZ8126E	**Attribute group name** *attribute_group_name* **is not valid.**

Explanation: This is an informational message only.

KQZ8127E	**An attribute group with identifier** *id* **was defined previously.**

Explanation: This is an informational message only.

KQZ8128E	**Attribute group name** *id* **is reserved for internal use.**

Explanation: This is an informational message only.

KQZ8129E	**Attribute group** *attribute_group_name* **does not have help text.**

Explanation: This is an informational message only.

KQZ8130E	**The help text for** *object_name* **exceeds the maximum length of** *max_length***.**

Explanation: This is an informational message only.

KQZ8131E	**No operating systems selected for attribute group "***attribute_group_name***".**

Explanation: This is an informational message only.

KQZ8132E Attribute group
"*referencing_attribute_group*" **references an
unknown attribute group
"***referenced_attribute_group***".**

Explanation: This is an informational message only.

KQZ8133E Joined attribute group
"*joined_attribute_group*" **attempts to join
attribute group
"***referenced_attribute_group***" with itself.**

Explanation: This is an informational message only.

KQZ8134E Attribute group *referencing_attribute_group*
**references the Availability attribute
group; however, no availability filters
exist.**

Explanation: This is an informational message only.

KQZ8135E No attribute to join specified for
attribute group *attribute_group*.

Explanation: This is an informational message only.

KQZ8136E Join attribute "*attribute*" defined in
joined attribute group
"*joined_attribute_group*" **was not found in
attribute group** *data_source*.

Explanation: This is an informational message only.

KQZ8138E Key attribute "*attribute*" defined in
joined attribute group
"*joined_attribute_group*" **was not found in
either base attribute group.**

Explanation: This is an informational message only.

KQZ8139E Attribute name *attribute_name* is not
valid.

Explanation: This is an informational message only.

KQZ8140E Attribute name *attribute_name* exceeds
the limit of *limit* characters.

Explanation: This is an informational message only.

KQZ8141E Attribute name *id* is reserved for
internal use.

Explanation: This is an informational message only.

KQZ8142E Attribute *attribute_name* does not have
help text.

Explanation: This is an informational message only.

KQZ8143E Attribute *attribute_name* is *attribute_bytes*
bytes long which exceeds the maximum
size of *maximum_size* bytes.

Explanation: This is an informational message only.

KQZ8144E The formula contains a syntax error.

Explanation: This is an informational message only.

KQZ8145E Attribute group *id* contains
attribute_count attributes, more than the
limit of *maximum_attribute_count*.

Explanation: There are too many attributes in the
attribute group set to display on the TEP.

Operator response: Remove some attributes, mark
some attributes as not being displayed on the TEP, or
split the group into two smaller groups.

KQZ8146E Attribute group *id* contains zero
attributes.

Explanation: This is an informational message only.

KQZ8147E Attributes in attribute group
attribute_group_name total
attribute_group_bytes bytes which exceeds
the maximum of *maximum_size* bytes.

Explanation: This is an informational message only.

KQZ8148E Attribute group *source* can produce more
than one data row but does not contain
a key attribute.

Explanation: This is an informational message only.

KQZ8149E Perfmon attribute group *source* can
produce more than one data row but
does not return the Perfmon instance
name or contain an other key attribute.

Explanation: This is an informational message only.

KQZ8150E Range value "*range_endpoint_value*" is not
a valid numerical value.

Explanation: This is an informational message only.

KQZ8151E	Range value "*range_endpoint_value*" is not a number from *minimum_value* to *maximum_value*, the minimum and maximum for a *integer_size*-bit number.

Explanation: This is an informational message only.

KQZ8152E	Range value "*range_endpoint_value*" is not a number from *minimum_value* to *maximum_value*, the minimum and maximum for a *integer_size*-bit number with a decimal adjustment of *decimal_adjustment*.

Explanation: This is an informational message only.

KQZ8153E	Minimum range value *minimum_range_endpoint_value* is not less than maximum range value *maximum_range_endpoint_value*.

Explanation: This is an informational message only.

KQZ8154E	Decimal adjustment (scale) must be a number from 0 to *maximum_scale* for *integer_size*-bit numbers.

Explanation: This is an informational message only.

KQZ8155E	You can only join an attribute group that produces events to an attribute group that produces a single data row.

Explanation: This is an informational message only.

KQZ8156E	Attribute *attribute_name* is defined as a key, however it is defined as hidden.

Explanation: This is an informational message only.

KQZ8157E	The metric name is missing in attribute *attribute_name*.

Explanation: This is an informational message only.

KQZ8158E	No type is specified for attribute *attribute_name*.

Explanation: This is an informational message only.

KQZ8159E	Attribute *attribute_name* does not have a valid maximum size.

Explanation: This is an informational message only.

KQZ8160E	The object identifier is missing in attribute *attribute_name*.

Explanation: This is an informational message only.

KQZ8161E	"*token*" is not expected in column *column_number*.

Explanation: This is an informational message only.

KQZ8162E	More tokens expected at the end of the formula.

Explanation: This is an informational message only.

KQZ8163E	Closing parenthesis for function call "*function_name*" not found.

Explanation: This is an informational message only.

KQZ8164E	Two unary operators, "*unary_operator*" and "*unary_operator*" found without an intervening expression.

Explanation: This is an informational message only.

KQZ8165E	"*bad_function_name*" is not a valid function name.

Explanation: This is an informational message only.

KQZ8166E	"*token*" found where identifier or literal was expected.

Explanation: This is an informational message only.

KQZ8167E	Missing argument in function "*function_name*".

Explanation: This is an informational message only.

KQZ8168E	"*bad_operator*" is not a valid operator.

Explanation: This is an informational message only.

KQZ8169E	Lexical error at column "*column_number*". Encountered: "*bad_character*" after "*reference_character*".

Explanation: This is an informational message only.

KQZ8170E	No function name has been specified.

Explanation: This is an informational message only.

KQZ8171E	**A function name cannot start with a number.**

Explanation: This is an informational message only.

KQZ8172E	**A function name cannot contain a space character.**

Explanation: This is an informational message only.

KQZ8173E	**A function name cannot contain character "***bad_character***".**

Explanation: This is an informational message only.

KQZ8174W	**"***function_name***" is not a recognized derived formula function.**

Explanation: This is an informational message only.

KQZ8175E	**No attribute name has been specified.**

Explanation: This is an informational message only.

KQZ8176E	**An attribute name cannot start with a number.**

Explanation: This is an informational message only.

KQZ8177E	**An attribute name cannot contain a space character.**

Explanation: This is an informational message only.

KQZ8178E	**An attribute name cannot contain character "***bad_character***".**

Explanation: This is an informational message only.

KQZ8179W	**Attribute "***attribute_name***" is not found in this attribute group.**

Explanation: This is an informational message only.

KQZ8180W	**Function "***function_name***" has ***argument_count*** arguments, but ***parameter_count*** arguments are expected.**

Explanation: This is an informational message only.

KQZ8181W	**Function "***function_name***" argument ***argument_number*** is ***actual_argument_type***, but ***expected_parameter_type*** is expected.**

Explanation: This is an informational message only.

KQZ8182E	**An object identifier is specified in attribute ***attribute_name*** which also has an index reference.**

Explanation: This is an informational message only.

KQZ8184E	**Operator ***operator*** must have 2 operands.**

Explanation: This is an informational message only.

KQZ8185E	**Operator ***operator*** must have 1 or 2 operands.**

Explanation: This is an informational message only.

KQZ8186W	**The left operand of the ***operator*** operator is ***left_operand_type*** and the right is ***right_operand_type***. Both types should be the same.**

Explanation: This is an informational message only.

KQZ8187W	**The left operand of the ***operator*** operator is ***actual_type_with_indefinite_article*** but ***actual_type_with_indefinite_article*** operand is expected.**

Explanation: This is an informational message only.

KQZ8188W	**The right operand of the ***operator*** operator is ***actual_type_with_indefinite_article*** but ***actual_type_with_indefinite_article*** operand is expected.**

Explanation: This is an informational message only.

KQZ8189W	**The derived formula in attribute ***attribute_name*** evaluates to ***actual_type*** but should evaluate to ***expected_type*** to match the attribute type.**

Explanation: This is an informational message only.

KQZ8190E	**There are no process or service availability filters defined with the TADMM sensor "Use these criteria" box checked.**

Explanation: One process or service availability filter must have TADDM sensor criteria defined, and the check box labeled "Use these criteria to identify where the sensor should run" checked.

Operator response: Define a process availability filter, select the "TADDM sensor" tab, check the "Use these criteria to identify where the sensor should run" checkbox, define criteria to identify the process, save the file and regenerate the sensor.

KQZ8191E **There are more than one process or service availability filters defined with the TADMM sensor "Use these criteria" box checked.**

Explanation: Only one process or service availability filter can have the check box labeled "Use these criteria to identify where the sensor should run" checked.

Operator response: Examine all the process and service availability filters, select the "TADDM sensor" tab, and make sure only one of them has the "Use these criteria to identify where the sensor should run" checkbox checked. Then save the file and regenerate the sensor.

KQZ8192E **Cannot write to file** *maximum_count*.

Explanation: An unsuccessful attempt was made to write the file to the local file system.

Operator response: Change the path where the file is being written, or check that the specified path is not read-only or the disk partition is not full.

KQZ8195E **Java resource** *resource_name* **cannot be found or read.**

Explanation: This is an informational message only.

KQZ8196E **Closing parenthesis after "***expression_fragment***" not found.**

Explanation: This is an informational message only.

KQZ8197E **An agent with affinity "***affinity***" has already been defined.**

Explanation: Affinities must be unique

Operator response: Enter a unique affinity.

KQZ8198E **Index,** *index*, **is not defined.**

Explanation: The specified SNMP index is not defined in the set of MIBs loaded by the parser.

Operator response: Find the MIB that defines the index and import it.

KQZ8199E **Could not determine an OID for value,** *value*.

Explanation: The parser could not determine the OID for the specified value.

Operator response: Find the MIB that defines the value and import it.

KQZ8200W **The size of attribute,** *name*, **was changed from** *original_size* **to** *new_size*.

Explanation: The size reported by the MIB file was larger than expected.

Operator response: If the size needs to be larger, modify the attribute to increase the size.

KQZ8201E **"***supposed_directory_name***" is not a valid directory name.**

Explanation: The value is not a valid directory.

Operator response: Enter or select a valid directory name.

KQZ8202E **File "***file_name***" does not exist in directory "***directory_name***"**

Explanation: The file does not exist in the directory.

Operator response: Enter a valid directory name that contains the file.

KQZ8203E *schema_file_name* **version** *schema_version* **and** *naming_rules_file_name* **version** *naming_rules_version* **from directory** *directory_name* **do not match.**

Explanation: The two files must be from the same version of the Common Data Model.

Operator response: Get files from the same version of the Common Data Model (at least CDM.xsd, NamingRules.xml, and oneschema.xml) and place them in the directory.

KQZ8204E **The join attributes selected for** *attribute_group* **have different types.**

Explanation: The two join attributes for a joined attribute group must both be numeric or both be a string.

Operator response: Select two join attributes of the same type, either both string or both numeric.

KQZ8205E **The event threshold attribute can only be set if attribute group,** *attribute_group*, **is pure event.**

Explanation: The attribute group is not a pure event group, so the value set for the event threshold should not be set.

Operator response: Remove the event threshold attribute from the attribute group definition.

KQZ8206E   The event summary interval attribute can only be set if attribute group, *attribute_group*, is pure event.

Explanation: The attribute group is not a pure event group, so the value set for the event summary interval should not be set.

Operator response: Remove the event summary interval attribute from the attribute group definition.

KQZ8207E   The event filtering threshold value for attribute group *attribute_group* is not valid. It should be one of "send_none", "send_first", "send_all", a positive integer or a configuration variable.

Explanation: The attribute does not contain a valid value.

Operator response: Set a valid value for the attribute.

KQZ8208E   The event summary interval for attribute group *attribute_group* is not valid. It should be a positive integer or a configuration variable.

Explanation: The attribute does not contain a valid value.

Operator response: Set a valid value for the attribute.

KQZ8209W   An event threshold exists for attribute group *attribute_group*; however, an event summary interval is not set.

Explanation: The event threshold should only be set if an event summary interval is set.

Operator response: Either remove the event threshold or specify an event summary interval.

KQZ8210E   Event filtering and summarization is enabled for attribute group *attribute_group*; however, no key attribute exists.

Explanation: The attribute group does not contain a key attribute.

Operator response: Specify a key attribute.

KQZ8211E   Operating system *operating_system* is selected in more than one command for "*command_definition_name*".

Explanation: Two commands for a single command definition are configured to run on the same operating system. When alternate commands are defined in a single script definition, the commands must to run on different operating systems. For any given operating system, only one command can be run.

Operator response: Remove the operating system selection on one of the command definitions.

KQZ8212E   No operating systems selected for command "*command*".

Explanation: This is an informational message only.

KQZ8213E   Filtered attribute group *attribute_group_name* has no formula for the filter.

Explanation: This is an informational message only.

KQZ8214E   Attribute group "*referencing_attribute_group*" references attribute group "*referenced_attribute_group*" which belongs to a different subnode.

Explanation: This is an informational message only.

KQZ8215E   Attribute "*attribute*" has source type "*source_class*" in attribute group "*attribute_group*" which has settings type "*settings_class*". This attribute is expected to be in a group with settings type "*settings_class*".

Explanation: This is an informational message only.

KQZ8216E   Filtered attribute group "*attribute_group*" is missing a reference to a source attribute group.

Explanation: This is an informational message only.

KQZ8217E   Filtered attribute group "*attribute_group*" has attribute "*attribute*" with a missing referenced attribute name.

Explanation: This is an informational message only.

KQZ8218E   Attribute "*referencing_attribute*" in attribute group "*referencing_attribute_group*" references an attribute named "*source_attribute_name*" that does not exist in attribute group "*source_attribute_group*".

Explanation: This is an informational message only.

KQZ8219E   Attribute "*referencing_attribute*" of type "*referencing_attribute_type*" in attribute group "*referencing_attribute_group*" references attribute "*source_attribute*" of type "*source_attribute_type*" in attribute group "*source_attribute_group*". The attribute types should be the same.

Explanation: This is an informational message only.

KQZ8220W   Function *function_name* **should only be called for event attribute groups, but is called for sampled attribute group** *attribute_group_name*.

Explanation: The functions isSummaryEvent, cumulativeSum, and occurrenceCount are applicable only to pure event attribute groups, but one of them was called for a sampled attribute group.

Operator response: Remove the function call from the formula.

KQZ8221E   The formula is missing.

Explanation: This is an informational message only.

KQZ8222W   Event summarization is enabled for attribute group *attribute_group*; **however, no event summarization attributes exist.**

Explanation: Although the attributes are not necessary, they are useful when performing event summarization.

Operator response: Add the event summarization attributes by right clicking on the attribute group.

KQZ8223W   Event summarization is enabled for attribute group *attribute_group*; **however, the event summarization occurrence count attribute does not exist.**

Explanation: Although the attribute is not necessary, it is useful when performing event summarization.

Operator response: Add the event summarization attributes by right clicking on the attribute group.

KQZ8224W   Event summarization is enabled for attribute group *attribute_group*; **however, the summary event flag attribute does not exist.**

Explanation: Although the attribute is not necessary, it is useful when performing event summarization.

Operator response: Add the event summary attributes by right clicking on the attribute group.

KQZ8225W   Event summarization is enabled for attribute group *attribute_group*; **however, the event threshold attribute does not exist.**

Explanation: Although the attribute is not necessary, it is useful when performing event summarization.

Operator response: Add the event summarization attributes by right clicking on the attribute group.

KQZ8226W   Event summarization is enabled for attribute group *attribute_group*; **however, the summary interval attribute does not exist.**

Explanation: Although the attribute is not necessary, it is useful when performing event summarization.

Operator response: Add the event summarization attributes by right clicking on the attribute group.

KQZ8227W   Attribute *attribute_name* **must not be both a key and a rate or delta.**

Explanation: This is an informational message only.

KQZ8228E   The subnode name cannot be empty

Explanation: No subnode name was entered.

Operator response: Enter a name for the subnode.

KQZ8229E   The subnode description cannot be empty

Explanation: No subnode description was entered.

Operator response: Enter a description for the subnode.

KQZ8230E   The errpt command cannot be empty

Explanation: The errpt command line was not specified

Operator response: Enter the errpt command that should be run.

KQZ8231E   The command specified does not invoke the errpt command or is not a configuration variable.

Explanation: The command specified must run the errpt command or it must be a configuration variable.

Operator response: Specify the errpt utility or a configuration variable.

KQZ8232E   The command specified does not provide the -c option.

Explanation: The -c option is required for the agent to properly gather data from errpt.

Operator response: Specify the -c option.

KQZ8233E   The configuration variable must start with ${ and end with }.

Explanation: Ensure that the configuration variable is specified properly.

Operator response: Specify a correct configuration variable.

KQZ8234W   Event filtering and summarization is not enabled for attribute group, *attribute_group***; however, event summarization attributes exist.**

Explanation: The derived functions being use only return valid data when event filtering and summarization is turned on.

Operator response: Remove the event summarization attributes from the group or enable filtering and summarization for the group.

KQZ8235E   *schema_file_name* **has a format error and cannot be parsed.**

Explanation: There was an error parsing a Common Data Model file.

Operator response: Download the files from Common Data Model again (at least CDM.xsd, NamingRules.xml, and oneschema.xml) and place them in the directory specified in the Common Data Model preferences.

KQZ8236E   The sensor has two or more layouts with the same display name **"***layout_display_name***".**

Explanation: Each TADDM GUI layout must have a unique display name.

Operator response: In the TADDM GUI section, click one of the layouts with the duplicate display name, click the Edit button, and change the display name.

KQZ8237E   The sensor has two or more layouts which reference the same Common Data Model class "*layout_class_name***".**

Explanation: Each TADDM GUI layout must reference a unique Common Data Model class.

Operator response: In the TADDM GUI section, click one of the layouts with the duplicate class name, click the Edit button, and browse to a different class.

KQZ8238E   TADDM GUI layout does not have a display name.

Explanation: A TADDM GUI layout definition does not have a display name.

Operator response: In the TADDM GUI section, select the layout without a name, click the Edit button, and enter a display name.

KQZ8239E   TADDM GUI layout "*layout_name***" does not define a CDM class.**

Explanation: A TADDM GUI layout definition does not have a Common Data Model class associated with it.

Operator response: In the TADDM GUI section, select the layout, click the Edit button, select Browse, and choose a CDM class.

KQZ8240E   TADDM GUI layout "*layout_name***" does not contain any tab definitions.**

Explanation: Each TADDM GUI layout must define at least one tab.

Operator response: In the TADDM GUI section, select the layout and click the Add button to define a tab in the layout.

KQZ8241E   TADDM GUI layout "*layout_name***" has two or more tabs with the same display name "***tab_display_name***".**

Explanation: Each TADDM GUI tab in a layout must have a unique display name.

Operator response: In the TADDM GUI section, open the layout, click one of the tabs with the duplicate display name, click the Edit button, and change the display name.

KQZ8242E   TADDM GUI tab in layout "*layout_name***" does not have a display name.**

Explanation: A TADDM GUI tab definition does not have a display name.

Operator response: In the TADDM GUI section, select the tab without a name, click the Edit button, and enter a display name.

KQZ8243E   TADDM GUI tab "*tab_name***" in layout "***layout_name***" does not contain any table definitions.**

Explanation: Each TADDM GUI tab in a layout must define at least one table.

Operator response: In the TADDM GUI section, select the tab and click the Add button to define a table in the tab.

KQZ8244E   TADDM GUI tab "*tab_name***" in layout "***layout_name***" has two or more tables with the same display name "***tab_display_name***".**

Explanation: Each TADDM GUI table in a tab must have a unique display name.

Operator response: In the TADDM GUI section, open the layout and tab, click one of the tables with the duplicate display name, click the Edit button, and change the display name.

KQZ8245E TADDM GUI table in tab "*tab_name*" in layout "*layout_name*" does not have a display name.

Explanation: A TADDM GUI table definition does not have a display name.

Operator response: In the TADDM GUI section, select the table without a name, click the Edit button, and enter a display name.

KQZ8246E TADDM GUI table in tab "*tab_name*" in layout "*layout_name*" does not define a CDM class.

Explanation: A TADDM GUI table definition does not have a Common Data Model class associated with it.

Operator response: In the TADDM GUI section, select the table, click the Edit button, select Browse, and choose a CDM class.

KQZ8247E TADDM GUI table "*table_name*" in tab "*tab_name*" in layout "*layout_name*" does not contain any field definitions.

Explanation: Each TADDM GUI table must define at least one field.

Operator response: In the TADDM GUI section, select the table and click the Add button to define a field in the table.

KQZ8248E TADDM GUI field in table "*table_name*" in in tab "*tab_name*" in layout "*layout_name*" has no attribute selected.

Explanation: A TADDM GUI field must select an attribute from the parent table's class or parent field's class.

Operator response: In the TADDM GUI section, select the field, click the Edit button, and choose an attribute name.

KQZ8249E TADDM GUI field "*attribute_name*" in table "*table_name*" in tab "*tab_name*" in layout "*layout_name*" does not contain any field definitions.

Explanation: A TADDM GUI field which identifies another Common Data Model object must define at least one field from that object.

Operator response: In the TADDM GUI section, select the field and click the Add button to identify a field from the associated attribute.

KQZ8250E TADDM GUI field in table "*tab_name*" in tab "*tab_name*" in layout "*layout_name*" does not have a display name.

Explanation: A TADDM GUI field which identifies a primitive attribute value to display in a table must define a display name to be displayed along with the attribute.

Operator response: In the TADDM GUI section, select the table without a name, click the Edit button, and enter a display name.

KQZ8251E Class "*class_name*" is not a valid Common Data Model class.

Explanation: The class specified could not found in the Common Data Model or does not inherit from core.ManagedElement.

Operator response: Select a valid class from the Common Data Model browser, or update the builder with a more recent version of the Common Data Model schema files (Window - Preferences - IBM Agent Builder - Common Data Model).

KQZ8252E CDM schema directory "*directory_name*" does not exist.

Explanation: A directory containing the CDM schema was set with the preferences and that directory no longer exists.

Operator response: Download the files from Common Data Model (at least CDM.xsd, NamingRules.xml, and oneschema.xml) and identify the location of those files using Window - Preferences - IBM Agent Builder - Common Data Model.

KQZ8253E CDM schema file "*file_name*" does not exist in directory "*directory_name*".

Explanation: A directory containing the CDM schema was set with the preferences and one or more Common Data Model files no longer reside in that directory (or cannot be read from that directory).

Operator response: Download the files from Common Data Model (at least CDM.xsd, NamingRules.xml, and oneschema.xml) into the directory, or identify a new directory location of those files using Window - Preferences - IBM Agent Builder - Common Data Model.

KQZ8254E Common Data Model attribute "*attribute_name*" has type "*attribute_type*", but embedded class information shows that it is type "*attribute_type*".

Explanation: This is an informational message only.

**KQZ8255E   Common Data Model attribute
"*attribute_name*" has no topology link
finder class defined. Attribute parent is
"*attribute_path*".**

Explanation: If the Common Data Model class in
which an attribute resides has a topology node, and the
attribute itself is a class which has a topology node,
then a link finder custom class and method must be
defined. The custom link finder class is missing.

Operator response: Select the attribute node on the
Common Data Model tree and enter a custom link
finder class name.

**KQZ8256E   Common Data Model attribute
"*attribute_name*" has no topology link
finder method defined. Attribute parent
is "*attribute_path*".**

Explanation: If the Common Data Model class in
which an attribute resides has a topology node, and the
attribute itself is a class which has a topology node,
then a link finder custom class and method must be
defined. The custom link finder method is missing.

Operator response: Select the attribute node on the
Common Data Model tree and enter a custom link
finder method name.

**KQZ8257E   Common Data Model class "*class_name*"
has no topology node finder class
defined.**

Explanation: If the Common Data Model class has a
topology node and specifies that it is to use a custom
class and method to locate the appropriate nodes, then
a node finder custom class and method must be
defined. The custom node finder class is missing.

Operator response: Select the node on the Common
Data Model tree and enter a custom node finder class
name.

**KQZ8258E   Common Data Model class "*class_name*"
has no topology node finder class
defined. The class is defined in attribute
"*attribute_path*".**

Explanation: If the Common Data Model class has a
topology node and specifies that it is to use a custom
class and method to locate the appropriate nodes, then
a node finder custom class and method must be
defined. The custom node finder class is missing.

Operator response: Select the node on the Common
Data Model tree and enter a custom node finder class
name.

**KQZ8259E   Common Data Model class "*class_name*"
has no topology node finder class
defined.**

Explanation: If the Common Data Model class has a
topology node and specifies that it is to use a custom
class and method to locate the appropriate nodes, then
a node finder custom class and method must be
defined. The custom node finder method is missing.

Operator response: Select the node on the Common
Data Model tree and enter a custom node finder
method name.

**KQZ8260E   Common Data Model class "*class_name*"
has no topology node finder class
defined. The class is defined in attribute
"*attribute_path*".**

Explanation: If the Common Data Model class has a
topology node and specifies that it is to use a custom
class and method to locate the appropriate nodes, then
a node finder custom class and method must be
defined. The custom node finder method is missing.

Operator response: Select the node on the Common
Data Model tree and enter a custom node finder
method name.

**KQZ8261E   Could not copy file from
"*source_file_path*" to "*target_file_path*".**

Explanation: This is an informational message only.

**KQZ8262E   Could not copy directory from
"*source_directory*" to "*target_directory*".**

Explanation: This is an informational message only.

**KQZ8263E   Could not add directory from
"*source_directory_or_file*" to zip file
"*zip_file*".**

Explanation: This is an informational message only.

**KQZ8264E   The HTTP function specified for
attribute, *attribute_name*, is not valid.**

Explanation: The function specified is incorrect.

Operator response: Select a valid type for the
attribute.

**KQZ8265E   The HTTP function specified for
attribute, *attribute_name*, requires an
argument; however, none was specified.**

Explanation: The function selected requires an
argument.

Operator response: Specify an argument or choose a
different attribute type.

KQZ8266E   **The XPath for attribute group,**
*attribute_name***, contains a syntax error.**

Explanation: The XPath contains a syntax error.

Operator response: Correct the XPath syntax.

KQZ8267E   **The XPath for attribute,** *attribute_name***,**
contains a syntax error.

Explanation: The XPath contains a syntax error.

Operator response: Correct the XPath syntax.

KQZ8268E   **An attribute cannot have an empty**
name.

Explanation: There is no name specified for the
attribute.

Operator response: Specify a unique name for the
attribute.

KQZ8269E   **Agent Builder encountered an error**
while generating the Cognos data
model.

Explanation: The builder encountered an unexpected
error.

Operator response: Ensure you have the correct
permissions to the output directory. If the error persists,
try restarting Agent Builder.

KQZ8270E   **No URL specified for attribute group**
*attribute_group***.**

Explanation: The attribute group must contain a URL.

Operator response: Specify the URL for the attribute
group.

KQZ8271E   **No HTTP request type specified for**
attribute group *attribute_group***.**

Explanation: The attribute group must contain a
request type.

Operator response: Specify the request type for the
attribute group.

KQZ8272E   **The request type specified for attribute**
group *attribute_group* **requires post data**
to be specified.

Explanation: The attribute group must contain post
data.

Operator response: Specify post data for the attribute
group or change the request type to GET.

KQZ8273W   **The request type specified for attribute**
group *attribute_group* **is GET; however,**
post data is specified.

Explanation: The post data will not be used.

Operator response: Remove the post data for the
attribute group or change the request type either POST
or PUT.

KQZ8274E   **The post data specified for attribute**
group *attribute_group* **contains a syntax**
error.

Explanation: The post data is not well formated XML.

Operator response: Correct the post data for the
attribute group or change the request type to GET.

KQZ8280E   **Common Data Model file**
schema_file_name **could not be found at**
location *location***.**

Explanation: The Common Data Model file could not
be found.

Operator response: Download the files from Common
Data Model again (at least CDM.xsd,
NamingRules.xml, and oneschema.xml) and place them
in the directory specified in the Common Data Model
preferences.

KQZ8281E   **Common Data Model zip file**
schema_file_name **at location** *location* **could**
not be opened.

Explanation: The Common Data Model zip schema
file could not be opened or read.

Operator response: Download the files from Common
Data Model again (at least CDM.xsd,
NamingRules.xml, and oneschema.xml) and place them
in the directory specified in the Common Data Model
preferences.

KQZ8282I   **Attributes from more than one attribute**
group are being queried.

Explanation: A simple mapping section copies
attribute values from one attribute group to attributes
in one Common Data Model class. This section gets
attributes from more than one attribute group and thus
cannot be shown under the Attributes tab.

Operator response: Click on the Queries tab and
select a query from the Query field to see which
attributes' values are being used.

KQZ8283I   No attribute groups are being queried.

Explanation: A simple mapping section copies attribute values from one attribute group to attributes in one Common Data Model class. This section does not query any attribute groups and thus cannot be shown under the Attributes tab.

Operator response: If appropriate for this mapping section, click on the Queries tab and click on the Add button select a query from the Query field at the right of the Query field to add an attribute group to query.

KQZ8284I   Attributes from more than one Common Data Model class are being set.

Explanation: A simple mapping section copies attribute values from one attribute group to attributes in one Common Data Model class. This section copies attributes to more than one Common Data Model class and thus cannot be shown under the Attributes tab.

Operator response: Click on the CDM Attributes tab and select a Common Data Model class from the Class field to see how that class' variables will be set.

KQZ8285I   No Common Data Model class mappings are defined.

Explanation: A simple mapping section copies attribute values from one attribute group to attributes in one Common Data Model class. This section does not copy attributes to any Common Data Model class and thus cannot be shown under the Attributes tab.

Operator response: If appropriate for this mapping section, click on the CDM Attributes tab and click on the Add button at the right of the Class field to add a Common Data Model class whose attributes will be mapped.

KQZ8286E   An attribute group with table ID *table ID* **mentioned in the TMS DLA was not found.**

Explanation: An attribute group specified in a TEMS query from the TMS DLA was not found.

Operator response: Open the Common Data Model mapping and select the attribute group whose variables are to be mapped to Common Data Model attributes.

KQZ8287E   A TEMS query in TMS DLA CDM mapping section *section_name* **does not contain an attribute group.**

Explanation: An attribute group specified in a TEMS query from the TMS DLA was not found.

Operator response: Open the Common Data Model mapping and select the attribute group whose variables are to be mapped to Common Data Model attributes.

KQZ8289E   A TMS DLA variable definition without a name was found in a query of attribute group *attribute_group_name***.**

Explanation: This is an informational message only.

KQZ8290E   TMS DLA variable *attribute_group_name* **for attribute group** *attribute_group_name* **does not have a column ID specified.**

Explanation: This is an informational message only.

KQZ8291E   TMS DLA Variable *attribute_group_name* **has column ID Variable** *column_ID* **that does not belong to any attribute in attribute group** *attribute_group_name***.**

Explanation: This is an informational message only.

KQZ8292E   A TMS DLA variable definition without a name was defined to transform variable *parent_variable_name***.**

Explanation: This is an informational message only.

KQZ8293E   TMS DLA Variable definition *variable_name* **has no method name.**

Explanation: This is an informational message only.

KQZ8294E   TMS DLA variable *variable_name* **is defined more than once.**

Explanation: This is an informational message only.

KQZ8295E   TMS DLA variable name *variable_name* **is already defined as a predefined variable.**

Explanation: This is an informational message only.

KQZ8296E   A TMS DLA filter in mapping section *mapping_section* **had no type or multiple types specified.**

Explanation: This is an informational message only.

KQZ8297E   TMS DLA filter *filter_name* **has no variable name.**

Explanation: This is an informational message only.

KQZ8298E   Node *node_name* **is not recognized in TMS DLA mapping section** *mapping_section***.**

Explanation: This is an informational message only.

KQZ8299E   **No ID found in the TMS DLA mapping to CDM class** *CDM_class_name*.

Explanation: This is an informational message only.

KQZ8300E   **No source token found in the TMS DLA mapping to CDM class** *CDM_class_name*.

Explanation: This is an informational message only.

KQZ8301E   **No source found in the TMS DLA mapping of CDM relationship** *CDM_relationship_name*.

Explanation: This is an informational message only.

KQZ8302E   **No source found in the TMS DLA mapping of CDM relationship** *CDM_relationship_name*.

Explanation: This is an informational message only.

KQZ8303E   **Attribute** *attribute_name* **mentioned in the TMS DLA is not found in CDM class** *class_name*.

Explanation: This is an informational message only.

KQZ8304E   **TMS DLA variable** *variable_name* **is not defined.**

Explanation: This is an informational message only.

KQZ8305E   **The custom command "***command***" is not a Java invocation command.**

Explanation: This is an informational message only.

KQZ8306E   **Grammar "***filter_grammar_string***" in filtered attribute group** *attribute_group_name* **is not a valid grammar.**

Explanation: This is an informational message only.

KQZ8307E   **Function** *function_name* **is called from the filter in attribute group** *attribute_group_name*. **It is a cumulative function which is not supported in filters.**

Explanation: The functions count, cumulativeSum, and last are not supported in filters and may return incorrect values.

Operator response: Remove the function call from the formula.

KQZ8308E   **The filter formula in attribute group** *attribute_group_name* **contains a syntax error.**

Explanation: This is an informational message only.

KQZ8309E   **A fixed number of bytes and a delimiter are both specified in attribute** *attribute_name* **in attribute group** *attribute_group_name*.

Explanation: There should be only one way to specify how an attribute value is copied from a record, but both a byte count and a delimiter are specified.

Operator response: Remove the delimiter or the byte count from the specification.

KQZ8310E   **A fixed number of bytes and a delimiter are both specified in attribute group** *attribute_group_name*.

Explanation: There should be only one way to specify how an attribute value is copied from a record, but both a byte count and a delimiter are specified.

Operator response: Remove the delimiter or the byte count from the specification.

KQZ8311E   **Both a special delimiter and string delimiter are specified in attribute** *attribute_name* **in attribute group** *attribute_group_name*.

Explanation: There should be only one way to specify how an attribute value is copied from a record, but both a special delimiter and a string delimiter are specified.

Operator response: Remove the special delimiter or the string delimiter from the specification.

KQZ8312E   **Both a special delimiter and string delimiter are specified in attribute group** *attribute_group_name*.

Explanation: There should be only one way to specify how an attribute value is copied from a record, but both a special delimiter and a string delimiter are specified.

Operator response: Remove the special delimiter or the string delimiter from the specification.

KQZ8313E   **A starting delimiter was specified without an ending delimiter in attribute** *attribute_name* **in attribute group** *attribute_group_name*.

Explanation: You cannot describe how an attribute value is copied from a record by specifying only a beginning delimiter. You must specify an ending

delimiter alone or both a beginning and ending delimiter.

Operator response: Add an ending delimiter or choose a different way to describe what data is copied into an attribute.

KQZ8314E **A starting delimiter was specified without an ending delimiter in attribute group** *attribute_group_name*.

Explanation: You cannot describe how an attribute value is copied from a record by specifying only a beginning delimiter. You must specify an ending delimiter alone or both a beginning and ending delimiter.

Operator response: Add an ending delimiter or choose a different way to describe what data is copied into an attribute.

KQZ8315E **The number of bytes copied to the attribute must be an integer greater than** *minimum_byte_count* **and less than or equal to** *maximum_byte_count* **in attribute** *attribute_name* **in attribute group** *attribute_group_name*.

Explanation: The byte count specified is not a valid integer or not a positive integer.

Operator response: Change the byte count to a positive integer.

KQZ8316E **The number of bytes copied to the attribute must be an integer greater than** *minimum_byte_count* **and less than or equal to** *maximum_byte_count* **in attribute group** *attribute_group_name*.

Explanation: The byte count specified is not a valid integer or not a positive integer.

Operator response: Change the byte count to a positive integer.

KQZ8317E **The XML element is missing in attribute group** *attribute_group_name*.

Explanation: An XML log file is indicated but no XML element was given to identify a record.

Operator response: Enter an XML element name.

KQZ8318E **The TEMS query for attribute group** *id* **is** *size* **bytes, which exceeds the limit of** *max_size* **bytes.**

Explanation: The query string for an attribute group is limited in size. If too many attributes are included in an attribute group, then this query string exceeds its limit. Only attributes that are actually sent to the TEMS are included in this count.

Operator response: Remove some attributes, mark some attributes as not being displayed on the TEP, or split the group into two smaller groups.

KQZ8319E **An error occurred generating a TEMS query for the agent.**

Explanation: An error occurred while creating the TEMS queries for the agent.

Operator response: See the log file for more information about the error.

KQZ8320E **A zero-length starting delimiter was specified in attribute** *attribute_name* **in attribute group** *attribute_group_name*.

Explanation: You cannot describe how an attribute value is copied from a record by specifying an empty starting delimiter.

Operator response: Fill in the starting delimiter or select "Separator text" and fill in only an ending delimiter.

KQZ8321E **A zero-length starting delimiter was specified in attribute group** *attribute_group_name*.

Explanation: You cannot describe how an attribute value is copied from a record by specifying an empty starting delimiter.

Operator response: Fill in the starting delimiter or select "Separator text" and fill in only an ending delimiter.

KQZ8322E **The file "**file_name**" that is referenced in** *display_name*, **does not exist in the project.**

Explanation: This is an informational message only.

KQZ8323E **The file "**file_name**" that is referenced in** *display_name*, **does not exist in the project folder** *folder_name*.

Explanation: This is an informational message only.

KQZ8324E **The file "**file_name**" that is referenced in** *display_name* **does not exist in the "**scripts_folder_name**" folder for operating systems** *operating_system_list*.

Explanation: This is an informational message only.

KQZ8325E **The file "**file_name**" that is referenced in** *display_name* **was found in the "**folder_name**" folder with letters of a different case "**actual_file_name**".**

Explanation: The file referenced by the agent does not

contain the same case in the reference as it does on the file system. This will cause errors if the project is moved to a file system that uses case-sensitive file names, or if the agent is deployed on a file system that uses case-sensitive file names.

Operator response: Fix the reference in the agent to match the case of the file on the file system.

KQZ8326E **No object ID (OID) filter is specified in SNMP event attribute group "*attribute_group_name*".**

Explanation: An SNMP event attribute group must have a filter which describes which events are shown in the attribute group. This attribute group has no filter.

Operator response: Select one of the event options in the "SNMP event information" section of the panel. If select Custom Events, enter the object IDs that should be shown in this attribute group, separated by commas.

KQZ8327E **JDBC statement is missing.**

Explanation: A JDBC attribute group must have a JDBC statement which can retrieve data from the database. This attribute group has no statement.

Operator response: Enter an SQL query or stored procedure which will run to collect data from the database.

KQZ8328E **WMI namespace is missing.**

Explanation: A WMI attribute group must have a namespace and class name which is used to retrieve data from WMI. This attribute group has no namespace.

Operator response: Enter a WMI namespace.

KQZ8329E **WMI class name is missing.**

Explanation: A WMI attribute group must have a namespace and class name which is used to retrieve data from WMI. This attribute group has no class name.

Operator response: Enter a WMI class name.

KQZ8330E **WMI class name is missing.**

Explanation: A WMI attribute group must have a namespace and class name which is used to retrieve data from CIM. This attribute group has no class name.

Operator response: Enter a CIM class name.

KQZ8332E **SNMP performance object display name is missing.**

Explanation: An SNMP attribute group must have a display name by which the attribute group is identified in the Performance Object Status table. This attribute group has no performance object display name.

Operator response: Enter a performance object name.

KQZ8333E **Log file name is missing.**

Explanation: A log file attribute group must specify the name for each log file to be monitored. This attribute group does not specify a name for one or more files.

Operator response: Enter a file name, optionally using wild cards, for each log file to be monitored.

KQZ8334E **The JMX MBean name or pattern is missing.**

Explanation: The JMX MBean name or pattern has not been entered.

Operator response: Enter a valid MBean name or MBean pattern.

KQZ8335E **The Director REST object name is missing.**

Explanation: The REST object name has not been entered.

Operator response: Enter a REST object name.

KQZ8336E **Agent *agent_product_code* does not contain any monitoring actions.**

Explanation: No data sources were specified in this agent, and therefore there is nothing that it can monitor.

Operator response: Add one or more data sources to the agent.

KQZ8337E **CIM namespace is missing.**

Explanation: A CIM attribute group must have a namespace and class name which is used to retrieve data from CIM. This attribute group has no namespace.

Operator response: Enter a CIM namespace.

KQZ8338E **OSLC type is missing.**

Explanation: An OSLC resource definition must specify an OLSC type of the resource.

Operator response: Add the OSLC type to the resource.

KQZ8339E **OSLC type "***agent_product_code***" is not valid.**

Explanation: Only OSLC types Location, ServiceInstance, SoftwareServer, SoftwareModule, and StorageVolume are allowed

Operator response: Select one of the valid OSLC types.

KQZ8340E **Attribute group is missing from the OSLC resource definition.**

Explanation: The resource definition represents the same entity that one of the agent's attribute groups represents, and no attribute group was specified.

Operator response: Select an attribute group whose rows represent the same object that this resource represents.

KQZ8341E **Attribute group "***attribute_group_name***" is not valid.**

Explanation: The resource definition represents the same entity that one of the agent's attribute groups represents, and the attribute group specified is not defined in this agent.

Operator response: Select an attribute group whose rows represent the same object that this resource represents.

KQZ8342E **Dependent attribute group "***attribute_group_name***" is not valid.**

Explanation: The resource definition specified a dependent attribute group that does not exist.

Operator response: Select a valid attribute group.

KQZ8343E **Attribute or value is missing from an OSLC property definition.**

Explanation: An OSLC property value is obtained from an ITM attribute value. No attribute was specified in this property definition.

Operator response: Select an attribute from the resource's main or dependent attribute groups.

KQZ8344E **Attribute group "***attribute_group_name***" referenced on OSLC property "***attribute_group_name***" is not valid.**

Explanation: An attribute group referenced in an OSLC property value is not a valid attribute group.

Operator response: Edit the property value and change the reference to an attribute from either the resource's main attribute group or from one of the dependent attribute groups.

KQZ8345E **Relationship type not specified.**

Explanation: An OSLC relationship must specify a relationship type such as "depends on". This relationship does not specify a type.

Operator response: Enter the OSLC relationship type.

KQZ8346E **Relationship target resource definition not specified.**

Explanation: An OSLC relationship is defined in a source relationship and must reference a target resource by name. This relationship does specify a target resource.

Operator response: Select a target resource definition.

KQZ8347E **The specified target resource type** *resource_type* **does not match the actual type** *resource_type* **of resource** *resource_name***.**

Explanation: An OSLC relationship is defined in a source relationship and must reference a target resource by name. A target resource type can also be specified. In this case, the type specified does not match the resources defined type.

Operator response: Remove or correct the specified target resource type or select a different target resource.

KQZ8348E **No criteria specified to match resource** *source_resource_name* **to** *target_resource_name***.**

Explanation: The criteria used to match a source and target resource in a relationship is missing.

Operator response: Enter one or more property paris to match source and target resources.

KQZ8349E **Property** *property_name* **is not defined by resource** *resource_name***.**

Explanation: The criteria used to match a source and target resource specified a property in one of those resources that does not exist.

Operator response: In the matching criteria, enter a valid property for the source resource and the target resource.

KQZ8350E **Matching criteria property missing. for resource** *resource_name***.**

Explanation: The criteria used to match a source and target resource did not specify a property for one or both resources.

Operator response: In the matching criteria, enter a valid property for the source resource and the target resource.

KQZ8351E   Method name is missing.

Explanation: When an OSLC method is specified, a method name is required.

Operator response: Specify a method name.

KQZ8352E   Log source specifies both regExFileName and regExStrictFileName attributes.

Explanation: A file name pattern may either be a legacy regExFileName or a preferred regExStrictFileName, it can't be both. The agent will be generated assuming regExStrictFileName is correct.

Operator response: Only set one of the 2 flags in the agent definition.

KQZ8353E   The directory containing the OSLC definitions "*directory_name*" does not exist.

Explanation: A directory containing the RDF resource shapes XML file was set with the preferences and that directory no longer exists.

Operator response: Extract the RDF resource shapes XML file from a running instance of OSDP and save it as resource-shapes.xml. Identify the location of that file using Window - Preferences - IBM Agent Builder - OSLC.

KQZ8354E   The OSLC definitions file "*file_name*" does not exist in directory "*directory_name*".

Explanation: A directory containing the OSLC definition file was set with the preferences and the OSLC definition file longer resides in that directory (or cannot be read from that directory).

Operator response: Extract the resource-shapes.xml file from a running instance of OSDP and identify the location of that file using Window - Preferences - IBM Agent Builder - OSLC.

KQZ8355W   Attribute group "*attribute_group_name*" referenced by OSLC property *OSLC_property_name*, has no row selection criteria defined.

Explanation: An OSLC property value references an attribute from an attribute group other than the main attribute group for the resource. The attribute group can return multiple rows, but there is no criteria defined to select which row corresponds to the particular row from the main attribute group.

Operator response: Open the resource dependencies dialog and add criteria to match a row from the resource's main attribute group to a row from the referenced attribute group.

KQZ8357E   Attribute "*attribute_name*" does not exist in attribute group "*attribute_group_name*". This occurred in the specification of dependent attribute group "*dependent_attribute_group_name*"

Explanation: An attribute used to match data rows from the main attribute group to the dependent attribute group is not a valid attribute.

Operator response: Select a valid attribute from the main attribute group.

KQZ8358E   Attribute "*attribute_name*" does not exist in dependent attribute group "*attribute_group_name*".

Explanation: An attribute used to match data rows from the main attribute group to the dependent attribute group is not a valid attribute.

Operator response: Select a valid attribute from the dependent attribute group.

KQZ8359E   Attribute "*attribute_name*" does not exist in attribute group "*attribute_group_name*".

Explanation: An attribute referenced in an OSLC property value does not exist in the referenced attribute group.

Operator response: Edit the property value and change the reference to an attribute from either the resource's main attribute group or from one of the dependent attribute groups.

KQZ8360E   The name "*name*" is used in more than one dashboard component.

Explanation: The names of the dashboard, pages, and widgets must all be unique. A name was duplicated in more than one of those component.

Operator response: Change one of the duplicate names to a different value, or check the "Match title" check box next to the name to generate a unique name.

KQZ8361E   Attribute "*attribute_name*" is not a member of attribute group "*attribute_group_name*".

Explanation: A reference to an attribute does not correspond to an actual attribute definition in the agent.

Operator response: Change the name of the attribute or attribute group so that the reference is valid.

KQZ8362E Attribute group reference *dataset_id* **is not valid.**

Explanation: A reference to an attribute group has not been specified or is no longer valid.

Operator response: Select a valid attribute group for the widget.

KQZ8363E The *attribute_name* **generated attribute should not be in the sort criteria when there is only one attribute in the bar chart.**

Explanation: This attribute has a value which is the sum of all the attribute values which comprise a bar chart series. It is not a real agent attribute, but it is available only to the dashboard sorting criteria. It can be specified only for bar chart sorting criteria, and only when there is more than one attribute in the series. This message is issued if there is only one attribute in the series.

Operator response: Add another attribute to the bar chart series or remove this attribute from the sorting criteria.

KQZ8364E Dashboard page does not contain any layouts.

Explanation: A page must contain one or more layouts. This page does not contain any layouts.

Operator response: Add layouts to the page or remove the page from the dashboard.

KQZ8365W Dashboard layout does not contain any widgets.

Explanation: A layout must contain one or more widgets to be shown when the layout is selected. This layout does not contain any widgets.

Operator response: Add widgets to the layout or remove the layout from the page.

KQZ8366E Dashboard page has no title.

Explanation: A dashboard page must have both a title and a name.

Operator response: Set a title on all dashboard pages.

KQZ8367E Dashboard page has no name.

Explanation: A dashboard page must have both a title and a name.

Operator response: Set a unique name on all dashboard pages, or select the "Match title" check box to generate a unique name based on the title.

KQZ8368E Dashboard layout has no title.

Explanation: A dashboard layout must have both a title and a name.

Operator response: Set a title on all dashboard layouts.

KQZ8369E Dashboard layout has no name.

Explanation: A dashboard layout must have both a title and a name.

Operator response: Set a unique name on all dashboard layouts, or select the "Match title" check box to generate a unique name based on the title.

KQZ8370E No dashboard pages are defined.

Explanation: A dashboard page must be defined to be able to display any of the widgets that are defined.

Operator response: Create a page and layout and add the desired widgets to the layout.

KQZ8371E Dashboard widget has no title.

Explanation: A dashboard widget must have both a title and a name.

Operator response: Set a title on all dashboard pages.

KQZ8372E Dashboard widget has no name.

Explanation: A dashboard widget must have both a title and a name.

Operator response: Set a unique name on all dashboard widgets, or select the "Match title" check box to generate a unique name based on the title.

KQZ8373E The table definition contains no column attributes.

Explanation: When a table is defined, it must contain at least one column, and this table does not contain any columns.

Operator response: Select one or more attributes to be shown as columns in the table.

KQZ8374E The bar chart definition contains no attributes for its series of bars.

Explanation: When a bar chart is defined, at least one numeric attribute must be identified to make up the length of the bar. More than one numeric attribute can be defined several bars are to be grouped together or strung together forming one long bar with segments representing each of the individual values.

Operator response: Select one or more numeric attributes to be shown as a single bar or series of bars.

KQZ8375E   **Attribute "***attribute_name***" is not a numeric attribute.**

Explanation: Attributes in a bar chart must have a numeric value that make up part or all of the length of the bar. This attribute is not numeric, so the length of the bar to present in the bar chart cannot be determined.

Operator response: Remove this attribute from the bar chart series definition.

KQZ8376E   **Value "***value***" in field "***field_name***" is not a positive integer.**

Explanation: Only a positive integer can be specified in this field.

Operator response: Replace the value with a positive integer.

KQZ8377E   **The bar chart has no label attribute.**

Explanation: When defining a bar chart, you must also define an attribute used to label each of the series.

Operator response: Change the name of the attribute or attribute group so that the reference is valid.

KQZ8378E   **Value "***value***" in field "***field_name***" is not a positive integer or blank (indicating no limit).**

Explanation: Only a positive integer can be specified in this field, or a blank value that indicates no limit.

Operator response: Replace the value with a positive integer or remove the value.

KQZ8379E   **Unique agent with product code** *product_code* **could not be found.**

Explanation: Widgets are defined using an attribute group in agent with the specified product code, but that agent could not be found. The agent's project may have been closed or deleted from the workspace, or there may be multiple agents with the same product code.

Operator response: Open the agent, reload it into the workspace, or select a different agent.

KQZ8380E   **Agent with product code** *product_code* **could not be accessed. It is required by dashboard widget** *widget_title***.**

Explanation: Widgets are defined using an attribute group in agent with the specified product code, but that agent could not be found. The agent's project may have been closed or deleted from the workspace, or there may be multiple agents with the same product code.

Operator response: Open the agent, reload it into the workspace, or select a different agent.

KQZ8381E   **Dashboard layout has no physical layout selected.**

Explanation: A dashboard layout identify a physical layout for the base widgets to be displayed in it.

Operator response: Select a physical layout.

KQZ8382E   **APM UI widget has no name.**

Explanation: An APM UI widget must have a name.

Operator response: Enter a unique name for the widget (unique among all the widgets in the group widget)

KQZ8383E   **The grid widget definition contains no attributes.**

Explanation: When a grid is defined, at least one attribute must be identified to display as a column in the grid.

Operator response: Select one or more attributes to be shown as columns in the grid.

KQZ8384E   **The HTML table widget definition contains no attributes.**

Explanation: When an HTML table is defined, at least one attribute must be identified to display as a row in the table.

Operator response: Select one or more attributes to be shown as rows in the table.

KQZ8385E   **The bullet or bullet chart widget definition does not have a numeric attribute selected for the value to be displayed.**

Explanation: When a bullet or bullet chart widget is defined, one numeric attribute must be selected whose value is to be displayed in the bullet.

Operator response: Select one numeric attribute to be shown in the bullet.

KQZ8386E   **The bullet or bullet chart widget does not have a minimum value defined.**

Explanation: A bullet or bullet chart widget must have a minimum and maximum value so that the actual value can be displayed in the context of its permitted range of values.

Operator response: Enter the minimum value of the attribute.

KQZ8387E   The bullet or bullet chart widget does not have a maximum value defined.

Explanation: A bullet or bullet chart widget must have a minimum and maximum value so that the actual value can be displayed in the context of its permitted range of values.

Operator response: Enter the maximum value of the attribute.

KQZ8388E   Attribute group *attribute_group* **does not contain any numeric attributes.**

Explanation: This type of widget requires that a numeric attribute be selected, but this attribute group does has none.

Operator response: Select a different attribute group that has a numeric attribute to display in this widget.

KQZ8389W   Group widget does not contain any widgets.

Explanation: To show information from an attribute group, a group widget must contain one or more widgets.

Operator response: Select the Add widget action from the upper right corner of the group widget editor page, or from the group widget context menu in the Outline view.

KQZ8390W   APM UI page does not contain any group widgets.

Explanation: To show information from an attribute group, an APM UI page must contain one or more group widgets.

Operator response: Select the Add group widget action from the upper right corner of the APM UI page editor page, or from the APM UI page context menu in the Outline view.

KQZ8391E   APM UI group widget has no name.

Explanation: An APM UI group widget must have both a title and a name.

Operator response: Enter a unique name for the group widget (unique among all APM UI objects), or select the "Match title" check box to generate a unique name based on the title.

KQZ8392E   APM UI group widget has no title.

Explanation: An APM UI group widget must have both a title and a name.

Operator response: Enter a title for the group widget.

KQZ8393E   Attribute *attribute_name* **has a scale or precision value, but not both.**

Explanation: This is an informational message only.

KQZ8394E   The bullet chart widget definition does not have an attribute selected for the label.

Explanation: When a bullet chart widget is defined, one attribute must be selected to label each bullet in the chart.

Operator response: Select one attribute to be used as a label next to each bullet.

KQZ8395E   The file *file_name* **could not be read or parsed:** *untranslated_message_from_exception*.

Explanation: There was an error reading or properly parsing a JSON file.

Operator response: Edit the file and fix the JSON syntax.

KQZ8396E   The chart widget definition does not have an X attribute selected.

Explanation: When a chart widget is defined, one attribute must be selected for each of the X and Y axis.

Operator response: Select one attribute to be used as the X axis.

KQZ8397E   The chart widget definition does not have a Y attribute selected.

Explanation: When a chart widget is defined, one attribute must be selected for each of the X and Y axis.

Operator response: Select one attribute to be used as the Y axis.

KQZ8398W   A widget of type "*type_of_widget***" can show values from only a single row, but attribute group** *attribute_group_name* **can return more than one row and the data set is not sorted.**

Explanation: Certain types of widgets only show data from one data row. If that type of widget attempts to show data from an attribute group that returns multiple rows, only data from one of the rows will be shown.

Operator response: Select an attribute group that returns only one row, or select a different type of widget to display data from this attribute group.

KQZ8399W **The widget has the same attribute for both the "***status***" and the "***status***" status.**

Explanation: You cannot select the same attributes for two different status values.

Operator response: Select a different attribute, or no attribute, for one of those status values.

KQZ8400E **The APM UI application template has no title.**

Explanation: The APM UI application template must have a title.

Operator response: Click on the APM UI node on the Outline view and enter a title in the Application Template section.

KQZ8401E **The APM UI application template has no name.**

Explanation: The APM UI application template must have a name.

Operator response: Click on the APM UI node on the Outline view and enter a name in the Application Template section, or click the "Match title" check box to generate a name based on the title.

KQZ8402E **No component title is defined for the agent.**

Explanation: A component title must be defined for the agent. This is the name that labels instances of this agent when they are being added as components of an applicaation.

Operator response: Click on the APM UI node on the Outline view and enter a component title in the Application Template section.

KQZ8403W **A widget of type "***type_of_widget***" must have multiple rows to show values, but attribute group** *attribute_group_name* **can return only one row.**

Explanation: Certain types of widgets only show data from multiple row, and show no meaningful graphic when there is only one data row to show. If that type of widget attempts to show data from an attribute group that returns only one row, there may be no graphic displayed or the resulting graphic may be difficult to see (e.g. a single point instead of a line).

Operator response: Select an attribute group that returns multipel rows, or select a different type of widget to display data from this attribute group.

KQZ8404E **The file** *file_name* **contained a JSON array with no embedded objects.**

Explanation: A JSON model file should contain a JSON object or an array containing a JSON object.

Operator response: Edit the file and add the correct JSON object.

KQZ8405E **APM UI objects were added or removed from file** *file_name*.

Explanation: While small changes can be made to an APM UI model object file while an agent is being editied, adding or removing top-level JSON objects is not allowed.

Operator response: Restore the JSON file, then add or remove pages and group widgets from the agent editor. If structural changes must be made directly to a JSON file, close the agent editor before making those changes.

KQZ8406W **Summary group widget is not linked to any page.**

Explanation: When the summary group widget is shown in APM UI, it is expected that a user can click on it and see a detailed page about the resource. The linked page identifies the page shown.

Operator response: Click the "New page" button to define a new page with group widgets and widgets. A wizard will run which defines page with the correct name. If you have already defined a linked page for this component, select it in the "Linked page" dropdown.

KQZ8407E **APM UI page has no title.**

Explanation: An APM UI page must have both a title and a name.

Operator response: Enter a title for the page.

KQZ8408E **APM UI page has no name.**

Explanation: An APM UI page must have both a title and a name.

Operator response: Enter a unique name for the page (unique among all APM UI objects), or select the "Match title" check box to generate a unique name based on the title.

KQZ8409E **Summary group widget should link to a page named** *expected_page_name* **and not** *actual_page_name*.

Explanation: The linked page should be named in a particular way so that clicking on a component in the APM UI "Instances" panel displays the same page as clicking on the component's summary group widget.

Operator response: Change the name of the page to the expected name or click "New page" to define a new page with the correct name.

KQZ8410W   Group widget causes the page to be *expected_page_name* **pixels wide, over 1000 pixels.**

Explanation: It is recommended that APM UI pages be under 1000 pixels wide so they can be displayed on small devides. This group widget would cause the page to be over 1000 pixels wide.

Operator response: Make the group widget narrower or have it start further left on the page.

KQZ8411W   Group widgets "*group_widget_name***" and "***group_widget_name***" overlap.**

Explanation: The size and position would cause the two group widgets to overlap when displayed in the APM UI page.

Operator response: Change the starting coordinates or size of the group widgets so they do not overlap.

KQZ8412E   The monitored application signature contains two discovery scripts for the same operating system *operating_system***.**

Explanation: Include any given operating system tag with only one discovery script.

Operator response: Remove the operating system tag for one of the script files.

KQZ8413E   Custom attribute group *attribute_group_name* **has attribute** *attribute_name* **from an older committed version of the agent after a newer attribute.**

Explanation: A newer version of an agent cannot add, remove, reorder, hide, unhide, or change the size or type of attributes that existed in older versions of an agent. It can only add new attributes after the older attributes. Agent Builder found at least one older attributes that came after a newer attribute.

Operator response: Move any new attributes after older attributes.

KQZ8414W   Group widget links a page with one or more group widgets that show data from a different node.

Explanation: When linking from a group widget, data can be shown in the target page's group widgets only if it comes from attribute groups in the same base agent or subnode as the originating group widget. One or more of the group widgets in the target page attempt to show data from a different agent node.

Operator response: Change the group widgets in the target page so they only attempt to show data from attribute groups in the same base agent or subnode as the originating group widget.

KQZ8415E   The pod widget definition contains no attribute.

Explanation: When a pod widget is defined, one attribute must be identified to display ion the widget.

Operator response: Select one attributes to be shown in the pod widget.

KQZ8416E   Value "*value***" for severity "***severity***" is not a valid number.**

Explanation: This is an informational message only.

KQZ8417E   Severity values can be specified only on numeric attributes.

Explanation: This is an informational message only.

KQZ8418E   Range starting value "*value***" is greater than ending value "***value***" in level "***level***".**

Explanation: A range's starting value must be less than or equal to its ending value.

Operator response: Swap the starting and ending values of the range.

KQZ8419E   Value "*value***" in level "***level***" overlaps with value "***value***" in level "***level***".**

Explanation: For any attribute, a value or range cannot overlap any other value or range.

Operator response: Change the values so that values and ranges do not overlap.

KQZ8420E   Range "*range_starting_value***" to "***range_ending_value***" in level "***level***" overlaps with value "***value***" in level "***level***".**

Explanation: For any attribute, a value or range cannot overlap any other value or range.

Operator response: Change the values so that values and ranges do not overlap.

KQZ8421E   More than one attribute indicating Primary agent status: attribute *attribute_name* **in attribute group** *attribute_group_name* **and attribute** *attribute_name* **in attribute group** *attribute_group_name***.**

Explanation: Only one attribute can be the source of primary status for the agent or subnode.

Operator response: Remove the Primary status indication of one of the attributes.

KQZ8422E **Attribute giving Primary status occurs in attribute group with possible multiple data rows.**

Explanation: The attribute indicating Primary agent or subnode status must be in an attribute group that returns only one row.

Operator response: Change the Primary status to a different attribute or indicate that its parent attribute group can return only a single row.

KQZ8423E **Attribute giving Primary status must be a numeric attribute.**

Explanation: The attribute indicating Primary agent or subnode status must be a numeric attribute whose values are mapped to different severity levels.

Operator response: Define values appropriate for each of the severity levels.

KQZ8424E **Attribute giving Primary status must have values for at least two different severity levels.**

Explanation: The attribute indicating Primary agent or subnode status must be a numeric attribute whose values are mapped to different severity levels. If values are not mapped to at least two different severity levels, then the status of the agent cannot change.

Operator response: Define values appropriate for each of the severity levels.

KQZ8425E **Time server** *time_server_host_name* **could not be reached so JAR file** *JAR_file_name* **could not be signed.**

Explanation: Agent Builder needs to be able to connect to the time server as part of signing the JAR file for the self-describing JAR file.

Operator response: Run the Agent Builder command from a host that has access to the Internet.

KQZ8426W **Time server** *time_server_host_name* **could not be reached. JAR file** *JAR_file_name* **is being signed without a time stamp.**

Explanation: Agent Builder was not able to reach the time server, so the JAR file is being signed without a time stamp. This means that the JAR cannot be validated after the certification expiration date of the private key.

Operator response: Run the Agent Builder command from a host that has access to the Internet.

KQZ8427W **Status is being shown for more than** *maximum_visible_status_attributes* **attributes in the base agent. There may not be room in the summary area to show more than 5 values.**

Explanation: The summary status area is a fixed size and can only show about 5 widgets.

Operator response: Rerun the dashboard setup wizard and remove some of the secondary status attributes.

KQZ8428W **Status is being shown for more than** *maximum_visible_status_attributes* **attributes in subnode "***subnode_name***". Selected attributes may not all be visible in the summary area.**

Explanation: The summary status area is a fixed size and can only show a few widgets.

Operator response: Rerun the dashboard setup wizard and remove some of the secondary status attributes.

KQZ8429E **Software server type "***software_server_type***" has already been defined in project "***project_name***".**

Explanation: Different agents should identify different types of software servers.

Operator response: Rerun the OSLC setup wizard and select a different software server type for one of the agents or subnodes.

KQZ8430E **The software server type "***software_server_type***" is the same for the base agent and subnode "***subnode_name***".**

Explanation: If an agent and subnode type both represent software servers, the type of server each represents must be different from the other.

Operator response: Change the software server types in the base agent or the subnode so they are not the same. You can do this by rerunning the OSLC setup wizard, or selecting the resource from the Outline view and changing the software server type.

KQZ8431E **The software server type "***software_server_type***" is the same for subnode "***subnode_name***" and subnode "***subnode_name***".**

Explanation: If two subnode types both represent software servers, the type of server each represents must be different from the other.

Operator response: Change the software server one of the subnodes so they are not the same. You can do this by rerunning the OSLC setup wizard, or selecting the resource from the Outline view and changing the software server type.

KQZ9000I **The agent has successfully completed startup processing.**

Explanation: This is an informational message only.

KQZ9001I **The agent is shutting down.**

Explanation: This is an informational message only.

KQZ9002I **Received Take action command** *<command>*

Explanation: This is an informational message only.

KQZ9003I **Starting the custom data provider client named '***client***'**

Explanation: This is an informational message only.

KQZ9004I **Restarting the custom data provider client named '***client***'**

Explanation: This is an informational message only.

KQZ9005I **Processing a dynamic configuration update request.**

Explanation: This is an informational message only.

KQZ9006I **Custom data client connected from system** *client*.

Explanation: This is an informational message only.

KQZ9007I **Agent shutdown request from data provider on socket** *socket*.

Explanation: This is an informational message only.

KQZ9999E **RKANDATV Member** *filename* **not found.**

Explanation: This is an informational message only.

Chapter 6. Agent trace logs

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 in a `logs` subdirectory on the host computer. See the following sections to learn how to configure and use trace logs:

- "Principal trace log files" on page 84
- "Example for using trace logs" on page 86
- "Setting RAS trace parameters" on page 87

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

IBM Software Support uses the information that is captured by trace logs to trace a problem to its source or to determine why an error occurred. Although the default configuration for trace logs is to be enabled, it can be disabled.

Overview of log file management

(Table 3 on page 84) provides the names, locations, and descriptions of RAS1 log files. The log file names adhere to the following naming convention:

`hostname_productcode_[instance_]kproduct_codeagent_timestamp-nn.log`

where:

- *hostname* is the host name of the machine on which the monitoring component is running.
- *product_code* is the last two characters of the product code (for example, for K33, it would be 33).
- *instance* is the instance ID of a multi-instance agent. The instance ID can be up to 26 characters long.
- *timestamp* is an eight-character hexadecimal time stamp that represents the time at which the program started.
- *nn* is a rolling log suffix. See "Examples of trace logs" for details of log rolling.

Single and multi-instance agents build differently formatted log file names. Multi-instance agents include the instance ID in the log file name. The following example is for a multi-instance agent that runs on `balayne`, with product code k11 and instance ID `inst1`:

`BALAYNE_11_inst1_k11agent_46c31514-01.log`

The following example is for a single instance agent that runs on `balayne`, with product code 13:

`inst1 BALAYNE_13_k13agent_46c49270-01.log`

Examples of trace logs

For example, if a monitoring agent is running on computer `server01` with the product code of K33, the RAS log file for a data source might be named:

`server01_33_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 data source might have a series of log files as follows:

```
server01_33_437fc59-01.log
server01_33_437fc59-02.log
server01_33_437fc59-03.log
```

As the program runs, the first log (*nn*=01) is preserved because it contains program startup information.
The remaining logs roll: when the set of numbered logs reaches a maximum size, the remaining logs are
overwritten in sequence.

Each time a program is started, a new time stamp is assigned to maintain a short program history. For
example, if the data source is started twice, it might have log files as follows:

```
server01_33_437fc59-01.log
server01_33_437fc59-02.log
server01_33_437fc59-03.log
server01_33_537fc59-01.log
server01_33_537fc59-02.log
server01_33_537fc59-03.log
```

Principal trace log files

(Table 3) contains locations, file names, and descriptions of trace logs that can help determine the source
of problems with agents.

Table 3. Trace log files for troubleshooting agents

System where log is located	File name and path	Description
On the Tivoli Enterprise Monitoring Server	• On Windows: The file `IBM Tivoli Monitoring` *timestamp*`.log` in the *install_dir*`\InstallITM` path. • On UNIX: The `candle_installation.log` file in the *install_dir*`/logs` path.	Provides details about products that are installed. **Note:** Trace logging is enabled by default. A configuration step is not required to enable this tracing.
	The `Warehouse_Configuration.log` file is in the following path on Windows: *install_dir*`\InstallITM`. On UNIX, the file is in the following path: *install_dir*`/Install`	Provides details about the configuration of data warehousing for historical reporting.
	The name of the RAS log file is as follows: • On Windows: *install_dir*`\logs\` `hostname_ms_HEXtimestamp-nn.log` • On UNIX: *install_dir*`/logs/` `hostname_ms_timestamp.log` **Note:** File names for RAS1 logs include a hexadecimal time stamp. Also on UNIX, a log with a decimal time stamp is provided: *hostname_productcode_timestamp*`.log` and *hostname_productcode_timestamp*`.pidnnnnn` in the *install_dir*`/logs` path, where *nnnnn* is the process ID number.	Traces activity on the monitoring server.

Table 3. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description
On the Tivoli Enterprise Monitoring Server	The name of the RAS log file is as follows: • On Windows: *install_dir*\logs\ hostname_cq_timestamp-nn.log • On UNIX: install_dir/logs/ *hostname_cq_timestamp-nn*.log **Note:** File names for RAS1 logs include a hexadecimal time stamp. Also on UNIX, a log with a decimal time stamp is provided: *hostname_productcode_timestamp*.log and *hostname_productcode_ 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 in the following path on Windows:*install_dir*\InstallITM path. On UNIX, the file is in the following path: *install_dir*/logs	When you enable historical reporting, this log file traces the status of the warehouse proxy agent.
On the computer that hosts the monitoring agent	The RAS1 log files are named *hostname_productcode_[instance]_k[productcode]* agent_*timestamp-nn*.log **Note:** 1. The files are, by default, in the *install_dir*\tmaitm6\logs path. 2. File names for RAS1 logs include a hexadecimal time stamp. 3. Multi-instance agents include the instance ID in the log file name.	Traces activity of the monitoring agent.
On the computer that hosts the monitoring agent that includes JDBC or JMX data sources	The JMX, JDBC, or Java log file is named as follows, depending on whether the agent uses JMX, JDBC, or both JMX and JDBC (Java): • For a single instance agent *KXX_JMX|JDBC|JAVA*_trace.log • For a multiple instance agent *KXX_JMX|JDBC|JAVA_instanceName*_trace.log	Traces activity of the data provider Java process for JMX, JDBC, or both.

Table 3. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description

The RAS1 log files are named *hostname_productcode_[instance_]_k[productcode]*agent_*timestamp-nn*.log and are in the *install_dir*\tmaitm6\logs path.
Note: File names for RAS1 logs include a hexadecimal time stamp.
Note: Multi-instance agents include the instance ID in the log file name.
 	
Definitions of variables:
    timestamp is time stamp whose format includes year (y), month (m), day (d), hour (h), and minute (m), as follows: **yyyymmdd hhmm**
    HEXtimestamp is a hexadecimal representation of the time at which the process was started.
    install_dir represents the directory path where you installed the IBM Tivoli Monitoring component. *install_dir* can represent a path on the computer that host the monitoring system, the monitoring agent, or the portal.
    instance refers to the name of the database instance that you are monitoring.
    hostname refers to the name of the computer on which the IBM Tivoli Monitoring component runs.
    nn represents the circular sequence in which logs are rotated. The range is 1-5, by default, though the first is always retained because it includes configuration parameters.		

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

Example for 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. The following example is from the log for a Tivoli Universal Agent data source that is created by the Agent Builder:

```
!47CC1929.0000!==========>  IBM Tivoli RAS1 Service Log   <=========
+47CC1929.0000  System Name: BALAYNE Process ID: 2152
+47CC1929.0000  Program Name: k01agent  User Name: SYSTEM
+47CC1929.0000  Task Name: k01agent  System Type: WinXP;5.1-SP2
+47CC1929.0000  MAC1_ENV Macro: 0xC112  Start Date: 2008/03/03
+47CC1929.0000  Start Time: 10:28:41 CPU Count: 2
+47CC1929.0000  Page Size: 4K  Phys Memory: 2047M
+47CC1929.0000  Virt Memory: 2048MPage Space: 3429M
+47CC1929.0000  Service Point: system.balayne_01 UTC Start Time: 47cc1929
+47CC1929.0000  ITM Home: C:\IBM\ITM ITM Process: balayne_01
+47CC1929.0000  Executable Name: C:\IBM\ITM\TMAITM6\k01agent.exe
+47CC1929.0000  KBB_RAS1: ERROR
+47CC1929.0000  KBB_RAS1_LOG: C:\IBM\ITM\TMAITM6\logs\BALAYNE_01_k01agent_47cc1929-.log
INVENTORY=C:\IBM\ITM\TMAITM6\logs\BALAYNE_01_k01agent.inv COUNT=03 LIMIT=5 PRESERVE=1 MAXFILES=9
+47CC1929.0000  KBB_ENVPATH: C:\IBM\ITM\TMAITM6\KQRENV
+47CC1929.0000 =================================================
(47CC1929.0000-2390:RAS1,400,"CTBLD")
+47CC1929.0000 Component: kbb
+47CC1929.0000 Driver: d7310a/3784490.1
+47CC1929.0000 Timestamp: Nov  6 2007 17:51:39
+47CC1929.0000 Target: wv7i386
(47CC1929.0001-2390:RAS1,400,"CTBLD")
+47CC1929.0001 Component: kdy
+47CC1929.0001 Driver: d7310a/3784490.23
+47CC1929.0001 Timestamp: Nov  6 2007 18:36:38
+47CC1929.0001 Target: wv7i386
(47CC1929.0002-2390:RAS1,400,"CTBLD")
+47CC1929.0002 Component: kns
+47CC1929.0002 Driver: d7310a/3784490.9
+47CC1929.0002 Timestamp: Nov  6 2007 18:20:58
+47CC1929.0002 Target: wv7i386
(47CC1929.0003-2390:RAS1,400,"CTBLD")
+47CC1929.0003 Component: ira
```

```
+47CC1929.0003 Driver: dev/3751458.660
+47CC1929.0003 Timestamp: Mar  3 2008 10:22:31
+47CC1929.0003 Target: wv7i386
(47CC1929.0004-2390:kbbssge.c,52,"BSS1_GetEnv") CANDLE_HOME="C:\IBM\ITM"
(47CC1929.0005-2390:kbbssge.c,52,"BSS1_GetEnv") CDP_DP_ACTION_TIMEOUT="20"
(47CC1929.0006-2390:kbbssge.c,52,"BSS1_GetEnv") CDP_DP_CACHE_TTL="30"
(47CC1929.0007-2390:kbbssge.c,52,"BSS1_GetEnv") CDP_PURE_EVENT_CACHE_SIZE="100"
(47CC1929.000A-2390:kbbssge.c,52,"BSS1_GetEnv") AGENT_REF_FILE="C:\IBM\ITM\TMAITM6\KQR.ref"
(47CC1929.000B-2390:query.cpp,698,"CtPreInit") AGENT_REF_FILE = C:\IBM\ITM\TMAITM6\KQR.ref
(47CC1929.000C-2390:query.cpp,241,"ApplicationXMLConfigParser::startElement") Returning
 service name = KQRCMA
(47CC1929.000D-2390:kbbssge.c,52,"BSS1_GetEnv") CANDLE_HOME="C:\IBM\ITM"
(47CC1929.000E-2390:kbbssge.c,52,"BSS1_GetEnv") AGENT_REF_FILE="C:\IBM\ITM\TMAITM6\K01.ref"
```

This example shows that the data source started up correctly. You can see the values for variables that can be used to configure the data source (CDP_PUSH_INTERVAL_SECS and CDP_NT_EVENT_LOG_GET_ALL_ENTRIES_FIRST_TIME).

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

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

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

For information about the **ras1log** tool, see the *IBM Tivoli Monitoring Troubleshooting Guide*.

Setting RAS trace parameters

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

Before you begin

To ensure that you understand log rolling and can reference the correct log files when you manage log file generation, see ("Overview of log file management" on page 83).

About this task

The Agent Builder agents and agent runtime use RAS1 tracing and generate the logs that are described in (Table 3 on page 84). The default RAS1 trace level is ERROR.

Specify RAS1 trace options in the *agent_name*ENV file on Windows systems, and in the *agentname*.ini file on UNIX systems.

Procedure

Use one of the following procedures:
- Optional: Manually edit the configuration file to set trace log preferences:
  1. Open the file which contains the trace options.
     - On Windows systems: *install_dir*\TMAITM6\K*PRODUCTCODE*ENV[_*instance*] or
       install_dir\TMAITM6_x64\K*PRODUCTCODE*ENV[_*instance*]
     - On UNIX and Linux systems: *install_dir*/config/.*productcode*.environment

2. Edit the line that begins with `KBB_RAS1=` to set trace log preferences. For example, if you want detailed trace logs, set the Maximum Tracing option:`KBB_RAS1=ERROR (COMP:kqz ALL) (UNIT:kra ALL)`

3. Edit the line that begins with `KBB_RAS1_LOG=` to manage the generation of log files:
   - `MAXFILES`: the total number of files that are to be kept for all starts of a program. After this value is exceeded, the oldest log files are discarded. Default value is 9.
   - `LIMIT`: the maximum size, in megabytes (MB) of an 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 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.

- Optional: For Windows operating systems only, you can use the following alternative method to edit trace log 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 menu in the **Enter RAS1 Filters** field or type a valid string.
   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 log 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 log files for all starts 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. The **KDC_DEBUG** setting and the Maximum error trace setting can generate many trace log messages. 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 report a restart of the monitoring agent so that your changes take effect.

What to do next

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. See the "Procedure" section to learn how to adjust file size and numbers of log files to prevent logging activity from occupying too much disk space.

Regularly prune log files other than the RAS1 log files in the `logs` directory. Unlike the RAS1 log files that are pruned automatically, other log types can grow indefinitely. For example, the logs in (Table 3 on page 84) that include a process ID number (PID).

The following list comprises the RAS1 trace parameters settings:
- No error tracing. `KBB_RAS1=-none`
- General error tracing. `KBB_RAS1=ERROR`
- Intensive error tracing. `KBB_RAS1=ERROR (COMP:kqz ALL)`

- Agent interaction with the Tivoli Enterprise Monitoring Server. KBB_RAS1=ERROR (UNIT:genericagent ALL) (UNIT:kra ALL)
- Trace data collection. KBB_RAS1=ERROR (UNIT: ALL)
- Trace Script data collection. KBB_RAS1=ERROR (UNIT:shell ALL) (UNIT:commandwithtimeout ALL)
- Trace Availability data collection. KBB_RAS1=ERROR (UNIT:availability ALL) (UNIT:winavailability ALL)
- Trace Windows Event Log data collection. KBB_RAS1=ERROR (UNIT:winlog ALL) (UNIT:eventlog ALL)
- Trace log file data collection. KBB_RAS1=ERROR (UNIT:logmonitor ALL)
- Trace SNMP data collection. KBB_RAS1=ERROR (UNIT:snmp ALL)
- Trace ICMP Ping data collection. KBB_RAS1=ERROR (UNIT:ping ALL)
- Trace CIM data collection. KBB_RAS1=ERROR (UNIT:cim ALL)
- Trace PerfMon data collection. KBB_RAS1=ERROR (UNIT:queryclass ALL)
- Trace WMI data collection. KBB_RAS1=ERROR (UNIT:wmi ALL)
- Trace separate collector interface. KBB_RAS1=ERROR (UNIT:custom ALL) (UNIT:CPS_Socket ALL) (UNIT:cpci ALL)

Note: The **KDC_DEBUG** setting and the Maximum error trace setting can generate many trace logs. Use them only temporarily, while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.

Chapter 7. Problem classification

Symptom descriptions and detailed workarounds for troubleshooting when you are using the Agent Builder or when you are working with your agent.

See the *Tivoli Monitoring: Troubleshooting Guide, GC32-9458* for general problem determination. Also, see the *IBM Tivoli Monitoring Messages Guide* for general IBM Tivoli Messages.

Troubleshooting: Agent Builder

(Table 4 on page 92) shows solutions for installation, configuration, and uninstallation problems.
- Agent Builder fails to start or starts but does not display its user interface
- Maximum data size exceeded
- Receive error when installing Tivoli Enterprise Monitoring support on Windows system
- Display name is not refreshed
- Demo CD problems
- The -console flag does not work
- No help is displayed when clicking help links within the Agent Builder
- AgentBuilder does not start on a 64 bit Linux system
- Linux Gtk library warning messages
- Problems launching the Agent Builder on a non-English system
- Remote service browsing error
- Key attribute missing
- Change command return code or script data provider executable
- Error when attempting to launch Eclipse
- Browsing processes or services on a remote system do not work
- When I generate an agent and omit the .bat or .cmd in the script data source command, the script does not run.
- Resource out of sync
- Parsing MIBs
- MIBs frequently have errors
- Agent Builder version on UNIX
- Adding new attributes to log file data source
- Agent Builder does not allow duplicate data source names in different subnodes
- CIM integer array value
- No CIM support for certificates
- How do I display large numeric values?
- Parse Log window characters corrupted
- Adding data source Browse button not active
- Agent Builder CIM Browser does not show CIM Classes for AIX OpenPegasus 2.6.1.
- Agent Builder CIM Browser does not show CIM classes for Solaris WBEM Server
- JDBC connection to zOS DB2® database is failing
- Specifying the internal_logon connection property for Oracle
- The Agent Builder uninstall ends with an error.
- Project default location error

- Product code and affinity errors not cleared
- Agent Builder script argument parameterization does not work.
- Error message in any of the Agent Builder wizards is truncated.
- JRE or JDK not available
- Installing the agent locally fails with error KQZ0208E
- iFixes applied to the Agent Builder are not removed when the Agent Builder is uninstalled
- Agent Builder workspace screen not responding in UNIX over a Cygwin Xserver
- Using the Parse function on the Parse Log window, returns incorrect results, such as no rows appear
- JMX browser fails to connect to WebLogic 10.x

Table 4. Problems and solutions for installation and use of the Agent Builder

Problem	Solution
Agent Builder fails to start, or starts but does not display its user interface, or fails to start test Agent, or terminates abnormally.	In the user home directory, delete the following files: - `p2` - `.agentbuilder_config` **Important:** On Windows systems the user home directory is in the `HOMEPATH` environment variable. On Linux systems the user home directory is in the `HOME` environment variable.

Maximum data size exceeded
 	
 When you save an agent, you might see the following error in the Problems View:
 `Data source DataSourceName exceeds the`
 `maximum data size of 8192 bytes`
	Tivoli Monitoring currently limits the amount of data that can be returned for each row in a table to 8192 bytes. For each data source in the agent, the Agent Builder computes the sizes of the attributes in the following ways:
	 - Only attributes marked `Display attribute in the Tivoli Enterprise Portal` are counted.
	 - Each 32-bit numeric attribute is 4 bytes. Each 64-bit numeric attribute is 8 bytes.
	 - For each string attribute, the value for maximum size is used (with a maximum value of 2048 bytes). Ensure that the sizes listed for string attributes are set to reasonable values (under 100 bytes).
	 - Any request for data from an attribute group causes collection of all the data. Defining large attribute groups can increase processor and memory usage in the monitoring system. Where the data does not need to be displayed together, form smaller groups of data to optimize the behavior of the system.

An error occurs when you install Tivoli Enterprise Monitoring support on Windows system I tried to install Tivoli Enterprise Monitoring support on a Windows Tivoli Enterprise Monitoring with an Agent Builder script, and received the following error: `F:\wspace1\CCMDB\export>installIra.bat` `f:\IBM\ITM6.2` `Install of K41 Agent successful.` `FIND: `VRMF='': No such file or directory`   `06200100 was unexpected at this time.`	Reset your PATH to ensure that the Windows **find** command is found first. It is possible that something was installed that is now the first **find** command in the PATH. For example, if you installed Cygwin (a set of UNIX tools for Windows). If Cygwin is first in your PATH, you hit the Cygwin **find** command rather than the built-in Windows **find** command.

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution
Display name is not refreshed If you are browsing to add a process or a service and select one, and then you select a different one before you click **OK**, the display name is not refreshed for the new process or service that is selected.	Delete the characters that are in the display name field, and then browse.
Demo CD problems I am running the demo CD as my Tivoli Monitoring system. I selected the managed node to browse. I am shown an unusual set of processes and UNIX operating systems is automatically selected for my process instead of Windows.	You selected the wrong agent. The Demo CD contains many agents which would not normally be found together on a system. Stop the other OS agents and browse by using the real Monitoring Agent for Windows. Alternatively browse by using a system that has a normal Tivoli Monitoring installation.

The **-console** flag does not work
 	
You receive a message:
`The installer is unable to run in graphical mode.`
`Try running the installer with the -console or`
`-silent flag`
 	
You try to run the installer with the **-console** flag, but it does not work.
	The silent installation does not support the **-console** option. It does, however, support the **-silent** option.

No help is displayed when you click help links within the Agent Builder
 	
On an AIX system, you might see the following messages:
 	
`The context help for this user interface element`
`could not be found. Open in dynamic help.`
 	
Clicking the **Open in dynamic help** link does not do anything.
	On some AIX and Linux systems, Eclipse is unable to determine the default system browser. To correct this issue, you must set the default browser in Agent Builder.

Agent Builder does not start on a 64-bit Linux system Agent Builder does not start on my 64-bit Linux system. No errors are displayed or logged.	Make sure that you have the prerequisite software installed. Agent Builder is a 32-bit application so the 32-bit version of the prerequisites must be installed.

Linux `Gtk` library warning messages
 	
Even after I install the latest Linux 32-bit libraries for Agent Builder I see the following messages:
`(Agentbuilder:10801): Gtk-WARNING **: Unable to`
`locate theme engine in module_path: "clearlooks",`
 	
`Gtk-Message: Failed to load module`
`"pk-gtk-module": libpk-gtk-module.so: cannot`
`open shared object file: No such file or`
`directory`
 	
`Gtk-Message: Failed to load module`
`"canberra-gtk-module": libcanberra-gtk-module.so:`
`cannot open shared object file:`
`No such file or directory`
	These messages can be ignored. The `pk-gtk-module` and `canberra-gtk-module` packages do not have to be installed.

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution

Problems running the Agent Builder on a non-English system
 	
When you run the Agent Builder on a non-English system, the JVM might have difficulty to determine the locale of the system. This issue prevents the Agent Builder from running.
	To get around this issue, edit `install_location/agentbuilder.ini` and add the following 2 lines:
	`-Dfile.encoding LOCALE_PREFIX`
	
	Where `LOCALE_PREFIX` is the prefix for the locale the system is running (that is, FR for French). Also, the `-vm` line and the line immediately after must remain the first two lines in the file. Add this option AFTER those lines but before the `-vmargs`line:
	`-vminstall_location/_jvm/jre/bin/javaw -Dfile.encoding LOCALE_PREFIX -vmargs`

Remote service browsing error A failure occurs when you enter the host name and IP address of the local system when you try to browse WMI or services remotely.	Browsing in this way is not supported. You receive an error that the builder was unable to open a connection to the host. If you want to browse WMI or services locally, select **localhost** from the list instead of entering the host IP address.
Key attribute is missing When you save an agent, you might see the following error in the Problems View: `Data source DataSourceName does not contain a key attribute.`	You must have key attributes in the following situation only: If the data source can return multiple rows of data, select an appropriate attribute or attributes as keys. If the data source can return only one row of data, select **Produces a single data row** for the data source. There are other side effects too. Situations can combine data from multiple attribute groups which are defined to return only one row.
Change command return code or script data provider executable file When you change a command return code or a script data provider executable file, newly defined return codes do not show up.	If you change the executable file, then you must copy the new executable file into the agent's project directory under the scripts subdirectory. Copying ensures that the new executable file is picked up when you regenerate the agent.
Error when you attempt to start Eclipse: Agent Builder fails to start and displays an error that points to a log file in the configuration directory. The log file contains: `No application id has been Found.`	There are two possible solutions: • If the log file contains:java.lang.ClassNotFoundException: org.eclipse.core.runtime.adaptor.EclipseStarter, delete the .agentbuilder_config and p2 directories from C:\Users\Administrator and restart Agent Builder • Otherwise, uninstall Agent Builder, and reinstall it in a fresh directory.
Browsing processes or services on a remote system do not work	If use the browse remote system function, the Tivoli Enterprise Monitoring Server, the Tivoli Enterprise Portal Server and the OS agent are required to be running. Restarting the Tivoli Enterprise Monitoring Server or starting it after the OS agent causes the OS agent to go offline. The agent goes offline until its heartbeat with the Tivoli Enterprise Monitoring Server is done. Alternatively the OS agent can be restarted.

Problem	Solution
When I generate an agent and omit the .bat or .cmd in the script data source command, the script does not run.	Scripts in Windows are frequently started without specifying the .bat or .cmd extension on the command line. Do not omit the .bat or .cmd in the script data source command.
Resource out of sync I edited my agent xml file outside the project. I then get this error when I open the project: `Unable to create this part due to an internal error.Reason for the failure: Resource is out of sync with the file system: /bounds/itm_toolkit_agent.xml.`	To fix the error, click the project and press **F5** to refresh. Then, close the Agent Editor and reopen it.
Parsing MIBs When I load my MIB into the Agent Builder, it did not parse. I see is something like the following messages: `KQZ0022E Unexpected error parsing MIB file D:\mibs\mymib.MIB.Stack trace: com.ibm.tivoli.monitoring.agentkit.AgentException: KQZ0022E Unexpected error parsing MIB file D:\mibs\mymib.MIB.at com.ibm.tivoli.monitoring. agentkit.actions.LoadInitialMIBData.run (Unknown Source)at org.eclipse.jface.operation .ModalContext$ModalContextThread.run (ModalContext.java:113)Caused by: java.lang. NullPointerExceptionat com.tivoli.snmp.metadata .MibParser.OTdefinition(MibParser.java:1198)at com.tivoli.snmp.metadata.MibParser.assignment (MibParser.java:1081)at com.tivoli.snmp. metadata.MibParser.mibModule(MibParser.java:599)`  , and other similar messages  `MibParser.java:1198` and `MibParser.java:1081` might point to other areas of the parser.	To get the MIB to load: The MIB parser that is used by the Agent Builder uses the grammar that is defined by ASN.1 to parse the MIBs. Some MIBs do not follow the grammar correctly. The parser can relax certain rules to accommodate the most common errors. The MIB must be corrected, but until that can be done you can turn off checking for common errors by doing the following steps: 1. On the Agent Builder menu bar, click **Window > Preferences**. 2. Click **IBM Tivoli Monitoring Agent Generator** in the selection pane. 3. Select one of the following options in the **MIB Parsing Options** list: **Allow types to start with lowercase letters** Allows types that people write in MIBs, such as values **Allow numeric named numbers** Allows numbers that start with uppercase letters **Allow underscore in value name** Allows underscore characters **Allow values to begin with uppercase letters** Allows various (technically) invalid things **Ignore duplicate MIBs** Turns off warning for duplicate MIB modules

Problem	Solution
MIBs frequently have errors	As many of these errors as possible are fixed by the Agent Builder. However, some errors are so severe that they cannot be corrected. In many cases, it is possible to edit the MIB, correct the file, and then attempt to import the MIB into the Agent Builder. As MIB errors are discovered, IBM, customers, and IBM Business Partners add information to the A&BSM Technical Exchange Wiki, IBM Tivoli AA&BSM Technical Exchange (http://www.ibm.com/developerworks/wikis/display/aabsmenbl/Home). The information indicates the MIBs on which errors were discovered and the corrections that can be imported into the Agent Builder. See Parsing MIBs earlier in this table.
Agent Builder version on UNIX The Agent Builder is installed on a UNIX system, and you cannot start the GUI to see the version.	The directory name that matches the following pattern contains the current version of Agent Builder: *install dir*\features\ com.ibm.tivoli.monitoring.agentkit_X.Y.Z. vYYYYMMDDHHmm or *install dir*\features\ com.ibm.tivoli.monitoring.agentkit_*
Adding new attributes to log file data source **Next field** is by definition a way to build a log record from a log file. The record is built in the order in which fields are encountered in the line that is being parsed. IBM Tivoli Monitoring requires that all new attributes be added to the end of an attribute group.	Generally, application logs are what they are and when they change they can change dramatically. It is also often necessary to support the new and old log file formats to correctly support current and old versions of the application. The best way to handle this issue in an agent is to add an attribute group that represents the new log file format. When the agent is deployed to a system, you normally configure the name of the file to be monitored in the appropriate configuration variable. Use the configuration variable so that only the old or new attribute group is used in a specific instance of the agent.
Agent Builder does not allow duplicate data source names in different subnodes In the portal Navigator Physical view, I want the same Navigator node name for data sources that are in different subnode types.	The Agent Builder prevents you from adding warehouse data from two different attribute groups that have the same name in the same agent. A possible workaround to get duplicate names in the Tivoli Enterprise Portal Navigator is to define Navigator groups in the subnode definition. You define in the subnode by using the name that you want to display in the portal. Move the data source into the Navigator group and the data source name is effectively hidden.
CIM integer array value Only the first value of my CIM Integer Array was returned.	The Agent Builder currently does not have an array data type. String Arrays can contain variable length data, all of the strings are concatenated into a single value that is separated by a comma (,). Verify that the overall length of the attribute is large enough to contain all of the expected values. The Integer data type attribute does not accept the, delimiter. Rather than convert the integer array to string data, only the first value in the integer array is returned.

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution
No CIM provider support for certificates No information is displayed in the Tivoli Enterprise Portal. The Agent Builder CIM provider does not support the use of certificates.	CIM provider support is provided only for base, plain HTTP, and HTTPS. The CIM server was configured to require SSL certificates for all communication. The only workaround is to reconfigure the CIM server to allow communication without the use of SSL certificates.
How do I display large numeric values? The browsers create all of my numeric attributes as signed 32-bit values when compatibility with IBM Tivoli Monitoring V6.2 is required. These 32-bit values do not work for unsigned data or large values that I want to collect.	See Negative or wrong attribute value for a technique to use derived attributes to display large numeric values by using signed 32-bit attributes.
Parse Log window characters corrupted Characters that are displayed in the **Results** area of the Parse Log window are corrupted. I expected to see my non-ASCII file contents, displayed correctly in the browser and in the portal after I deploy my agent.	The Agent Builder log file parsing does not support parsing files with names or contents that contain non-ASCII characters.
Browse not active when you add a data source When you add a data source, **Browse** is not active when the data source type is WMI, Perfmon, or Windows Event Log; and Agent Builder is running on Linux or AIX.	For the Agent Builder on Linux or AIX, you cannot use the Browse function when you are creating WMI, Perfmon, or Windows Event Log data sources. The Windows APIs must be available on the Agent Builder system to Browse these data sources. You can still define these types of data sources when you run the Agent Builder on Linux or AIX by specifying the data source information manually.

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution

Agent Builder CIM Browser does not show CIM Classes for AIX OpenPegasus 2.6.1.
 	
`Efix 644427.080123 for sysmgt.pegasus.cimserver.rte` - Fix for PAM stack overflow Vulnerability in OpenPegasus 2.6.1 for AIX is applied to the IBM Pegasus CIM Server.
	This issue is resolved in IBM Pegasus CIM Server V2.6.1.35
	
	You can display the current version of the IBM Pegasus CIM Server file sets by using the following file: `lslpp -l sysmgt.pegasus.cimserver.rte`
	
	Upgrade to IBM Pegasus CIM Server to 2.6.1.35 or later
	
	For current details, see the AIX Common Information Model overview (http://pic.dhe.ibm.com/infocenter/aix/v7r1/topic/com.ibm.aix.cim/doc/cim/overview.htm)
	
	OR
	
	Temporarily remove `EFIX 644427` to browse the IBM Pegasus CIM Server on a development CIM Server and allow browsing of the CIMOM.
	Note: Be sure that you have access to the `EFIX 644427.080123.epkg.Z` file to reapply the EFIX.
	
	Remove the `EFIX`:
	1. Stop **cimlistener** and **cimserver**:
	  • On an AIX system, with IBM Director Agent or Server installed:
	    `/opt/ibm/icc/cimom/bin/stopcimlist`
	    `/opt/ibm/icc/cimom/bin/stopcim`
	  • On an AIX system, without IBM Director Agent or Server installed:
	    `cimlistener -s`
	    `cimserver -s`
	2. Remove the efix:
	    `emgr  -r -L 644427`
	3. Start **cimserver** and **cimlistener**:
	  • On an AIX system, with IBM Director Agent or Server installed:
	    `/opt/ibm/icc/cimom/bin/startcim`
	    `/opt/ibm/icc/cimom/bin/startcimlist`
	  • On an AIX system, without IBM Director Agent or Server installed:
	    `cimserver`
	    `cimlistener`
	
	(continued on the next page)

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution

Agent Builder CIM Browser does not show CIM Classes for AIX OpenPegasus 2.6.1.
 	
(continued)
	Reapply the EFIX:
	
	1. Stop **cimlistener** and **cimserver**:
	  • On an AIX system, with IBM Director Agent or Server installed:
	    `/opt/ibm/icc/cimom/bin/stopcimlist`
	    `/opt/ibm/icc/cimom/bin/stopcim`
	  • On an AIX system, without IBM Director Agent or Server installed:
	    `cimlistener -s`
	    `cimserver -s`
	2. Install the `efix`:
	    `emgr -e /tmp/644427.080123.epkg.Z`
	3. Start **cimserver** and **cimlistener**:
	  • On an AIX system, with IBM Director Agent or Server installed:
	    `/opt/ibm/icc/cimom/bin/startcim`
	    `/opt/ibm/icc/cimom/bin/startcimlist`
	  • On an AIX system, without IBM Director Agent or Server installed:
	    `cimserver`
	    `cimlistener`

Agent Builder CIM Browser does not show CIM classes for Solaris WBEM Server. The Agent Builder CIM Browser connects to a Solaris WBEM Server, but when a Namespace is selected, the CIM Browser displays the following error: `KQZ0224E An unknown error occurred when attempting to connect to the CIM server on host hostname.`	This issue is reported to SUN and is a Vendor Limitation. There is an error in the Solaris WBEM CIMOM. The enumerateClasses method is logging a NullPointerException in the WBEM log. There is no workaround.
JDBC connection to z/OS® DB2 database is failing.	Make sure that you are using the correct set of JAR files. The z/OS DB2 connection fails if you are not using the JAR files that include the correct licensing information.

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution
Specifying the internal_logon connection property for Oracle How do I specify the internal_logon connection property for Oracle?	If you want to allow users to specify the internal_logon connection property, add the following configuration property to the agent XML file. Add this property to the runtime configuration section of the XML file after you create and saved the agent with at least 1 JDBC data source. Find the KQZ_JDBC_PASSWORD property and insert the following text after that property: <code><property defaultValue="NONE" editable="false" name="KQZ_JDBC_ORACLE_INTERNAL_LOGON" required="true" type="restricted"> <label msgKey="KQZ_JDBC_INTLOGON">Internal Logon</label> <description msgKey="KQZ_JDBC_INT_LOGON_D"> The Oracle user name when doing an internal logon or none to logon normally. </description> <values> <value name="NONE"> <label msgKey="KQZ_JDBC_LOGON_NONE">None</label> </value> <value name="sysdba"> <label msgKey="KQZ_JDBC_LOGON_DBA">sysdba</label> </value> <value name="sysoper"> <label msgKey="KQZ_JDBC_LOGON_OPER">sysoper</label> </value> </values> </property></code>
The Agent Builder uninstallation ends with an error. If the Agent Builder is running when you attempt to uninstall, the uninstaller ends with an error.	Close the Agent Builder and manually delete the Agent Builder installation directory to complete the uninstallation.
Project default location error On the New IBM Tivoli Monitoring Agent Project page, if you clear the **Use default location** check box, and then browse to, or type, the default location, Eclipse gives an error that the specified directory overlaps an existing workspace. If you type a subdirectory underneath, Eclipse gives an error that the directory overlaps an existing project.	If you want to use the default location, select the **Use default location** check box. Do not browse to, or type, the default location.
Product code and affinity errors not cleared In the Agent Builder Editor, if you modify the product code or affinity (company ID or agent ID) of an agent, Agent A, so that it overlaps with the product code or affinity of another agent, Agent B, in the workspace, an error is created against Agent A. If you then modify the product code or affinity of Agent B so that the product codes or affinities are now unique, the error still exists on Agent A.	1. Click **Project** > **Clean** from the Agent Builder menu bar. 2. Click **Clean projects selected**. 3. Select the project that contains Agent A and click **OK**. The agent is revalidated and the error marker is removed.

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution

Agent Builder script argument parameterization does not work.
 	
When you create a script agent, passing a runtime Parameter as an argument to the script at execution time does not work.
	The command line cannot include environment variables. Runtime parameters must be referenced inside the script.
	
	The command cannot be `script ${K51_PROCNAME}`
	
	Instead, inside the script, reference the variable:
	• On Windows:
	   `PROCNAME=%K51_PROCNAME%`
	• Linux or UNIX:
	   `PROCNAME=$K51_PROCNAME`

An error message in any of the Agent Builder wizards is truncated.	Resize the window to make it wider so that the entire message can be viewed.
JRE or JDK not available You receive the following message: `A Java Runtime Environment (JRE) or Java Development Kit (JDK) must be available in order to run Agentbuilder. No Java virtual machine was found after searching the following locations: C:\Program Files\IBM\ITM\ AgentBuilder/jre/jre/bin/javaw.exe.`	Open the *install_dir*/`agentbuilder.ini` file and modify any lines that have a leading space by removing the leading space.
Installing the agent locally fails with error message KQZ0208E When you generate the agent, install it locally and specify a password with special characters, the login to the monitoring server fails with error message:`KQZ0208E The specified user name or password is incorrect.`	The password cannot include special characters.
iFixes applied to the Agent Builder are not removed when the Agent Builder is uninstalled If you apply an interim fix to the Agent Builder, when you uninstall the Agent Builder, the interim fix is not removed. When uninstalling, an installer message informs you that it was unable to remove all directories.	Remove the interim fix directories manually before you reinstall the Agent Builder.
Agent Builder workspace screen not responding in UNIX over a `Cygwin Xserver` The Agent Builder workspace screen does not respond in UNIX over a `Cygwin Xserver`. When you start Agent Builder, the options on the workspace screen are unavailable and you are unable to do actions.	An Eclipse issue with the `Xming` and `Cygwin` tools and not an issue with the Agent Builder. There is no fix available.
Using the Parse function on the Parse Log window, returns incorrect results, such as no rows shown When you use the Parse function on the Parse Log window, incorrect results are returned, such as no rows shown.	The Test log file parser reads only the last 1,000 lines of the log file in tail mode. Make sure the data that you are trying to test for occurs in the last 1000 lines of your sample log file.

Table 4. Problems and solutions for installation and use of the Agent Builder (continued)

Problem	Solution
JMX browser fails to connect to WebLogic 10.x The JMX browser fails to connect to WebLogic 10.x. The configuration settings are correct, but connection errors in the `traceKQZ.log` file show that a `CORBA.MARSHAL` error occurred.	Copy the `wlclient.jar` and the `wljmxclient.jar` files from your WebLogic server installation into the `jre/jre/lib/ext` directory of the Agent Builder installation and restart Agent Builder. This action loads the WebLogic JAR files in the system class loader which makes sure the correct classes are loaded to create the JMX connection. After you create your attribute groups by using the JMX browser, you must remove these two JAR files and restart the Agent Builder.
When I click **Collect Data** in a Test window, no data is returned or the data is not what I expect.	Examples: Log file provider might not detect and process the file yet. Ping might report all zeros since the ping did not happen yet Click **Collect Data** a second time If this solution does not resolve the issue, you can click **Check Results**. The Data Collection Status window opens and shows you more information about the data collected. You can attempt further debugging by looking at the test log files.

Troubleshooting: Agents

A table that shows problems that might occur with your agents:

- Program fails
- Negative or wrong attribute value
- `ATTRIBUTE_ERROR` displayed in the Performance Object Status attribute group when testing the agent in Agent Builder
- JMX Notifications
- Locally configuring an agent fails on Windows
- Command line does not allow me to configure an agent
- JMX monitors
- JMX browser connecting to WebSphere® 6.1
- Error code for attribute group, but data being returned
- JMX data provider connecting to WebSphere 7.0
- JMX data provider connecting to Oracle WebLogic on AIX
- The agent display name is not used
- Title bar not displaying the workspace name
- The log file is not monitored properly
- Agents not translated
- RAS1 log errors
- Log file data mismatch
- Installed agent does not show up
- Situations not showing up
- Queries not showing up

- Error states the startagent command failed
- When running command return code, the return code is not accurately shown
- Attribute group's data missing from Tivoli Enterprise Portal
- Changing version number causes errors
- Changing product code, company identifier, or agent identifier causes problems
- A script provider behaves oddly when edited
- Core dump after editing the ref file
- The Tivoli Enterprise Portal does not show any columns or column headers
- Bad string values collected from SNMP are displayed in attribute groups
- No data in the Tivoli Enterprise Portal
- Cannot remove agent from the Tivoli Enterprise Portal
- Service monitoring returns zeros for metrics
- Trying to monitor a non-existent Performance Monitor object
- Trying to monitor a non-existent WMI class
- Agent runs a command return code but does not return data
- UNKNOWN status displayed when trying to monitor a service
- No data shown for an attribute group
- Do not see situations in the console
- Data being sent by the agent does not look like it should in the Tivoli Enterprise Portal
- A re-installed agent appears to be configured in Managed Tivoli Monitoring Services
- Do not see situations in the navigator tree
- Agent crashes
- Agent configuration hangs
- Subnode name unique
- Installing 2 agents with the same script name
- Agent Configuration stops
- SNMP attribute group not collecting data reliably
- An agent monitoring SNMP V2 events, does not receive traps.
- Windows commands not running as expected
- CIM data provider stops collecting data from AIX OpenPegasus 2.6.1 CIM Server
- Collecting metrics through Windows APIs
- CIM data provider stops collecting data from the Solaris WBEM Server
- CIM data provider intermittently fails to collect data from Solaris 9 WBEM Server
- CIM data provider stops collecting data from Solaris 10 WBEM CIM_FileSystem class
- CIM data provider cannot collect data remotely from Solaris 10 WBEM server after applying Solaris Patches
- Local configuration JRE warning
- Password is not stored when locally configuring the agent on a Windows system
- Connecting to Microsoft SQL Server using integrated authentication is failing
- Microsoft SQL Server and JDBC driver compatibility errors with Java Runtime Environment (JRE) version 1.6
- JDBC connections are failing to find my JDBC driver
- Agent support files still exist after uninstalling
- Navigator display in the Tivoli Enterprise Portal shows a combination of old and new nodes or shows the wrong data when you click on a node

- Agent installation fails for agents built with Agent Builder V6.2.2 or earlier
- Installing the agent or application support fails with error message: KQZ0208E
- Ping attribute group on Windows slow to respond
- SDA (self describing agents), problem uploading support.
- Authorization failures when using SSH public key authentication
- Running the installIraAgentTEMS.sh results in an error on UNIX
- Agent with SSH to Windows does not run a command
- On Windows, a mapped drive to a Ping, Log file, JMX, or JDBC configuration file cannot be read
- Missing or unexpected data for a socket attribute group in the Tivoli Enterprise Portal
- HTTP data provider does not properly handle URLs that use the https protocol
- Testing an agent in Agent Builder, but not getting results.
- Tivoli Enterprise Monitoring Server does not start
- Script data providers that use SSH are failing
- An inbound ping is not reaching my agent on Windows 2012 Server.
- An inbound SSH connection from a remote script data source is not reaching my agent on Windows 2012 Server.
- How can I find the available parameters to perform silent command line configuration of an Agent Builder agent?
- An agent that has a subnode is not listed in the Threshold Manager in IBM Performance Management console.
- In IBM Performance Management console, you click on a status overview (summary) dashboard to view details. The Attribute Details tab opens, and at the same time, the Status Overview tab is disabled, so you can not return to the overview dashboard.
- In IBM Performance Management, when you install a new version of your agent on a system where an older version was installed, an "agent is already running" error message is displayed.
- In IBM Performance Management, silent configuration of an agent fails. An "XML configuration result: Configuration failed on matching the data in the response file with the properties in the XML file" message is displayed.
- In IBM Tivoli Monitoring, an agent that monitors WebSphere Application Server MBeans fails. Tivoli Enterprise Portal shows no data from the agent, and might show a connection error or an OBJECT_NOT_FOUND error code in Performance Object Status.
- In IBM Performance Management, the console displays no data for an agent that was created using Agent Builder. Data for other agents that monitor the same host is displayed.

Table 5. Problems and solutions for agents

Problem	Solution

Program fails
 	
No data for a script provider or a command return code is unusable. You see the following in the trace log:
 	
`(46C44462.0000-184C:commandwithtimeout.cpp,278,`
`"CommandWithTimeout::threadMain") *Error:`
`Failure in call to CreateProcess() for script`
`script1 not.bat Error The system cannot`
`find the file specified.`
 	
This shows that it tried to run the command **script1** with the argument **not.bat**.
	If you call a program with spaces in the name, use quotation marks around the name so that it is not parsed by the command interpreter. For example, `this is a test.bat` argument becomes:
	
	`"this is a test.bat" argument`

Table 5. Problems and solutions for agents (continued)

Problem	Solution

Negative or wrong attribute value
 	
I created an agent that includes a number that I expect to be a large positive number, but I see a negative or incorrect number.
	Tivoli Monitoring 6.2 uses 32-bit signed integers to represent numeric values. A 32-bit signed integer can display values from -2,147,483,648 to 2,147,483,647. The value that you are trying to display overflowed the 32-bit signed number. In many cases, the values are traced to the log file and replaced with enumerations that indicate the value exceeds maximum or minimum. Overflows can usually be handled by creating another attribute that scales the large one to a more reasonable value.
	
	For example, if the number represents the size of the disk in bytes, it is more useful to use megabytes or even gigabytes. Use the following procedure to convert the value:
	1. Select the **Data Sources** tab in the Agent Builder.
	2. Right-click the data source.
	3. Select **New Derived Attribute...**
	4. Choose a new name. For example, for Size, you can add units like Size_MB.
	5. Add a description.
	6. Select the appropriate data type. For example, Counter is correct for a total size.
	7. Create the formula.
	   • Select the attribute. For example, Size.
	   • Convert the value appropriately. For instance, `Size/1048576` converts from bytes to megabytes
	
	You can now either leave the original attribute or hide it by selecting the attribute and clearing **Display attribute in the Tivoli Enterprise Portal**. Hide the original attribute if it is likely that it might overflow a 32-bit signed integer.
	
	Tivoli Monitoring V6.2.1 introduces 64-bit numeric attributes. Changing a 32-bit numeric attribute that is overflowing to a 64-bit value is a natural way to represent large numeric values.

`ATTRIBUTE_ERROR` displayed in the Performance Object Status attribute group when testing the agent in Agent Builder	If there is a data collection problem for a particular attribute from certain data sources, a test run of the agent in Agent Builder might display `ATTRIBUTE_ERROR` in the Performance Object Status attribute group. To diagnose the issue, review the trace log files named K*xx_datasource_*trace.log, for example, K25_JMX_trace.log. Agent Builder displays the log file location at the top of the window (when testing a single attribute group) or in the Attribute Group Test window (when testing the entire agent). The log file will usually contain error messages showing the issue in more detail. For example, it might contain an "attribute not found on MBean" error for JMX.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
JMX Notifications I want create a data source to receive notifications, but I cannot see an option to configure in this way.	When you use the browser, take note of the MBean information that is displayed in the browser panel for the MBean you are working with. If the MBean contains items in the Attributes tab, then you get an attribute group that contains those metrics. If the MBean contains items in the Notifications tab, you get an event attribute group that contains a standard set of metrics for a Notification object. If both tabs contain values, then you get attribute groups for each. If notifications are not defined for the MBean, the browser does not create the event attribute group. You can create the event attribute group manually by not clicking **Browse** to display the JMX browser. Instead, manually type in the Object Name pattern and click **Finish**. This action creates the same event attribute group that you get from the browser had notifications been detected. It also creates an attribute group to receive data with no attributes defined. This other attribute group can be deleted.
Locally configuring an agent fails on Windows An Agent Builder created agent that contains configuration properties requires Tivoli Monitoring to install the Java Runtime Environment. If the Monitoring Agent for Windows OS was installed by using the **tacmd createnode** command to create a Tivoli Monitoring v6.2 Fix Pack 1: Windows OS Agent, then the Java Runtime eEnvironment is not installed. On this system, you cannot locally configure any Agent Builder created agents that contain configuration properties.	The agent can still be configured remotely by using the Tivoli Enterprise Portal. The following solutions can be used to install the Java Runtime Environment that is needed by Tivoli Monitoring: • Install an IBM provided agent that requires the Java Runtime Environment. • Install the Monitoring Agent for Windows OS locally instead of using the **tacmd createnode** command. • Install the Tivoli Monitoring V6.2: Windows OS Agent by using the **tacmd createnode** command instead of the Tivoli Monitoring V6.2 Fix Pack1: Windows OS Agent.
Command line does not allow me to configure an agent I cannot use the **itmcmd config** command (or CandleConfig) to configure an agent that contains JMX, SNMP, or JDBC attribute groups.	You must have Tivoli Monitoring v6.2 Fix Pack 1 to configure an agent that contains JMX, SNMP, or JDBC attribute groups by using the **itmcmd config** (or CandleConfig) commands. You can use the GUI to configure the agent if an upgrade is not an option.
JMX monitors JMX Monitors are not working with the JBoss application server.	The following is needed to make JMX Monitors work. Copy the connJboss-1.0.jar file from *CANDLE_HOME*/TMAITM6/k*xx*/jars/common/connectors/jboss on Windows or *CANDLE_HOME*/dynarch/k*xx*/jars/common/connectors/jboss on UNIX to *JBoss_install*/server/default/lib. If you have a server configured other than the default server, the *default* part of the path is different for your server. If the JBoss server is running, it must be restarted after you copy this file.
JMX browser cannot connect to WebSphere 6.1 The JMX MBean browser cannot connect to WebSphere 6.1 with security enabled, when you use the SOAP connector protocol.	The browser can collect the MBean names by using the rmi connector protocol.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
Error code for attribute group, but data is being returned The Performance Object status error code for my JMX attribute group is ATTRIBUTE_ERROR. Data is being returned for the MBeans, so what does this mean?	A JMX attribute group that has an error code set to ATTRIBUTE_ERROR in the performance object status attribute group has one or more attributes that cannot be collected. This error not only indicates a problem with one or more attributes, but it is a performance issue as well. To determine which attributes are having a problem, look for the exceptions in the JMX trace log file. The exceptions typically indicate the class path cannot locate a certain class or the attribute object cannot be serialized. When you see this error, the attributes must be collected individually from the MBean Server instead of collecting all attributes in one remote call. This collection method can significantly affect the performance of the agent.
JMX data provider cannot connect to WebSphere 7.0 JMX data provider fails to connect to WebSphere 7.0 with security enabled, when you use the RMI connector.	An issue with the WebSphere Application Server. Upgrade to WebSphere 7.0.0.1 or later to resolve this connection issue.
JMX data provider cannot connect to Oracle WebLogic Server on AIX The JMX data provider fails to connect to the Oracle WebLogic Server when you run on AIX.	This connection problem is a limitation that is documented by Oracle WebLogic. Connect to Oracle WebLogic remotely from an operating system with a compatible Sun Java runtime environment. In this case, the agent must be configured to use the compatible Sun Java runtime environment instead of the IBM Java runtime environment.
The agent display name is not used When you look at the list of agents in the Tivoli Enterprise Portal, the agent name displays as a sequence of letters and numbers instead of the name that you have defined in Agent Builder.	Make sure that agent support files are installed on the Tivoli Enterprise Portal Server. the Restart the server. If you are using Tivoli Enterprise Portal Desktop Client, make sure that agent support files are installed on the client and restart the client. To install the files, unpack the agent package on the target system and run the installIraAgentTEPS.sh/bat script.
Title bar not displaying the workspace name When you look at a generated agent through the Tivoli Enterprise Portal, the title bar displays *Nav_Node - TEPS_Hostname - UserID* rather than *Workspace_Name - TEPS_Hostname - UserID*.	When an agent is generated, workspaces are not created by default. If no workspace is defined for an attribute group, the Tivoli Enterprise Portal displays a generated workspace for the attribute group that shows all attributes in a table view. The title bar of the Tivoli Enterprise Portal displays the Navigation Node ID because the workspace name is not defined. You can click **File** > **Save** to save the generated workspace as the default workspace. A workspace name is now displayed in the title bar.
The log file is not monitored properly If you build an agent with a log file data source, and all or part of the log file name comes from a Configuration Property, and that Configuration Property value contains a space, the log file is not monitored properly.	Enter the Windows short name for the file or path in the agent configuration. You can get the short name of any file or directory with the **DIR /X** command issued at a Windows command prompt.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
Agents not translated Agents that are created by Agent Builder are not translated when shown on the Tivoli Enterprise Portal.	The Agent Builder does not build language packs. This means that the text that is displayed in the Tivoli Enterprise Portal is in the language you used when you built the agent.
RAS1 log errors I see the following in the RAS1 log for my agent. What does it mean? `(46C30EA0.0000-2180:getprocesscmdline.cpp,387, "GetProcessCmdLine") Unable to read the process environment block. ReadProcessMemory returned 0. (46C30EA0.0001-2180:getprocesscmdline.cpp,589, "getPIDCommandLine") Failed to get process command line, pid(4) error: Only part of a ReadProcessMemory or WriteProcessMemory request was completed.`	This error can occur on some systems for the process that represents the *system* in Windows. The process environment block is not available for this process. System is a special process and normally is not one you are monitoring. If all of the data in your Availability table is completed, then this error does not represent a problem. You can verify by checking the PID printed in the trace against the PIDs for the processes you are monitoring.
Log file data mismatch A record from the log file is not displayed on the Tivoli Enterprise Portal. Or the last entry or last few entries on the Tivoli Enterprise Portal do not match the contents of the log record.	Check for error messages in the trace file, for example, `HOSTNAME_81_k81agent_465c087e-01.log`. Look for the following trace entries: `(465C08D7.0000-2A4:logmonitorqueryclass.cpp,506,"LogMonitorQuery Class::setInstanceData")Agent metric count and UA metric count do no match! Agent count=<7>, UA count=<6>.(465C08D7.0001-2A4:logmonitorqueryclass.cpp,561,"LogMonitorQuery Class::setInstanceData")UA ran out of values for agent metric! Agent name=<rest>.` The Agent count indicates the number of attributes that are expected to be completed from a log file record. The UA count is the number of records that the data provider parsed from the log record. A mismatch means that some of the attributes might be parsed from the log record. However, others might not because there was less data in the log record than expected.
Installed agent does not show up An installed agent does not show up in the Tivoli Enterprise Monitoring Services utility.	Select **View > Refresh** from the Manage Tivoli Enterprise Monitoring Services window.
Situations not showing up I expect the situations to be true but they are not displayed as true. Or, I expect my node to display the little red circle that indicates that situations are true. I checked and the data exceeded the threshold. Why do I not see the situation on my node in the navigation tree.	Some of the associations between nodes and situations are loaded when the Tivoli Enterprise Portal starts. Restart the Tivoli Enterprise Portal.
Queries not showing up The new queries are not showing up.	Install the agent and then recycle the Tivoli Enterprise Monitoring Server and Tivoli Enterprise Portal.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
Error states the **startagent** command failed An error on the Tivoli Enterprise Portal says that the **C:\IBM\ITM\InstallITM\Batch\kincli -startagent -akxx command failed**.	After you install Tivoli Monitoring on a Windows endpoint, the machine must be rebooted before it can successfully be a target of remote deployment, or the start, stop, and remove functions that are available on the Tivoli Enterprise Portal. The reason for this is that the Tivoli Monitoring installation changes the PATH of the system to include some DLLs that must be found for those functions to work. However, the services do not pick up those changes until the machine reboots.
When you run command return code, the return code is not accurately shown When you run the Windows command return code to run a command and analyze the return code, and the command is a `.bat` or `.cmd` script, the return code is not accurately shown. The script exits with something like `exit /b 2`.	To get this value, surround the target script with a script that calls the target script and then runs`"exit %ERRORLEVEL%"`.
Attribute group data is missing from Tivoli Enterprise Portal I built an attribute group by using a script source and I do not see any data in my Tivoli Enterprise Portal.	Read the log file and look for text that looks like: `(46543D0F.0019-1A0C:shellqueryclass.cpp,331, "internalCollectData") Missing metrics. Skipping row. expected 15 tokens, parsed 2. Input:<FINDSTR>, separator:<:>` This text indicates that your script returned data that did not match the defined format (in this case, items that are separated by a colon). It was attempting to parse the string that is contained within the first <> pair. Fix the script to return data in the correct format. You can test the result by editing the script in the agent directory because it calls the script each time it tries to collect data.
Changing version number causes errors If you have an agent that you created with the Agent Builder, and you modify it and change the version number, if you attempt to deploy the agent remotely with the new version, you get an error that says **KFWITM291E An agent configuration schema was not found.**	The Tivoli Enterprise Monitoring Server and Tivoli Enterprise Portal Server support must be installed again, even if you changed nothing but the version number. This error is caused by certain configuration files that contain the version number. You receive failures if the files with the new version number are not present.
Changing product code, company identifier, or agent identifier causes problems You have an agent that you created with the Agent Builder, and you modify it and change the product code, company identifier, or agent identifier after you created workspaces or situations.	All the situations and workspaces must be re-created.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
A script provider behaves oddly when edited For instance, you edit the script and add a sleep 30 to simulate a timeout. The timeout occurred as expected during the next refresh of the group. Then you take out the sleep 30 and refresh the group again. The calculated values are now all set to 0.	This behavior is because of the previous data point being lost.
Core memory dump after you edit the `.ref` file Core memory dump with a seemingly innocent modification to the `.ref` file. For example, splitting attributes of an element in the `.ref` file onto different lines still produces valid XML, but the agent coredumps.	Do not edit this file.
The Tivoli Enterprise Portal does not show any columns or column headers Navigator groups in an agent do not show any columns or column headers. Instead, an error is displayed in the view: `KFWITM220E Request failed during execution.` In addition to navigator groups that the user created, this error is also seen with internally generated navigator groups such as the Availability and JMX Monitors navigator groups.	When you define a navigator item, there can be more than one attribute group with a node in the navigation tree. When there is more than one attribute group, you must assign a query to a workspace. After you assign a query, you can see the data.
Bad string values that are collected from SNMP are displayed in attribute groups	This behavior happens for `OCTETSTRING` types where the value is binary data and not strings. Binary data is not translated for display. It is forwarded as the binary data.

No data in the Tivoli Enterprise Portal
 	
I have a script data source and I am not getting any data in the Tivoli Enterprise Portal.
	Change the setting for the trace to: `ERROR (UNIT:shell ALL)`
	
	If you see a trace like the following, your script is not returning the data in the expected format.
	`(45FEFE30.001F-D14:shellqueryclass.cpp,329, "internalCollectData") Missing metrics. Skipping row`
	`(45FEFE30.0044-D14:shellqueryclass.cpp,329, "internalCollectData") Missing metrics. Skipping row`

Cannot remove agent from the Tivoli Enterprise Portal When you try to remove an agent, you see that the agent is still listed in the desktop navigation view, but it is not available.	This problem occurs if the agent remains in the managed system list in IBM Tivoli Monitoring. Perform the following steps: 1. Select the **Enterprise** node, in the physical tree in the Tivoli Enterprise Portal. 2. Right-click **Workspace** > **Managed System Status**. 3. Select the entry for the agent. **Note:** The name is displayed in the second column. 4. Right-click and select **Clear offline entry**. 5. The element is removed from the tree in the Tivoli Enterprise Portal.

Table 5. Problems and solutions for agents (continued)

Problem	Solution

Service or process monitoring returns zeros for metrics
 	
When you create an agent to monitor Service availability, the column values are not correct. All metrics, including the Process ID, are zero.
 	
For example:
• For Services, you might receive the following information:
   `Status=UNKNOWN`
 	
   and zeros for the availability metrics.
• For Processes, you might receive the following information:
   `Status= PROCESS_DATA_NOT_AVAILABLE`
 	
   and zeros for the availability metrics except for Process ID.
	Ensure that the agent is being run under an Administrator ID.

Trying to monitor a non-existent Performance Monitor object The agent runs and tries to monitor a Performance Monitor object, but a status of `INACTIVE` is displayed along with the error code `OBJECT_NOT_FOUND`.	The Performance Monitor object does not exist in the system. Specify a Performance Monitor object that exists in the system, or install the monitored application that creates the Performance Monitor object.
Trying to monitor a non-existent WMI class The agent runs and tries to monitor a WMI class, but a status of `ACTIVE` is displayed along with the error code `NO_INSTANCES_RETURNED`.	The WMI class was not found and does not exist in the system. WMI collection displays the error message in the log each time the agent tries to collect the data. Specify a WMI class that exists in the system, or install the monitored application.

Agent runs a command return code but does not return data
 	
When your agent runs a command return code script, the end of the log might display the information such as the line in the following example:
`FACWIN5B_test_datasource_442816d1-02.log:`
`(4428171C.30A2-1A50:applicationpinglistelement.`
`cpp,100,"isApplicationAvailable")`
`Running Application Ping Command hello.bat`
 	
If this type of information is in the log and is the last to be displayed, the command return code script did not end normally. The agent is locked up and cannot return data.
	Investigate the trace log. An entry similar to this example indicates that the command return code has not run to completion.
	
	Amend your command return code so that it is completed in a reasonable amount of time (for example, no more than 10 seconds).

UNKNOWN status is displayed when you try to monitor a service You try to monitor a service but the message `Status=UNKNOWN` is displayed, even though you already verified that the agent has Administrator privileges.	The service is not installed on the system. When the view is being built for the Availability table, rows where the status is `Unknown` must be filtered out to prevent confusion. Filtering rows out is especially needed when an application is composed of a set of optional services. The lack of a service is not an error in this case; it is normal.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
No data is shown for an attribute group You try to monitor a data source but no data is shown from an attribute group that collects data.	If the systems used for developing and testing the agent are different, the WMI classes and the Performance Monitor objects can be different too. Develop and test the agent on the same version of Windows and the same version of the monitored application that you want to manage.
Do not see situations in the console I installed my agent, situations, and workspaces. I configured the agent and started it. I see it in the Tivoli Enterprise Portal, but I do not see the situations in the navigator tree or the Situation Event Console. I checked, and the situations are associated with the correct nodes.	Restart the Tivoli Enterprise Portal.
Data being sent by the agent does not look like it can be in the Tivoli Enterprise Portal The data looks like the attributes are not being parsed in the correct places.	Reinstalling Tivoli Monitoring is the safest way to ensure that you do not introduce incompatibilities between the phases of your development. **Note:** The agent builder includes features to prevent you from introducing these types of changes into later versions of your agent. These features ensure that you do not have this type of problem as you build and deploy updates to an agent.
The status for a reinstalled agent indicates that the agent is configured in Managed Tivoli Monitoring Services When you develop an agent, you likely generate, install, test, update the agent and then generate, install and test again. When you follow these actions, the agent status indicates that the agent is configured in Managed Tivoli Monitoring Services after the agent is reinstalled.	If you modified the agent configuration, then reconfigure the agent, and restart.
Do not see situations in the navigator tree I installed my agent, situations, and workspaces. I configured the agent and started it. I see it in the Tivoli Enterprise Portal, but I do not see the situations in the navigator tree. They are not associated with the correct node. (I right-click on the node and select the situations, but they do not show in the default list.)	When you create the situation on a live system, it is automatically distributed to the agent by using the host name. This host name is not available in every environment. So you must distribute the situation to a generic managed system list that exists when the agent is installed. Distribute the situations to the CUSTOM_*app_name*00 Managed System List, and reimport the situations. Then rebuild the Solution Installer image, and reinstall the Tivoli Enterprise Monitoring Server support for the agent.

Agent fails
 	
One reason this behavior can occur is that the ICCRTE_DIR might not be set in the ENV file on Windows systems.
	cygwin might be installed so that ICCRTE_DIR is set as:
	`ICCRTE_DIR=`
	
	The Kxxinstall.log has the following text that shows the problem:
	`find: ICCRTE_DIR=: No such file or directory`
	
	You can fix this problem by taking cygwin out of the path and setting ICCRTE_DIR manually.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
Subnode names Subnodes from different agent instances have the same managed system name.	The Managed System Name for a subnode consists of *2 letter agent Product Code*:*first 24 characters of the Subnode ID*:*3 letter Subnode Type* The first 24 characters of subnode IDs must be unique for all instances of the subnode type in the IBM Tivoli Monitoring installation. The agent automatically adds a prefix `PC` to prevent the subnodes from colliding with subnodes created by other agents. It automatically appends the subnode type to prevent collisions with other subnode types in the same agent. It uses the first 24 characters of the Subnode ID (which you control) as the final token. No part of the Agent Instance or the Agent Host System is used in constructing the Subnode Managed System Name. By using the same Subnode ID in 2 instances of the Agent, the Managed System Names collide. This name collision happens even for Agent Instances hosted on separate systems. The result is the subnodes do not function.
Installing 2 agents with the same script name On Windows operating systems, when two different agents are installed on the same Tivoli Enterprise Monitoring Agent, and they both have a script with the same name, the script from the last agent that was installed or deployed overwrites any existing scripts of the same name. Scripts are copied into the `instdir\tmaitm6` directory without a warning.	There is no solution. The files are copied into the TEMA directory so that they are all in a consistent place and easily accessed by the agent and each other. The situation is the same for Windows and UNIX systems.
Agent Configuration stops When you deploy or configure an agent that contains subnodes and requires a minimum IBM Tivoli Monitoring version of 6.2.1 on a Tivoli Enterprise Monitoring Agent that has a IBM Tivoli Monitoring version earlier than 6.2.1, configuration might stop.	1. Upgrade the OS agent on the target system to the prerequisite for the agent, version 6.2.1 or later. 2. Change the **Minimum ITM version** field to 6.2 and rebuild the agent, or upgrade to Tivoli Monitoring 6.2.1 or later. The subnode configuration parameters do not have User Configurable Initial Values, although default values might still be assigned when you build the agent. You also cannot override configuration parameters that are not explicitly listed in the subnode configuration overrides section. This issue can be addressed in 2 ways: • Configure multiple instances of the agent. Each instance can provide a different set of values for parameters that are not included in the subnode overrides. • Rebuild the agent so that the Subnode Configuration Overrides contain all parameters that might require to be overridden.

Table 5. Problems and solutions for agents (continued)

Problem	Solution

SNMP attribute group not collecting data reliably
 	
Data is collected intermittently or not at all. The SNMP version and credentials are configured correctly The Performance Object Status Error Code for the attribute group shows `NO RESPONSE RECEIVED`.
Note: This issue applies to SNMP attribute groups, so the Object Type in the Performance Object Status table is SNMP.
 	
The agent trace file shows the following message:
`Timeout occurred. No response from agent.`
 	
Here is a sample entry: `(48A18C71.000A-`
`12:snmpqueryclass.cpp,1714,"internalCollectData")`
`Timeout occurred.  No response from agent.`
	The IBM Tivoli Monitoring SNMP data provider is multithreaded to enhance performance. The SNMP data source that is being monitored might not be able to respond to multiple incoming requests in a timely manner. There are tuning options that can improve reliability of data collections:
	
	Reduce the thread pool size
	The default thread pool size is 15. Try reducing the size to 5. This setting can be adjusted in the agent ENV file by setting the CDP_DP_THREAD_POOL_SIZE environment variable.
	
	Increase the SNMP Response timeout
	The default SNMP timeout is 2 seconds. Try increasing the timeout to 6 seconds. This setting can be adjusted in the agent ENV file by setting the CDP_SNMP_RESPONSE_TIMEOUT environment variable.
	
	Reduce the number of SNMP retry attempts
	The default number of SNMP retry attempts is 2. Try reducing the size to 1. This setting can be adjusted in the agent ENV file by setting the CDP_SNMP_MAX_RETRIES environment variable.
	For more information about setting agent environment variables, see (Chapter 4, "List of environment variables," on page 15).

An agent monitoring SNMP V2 events, does not receive traps.
 	
The MIB for the monitored device indicates the enterprise OID for the trap ends with a ".0". The received SNMP V2 traps contain the snmpTrapOID.0 varbind with a value of `enterprise OID.specific type`.
 	
Example: The received snmpTrapOID is:
`1.3.6.1.4.1.1302.3.8.10.2.1.`**`0.6`**
 	
Enterprise OID defined in the MIB for this trap:
`1.3.6.1.4.1.1302.3.8.10.2.1.`**`0`**
	The Agent Builder SNMP event receiver follows RFC 2089 so it can handle SNMP V1 and V2 traps. This RFC states that the last token of the snmpTrapOID.0 varbind is the specific trap field. This token and the preceding token if it is a 0 is removed from snmpTrapOID.0 to create the enterprise field. If your MIB includes enterprise OIDs that end with a `.0` but receives traps with the last two tokens that are removed from the snmpTrapOID, varbind does not match the enterprise OID in the MIB. To fix, you must make the following modification to your agent:
	• Edit the agent XML and find the lines that look like:
	– `global_snmp_event_settings_for_group`
	`oids="1.3.6.1.4.1.1302.3.8.10.2.1.`**`0`**`-6"`
	• Delete the `.0` (including the dot), so it now looks like:
	– `global_snmp_event_settings_for_group`
	`oids="1.3.6.1.4.1.1302.3.8.10.2.1-6"`
	• Finally regenerate and reinstall the agent.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
Windows commands not running as expected Take Action command does not run Windows command as expected. Availability Functionality Test does not run Windows command as expected. Script data source does not run Windows command as expected.	The mechanism that is used to start a process in Take Action commands, and agent runtime data providers is the native Windows process management API, CreateProcess(). With this command you can start processes that are implemented in `.bat`, `.cmd`, or `.exe` files. Windows implements several common command functions as internal commands in the shell and not as programs. These include commands like `echo` and `dir` (common commands that are used to test script execution). Since these commands are not programs, they cannot be started with createProcess(). To call these commands, create a `.bat` or `.cmd` file that contains the commands. It is possible to start the command processor and provide the built-in command as an argument, as shown in the following example: `cmd /c "echo val1;1;val2;2"` Remember that you are collecting the return code from `cmd`, not `echo` in this example.
CIM data provider stops collecting data from AIX OpenPegasus 2.6.1 CIM Server. Data collection resumes if the AIX CIM Server is stopped and restarted.	This issue is resolved in IBM Pegasus CIM Server V2.6.1.35 You can display the current version of the IBM Pegasus CIM Server file sets by using `lslpp -l sysmgt.pegasus.cimserver.rte` Upgrade the IBM Pegasus CIM Server to 2.6.1.35 or later For current details, see the AIX Common Information Model overview (http://pic.dhe.ibm.com/infocenter/aix/v7r1/topic/com.ibm.aix.cim/doc/cim/overview.htm)
Collecting metrics through the Windows APIs	To collect metrics through the Windows APIs, the agent must be hosted on a Windows operating system. Remote registry administration must be enabled on the remote systems.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
CIM data provider stops collecting data from the Solaris WBEM Server.	Several Solaris patches are required to achieve a stable Solaris WBEM CIM Server. Minimum versions that are required are: Solaris 9:Patch Synopsis • 112945-46 WBEM Patch (Sparc) • 114193-36 WBEM Patch (X86) • 116807-02 SMC Security Patch (Sparc) • 116808-02 SMC Security Patch (X86) • 114501-01 DRM Provider Patch (Sparc) • 114502-01 DRM Provider Patch (X86) • 114503-14 User Manager (VUserMgr.jar) Patch (Sparc) • 114504-14 User Manager (VUserMgr.jar) Patch (X86) • 114711-03 Disk Manager (VDiskMgr.jar) Patch (Sparc) • 114712-03 Disk Manager (VDiskMgr.jar) Patch (X86) • 112943-09 Volume Management (VVolMgr.jar) Patch (Sparc) [DiskSuite/SVM] • 114192-06 Volume Management (VVolMgr.jar) Patch (X86) [DiskSuite/SVM] Solaris 10:Patch Synopsis • 119313-22 WBEM Patch (Sparc) • 119314-23 WBEM Patch (X86) • 121308-14 Console Patch (Sparc) • 121309-14 Console Patch (X86) • 119315-14 Solaris Management Applications Patch (Sparc) • 119316-14 Solaris Management Applications Patch (X86) • 124188-02 Trusted Solaris Attributes Patch (Sparc) • 124189-02 Trusted Solaris Attributes Patch (X86)
CIM data provider intermittently fails to collect data from Solaris 9 WBEM Server after all patches are applied.	This issue is reported to Sun Microsystems and is a vendor limitation. If you are running a typical multi-threaded agent against few remote systems, the agent might send all of the requests concurrently to a single WBEM CIM Server. The CIM Server might not handle all requests. In a typical environment, with multiple remote CIM Servers, the requests are spread out across systems and this problem does not occur. Set the following environment variable in the agent env or inifile: CDP_DP_LOCK_CIM_ACCESS=YES When CDP_DP_LOCK_CIM_ACCESS=YES is set, the agent serializes the CIM requests that it sends. The lock covers the lifespan of the request to the other system. When the request is received, the agent unlocks and then processes the result. **Note:** This flag can have a negative effect on the scale of the agent. Use this flag only when it is necessary.

Table 5. Problems and solutions for agents (continued)

Problem	Solution

CIM data provider stops collecting data from Solaris 10 WBEM CIM_FileSystem class.
 	
The Performance Object Status for this attribute group reports GENERAL ERROR.
	This issue is reported to SUN and is a Vendor Limitation. There is an error in the Solaris WBEM CIMOM. Requests for the CIM_FileSystem Class log this error in the WBEM log:
	
	`nfs_mntinfo: Can't access mnttab.`
	`Too many open files`
	`CIM_ERR_FAILED:`
	`nfs_get_mount_list Failed.`
	
	The workaround is to collect data from the `Solaris_LocalFileSystem` class, or to recycle the WBEM CIM Server.

CIM data provider cannot collect data remotely from Solaris 10 WBEM server after you apply Solaris Patches: • `121308 Console Patch (Sparc)` • `121309 Console Patch (X86)`	If you are running `Solaris 10 6/06` or earlier, you must modify your WBEM configuration file to allow remote connections after you install patch 121308-XX. See the following SunSolve document for detailed information: 　Document ID: 211275 　Title: *Solaris[TM] 10 WBEM only listens to port 898 on localhost*
Local configuration JRE warning Locally configuring an agent displays this warning: `Kincfgexit Java Runtime Environment was not detected! Extended agent configuration is disabled - if remote configuration for the agent is supported, complete the process using the Tivoli Enterprise Portal.`	The Monitoring Agent for Windows OS was deployed by using **tacmd createnode**, so no Java was installed on the local system. The agent is configured enough to allow it to connect to the Tivoli Enterprise Monitoring Server by using the default agent configuration parameters. Start the agent to allow it to connect to the Tivoli Enterprise Monitoring Server. You can then complete the configuration by using the Tivoli Enterprise Portal. Optionally, you can install a supported JRE locally to configure the agent by using the Manage Tivoli Enterprise Monitoring Services interface. This problem is known to occur on 6.2.2 releases. Also, use the steps in the following problem: Password is not stored when locally configuring the agent on a Windows system.

Password is not stored when locally configuring the agent on a Windows system	When the Java Runtime Environment is installed by Tivoli Monitoring, a special patch is applied to encrypt the password. When the JRE is manually installed, this patch is not applied. If you manually installed the JRE, do the following steps so that passwords are correctly encrypted:
	1. Copy the following 3 files from the `%CANDLE_HOME%\InstallITM` directory to the `C:\Program Files\IBM\Java50\jre\lib\security` directory:
	　`java.security`
	　`local_policy.jar`
	　`US_export_policy.jar`
	2. Reconfigure the agent to correctly encrypt the password and store it in the configuration file.

Table 5. Problems and solutions for agents (continued)

Problem	Solution

Connecting to Microsoft SQL Server by using integrated authentication is failing	You can connect to a Microsoft SQL Server without a user ID or password by using integrated authentication from Microsoft. This only works on Microsoft Windows operating systems and requires that you have a JDBC driver that supports integrated authentication. Integrated authentication can be used for JDBC connections in the Agent Builder browser or in the agent run time.
	
	• To connect by using the JDBC browser, make sure the JDBC driver authentication dll file is present somewhere in the system path of the computer. Start Agent Builder after the dll file is in the path. After Agent Builder is running, you can use the JDBC browser without specifying a user ID or password in the connection properties dialog box to connect to a Microsoft SQL Server by using integrated authentication. Integrated authentication uses the current user's account to verify the authentication.
	
	• The agent run time can connect to a Microsoft SQL Server by using integrated authentication by doing the following steps:
	
	  – Make sure that the JDBC user name and JDBC password configuration properties are changed so the Required check box is not selected in the Runtime Configuration editor tab.
	
	  – The authentication dll file that comes with the JDBC driver must be in the path of the system. Alternatively when you configure the agent, include a JVM argument in Java properties that specifies the location of the user authentication dll file. for example: `-Djava.lib.path=E:\sqljdbc_1.2\enu\auth\x86`
	
	  – When you configure the agent, do not specify a user name or password in the configuration properties for JDBC.

Microsoft SQL Server and JDBC driver compatibility errors with Java Runtime Environment (JRE) version 1.6	Microsoft requires you to use the JDBC 4.0 driver JAR file `sqljdbc4.jar` when you use Java Runtime Environment (JRE) version 1.6. This driver must be used with any JRE version 1.6 or newer. If you use a JRE version 1.5, you must use the older JDBC JAR file`sqljdbc.jar`.
JDBC connections are failing to find my JDBC driver JDBC connections are failing to find my JDBC driver that was added to the class path.	Make sure that the JDBC driver is compatible with the JRE that you are using. JDBC 4.0 drivers are compiled with Java 1.6. To use a JDBC 4.0 driver, the JRE that you configure the agent to use must be at least Java 1.6. Agent Builder uses Java 1.5, so you must use a JDBC driver that is compatible with Java 1.5 to use the JDBC browser in Agent Builder.

Table 5. Problems and solutions for agents (continued)

Problem	Solution

Agent support files remain after you uninstall it.
 	
After you uninstall an agent, the agent support files remain on the system.
	The support files for the Tivoli Enterprise Monitoring Server and the Tivoli Enterprise Portal are not removed by uninstalling the agent.
	1. Remove Tivoli Enterprise Monitoring Server Application support by completing the following steps:
	   a. Use Manage Tivoli Enterprise Monitoring Services.
	   b. Select **Tivoli Enterprise Monitoring Server**.
	   c. Right-click and select **Advanced**.
	   d. Select **Remove TEMS application support**.
	   e. Select the agent to remove its application support.
	2. Remove the agent from the Tivoli Enterprise Portal by using the following procedure:
	   a. Ensure that your Tivoli Enterprise Monitoring Server and Tivoli Enterprise Portal Server are up and running.
	   b. Log on to your Tivoli Enterprise Portal client.
	   c. From the Tivoli Enterprise Portal client Physical Navigator views, right-click **Enterprise** and select **Workspace** > **Managed System Status**. The Managed System Status workspace is displayed.
	   d. Select all of the IBM Tivoli Managed Systems for your agent.
	   e. Right-click and select **Clear off-line entry**, which clears all of the entries from that table.

Navigator display in the Tivoli Enterprise Portal shows a combination of old and new nodes or shows the wrong data when you click a node When you remove attribute groups, rename them, or reorganize existing groups into or out of navigator groups, the display in the Tivoli Enterprise Portal might show a combination of old and new nodes.	If you are using Agent Builder 6.2.1.2 or later, resolve this issue by restarting the Tivoli Enterprise Portal Server and then, restart the Tivoli Enterprise Portal.
Agent installation fails for agents that are built with Agent Builder V6.2.2 or earlier For agents built with Agent Builder V6.2.2 or earlier, installing the agent might prevent other agents from being successfully installed. If the TECLIB directory does not exist in TMAITM6 when the Agent Builder agent is installed, then a file is created with the name TECLIB. When subsequent agents attempt to create files in the TECLIB directory, the agent installation fails.	Perform the following steps: 1. Rename the file from `TECLIB` to `kXX.baroc`, where *XX* is the two-character product code for the agent to which the file belongs. 2. Create a directory that is called `TECLIB` and copy the renamed `kXX.baroc` file into the newly created `TECLIB` directory. 3. Try the installation, or deployment of the agent that failed, again.
Installing the agent or application support fails with error message: `KQZ0208E` When you install the agent or application support and specifying a password with special characters, the login to the monitoring server fails with error message: `KQZ0208E`. The specified user name or password is incorrect.	The password cannot include special characters.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
SDA (*self describing agents*), Problem uploading support. I am developing an agent by using Agent Builder and I am using SDA (*self describing agents*). It uploaded my support one time, but it does not seem to be doing it anymore. What can I do?	You can increment the agent version number. or you can use `tacmd deleteappinstallrec -t` *XX* `-v` *version* (*XX* is the two-character product code for the agent. *version* is an 8 digit long number, such as 06230000). This command deletes the tag that tells the system it is uploaded.
Ping attribute group on Windows slow to respond It is a long time before I start getting data back from my ping attribute group on Windows.	Name resolution on Windows can take about 5 seconds to timeout if an IP address does not resolve to a host name. If you defined several devices that have this name resolution issue the ping attribute group takes longer than expected to initialize. To prevent this problem, make sure the devices you define can be resolved in DNS or by using entries in your local host file.

Authorization failures when you use SSH public key authentication	Check the agent log file. An error message similar to the following one, indicates that the agent process cannot open the private key file. This error might happen on Windows systems since the agent runs as a service that might not be able to access another users private key file. Resolve this problem by making sure the agent process runs as a user that can read the private key file.
	
	The following is an example of an error message when the agent process cannot open the private key file:
	`(4C6D417B.0048-`
	`1230:userauth.c,631,"file_read_privatekey") -16 -`
	`Unable to initialize private key from file`

Running the `installIraAgentTEMS.sh` results in an error on UNIX
 	
Running the `installIraAgentTEMS.sh` results in the following error on UNIX: `Installation failed. Please see the log in /opt/IBM/ITM/logs/`*product_code*`_TEMSInstall.log`
 	
The end of the *product_code*`_TEMSInstall.log` contains the following lines:
 	
`. . .`
`+ rm -rf /tmp/k4s`
`rm: 0653-610 Cannot remove current directory /tmp \`
`/k4s.`
`+ [ -d /opt/IBM/ITM//tables/cicatrsq/TECLIB ]`
`+ cp ./ira/agent/common/k4s.baroc /opt/IBM/ITM// \`
`tables/cicatrsq/TECLIB/k4s.baroc`
`cp: ./ira/agent/common/k4s.baroc: A file or \`
`directory in the path name does not exist.`
`+ fail`
`~`
	Extract your agent package into a directory other than /tmp/*product_code,* where *product_code* is in lowercase.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
Agent with SSH to Windows does not run a command An agent with SSH to Windows, does not run a command, or, the agent runs the command with SSH to Windows with no effect.	To run a remote command to a Windows host, you must have a Linux like shell environment installed. Cygwin is an example of a Linux like shell environment. To verify whether a shell environment exists, SSH or log on to the remote host and enter the command: `PATH=$PATH:. `*`<command>`* If the command runs, then a shell environment exists.
On Windows, a mapped drive to a Ping, log file, JMX, or JDBC configuration file cannot be read On Windows, a mapped drive to a Ping, log file, JMX, or JDBC configuration file cannot be read. The agent runs as a service and cannot see the mapped drives.	On Windows, do not use a mapped drive to store files that are required by the agent.
Missing or unexpected data for a socket attribute group in the Tivoli Enterprise Portal There is missing or unexpected data for a socket attribute group in the Tivoli Enterprise Portal.	Check the agent log if there are missing rows of data for a socket attribute group or if the data is not as expected. If there is missing or unexpected data, check the log even if the Performance Object Status for the attribute group displays `NO_ERROR`, as `NO_ERROR` is displayed if any valid rows were returned.
The HTTP data provider does not properly handle URLs that use the https protocol This problem occurs when you use an IBM Java run time on Solaris or HP-UX systems. You know that you have this problem if the Tivoli Enterprise Portal shows `http://` before each of your `https` URLs. For example, http://https://website.ibm.com	This problem can be solved in one of 2 ways. One solution is to add the following parameter to the `JVM arguments` runtime configuration property: `-Djava.protocol.handler.pkgs=com.ibm.net.ssl.www2.protocol` Another solution is to use a Java run time that was not provided by IBM if you have one available on the system.
I am testing my agent in Agent Builder and I do not seem to be getting any results. Performance Object Status shows `Timed Out` (and possibly some other values that indicate there might be a problem)	Sometimes the trace settings can slow the agent down in the test mode enough that data is not visible in the builder. This problem is most common in data sources like SOAP, JMX, and JDBC that use a Java provider. Lower your `Java Trace Level` setting by choosing a value higher in the list. Usually agents work with a trace level of `DEBUG_MID`. Sometimes it is necessary to set the trace level to `ERROR` (which is the value that is used when the agent is installed).
The Tivoli Enterprise Monitoring Server does not start and I receive a message that the number of installation packages exceeds the maximum of 512.	Install an uninitialized `QA1CDSCA` definition file that causes the Tivoli Enterprise Monitoring Server to extend the space that is used for application definitions. For more information about obtaining and installing the file, see Installed packages exceed the 512 maximum
I have an agent that is built with an Agent Builder version before 6.3. Script data providers that use SSH are failing with messages similar to this: `(5102BB3C.002C-B14:sshlibinterface.cpp,487, "Ssh_Interface_load") Failed to load the dynamic library k03ssh.dll : return code = 126 (5102BB3C.002D-B14:sshlibinterface.cpp,508, "Ssh_Interface_load") could not create libHandle (5102BB3C.002E-B14:shellqueryclass.cpp,247, "ShellQueryClass") Error initializing SSH Connector class`	Rebuild the agent with Agent Builder version 6.3 or later.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
On a Windows Server 2012 system, for an agent with a Internet Control Message Protocol (ICMP) data source, an outbound ping works but an inbound ping fails.	You must enable the server to respond to ping. Use the following procedure: 1. Open the Windows **Control Panel**. 2. Select **System and Security** > **Windows Firewall** > **Advanced Settings** The Windows Firewall with Advanced Security window opens. 3. Click **Inbound Rules**. Another Windows Firewall with Advanced Security window opens. 4. In the Inbound Rules list scroll to **File and Printer Sharing (Echo Request - ICMPv4-In)**. 5. Right-click **File and Printer Sharing (Echo Request - ICMPv4-In)** and select **Enable Rule**. 6. Repeat for **File and Printer Sharing (Echo Request - ICMPv6-In)**. Inbound pings to the server from other systems are now enabled.
On a Windows Server 2012 system, for an agent with a remote script data source, the inbound SSH connection fails.	You must create an inbound rule for SSH connection. Use the following procedure: 1. Open the Windows **Control Panel**. 2. Select **System and Security** > **Windows Firewall** > **Advanced Settings** The Windows Firewall with Advanced Security window opens. 3. Click **Inbound Rules**. Another Windows Firewall with Advanced Security window opens. 4. Right-click **Inbound Rules** and select **New Rule**. The New Inbound Rule Wizard window opens. 5. Select **Port** and click **Next**. 6. Select **TCP** and **Specific local**. 7. Enter 22 in the **Specific local** field. 8. Select **Allow the connection** and click **Next**. 9. In this window, you can choose different domains that you want the rule to apply to. The default is that all domains are selected. When you make your selection, click **Next**. 10. In this window, enter `SSH Connection`, or your preferred name for the connection. You can also optionally enter a description of the connection. When you are finished, click **Finish**. An **Inbound Rule** named **SSH Connection** is created in the Inbound Rules list and it is enabled. The rule allows inbound SSH connections on TCP port 22.

Table 5. Problems and solutions for agents (continued)

Problem	Solution
How can I find the available parameters to perform silent command line configuration of an Agent Builder agent?	1. Create a file named `silent_config_agent.txt` 2. Copy the configuration variables from the `XX_dd.properties` file into the `silent_config_agent.txt` file and complete the variable values. 3. Run the following command to configure the agent: `itmcmd config -p /tmp/silent_config_agent.txt -o MyInstance -A XX` **Note:** • *XX* is the 2 character short name you specify when creating the Agent Builder agent. • *MyInstance* is the instance name of the agent. • The file `XX_dd.properties` can be found in the top level k*xx* directory of the agent installation tar or zip file.
in IBM Performance Management console, an agent that has a subnode is not listed in the Threshold Manager.	Usually, an agent that has one or more subnodes appears in Threshold Manager under the name of one of the subnodes. All the attributes from the agent and all of its subnodes are available under this name.
In IBM Performance Management console, you click on a status overview (summary) dashboard to view details. The Attribute Details tab opens, and at the same time, the Status Overview tab is disabled, so you can not return to the overview dashboard.	When you click on a status overview dashboard in IBM Performance Management console, normally, the detail view for agent opens. The current release of Agent Builder does not provide a detail view, and therefore, only the Attribute Details tab is available. To return to the overview dashboard, click the **Components** link that is located in a path of links near the tabs.
In IBM Performance Management, when you install a new version of your agent on a system where an older version was installed, an "agent is already running" error message is displayed.	Ignore the message. The agent is changed to the new version correctly.
In IBM Performance Management, silent configuration of an agent fails. An "XML configuration result: Configuration failed on matching the data in the response file with the properties in the XML file" message is displayed.	Ensure that the silent configuration file is correct. In particular, ensure that all the mandatory configuration items are provided. The mandatory configuration items are not commented out in the sample configuration file that is shipped in the agent package.
In IBM Tivoli Monitoring, an agent that monitors WebSphere Application Server MBeans fails. Tivoli Enterprise Portal shows no data from the agent, and might show a connection error or an OBJECT_NOT_FOUND error code in Performance Object Status.	Include the following item in the `KQZ_JMX_WAS_WAS70_JAR_FILES` configuration property: `runtimes/com.ibm.ws.admin.client_*.jar` Use the `;` symbol to separate it from other items in the property, if present. You can set the property in the Agent Builder Configuration Properties window (see "Cuztomizing agent configuration"). Alternatively. you can use Manage Tivoli Monitoring Services to set it in every host where the agent is installed.

Table 5. Problems and solutions for agents (continued)

Problem	Solution

In IBM Performance Management, the console displays no data for an agent that was created using Agent Builder. Data for other agents that monitor the same host is displayed.	This problem can be caused by one of several issues with a component of the Performance Management server.
	
	If you are using Performance Management on Cloud, contact IBM Support. For instructions about contacting IBM Support, see the following page: https://www.ibmserviceengage.com/support.
	
	If you are using a Performance Management on premises product, execute the following command on the host for the Performance Management server:
	
	`apm restart asfrest`
	
	If the issue is not resolved, execute the following command:
	
	`apm restart min`

Troubleshooting: Report Creation

A table that shows problems that might occur when you create reports:
- Cognos® data model for an agent loads into Framework Manager but testing a table causes a table or view not found error
- Testing any of the tables in the IBM_TRAM schema in Framework Manager results in an error on DB2
- When running on Windows, testing an Oracle data source in Tivoli Common Reporting fails
- The ManagedSystem dimension can not be utilized when creating reports for an agent
- Warnings when Model Advisor is run against the Cognos data model

.

Table 6. Problems and solutions for Report Creation

Problem	Solution
Cognos data model for an agent is loaded into Framework Manager but testing a table causes a table or view not found error	This problem can have 2 different causes and solutions: • The agent's tables do not exist in the Tivoli Data Warehouse database. Install and configure the agent, start historical collections, and configure summarization. Allow time for the agent to export data to the warehouse proxy and for the Summarization and Pruning agent to summarize data. • The schema name that is used in the data source of the data model does not match the schema that is used in the Tivoli Data Warehouse database. Change the schema value in the data source to match the schema used.

Table 6. Problems and solutions for Report Creation (continued)

Problem	Solution

Testing any of the tables in the IBM_TRAM schema in Framework Manager results in an error on DB2
 	
Testing any of the tables in the IBM_TRAM schema in Framework Manager results in following error on DB2:
 	
`This query contains an error`
`and can not be executed.`
`[IBM][CLI Driver][DB2/AIX64] SQL0551N`
`"ITMUser" does not have the required`
`authorization or privilege to perform`
`operation "SELECT" an object`
`"IBM_TRAM.ComputerSystem".SQLSTATE=42501`
	Grant select permission on all the Tivoli Reporting and Analytics Model tables. Change <IBM_TRAM> to the schema used for Tivoli Reporting and Analytics Model and <Tivoli Data Warehouse user ID> to the Tivoli Data Warehouse user ID.
	1. Connect to the Tivoli Data Warehouse as a user with SYSDBA privileges.
	2. Issue the following grants:
	  a. `Grant select on <IBM_TRAM>."ComputerSystem" to <Tivoli Data Warehouse user ID>`
	  b. `Grant select on <IBM_TRAM>.MONTH _LOOKUP to <Tivoli Data Warehouse user ID>`
	  c. `Grant select on <IBM_TRAM>.TIMEZONE_ DIMENSION to <Tivoli Data Warehouse user ID>`
	  d. `Grant select on <IBM_TRAM>.TIME_DIMENSION to <Tivoli Data Warehouse user ID>`
	  e. `Grant select on <IBM_TRAM>. WEEKDAY_LOOKUP to <Tivoli Data Warehouse user ID>`
	  f. `Grant  execute on procedure <IBM_TRAM>. CREATE_TIME_DIMENSION to <Tivoli Data Warehouse user ID>`

When you run on Windows, testing an Oracle data source in Tivoli Common Reporting fails
 	
When you run on Windows, testing an Oracle data source in Tivoli Common Reporting fails with an error similar to:
 	
`QE-DEF-0285 The logon failed.`
`QE-DEF-0325 The logon failed for the`
`following reason:`
`RQP-DEF-0068 Unable to connect at least`
`one database during`
`a multi-database attach to 1 database(s)`
`in: testDataSourceConnection`
	The Oracle client libraries are not in the system PATH environment variable. Edit the PATH environment and add the directory that contains the Oracle client DLL files. Restart the Tivoli Common Reporting server.

The `ManagedSystem` dimension cannot be used when you create reports for an agent I am not able to use the `ManagedSystem` dimension when I create reports for my agent.	Perform the following checks: • Make sure that you created or altered the ManagedSystem table in the Tivoli Data Warehouse. • Make sure that you created the stored procedure that populates the ManagedSystem table for Agent Builder agents. • Make sure that you run the stored procedure by using your agent's product code. • Examine the `ManagedSystem`table to ensure that entries for your agent type exist in the table.

Table 6. Problems and solutions for Report Creation (continued)

Problem	Solution

Warnings when Model Advisor is run against the Cognos data model
 	
When the Model Advisor is run against the Cognos data model, the following warnings are shown:
 	
Issue 1: Facts identified by cardinality
    The query subject is identified as a fact because of the cardinality of its relationships. It is suggested that you review the implications of this fact to SQL generation and, if appropriate, change the usage of the query subject or its relationships.
 	
    Problem Description: The query subject TEST_1 is on the many side of all its referencing relationships.
 	
Issue 2: Query subjects that can behave as facts or dimensions
    This query subject can behave as a fact or a dimension. It is suggested that you evaluate this query subject in the context of the model to ensure that queries are not split improperly or unnecessarily.
 	
    Problem Description: The query subject `ManagedSystem` is referenced by relationship ends of different cardinalities.
 	
Issue 3: Determinants that conflict with relationships
    There is a determinant specified that conflicts with the relationship you defined. This ambiguity can cause a query to be split unnecessarily. It is suggested that you examine and resolve this ambiguity in the model.
 	
    Problem Description: The relationship `TIME_DIMENSION <- -> WEEKDAY_LOOKUP` does not reference all the keys of any uniquely identified determinant in the query subject `TIME_DIMENSION`. The relationship has a 0:1 or 1:1 cardinality, indicating that its keys must be an exact match to the keys of a uniquely identified determinant. Review the cardinality of the relationship and the determinant information to determine whether adjustments are required.
 	
(continued on the next page)
	These warnings are expected and do not signify a problem with the Cognos data model.

Table 6. Problems and solutions for Report Creation (continued)

Problem	Solution
Warnings when Model Advisor is run against the Cognos data model (continued) **Issue 4: Factors that override the Minimized SQL setting** A query subject has attributes that override the SQL Generation type setting of Minimized. Relationships between model query subjects, determinants on model query subjects and data source query subjects with modified SQL override the Minimized SQL Generation type. **Problem Description:** There can be problems to generate minimized SQL for the object `Time Dimension`. The object is set to use minimized SQL. **Problem Description:** There can be problems to generate minimized SQL for the object `ManagedSystem`. The object is set to use minimized SQL. **Problem Description:** There can be problems to generate minimized SQL for the object `ManagedSystemName`. The object is set to use minimized SQL.	These warnings are expected and do not signify a problem with the Cognos data model.

Chapter 8. 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`).

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