Tivoli® Intelligent Orchestrator

IBM

Version 5.1

Problem Determination and Troubleshooting Guide

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Note:

Before using this information and the product it supports, read the information in Appendix C, "Notices," on page 229.

Contents

Preface

This guide describes how to identify and resolve problems that might occur when you use Tivoli® Intelligent Orchestrator or Tivoli Provisioning Manager.

The instructions in this book apply to both Tivoli Intelligent Orchestrator and Tivoli Provisioning Manager and will clearly identify any information or tasks that apply only to one application or the other.

Who should read this book

This book should be read by system administrators, operators, or anyone else responsible for performing orchestration and provisioning tasks with the application. The book is also addressed to all Tivoli Customer Support service engineers or developers who are responsible for providing customer support and for troubleshooting Tivoli Intelligent Orchestrator.

People reading this book should have knowledge in the following areas:
- Windows® 2000 Server or Windows Server 2003
- Linux® on Intel®
- IBM® AIX® operating system
- Sun Solaris operating system
- SUSE Linux Enterprise Server 8 for Linux on iSeries™
- Networking concepts
- Basic operating system commands
- DB2 Universal Database™ Enterprise Server Edition or Oracle9i Database operation, configuration, and maintenance
- WebSphere® Application Server
- Basic SQL commands
- XML
- The Internet

Refer to the online help for more information on configuring and administering Tivoli Intelligent Orchestrator.

Publications

This section lists publications in the Tivoli Intelligent Orchestrator library and related documents. It also describes how to access Tivoli publications online and how to order Tivoli publications.

Read the descriptions in the Tivoli Intelligent Orchestrator library, the prerequisite publications, and the related publications to determine which publications you might find helpful. After you determine the publications you need, refer to the instructions for accessing publications online.

Tivoli Intelligent Orchestrator library

The publications in the Tivoli Intelligent Orchestrator library are:
- *Tivoli Intelligent Orchestrator Installation Guide*

Explains how to install and upgrade Tivoli Intelligent Orchestrator software. This guide also provides information about troubleshooting installation problems.

- *Tivoli Intelligent Orchestrator Migration Guide*

    This book describes the steps to migrate from a previous version of Tivoli Intelligent Orchestrator.

- *Tivoli Intelligent Orchestrator Release Notes*®

    These release notes describe last minute product changes and known problems in the Tivoli Intelligent Orchestrator product release.

- *Tivoli Intelligent Orchestrator Problem Determination Guide*

    This guide describes how to identify and resolve problems that occur when you use Tivoli Intelligent Orchestrator. The instructions in this book apply to both Tivoli Intelligent Orchestrator and Tivoli Provisioning Manager and will clearly identify any information or tasks that apply only to one application or the other.

The remaining product documentation is available in the online help, which can be launched from the Web interface for the product.

Prerequisite publications

To use the information in this book effectively, you must have some prerequisite knowledge, which you can obtain from the following publications:

- WebSphere Application Server Information Center , available from `www.ibm.com/websphere`.

    You can also download the WebSphere Application Server documentation plug-in and install it in the Tivoli Intelligent Orchestrator. This plug-in enables you to view the WebSphere Application Server documentation in the same Information Center as the Tivoli Intelligent Orchestrator help.

- DB2 Universal Database Information Center, available from `www.ibm.com/db2`.
- IBM Directory Server documentation., available from `http:// publib.boulder.ibm.com/tividd/td/tdprodlist.html`.

Related publications and resources

Information related to Tivoli Intelligent Orchestrator is available in the following locations:

- The IBM Orchestration and Provisioning Automation Library is available online at: http://catalog.lotus.com/wps/portal/tpm. The IBM Orchestration and Provisioning Automation Library delivers the tools that you need to build your business around on demand automation. New workflows and automation packages and updated readme files for automation packages that are included with Tivoli Intelligent Orchestrator will be available in the IBM Orchestration and Provisioning Automation Library. This site will also contain the most up-to-date information about the full list of available workflows.

    Note: Many workflows, for example the network devices and storage workflows, cannot be categorized by platform. However, the workflow for each readme will document any platform-specific information.

- The IBM On Demand Automation Catalog is available online at http://www-306.ibm.com/software/tivoli/features/opal/. This site is a resource for partners who want to develop workflows to be put into the Orchestration and Provisioning Library.
- Redbooks™ related to Tivoli Intelligent Orchestrator are available at www.redbooks.ibm.com

- The Tivoli Software Library provides a variety of Tivoli publications such as white papers, datasheets, demonstrations, redbooks, and announcement letters. The Tivoli Software Library is available on the Web at: http://publib.boulder.ibm.com/tividd/td/tdprodlist.html
- The *Tivoli Software Glossary* includes definitions for many of the technical terms related to Tivoli software. The *Tivoli Software Glossary* is available at http://publib.boulder.ibm.com/tividd/glossary/tivoliglossarymst.htm

Accessing publications online

The publications for this product are available online in Portable Document Format (PDF) or Hypertext Markup Language (HTML) format, or both in the Tivoli software library: http://publib.boulder.ibm.com/tividd/td/tdprodlist.html

To locate product publications in the library, click the first letter of the product name or scroll until you find the product name. Then, click the product name.

Product publications include release notes, installation guides, user's guides, administrator's guides, and developer's references.

Note: To ensure proper printing of PDF publications, select the **Fit to page** check box in the Adobe Acrobat Print window (which is available when you click **File → Print**).

In addition to accessing the PDF publications, you can also access the online help which is shipped with Tivoli Intelligent Orchestrator. The online help is available at the external IBM Tivoli Information Center, located at: http://publib.boulder.ibm.com/infocenter/tivihelp/index.jsp.

Ordering publications

You can order many Tivoli publications online at the following Web site:

http://www.elink.ibmlink.ibm.com/public/applications/ publications/cgibin/pbi.cgi

You can also order by telephone by calling one of these numbers:
- In the United States: 800-879-2755
- In Canada: 800-426-4968

In other countries, see the following Web site for a list of telephone numbers:

http://www.ibm.com/software/tivoli/order-lit/

Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. With this product, you can use assistive technologies to hear and navigate the interface. You also can use the keyboard instead of the mouse to operate all features of the graphical user interface.

Tivoli software training

For Tivoli software training information, refer to the IBM Tivoli Education Web site: http://www.ibm.com/software/tivoli/education.

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:

- Searching knowledge bases: You can search across a large collection of known problems and workarounds, Technotes, and other information.
- Obtaining fixes: You can locate the latest fixes that are already available for your product.
- Contacting IBM Software Support: If you still cannot solve your problem, and you need to work with someone from IBM, you can use a variety of ways to contact IBM Software Support.

For more information about these three ways of resolving problems, see Appendix B, "Support information," on page 225.

Conventions used in this book

This reference uses several conventions for special terms and actions and for operating system-dependent commands and paths.

Typeface conventions

The following typeface conventions are used in this reference:

Bold
Lowercase commands or mixed case commands that are difficult to distinguish from surrounding text, graphical user interface (GUI) controls such as names of fields, icons, or menu choices, keywords, parameters, options, names of Java™ classes, and objects are in **bold**.

Italic
Variables, titles of publications, and special words or phrases that are emphasized are in *italic*. Italics also indicate names for which you must substitute the appropriate values for your system.

Monospace
Code examples, command lines, screen output, file and directory names that are difficult to distinguish from surrounding text, system messages, text that the user must type, and values for arguments or command options are in monospace.

Chapter 1. Introduction to troubleshooting

Problem determination, or troubleshooting, is a process of determining why a product is not functioning in the expected manner. This guide provides information to help you identify and resolve problems that you encounter when using Tivoli Intelligent Orchestrator.

Product and system overview

Tivoli Intelligent Orchestrator is an automated resource management solution for corporate and Internet data centers. Through orchestrated provisioning, it provides the ability to manage the IT environment in real time, according to defined business policies, to achieve desired business goals.

Many organizations face challenges in managing their existing IT resources, evaluating their effectiveness in supporting business needs, and determining how to meet future needs with existing or new resources. To effectively respond to change, financial pressures, and competition, businesses need to maintain an environment that is flexible, responsive, and makes optimal use of available resources. There are two aspects to creating such an environment:

Creating a flexible business model
Many organizations have difficulty responding to change because business processes. In some organizations, processes might be too rigid and difficult to adapt to different situations. Conversely, other organizations struggle with processes that are unclear, inconsistent, or duplicated by participants in the processes. To effectively respond to change, businesses must clearly define their end-to-end business processes and subprocesses. For maximum flexibility and consistent implementation, subprocesses are designed as components that can be customized or reused in larger processes.

Creating a flexible IT environment
To support changing business needs and priorities, the IT infrastructure that supports the operations and applications in a business must be optimized for allocation based on demand and re-purposing in different business contexts.

Tivoli Intelligent Orchestrator helps you to develop an optimized IT environment by:

Modeling your business processes
You can capture your business processes in workflows. Workflows automatically and consistently perform the configuration tasks that you currently perform manually. Tivoli Intelligent Orchestrator provides workflows that you can customize, or you can create new ones to support your existing tools and processes. Workflows can automate processes from configuring and allocating servers, to installing, configuring, and patching software, and can be either large and complex or can consist of a single command. The automation of configuration tasks is called automated provisioning.

Modeling your data center assets
Tivoli Intelligent Orchestrator manages a virtual representation of your data center in a data center model. Virtualization exists on several levels to provide flexible configuration in different contexts:

- Each asset is represented by a data center object. When you make a change to an asset with Tivoli Intelligent Orchestrator, the data center object is updated in the data center model. If a change is made outside of Tivoli Intelligent Orchestrator, the external change can be identified by comparing it with the data center object in the data center model.
- For some data center assets, the data center model stores data about the asset and data about deploying or provisioning the asset separately to provide a range of implementation options. For example, when a software package is added to the Tivoli Intelligent Orchestrator software catalog, you define the software package as a installable file. You can then create software definitions that describe different configuration requirements and configuration options for installing the same software package.
- You can create templates that define standard configurations. For example, you can create a server template that includes the routing, software, and storage configuration for a particular application tier. When a server is added to the application tier, the defined configuration is automatically applied.
- You can define application topologies that describe requirements for an application. You can then deploy an application based on the defined application requirements.

Orchestrating provisioning
You can configure Tivoli Intelligent Orchestrator to dynamically allocate resources to applications based on demand or priority. Applications can share pools of available resources to optimize utilization and eliminate idle resources or excess allocation of resources.

Product comparison

Tivoli Intelligent Orchestrator includes Tivoli Provisioning Manager, a standalone product that can be purchased separately, based on your data center needs. Tivoli Provisioning Manager provides core automated deployment capability, while Tivoli Intelligent Orchestrator adds policy-based decision-making capabilities.

Tivoli Intelligent Orchestrator uses historical and current demand and performance data, as well as defined business policies to determine where and when to allocate resources. When a deployment decision is made, Tivoli Intelligent Orchestrator runs workflows to automatically make the required configuration and allocation changes. You can specify the degree of automated provisioning that you require at the global, application, and tier level.

The following table summarizes the complementary roles of the two products:

Tivoli Intelligent Orchestrator	Tivoli Provisioning Manager
Orchestrates automation	Coordinates provisioning
Determines why, when, and where: Senses why an action is necessary, anticipates when to start provisioning, and prioritizes where to put resources.	Coordinates what and how: Determines what data center assets to provision and provisions them based on your defined business processes.

Product architecture

Tivoli Intelligent Orchestrator includes the following main components:
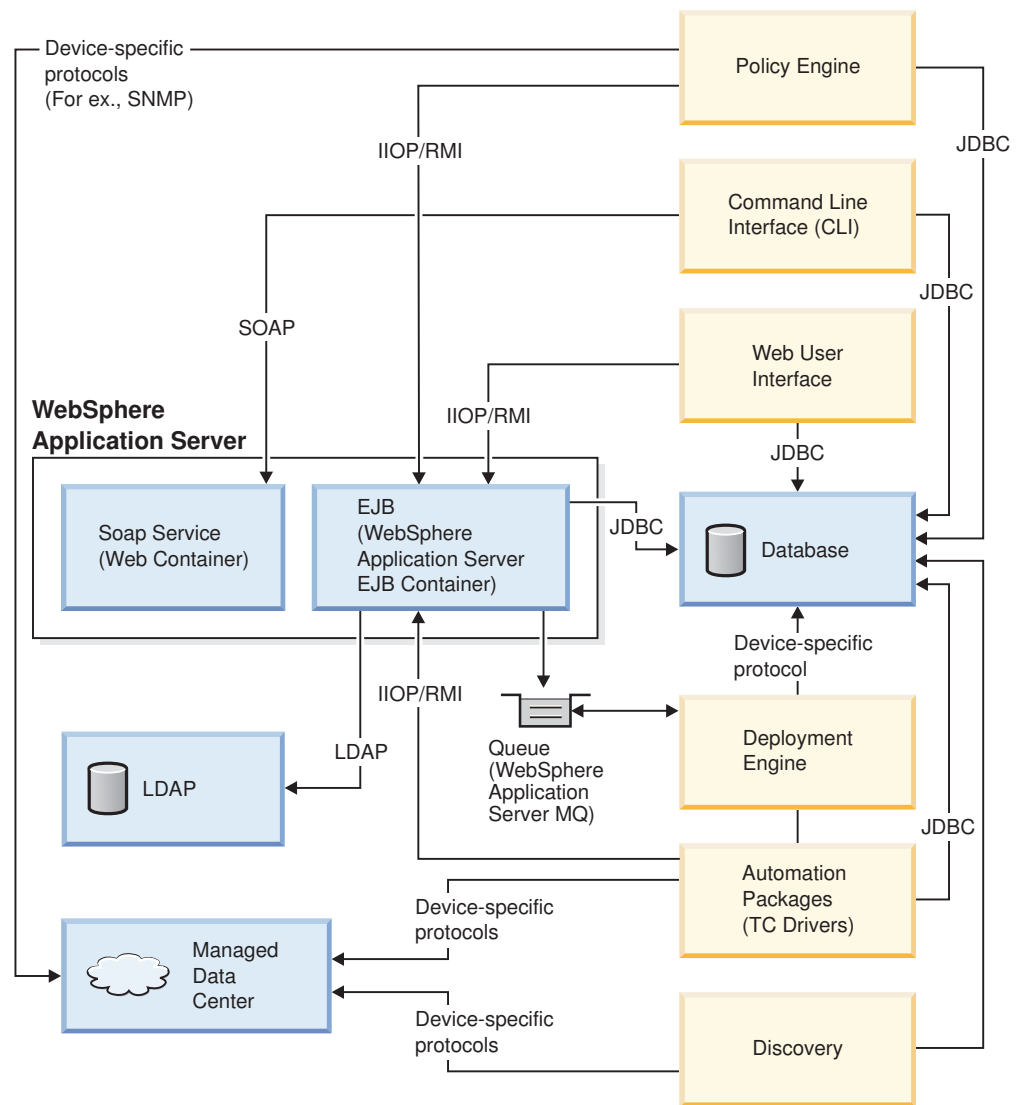
Tivoli Intelligent Orchestrator components

data center model

The data center model is an abstract representation of all physical and logical assets in a data center that Tivoli Intelligent Orchestrator manages, and their relationships. The data center model is stored in the Tivoli Intelligent Orchestrator database. It communicates directly with all other Tivoli Intelligent Orchestrator components and facilitates communication between product components.

policy engine

The policy engine is responsible for orchestration capability in Tivoli Intelligent Orchestrator. It encompasses:

data acquisition engine

This component gathers and preprocesses performance metrics

from each managed application environment in the data center. It captures and filters data from the application, operating system, and infrastructure layers and communicates the data to other components.

objective analyzer
This component determines the resource requirements of each application, and identifies trends and peaks in resource use. Each managed application environment has an associated objective analyzer.

global resource manager
This component receives requirements for servers or network devices from all the objective analyzers, and manages the overall optimization. It has two primary responsibilities: making optimal resource allocation decisions, and maintaining a stable application infrastructure. By considering the different server requirements for each application environment, it determines where to allocate resources.

deployment engine
The deployment engine is responsible for automated provisioning. It creates, stores, and runs workflows and communicates their success or failure in performing an operation. Workflows can be triggered by commands from an administrator, by external tools that send SOAP commands to Tivoli Intelligent Orchestrator, or by recommendations from the policy engine.

automation packages
An automation package is a collection of workflows, scripts, and other commands and tools that apply to the operation of a specific type of software component or a physical device. The deployment engine manages the deployment of workflows and associated workflow components in an automation package.

discovery technologies
A discovery technology is an application that performs configuration change detection. For example Tivoli NetView can discover new hardware that is added to the data center and is not defined in the data center model. For hardware that is already defined in the data center model, it can also identify configuration changes that occur outside of Tivoli Intelligent Orchestrator.

management interface
Tivoli Intelligent Orchestrator has two management interfaces: a Web interface, and a command-line interface. The Web interface provides a graphical representation of the data center, includes wizards to simplify configuration, and offers features such as reporting and task status monitoring that are not available from the command-line interface. The command-line interface provides access to Tivoli Intelligent Orchestrator features with SOAP. Administrators have the flexibility to perform tasks such as creating scripts that run specific SOAP commands or setting up external tools to send SOAP commands in response to an event.

Prerequisites installed with Tivoli Intelligent Orchestrator

Tivoli Intelligent Orchestrator interacts with other components that are installed with it.

WebSphere Application Server
>WebSphere Application Server hosts management interfaces and coordinates interaction between other system components.

Database server
>The database server stores the data center model and report and audit data.

Directory server
>The directory server manages user accounts and user authentication.

Built-in troubleshooting features

Tivoli Intelligent Orchestrator records system activity and events in message logs, trace logs, and Common Base Event logs. You can view the contents of these log files in a text editor.

Problem classification

This guide provides information about Tivoli Intelligent Orchestrator tools, resources, and techniques that can help you identify and resolve the following types of problems:

- "Problems with installation" on page 55
- "Problems with logging in" on page 62
- "Problems with workflows" on page 64
- "Other common problems" on page 68

For details about problems and resolutions for these issues, see Chapter 7, "Common problems and known limitations in Tivoli Intelligent Orchestrator," on page 55.

Product maintenance

Problems can often be avoided with planning and preparation before you deploy Tivoli Intelligent Orchestrator. Before you install the software, review the *Tivoli Intelligent Orchestrator Release Notes*, the *Tivoli Intelligent Orchestrator Installation Guide*, and the *Tivoli Intelligent Orchestrator Migration Guide*. These documents contain the following important information:

- Supported operating system levels
- Prerequisite software requirements
- Required software fix packs
- Minimum and recommended memory requirements
- Disk space requirements
- Upgrade considerations
- Known problems, limitations, and recovery procedures

Backing up the system

After you have installed Tivoli Intelligent Orchestrator, ensure that you have a comprehensive backup and system recovery strategy in place. Because Tivoli Intelligent Orchestrator does not include tools for backing up or restoring your system, you should back up your system in accordance with the documentation that is provided with your operating system or with any specialized backup and restore software that you use.

You might want to consider the following general recommendations for backing up your Tivoli Intelligent Orchestrator system:

- Perform a full backup of your existing DB2 Universal Database or Oracle database. General guidelines for backing up DB2 Universal Database and Oracle9i Database data are provided in the *Tivoli Intelligent Orchestrator Version 5.1 Migration Guide*. For more details, refer to the DB2 Universal Database information center available at

  `http://publib.boulder.ibm.com/infocenter/db2help/index.jsp`

  or to the Oracle9i documentation available at

  `http://www.oracle.com/technology/documentation/oracle9i.html`

- Back up your directory server database. Considerations for Microsoft Active Directory and general guidelines for backing up an IBM Tivoli Directory Server database are provided in the *Tivoli Intelligent Orchestrator Version 5.1 Migration Guide*. For more backup and migration details, refer to the IBM Tivoli Directory Server Installation and Configuration documentation available at:

  `http://publib.boulder.ibm.com/tividd/td/IBMDirectoryServer5.2.html`

- Back up your automation packages (`.tcdriver` files) using any of the standard backup and restore tools that you are currently using. For more details on automation packages, refer to the *Developing automation packages* section of the Tivoli Intelligent Orchestrator information center.

  For Tivoli Intelligent Orchestrator publications:
  1. Go to http://www.ibm.com/software/tivoli/products/intell-orch/
  2. Click **Technical documentation** on the left.

  For Tivoli Provisioning Manager publications:
  1. Go to http://www.ibm.com/software/tivoli/products/prov-mgr/
  2. Click **Technical documentation** on the left.

Performing periodic checks and maintenance

In addition to the preceding backup guidelines, here are several best practices that can help you do even more to prevent problems:

- On Windows, periodically back up the user registry following the instructions provided by the user registry vendor.
- Periodically check that all systems that are running Tivoli Intelligent Orchestrator have sufficient disk space for runtime and problem determination data. As your security policy grows, and the number of users, groups, and protected objects increase, the space requirements for the policy databases, message logs, trace logs, Common Base Event logs, and any auditing information can increase as well. For more information, see Chapter 4, "Locating and configuring log files," on page 39.
- Regularly check for the availability of fix packs and install them as they become available. Information on fix packs and other usual information can be found on the Tivoli Intelligent Orchestrator support Web site, at:

  `http://www.ibm.com/software/sysmgmt/products/support/`
  `IBMTivoliIntelligentOrchestrator.html`

Problem resolution

Use the information in this guide to identify and resolve potential problems. If you cannot correct the problem, gather the relevant diagnostic information as described in this guide and then use the information in Chapter 9, "Contacting IBM Tivoli Software Support," on page 91 to get further assistance.

Chapter 2. Problem determination essentials for Tivoli Intelligent Orchestrator

This chapter describes how to approach troubleshooting in Tivoli Intelligent Orchestrator. Providing methodologies and troubleshooting methods for identifying problems in Tivoli Intelligent Orchestrator will help you to reduce the time spent finding resolutions to these problems.

The following sections are described:
- "Problem determination methodologies"
- "Troubleshooting methods for Tivoli Intelligent Orchestrator and prerequisites" on page 9

Problem determination methodologies

The keys to the problem determination process are understanding the problems and identifying the causes of problems. Problem determination in Tivoli Intelligent Orchestrator might be quite a difficult process at times, due to the complexity of the product, the fact that it integrates with many different products, the number of software prerequisites the product relies on, and also to the variety of platforms the product can be installed and configured on.

The following steps are required to identify and resolve a problem in a Tivoli Intelligent Orchestrator environment in a systematic manner:
- "Defining the problem"
- "Identifying the cause of the problem" on page 8
- "Fixing the problem" on page 9

Defining the problem

The first step is made when you determine that the product is not functioning in the expected manner. Then, you try to correctly identify the problem, by gathering information about the context that triggered the problem and about the problem itself. This phase requires the following steps:
- Identifying the problem symptoms
- Providing a complete description of the error messages generated by the system

During this phase, you must be prepared to answer questions like:
- How did you first notice the problem?
- Where were you in the process when the problem occurred?
  - Are you a first-time user of Tivoli Intelligent Orchestrator?
  - Were you installing a prerequisite?
  - Were you configuring a prerequisite?
  - Were you installing Tivoli Intelligent Orchestrator? If yes, was this the first installation?
  - Were you performing post-installation configurations?
  - Were you performing a runtime task?
- Have you previously performed the same procedure without getting errors? What was done differently this time?

- What was the first symptom of the problem? Have you noticed other symptoms occurring simultaneously?
- Does the problem affect only one system or multiple systems?
- Did you receive an error message indicating what the problem is?
- If the problem can be reproduced, what are the steps that you need to perform to recreate it?

Identifying the cause of the problem

The information you gathered during the previous phase helped you to correctly identify the problem and describe the context that triggered it. To be able to identify and locate the cause of the problem, it is very important that you understand the Tivoli Intelligent Orchestrator architecture and the interaction between its components. This will help you to determine the specific component that is involved with the problem:

- Data center model
- Policy engine
- Deployment engine
- Automation packages
- Discovery technologies
- Management interface

Problems limited to a single product component have causes that are easier to identify. Other problems might affect various components and their causes might be subtle and more difficult to identify. Furthermore, different problems may have the same symptoms, but different causes. Ideally, you should be able to approach the problem in such a way so that you can isolate it to a single component.

If you cannot identify the cause of a problem, you might want to seek the assistance of the Tivoli Support team, who will be able to pinpoint the cause of the problem and recommend ways to recover from specific situations. For more information on how to contact the IBM Tivoli Software Support, refer to Chapter 9, "Contacting IBM Tivoli Software Support," on page 91.

As Tivoli Intelligent Orchestrator integrates many different products, some of the problem determination issues that might be considered difficult at times are:

Determining where the problem lies and what it is
> The first challenge would be to determine if the problem is a customer error, triggered by an incorrect use of the product, or an error of the product itself, that is, a defective piece of software or hardware. Errors encountered at startup are often missed, resulting in symptoms that are encountered down the road. It is always worthwhile verifying whether problems or exceptions are encountered at startup, before debugging a symptom found down the road. Any problem found in a startup trace should be addressed first.

Verifying whether the problem can be replicated
> You need a non-production environment on which to replicate the problem and do all tracing and analysis. Having a non-production environment available would also allow you to test the problem on different platforms.

Checking whether the problem has occurred before
> If the same problem or a similar problem have been dealt with before, it is very likely that extensive support documentation is provided. Begin by

searching the available IBM technotes for your product and the available knowledge bases to determine whether the resolution to your problem is already documented.

Analyzing the actions that led up to the problem and generating an action plan
The approach that you should take must make use of all the available resources and tools. You should start by verifying whether all the hardware and software prerequisites have been met. While focusing on the problem itself, you should always take into account the bigger picture of the Tivoli Intelligent Orchestrator environment.

Fixing the problem

Once the problem is well defined and understood and its cause is correctly identified, corrective steps are required to solve the problem. As an additional step to this phase, it is always worthwhile documenting the problem for the future, to expedite the resolution of further possible problems.

Troubleshooting methods for Tivoli Intelligent Orchestrator and prerequisites

Based on the feedback received from our Support teams, the following methods have been proposed for troubleshooting Tivoli Intelligent Orchestrator and its prerequisites. Used in addition to your own product knowledge and experience, these troubleshooting methods might help you to shorten the time spent looking for a problem resolution, by better orienting you inside the Tivoli Intelligent Orchestrator problem determination process.

At all times during the problem determination process, keep the following points in mind:

- The WebSphere Application Server is central to Tivoli Intelligent Orchestrator and its components. All components, DB2 Universal Database, IBM Tivoli Directory Server, SOAP, user interface, deployment engine, policy engine, command line tools, interact with the WebSphere Application Server. If you do not know where to start with a problem that you have encountered, start with WebSphere Application Server. Check the `SystemOut.log` file for errors. The log file is located in the following directory:
  - On Windows: `%WAS_HOME%\logs\<server-name>`
  - On UNIX: `$WAS_HOME/logs/<server-name>`
- Isolate the root error using the proposed troubleshooting methods to find a resolution.
- Take screen shots of specific steps and errors received along the way
- Utilize and exploit the knowledge bases.

The methods that are provided for troubleshooting the Tivoli Intelligent Orchestrator are series of tests or questions. Troubleshooting methods are organized so that you can start with general questions and then continue with more specific questions that allow you to narrow down the problem space. Based on the answers to these questions, you can isolate the problem and find a resolution to it.

Depending on the stage you are encountering the problem, you must identify the starting troubleshooting method within that stage, and then follow it to find the resolution to your problem. Many troubleshooting methods will point you to the knowledge bases.

The following stages are described to the Tivoli Intelligent Orchestrator problem determination process:

1. "Troubleshooting the prerequisite installation"
2. "Tivoli Intelligent Orchestrator installation and subcomponent configuration verification" on page 17
3. "Tivoli Intelligent Orchestrator runtime problem determination" on page 21
4. "Accessing the knowledge bases" on page 26
5. "Using the available command line tools" on page 26

Troubleshooting the prerequisite installation

The following steps are required during this phase:

1. Ensure that the operating system has all required fixes and levels. For a complete list of operating system environments that are supported by Tivoli Intelligent Orchestrator, refer to the *Tivoli Intelligent Orchestrator Installation Guide, Version 5.1*.

2. For your specific server topology, ensure that the prerequisite installer installed the required versions and patches for the prerequisites and their related components, as described in detail in the *Tivoli Intelligent Orchestrator Installation Guide*. Tivoli Intelligent Orchestrator requires the following prerequisites:

   - DB2 Universal Database Enterprise Server Edition, Version 8.2, Fix Pack 11 or ▶ Solaris : Oracle 9i
   - IBM Tivoli Directory Server, Version 6.0, Fix Pack 1
   - WebSphere Application Server, Version 6.0, Fix Pack 2.

3. After the prerequisite installation, you might want to follow these steps:

   - Ensure that the configuration of the IBM Tivoli Directory Server database was successful. If not, refer to the "IBM Tivoli Directory Server verification" on page 11 section.
   - Perform a subcomponent verification, as described in the following subsections:
     - "DB2 Universal Database verification"
     - "IBM Tivoli Directory Server verification" on page 11
     - "WebSphere Application Server verification" on page 13

DB2 Universal Database verification

Follow these steps to ensure that the DB2 Universal Database was successfully started:

1. Use the following command to start the database:

   - On UNIX: `$ db2start`

     For example, `db2start` on AIX has the following output:

     ```
     $ db2start
     07/13/2005 11:54:07 0 0 SQL1063N DB2START processing was successful.
     SQL1063N DB2START processing was successful
     ```

   - On Windows:
     - From the services window, start the service `DB2 - <instance_name>`.
     - The default service name in Tivoli Intelligent Orchestrator 5.1 is `DB2 - DB2`.

2. Verify whether the designated port is available by running this command:

   ```
   netstat -an |grep 50000
   ```

3. Verify if all required DB2 Universal Database processes are up and running:

- On Windows, launch Task Manager and check the Processes window.
- On UNIX, run the following command to list all DB2 Universal Databaseprocesses: `db2_local_ps`

The required DB2 Universal Database processes include:

- db2fmd
- db2dasrrm
- db2fmcd
- db2wdog
- db2sysc
- db2ckpwd
- db2gds
- db2syslog
- db2ipccm
- db2tcpcm

- Db2resync
- db2srvlst
- db2agent (LDAP)
- db2fmp
- db2agent (TIOINTER)
- db2loggr (TC)
- db2loggw (TC)
- db2dlock (TC)
- db2pfchr
- db2pclnr
- db2event

4. Check the `db2diag.log` file for errors. The file is located in the following directory:
   - On Windows: `<DB2_Instance_Home_Directory>`
   - On UNIX: `<instance-owner-home>/sqllib/db2dump`

5. Search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

IBM Tivoli Directory Server verification

The verification requires these steps:

1. Ensure that the IBM Tivoli Directory Server database was successfully created.

   Check the `ldapcfg.stat` file to see the syntax used at the time of the database creation. The file is located in the following directory:
   - On Windows: `C:\IBM\ldap\tmp`
   - On UNIX: `/usr/ldap/tmp`

   You should see an output similar to the following:
   - Windows:
     ```
     C:\IBM\ldap\bin\ldapcfg -n -a db2inst1 -w password -d LDAP -l
     C: -c -f C:\IBM\ldap\tmp\ldapcfg.dat
     ```
   - UNIX:
     ```
     /usr/ldap/bin/ldapcfg -n -a db2inst1 -w th1nk -d ldap -l
     /home/db2inst1 -c -f /usr/ldap/tmp/ldapcfg.dat
     ```

2. Ensure that the IBM Tivoli Directory Server was successfully started:
   a. Verify whether the IBM Tivoli Directory Server database was successfully started, using the `ibmdirctl` command line utility:
   ```
   ibmdirctl -D cn=root -w <password> status
   ```

   The `ibmdirctl` command is located in the following directory:
   - On Windows: `C:\IBM\ldap\bin`
   - On UNIX: `/usr/ldap/bin`

   Note: To be able to use the `ibmdirctl` command, the IBM Directory Administrator service must be running.

Use the Windows Services panel, or issue the `ibmdiradm` command on UNIX to verify if the service is running. IBM Directory Administrator uses the port number 3538 for requests.

You can also start and stop IBM Tivoli Directory Server using the `ibmdirctl` command:

- Starting the IBM Tivoli Directory Server:

    `ibmdirctl -D cn=root -w <password> start`

- Stopping the IBM Tivoli Directory Server:

    `ibmdirctl -D cn=root -w <password> stop`

3. You can also use `ldapsearch` command line utility to verify whether IBM Tivoli Directory Server is running, configured properly, and responding to queries:

    ```
    ldapsearch -h <ldapserver> -p 389 -D cn=root -w <password>
    -b "" -s base objectclass=*
    ```

    The `ldapsearch` command is also located in the following directory:

    - On Windows: `C:\IBM\ldap\bin`
    - On UNIX: `/usr/ldap/bin`

    For more information on command line tools that can be used during the IBM Tivoli Directory Server problem determination process, refer to "IBM Tivoli Directory Server command line tools" on page 33.

4. Verify whether the DB2 database is successfully started. For more information, refer to "DB2 Universal Database verification" on page 10.

5. Check the runtime IBM Tivoli Directory Server log files for errors. The logs are stored in the following directory:

    - Windows: *<LDAP_Install_Directory>*`\var\`
    - UNIX: `/var/ldap/`

    where *<LDAP_Install_Directory>* is the installation directory for the LDAP server.

    The log files include:

    - `ibmslapd.log`
    - `audit.log`
    - `db2diag.log`
    - `ibmds_config.log`
    - `ibmds_config_err.log`

6. If required, edit the `ibmslapd.conf` file, which is the IBM Tivoli Directory Server configuration file that controls the server operation. The file is located in the following directory:

    - On Windows: `C:\IBM\ldap\etc`
    - On UNIX: `/usr/ldap/etc`

    Note: IBM Tivoli Directory Server must be restarted for the edits to the `ibmslapd.conf` file to take effect.

    The `ibmslapd.conf` file can be used for:

    - Changing the IBM Tivoli Directory Server log locations
    - Adding and removing IBM Tivoli Directory Server suffixes
    - Controlling server startup parameters and database connection parameters
    - Changing administrator user credentials
    - Modifying SSL security settings

7. Search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

WebSphere Application Server verification

The verification requires the following steps:

1. Perform a WebSphere Application Server installation verification test, by running the following script:
   - On Windows: `%WAS_HOME%\bin\ivt.bat`
   - On UNIX: `$WAS_HOME/bin/ivt.sh`

   Check the `ivt.log` file for errors. The log file is located in the following directory:
   - On Windows: `%WAS_HOME%\logs`
   - On UNIX: `$WAS_HOME/logs`

2. Ensure that the correct WebSphere Application Server version was installed, and verify the WebSphere Application Server status:
   - Use the `versionInfo` command line utility to display the current level of WebSphere Application Server. The command is located in the following directory:
     - On Windows: `%WAS_HOME%\bin`
     - On UNIX: `$WAS_HOME/bin`
   - Use the `serverStatus` command line utility to display the WebSphere Application Server status:

     `serverStatus -all -user <username> -password <password>`

     The command is located in the following directory:
     - On Windows: `%WAS_HOME%\bin`
     - On UNIX: `$WAS_HOME/bin`

     Tool information is logged in the `serverStatus.log` file, located in the `%WAS_HOME%\logs` directory on Windows, `$WAS_HOME/logs` on UNIX.

   For more information on command line tools that can be used during the WebSphere Application Server problem determination process, refer to "WebSphere Application Server command line tools" on page 32.

3. If required, edit the WebSphere Application Server configuration files. The master configuration repository is located at `$WAS_HOME/config`. The configuration files contain the following information:
   - Cell configuration information in XML files
   - Applications held as EAR files and deployment descriptors
   - Templates as XML files that can be used for creating resources

   Two administration clients are provided to edit the configuration of all components:
   - The administrative console, available at `http://<WAS hostname.domainname>:9090/admin/`
   - The `wsadmin` shell scripting client

   The following is a list of useful configuration files:

   Security.xml
   > This file contains server security configuration, and is located in the `$WAS_HOME/config/cells/<cell>` directory. When encountering problems logging in to the WebSphere Application Server

administrative console, security can be disabled in this file by changing the value of the `enabled` parameter in the second line from `true` to `false`.

By default, `<cell>` represents the host name.

Server.xml
> This file contains server-specific configuration information, and is located in the `$WAS_HOME`/config/cells/`<cell>`/nodes/`<node>`/servers/ server1 directory.

Java.security
> This file contains security properties used by the java.security classes. It is located in the `$WAS_HOME`/java/jre/lib/security directory.

Sas.client.props
> This file contains security settings that indicate the Java Client how to access secured applications. It is located in the `$WAS_HOME`/properties directory.

4. Check the runtime WebSphere Application Server log files for errors. The logs are stored in the following directory:

   - On Windows: %WAS_HOME%\logs\<server-name>
   - On UNIX: $WAS_HOME/logs/<server-name>

   where `<server-name>` is by default server1.

   The runtime WebSphere Application Server log files include:

   SystemOut.log
   > This log file contains messages generated when the applications running inside the application server are being started or stopped. When startingTivoli Intelligent Orchestrator, use the following command to monitor this log file for any problems:
   > `tail -f SystemOut.log`

   SystemErr.log
   > This log file contains Java exceptions and stack traces caused by applications and their applications.

   startServer.log
   > This log file contains errors that occur during the startup of the WebSphere Application Server. Look for the following output for a successful startup:
   > `Server <server-name> open for e-business.`

   stopServer.log
   > This log file contains errors that occur during the shutdown of the WebSphere Application Server. Look for the following output for a successful shutdown:
   > `Server <server-name> stop completed.`

5. Search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

Problem determination using SystemOut.log: The following steps are required when troubleshooting the WebSphere Application Server using `SystemOut.log`:

1. Look for any error during the WebSphere Application Server startup.
   - If you see an error before the point where you see `...ready for e-business`, check the WebSphere Application Server configuration.

- If no error can be found, look for other symptoms in the log file.
2. Find the first occurrence of the error in the log file. You will either see an error message or an error exception with a stack trace.
3. Review the proper error message. It will be either from WebSphere Application Server or from the application that caught and properly handled the exception. Review the message and investigate.
4. Check the Java exception with the stack trace:
   - Check the stack trace and follow the classes, with the package names, and try to identify them.
   - If all the classes belong to the application server and you can easily identify them by package names, you probably have a configuration error.
   - Try to detect the source of the problem based on class names, which are usually very descriptive.
   - If you find any class in the stack trace that belongs to the enterprise application, you need to check the application.

SystemOut.log successful startup breakdown:

Administration service
```
        AdminInitiali A ADMN0015I: AdminService initialized
```

Secure Authentication Services (LDAP)
```
        Configuration A SECJ0215I: Successfully set JAAS login provider
                       configuration class to
                       com.ibm.ws.security.auth.login.Configuration.
        SecurityDM    I SECJ0231I: The Security component's FFDC Diagnostic Module
                       com.ibm.ws.security.core.SecurityDM
                       registered successfully: true.
        SecurityCompo I SECJ0309I: Java 2 Security is disabled.
        SecurityCompo I SECJ0212I: WCCM JAAS configuration information successfully
                       pushed to login provider class.
        SecurityCompo I SECJ0240I: Security service initialization completed
                       successfully
        SASRas         A JSAS0001I: Security configuration initialized.
        SASRas         A JSAS0002I: Authentication protocol: CSIV2/IBM
        SASRas         A JSAS0003I: Authentication mechanism: LTPA
        SASRas         A JSAS0004I: Principal name: todaix05.think.lab.austin.-
                       ibm.com:389/wasadmin
        SASRas         A JSAS0005I: SecurityCurrent registered.
        SASRas         A JSAS0006I: Security connection interceptor initialized.
        SASRas         A JSAS0007I: Client request interceptor registered.
        SASRas         A JSAS0008I: Server request interceptor registered.
        SASRas         A JSAS0009I: IOR interceptor registered.
```

Map Tivoli Intelligent Orchestrator resource references
```
        ResourceMgrIm I WSVR0049I: Binding DataSource as jdbc/KulaDB
        ResourceMgrIm I WSVR0049I: Binding Default Datasource as
                 DefaultDatasource
        ResourceMgrIm I WSVR0049I: Binding QueueConnectionFactory as
                 jms/factory/QueueConnectionFactory
        ResourceMgrIm I WSVR0049I: Binding DeploymentEnginePrivateRequests
                  as jms/factory/DeploymentEngine/
                  PrivateRequests
        ResourceMgrIm I WSVR0049I: Binding DeploymentEngineHighLevelOutput
                 as jms/factory/DeploymentEngine/
                 HighLevelOutput
        ResourceMgrIm I WSVR0049I: Binding TopicConnectionFactory as
        jms/factory/TopicConnectionFactory
        ResourceMgrIm I WSVR0049I: Binding DeploymentEngineHighLevelOutputForTEC
        as jms/factory/DeploymentEngine/HighLevelOutputForTEC
        ResourceMgrIm I WSVR0049I: Binding DeploymentEnginePrivateRequests
        as queue/thinkcontrol/DeploymentEngine/PrivateRequests
        ResourceMgrIm I WSVR0049I: Binding DeploymentEngineHighLevelOutput
        as topic/thinkcontrol/DeploymentEngine/HighLevelOutput
        ResourceMgrIm I WSVR0049I: Binding ThinkControlInternalMessages as
        topic/thinkcontrol/Invocation
```

```
ResourceMgrIm I WSVR0049I: Binding Default_CF as
eis/DefaultDatasource_CMP
ResourceMgrIm I WSVR0049I: Binding AgentRegistry as
jdbc/AgentRegistry
```

Simple Object Access Protocol (SOAP)

```
JMXSoapAdapte A ADMC0013I: SOAP connector available at port 8880
```

Applications

```
ApplicationMg A WSVR0200I: Starting application: DefaultApplication
EJBContainerI I WSVR0207I: Preparing to start EJB jar: Increment.jar
EJBContainerI I WSVR0037I: Starting EJB jar: Increment.jar
. . .
ApplicationMg A WSVR0221I: Application started: DefaultApplication

ApplicationMg A WSVR0200I: Starting application: ivtApp
EJBContainerI I WSVR0207I: Preparing to start EJB jar: ivtEJB.jar
EJBContainerI I WSVR0037I: Starting EJB jar: ivtEJB.jar
. . .
ApplicationMg A WSVR0221I: Application started: ivtApp

ApplicationMg A WSVR0200I: Starting application: adminconsole
WebContainer  A SRVE0169I: Loading Web Module: adminconsole.
. . .
ApplicationMg A WSVR0221I: Application started: adminconsole
```

TCEAR Application

```
ApplicationMg A WSVR0200I: Starting application: TCEAR
EJBContainerI I WSVR0207I: Preparing to start EJB jar: tcEJB.jar
EJBContainerI I WSVR0037I: Starting EJB jar: tcEJB.jar
EJBContainerI I WSVR0207I: Preparing to start EJB jar: jdsEJB.jar
EJBContainerI I WSVR0037I: Starting EJB jar: jdsEJB.jar
WebContainer  A SRVE0169I: Loading Web Module: tcWebUI.war.
. . .
WebContainer  A SRVE0169I: Loading Web Module: tcSoap.
...
WebContainer  A SRVE0169I: Loading Web Module: odiWebServices.
...
WebContainer  A SRVE0169I: Loading Web Module: odiWebServicesClient.
...
WebContainer  A SRVE0169I: Loading Web Module: jdsWAR.
...
MDBListenerIm I WMSG0042I: MDB Listener RecommendationsMDBPort started
successfully for JMSDestination topic/thinkcontrol/DeploymentEngine/
HighLevelOutput
MDBListenerIm I WMSG0042I: MDB Listener TECEventSenderMDBPort started
successfully for JMSDestination topic/thinkcontrol/DeploymentEngine/
HighLevelOutput
MDBListenerIm I WMSG0042I: MDB Listener DEAdaptorMDBPort started
successfully for JMSDestination topic/thinkcontrol/DeploymentEngine/
HighLevelOutput
ApplicationMg A WSVR0221I: Application started: TCEAR
```

Agent Manager application

```
ApplicationMg A WSVR0200I: Starting application: AgentManager
WebContainer  A SRVE0169I: Loading Web Module: AgentManager.
...
ApplicationMg A WSVR0221I: Application started: AgentManager

ApplicationMg A WSVR0200I: Starting application: AgentRecoveryService
WebContainer  A SRVE0169I: Loading Web Module: AgentRecovery.
...
ApplicationMg A WSVR0221I: Application started: AgentRecoveryService
```

HTTP Transport Service

```
HttpTransport A SRVE0171I: Transport http is listening on port 9,080.
HttpTransport A SRVE0171I: Transport https is listening on port 9,443.
HttpTransport A SRVE0171I: Transport http is listening on port 9,090.
```

```
        HttpTransport A SRVE0171I: Transport https is listening on port 9,043.
        HttpTransport A SRVE0171I: Transport https is listening on port 9,511.
        HttpTransport A SRVE0171I: Transport https is listening on port 9,512.
        HttpTransport A SRVE0171I: Transport http is listening on port 9,513.
```

Remote Method Invocation (RMI)
```
        RMIConnectorC A ADMC0026I: RMI Connector available at port 2809
```

Startup Complete
```
        WsServer     A WSVR0001I: Server server1 open for e-business
```

Tivoli Intelligent Orchestrator installation and subcomponent configuration verification

Tivoli Intelligent Orchestrator configures all of the subcomponents during its installation. You might also choose to manually configure all or some of the subcomponents, as required. For more information on Tivoli Intelligent Orchestrator installation log files, refer to Chapter 5, "Tivoli Intelligent Orchestrator log files," on page 45.

Tivoli Intelligent Orchestrator installation

If you are installing Tivoli Intelligent Orchestrator using the Tivoli Intelligent Orchestrator installer, use the Tivoli Intelligent Orchestrator installation wizard to enter connection information such as user IDs, passwords, paths, fully qualified domain information, and ports, to connect to the subcomponents. Tivoli Intelligent Orchestrator will check the validity of this information. You can review the configuration and installation information that is displayed at the end of the installation wizard, when the progress indicator is shown.

The Tivoli Intelligent Orchestrator installer completes the following operations:
* Creates subfolders for the Tivoli common directory.
* Creates the `tioadmin` user or group if it does not already exist.
* Sets up the license files.
* Copies the Tivoli Intelligent Orchestrator file structure to the Tivoli Intelligent Orchestrator installation directory.
* Installs the Tivoli Intelligent Orchestrator files.
* Copies the automation packages to `<TIO HOME>/drivers`.
* Copies the Eclipse plug-ins for online help system.
* Installs the language files.
* Installs GUID.
* If the **Install Netview** check box is selected, the Netview installer is launched.
* If the **Copy Repository CD** check box is selected, disk 9 that contains the agent installers is copied to the specified directory.
* Defines the environment variables.
* Sets up the configuration data. Configuration information entered into the Tivoli Intelligent Orchestrator wizard is stored in the `%TIO_HOME%\config` directory on Windows (`$TIO_HOME/config` on UNIX). By editing the XML files in this directory, it ensures that the placeholders are replaced by correct values.
* On Windows, it creates Tivoli Intelligent Orchestrator start and stop desktop icons.
* Generates the agent manager response file template.
* Sets up the DB2 database.
* Configures the IBM Tivoli Directory Server.

- Starts the WebSphere Application Server.
- Configures the WebSphere Application Server, including:
  - WebSphere Application Server configuration
  - WebSphere Application Server deployment
  - WebSphere Application Server setup on UNIX, to run as user configuration
- Enables security for the WebSphere Application Server.
- On Windows, it creates the Windows Service.
- On Windows, it creates keys in Windows registry.
- Reinitializes the database.
- The Tivoli Intelligent Orchestrator uninstaller is automatically created by the Install Shield MultiPlatform (ISMP).
- If the **Install Agent Manager** check box is selected, the agent manager installer is launched.
-

Verifying subcomponent configuration

The following procedures are required to confirm that Tivoli Intelligent Orchestrator and subcomponents have been successfully configured:

- Verifying Tivoli Intelligent Orchestrator's connection to DB2 Universal Database. See "DB2 Universal Databaseconfiguration verification."
- Verifying the IBM Tivoli Directory Server configuration. See "IBM Tivoli Directory Server configuration verification" on page 19.
- Verifying Tivoli Intelligent Orchestrator's connection to IBM Tivoli Directory Server. See "IBM Tivoli Directory Server connection verification" on page 20.
- Verifying the WebSphere Application Server configuration. See "WebSphere Application Server configuration verification" on page 21.

DB2 Universal Databaseconfiguration verification: Tivoli Intelligent Orchestrator uses two mechanisms to connect to the database:

1. Java connection using the information in the dcm.xml file, located at %TIO_HOME%\config on Windows ($TIO_HOME/config on UNIX):

   ```
   <config>
    <database>
    <type>db2</type>
    <driver>COM.ibm.db2.jdbc.app.DB2Driver</driver>
    <url>jdbc:db2:TC</url>
    <name>TC</name>
    <username>db2inst1</username>
    <password>QJsdAjUEHi8=</password>
    </database>
   </config>
   ```

2. Kula user through the WebSphere Application Server.

   In the administrative console, go to **Security –> JAAS Configuration –> J2C Authentication Data** to connect to the database.

When troubleshooting the DB2 Universal Database connection with Tivoli Intelligent Orchestrator, follow these steps:

1. Try to manually connect to the database, and run the following command to list all DB2 Universal Database tables:

   ```
   list tables
   ```

Verify if the `DCM_OBJECT` table is listed. If not, determine what user ID is required to connect to see the `DCM_OBJECT` table, and update the `dcm.xml` file and the `kula` user appropriately.

If the table list is successfully created, verify the DB2 Universal Database connection information in the `dcm.xml` file.

2. If you cannot connect manually to the database, check if the database is started successfully. See "DB2 Universal Database verification" on page 10. You might also want to run the following command to verify if the designated port is available:`netstat -an grep| 50000`.

3. Search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

IBM Tivoli Directory Server configuration verification: The following steps are required:

Note: Note that all `ldapsearch` commands are based on the default tree path, `dc=ibm,dc=com`. If this is changed, then you should use your custom tree path.

1. Verify whether the IBM Tivoli Directory Server was successfully started, using the `ibmdirctl` command line utility. For more information, see "IBM Tivoli Directory Server verification" on page 11.

2. If the IBM Tivoli Directory Server was successfully started, check the IBM Tivoli Directory Server's basic functionality, using the `ldapsearch` command line utility:

```
ldapsearch -h <ldapserver> -p 389 -D cn=root
-w <password> -b "" -s base objectclass=*
```

This search should return about sixty lines of `ldap` information.

On Windows, you must use the IBM `ldapsearch` command, not the Cygwin OpenLDAP `ldapsearch` command. The IBM `ldapsearch` command is located in the following directory:

- On Windows: `C:\IBM\ldap\bin`
- On UNIX: `/usr/ldap/bin`

3. Check the IBM Tivoli Directory Server suffixes, using the `ldapsearch` command:

```
ldapsearch -v -h <ldapserver> -D cn=root -w <password>
-p 389 -b "" -s base objectclass=* | grep namingcontexts
```

Note: Not supplying the `-b` option is resource-intensive.

4. Check the IBM Tivoli Directory Server schema:

```
ldapsearch -b cn=schema -s base objectclass=* |
grep -i think
```

5. Check all users and groups using the `ldapsearch` command. The following steps are required:

a. Confirm proper import of all user and group entries:

```
ldapsearch -v -h < ldapserver> -D cn=root
-w <password> -p 389 -b "dc=ibm,dc=com" cn=*
```

The output should include over one hundred and ninety matches.

b. Confirm the proper import of all Tivoli Intelligent Orchestrator user entries:

```
ldapsearch -v -h < ldapserver > -D cn=root
-w <password> -p 389 -b "dc=ibm,dc=com" cn=tio*
```

The output should return the following entries: `tioldap`, `tiointernal`, and `tioappadmin`.

   c. Confirm that a particular user or group has been imported:

```
ldapsearch -v -h < ldapserver > -D cn=root
-w <password> -p 389 -b "dc=ibm,dc=com" cn=<username>
```

This should return the full output of the specified user.

   d. Ensure the proper functionality with the `wasadmin` user:

```
ldapsearch -v -h < ldapserver > -w wasadmin
-D "cn=wasadmin,dc=ibm,dc=com" -p 389 -b "dc=ibm,dc=com" cn=tio*
```

The output should return the following entries: `tioldap`, `tiointernal`, `tioappadmin`.

6. Check for proper tree ownership, to ensure that Tivoli Intelligent Orchestrator is able to navigate the user and group structure accordingly:

```
ldapsearch -v -h <ldapserver> -p 389 -D cn=root -w <password>
-b "dc=ibm,dc=com" -s base "objectclass=*" entryowner ownerpropagate
```

The output should return the following: `ownerpropagate=TRUE`, and `entryowner=access-id:CN=TIOLDAP,DC=IBM,DC=COM`

7. Search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

IBM Tivoli Directory Server connection verification: The following steps are required:

1. Check Tivoli Intelligent Orchestrator's connection to the IBM Tivoli Directory Server:

   a. Check the `user-factory.xml` file for changes that were made during the Tivoli Intelligent Orchestrator installation. The `user-factory.xml` file is Tivoli Intelligent Orchestrator's configuration file for accessing the IBM Tivoli Directory Server, and is located in the following directory:

     • Windows: `%TIO_HOME%\config`

     • UNIX or Linux: `$TIO_HOME/config`

   Changes to the server name, port, root suffix, principal user, internal user, encrypted passwords, and SSL-binding are shown as follows:

```
<server>todaix03.think.lab.austin.ibm.com</server>
<ldap-port>389</ldap-port>
<root>dc=ibm,dc=com</root>
<principal>tioldap</principal>
<internal-user>tiointernal</internal-user>
```

2. In the WebSphere administrative console, go to **Security –> User Registries –> LDAP**, to check the WebSphere Application Server connection to the IBM Tivoli Directory Server.

3. Verify the IBM Tivoli Directory Server connection:

   a. Check the IBM Tivoli Directory Server basic functionality using the following command:

```
ldapsearch -v -h <ldapserver> -p 389 -D cn=root
-w <password> -b "" -s base objectclass=*
```

   b. If the `ldapsearch` search returns a `command not found`, install the IBM Tivoli Directory Server Client, following the instructions provided in the *Tivoli Intelligent Orchestrator Installation Guide*.

c. If the `ldapsearch` search returns a `connection error`, start a Telnet session and try to connect to the IBM Tivoli Directory Server using the port number 389.

   d. If communication can be established with a Telnet session between the IBM Tivoli Directory Server and Tivoli Intelligent Orchestrator, check the IBM Tivoli Directory Server administrative password.

4. Search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

WebSphere Application Server configuration verification: The following steps are required:

1. Check the `SystemOut.log` file for errors. For more information, refer to "Problem determination using SystemOut.log" on page 14.

2. Verify the components in the WebSphere administrative console. If there are missing components, search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

Tivoli Intelligent Orchestrator runtime problem determination

The runtime problem determination process for Tivoli Intelligent Orchestrator can be divided into *component-based* problem determination, and *task-based* problem determination. Depending on the type of error you are encountering, you must determine where to start the problem determination process.

- "Component-based problem determination"
- "Task-based problem determination" on page 23

Component-based problem determination

This is the base level of problem determination in the Tivoli Intelligent Orchestrator runtime environment. After you isolate the problem to a specific component, you can then refer to that component problem determination method, as follows:

- "DB2 Universal Database error problem determination"
- "DB2 Universal Database constraint problem determination"
- "IBM Tivoli Directory Server authentication problem determination" on page 22
- "WebSphere Application Server error problem determination" on page 23

DB2 Universal Database error problem determination: If you have encountered a DB2 Universal Databaseerror, follow these steps:

1. If it is a DB2 Universal Database connection problem, refer to "DB2 Universal Databaseconfiguration verification" on page 18.

2. If it is a constraint error or exception, refer to "DB2 Universal Database constraint problem determination."

3. If the problem you have encountered is neither a connection problem nor a constraint error or exception, search the knowledge bases for the keyword error and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

DB2 Universal Database constraint problem determination: If you have encountered a DB2 Universal Database constraint error or exception, follow these steps:

1. Using the error message you have received, identify the DB2 Universal Database table with the constraint.

Constraints are listed in the `$TIO_HOME/sql/db2/dbschema.sql` file as foreign keys and primary keys.

2. Identify the type of constraint, by specifying whether it is an object addition or an object removal.

3. In the `dbschema.sql` file, search the `ALTER TABLE` constraint for the table that interests you. Use the table name from the error message and the type of constraint identified.

4. If it is a primary key constraint, use the constraint statement and the object you are inserting and look in the database to see whether an object with those values already exists. If it does, change the object you are inserting so that to make it unique.

5. If it is a foreign key constraint, identify the second table and the value that is involved in the constraint, and then delete the associated object that is described by the constraint, and then you should be able to delete your object.

IBM Tivoli Directory Server authentication problem determination: If you have encountered an IBM Tivoli Directory Server authentication problem on the Tivoli Intelligent Orchestrator server, follow these steps:

1. Check the IBM Tivoli Directory Server for root authentication:

```
ldapsearch -v -h < ldapserver > -p 389 -D "cn=root"
-w <password>  -b "dc=ibm,dc=com" cn=wasadmin
```

If it is a connection problem, refer to "IBM Tivoli Directory Server connection verification" on page 20.

2. Check the IBM Tivoli Directory Server for `wasadmin` authentication:

```
ldapsearch -v -h < ldapserver > -p 389 -D "cn=wasadmin,dc=ibm,dc=com"
-w <password>  -b "dc=ibm,dc=com" cn=wasadmin
```

If it is an authentication problem, perform the following:

- Verify the user credentials
- Synchronize password using `changePassword.sh`
- Refer to "IBM Tivoli Directory Server connection verification" on page 20

3. Check the `tioldap` user:

```
ldapsearch -v -h < ldapserver > -p 389 -D "cn=wasadmin,dc=ibm,dc=com"
-w <password>  -b "dc=ibm,dc=com" cn=tioldap
```

4. Check the `tioldap` authentication:

```
ldapsearch -v -h < ldapserver > -p 389 -D "cn=tioldap,dc=ibm,dc=com"
-w <password>  -b "dc=ibm,dc=com" cn=tioldap
```

If it is an authentication problem, perform the following:

- Verify the user credentials
- Synchronize password using `changePassword.sh`
- Refer to "IBM Tivoli Directory Server connection verification" on page 20

5. Check the `tiointernal` user:

```
ldapsearch -v -h < ldapserver > -p 389 -D "cn=wasadmin,dc=ibm,dc=com"
-w <password>  -b "dc=ibm,dc=com" cn=tiointernal
```

6. Check the `tioappadmin` user:

```
ldapsearch -v -h < ldapserver > -p 389 -D "cn=wasadmin,dc=ibm,dc=com"
-w <password>  -b "dc=ibm,dc=com" cn=tioappadmin
```

7. If the encountered error is not related to either `tioldap`, `tiointernal`, or `tioappadmin`, compare the user output against `ldap.ldif`.

8. Search the knowledge bases and, if necessary, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

WebSphere Application Server error problem determination: If you have encountered a WebSphere Application Server error, use `SystemOut.log` and follow these steps:

1. In the `SystemOut.log` file, find the last startup section by going to the end of the file and then searching upwards for `"End Display"`. If you cannot find it, start the WebSphere Application Server. For more information, refer to "WebSphere Application Server verification" on page 13.

2. If you found the startup section, search for errors between `"End Display"` and `open for e-business`. If errors are found, go to the WebSphere Application Server startup verification. See "WebSphere Application Server verification" on page 13.

3. If no errors are found, search for errors at the time stamp of the encountered problem. If no errors are found, go to the Tivoli Intelligent Orchestrator "Task-based problem determination."

4. If errors are found, match the error found with any of the following LDAP keywords: `SEC*`, `LDAP`, `LTPA`, `security`. If there is an error match, go to "IBM Tivoli Directory Server authentication problem determination" on page 22.

5. If no match is found for the error, search the Tivoli Intelligent Orchestrator Support Knowledge Base for the error message. If the error message is found, resolve the issue using the knowledge entry.

6. If no error message is found, check the WebSphere Application Server Support Knowledge Base for the error message. If the error message is found, resolve the issue using the knowledge entry.

7. If no error message is found, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

Task-based problem determination

The task-based troubleshooting methodologies and methods described below can help you to either solve or isolate your problem to a particular component. To find a resolution to your problem, you might need to return to the component-based troubleshooting methods or to the verification troubleshooting methods.

Problem determination methods are proposed for the following runtime tasks:
- "Starting Tivoli Intelligent Orchestrator"
- "Tivoli Intelligent Orchestrator login" on page 24
- "Navigating the Tivoli Intelligent Orchestrator user interface" on page 24
- "User interface errors" on page 24
- "Running workflows" on page 25
- "Running commands on managed servers" on page 25

Starting Tivoli Intelligent Orchestrator: The following steps are required for starting Tivoli Intelligent Orchestrator:

1. Verify whether the DB2 Universal Database is successfully started. If DB2 Universal Database is not started, start it. For more information, refer to "DB2 Universal Database verification" on page 10.

2. If DB2 Universal Database is started, check whether the IBM Tivoli Directory Server is started. If the IBM Tivoli Directory Server is not started, start it. For more information, refer to "IBM Tivoli Directory Server verification" on page 11.

3. If the IBM Tivoli Directory Server is started, check the `SystemOut.log` file for the following types of exceptions. For more information on the `SystemOut.log` file, refer to "Problem determination using SystemOut.log" on page 14:

   a. If authentication exceptions are found in the log file, go to "IBM Tivoli Directory Server authentication problem determination" on page 22.

   b. If XA connection exceptions are found, go to "DB2 Universal Database error problem determination" on page 21.

   c. If other exceptions are found, go to "WebSphere Application Server error problem determination" on page 23.

Tivoli Intelligent Orchestrator login: The following steps are required for troubleshooting the Tivoli Intelligent Orchestrator login:

1. If the login screen cannot be loaded, verify whether you can ping the Tivoli Intelligent Orchestrator server.

   • If you can ping the server successfully, go to "WebSphere Application Server verification" on page 13.

   • If you cannot ping the server, resolve the required network issues.

2. If the login screen is loaded successfully, use the appropriate credentials to log in to the Tivoli Intelligent Orchestrator server.

   • If the login fails, check the Tivoli Intelligent Orchestrator Knowledge Base for firewall issues. If firewall issues are found, follow the resolution using the knowledge entry.

   • If no firewall issues are found, go to "IBM Tivoli Directory Server authentication problem determination" on page 22.

Navigating the Tivoli Intelligent Orchestrator user interface: The following steps are required for troubleshooting the Tivoli Intelligent Orchestrator user interface navigation:

1. If a `COPXXXX` error is encountered, go to "User interface errors."

2. If you encounter a navigation problem, go to "IBM Tivoli Directory Server authentication problem determination" on page 22.

3. If the error you have encountered cannot be included in any of the above categories, search the error on the Tivoli Intelligent Orchestrator Knowledge Base. If the error is documented on the knowledge base, follow the resolution using the knowledge entry.

4. If the error cannot be found on the knowledge base, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

User interface errors: The following steps are required for troubleshooting the Tivoli Intelligent Orchestrator user interface errors:

1. If a user interface error is encountered, search for the error in the `%TIO_LOGS%\j2ee\console.log` file using either the user interface error number or the error time stamp.

   For example, if the following error message is received in the Tivoli Intelligent Orchestrator user interface:

   ```
   COPCOM093E The JDBC driver caused an SQL exception.
   COPJEE272E (ProblemID: UI640236)
   ```

   You would then search the `j2ee/console.log` file for the Problem ID: UI**640236**. In this case, you would find the corresponding error stack trace:

   ```
   2005-05-02 10:24:11,108 ERROR [Servlet.Engine.Transports : 2]
   (Location.java:454) webui.Location: UI
   Exception [640236], user=null
   ```

```
2005-05-02 10:24:11,123 ERROR [Servlet.Engine.Transports : 2]
(Location.java:506) webui.Location:
Error Code = COPCOM093EdcmSqlException
 ERROR MESSAGE = COPCOM093E The JDBC driver caused an SQL exception.
 1. NESTED EXCEPTION: MESSAGE = [IBM][CLI Driver][DB2/6000]
SQL0532N A parent row cannot be deleted
 because the relationship "DB2INST1.RECOMMENDATION_REQUEST.SQL050324085328960"
restricts the deletion.
  SQLSTATE=23504 DETAILS: DB2INST1.RECOMMENDATION_REQUEST(POOL_ID) ->
DB2INST1.SPARE_POOL(POOL_ID) IP = 9.3.127.47
 THREAD = Servlet.Engine.Transports : 2
 STACK TRACE ==> com.thinkdynamics.kanaha.datacentermodel.DataCenter-
SystemException: COPCOM093E The JDBC driver caused an SQL exception....
```

2. Determine whether there is a root cause shortly above the error.

3. Use the logged error or the root cause to research your problem.

4. If a solution is still not found, try matching the error with the following keywords: LTPA, LDAP, authentication, credential, token. If a match is found, go to "IBM Tivoli Directory Server authentication problem determination" on page 22.

5. If no match is found, try matching the error with the following keywords: constraint, DB2, SQL, relationship, row, table. If a match is found, go to "DB2 Universal Database error problem determination" on page 21.

6. If no match is found, check the WebSphere Application Server SystemOut.log file for errors. For more information, go to "WebSphere Application Server error problem determination" on page 23.

Running workflows: The following steps are required for troubleshooting workflows:

1. Try running a noop workflow. If you cannot run the noop workflow, the deployment engine is not running. Restart Tivoli Intelligent Orchestrator.

2. Try running workflows as logical device operations.
   - If you cannot run workflows as logical device operations, check if errors are encountered against a particular object.
   - If no errors are encountered against a particular object, check if errors occur while running the workflow. If such errors are found, go to "Running commands on managed servers."
   - If no errors occur while running the workflow, search the Tivoli Intelligent Orchestrator Knowledge Base. If the error is documented on the knowledge base, follow the resolution using the knowledge entry.
   - If the error cannot be found on the knowledge base, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

3. Verify if the faulty workflow is associated with a data center model object.
   - If the workflow is associated with a data center model object, go to"Running commands on managed servers."
   - If the workflow is not associated with a data center model object, associate it with a data center model object.

Running commands on managed servers: The following steps are required for troubleshooting executing commands on managed servers:

1. Try isolating the error using the log info statements, or set the log level to DEBUG.

2. Try a simplified command such as uname -a against the managed server.

3. If trying a simplified command works, try running a command using the command line interface:

```
ssh -l username IP 'command'
```

4. If running the command using the command line interface works, it is an environment issue. In your workflow source, check your `.profile` first.

5. If running the command using the command line interface fails, run the command directly on the managed server.

6. If running the command on the managed server works, debug the SSH configuration issue. For more information on SSH configurations, refer to the *Security* section of the Tivoli Intelligent Orchestrator information center. If you need more information on how to address the SSH configuration issue, search the Tivoli Intelligent Orchestrator Knowledge Base. If information is found on the knowledge base, follow the resolution using the knowledge entry. If no information is found, contact Support. For more information, refer to Appendix B, "Support information," on page 225.

7. If running the command on the managed server fails, debug the command on the managed server.

Accessing the knowledge bases

At any time during the problem determination process, when a resolution to your problem cannot be found, check the knowledge bases for Tivoli Intelligent Orchestrator and its prerequisites to determine whether the resolution to your problem is already documented.

The following knowledge bases are available:

- For Tivoli Intelligent Orchestrator:

  http://www-306.ibm.com/software/sysmgmt/products/support/
  IBMTivoliIntelligentOrchestrator.html

- For DB2 Universal Database: http://www-306.ibm.com/software/data/db2/udb/
  support/

- For the IBM Tivoli Directory Server:

  http://www-306.ibm.com/software/sysmgmt/products/support/
  IBMDirectoryServer.html

- For the WebSphere Application Server:

  http://www-306.ibm.com/software/webservers/appserv/
  was/support/

For more Support information, refer to Appendix B, "Support information," on page 225.

Using the available command line tools

This section describes a number of command line tools that are most frequently used during the problem determination process of Tivoli Intelligent Orchestrator and its prerequisites. The following command line tools are described:

- "Tivoli Intelligent Orchestrator command line tools"
- "WebSphere Application Server command line tools" on page 32
- "IBM Tivoli Directory Server command line tools" on page 33

Tivoli Intelligent Orchestrator command line tools

The following table lists a number of command line tools that can be used during the Tivoli Intelligent Orchestrator problem determination process:

Note: The command line tools can be found on TIO_HOME/tools

Table 1. Tivoli Intelligent Orchestrator command line tools

Name	Location	Description	Syntax
applyNewEncryptKey.cmd applyNewEncryptKey.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Migrates all of the existing credentials from the TIO database tables based on a new encryption key. When switching to a new encryption key, a user must also change encrypted data inside the database tables to re-encrypt them using the new encryption key.	**applyNewEncryptKey.cmd/sh [new_encryption_key] applyNewEncryptKey.sh [new_encryption_key]**
cancel-all-in-progress.cmd cancel-all-in-progress.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Cancels all of the deployment requests that are in progress.	`cancel-all-in-progress.cmdcancel-all-in-progress.sh`
changePassword.cmd changePassword.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Changes the default Tivoli Intelligent Orchestrator password for the following users: wasadmin, tioldap, tioappadmin, tiodb, tiointernal. The tiointernal password is used by the agents to register with the agent manager.	**changePassword.cmd <user id> <your new password> <current wasadmin password> changePassword.sh <user id> <your new password> <current wasadmin password>**
clean-up-deployment-requests.cmd clean-up-deployment-requests.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Cleans up all workflows that are in the in-progress state.	**clean-up-deployment-requests.cmd clean-up-deployment-requests.sh**
clean-up-tasks-history.cmd clean-up-tasks-history.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Deletes the task history.	**clean-up-tasks-history.cmd [date] clean-up-tasks-history.sh [date]**

Table 1. Tivoli Intelligent Orchestrator command line tools (continued)

Name	Location	Description	Syntax
dcmExport.cmd dcmExport.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Example: dcmExport.cmd c:/myDirectory/myOutput.xml If outputFilename is not specified, the default output file name is dcmExport.xml in the current directory). Use of option [-d] outputs protected data in clear text (default is encrypted).	**dcmExport.cmd [-d] [outputFilename] dcmExport.sh [-d] [outputFilename]**
dcmQueryCommand.cmd dcmQueryCommand.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Expects full path name of the input file.	**dcmQueryCommandt.cmd [input_file] dcmQueryCommandt.sh [input_file]**
engineStatus.cmd engineStatus.sh	• On Windows: • On UNIX: $TIO_HOME/tools	Verifies the status of the deployment engine, policy engine, and AgentShell Server.	
init.cmd init.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Initializes the database and installs the automation packages with the installDriver option.	**init.cmd [dcmcfg_file] init.sh [dcmcfg_file]**
packageLogs.cmd packageLogs.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Packages the Tivoli Intelligent Orchestrator logs. The resulting zip file is saved by default in your current directory.	**packageLogs.cmd packageLogs.sh [dcmcfg_file]**
reinit.cmd reinit.sh	• On Windows: %TIO_HOME%\tools • On UNIX: $TIO_HOME/tools	Initializes the database and installs the automation packages with the forceInstallDriver option.	**reinit.cmd reinit.sh**

Table 1. Tivoli Intelligent Orchestrator command line tools (continued)

Name	Location	Description	Syntax
`retrieveDetails.cmd` `retrieveDetails.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Retrieves and displays a data center model object based on the specified identifier.	**retrieveDetails.cmd -i\<deviceId\> [-i\<deviceId\>]* retrieveDetails.sh -i\<deviceId\> [-i\<deviceId\>]***

Table 1. Tivoli Intelligent Orchestrator command line tools (continued)

Name	Location	Description	Syntax
siregister.cmd siregister.sh	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Extracts installable files from Macrovision Solution Installation packages and adds them to the Tivoli Intelligent Orchestrator software catalog. **package_location** The URL of the Solution Installation package on the Tivoli Intelligent Orchestrator server. For example, file:S:/solutioninstall/sipackage/acme.zip. **repository_name** The name of a file repository in Tivoli Intelligent Orchestrator where you want to store the package. For example, si-file-repository. **repository_mount_point** The mount point to mount the file repository. For example, /si/export. mount_path The relative path to the package, starting with the specified mount point. For example, if the mount point is /si/export and the mount path is sipackage, then the whole path is /si/export/sipackage. **repository_host_name** The host name of the file repository for the package. **user_name** The SSH user name configured for accessing the file repository.	**siregister.cmd [package_location] [repository_name] [repository_mount_point] [mount_path] [repository_host_name] [user_name] siregister.sh [package_location] [repository_name] [repository_mount_point] [mount_path] [repository_host_name] [user_name]**

Table 1. Tivoli Intelligent Orchestrator command line tools (continued)

Name	Location	Description	Syntax
`tc-driver-manager.cmd` `tc-driver-manager.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Installs, uninstalls, gets information, and gets the device model for the specified automation package. Available commands are: <forceInstallDriver, fid> <driverName | '*'> [options]	**tc-driver-manager.cmd [command]** **tc-driver-manager.sh [command]**
`tio.cmd` `tio.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Starts and stops the Tivoli Intelligent Orchestrator.	
`tioStatus.cmd` `tioStatus.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Verifies the status of the deployment engine, policy engine, AgentShell Server, and WebSphere Application Server.	
`updateCredential.cmd` `updateCredential.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Updates the value of the `internal-user` and `internal-password` tag in the `user-factory.xml` file. It also updates the JMS login user in the WebSphere administrative console.	**updateCredential.cmd internal_user_password [WAS_Admin_User] [WAS_Admin_password] [WAS_CELL_NAME] updateCredential.sh internal_user_password [WAS_Admin_User] [WAS_Admin_password] [WAS_CELL_NAME]**
`workflowLogExport.cmd` `workflowLogExport.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Exports the run history of one or more specified workflows to a log file. The default location for this log file is in the `%TIO_LOGS%` directory.	**workflowLogExport.cmd (-n [workflow name] or -r [request id]) -f [output file name] -i [input file name] workflowLogExport.sh (-n [workflow name] or -r [request id]) -f [output file name] -i [input file name]**

Table 1. Tivoli Intelligent Orchestrator command line tools (continued)

Name	Location	Description	Syntax
`xmlImport.cmd` `xmlImport.sh`	• On Windows: `%TIO_HOME%\ tools` • On UNIX: `$TIO_HOME/ tools`	Imports objects from a specified XML file into the data center model. The XML source file must be validated against the `xmlimport.dtd` file (located in the `$TIO_HOME/xml` directory), that defines the legal building blocks of the XML document.	**xmlImport.cmd file_URL [file_URL] xmlImport.sh file_URL [file_URL]**

WebSphere Application Server command line tools

The following table lists command line tools that can be used during the WebSphere Application Server problem determination process:

Table 2. WebSphere Application Server command line tools

Name	Location	Description	Syntax
`setupCmdLine.bat` `setupCmdLine.sh`	• On Windows: `%WAS_HOME%\ bin` • On UNIX: `$WAS_HOME/ bin`	Sets the environment variables needed by the WebSphere Application Server.	
`collector`	• On Windows: `%WAS_HOME%\ bin` • On UNIX: `$WAS_HOME/ bin`	Gathers logs, property files, configuration files, operating system and Java data and puts into a JAR file. The JAR file name is based on the host name and package of the server, in the format: `hostname-ND|Base-WASenv.jar`.	
`versionInfo`	• On Windows: `%WAS_HOME%\ bin` • On UNIX: `$WAS_HOME/ bin`	Displays information about the current level of the WebSphere Application Server.	
`serverStatus`	• On Windows: `%WAS_HOME%\ bin` • On UNIX: `$WAS_HOME/ bin`	Displays the current status of the WebSphere Application Server.	

Table 2. WebSphere Application Server command line tools (continued)

Name	Location	Description	Syntax
`backupConfig` `restoreConfig`	• On Windows: `%WAS_HOME%\bin` • On UNIX: `$WAS_HOME/bin`	Archives the contents of the `%WAS_HOME%\config` directory and subdirectories to a specified ZIP file, or `toWebSphereConfig_<yyyy-mm-dd>.zip`, created in the same directory in which the command is run.	
`was_security.bat` `was_security.sh`	• On Windows: `%TIO_HOME%\bin` • On UNIX: `$TIO_HOME/bin`	Can be used to enable the WebSphere Application Server security in case it is disabled.	

IBM Tivoli Directory Server command line tools

The following table lists command line tools that can be used during the IBM Tivoli Directory Server problem determination process:

Table 3. IBM Tivoli Directory Server command line tools

Name	Location	Description
`ibmdirctl`	• On Windows: `C:\IBM\ldap\bin` • On UNIX: `/usr/ldap/bin`	Verifies whether the IBM Tivoli Directory Server database was successfully started. Can be used to start and stop the IBM Tivoli Directory Server. To be able to use the `ibmdirctl` command, the IBM Directory Administrator service must be running.
`ibmdiradm`	• On UNIX: `/usr/ldap/bin`	Verifies whether the IBM Directory Administrator service is running.
`ldapsearch`	• On Windows: `C:\IBM\ldap\bin` • On UNIX: `/usr/ldap/bin`	Verifies whether IBM Tivoli Directory Server is running, configured properly, and responding to queries.
`update_xmi.cmd` `update_xmi.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Updates the base domain, `basedn`, for the IBM Tivoli Directory Server.
`updateLDAPHostname.cmd` `updateLDAPHostname.sh`	• On Windows: `%TIO_HOME%\tools` • On UNIX: `$TIO_HOME/tools`	Updates the IBM Tivoli Directory Server host name.

Chapter 3. Log file types

Tivoli Intelligent Orchestrator produces message logs, trace logs, and Common Base Event logs that can be configured dynamically.

Message logs

Message logs record Tivoli Intelligent Orchestrator system events as text messages so they can be reviewed later by customers or by IBM Tivoli Software Support. Typically, messages are used to provide information about how the system or application is performing, and to alert the system administrator to exceptional conditions when they occur. If an error occurs, you can check the message logs for information about the error, the cause of the error, and possible resolutions for the error.

Message logs have the file name `msg.log`, and are stored in the subfolder for each software component. Messages are localized based on the locale configured on the Tivoli Intelligent Orchestrator server. There are multiple levels of message logs, and they can be filtered by message log level and software component.

For a complete listing of the Tivoli Intelligent Orchestrator messages, see Chapter 10, "Tivoli Intelligent Orchestrator messages," on page 95.

Message ID format

The message ID consists of 10 alphanumeric characters that uniquely identify the message. Each message ID includes:

- A 3-character product identifier
- A 3-character component or subsystem identifier
- A 3-digit serial or message number
- A 1-character type code indicating the severity of the message

The sequence of the alphanumeric characters in the message ID is COPYYY###Z where:

- COP is a three-character release-independent product identifier. The system uses this product identifier to identify the relevant subdirectory that contains serviceability information when using the Tivoli Common Directory.
- YYY is the subsystem code, including the following subsystem codes:

Code	Subsystem
COM	Common
DEX	Deployment engine
JEE	j2ee — the Tivoli Intelligent Orchestrator code that runs on the WebSphere Application Server.
PEZ	Policy engine
TCA	Tivoli common agent
TDM	TC driver manager
JDS	Job Distribution Service
UTL	Utilities

- ### is 3-digit unique serial or message number.
- Z is the severity code indicator, including the following indicators:

Severity code	Description
I	Informational message. The message provides information or feedback about normal events that have occurred or are occurring, but do not require you to take action. The message might also request that you provide information in instances where the outcome of the information you provide will not be negative.
W	Warning message. The message indicates that potentially undesirable conditions have occurred or could occur, but the program can continue. Warning messages might ask you to make a decision before processing continues.
E	Error message. The message indicates an error that requires an intervention or correction before the program can continue.

Message elements

Each message includes a message ID, message text, and explanation text. Some messages also include action text when the user can take an action.

Example:

COPDEX101E   A security exception occurred while the system parsed the profile XML file.

Explanation: The ITM Obtain OS Profiles workflow generates an XML file that contains the list of profiles installed in Tivoli Management Agent. This profile XML file is copied to the IBM Tivoli Provisioning Manager and then it is parsed by the Profile XML Parser. The XML parser cannot read the profile XML file because a security error occurred. This is a file permissions issue. Either the parent directory of the profile XML file is missing appropriate file permissions, or the profile XML file is missing the appropriate file permissions.

Operator response: Verify that the login user is assigned read and write access to the parent directory of the ProfileXMLParser.

Message ID
> String of 10 alphanumeric characters that uniquely identifies the message. In the preceding example, the message ID is COPDEX101E.

Message text
> Explains the reason for the message, what the message means, and possible causes of the message with recommended steps you can take (for those messages that require some action on your part). In the preceding example, the message text is: A security exception occurred while the system parsed the profile XML file.

Explanation
> Contains additional information about the cause of the message, and describes the action that the system took or will take. In the example, the explanation follows the label Explanation.

Action
> Describes what you must do to proceed, to recover from the error, or to prevent a problem from occurring. Actions can include:

Action title	Description
System Action	Describes the reaction of the system to the condition that caused it to display this message.
Operator Response	Describes what response you might be able to take.

Action title	Description
Administrator Response	Describes what response a system administrator might be able to take.
Programmer Response	Describes what response a system programmer might be able to take.

In the example, the action follows the label Operator Response.

Trace logs

Tivoli Intelligent Orchestrator provides configurable tracing capabilities that can help you determine the cause of a problem. Trace logs and first-failure data capture (FFDC) are built into the software to assist the IBM Customer Support for Tivoli software personnel in gathering information to determine why a problem is occurring, and might be requested as part of diagnosing a reported problem.

- Trace logs capture operating environment details, including the starting and stopping of processes, data transfer between software components, activity that occurs while the software is running, and errors that occur when the code fails to operate as intended.
- First-failure data capture captures and stores the tracing information preceding an error message.

Trace logs are used to determine the causes of Tivoli Intelligent Orchestrator problems and to debug errors. Error messages can include information about the cause of the error and possible resolutions for the error. Trace logs are intended to be used by Tivoli Customer Support service engineers or developers. If you encounter an issue, Support representatives might ask you to obtain information from trace logs so that they can review the details.

Trace logs have the file name `trace.log`, and are stored in the subfolder for each software component. Trace logs are in English only, localization support (national language support) is not provided for trace entries. By default, tracing is enabled at the minimal level that is required for FFDC, and can be changed as required.

Common Base Event logs

Trace logs are automatically translated to Common Base Event, which is a standardized format for logging and tracing events in a multi-application environment. By using the Common Base Event format, Tivoli Intelligent Orchestrator facilitates the integration of problem determination data, and makes it possible to rapidly identify an event, collect and analyze problem determination data, establish the event priority, plan appropriate responses, and make the necessary adjustments to resolve it. An XML-based standard, the Common Base Event guarantees consistency of interpretation for all of the messages generated between applications, and offers consistent and complete information about the following:

- The system component that reports a particular error
- The components affected by this error, which might be the same as the component reporting the error
- The error itself

Common Base Event logs have the file name `cbe.log`, and are stored in the subfolder for each software component.

Chapter 4. Locating and configuring log files

This release of Tivoli Intelligent Orchestrator produces logs that follow the Tivoli Common Directory standard.

Log locations

To provide a consistent mechanism for locating serviceability information, Tivoli products and applications have implemented the Tivoli Common Directory. The Tivoli Common Directory represents a central location on systems running Tivoli software for storing serviceability-related files.

The location of the message logs, trace logs, and Common Base Event logs for Tivoli Intelligent Orchestrator follow the Tivoli Common Directory standard. The log locations are shown in the following table.

Directory name	Description	Path
j2ee	WebSphere JVM	`%TIO_LOGS%\j2ee`
deploymentengine	Deployment Engine JVM	`%TIO_LOGS%\deploymentengine`
policyengine	Policy Engine JVM	`%TIO_LOGS%\policyengine`
tcdrivermanager	Workflows	`%TIO_LOGS%\tcdrivermanager`
install	Installation	`%TIO_LOGS%\install`
uninstall	Uninstall process	`%TIO_LOGS%\uninstall`
agentshellserver	Agent Shell Server	`%TIO_LOGS%\agentshellserver`
wswb	WebSphere Studio WorkBench (WSWB)	`%TIO_LOGS%\wswb`

where *%TIO_LOGS%* takes the following default values:

- **Windows:** `C:\Program Files\ibm\tivoli\common\COP\logs`
- **UNIX® or Linux:** `/var/ibm/tivoli/common/COP/logs`

The log files that are generated by all the utility scripts, such as `%TIO_HOME%\tools\cancel-all-in-progress.cmd`,
`%TIO_HOME%\tools\changepassword.cmd`, and so on, are located in the *%TIO_LOGS%* directory on Windows systems ($TIO_LOGS on UNIX or Linux).

Log directory files

Each Tivoli Intelligent Orchestrator JVM directory includes the following log files:

console.log
> Stores all event logs including messages, traces, and debugging information.

msg.log
> Stores the globalized event messages so the user can understand a problem and take action to try and resolve the problem.

trace.log
> Stores errors that are reviewed by IBM Tivoli Support.

cbe.log
> Stores all error messages in Common Base Event format.

Logging levels

This section details the behavior of Tivoli Intelligent Orchestrator logs based on how the logging levels are defined.

The logging level hierarchy for Tivoli Intelligent Orchestrator is shown in the following table:

Logging level	Description
msg_error#com.thinkdynamics.kanaha. util.logging.MessageLevel	Extended for message logs
msg_warn#com.thinkdynamics.kanaha. util.logging.MessageLevel	Extended for message logs
msg_info#com.thinkdynamics.kanaha. util.logging.MessageLevel	Extended for message logs
error	Default log4j level — trace logs
warn	Default log4j level — trace logs
info	Default log4j level — trace logs
debug	Default log4j level — trace logs

The extended logging levels are the highest levels in the logging hierarchy. These levels are set exclusively for the messages, which are globalized and distinct from the trace logs. Trace logs are available only in English.

Configuring logs with log4j

Log data in Tivoli Intelligent Orchestrator is managed by log4j, an established open source logging tool. This section details the default log4j settings, the customized Tivoli Intelligent Orchestrator settings, and how you can modify settings dynamically. For complete log4j documentation, go to http://logging.apache.org/log4j/docs/documentation.html.

The data from the console.log, msg.log, trace.log, and cbe.log files are recorded based on the default logging levels and configuration parameters set in the log4j.prop file or in the log4j-util.prop. Use the log4j-util.prop file to configure the logging for all scripts located in the %TIO_HOME%\tools directory.

log4j.prop

The log4j.prop file, shown below, defines the default configuration for message, trace, and Common Base Event logs.

The location of this file is as follows:

Windows
> %TIO_HOME%\config

UNIX or Linux
> $TIO_HOME/config

```
# output directory. Can be overwritten with -Dkanaha.logs=
#
kanaha.logs=logs

# message formats
# normal  used to write to console.log
# error   used to format error messages (prints location of a problem)
```

```
# module  is meant for messages written module specific files
#
output.normal=%d{ISO8601} %-5p [%t] (%13F:%L) %c{2}: %m%n
output.error=%d{ISO8601} %-5p [%t] (%13F:%L): %m%n
output.module=%d{ISO8601} %-5p [%t] (%13F:%L): %m%n


#
# configure root category
# note that this configuration is inherited by all other categories (see
# example below if you want to suppress this behaviour)
#
log4j.rootCategory=DEBUG, consolefile, errorfile, messagefile

# everything goes to console.log
# rolling by log size. For other rolling options, see
# http://logging.apache.org/log4j/docs/api/index.html
#
log4j.appender.consolefile=org.apache.log4j.RollingFileAppender
log4j.appender.consolefile.MaxFileSize=100MB
log4j.appender.consolefile.MaxBackupIndex=10
log4j.appender.consolefile.File=${kanaha.logs}/console.log
log4j.appender.consolefile.layout=org.apache.log4j.PatternLayout
log4j.appender.consolefile.layout.ConversionPattern=${output.normal}
log4j.appender.consolefile.threshold=info
log4j.appender.consolefile.append=true

# errors to trace log file, for FFDC
# rolling by log size
#
log4j.appender.errorfile=org.apache.log4j.RollingFileAppender
log4j.appender.errorfile.MaxFileSize=10MB
log4j.appender.errorfile.MaxBackupIndex=10
log4j.appender.errorfile.File=${kanaha.logs}/trace.log
log4j.appender.errorfile.layout=org.apache.log4j.PatternLayout
log4j.appender.errorfile.layout.ConversionPattern=${output.error}
log4j.appender.errorfile.threshold=error
log4j.appender.errorfile.append=true

# globalized message log to msg.log (user log)
# rolling by log size
#
log4j.appender.messagefile=org.apache.log4j.RollingFileAppender
log4j.appender.messagefile.MaxFileSize=10MB
log4j.appender.messagefile.MaxBackupIndex=10
log4j.appender.messagefile.File=${kanaha.logs}/msg.log
log4j.appender.messagefile.layout=org.apache.log4j.PatternLayout
log4j.appender.messagefile.layout.ConversionPattern=${output.normal}
log4j.appender.messagefile.threshold=MSG_INFO#com.thinkdynamics.kanaha.
util.logging.MessageLevel
log4j.appender.messagefile.append=true

# suppress annoying messages from datacentermodel
log4j.category.com.thinkdynamics.kanaha.datacentermodel=INFO


#
# examples
#

# suppress writing dcm messages to console.log
#
#log4j.category.com.thinkdynamics.kanaha.datacentermodel=INFO,
datacentermodel, errorfile
#log4j.additivity.com.thinkdynamics.kanaha.datacentermodel=false
#log4j.appender.datacentermodel=org.apache.log4j.FileAppender
#log4j.appender.datacentermodel.File=${kanaha.logs}/datacentermodel.log
```

```
#log4j.appender.datacentermodel.layout=org.apache.log4j.PatternLayout
#log4j.appender.datacentermodel.layout.ConversionPattern=${output.module}
#log4j.appender.datacentermodel.append=false
```

Log level defaults

The initial log4j log level configuration for each log file is set to `info`. As defined in the `log4j.prop` file above, each log file is set to a unique log level for Tivoli Intelligent Orchestrator using the

`log4j.appender.`*`filename`*`.threshold=` parameter.

The following is a list of the default logging levels for each of the log file types:

console.log
> `info`
>
> If you want more log information for troubleshooting purposes, set the log level to `debug`.

trace.log
> `error`

msg.log
> `MSG_INFO#com.thinkdynamics.kanaha.util.logging.MessageLevel`

cbe.log
> `error`

RollingFileAppender defaults

The RollingFileAppender defines the autoarchiving behavior of the log4j tool. As defined in the `log4j.prop` file above, the default settings for each Tivoli Intelligent Orchestrator log file are:

console.log
- Maximum number of archived log files: 10
- Maximum log file size: 100MB

trace.log
- Maximum number of archived log files: 10
- Maximum log file size: 10MB

msg.log
- Maximum number of archived log files: 10
- Maximum log file size: 10MB

cbe.log
- Maximum number of archived log files: 10
- Maximum log file size: 10MB

Configuring log4j dynamically

To modify the `log4j.prop` or `log4j-util.prop` file:

1. Open the properties file in a text editor.
2. Modify settings as required.
3. Save the file.

The Tivoli Intelligent Orchestrator application server automatically reloads the log4j configurations 60 seconds after you save the properties file. You do not need to restart the Tivoli Intelligent Orchestrator server. The updated log4j configuration will implement after 60 seconds.

Example:

To enable the TC driver manager to append to its log file located in the `%TIO_LOGS%\tcdrivermanager` directory, complete these steps:

1. Open `log4j-util.prop` in a text editor.
2. Change the default `log4j.appender.file.append=false` to `log4j.appender.file.append=true`.
3. Save the file.

Preparing log files for review by IBM Tivoli Support

Tivoli Intelligent Orchestrator includes packageLog, a log management tool that simplifies the problem determination process. For more information, see "packageLog ZIP tool" on page 92.

Chapter 5. Tivoli Intelligent Orchestrator log files

This chapter describes the directory locations for the following log files:

- "Log files for product setup"
- "Log files for the uninstall process"
- "Log files for starting and stopping the server" on page 46
- "Log files for the Web interface" on page 47
- "Deployment engine log files" on page 47
- "Workflow logs" on page 48
- "Logs for data collection and decision making" on page 49
- "Automation package logs" on page 49

Log files for product setup

These log files are for installation and data center model initialization.

Table 4. Product setup logs

File name	Location	Description
reinit.log	**Windows** %TIO_LOGS% Default value for %TIO_LOGS%: C:\Program Files\ibm\tivoli\ common\COP\logs **UNIX or Linux** $TIO_LOGS Default value for $TIO_LOGS: /var/ibm/tivoli/common/COP/logs	This log file is created when you initialize the database and load the default automation packages, workflows, and data center model. It is also used whenever you run the reinit command to reload your automation packages and data center model. It contains SQL statements used to initialize the database, and output data resulting from the loading of automation packages and data center model.
tcinstall.log	**Windows** %TIO_LOGS%\install **UNIX or Linux** $TIO_LOGS/install	This is the InstallShield log for Tivoli Intelligent Orchestrator installation.

Log files for the uninstall process

When you uninstall Tivoli Intelligent Orchestrator, the log files for the uninstall process follow the Tivoli Common Directory standard, and are located in the following directory:

Windows
%TIO_LOGS%\uninstall

UNIX or Linux
$TIO_LOGS/uninstall

Log files for starting and stopping the server

Log files for starting and stopping the Tivoli Intelligent Orchestrator server are stored in the %TIO_LOGS% directory. Log files specific to WebSphere Application Server are located in the %WAS_HOME%\logs\server1 directory, where %WAS_HOME% is the default WebSphere Application Server home directory.

Table 5. Server startup and shutdown logs

File name	Location	Description
tio_start.log	**Windows** 　　%TIO_LOGS% **UNIX or Linux** 　　$TIO_LOGS	This is the log file of the most recent startup of the Tivoli Intelligent Orchestrator server. This log is overwritten each time the server is started. If startup happens with no errors, this file is very short. If there are errors, you might need to consult the WebSphere Application Server logs for additional information.
tio_stop.log	**Windows** 　　%TIO_LOGS% **UNIX or Linux** 　　$TIO_LOGS	This is the log file of the most recent shutdown of the Tivoli Intelligent Orchestrator server. This file is overwritten each time the server is stopped.
startServer.log	**Windows** 　　%WAS_HOME%\logs\server1 **UNIX or Linux** 　　$WAS_HOME/logs/server1	This is the log file for the startup of the WebSphere Application Server.
stopServer.log	**Windows** 　　%WAS_HOME%\logs\server1 **UNIX or Linux** 　　$WAS_HOME/logs/server1	This is the log file for the shutdown of the WebSphere Application Server. WebSphere is the last service to stop when you shut down Tivoli Intelligent Orchestrator, so this log file is useful for verifying whether the shutdown completed.
SystemOut.log	**Windows** 　　%WAS_HOME%\logs\server1 **UNIX or Linux** 　　$WAS_HOME/logs/server1	This is the log file for WebSphere Application Server output. You might want to refer to this file when WebSphere Application Server does not start.

Log files for the Web interface

Log files for the Web interface and data center model changes, and other operations associated with the Web interface are stored in the `%TIO_LOGS%\j2ee` directory.

Table 6. Web interface logs

File name	Location	Description

console.log	**Windows**
	    `%TIO_LOGS%\j2ee`
	UNIX or Linux
	    `$TIO_LOGS/j2ee`
		This log file stores all event logs for the Web interface including messages, traces, and debugging information.

msg.log	**Windows**
	    `%TIO_LOGS%\j2ee`
	UNIX or Linux
	    `$TIO_LOGS/j2ee`
		This log file stores the globalized event messages for the Web interface and data center model changes.

trace.log	**Windows**
	    `%TIO_LOGS%\j2ee`
	UNIX or Linux
	    `$TIO_LOGS/j2ee`
		This log file stores error messages that can be reviewed by Tivoli Software Support.

cbe.log	**Windows**
	    `%TIO_LOGS%\j2ee`
	UNIX or Linux
	    `$TIO_LOGS/j2ee`
		This log file stores all error messages for the Web interface in Common Base Event format.

Deployment engine log files

Log files for workflow and deployment requests are stored in the `%TIO_LOGS%\deploymentengine` directory.

Table 7. Deployment engine logs

File name	Location	Description

console.log	**Windows**
	    `%TIO_LOGS%\deploymentengine`
	UNIX or Linux
	    `$TIO_LOGS/deploymentengine`
		This log file stores all event logs for workflow and deployment requests including messages, traces, and debugging information.

msg.log	**Windows**
	    `%TIO_LOGS%\deploymentengine`
	UNIX or Linux
	    `$TIO_LOGS/deploymentengine`
		This log file stores the globalized event messages for the deployment engine component.

trace.log	**Windows**
	    `%TIO_LOGS%\deploymentengine`
	UNIX or Linux
	    `$TIO_LOGS/deploymentengine`
		This log file stores error messages that can be reviewed by Tivoli Software Support.

Table 7. Deployment engine logs (continued)

File name	Location	Description

cbe.log	**Windows**
	    %TIO_LOGS%\deploymentengine
	UNIX or Linux
	    $TIO_LOGS/deploymentengine
		This log file stores all event logs for the deployment engine component in Common Base Event standard format.

deploymentengine_start.log	**Windows**
	    %TIO_LOGS%\deploymentengine
	UNIX or Linux
	    $TIO_LOGS/deploymentengine
		This is the log file of the most recent startup of the deployment engine. This log is overwritten each time the deployment engine is started.

Workflow logs

If you want to determine why a particular workflow has failed, you can use the Web interface to display the run history for that workflow. You can also export the log files of your workflow history using the workflowLogExport command, as described below. The command script is located in the %TIO_HOME%\tools directory, where %TIO_HOME% is the Tivoli Intelligent Orchestrator home directory.

- On a Windows platform, type the following command:

  workflowLogExport.cmd (-n <workflow_name>* | -r <request_id>) [-f <export_filename>] [-i <input_filename>]

- On a UNIX or Linux platform, type the following command:

  workflowLogExport.sh (-n <workflow_name>* | -r <request_id>) [-f <export_filename>] [-i <input_filename>]

  where:

  - <workflow_name> is the name of the workflow whose run history you want to export to a log file;
  - <request_id> indicates the deployment request identifier;
  - [-f <export_filename>] specifies the fully qualified path and file name where the workflow log will be exported. By default, the file format for the exported log file is XML, and the default file name is workflowLogExport.xml. If you do not specify a different file format, the workflow log file will be exported by default to XML. Also, if no file location is specified, the log file will be exported by default to the %TIO_LOGS% directory.
  - [-i <input_filename>] specifies the name of the file that lists the names of all workflows whose run history you want to export to the same log file.

Logs for data collection and decision making

Log files for the policy engine component (data acquisition engine, application controllers, global resource manager) are stored in the `%TIO_LOGS%\policyengine` directory.

Table 8. Policy engine logs

File name	Location	Description

console.log	**Windows**
	　　`%TIO_LOGS%\policyengine`
	UNIX or Linux
	　　`$TIO_LOGS/policyengine`
		This log file stores all event logs for the policy engine component including messages, traces, and debugging information.

msg.log	**Windows**
	　　`%TIO_LOGS%\policyengine`
	UNIX or Linux
	　　`$TIO_LOGS/policyengine`
		This log file stores the globalized event messages for the policy engine component.

trace.log	**Windows**
	　　`%TIO_LOGS%\policyengine`
	UNIX or Linux
	　　`$TIO_LOGS/policyengine`
		This log file stores error messages that can be reviewed by Tivoli Software Support.

cbe.log	**Windows**
	　　`%TIO_LOGS%\policyengine`
	UNIX or Linux
	　　`$TIO_LOGS/policyengine`
		This log file stores all event logs for the policy engine component in Common Base Event standard format.

policyengine_start.log	**Windows**
	　　`%TIO_LOGS%\policyengine`
	UNIX or Linux
	　　`$TIO_LOGS/policyengine`
		This is the log file of the most recent startup of the policy engine. This log is overwritten each time the policy engine is started.

Automation package logs

Log files for orchestration packages are stored in the `%TIO_LOGS%\tcdrivermanager` directory.

Table 9. Automation package logs

File name	Location	Description

console.log	**Windows**
	　　`%TIO_LOGS%\tcdrivermanager`
	UNIX or Linux
	　　`$TIO_LOGS/tcdrivermanager`
		This log file stores all event logs for orchestration packages including messages, traces, and debugging information.

msg.log	**Windows**
	　　`%TIO_LOGS%\tcdrivermanager`
	UNIX or Linux
	　　`$TIO_LOGS/tcdrivermanager`
		This log file stores the globalized event messages for orchestration packages.

Table 9. Automation package logs (continued)

File name	Location	Description

trace.log	**Windows**
	      `%TIO_LOGS%\tcdrivermanager`
	
	UNIX or Linux
	      `$TIO_LOGS/tcdrivermanager`
		This log file stores error messages that can be reviewed by Tivoli Software Support.

cbe.log	**Windows**
	      `%TIO_LOGS%\tcdrivermanager`
	
	UNIX or Linux
	      `$TIO_LOGS/tcdrivermanager`
		This log file stores all event logs for orchestration packages in Common Base Event standard format.

Chapter 6. Middleware prerequisite log files

This chapter describes the directory locations for the following log files:

- "Installation log files for prerequisites"
- "Runtime logs for prerequisites" on page 52

Installation log files for prerequisites

When you install the prerequisite software for Tivoli Intelligent Orchestrator using the graphical installer, the log files for the installation process are created in the *Tivoli_common_directory*\GPX directory, where:

- The default value for the *Tivoli_common_directory* is:

    Windows
    > `C:\Program Files\ibm\tivoli\common`

    UNIX or Linux
    > `/var/ibm/tivoli/common`

- GPX is the three-digit product code for the prerequisite installer.

Installation logs for individual prerequisites

The installation logs for each software prerequisite are also located in the *Tivoli_common_directory*\GPX directory.

WebSphere Application Server

The WebSphere Application Server logs are:

- base.log
- websphere.stdout
- websphere.stderr
- websphereFixPack.stdout
- websphereFixPack.stdout

DB2 Universal Database

The log files for IBM DB2 Universal Database Enterprise Edition 8.2 are:

- db2server.log
- db2server.trace
- db2Server.stderr
- db2Server.stdout
- db2ServerHotfix.stderr
- db2ServerHotfix.stdout
- db2client.log
- db2client.trace
- db2Client.stderr
- db2Client.stdout
- db2wi.log

Directory Server

The log files for the IBM Tivoli Directory Server are:

*   ldap.stderr
*   ldap.stdout
*   ldapinst.log

Runtime logs for prerequisites

For additional information on errors that do not pertain to Tivoli Intelligent Orchestrator, you might want to consult the error and trace logs for the middleware prerequisites. The names and the locations of these log files are provided below.

WebSphere Application Server

The runtime WebSphere Application Server logs are located in the `%WAS_HOME%\logs` and the `%WAS_HOME%\logs\server1` directories, where `%WAS_HOME%` is the WebSphere Application Server home directory. The runtime transaction logs for WebSphere Application Server are stored in the `%WAS_HOME%\tranlog` directory.

The default value for *%WAS_HOME%* is:

Windows
> `C:\Program Files\WebSphere\AppServer`

AIX   `/usr/WebSphere/AppServer`

Linux and Solaris
> `/opt/WebSphere/AppServer`

Check the following log files for errors:

*   SystemOut.log
*   startServer.log
*   stopServer.log
*   SystemErr.log

SystemOut.log
> This is the log file for WebSphere output. It contains messages that are generated when the applications running inside the WebSphere Application Server are being started or stopped. You might want to refer to this file when WebSphere does not start. The log file is located in the `%WAS_HOME%\logs\server1` directory on Windows systems (`$WAS_HOME/logs/server1` on UNIX or Linux).
>
> After the Tivoli Intelligent Orchestrator is successfully started, use the `tail -f SystemOut.log` command to monitor this log file for any problems that might occur.

startServer.log
> This is the log file for the startup of the WebSphere Application Server, located in the `%WAS_HOME%\logs\server1` directory on Windows systems (`$WAS_HOME/logs/server1` on UNIX or Linux).
>
> Look for `open for e-business` for a successful startup of the WebSphere Application Server.

stopServer.log
> This is the log file for the shutdown of the WebSphere Application Server.

WebSphere Application Server is the last service to stop when you shut down Tivoli Intelligent Orchestrator, so this log file is useful for verifying whether the shutdown completed. It is located in the %WAS_HOME%\logs\server1 directory on Windows systems ($WAS_HOME/logs/server1 on UNIX or Linux).

Look for `Server <server-name> stop completed` for a successful shutdown of the WebSphere Application Server.

SystemErr.log
This is the log file that contains Java exceptions and stack traces caused by the enterprise applications. It is located in the %WAS_HOME%\logs\server1 directory on Windows systems ($WAS_HOME/logs/server1 on UNIX or Linux).

DB2 Universal Database

The DB2 Universal Database error logs are stored in the *%DB2_HOME%*\DB2 directory on Windows® systems (*$DB2_HOME*/db2dump on UNIX or Linux), where *%DB2_HOME%* is the default DB2 home directory.

Check the following log file for errors:

db2diag.log
When an error occurs, the `db2diag.log` is updated with information about the error. This is the primary log to use when debugging DB2 Universal Database problems.

db2alert.log
If an error is determined to be an alert, then an entry is made in the `db2alert.log` file and to the operating system or native logging facility.

dump files
For some error conditions, additional information is logged in external binary dump files named after the failing process ID. These files are intended for DB2 Universal Database Customer Support.

trap files
The database manager generates a trap file if it cannot continue processing because of a trap, segmentation violation, or exception. Trap files contain a function flow of the last steps that were executed before a problem occurred.

Other useful DB2 Universal Databasecommands include:

db2trc   This command gives you the ability to control tracing.

db2support
This command collects environment information and log files and places them into a compressed archive file.

Directory Server

Trace logs for the LDAP server are stored in the *<LDAP_Install_Directory>*\appsrv\logs directory, where *<LDAP_Install_Directory>* is the installation directory for the LDAP server.

Check the following log files for errors:
- `ibmslapd.log`
- `audit.log`

- `db2diag.log`
- `ibmds_config.log`
- `ibmds_config_err.log`

Tivoli Agent Manager

Trace logs for the agent manager are stored in the *Agent_Manager_install_dir* `logs` directory, where *Agent_Manager_install_dir* is the installation directory for the agent manager. The log files for the Tivoli Intelligent Orchestrator installed on a managed server are stored in the installation directory on the target server.

For more information on agent manager logs, refer to Chapter 8, "Troubleshooting the agent manager," on page 79.

Chapter 7. Common problems and known limitations in Tivoli Intelligent Orchestrator

This chapter describes how to recover from the following types of Tivoli Intelligent Orchestrator problems, and describes a number of known limitations for the Tivoli Intelligent Orchestrator reports:

- "Problems with installation"
- "Problems with logging in" on page 62
- "Problems with workflows" on page 64
- "Other common problems" on page 68
- "Known report limitations" on page 77

Problems with installation

This section includes troubleshooting scenarios for the following problems:

- "In Linux, you cannot create the user tioadmin"
- "The system cannot connect to the IBM Tivoli Directory Server during the Tivoli Intelligent Orchestrator installation" on page 56
- "The installation of the DB2 Universal Database Client on Windows 2003 system fails" on page 56
- "Installing the common agent and the agent manager is not supported" on page 57
- "The system cannot connect to the database server during the Tivoli Intelligent Orchestrator installation" on page 57
- "The Microsoft Active Directory installation fails" on page 57
- "The Microsoft Active Directory installation fails with invalid certificate value" on page 58
- "The silent installation program for Tivoli Intelligent Orchestrator exits before the installation is completed" on page 58
- "Environment variables not set for user tioadmin" on page 58
- "The installation of IBM Tivoli NetView on Windows fails if the password for creating a user account does not meet the system requirements" on page 59
- "The agent manager installation fails during the Tivoli Intelligent Orchestrator installation" on page 59
- "An error occurs when running the rpm -qa command after the DB2 Universal Database, IBM Tivoli Directory Server, and WebSphere Application Server prerequisites are installed on Linux" on page 62

In Linux, you cannot create the user tioadmin

The installation appears to proceed successfully to completion, but when you check to find the user `tioadmin`, it has not been created.

Cause

This is a known InstallShield Multi-Platform issue. Because the user `tioadmin` is not created, the server environment is unstable. Various elements of the installation expect `tioadmin` and require it to exist. For example, because WebSphere Application Server is configured to start with `tioadmin`, WebSphere Application Server cannot start.

In Linux, the `tioadmin` user creation fails if the `tioadmin` group already exists before you install. No exception is thrown, so the installer cannot detect that the user creation operation has failed, and the system cannot return to a previous stage of the installation.

Solution

Reinstall Tivoli Intelligent Orchestrator. However, before you start the installation, ensure that the `tioadmin` user and `tioadmin` group either both exist or both do not exist.

The system cannot connect to the IBM Tivoli Directory Server during the Tivoli Intelligent Orchestrator installation

Cause

During the Tivoli Intelligent Orchestrator installation, the system might indicate that it cannot connect to the IBM Tivoli Directory Server. This error occurred because the directory server was not started before running the installer. The directory server must be started before you install Tivoli Intelligent Orchestrator, so the installer can connect to it.

Solution

1. Ensure that the directory server is installed:
   a. If the installation destination directory was created, check the installation log file for the directory server:
      - Windows: `C:\IBM\LDAP\ldapinst.log`
      - UNIX or Linux: `/usr/ldap/ldapinst.log`

   After the installation of the directory server is complete, an LDAP database must be created within DB2 Universal Database. For more information, refer to the *Installation Guide for Tivoli Intelligent Orchestrator 5.1*.

   The `ldapcfg.stat` file shows the syntax that was used at the time of the database creation:

   ```
   C:\IBM\ldap\bin\ldapcfg -n -a db2inst1 -w password -d LDAP -l C: -c -f
   C:\IBM\ldap\tmp\ldapcfg.dat
   ```

   The `ldapcfg.stat` file is located in the following directory:
   - On Windows: `C:\IBM\ldap\tmp\ldapcfg.stat`
   - On UNIX or Linux: `/usr/ldap/tmp/ldapcfg.stat`

2. Verify the status of the directory server, using the `ibmdirctl` tool, located in the `C:\IBM\ldap\bin` directory on Windows or in the `/usr/ldap/bin` directory on UNIX or Linux. Type the following command to check the directory server status:

   ```
   ibmdirctl -D cn=root -w <password> status
   ```

3. If the directory server is not started, start it by using the following command:

   ```
   start: ibmdirctl -D cn=root -w <password> start
   ```

The installation of the DB2 Universal Database Client on Windows 2003 system fails

Cause

The CD used for installing the DB2 Universal Database Client, DB2 Universal Database Administration Client, Version 8.1 on 64–bit systems, is not supported on Windows 2003 operating systems.

Solution

Use the DB2 Universal Database Administration Client, Version 8.1 for Windows operating systems on 32–bit systems CD instead.

Installing the common agent and the agent manager is not supported

Cause

Installing the common agent on the Tivoli Intelligent Orchestrator server, where the agent manager is also installed, is not supported.

Solution

Manually uninstall the common agent.

The system cannot connect to the database server during the Tivoli Intelligent Orchestrator installation

Cause

During the installation, the system might indicate that it cannot connect to the database. This error occurred because the database was not started before running the installer. The database server must be started before you install Tivoli Intelligent Orchestrator, so that the installer can connect to it.

Solution

Ensure that the database server is installed. Verify the status of the database server. If it is not started, start it.

Use the following commands to start the DB2 Universal Database server:

- On Windows: `DB2 - <instance_name>`
- On UNIX: `$db2start`

  If the database server was successfully started, you should see the following output:

  ```
  db2start 12-21-2004 14:44:01 0 0 SQL1063N
  DB2START processing was successful. SQL1063N
  DB2START processing was successful
  ```

You should also verify whether the required port is available:

```
netstat -an |grep 50000
```

The Microsoft Active Directory installation fails

Cause

The Microsoft® Active Directory SSL certificate is missing. If you run the Tivoli Intelligent Orchestrator installer without the SSL certificate, the Microsoft Active Directory configuration will fail.

Solution

This is a manual configuration step that you must complete before you install Tivoli Intelligent Orchestrator.

1. Generate the SSL certificate on the Microsoft Active Directory server.
2. Install the SSL certificate on the client server.

3. Import the `schema.ldif` and `ldap.ldif` files into the Microsoft Active Directory server. Instructions for this step are found in *Tivoli Intelligent Orchestrator Installation Guide Version 5.1.*

4. Run the `reinit` command.

The Microsoft Active Directory installation fails with invalid certificate value

Cause

The Microsoft Active Directory certificate is missing but the user enters a value for the certificate location during the install. If the file does not exist on the Tivoli Intelligent Orchestrator server, then the Tivoli Intelligent Orchestrator exits with error *1005*. There is no other error information available with this error code.

The silent installation program for Tivoli Intelligent Orchestrator exits before the installation is completed

Cause

WebSphere Application Server was not started before the silent installation started.

Solution

Before you run the silent installation:

1. Ensure that WebSphere Application Server is started.
2. Ensure that WebSphere Application Server security is not running.

Environment variables not set for user tioadmin

You are using a login window manager such as CDE, and when you start Tivoli Intelligent Orchestrator you get a message that informs you that `WAS_HOME` is not set.

Cause

The login window manager might have bypassed the required user profile file.

User `tioadmin` uses the bash shell as the login shell, which is supported for a line-mode login (for example, via telnet). If you use a login window manager such as CDE, it might bypass the `.profile` file for user `tioadmin`. When the profile file is bypassed, the system cannot create a complete login environment.

Solution

1. Create the `.bashrc` file in the `tioadmin` home directory, and insert the following single line: `. $HOME/.profile`
2. Save the file.
3. Edit the `.dtprofile` in the `tioadmin` home directory and remove the comment from the line: `DTSOURCEPROFILE=true`. This file is created automatically when user `tioadmin` logs in to CDE for the first time.
4. Login as user `tioadmin` again to the Common Desktop Environment.

The installation of IBM Tivoli NetView on Windows fails if the password for creating a user account does not meet the system requirements

Cause
When installing IBM Tivoli NetView on Windows, the NetView installer creates a user account on your system for the NetView service. If the password that you are prompted to enter for creating this user account does not conform with the password policy of your system, the NetView installation fails.

Solution
Ensure that the password for creating the NetView user account conforms with the password policy of your system.

The agent manager installation fails during the Tivoli Intelligent Orchestrator installation

The installation of the agent manager fails during the Tivoli Intelligent Orchestrator installation with the following warning:

```
WARNING: Failed to install agent manager. View log
C:\Program Files\IBM\tivoli\thinkcontrol\AM\logs\am_install.log for more details.
```

Cause
You might want to consult the agent manager logs to identify the cause of this problem. The agent manager log files are located in the `C:\Program Files\IBM\tivoli\thinkcontrol\AM\logs` directory. Possible causes might include:

- The port required for the agent manager installation might be busy.
- The agent manager has already been installed on your system.

Solution 1
If no agent manager installation has been performed on the server prior to the Tivoli Intelligent Orchestrator installation, follow these steps:

1. Consult the agent manager log files and make all the necessary changes following the instructions in the logs.
2. Retry the Tivoli Intelligent Orchestrator installation. The Tivoli Intelligent Orchestrator installer will detect that Tivoli Intelligent Orchestrator is already installed and will install only agent manager.

For more details on the agent manager reinstallation, refer to the *Tivoli Intelligent Orchestrator Installation Guide*.

Solution 2
If the agent manager was previously installed on the Tivoli Intelligent Orchestrator installation, you should uninstall the agent manager first, and then retry the Tivoli Intelligent Orchestrator installation.

Uninstalling the agent manager: Uninstalling the agent manager uninstalls the application from your operating system and removes the agent manager servlets from WebSphere Application Server. The uninstallation wizard does not remove the registry. Removing the registry is an optional step that you can perform after running the wizard. The wizard also does not uninstall WebSphere Application Server or DB2 Universal Database Enterprise Server Edition, even if those prerequisite products were installed along with the agent manager.

Note: To prevent the loss of data:

- Do not uninstall the agent manager until all products that use it have been uninstalled.
- Do not clean the agent manager tables from the registry or drop the registry database until all products that use the registry are uninstalled.

To uninstall the agent manager, follow these steps:

1. Stop the agent manager server if it is running:
   - As a Windows service:

     To stop the agent manager server if the installation program created a Windows service, use the Windows Services window or the `Services` folder in the Microsoft Management Console to stop the service with the following name:

     `IBM WebSphere Application Server V5 - Tivoli Agent Manager`
   - On Windows but not as a service:

     To stop the agent manager server if it is not a Windows service:
     a. Open a command prompt window.
     b. Run the following command:

        `WAS_install_dir\bin\stopServer app_server_name`

        where `app_server_name` is the name of the application server where the agent manager is installed. By default, this is `AgentManager`. The server name is case-sensitive.

        When the agent manager server is stopped, the following message is generated:

        `ADMU4000I: Server app_server_name stop completed.`
   - On AIX, Linux, or Solaris systems

     To stop the agent manager server on AIX, Linux, or Solaris systems, run the following command:

     `WAS_install_dir/bin/stopServer.sh app_server_name`

     When the agent manager server is stopped, the following message is generated:

     `ADMU4000I: Server app_server_name stop completed.`
2. Optionally, remove agent manager objects from the registry database.
   - If the registry database is used only by the agent manager and is not shared with another program, drop the database using the database administration tools for your type of database. If the registry is in a remote database, you might have to perform this step on the remote database server instead of on the agent manager server.
   - If the database is shared with other programs, remove the agent manager-specific tables from the database by following the procedure for your database type. You can do this step on the agent manager server, even if the registry is in a remote database:
     - DB2 Universal Database
       a. In a command line window, change to the `Agent_Manager_install_dir`/db/db2 directory.
       b. Run the following command:
          - On Windows

            `db2cmd /c /i /w "RemoveCASTables.bat database_password"`
          - On AIX, Linux, and Solaris

```
Agent_Manager_install_dir/bin/
RunInDbEnv.sh RemoveCASTables.sh database_password
```

Replace *database_password* with the DB2 database password.

- Oracle

    a. In a command line window, change to the
       Agent_Manager_install_dir/db/oracle directory.

    b. Run the following command:

       - On Windows

         ```
         ./RemoveCASTables.bat database_password
         ```

       - On AIX, Linux, and Solaris

         ```
         ./RemoveCASTables.sh database_password
         ```

       Replace *database_password* with the Oracle database password.

3. Start the uninstallation program for your operating system:

   - On Windows systems, either use the Add/Remove Programs window to uninstall the agent manager, or run the following command from a command prompt:

     ```
     Agent_Manager_install_dir\_uninst\uninstall.exe
     ```

   - On AIX, Linux, and Solaris systems, run the following command from the *Agent_Manager_install_dir*/_uninst directory:

     ```
     java -jar uninstall.jar
     ```

     Or, to uninstall silently:

     ```
     java -jar uninstall.jar -silent
     ```

   The program does not delete the registry database or files created in the agent manager installation directory after installation.

4. If the agent manager application server is not named `AgentManager`, determine whether other Web applications are using that application server. If no other applications are using that application server, you can optionally delete the application server.

5. If you do not need the uninstallation logs, optionally delete the agent manager installation directory. By default, this is the following directory:

   - On Windows systems: `C:\Program Files\IBM\AgentManager`
   - On AIX, Linux, and Solaris systems: `/opt/IBM/AgentManager`

   Note: On a Windows system, you might have to restart the system before you can delete the agent manager installation directory.

6. If the registry is in a remote database, run the following command on the remote database server to uninstall the agent manager from that system:

   ```
   java -jar "Agent_Manager_install_dir/_uninstDS/uninstall.jar" -silent
   ```

7. If you do not need the uninstallation logs on the remote database server, optionally delete the agent manager installation directory. By default, this is the following directory:

   - On Windows systems: `C:\Program Files\IBM\AgentManager`
   - On AIX, Linux, and Solaris systems: `/opt/IBM/AgentManager`

   Note: On a Windows system, you might have to restart the system before you can delete the agent manager installation directory.

8. If you will not be reinstalling the agent manager on this system, remove the definition of `TivoliAgentRecovery` from your DNS servers.

The agent manager is now uninstalled.

Reinstalling Tivoli Intelligent Orchestrator: Retry the Tivoli Intelligent Orchestrator installation. The Tivoli Intelligent Orchestrator installer will detect that Tivoli Intelligent Orchestrator is already installed, and will install only agent manager.

An error occurs when running the rpm -qa command after the DB2 Universal Database, IBM Tivoli Directory Server, and WebSphere Application Server prerequisites are installed on Linux

After successfully installing the Tivoli Intelligent Orchestrator prerequisites on Linux, the following error might occur when running the `rpm -qa` command. This command queries the packages that are installed on the RedHat Advanced Server.

```
error: db4 error(-30989) from dbcursor->c_get: DB_PAGE_NOTFOUND:
Requested page not found
```

Cause

This is a known problem for RedHat Enterprise Linux version 3. A workaround is documented on the RedHat Web site as defect number 149974. For more details, see https://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=149974.

Solution

Run the following command first, to remove the cache files where the page is not found:

```
rm -f /var/lib/rpm/__db*
```

The cache will be re-created as needed.

Run the `rpm -qa` command afterwards, to obtain a complete listing of installed packages on the RedHat Advanced Server, without returning errors.

Problems with logging in

This section includes troubleshooting scenarios for the following problems:
- "You cannot log in"
- "Problems with logging in"

You cannot log in

Cause

The LDAP server might be down.

Solution 1

Run the `ibmdirctl` command to check the status of the LDAP server. From *LDAP_install_directory*\appsrv\bin, run the `ibmdirctl` command using the following syntax:

```
ibmdirctl -D username -w password status
```

The returned value is `ibmslapd process is running` when the server is running. If the system does not confirm that the process is running, start the server.

To start the server, run `ibmdirctl` again and use the following syntax:

```
ibmdirctl -D username -w password start
```

Solution 2

Run the Tivoli Directory Server Web Administration tool to check the status of the LDAP server.

Note: This solution is provided for a two-node directory server installation.

1. From *LDAP_Install*\appsrv\bin, run:
   - startServer.sh in UNIX
   - startServer.bat in Windows

   and use the following syntax:

   startServer server1

2. In a Web browser, go to http://*hostname*:9080/IDSWebApp/IDSjsp/Login.jsp

3. Log in with the appropriate user name and password. The Tivoli Directory Server Web Administration tool starts.

4. In the navigation bar click **Server administration**. The status of the directory server appears in the main window.

5. Click **Start** or **Stop** or **Restart** to change the status of the server.

For more information on scenarios that can affect login, see the Tivoli Intelligent Orchestrator support Web site:

http://www.ibm.com/software/sysmgmt/
products/support/IBMTivoliIntelligentOrchestrator.html

In the **Choose a Product** list, select **Tivoli Intelligent Orchestrator**.

You cannot change your password

Cause

The password policy parameters are incorrect (such as minimum length, minimum number of alphabetic characters, and other parameters), so the LDAP server cannot validate the password.

Solution

Run the Tivoli Directory Server Web Administration tool to check the password policy.

Note: This solution is provided for a two-node directory server installation.

1. From *LDAP_Install*\appsrv\bin, run:
   - startServer.sh in UNIX
   - startServer.bat in Windows

   and use the following syntax:

   startServer server1

2. In a Web browser, go to http://*hostname*:9080/IDSWebApp/IDSjsp/Login.jsp

3. Log in with the appropriate user name and password. The Tivoli Directory Server Web Administration tool starts.

4. In the navigation bar click **Server administration** and then click **Manage security properties**.

5. In the main window:
   a. Click **Password policy** to check whether the password syntax is enabled or not.
   b. Click **Password validation** to check the password syntax.

6. Change your password again based on the specified password syntax.

Problems with workflows

This section includes troubleshooting scenarios for the following problems:
- "DB2 Universal Database errors occur when you deploy resources"
- "DB2 Universal Database creates a database state error"
- "DB2 Universal Database deadlocks occur when the system runs a logical operation" on page 65
- "Shell command error: Resource temporarily unavailable" on page 65
- "IBM Tivoli Software Support personnel have requested a copy of a workflow" on page 65
- "A workflow does not install" on page 67
- "Cannot run workflows if the PS1 environment variable is altered" on page 68

DB2 Universal Database errors occur when you deploy resources

When you run a workflow to deploy resources, you might see a DB2 Universal Database error telling you that an SQL exception has occurred.

Cause

This error can occur when the application heap size is not large enough to process the request.

Solution

Increase the application heap size, rebind the packages, terminate all connections, and restart the Tivoli Intelligent Orchestrator server. To complete this task:

1. Log on to the DB2 Universal Database server as the DB2 Universal Database instance owner.

2. Open a DB2 Universal Database command window and enter the following command to increase the application heap size:

   ```
   db2 update db cfg for $DB2_DB_NAME using applheapsz 3072
   ```

   where *$DB2_DB_NAME* is the name of the database you want to modify.

3. Under the `sqllib\bnd` directory, run the following command to rebind the packages:

   ```
   db2 connect to $DB2_DB_NAME db2 "bind @db2ubind.lst blocking
   all grant public" db2 "bind @db2cli.lst blocking all grant public CLIPKG 6"
   ```

4. Run the following command to terminate all connections:

   ```
   db2 force applications all
   ```

5. Restart the Tivoli Intelligent Orchestrator server.

DB2 Universal Database creates a database state error

Tivoli Intelligent Orchestrator displays a DB2 Universal Database error. For example:

```
com.ibm.tivoli.orchestrator.de.dao.PersistentStateException: COPDEX038E A
persistent/database state error: [IBM][CLI Driver][DB2/NT] SQL0302N EXECUTE
<DB text> SQLSTATE=22001 occurred.
```

Cause

The workflow variable values are limited to 4000 bytes. When a scriptlet or Java plug-in returns a value longer than 4000 bytes, DB2 Universal Database will throw an exception.

Solution

Keep the length of your workflow variables to less than 4000 bytes.

DB2 Universal Database deadlocks occur when the system runs a logical operation

Cause

The DB2 database configuration parameter (lock list) value is not large enough.

Solution

Adjust the size of the lock list value from 50 to 2000. Depending on the volume of traffic on the servers and the size of your data center model, you might want to select a more appropriate value.

For more information on setting the lock list value, go to

```
http://www-3.ibm.com/cgi-bin/db2www/data/db2/udb/winos2unix/
support/v8document.d2w/report?fn=r0000267.htm
```

Shell command error: Resource temporarily unavailable

If you get this error: `bash: fork: Resource temporarily unavailable`, it might be accompanied by this Tivoli Intelligent Orchestrator message:

```
COPCOM123E This shell command error occured: Exit value=128, Error stream=
"/usr/bin/bash: fork: Resource temporarily unavailable ", Result stream="".
```

Solution

Increase the maximum number of processes allowed per user on your system.

For instructions on setting the maximum number of processes allowed per user, refer to the documentation for your operating system.

Shell command error: Exit value=1, Error stream=", Result stream="no bash in ..."

When you are running a workflow, you might see the following error:

```
COPCOM123E This shell command error occurred: Exit value=1, Error stream="",
Result stream="no bash in /bin/usr/bin /usr/sbin /usr/local/bin . /usr/bin /
etc /usr/sbin /usr/ucb /usr/bin//usr/java131/jre/bin /usr/java131/bin /
nmlprod/common/scripts /nmlprod/common/bin /opt/seos/bin".
```

Solution

The automation package that you are running requires bash on the endpoint.

IBM Tivoli Software Support personnel have requested a copy of a workflow

Solution: workflowLogExport tool

This command line utility exports the run history of one or more specified workflows to a log file that can be either in XML format (the default option) or in any other file format of your choice.

This command line utility exports the workflow execution logs into an XML file. The tool simplifies the process of sending workflows to the Software Support team so they can access the log information that they need to diagnose a workflow problem without accessing your computer remotely. The user can export the run history of individual workflows, or the run history of more logs into a log file whose name, file format, and location you can specify.

The command line utility is available at the following location:

Windows
> `%TIO_HOME%\tools`
>
> where `%TIO_HOME%` is the Tivoli Intelligent Orchestrator home directory.

UNIX or Linux
> `$TIO_HOME/tools`

Syntax for Windows: Enter the following command on one line:
```
workflowLogExport.cmd (-n <workflow_name>* | -r <request_id>) [-f <export_filename>]
[-i <input_filename>]
```

where:
- `[-n workflow_name]*` is a command option that specifies the name of the workflow whose run history you want to export to a log file. The asterisk (*) indicates that you can include multiple workflow names in this variable. If you do not specify one or more workflow names, workflowLogExport will dump the workflow run history for all workflows.
- `[-r <request_id>]` is a command option that indicates the deployment request identifier.
- `[-f export_filename]` is a command option that specifies the fully qualified path and file name of the workflow log. By default, the file format for the exported log file is XML, and the default file name is `workflowLogExport.xml`. If you do not specify a different file format, the workflow log file will be exported by default to XML. Also, if no file location is specified, the log file will be exported by default to the `%TIO_LOGS%` directory.
- `[-i input_filename]` is a command option that specifies the name of the file that lists the names of all workflows whose run history you want to export to the same log file.

Examples:
```
workflowLogExport.cmd -n MyWorkflow1 -n MyWorkflow2 -r 10017 -f "c:/myDirectory/
myWorkflowExport.xml" -i "c:/myDirectory/myExportWorkflowList.txt"
workflowLogExport.cmd -i "c:/myDirectory/myExportWorkflowList.txt"
workflowLogExport.cmd -i "c:/myDirectory/myExportWorkflowList.txt" -n MyWorkflow101
```

Syntax for UNIX:
```
workflowLogExport.cmd (-n <workflow_name>* | -r <request_id>) [-f <export_filename>]
[-i <input_filename>]
```

where the command options are the same as the command options for Windows.

Returned file: The workflow run history will be exported into a log file with a file name and format that you can specify. If you do not specify them, the workflow run history will be exported by default to `workflowLogExport.xml` in the `%TIO_LOGS%` directory.

Log content structure: workflow –> deployment request –> workflow execution log –> workflow execution log detail

Example workflow log export:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow-execution-history>
 <workflow id="21" name="Test Workflow 99999">
  <deployment-requestid="10020">
   <execution-log id="21" date="Mar 10, 2005 11:48:54 AM" position="1"
   call-stack-level="1" lo
    <log-details position="2" name="Test Details Name">
    Test Details Values</log-details>
   </execution-log>
  </deployment-request>
 </workflow>
</workflow-execution-history>
```

A workflow does not install

Cause

This error can occur when workflows, parameters, and variables are named incorrectly.

Solution

To ensure that your workflows can be installed properly, ensure that you use valid names for workflows, parameters and variables.

Only the following characters can be used in workflow names: a-z, A-Z, 0-9, underscore (_), and period (.).

- The first character can be any of: a-z, A-Z, or underscore (_). It cannot be 0-9 or a period (.)
- The last character in the name cannot be a period (.)
- Intervening characters between the first character and the last character in the workflow can be: a-z, A-Z, 0-9, underscore (_), or period (.)
- Workflow names can be 255 characters in length.

Only the following characters can be used for workflow parameter and variable names: a-z, A-Z, 0-9, and underscore (_).

- The first character can only be: a-z, A-Z, or underscore (_). It cannot be 0-9.
- The remaining characters can be: a-z, A-Z, 0-9, or underscore (_).

Workflow keywords cannot be used for variable names. If your workflows contain variables with any of the following names, you must rename them.

```
in, inout, catch, catchall, CheckDeviceLocale, credentialskey,
DCMDelete, DCMInsert, DCMQuery, DCMUpdate, do, done,
encrypted, else, endif, endtry, error, finally, foreach,
if, implements, info, java, Java, Jython, language, LocaleInsensitive, log,
out, noop, parent, rethrow, scriptlet, then, timeout, try, target, throw,
var, warning, while, workflow
```

Note: Any Unicode character can be used to enter comments in workflow scripts.

Cannot run workflows if the PS1 environment variable is altered

Cause

When running scriptlets in Tivoli Intelligent Orchestrator, the system will expect that the command prompt ends in $ or #. The PS1 environment variable governs what your prompt looks like. If you change this variable on your managed-to or managed-from system, you might run into problems running workflows.

For example, on most UNIX systems, when you are logged in as `tioadmin`, by default, you see the following command prompt:

```
$
```

If you change the PS1 variable for `tioadmin` to be `tioadmin>`, then you will see the following as the command prompt:

```
tioadmin>
```

Solution

To be able to run scriptlets in Tivoli Intelligent Orchestrator, ensure that the command prompt ends in $ or #.

Here are examples of acceptable command prompts:

```
command$
$
#
command#
```

For more information on troubleshooting workflows, refer to the *Developing automation packages* section in the Tivoli Intelligent Orchestrator information center.

Other common problems

This section includes troubleshooting scenarios for the following problems:

- "On Windows, Tivoli Intelligent Orchestrator does not start" on page 69
- "Problems occur when administering Tivoli Intelligent Orchestrator from the Web interface while a local firewall is enabled" on page 69
- "Incorrect SOAP parameters generate detailed Java exception messages" on page 70
- "XML import does not work properly" on page 70
- "DB2 Universal Database does not work properly with terminal server" on page 71
- "On UNIX, Tivoli Intelligent Orchestrator logs fill up the file system" on page 71
- "On Windows 2000, the embedded messaging feature does not work" on page 71
- "WebSphere Application Server on Linux remains paused when you try to stop the JMS pub sub broker" on page 72
- "On Windows, the remote connection to the database hangs when the database server is on a multiprocessor machine" on page 72
- "For languages other than English, the text in CSV reports imported in Microsoft Excel is garbled" on page 73
- "An error occurs if you use special characters to create a new user or security role" on page 74

- "Common agents unable to communicate with the agent manager" on page 75
- "Limitations when trying to manually associate a discovered software resource with a software definition" on page 75
- "Some patch installations might fail when trying to perform a multiple patch installation" on page 76
- "Running lightweight management server with DB2 Universal Database generates exceptions" on page 76
- "Agent receives an HTTP Unauthorized (401) response code" on page 77
- "There is a maximum size for returnResult parameter storage" on page 76

On Windows, Tivoli Intelligent Orchestrator does not start

Tivoli Intelligent Orchestrator does not start, and a message appears in the WebSphere Application Server log (%WAS_HOME%\logs\server1\SystemOut.log) similar to:

```
3c450cad LdapRegistryI E SECJ0352E: Could not get the users
matching the pattern wasadmin because of the following exception
javax.naming.AuthenticationException:
[LDAP: error code 49 - Invalid Credentials]
```

Cause

In this configuration, IBM Tivoli Directory Server might treat DB2 Universal Database as if it has started, even though it may not be completely started.

Solution

Try stopping and starting your IBM Tivoli Directory Server service, and then try starting Tivoli Intelligent Orchestrator again.

To prevent this problem from occurring each time you reboot:

1. Go to Start –> Settings –> Control Panel –> Administrative Tools –> Services
2. Right-click the **IBM Tivoli Directory Server** service and select **Properties**.
3. In the Start type list, select **Manual**.

Problems occur when administering Tivoli Intelligent Orchestrator from the Web interface while a local firewall is enabled

When you try to perform administrative tasks from the Tivoli Intelligent Orchestrator Web interface while firewall applications are running on the client machine, certain features of the desktop firewall might interfere with the user interface functions, leading to unexpected errors.

Cause

Some desktop firewall applications that are running locally on the client machine, such as Zone Labs Integrity Client, can remove the **HTTP Referer** field from the header of the HTTP request. In Zone Labs Integrity Client, this feature is enabled through the **Remove private header information** setting. When enabled, this setting automatically replaces the value of the **HTTP Referer** field with the **XXXXXXX** string. As a result, a number of functions in the Tivoli Intelligent Orchestrator Web interface will not work. The errors that occur are not descriptive.

Solution

Before logging in to Tivoli Intelligent Orchestrator, ensure that the **HTTP Referal** field removal does not apply to the Tivoli Intelligent Orchestrator Web site. The following are Zone Labs Integrity Desktop-specific instructions to customize the

privacy settings for the Tivoli Intelligent Orchestrator Web address so that they no longer interfere with the Tivoli Intelligent Orchestrator user interface.

To customize the privacy settings for the Tivoli Intelligent Orchestrator URL in the Zone Labs Integrity Desktop, perform the following steps:

1. Open the Zone Labs Integrity Desktop.
2. Click **Privacy**. The **Main** tab is displayed. Click the **Site List** tab.
3. Click **Add**. The Add Site window is displayed.
4. Type the URL of the Tivoli Intelligent Orchestrator server, and then click **OK**.
5. Verify that the Web address of the Tivoli Intelligent Orchestrator server is now added to the site list, and that check marks indicate that all of the settings are enabled for this particular site. A pencil icon in the Edited column indicates that you have customized privacy settings for this site, and the site will remain in your list.

Incorrect SOAP parameters generate detailed Java exception messages

When you submit an incorrect SOAP parameter from the command line, Tivoli Intelligent Orchestrator returns not only an error message that explains why the error occurred, but also a detailed Java exception message.

Cause

A SOAP client can be run on a machine other than the Tivoli Intelligent Orchestrator server. In such a scenario, the SOAP client is a thin client that has no message log available.

Solution

Tivoli Intelligent Orchestrator presents the complete Java exception message as well, so you will have the detailed feedback that you might need. This can be helpful if you build your own SOAP client based on the Tivoli Intelligent Orchestrator application programming interface.

XML import does not work properly

Tivoli Intelligent Orchestrator does not function as you would expect when you run an XML import while all the Tivoli Intelligent Orchestrator processes are running.

Cause

Tivoli Intelligent Orchestrator processes cache some information, and they depend on JMS messages for notification when events occur (for example, when the system runs logical device operations and workflows). However, an XML import does not send any notifications to the Tivoli Intelligent Orchestrator processes. It just loads the database.

Solution

Shut down Tivoli Intelligent Orchestrator processes before you run an XML import, and then restart them when the XML import is completed.

DB2 Universal Database does not work properly with terminal server

Cause
The Tivoli Intelligent Orchestrator installation fails with DB2 Universal Database when terminal server is enabled. There is an *db2.exe application error*. The DB2 Universal Database command will not work.

Solution
Disable the terminal server and reboot before trying to install again.

On UNIX, Tivoli Intelligent Orchestrator logs fill up the file system

When the log directory is on the same file system as Tivoli Intelligent Orchestrator, it can reach or exceed the capacity of the file system. This can prevent the application from creating new log files.

Cause
The capacity of the file system is not large enough.

Solution
Try one of the following solutions:

- Determine whether other processes are using the file system on which the logs are located. If so, create a dedicated file system for logging so that the file system is not affected by any process other than logging. Refer to your operating system manual for the required procedures.
- Extend the size of the file system on which the log is located. Alternatively, free up space on the same file system to provide a short term solution.
- If current messages in the logs require attention, resolve the problems so that the messages will not appear again. To prevent this problem from occurring in future, investigate and modify the size of the file system as required.
- Manually archive the log files to increase the amount of available storage space on the file system.
- Set the maximum log file size for the `console.log` file and the `msg.log` file to a smaller value.

On Windows 2000, the embedded messaging feature does not work

You will notice the problem if you see a message similar to the following example:

```
Unable To Locate DLL The dynamic link library MSVCP60.dll could not be found
in the specified path...
```

Cause
The embedded messaging feature is missing the `msvcp60.dll` file on Windows 2000 Server platforms.

The prerequisite checker in the installer program does not check for this DLL file on the Windows 2000 Server platform. If you select the Windows 2000 Support Tools during Windows 2000 Server installation, the installation program for Windows 2000 Server installs the DLL file in the `C:\Program Files\Support Tools` directory. The DLL file is installed during the installation of Windows 2000 Advanced Server in the `C:\WINNT\system32` directory.

Solution

From the Microsoft Visual C++ 6.0 Support Web site available at http://support.microsoft.com/default.aspx?scid=kb;en-us;259403&Product=vc6, follow the instructions to download the `Vcredist.exe` installer. The installer will place the `msvcp60.dll` file at the correct location on your computer.

WebSphere Application Server on Linux remains paused when you try to stop the JMS pub sub broker

The last line in the log is:

```
1b2ddb28 JMSEmbeddedPr A MSGS0054I: Stopping the Broker
```

When you run `ps -ef | grep java` it returns only one process: `stopServer`.

Cause

A problem occurred in the Linux libstdc++ library.

Solution

Stop the server process to stop the broker.

1. From http://www.rpmfind.net/linux/RPM/redhat/7.3/i386/index.html, download the libstdc++ RPM.
2. Rename the existing `libstdc++-3-libc6.2.2-2.10.0.so`
3. Extract the library from the rpm using rpm2cpio and replace the existing library. For detailed procedures, go to: http://www.rpm.org/max-rpm/s1-rpm-miscellania-rpm2cpio.html

Do not follow the instructions in the WebSphere Application Server 5.0.2 release notes that tell you to upgrade to the latest level of `libstdc`. That instruction is incorrect.

On Windows, the remote connection to the database hangs when the database server is on a multiprocessor machine

When the database server is on a multiprocessor machine, the remote connection to the database might hang, in which case the database server logs the following error in the `db2diag.log` file:

```
DIA3208E Error encountered in TCP/IP protocol support.
TCP/IP function "accept". Socket was "920". Errno was "10061".
```

Cause

Not enough connection managers are allocated from the database server.

Solution

1. Update the database registry, `DB2TCPCONNMGRS`, to enable the database server to provide additional connection managers.
2. Considering that `DB2TCPCONNMGRS` takes values between 1 and 8, use the following formula to determine the value of a given computer:

   Calculate the square root of the number of processors and round up to a maximum value of 8.
3. Run the following command to update the registry:

   ```
   db2set DB2TCPCONNMGRS=<value_calculated>
   ```
4. After changing the registry value, restart DB2 as follows:

   ```
   db2stop force
   db2start
   ```

For more information, refer to the DB2 product documentation available at
http://www.ibm.com/software/data/db2/udb/support/manualsv8.html.

For languages other than English, the text in CSV reports imported in Microsoft Excel is garbled

Tivoli Intelligent Orchestrator reports that are exported to Comma Separated
Values (CSV) file format can be afterwards imported in spreadsheet applications
such as Microsoft Excel. When trying to import CSV reports into Excel in
languages other than English, the text gets garbled.

Cause

The CSV files are written in UTF-8 format (abbreviation for Universal
Transformation Format). UTF-8 converts 16-bit Unicode characters into 8-bit ASCII
characters. Microsoft Excel does not currently support UTF-8 in CSV format. For
more information about this known defect, you might also want to refer to
http://support.microsoft.com/default.aspx?scid=kb;ja;821863.

Solution

CSV files are written in UTF-8 format to support multiple language scripts in a
single report. CSV can be imported into spreadsheet applications, but can also be
imported into the database using custom applications. The following solutions that
have been tested for various languages are provided. In addition to these solutions,
there are operating system and Excel requirements that must be met, in order for
the characters to be displayed properly.

Solution 1

1. Open the `<Report_name>.csv` file in Notepad, and then save it as
   Unicode, renaming it to `<Report_name>_unicode.csv`.
2. Open the `<Report_name>_unicode.csv` file in Excel. The Text Import
   Wizard is displayed:
   a. In the first step, select **Delimited** and ensure that all other options
      are clear.
   b. In the second step, clear **Tab** and select **Comma**.
   c. Click **Finish** before going to step 3.

   After performing the steps described above, the CSV report can be
   opened in Excel with all characters displayed properly.

Solution 2

1. Open the `<Report_name>.csv` file in Notepad, and then save it as ANSI,
   renaming it to `<Report_name>_ansi.csv`.
2. Open the `<Report_name>_ansi.csv` file in Excel. The characters are
   properly displayed.

Solution 3

You can convert the CSV file from UTF-8 to native encoding using a code
conversion tool. You can use the `native2ascii` command line utility that is
provided with the Java JDK toolkit. The tool can be found in the
`%WAS_HOME%/AppServer/java/bin` directory.

1. Open a command prompt window, and change directories until you
   reach the location of the `native2ascii` tool. Alternatively, you can set
   the value of *Path*, the system variable for the operating system, to
   include the location of the Java JDK toolkit.
2. Type the following command:

```
native2ascii -encoding UTF-8 <Report_name>.csv | native2ascii -reverse
-encoding <Language_Code> > <Report_name>_output.csv
```

where *<Language_Code>* is the locale code for the language that you are
interested in. For example, GB2312 is the code for simplified Chinese.

3. Open the *<Report_name>*_output.csv file in Excel.

All characters are properly displayed.

Instead of running the above command more than once for converting
more CSV files, you might want to create a script file that uses the
command in step 2 and specifies the names of all the CSV files that require
conversion. You can run the script to convert all the required files at once.

In addition to the solutions described above, the following operating system and
Excel requirements must be met to be able to display the characters properly:

Operating system requirements

Try matching the language of the imported CSV report with the operating
system language. For example, for Japanese, try importing the file on a
computer that is running a Japanese operating system.

If you cannot meet this requirement, set your system's user locale to the
language of your choice, so that you can use the standard settings for that
language. Perform the following steps:

1. Click **Start –> Settings –> Control Panel**, and then open **Regional
   Options**.
2. On the General tab, change the user locale to the language you are
   interested in.
3. Click **OK**.

Excel requirements

You can set the Microsoft Office language settings to the language of your
choice by performing the following steps:

1. Click **Start –> Programs –> Microsoft Office Tools –> Microsoft Office
   XP Language Settings**.
2. On the Enabled Languages tab, set the **Default version of Microsoft
   Office** to the language of your choice.
3. Ensure that the language that interests you is on the **Enabled
   languages** list:
   a. In the **Available languages** list, click the language that interests
      you.
   b. Click **Add** to add the selected language to the list of **Enabled
      languages**.
4. Click **OK**.

An error occurs if you use special characters to create a new user or security role

If you include special characters like comma (,), equals (=), plus (+), less than (<),
greater than (>), number sign (#), semicolon (;), backslash (\), and quotation marks
("") in the user role name or security role name, the following error occurs:

```
COPCOM132E An error occurred during the LDAP operation:
cn=#dffded: [LDAP: error code 34 - Invalid DN syntax].
```

Cause

The Distinguished Name (DN) syntax supported by the directory server does not support special characters. This is a known problem with the IBM Tivoli Directory Server and is described in detail in the *Tivoli Directory Server Administration Guide* that is available at http://publib.boulder.ibm.com/tividd/td/ IBMDirectoryServer5.2.html.

Solution

Escape these special characters or other characters in an attribute value in a distinguished name string by preceding it with a backslash (\).

Common agents unable to communicate with the agent manager

Communication problems between the common agents and the agent manager might include, for example, a failed ping agent, or failed subagent installations when installing the common agent.

Cause

The Domain Name Server (DNS) is not properly set up in the common agents' environment. By default, the agent manager is set up so that the common agent machines must be able to resolve the fully qualified name of the agent manager server.

Solution

In cases where the endpoint machine where you want to install the common agent cannot resolve the fully qualified name of the agent manager server, follow these steps:

1. Stop Tivoli Intelligent Orchestrator.
2. On the Tivoli Intelligent Orchestrator server, edit the `AgentManager.properties` file that is located in the following directory:

   `$WAS_HOME/installedApps/<nodename>/AgentManager.ear/`
   `AgentManager.war/WEB-INF/classes/resources`

   a. Find the line that looks like:

      `ARS.host=<fully qualified name>`

      where `<fully qualified name>` can be, for example,
      `bvtwin1.torolab.ibm.com`.

   b. Replace the IP address with the fully qualified name, for example, `9.2.2.2`. The edited line should now look like:

      `ARS.host=9.2.2.2`

3. Restart the agent manager.
4. Retry installing the common agent on the endpoint machine.

Limitations when trying to manually associate a discovered software resource with a software definition

When you manually associate a discovered software resource on a server with a software definition, you can only select a software product, patch, or operating system software definition.

The following scenario is described:

- You manually associated a discovered software resource on a server with a software stack definition.

- When you look at the properties of the software stack, no software modules are displayed.
- Compliance checking also incorrectly defines the software stack as missing when the software stack is included in the server template.

Cause

You can associate a discovered software resource with a software product, patch, or operating system software definition only. Associations with a software stack or distributed application are not supported.

Solution

Avoid associating software stacks or distributed applications with identified software resources on a server.

Some patch installations might fail when trying to perform a multiple patch installation

When trying to perform a multiple patch installation, some patch installations might fail. The following error message is displayed:

```
COPCOM116E The operation timed out.
```

Cause

Microsoft limitations to multiple patch installation can cause some patch installations to fail.

Solution

If you are having problems installing a particular patch, you might need to perform manual steps to complete the installation. Consult Microsoft article 296861 for more information: http://support.microsoft.com/kb/296861

There is a maximum size for returnResult parameter storage

When you run a workflow the returnResult parameter stores the output of the command. If the results are too large, you will receive an error.

The following error message is displayed:

```
COPDEX038E A database error occured:
The value of a host variable in the EXECUTE or OPEN statement
is too large for its corresponding use .
```

Cause

There is a 4000 character limit on returnResult parameter storage and a 3800 character limit for scriptlets.

Device Manager limitations

The following are known limitations for the Device Manager:

Running lightweight management server with DB2 Universal Database generates exceptions

Some device classes (plug-ins) are not configured with lightweight device management server. You can receive exceptions for the missing device classes. However, lightweight device management server will start and run with its more limited set of device classes.

Agent receives an HTTP Unauthorized (401) response code

Agent can receive an Unauthorized (401) response code for a number of reasons, such as:

- The agent did not provide a client certificate as part of the SSL handshake, which can be caused by the agent connecting in on the wrong port. The agent must connect in on the port which is configured for SSL client authentication.
- The client certificate provided as part of the SSL handshake revoked.

Known report limitations

The following are known limitations for the reporting capabilities of the Tivoli Intelligent Orchestrator:

Running any report with too many objects selected fails

Running any report with too many objects selected generates the following error:

```
COPJEE389E: The report contains too many objects.
Retry with fewer selections.
```

Cause

Based on the information in the log files, this error is triggered by the following DB2 Universal Database error:

```
DB2 error - SQL0101N The statement is too long or too complex.
```

Two causes have been identified:

- The application heap size and statement heap size are not large enough to process the request.
- The report contains too many selected objects, which generates an SQL statement that is too large to be handled in one single report.

Solution

1. Increase the Java memory to prevent your computer from becoming slow or unresponsive. Increase the application heap size and the statement heap size incrementally by 1024, until the problem is alleviated. To complete this task:

    a. Open a DB2 Universal Database command window and enter the following commands to increase the application heap size and statement heap size:

    ```
    db2 update db cfg for $DB2_DB_NAME using applheapsz <size>
    db2 update db cfg for $DB2_DB_NAME using stmtheap <size>
    ```

    where *$DB2_DB_NAME* is the name of the DB2 database that you want to modify.

2. Instead of selecting individual objects, try grouping objects first, and then select the object groups. For example, you might want to try selecting groups of systems or entire application tiers or resource pools rather than selecting individual systems. Grouping objects will reduce the number of selections, making the report more manageable.

Chapter 8. Troubleshooting the agent manager

This chapter contains the following sections to help you resolve problems with the agent manager:

- "Log files for the agent manager"
- "Determining the version of agent manager" on page 83
- "Installation and uninstallation verifications" on page 83
- "Common problems" on page 87

Log files for the agent manager

The following sections describe how to locate and use the agent manager log files:

- "Packaging the log files"
- "Locating the installation log files"
- "Locating the uninstallation log files" on page 81
- "Locating the remote registry logs" on page 81
- "Locating the runtime log files" on page 82
- "Locating the DB2 Universal Database runtime logs" on page 82

Packaging the log files

If you encounter a problem that you cannot resolve immediately, collect a copy of the log files and system configuration information. This preserves the information you need to perform detailed problem determination and prevents you from having to scan back through messages and trace events that were recorded after the problem occurred. If you contact IBM Customer Support, you must provide this package.

To package the logs and configuration information into a compressed, or zipped, file for IBM Customer Support, use the log collection tool that is available in the `toolkit` subdirectory of the agent manager installation directory (*Agent_Manager_install_dir*).

Locating the installation log files

The log files generated during the installation and initial configuration of the agent manager are located in the `Agent_Manager_install_dir\logs` directory. The default directory for the agent manager installation is `%TIO_HOME%\AgentManager` on Windows (`$TIO_HOME/AgentManager` on UNIX or Linux). The following table lists the installation logs.

Table 10. Agent manager installation log files

Log file name	Description
AMReturnValues.log	Summary of return values of the steps of the agent manager installation. If the agent manager was installed silently, check this log for the results of each step of the installation. If you installed using the agent manager installation wizard, this information is displayed automatically. If you are performing a silent installation, check this log for a step-by-step summary of the installation's results.
am_install.log	InstallShield MultiPlatform (ISMP) log for the installation of the agent manager. Check this log first to verify that the agent manager installed properly and that the agent manager is started.
am_upgrade.log	Information about whether a new installation was performed or an existing version of the agent manager was found on the system and upgraded.
auth_stdout.log auth_stderr.log	Standard output and standard error logs for the AuthXMLUpdate program.
certGen_stdout.log certGen_stderr.log	Standard output and standard error logs for generating the root certificate for the agent manager certificate authority.
datastore_stdout.log datastore_stderr.log	Standard output and standard error logs for creating and initializing the tables in the registry database.
db_stdout.log db_stderr.log	Standard output and standard error logs for creating the registry database.
encrypt_stdout.log encrypt_stderr.log	Standard output and standard error logs for the EncryptAMProps program.
guid_install.log guid_stdout.log guid_stderr.log	Standard output and standard error logs for installing the Tivoli globally unique identifier (GUID).
msg_EPM_Install.log trace_EPM_Install.log	Messages and trace information generated during the installation and configuration of the agent manager applications in WebSphere Application Server.
startserver_stdout.log startserver_stderr.log	Standard output and standard error logs for starting the agent manager application server under WebSphere.
jacl/amApp_out.log jacl/amApp_err.log	Standard output and standard error logs generated while installing the AgentManager and AgentRecoveryService applications and .WAR files. These logs are generated by the `EPMInstallApp.jacl` configuration script.

Table 10. Agent manager installation log files (continued)

Log file name	Description
jacl/appServer_out.log jacl/appServer_err.log	Standard output and standard error logs generated while installing the application server for the agent manager. These logs are generated by the `EPMAppServer.jacl` script
jacl/checkcell_out.log jacl/checkcell_err.log	Standard output and standard error logs for verifying the cell for the WebSphere configuration. These logs are generated by the `EPMValidate.jacl` script.
jacl/checknode_out.log jacl/checknode_err.log	Standard output and standard error logs for verifying the node for the WebSphere configuration. These logs are generated by the `EPMValidate.jacl` script.
jacl/jdbc_out.log jacl/jdbc_err.log	Standard output and standard error logs for configuring the WebSphere JDBC provider, data source, and J2C Authentication Data Entry. These logs are generated by the `EPMJdbcProvider.jacl` script.
jacl/ssl_out.log jacl/ssl_err.log	Standard output and standard error logs for SSL configuration. These logs are generated by the `EPMSSLConfig.jacl` script.
jacl/virHost_out.log jacl/virHost_err.log	Standard output and standard error logs for creating the WebSphere virtual host. These logs are generated by the `EPMVirtualHost.jacl` script.

Locating the uninstallation log files

The log files generated when you uninstall the agent manager are located in the `Agent_Manager_install_dir\logs` directory. The following table lists the agent manager uninstallation logs:

Table 11. Agent manager uninstallation log files

Log file name	Description
uninstall.log	InstallShield MultiPlatform (ISMP) log for uninstalling the agent manager.
AMUninstallReturnValues.log	Summary of return values of the steps of the agent manager uninstallation.
msg_EPM_Install.log trace_EPM_Install.log	Messages and trace information generated when uninstalling the agent manager applications in WebSphere Application Server.

Locating the remote registry logs

If the registry is on a system other than the agent manager server, install a subset of the agent manager files on the database server to create and initialize the registry database. The following table lists the logs that are created when creating the remote registry database.

Table 12. Remote registry database installation log files

Log File	Description
datastore.out	A log of the SQL statements that are run to create the registry database and its tables.
ds_install.log	An ISMP log for installing the files necessary to create the registry database.
db_stdout.log db_stderr.log	Standard output and standard error logs for creating the registry database. Check db_stdout.log first to see if the registry was created successfully.

Locating the runtime log files

The runtime logs for the agent manager are located in the *was_install_dir*\logs\ *app_server_name* directory, where *app_server_name* is the name of the application server. By default, this is Agent Manager.

The runtime logs for WebSphere are located in the *WAS_install_dir*\logs\server1 directory.

Additional logs are in the *was_install_dir*/logs/ffdc directory.

Locating the DB2 Universal Database runtime logs

DB2 Universal Database provides several First Failure Data Capture (FFDC) facilities that log information as errors occur. The DB2 Universal Database FFDC facilities are used with CLI and DB2 traces to diagnose problems. The information captured by DB2 Universal Database for FFDC includes:

db2diag.log
When an error occurs, the db2diag.log is updated with information about the error. This is the primary log to use when debugging DB2 Universal Database problems.

db2alert.log
If an error is determined to be an alert, then an entry is made in the db2alert.log file and to the operating system or native logging facility.

dump files
For some error conditions, additional information is logged in external binary dump files named after the failing process ID. These files are intended for DB2 Universal Database Customer Support.

trap files
The database manager generates a trap file if it cannot continue processing because of a trap, segmentation violation, or exception. Trap files contain a function flow of the last steps that were executed before a problem occurred.

Other useful DB2 Universal Database commands include:

db2trc This command gives you the ability to control tracing.

db2support
This command collects environment information and log files and places them into a compressed archive file.

Determining the version of agent manager

To determine the version of the agent manager, use the `GetAMInfo` command, which is located in the `Agent_Manager_install_dir/bin` directory. On Windows systems, it has the .cmd extension (`GetAMInfo.cmd`). On AIX, Linux, and Solaris systems, is has the .sh extension (`GetAMInfo.sh`).

To display the version of the agent manager and agent recovery service applications, run the following command. This example shows the command for a AIX, Linux, or Solaris system:

`Agent_Manager_install_dir/GetAMInfo.sh`

To display the version of the agent manager application, run the following command. This example shows the command for a Windows system:

`Agent_Manager_install_dir\GetAMInfo.bat AgentManager`

Note: The application name, `AgentManager`, is not related to the name of application server in which you install agent manager. For example, if you install the agent manager into the application server named `server1`, the application name remains `AgentManager`.

To display the version of the agent recovery service, run the following command. This example shows the command for a AIX, Linux, or Solaris system:

`Agent_Manager_install_dir/GetAMInfo.sh AgentRecoveryService`

Installation and uninstallation verifications

The following sections are described:
- "Verifying that the agent manager service is running"
- "Verifying the installation of WebSphere Application Server" on page 84
- "Verifying the installation of DB2 Universal Database Enterprise Server Edition (ESE)" on page 84
- "Errors starting the agent manager application server" on page 84
- "Errors starting the agent manager application" on page 84
- "Verifying the connection to the registry" on page 84
- "Enabling and disabling tracing" on page 85
- "Recovering from an incomplete uninstallation of the agent manager" on page 86

Verifying that the agent manager service is running

If you suspect that the agent manager server is not running, use the health check tools that are available in the `toolkit` subdirectory of the agent manager installation directory (`Agent_Manager_install_dir`). The WebSphere Application Server `serverStatus` command tells whether the application server is started, but does not indicate whether it is fully functional. For example, if a remote registry database is inaccessible because of a network or authorization problem, the `serverStatus` command reports that the application server is operational. However, the agent manager server cannot register agents or resource managers without a connection to the registry.

Verifying the installation of WebSphere Application Server

To verify the installation of WebSphere Application Server, use the `firststeps` tool, located in the `WAS_install_dir/firststeps` directory. Run the program for your operating system:

- Windows: `firststeps.bat`
- AIX, Linux, or Solaris: `firststeps.sh`

Verifying the installation of DB2 Universal Database Enterprise Server Edition (ESE)

If the registry is in a DB2 database and the agent manager server does not install or start properly, or if you receive errors about problems accessing the registry, verify that DB2 Universal Database ESE installed properly and that the DB2 Universal Database server that controls the registry database is running.

To verify that DB2 Universal Database ESE installed properly, refer to the DB2 Universal Databasedocumentation for your operating system. The installation documentation contains information about verifying the installation using either the command line processor (CLP) or the First Steps GUI. The general procedure is the same for both methods:

1. Create the SAMPLE database.
2. Connect to the SAMPLE database.
3. Execute a query against the SAMPLE database.
4. Drop the SAMPLE database.

Errors starting the agent manager application server

If you cannot start the agent manager application server:

- If you get a `NoServerDefinedException` when you use the WebSphere `startServer` command to start the agent manager application server, ensure that you specified the correct server name. Although the default name of the agent manager application server is `AgentManager`, the agent manager might be installed to a different application server, such as `server1`.
- If you have reconfigured WebSphere Application Server on UNIX or Linux to run as a user other than `root` and get a `FileNotFoundException` exception or a "`Permission denied`" error, make sure that the user ID that runs the WebSphere processes has permission to read the agent manager files, particularly the files in the `Agent_Manager_install_dir`/certs directory.

Errors starting the agent manager application

If the logs indicate a problem starting the certificate authority, a common cause is a problem with the certificates. To correct this, you can replace your certificates.

Verifying the connection to the registry

If any errors indicate a problem accessing the registry, verify that the registry is correctly configured and available by performing these steps:

1. Open the WebSphere Administrative Console, and then expand **Resources** and then click **JDBC Providers**.
2. In the **Server** field on the JDBC Providers panel, type the name of the application server where the agent manager is installed or click **Browse** to select it from a list. By default, this is `AgentManager`.

3. Click **Apply** to list the JDBC providers for the agent manager application server.
4. In the list of providers, click **AgentJDBCProvider**.
5. In the Additional Properties area at the bottom of the Configuration page of the JDBC provider, click **Data Sources**.
6. In the Data Sources page, check the box next to **AgentRegistry** and then click **Test Connection**.
7. Review the status message at the top of the Data Sources panel. A message similar to the following indicates that the JDBC connection is correctly configured:

```
Test connection for datasource AgentRegistry on server server1 at
node WAShostname was successful.
```

Enabling and disabling tracing

You can control whether trace information is captured and the amount of details in agent manager trace levels. By default, tracing is disabled.

Enabling tracing

To enable tracing for the agent manager:
1. Start the WebSphere Administrative Console.
2. Click **Servers –> Application Servers –>** *app_server_name* **–> Logging and Tracing –> Diagnostic Trace**.

   Replace *app_server_name* with the name of the application server where the agent manager applications are installed, for example, AgentManager.
3. In the **General Properties** area of the Configuration page, make sure that **Enable Trace** is checked.
4. In the **Trace Specification** field on the **Runtime** page, type one of the values specified in the table below..

   Table 13. Setting trace levels

Task	Value in Trace Specification text box
Turn on all tracing	mgr.*=all=enabled
Turn on the entry and exit tracing	mgr.*=entryexit=enabled
Turn on the highest level of tracing	mgr.*=debug=enabled
Turn on tracing for warnings	mgr.*=event=enabled

   The **Trace Output** area shows the directory and file name where the trace information is written. A typical location is ${SERVER_LOG_ROOT}/trace.log, where the WebSphere environment variable ${SERVER_LOG_ROOT} represents the runtime log directory, *WAS_install_dir*/logs/*app_server_name*.
5. Click **OK**.
6. In the Taskbar, click **Save** to save the change to the master configuration.
7. In the **Save to Master Configuration** area, click **Save** again to confirm the change.

Disabling tracing

To disable tracing for the agent manager:
1. Start the WebSphere Administrative Console.

2. Click **Servers –> Application Servers –>** *app_server_name* **–> Logging and Tracing –> Diagnostic Trace**. Replace *app_server_name* with the name of the application server where the agent manager applications are installed, for example, `AgentManager`.

3. Ensure that **Enable Trace** is not checked.

4. Click **OK**.

Recovering from an incomplete uninstallation of the agent manager

This section describes how to manually remove the agent manager from your environment if the uninstallation wizard does not complete successfully. Use this procedure *only* after running the wizard. Some of these steps might not be necessary, depending on how much of the uninstallation wizard was completed.

1. Stop the agent manager server if it is running. Run the following command:
   - On Windows systems: `WAS_install_dir\bin\stopServer.bat AgentManager`
   - On AIX, Linux, or Solaris systems: `WAS_install_dir/bin/stopServer.sh AgentManager`

2. If the agent manager server is configured to start automatically after a Windows system restarts, delete the Windows service for the agent manager, using the following command:

   `WAS_install_dir\bin\WASService.exe -remove "Tivoli Agent Manager"`

3. If the agent manager server is configured to start automatically after an AIX, Linux, or Solaris system restarts, remove the entries in the `/etc/inittab` file that start the server:
   - Remove the entry that starts the agent manager server. This entry is added on all systems.

     `am:2345:once:/opt/IBM/WebSphere/AppServer/bin/rc.am >/dev/console 2>&1`

     In this example, WebSphere Application Server is installed in the `/opt/IBM/WebSphere/AppServer` directory.
   - If the registry is in a local DB2 database, remove the entry that starts the DB2 server. The entry is not created if the registry is in a remote DB2 database, or a local or remote Oracle database.

     `amdb:2345:once:su - db2inst1 -c db2start >/dev/console 2>&1`

     In this example, `db2inst1` is the DB2 user name for accessing the registry.

4. Remove the agent manager from WebSphere Application Server:
   a. Open the WebSphere Administrative Console.
   b. In the navigation tree on the left side of the console, expand **Environment**, then click **Virtual Hosts**, and then delete `AgentManagerHost`.
   c. Expand **Security**, then click SSL, and then delete `AgentManagerSSL` and `AgentManagerClientAuthSSL`.
   d. Expand **Resources**, and then click **JDBC Providers**. Using the filter table, set the scope to the server `AgentManager`, and then delete `AgentJDBCProvider`.
   e. Expand **Applications**, then click **Enterprise Applications**, and then uninstall `AgentManager` and `AgentRecoveryService`.
   f. Expand **Servers**, then click **Application Servers**, and then delete `AgentManager`.
   g. In the **Message(s)** area of the console, click **Save** to save the changes to the configuration.

h. In the **Save to Master Configuration** area , click **Save** again to exit the Master Configuration window.
5. Optionally, clean up the agent manager objects in the database.

> **Important:** Remove the agent manager tables from the database or drop the registry database only if all products that use the registry are uninstalled.

a. Remove the agent manager tables from the registry database by running the following command:
   - On Windows systems:

     `Agent_Manager_install_dir\db\database_type\RemoveCASTables.bat`
   - On AIX, Linux, and Solaris systems:

     `Agent_Manager_install_dir/db/database_type\RemoveCASTables.sh`

     Replace variable `database_type` with one of the following values to identify the database type:
     - db2
     - oracle
b. If the database is used only by the agent manager and is not shared with another program, optionally drop the registry database using the database administration tools for your type of database.
6. Delete the agent manager installation directory. By default, this is the following directory:
   - On Windows systems: `C:\Program Files\IBM\AgentManager`
   - On AIX, Linux, and Solaris systems: `/opt/IBM/AgentManager`

> **Note:** On a Windows system, you might have to restart the system before you can delete the agent manager installation directory.

Common problems

You might encounter the following problems:
- "Registration and communication failures"
- "Problems using the WebSphere Administrative Console" on page 88

Registration and communication failures

The WebSphere log `SystemOut.log` contains a record of agents that contact the agent recovery service. Common reasons for an agent to be unable to register or communicate with the agent manager include the following problems:

- The agent manager properties file, which the agent manager sends to the agent when it first connects, might contain a short host name in the URL for the Web services instead of a fully qualified host name. For example, the person who installs the agent manager might specify the host name as `myserver` instead of `myserver.ibm.com`. If an agent is in a network that cannot resolve the short host name to the fully qualified host name, it cannot access the agent manager services. Because the person who installs the agent can specify the fully qualified host name for the initial connection to the agent manager server, the problem can be discovered after the initial connection.
- The wrong truststore file was used when installing the agent or resource manager.
- The wrong agent registration password was used when installing the agent.

- The wrong resource manager registration user or password was used when installing the resource manager.
- Agent manager configuration files, such as `AgentManager.properties` or `Authorization.xml`, are missing or have been altered.
- Security credentials are invalid, expired, or revoked.
- An agent is attempting to re-register, but duplicate registration is disabled.

Problems using the WebSphere Administrative Console

This section describes common problems that you might encounter with the WebSphere Administrative Console.

Cannot start the WebSphere Administrative Console

You receive a "Page cannot be displayed" message when you start the WebSphere Administrative Console.

Possible problems: This error can be caused by the following problems:
- The wrong port number is being used.
- The WebSphere server that runs the WebSphere Administrative Console is stopped.

Solution: Try the following solutions:
- Ensure that the port number shown in the browser **Address** field shows the correct port number. Typically, this is port 9090, but it can be different, particularly on AIX systems.
- Start the WebSphere server that runs the WebSphere Administrative Console:

    As a Windows service
    To start the WebSphere server as a Windows service, use the Windows Services window or the Services folder in the Microsoft Management Console to start the service with the following name:

    ```
    IBM WebSphere Application Server V5 - server1
    ```

    Using a Windows command
    To start the WebSphere using a Windows command:
    1. Open a command prompt window.
    2. Change to the *WAS_install_dir*\bin directory.
    3. Run the following command:
        ```
        startServer server1
        ```

        Note: The service name, `server1`, is case-sensitive.
    4. Check the log to see if any errors occurred. The log is in the *WAS_install_dir*\server1\logs\startServer.log file.

    On AIX, Linux, or Solaris systems
    To start the WebSphere server on AIX, Linux, or Solaris systems, run the following command:
    ```
    startServer server1
    ```

Configuring the WebSphere Administrative Console to use a different port

By default, the HTTP Transport uses port 9090 to communicate with the WebSphere Administrative Console. Other processes, such as the Web-based System Manager on AIX systems, might also use port 9090. To resolve this conflict,

assign a different port to the administrative console. You can do this when you install WebSphere Application Server or afterwards.

To change the port used by the WebSphere Administrative Console after WebSphere Application Server is installed, complete the following steps. In this example, the WebSphere Administrative Console runs under the application server named `server1` and the Web browser is running on the same system as WebSphere Application Server:

1. Select an available port using both of the following techniques:
   - Examine the `/etc/services` or `%SYSTEMROOT%\System32\drivers\etc\services` file to see a list of port definitions for the system.

     The list includes ports that can be used by services on your system, even if the port is not currently in use. The file does not include ports that are opened dynamically by applications.
   - Use the `netstat -a` command to list the active ports on this system.

     This example uses port 9091.

2. In the `virtualhosts.xml` file, located in the `WAS_install_dir/config/cells/cellName` directory, change port 9090 to 9091.

3. In the `server.xml` file, located in the `WAS_install_dir/config/cells/cellName/nodes/nodeName/server/server1` directory, change port 9090 to 9091.

4. Stop `server1`, and then start it using the following commands:
   ```
   stopServer server1
   startServer server1
   ```

5. Access the administrative console using the following Web address:
   ```
   http://hostName:9091/admin
   ```

On Windows, if you have shortcuts to the administrative console, you must change the port number in the **Target** field of the shortcut properties.

If this chapter did not help you resolve your problem, you can get additional assistance from the IBM Software Support Web site at the following Web address:

http://www.ibm.com/software/support/

Chapter 9. Contacting IBM Tivoli Software Support

If you encounter a problem with the Tivoli Intelligent Orchestrator product, first look for help at the Tivoli Intelligent Orchestrator Support Web site. This site contains a searchable database of Technotes and frequently asked questions relating to current issues. The site also contains presentations, fixes, fix packs, and white papers. Go to http://www-306.ibm.com/software/sysmgmt/products/support/, and under **Product support pages A to Z** click **I**, and then select **IBM Tivoli Intelligent Orchestrator** to open the Tivoli Intelligent Orchestrator Support Web site.

If the problem cannot be resolved by using the Tivoli Intelligent Orchestrator Support Web site or the problem determination and troubleshooting information provided in this guide, contact IBM Tivoli Software Support.

The proper method for contacting support is described in the Tivoli Support Handbook. This handbook is located at the following Web site: http://techsupport.services.ibm.com/guides/handbook.html. The guide directs you to collect certain kinds of information to help Tivoli Support find a solution to your problem.

Collect this information, but do not send it to Tivoli Support until you are directed to do so. The procedures and methods for transmitting such data undergo periodic change. Therefore, get the latest instructions from Tivoli Support before you send the information to them.

General data to collect for Tivoli Support

Collect the following information and make it available to Tivoli Support so they can solve the problem as quickly as possible:
- A brief description of the class of problem, such as installation, configuration, audit, system failure, or performance
- Hardware configurations (machine make and model number), operating system type, version number, patch levels
- Language/locale information
- Tivoli Intelligent Orchestrator level, including any fix packs
- Server information for these servers: Tivoli Intelligent Orchestrator, LDAP, DB2 Universal Database, IBM Directory Server, WebSphere Application Server. The information should include the systems on which they are located, network connectivity to these systems, and the version number (including fix packs) of the servers.
- List of any systems (Tivoli Intelligent Orchestrator server, LDAP server) configured with multiple IP addresses
- Detailed description of the problem, and whether the problem can be re-created. If the problem can be re-created, what steps are required to re-create the problem.
- Time frame in which the problem occurred (in relation to the log entries)
- The business impact of the problem you are facing. Determine how this impacts your system and your ability to meet your business needs.

- Proper contact information - your IBM Passport Advantage® or Tivoli Customer ID, appropriate phone number or e-mail address, your preference of return correspondence: by phone or e-mail, alternate phone numbers (if possible), and if not responding to you, the name and contact information for the person Tivoli Customer Support needs to contact.

packageLog ZIP tool

The packageLog tool is a command line utility that packages Tivoli Intelligent Orchestrator logs into a single ZIP file that you can send to the IBM Tivoli Software Support team. The ZIP file includes the log information that Tivoli Support representatives need to access so they can help diagnose a problem.

Location

Windows

> `%TIO_HOME%\tools`
>
> Where `%TIO_HOME%` is the Tivoli Intelligent Orchestrator home directory.

UNIX `$TIO_HOME/tools`

> Where `$TIO_HOME` is the Tivoli Intelligent Orchestrator home directory.

Syntax

Windows

> `packageLogs.cmd` *full_path_of_the_log–directory*, where *full_path_of_the_log–directory* is the location of the log directory that includes the log files you want to zip and send to Tivoli Support.
>
> The packageLogs tool automatically determines the default location of the logs. However, if the logs have been placed in a directory other than the default, you can use this variable to specify the unique directory location.

UNIX `packageLogs.sh` *full_path_of_the_log–directory*, where *full_path_of_the_log–directory* is the location of the log directory that includes the log files that you want to zip and send to Tivoli Support.

> The packageLogs tool automatically determines the default location of the logs. However, if the logs have been placed in a directory other than the default, you can use this variable to specify the unique directory location.

Returned file

The tool produces a ZIP file `LogPackage`*timestamp*`.zip`, located in the current directory, where *timestamp* is a time stamp assigned by the system when the packageLog tool completes the ZIP file.

Level Reporting tool for the WebSphere Application Server platform

The Level Reporting tool is a command line utility that scans your system for WebSphere Application Server platform products, and then builds a report file that details the products that it found as well as their respective maintenance levels. The tool is not intended to displace the current native level utilities such as **versionInfo** and **db2level** that are provided by the individual products. Rather, the tool is designed to produce a report file that includes the software level information that IBM Tivoli Software Support representatives need to access so they can help diagnose a problem.

Prerequisites

This utility assumes that you have set the JAVA_HOME and WAS_HOME environment variable appropriately. For example:

Windows
```
set JAVA_HOME=C:\IBM\WebSphere\AppServer\java
set WAS_HOME=C:\IBM\WebSphere\AppServer
```

Linux and UNIX
```
export JAVA_HOME=/opt/WebSphere/AppServer/java
export WAS_HOME=/opt/WebSphere/AppServer
```

AIX
```
export JAVA_HOME=/usr/WebSphere/AppServer/java
export WAS_HOME=/usr/WebSphere/AppServer
```

Location

Windows
```
%TIO_HOME%\tools
```
Where %TIO_HOME% is the Tivoli Intelligent Orchestrator home directory.

UNIX `$TIO_HOME/tools`

Where $TIO_HOME is the Tivoli Intelligent Orchestrator home directory.

Syntax

Windows
```
lrtwp.bat ( [ -format text | html | xml] [ -file output_file ] -debug)
| ( [ -help | -? | /help | /? | -usage ] )
```

UNIX
```
lrtwp.sh ( [ -format text | html | xml ] [ -file output_file ] -debug)
| ( [ -help | -? | /help | /? | -usage ] )
```

where:
- `-format` outputs the report in normal text or HTML or XML
- `-file` *output_file* writes the report to file rather than to standard out (console)
- `-debug` generates the lrtwp_n.trace trace file that includes debug information
- `-help` displays a terse description of each parameter
- `-usage` displays the usage string

Returned file

The returned report file is located in the current directory.

For additional options that can be used to obtain support for IBM products, refer to Appendix B, "Support information," on page 225.

Chapter 10. Tivoli Intelligent Orchestrator messages

This chapter lists the available Tivoli Intelligent Orchestrator messages. For more information on the conventions used to create these messages, see the section "Message logs" on page 35.

Note: Variables in a message are represented by *variable_n* where *n* is a unique value within the message.

The following message categories are available:

- "Common subsystem messages"
- "Deployment engine subsystem messages" on page 124
- "Job Distribution Service (JDS) subsystem messages" on page 135
- "J2ee subsystem messages" on page 135
- "Policy engines subsystem messages" on page 150
- "Common agent subsystem messages" on page 153
- "TC driver manager subsystem messages" on page 154
- "Utilities subsystem messages" on page 164
- "Networking Messages" on page 169
- "RXA Messages" on page 171
- "Software Distribution Messages" on page 173
- "Group Messages" on page 168
- "Compliance Messages" on page 166

Common subsystem messages

COPCOM001E   The system cannot delete the "*VALUE_0*" file.

Explanation: No additional information is available for this message.

COPCOM002E   The system cannot create the "*VALUE_0*" file. Message: "*VALUE_1*"

Explanation: No additional information is available for this message.

COPCOM003E   The system cannot find the *VALUE_0* dcm policy.

Explanation: No additional information is available for this message.

COPCOM004E   The software module *VALUE_0* does not have the required third party software package.

Explanation: The uninstall process failed when the provided software module did not have the required third party software package. The third party software

package is required to provide the name and version of the IBM Tivoli Configuration Manager Software Package.

Operator response: Verify that the provided software resource references the correct software module.

Administrator Response: The uninstall workflow requires that the software resource specify a software module that has a third party software package. Verify that the software module was imported or created with a third party software package.

Explanation: No additional information is available for this message.

COPCOM005E   The system cannot create the JMS message.

Explanation: No additional information is available for this message.

COPCOM006E   The software resource with ID *VALUE_0* does not have a valid software module ID.

Explanation: An error occurred when the workflow received as the input parameter a software resource ID that does not contain a valid software module ID. A valid software module ID is required to identify which package will be uninstalled from the specified system.

Operator response: Verify that the provided software resource references the correct software module. Verify that the package was installed on the specified system using a workflow that implements SoftwareInstallable.Install.

Explanation: No additional information is available for this message.

COPCOM007E The software resource with ID VALUE_0 does not have a valid server ID.

Explanation: An error occurred when the workflow received as the input parameter a software resource ID that does not contain a valid server ID. A valid server ID is required to identify the target system.

Operator response: Verify that the package was installed on the specified system using a workflow that implements SoftwareInstallable.Install.

COPCOM008E The system cannot open a Telnet connection to "VALUE_0".

Explanation: The user setting might be incorrect.

Operator response: From the command line, try to create the Telnet connection as 'userid'.

COPCOM009E The variable TMA.Label_propkey is undefined in the server with ID VALUE_0.

Explanation: An error occurred when the variable TMA.Label_propkey was not defined on the server. This property is needed since it identifies the IBM Tivoli Management Agent in systems that have more than one agent. The value of this property is the name of a second property. The second property contains the name of the IBM Tivoli Managed Agent label.

Administrator Response: Verify that the server has a variable named TMA.Label_propkey in the DEPLOYMENT_ENGINE scope.

Explanation: No additional information is available for this message.

COPCOM010E The third party software package with ID VALUE_0 does not have the required file name and file path.

Explanation: An error occurred during the registration of the Software Package Block when the third party software package did not have specify the name and path of the Software Package Block.

Operator response: Verify that registration was performed on the correct third party software package.

Administrator Response: Verify that the third party software package was defined using the correct file name and path attributes.

Explanation: No additional information is available for this message.

COPCOM011E The discovery object VALUE_0 does not have a valid filter string.

Explanation: The provided discovery object does not have the required property tcm.software.filter, tcm.hardware.pm.filter. Those properties are used to define which IBM Tivoli Configuration Manager resources will be imported into IBM . The defined filter value should be in the format:

```
PR=PolicyRegionValue;PM=ProfileManagerValue;
SP=SoftwarePackageValue;I=True.
```

Operator response: Verify that the correct discovery object was used. Verify that the discovery object has the required filter string properties.

Explanation: No additional information is available for this message.

COPCOM012E The server VALUE_0 does not have a locale value.

Explanation: An error occurred in the workflow because the server specified has a locale value that is null. The locale value is required to specify the locale value of the items that will be imported into the IBM database.

Administrator Response: Verify that the server object does not have null locale value.

COPCOM013E The system cannot find the NIC for network interface IP "VALUE_0".

Explanation: This is a validation issue.

Operator response: Validate the NIC information.

COPCOM014E The system cannot find the software stack with ID: "VALUE_0".

Explanation: This is a validation issue.

Operator response: Validate the software stack information.

COPCOM015E The system cannot get a JNDI context.

Explanation: No additional information is available for this message.

COPCOM016E **The directory** *VALUE_0* **does not exist.**

Explanation: An error occurred when the directory that contains the scripts that interact with IBM Tivoli Configuration Manager was not found. This directory contains the required scripts `itcmDist.sh`, `tmeCkDt.sh`, and others. This directory is usually `$TIO_HOME/repository/tivoli/itcm`.

Administrator Response: Verify that script repository directory exists. If this directory does not exist, it should be created and the scripts stored in the automation package itcm.tcdriver should be copied to this directory.

Explanation: No additional information is available for this message.

COPCOM017E **The system cannot send the JMS message (destination:*VALUE_0*).**

Explanation: No additional information is available for this message.

COPCOM024E **The system cannot use the** *VALUE_0* **JMS destination.**

Explanation: No additional information is available for this message.

COPCOM025E **The system cannot connect to the administration server because it cannot update the password in LDAP.**

Explanation: No additional information is available for this message.

COPCOM026E **The system cannot create the file because it cannot resolve the variable** *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM027E **The system cannot create the file because it cannot find the** *VALUE_0* **file.**

Explanation:

Operator response: Review the file permissions.

COPCOM028E **The system cannot create or write the** *VALUE_0* **file.**

Explanation:

Operator response: Confirm that you have been assigned write permission to the directory in which you want to create the file.

COPCOM029E **The system cannot determine the attribute type and it cannot update the Websphere Application Server setting.**

Explanation: No additional information is available for this message.

COPCOM030E **An exception occurred when performing a cryptographic operation. The system cannot encrypt the password.**

Explanation: No additional information is available for this message.

COPCOM031E **The system cannot load the** *VALUE_0* **file because it cannot read the file.**

Explanation: No additional information is available for this message.

COPCOM032E **The system cannot read the user-factory.xml configuration because the configuration file is not valid.**

Explanation: No additional information is available for this message.

COPCOM033E **An XML element is missing. The message property is not named.**

Explanation: No additional information is available for this message.

COPCOM034E **An error occurred: dataSource.class** *VALUE_0*,**methodName=***VALUE_1*

Explanation: No additional information is available for this message.

COPCOM035E **An error occurred:***VALUE_0*. **To prevent concurrent access to this object, this is considered an error. Reacquire a released object before using it.**

Explanation: No additional information is available for this message.

COPCOM036E **A shell command error occurred. Runtime.getRuntime().exec(command) returned null.**

Explanation: No additional information is available for this message.

COPCOM037E A shell command error occurred and the system cannot create the InputStreamHelper for the error stream.

Explanation: No additional information is available for this message.

COPCOM038E A shell command error occurred and the system cannot create a BufferedWriter for the input stream.

Explanation: No additional information is available for this message.

COPCOM039E A shell command error occurred and the system cannot create the InputStreamHelper for the output/result stream.

Explanation: No additional information is available for this message.

COPCOM040E The system failed to load the "*VALUE_0*" XML file.

Explanation: No additional information is available for this message.

COPCOM041E The system failed to parse the "*VALUE_0*" XML file.

Explanation: No additional information is available for this message.

COPCOM042E The system cannot read the "*VALUE_0*" XML file.

Explanation: No additional information is available for this message.

COPCOM043E The system cannot complete the "*VALUE_0*" SQL select query.

Explanation:

Operator response: Verify that the database is running.

COPCOM044E The system cannot access the database session pool.

Explanation:

Operator response: Verify that the database is running.

COPCOM045E The system cannot find the *VALUE_0* access control list.

Explanation: No additional information is available for this message.

COPCOM046E A parent object must be specified when importing a new access rule.

Explanation:

Operator response: In the XML file, verify that the access rule is defined within the access control list.

COPCOM047E A parent object must be specified when importing a new power outlet.

Explanation:

Operator response: In the XML file, verify that the power outlet is defined within the power unit.

COPCOM048E A parent object must be specified when importing a new server.

Explanation:

Operator response: In the XML file, verify that the new server is defined within the resource pool or application tier.

COPCOM049E A parent object must be specified when importing a new subnetwork.

Explanation:

Operator response: In the XML file, verify that the new subnetwork is defined, and then create the VLAN.

COPCOM050E Application *VALUE_0* not found.

Explanation: The application does not exist. It might need to be defined.

Operator response: Define the application.

COPCOM051E A data integrity constraint was violated.

Explanation: No additional information is available for this message.

COPCOM052E The system cannot find the *VALUE_0* BladeAdminServer.

Explanation: No additional information is available for this message.

COPCOM053E **The system cannot allocate** *VALUE_0* **shares of resource** *VALUE_1* **from the** *VALUE_2* **host platform.**

Explanation: No additional information is available for this message.

COPCOM054E **The system cannot delete the "***VALUE_0***" (***VALUE_1***) software fix pack because it is part of the "***VALUE_2***" stack.**

Explanation: No additional information is available for this message.

COPCOM055E **The system cannot delete the "***VALUE_0***" (***VALUE_1***) software fix pack because it is installed on the "***VALUE_2***" device.**

Explanation: No additional information is available for this message.

COPCOM056E **The system cannot find the** *VALUE_0* **ClusterAdminServer.**

Explanation: No additional information is available for this message.

COPCOM057E **The system cannot delete the application tier** *VALUE_0* **because it includes overflow servers.**

Explanation: No additional information is available for this message.

COPCOM058E **The system cannot find application tier** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM059E **The system cannot find a rule at position:** *VALUE_0*

Explanation: No additional information is available for this message.

COPCOM060E **The system cannot parse the attribute current-position:** *VALUE_0*

Explanation: No additional information is available for this message.

COPCOM061E **The system cannot find customer** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM062E **The system cannot find the deployment engine property** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM063E **The system cannot find the DCM object ID:** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM064E **The system cannot find the DCM object type:** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM065E **Default credentials are declared multiple times for SAP ID:** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM066E **The system cannot find device model:** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM067E **The system cannot find discovery:** *VALUE_0***.**

Explanation: While it imported discovery information from an XML file, the system looked in the data center model but did not find the discovery technology being associated or updated.

Operator response: Verify that the discovery technology exists and that it is spelled correctly.

COPCOM068E **The system cannot find the interface card port:** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM069E **The system cannot find the component:** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM070E **The system cannot find the load balancer type:** *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM071E The system cannot find the load balancer: *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM072E The system cannot find the monitoring application: *VALUE_0***.**

Explanation: While it imported monitoring application information from an XML file, the system looked in the data center model but did not find the monitoring application being associated.

Operator response: Verify that the monitoring application exists and that it is spelled correctly.

COPCOM073E The system cannot find the monitoring configuration: *VALUE_0***.**

Explanation: While it imported monitoring configuration information from an XML file, the system looked in the data center model but did not find the monitoring configuration being associated or updated.

Operator response: Verify that the monitoring configuration exists and that it is spelled correctly.

COPCOM074E More than one NIC is attached to switch port: *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM075E The system cannot find NIC: *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM076E Too many database connections are open.

Explanation: No additional information is available for this message.

COPCOM077E The system cannot find discovered by *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM078E The system cannot create discovered by for discovery *VALUE_0* **and object ID** *VALUE_1* **because it already exists.**

Explanation: No additional information is available for this message.

COPCOM079E The system cannot find the requested data center model object: *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM080E The system cannot find the required data center model object. The object either does not exist, or exists but is not the expected object type (type *VALUE_0***, ID** *VALUE_1***).**

Explanation: No additional information is available for this message.

COPCOM081E The system cannot find the requested data center model object type (*VALUE_0***).**

Explanation: No additional information is available for this message.

COPCOM082E The system cannot find power outlet *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM083E The system cannot find power unit *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM084E The single row select statement returned multiple records.

Explanation: No additional information is available for this message.

COPCOM085E The system cannot find the *VALUE_0* **server.**

Explanation: No additional information is available for this message.

COPCOM086E The system cannot find the property that was discovered by *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM087E The system cannot create the property discovered by for discovery *VALUE_0* **and property ID** *VALUE_1* **because it already exists.**

Explanation: No additional information is available for this message.

COPCOM088E   The system cannot find the *VALUE_0* **software product.**

Explanation: No additional information is available for this message.

COPCOM089E   The system cannot find the *VALUE_0* **software stack entry.**

Explanation: No additional information is available for this message.

COPCOM090E   The system cannot find the *VALUE_0* **software stack.**

Explanation: No additional information is available for this message.

COPCOM091E   The system cannot find the *VALUE_0* **software state.**

Explanation: No additional information is available for this message.

COPCOM092E   The system cannot find the *VALUE_0* **spare resource pool.**

Explanation: No additional information is available for this message.

COPCOM093E   The JDBC driver caused an SQL exception.

Explanation:

Operator response: For more information, see the console log located at $TIO_LOGS/de/console.log

COPCOM094E   The system cannot find subnetwork *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM095E

Explanation: No additional information is available for this message.

COPCOM096E   The system did not find the *VALUE_0* **switch port.**

Explanation: No additional information is available for this message.

COPCOM097E   The system cannot find the *VALUE_0* **switch.**

Explanation: No additional information is available for this message.

COPCOM099E   The system cannot find the virtual IP: *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM100E   The system cannot find VLAN *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM101E   *VALUE_0* **is not valid for** *VALUE_1***.**

Explanation:

Operator response: Make sure that the DCMObject type is an application tier.

COPCOM102E   The system cannot find the address space *VALUE_0***.**

Explanation:

Operator response: Define the address space.

COPCOM106E   An exception occurred getting the *VALUE_0* **home interface.**

Explanation: No additional information is available for this message.

COPCOM108E   A GUID generator exception occurred: *VALUE_0***. The original error message is "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPCOM110E   The file name "*VALUE_0***" is not valid.**

Explanation: No additional information is available for this message.

COPCOM113E   The "*VALUE_0***" XML file is not valid because it does not contain a driver.**

Explanation: No additional information is available for this message.

COPCOM114E   The file does not include the "*VALUE_0***" XML element.**

Explanation: No additional information is available for this message.

COPCOM115E There is not enough data to complete the task.

Explanation: No additional information is available for this message.

COPCOM116E The operation timed out.

Explanation: No additional information is available for this message.

COPCOM117E The system cannot decrypt a string that is empty or null.

Explanation: No additional information is available for this message.

COPCOM118E The system cannot encrypt a string that is empty or null.

Explanation: No additional information is available for this message.

COPCOM119E An exception occurred when performing the cryptographic operation: *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM120E The Base64 value "*VALUE_0*" is not valid.

Explanation: No additional information is available for this message.

COPCOM121E The encryption key length *VALUE_0* is not valid.

Explanation: No additional information is available for this message.

COPCOM122E Null encryption key.

Explanation: No additional information is available for this message.

COPCOM123E This shell command error occurred: Exit value=*VALUE_0*, Error stream="*VALUE_1*", Result stream="*VALUE_2*".

Explanation: There is a problem running your command or scriptlet on the command line of the managed device. Ensure the command or script works on the command line of the managed device and ensure you have all the packages required for running the command or scriptlets are installed on your managed device.

Operator response: Verify the shell command.

COPCOM124E A Telnet error occurred.

Explanation: No additional information is available for this message.

COPCOM125E A Telnet error occurred.

Explanation: No additional information is available for this message.

COPCOM126E The system cannot delete license key *VALUE_0* because it is being used.

Explanation: No additional information is available for this message.

COPCOM127E The system cannot delete the license pool *VALUE_0* because it is used by at least one software stack definition.

Explanation:

Operator response: Detach the license pool from the stack definition before you attempt to delete it.

COPCOM128E The system cannot delete all roles from a user with IBM Directory Server. At least one role is required. The first group found that would become empty is: *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM131E A user with this ID already exists. Try a different user ID.

Explanation: No additional information is available for this message.

COPCOM132E An error occurred during the LDAP operation: *VALUE_0*.

Explanation:

Operator response: Verify the LDAP server.

COPCOM133E The monitoring configuration *VALUE_0* is already associated with *VALUE_1*.

Explanation: A monitoring configuration with the same name is already associated with the current resource.

Operator response: If the monitoring configuration selected is correct, then nothing more is needed. If it is not correct, add an association with the desired monitoring configuration object.

COPCOM134E The password that you are trying to update cannot be null or empty for username *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM135E The username that you are trying to update cannot be null or empty.

Explanation: No additional information is available for this message.

COPCOM136E The system cannot find error *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM137E The system cannot add a stack that contains this stack.

Explanation: No additional information is available for this message.

COPCOM138E The system cannot complete the user management operation. Try again. If the problem continues, contact your system administrator.

Explanation:

Operator response: Verify that the LDAP server is running.

COPCOM140E An error occurred: *VALUE_0*

Explanation: No additional information is available for this message.

COPCOM143E A shell command error *VALUE_0* **occurred.**

Explanation: No additional information is available for this message.

COPCOM146E The "*VALUE_0***" attribute is missing.**

Explanation: No additional information is available for this message.

COPCOM147E The "*VALUE_0***" attribute includes an incorrect value: "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPCOM148E The system does not support an Insert action for the DCM object: "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPCOM149E The system does not support update for the "*VALUE_0***" attribute.**

Explanation: No additional information is available for this message.

COPCOM151E This monitoring configuration is being used by the "*VALUE_0***" group.**

Explanation: The group cannot be deleted because a monitoring configuration is associated with it.

Operator response: Remove this monitoring configuration from the group, and then try to delete it.

COPCOM152E This monitoring configuration is being used by the "*VALUE_0***" server.**

Explanation: The resource cannot be deleted because a monitoring configuration is associated with it.

Operator response: Remove this monitoring configuration from the resource, and then try to delete it.

COPCOM153E Delete the monitoring configurations associated with the "*VALUE_0***" monitoring application.**

Explanation: The monitoring application cannot be deleted because it contains at least one monitoring configuration.

Operator response: Delete the monitoring configuration from the monitoring application, and then try to delete the monitoring application.

COPCOM154E The system cannot find the *VALUE_0* **terminal server.**

Explanation: No additional information is available for this message.

COPCOM155E The system cannot find the *VALUE_0* **boot server.**

Explanation: No additional information is available for this message.

COPCOM156E The system cannot find the *VALUE_0* **software fix pack.**

Explanation: No additional information is available for this message.

COPCOM157E The system cannot find the *VALUE_0* **software product category.**

Explanation: No additional information is available for this message.

COPCOM158E The system cannot find the *VALUE_0* **interface card.**

Explanation: No additional information is available for this message.

COPCOM159E The system cannot find the *VALUE_0* **access rule.**

Explanation: No additional information is available for this message.

COPCOM160E The system cannot find the *VALUE_0* **server template.**

Explanation: No additional information is available for this message.

COPCOM161E The system cannot find the resource *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM162E The system cannot find the *VALUE_0* **resource requirement.**

Explanation: No additional information is available for this message.

COPCOM163E The system cannot find the *VALUE_0* **password credentials.**

Explanation: No additional information is available for this message.

COPCOM164E The system cannot find the *VALUE_0* **RSA credentials.**

Explanation: No additional information is available for this message.

COPCOM165E The system cannot find the *VALUE_0* **SNMP credentials.**

Explanation: No additional information is available for this message.

COPCOM166E The system cannot find the *VALUE_0* **protocol end point.**

Explanation: No additional information is available for this message.

COPCOM167E The system cannot find the *VALUE_0* **network interface.**

Explanation: No additional information is available for this message.

COPCOM168E The update function is not supported for the DCM object "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPCOM169E The delete function is not supported for the DCM object: "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPCOM170E The system cannot find this route: *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM171E The system cannot find real IP: *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM172E The DCM Object is not current with respect to the database.

Explanation: Another user has updated the record and the copy of the data is not current.

Operator response: Refresh the data and retry the update.

Explanation: No additional information is available for this message.

COPCOM173E The system cannot find the *VALUE_0* **file repository.**

Explanation: No additional information is available for this message.

COPCOM175E The system cannot find the *VALUE_0* **storage multipath settings.**

Explanation: No additional information is available for this message.

COPCOM176E The system cannot find the *VALUE_0* **data path settings.**

Explanation: No additional information is available for this message.

COPCOM178E The system cannot find the volume container settings *VALUE_0* **with volume manager** *VALUE_1* **and spare pool** *VALUE_2*.

Explanation: No additional information is available for this message.

COPCOM179E The system cannot find the volume container settings *VALUE_0* **with volume manager** *VALUE_1* **and application tier** *VALUE_2*.

Explanation: No additional information is available for this message.

COPCOM180E The system cannot find the *VALUE_0* **storage policy settings.**

Explanation: No additional information is available for this message.

COPCOM181E The system cannot find the *VALUE_0* **volume container settings.**

Explanation: No additional information is available for this message.

COPCOM182E The system cannot find the *VALUE_0* **logical volume settings.**

Explanation: No additional information is available for this message.

COPCOM183E The system cannot find the *VALUE_0* **file system settings.**

Explanation: No additional information is available for this message.

COPCOM184E The system cannot find the *VALUE_0* **physical volume settings.**

Explanation: No additional information is available for this message.

COPCOM185E The system cannot find the *VALUE_0* **disk partition settings.**

Explanation: No additional information is available for this message.

COPCOM186E The system cannot find the *VALUE_0* **file system mount settings.**

Explanation: No additional information is available for this message.

COPCOM187E The system cannot find the *VALUE_0* **system storage capabilities settings.**

Explanation: No additional information is available for this message.

COPCOM188E The system cannot find the *VALUE_0* **storage area network.**

Explanation: No additional information is available for this message.

COPCOM189E The system cannot find the *VALUE_0* **storage area network administration domain (fibre channel fabric).**

Explanation: No additional information is available for this message.

COPCOM190E The system cannot find the *VALUE_0* **fibre channel switch.**

Explanation: No additional information is available for this message.

COPCOM191E The system cannot find the *VALUE_0* **disk manager.**

Explanation: No additional information is available for this message.

COPCOM192E The system cannot find the *VALUE_0* **storage allocation pool.**

Explanation: No additional information is available for this message.

COPCOM193E The system cannot find the *VALUE_0* **storage area network frame.**

Explanation: No additional information is available for this message.

COPCOM194E The system cannot find the *VALUE_0* **storage volume.**

Explanation: No additional information is available for this message.

COPCOM195E The system cannot find the *VALUE_0* **volume manager.**

Explanation: No additional information is available for this message.

COPCOM196E   The system cannot find the *VALUE_0* **volume container.**

Explanation: No additional information is available for this message.

COPCOM197E   The system cannot find the *VALUE_0* **logical volume.**

Explanation: No additional information is available for this message.

COPCOM198E   The system cannot find the *VALUE_0* **file system.**

Explanation: No additional information is available for this message.

COPCOM199E   The system cannot find the *VALUE_0* **physical volume.**

Explanation: No additional information is available for this message.

COPCOM200E   The system cannot find the *VALUE_0* **physical partition.**

Explanation: No additional information is available for this message.

COPCOM201E   The system cannot find the *VALUE_0* **system storgage capabilities.**

Explanation: No additional information is available for this message.

COPCOM202E   The system cannot find the *VALUE_0* **fibre channel port with port number.**

Explanation: No additional information is available for this message.

COPCOM203E   The system cannot find the *VALUE_0* **data path.**

Explanation: No additional information is available for this message.

COPCOM204E   The system cannot find the *VALUE_0* **zone set.**

Explanation: No additional information is available for this message.

COPCOM205E   The system cannot find the *VALUE_0* **zone.**

Explanation: No additional information is available for this message.

COPCOM206E   The system cannot find the *VALUE_0* **zone membership data.**

Explanation: No additional information is available for this message.

COPCOM207E   A worldwide name is not defined for the *VALUE_0* **fibre channel port.**

Explanation: No additional information is available for this message.

COPCOM208E   The system cannot find the *VALUE_0* **storage volume in the** *VALUE_1* **storage area network frame.**

Explanation: No additional information is available for this message.

COPCOM209E   The system cannot find the logical volume *VALUE_0* **in the volume container** *VALUE_1*.

Explanation: No additional information is available for this message.

COPCOM210E   The system cannot find the logical volume settings *VALUE_0* **in the volume container settings** *VALUE_1*.

Explanation: No additional information is available for this message.

COPCOM211E   The system cannot find the fibre channel port with port number *VALUE_0* **in system** *VALUE_1*.

Explanation: No additional information is available for this message.

COPCOM213E   The system cannot find the zone *VALUE_0* **in the fibre channel fabric** *VALUE_1*.

Explanation: No additional information is available for this message.

COPCOM215E   The system cannot find the volume container settings *VALUE_0* **with volume manager** *VALUE_1* **and storage template** *VALUE_2*.

Explanation: No additional information is available for this message.

COPCOM216E No file system settings are defined in the logical volume settings *VALUE_0* **of the** *VALUE_1* **storage template.**

Explanation: No additional information is available for this message.

COPCOM217E The system cannot create the output file *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM218E The system cannot find the object type *VALUE_0* **with the ID or name** *VALUE_1***.**

Explanation: No additional information is available for this message.

COPCOM219E The database cannot complete the query.

Explanation: No additional information is available for this message.

COPCOM220E The system cannot find the *VALUE_0* **software requirement.**

Explanation: No additional information is available for this message.

COPCOM221E The system cannot find the *VALUE_0* **software capability.**

Explanation: No additional information is available for this message.

COPCOM222E The system cannot find the *VALUE_0* **software requirement name.**

Explanation: No additional information is available for this message.

COPCOM223E The system cannot find the *VALUE_0* **software requirement type.**

Explanation: No additional information is available for this message.

COPCOM224E The system cannot find the *VALUE_0* **software requirement value option.**

Explanation: No additional information is available for this message.

COPCOM226E The *VALUE_0* **server template is not valid.**

Explanation: No additional information is available for this message.

COPCOM228E The system cannot delete the *VALUE_0* **host platform because it includes virtual servers.**

Explanation: No additional information is available for this message.

COPCOM229E The system cannot delete the *VALUE_0* **host platform because it is installed as a software product.**

Explanation: No additional information is available for this message.

COPCOM230E The system cannot find the *VALUE_0* **host platform.**

Explanation: No additional information is available for this message.

COPCOM231E The system cannot find the *VALUE_0* **property.**

Explanation: No additional information is available for this message.

COPCOM232E The system cannot delete the resource *VALUE_0* **because it is part of an allocation.**

Explanation: No additional information is available for this message.

COPCOM233E The system cannot find the *VALUE_0* **license key.**

Explanation: No additional information is available for this message.

COPCOM234E The system cannot find the *VALUE_0* **license broker.**

Explanation: No additional information is available for this message.

COPCOM235E The system cannot find the *VALUE_0* **license pool.**

Explanation: No additional information is available for this message.

COPCOM236E The system cannot find the
supported requirement type: *VALUE_0*.

Explanation: No additional information is available
for this message.

COPCOM237E The system cannot find the *VALUE_0*
software module.

Explanation: No additional information is available
for this message.

COPCOM238E The system cannot find the *VALUE_0*
resource allocation.

Explanation: No additional information is available
for this message.

COPCOM239E The system cannot find the DCM
object ID for IP address *VALUE_0*.

Explanation: The IP address is not valid.

Operator response: Provide the correct IP address of
the resource.

COPCOM240E The system cannot find the *VALUE_0*
signal descriptor.

Explanation: No additional information is available
for this message.

COPCOM241E The system cannot find the *VALUE_0*
volume container access settings.

Explanation: No additional information is available
for this message.

COPCOM242E The system cannot find the *VALUE_0*
storage volume on the port.

Explanation: No additional information is available
for this message.

COPCOM243E The system cannot find the *VALUE_0*
router.

Explanation: No additional information is available
for this message.

COPCOM244E The system cannot find the *VALUE_0*
software association.

Explanation: No additional information is available
for this message.

COPCOM246E The system cannot find the *VALUE_0*
default protocol endpoint.

Explanation: No additional information is available
for this message.

COPCOM250E The system cannot find the *VALUE_0*
access control list network interface.

Explanation: No additional information is available
for this message.

COPCOM253E The system cannot find the *VALUE_0*
license allocation.

Explanation: No additional information is available
for this message.

COPCOM254E The system cannot find the *VALUE_0*
volume container access.

Explanation: No additional information is available
for this message.

COPCOM255E The system cannot find the *VALUE_0*
port connection.

Explanation: No additional information is available
for this message.

COPCOM256E The environment did not specify a
default log directory. Invoke the
command, and specify the log directory
as the argument.

Explanation: No additional information is available
for this message.

COPCOM257E The input directory name *VALUE_0* **is**
either not a directory, or it does not
exist.

Explanation: No additional information is available
for this message.

COPCOM258E The application cannot write the
output file *VALUE_0* **to the file system.**
Verify the write permission setting of
the directories, and then try again.

Explanation: No additional information is available
for this message.

COPCOM261E The system cannot send the events to
the Tivoli Enterprise Console®.

Explanation: The system cannot send the events to the
Tivoli Enterprise Console.

Administrator Response: Activate the logging function
in the Tivoli Enterprise Console Event Integration

Facility to determine the problem. To activate logging, set the TraceFileName variable in the Tivoli Enterprise Console configuration file.

COPCOM264E   The system cannot generate the Tivoli Enterprise Console (TEC) event because no event class name was specified.

Explanation: The Send TEC Event Java plug-in uses the Tivoli Enterprise Console TECAgent code base to send TEC events to the Tivoli Enterprise Console (TEC) server. All TEC events sent by the Send TEC Event Java plug-in must conform to the Tivoli Enterprise Console standard. The TEC event class name that was provided to the system does not conform to the standard.

Operator response: Verify that the name of the event class contains only alphanumeric characters, and verify that it does not contain any white space. Refer to the Tivoli Enterprise Console product manual for more information.

COPCOM265E   The system cannot find the switch endpoint *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM266E   The system cannot find the switch or the endstation endpoint *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM267E   The switch endpoint *VALUE_0* is not in trunking mode.

Explanation: No additional information is available for this message.

COPCOM268E   The switch endpoint *VALUE_0* is not connected to a peer endpoint.

Explanation: No additional information is available for this message.

COPCOM269E   The switch endpoint mode *VALUE_0* is not valid.

Explanation: No additional information is available for this message.

COPCOM270E   The switch endpoint encapsulation *VALUE_0* is not valid.

Explanation: No additional information is available for this message.

COPCOM271E   The system cannot find the *VALUE_0* DcmObjectSoftwareStack.

Explanation: No additional information is available for this message.

COPCOM272E   The system cannot find the discovery-association: *VALUE_0*.

Explanation: While it imported discovery information from an XML file, the system searched the data center model for the discovery-association that the system expects to associate or update. However, the system did not find the discovery-association.

Operator response: Verify that the discovery-association exists and that it is spelled correctly.

COPCOM273E   The system cannot find the config-drift: *VALUE_0*.

Explanation: While it imported discovery information from an XML file, the system searched the data center model for the config-drift entity that the system expects to associate or update. However, the system did not find the config-drift entity.

Operator response: Verify that the config-drift entity exists and that it is spelled correctly.

COPCOM274E   The system cannot find the discoverable: *VALUE_0*.

Explanation: While it imported discovery information from an XML file, the system searched the data center model for the discoverable entity that the system expects to associate or update. However, the system did not find the discoverable entity.

Operator response: Verify that the discoverable entity exists and that it is spelled correctly.

COPCOM275E   The system cannot find the discovery-execution: *VALUE_0*.

Explanation: While it imported discovery information from an XML file, the system searched the data center model for the discovery-execution entity that the system expects to associate or update. However, the system did not find the discovery-execution entity.

Operator response: Verify that the discovery-execution entity exists for the ID.

COPCOM277E   Fibre channel port number *VALUE_0* is out of range in the fibre channel switch *VALUE_1*.

Explanation: No additional information is available for this message.

COPCOM278E The system cannot find the *VALUE_0*
storage manager.

Explanation: No additional information is available
for this message.

**COPCOM279E The active zone set already exists in
the** *VALUE_0* **storage area network
fabric.**

Explanation: No additional information is available
for this message.

COPCOM281E The start port number *VALUE_0* **of
the fibre channel switch is greater than
the end port number** *VALUE_1.*

Explanation: No additional information is available
for this message.

COPCOM282E Port *VALUE_0* **is already connected to
port** *VALUE_1.*

Explanation: No additional information is available
for this message.

COPCOM283E The system cannot find the *VALUE_0*
file system mount.

Explanation: No additional information is available
for this message.

**COPCOM284E The system cannot find the
endstation endpoint** *VALUE_0.*

Explanation: No additional information is available
for this message.

COPCOM286E The VLAN with *VALUE_0* **:** *VALUE_1*
does not exist on switch *VALUE_2.*

Explanation: No additional information is available
for this message.

COPCOM287E The parent with the ID *VALUE_0* **that
is provided for the DCM insert is not
valid.**

Explanation: No additional information is available
for this message.

COPCOM289E The system cannot find the *VALUE_0*
storage pool template.

Explanation: No additional information is available
for this message.

COPCOM290E The system cannot find the *VALUE_0*
storage subsystem template.

Explanation: No additional information is available
for this message.

COPCOM291E The system cannot find the *VALUE_0*
storage fibre adapter template.

Explanation: No additional information is available
for this message.

COPCOM292E The system cannot find the *VALUE_0*
storage host bus adapter template.

Explanation: No additional information is available
for this message.

COPCOM293E The system cannot find the *VALUE_0*
storage manager template.

Explanation: No additional information is available
for this message.

COPCOM294E The system cannot find the *VALUE_0*
direct access storage device template.

Explanation: No additional information is available
for this message.

**COPCOM295E The system cannot delete the data
center fragment** *VALUE_0* **because it is
used by at least one network topology
template.**

Explanation: No additional information is available
for this message.

**COPCOM296E The system cannot delete the
network topology template** *VALUE_0*
**because it is used by at least one
application deployment template.**

Explanation: No additional information is available
for this message.

**COPCOM297E The system cannot delete the logical
deployment template** *VALUE_0* **because
it is used by at least one application
deployment template.**

Explanation: No additional information is available
for this message.

**COPCOM298E The system cannot perform delete
operation. Remove all dependencies and
then try again.**

Explanation: No additional information is available
for this message.

COPCOM299E The system cannot delete the application deployment template *VALUE_0* **because it is used by at least one application deployment.**

Explanation: No additional information is available for this message.

COPCOM300E The input XML file *VALUE_0* **is not encoded with UTF-8 encoding. Re-create the input XML file with proper encoding and try again.**

Explanation: No additional information is available for this message.

COPCOM302E Port number *VALUE_0* **is not unique.**

Explanation: No additional information is available for this message.

COPCOM303E *VALUE_0* **already exists.**

Explanation: No additional information is available for this message.

COPCOM304E The application to which the object *VALUE_0* **is inserted is not in maintenance mode.**

Explanation: No additional information is available for this message.

COPCOM305E The VLAN name cannot be null.

Explanation: No additional information is available for this message.

COPCOM306E The VLAN with name *VALUE_0* **already exists in the data center.**

Explanation: No additional information is available for this message.

COPCOM307E The system cannot find the deployment request parameter for the parameter name *VALUE_0.*

Explanation: No additional information is available for this message.

COPCOM308E The deployment request parameter value for the parameter name *VALUE_0* **is encrypted.**

Explanation: No additional information is available for this message.

COPCOM309E The deployment request parameter name cannot be null or empty.

Explanation: No additional information is available for this message.

COPCOM310E The server *VALUE_0* **does not host a software distribution application.**

Explanation: The discovery of the IBM Tivoli Configuration Management Software Packages failed because the discovery object references a server that does not host a Software Distribution Application.

Operator response: Ensure that the discovery object references the correct server. Ensure that the correct discovery object was used.

Administrator Response: A software distribution application construct should be created for the IBM Tivoli Configuration Management server if one does not exist.

Explanation: No additional information is available for this message.

COPCOM311E The values for data redundancy are not valid. Make sure that the values are greater than 0.

Explanation: No additional information is available for this message.

COPCOM312E The values for package redundancy are not valid. Make sure that the minimum redundancy, *VALUE_0*, **is smaller than or equal to the default redundancy,** *VALUE_1* **and is smaller than or equal to the maximum redundancy,** *VALUE_2*.

Explanation: No additional information is available for this message.

COPCOM313E The values for package redundancy are not valid. Make sure that the values are not negative.

Explanation: No additional information is available for this message.

COPCOM315E The values for data redundancy are not valid. Make sure that the minimum redundancy, *VALUE_0*, **is smaller than or equal to the default redundancy,** *VALUE_1*, **and is smaller than or equal to the maximum redundancy,** *VALUE_2*.

Explanation: No additional information is available for this message.

COPCOM316E The system cannot find the *VALUE_0* **boot server type.**

Explanation: No additional information is available for this message.

COPCOM317E The system cannot find the *VALUE_0* **image type.**

Explanation: No additional information is available for this message.

COPCOM321E The system cannot find the *VALUE_0* **image.**

Explanation: No additional information is available for this message.

COPCOM322E The system cannot find the *VALUE_0* **storage function type.**

Explanation: No additional information is available for this message.

COPCOM323E The policy type *VALUE_0* **is not valid.**

Explanation: No additional information is available for this message.

COPCOM324E The value for other-storage-function-type attribute is not specified.

Explanation: No additional information is available for this message.

COPCOM325E The system cannot find the *VALUE_0* **RAID redundancy mapping.**

Explanation: No additional information is available for this message.

COPCOM326E The system cannot delete the default *VALUE_0* **storage function type.**

Explanation: No additional information is available for this message.

COPCOM327E The system cannot find the source application tier resource *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM328E The system cannot find the target application tier resource *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM329E The system cannot find the *VALUE_0* **storage template.**

Explanation: No additional information is available for this message.

COPCOM330E   The principal *VALUE_0* **does not have** *VALUE_1* **permission on the object with ID** *VALUE_2***.**

Explanation: No additional information is available for this message.

COPCOM331E The subscription with ID *VALUE_0* **cannot be cancelled, because the provision schedule task ID cannot be found in its service instance with ID** *VALUE_1***.**

Explanation: No additional information is available for this message.

COPCOM332E The subscription with ID *VALUE_0* **cannot be cancelled, because it is not in the pending state.**

Explanation: No additional information is available for this message.

COPCOM333E The subscription with ID *VALUE_0* **cannot be deleted, because it is not in the Inactive_Expiried, Inactive_Failed, or Inactive_Terminated state.**

Explanation: No additional information is available for this message.

COPCOM334E The subscription with ID *VALUE_0* **cannot be cancelled or terminated, because it is already in the Inactive state.**

Explanation: No additional information is available for this message.

COPCOM335E The subscription with ID *VALUE_0* **cannot be re-subscribed, because its service instance with ID** *VALUE_1* **does not contain a provision schedule task ID.**

Explanation: No additional information is available for this message.

COPCOM336E The subscription with ID *VALUE_0* **cannot be re-subscribed, because its service instance with ID** *VALUE_1* **is not in the Provision_Error state.**

Explanation: No additional information is available for this message.

COPCOM337E The subscription with ID *VALUE_0* **cannot be re-subscribed, because it is not in the failed state.**

Explanation: No additional information is available for this message.

COPCOM338E The subscription with ID *VALUE_0* **cannot be terminated, because the unprovision schedule task ID cannot be found in its service instance with ID** *VALUE_1*.

Explanation: No additional information is available for this message.

COPCOM339E The subscription with ID *VALUE_0* **cannot be terminated, because its service instance with ID** *VALUE_1* **is not in provision_successful state.**

Explanation: No additional information is available for this message.

COPCOM340E The subscription with ID *VALUE_0* **cannot be terminated, because it is not in the active state.**

Explanation: No additional information is available for this message.

COPCOM341E The system cannot find the *VALUE_0* **restricted requirement.**

Explanation: No additional information is available for this message.

COPCOM343E The system cannot create the offering because the offering document cannot be created. The possible cause is either that the system is unable to find the offering template, or the template is in the wrong format.

Explanation: No additional information is available for this message.

COPCOM344E The system cannot create the order becaus the order document cannot be created. The possible cause is that the offering document is in the wrong format.

Explanation: No additional information is available for this message.

COPCOM345E The system cannot subscribe from the order with ID *VALUE_0* **because its order document is in the wrong format.**

Explanation: No additional information is available for this message.

COPCOM346E The system cannot schedule the task *VALUE_0* **to be executed in the past.**

Explanation: No additional information is available for this message.

COPCOM347E The dictionary key named *VALUE_0* **with ID** *VALUE_1* **in class** *VALUE_2* **cannot be added to the dictionary because it conflicts with an existing entry. The conflicting existing dictionary entry has the name** *VALUE_3* **and ID** *VALUE_4*.

Explanation: Dictionary entries must be unique and duplicate ID values or names are not allowed.

Operator response: This is an internal error. Contact your IBM service representative for assistance.

COPCOM348E The system cannot create the offering, because an offering *VALUE_0* **already exists.**

Explanation: No additional information is available for this message.

COPCOM351E The application name *VALUE_0* **cannot be found for Service.**

Explanation: No additional information is available for this message.

COPCOM352E The DCM object type *VALUE_0* **is not supported for creation of Services.**

Explanation: No additional information is available for this message.

COPCOM353E The service with ID *VALUE_0* **cannot be found.**

Explanation: No additional information is available for this message.

COPCOM354E The offering with ID *VALUE_0* **cannot be found.**

Explanation: No additional information is available for this message.

COPCOM355E The scheduled task type *VALUE_0* **is not valid.**

Explanation: No additional information is available for this message.

COPCOM356E Cannot create the scheduled task. Check the scheduled time and scheduled task type for valid input.

Explanation: No additional information is available for this message.

COPCOM357E The Order of ID *VALUE_0* **cannot be found.**

Explanation: No additional information is available for this message.

COPCOM358E The service with name *VALUE_0* **cannot be found.**

Explanation: No additional information is available for this message.

COPCOM359E The service instance of ID *VALUE_0* **cannot be found.**

Explanation: No additional information is available for this message.

COPCOM360E The subscription of ID *VALUE_0* **cannot be found.**

Explanation: No additional information is available for this message.

COPCOM361E AgentManager has thrown an exception. See the embedded exception for details.

Explanation: No additional information is available for this message.

COPCOM362E An error occured while registering with Agent Manager at address *VALUE_0.* **See the embedded exception for details.**

Explanation: No additional information is available for this message.

COPCOM363E The system cannot find the endpoint.properties file.

Explanation: No additional information is available for this message.

COPCOM366E The system cannot generate the offer document. The nested exception is *VALUE_0.*

Explanation: No additional information is available for this message.

COPCOM367E The system cannot modify the subscription with ID *VALUE_0,* **because its current status is neither New, Accpted, nor Active.**

Explanation: No additional information is available for this message.

COPCOM368E The system cannot modify the subscription with ID *VALUE_0,* **because its new start time is passed.**

Explanation: No additional information is available for this message.

COPCOM369E The system cannot modify the subscription with ID *VALUE_0,* **because its new start time is null.**

Explanation: No additional information is available for this message.

COPCOM370E The system cannot modify the start or end time of the subscription with ID *VALUE_0,* **because there is no provision or deprovision schedule task ID in its service instance with ID** *VALUE_1.*

Explanation: No additional information is available for this message.

COPCOM371E The system cannot find the Software Distribution Application *VALUE_0.*

Explanation: The system cannot find the Software Distribution Application in the data center model.

Operator response: Verify that the Software Distribution Application exists and that it is spelled correctly.

COPCOM372E The system cannot find the last fulfilled order for the subcription with ID: *VALUE_0.*

Explanation: No additional information is available for this message.

COPCOM373E The system cannot read the order document from the order with ID *VALUE_0.*

Explanation: No additional information is available for this message.

COPCOM374E The system cannot find the service instance by subscription with ID *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM375E The system cannot create the Constraint with constraint type *VALUE_0***.**

Explanation: The system does not recognize the type of the Constraint to be created. The constraint creation failed.

Operator response: Verify the correct type of the new Constraint to be created.

COPCOM376W The Constraint with the name *VALUE_0* **is not added, because a constraint with the same name already exists.**

Explanation: An existing Constraint with the same name prevents the addition of the new constraint.

Operator response: Verify the correct name of the new Constraint to be added.

COPCOM377E Internal Error: Null AgentGUID was specified.

Explanation: The database does not have any agent GUID for a server.

Operator response: Ensure that Common Agent is installed on the server and the AgentID property has the GUID of the agent.

COPCOM378E AgentManager did not find the Agent ID *VALUE_0***.**

Explanation: The AgentId property on the Server might be incorrect.

Operator response: Ensure that the AgentId property contains the correct GUID for Common Agent.

COPCOM380E Incorrect command syntax. Usage: XmlImport.cmd/sh file_URL [file_URL]* Example: XmlImport.cmd file:/c:/myDirectory/myInput.xml.

Explanation: No additional information is available for this message.

COPCOM381E The system cannot find the *VALUE_0* **software instance.**

Explanation: No additional information is available for this message.

COPCOM382E The system cannot find the *VALUE_0* **software installation.**

Explanation: No additional information is available for this message.

COPCOM383E The system cannot find the *VALUE_0* **software application data.**

Explanation: No additional information is available for this message.

COPCOM384E The system cannot find the *VALUE_0* **software configuration.**

Explanation: No additional information is available for this message.

COPCOM385E The system cannot find the report: *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM386E The system cannot find the report category *VALUE_0***.**

Explanation: No additional information is available for this message.

COPCOM387E The import report category failed with an exception.

Explanation: No additional information is available for this message.

COPCOM390E A Boolean value that is not valid was provided in the filter string.

Explanation: The Boolean include or exclude value in the filter string is incorrect.

Operator response: Ensure that the Boolean include or exclude value in the filter string is correct. Example: PR=region-one,PM=profile-one,EP=,I=T; or PR=region-two,PM=,SP=,I=F;

COPCOM391E The system cannot find the Third Party Software Package Id *VALUE_0***.**

Explanation: The system cannot find the Third Party Software Package in the data center model.

Operator response: Verify that the Third Party Software Package exists and the name is spelled correctly.

COPCOM392E   The system cannot find the TCM object for the Hostname: *VALUE_0,* **Type:** *VALUE_1,* **Object Label:** *VALUE_2*

Explanation: The object lookup failed for the given Object Label.

Operator response: Ensure that the Object Label exists in the TCM database.

COPCOM393E   The lookup results were ambiguous for TCM object Hostname: *VALUE_0,* **Type:** *VALUE_1,* **Object Label:** *VALUE_2*

Explanation: The object lookup results are ambiguous for the Object Label.

Operator response: Ensure that the Object Label is unique for the given type of the TCM database.

COPCOM394E   The lookup was for a TCM object type that is not valid: *VALUE_0*

Explanation: The object lookup was for a TCM object type that is not valid.

Operator response: Ensure that the object is a valid TCM object type.

COPCOM395E   The TCM object type *VALUE_0* **was not found.**

Explanation: The TCM object type was not found in the TCM database.

Operator response: Ensure that the lookup is not based on a non-existent object type.

COPCOM396E   The filter format is not valid. Filter: *VALUE_0*

Explanation: The filter does not follow the format specified.

Operator response: Ensure that the specified filter is consistant with specification. Example: PR=region-one,PM=profile-one,EP=endpoint-one,I=T; or PR=region-two,PM=profile-two,SP=profile^1.0,I=F;

COPCOM397E   The TCM connection for Hostname *VALUE_0* **is uninitialized.**

Explanation: The connection to the TCM server is uninitialized.

Operator response: Ensure that the TCM server is running.

COPCOM398E   The TCM server connection initialization failed for Hostname: *VALUE_0* **with Username:** *VALUE_1.* **Ensure that the TCM server is running and that the specified username and password are valid.**

Explanation: The TCM server connection initialization failed.

Operator response: Ensure that the TCM server is running and that the specified username and password are valid.

COPCOM399E   The TCM Orb access was denied for Hostname *VALUE_0*

Explanation: The TCM Orb access was denied for the thread.

Operator response: Ensure that the TCM server is running and that the specified username and password are valid.

COPCOM400E   No TCM Gateways were found for Hostname: *VALUE_0.*

Explanation: There are no gateways defined for the given TCM server and its managed nodes.

Operator response: Ensure that the TCM server and managed nodes are up and running and have defined gateways.

COPCOM401E   The endpoint lookup returned null for *VALUE_0.*

Explanation: The Endpoint lookup for the given label returned null or there are no valid subscriber Endpoints for the given Profile Manager.

Operator response: Ensure that the Endpoint either exists or is a valid subscriber to the given Profile Manager.

COPCOM402W   The system is unable to find the Device Model *VALUE_0* **to associate with the** *VALUE_1* **named** *VALUE_2.*

Explanation: The Wizard attempted to associate a Device Model with the Discovery Technology or the Software Distribution Application and could not find the Device Model.

Operator response: Ensure that the Device Model exists and has been loaded into the Data Center Model.

COPCOM403E   The constructor called is not instantiable.

Explanation: The constructor called is not instantiable.

COPCOM405E The Profile Manager is *VALUE_0*.

Explanation: The Profile Manager specified is not valid.

Operator response: Ensure that the Profile Manager exists in the TCM environment.

COPCOM407E Profile *VALUE_0* **is not a managed profile.**

Explanation: The creation of the profile failed because it is not a managed profile.

Operator response: Ensure that the profile being created for the software package is a managed profile.

COPCOM408E The Endpoint subscriber: *VALUE_0* **does not exist.**

Explanation: The Endpoint subscriber does not exist in the TCM environment.

Operator response: Ensure that the Endpoint is a subscriber to a Profile Manager.

COPCOM410E The filter *VALUE_1* **is a duplicate for the filter list named** *VALUE_0*.

Explanation: There are duplicate exclude filters in the list.

Operator response: Ensure that the filter definition does not contain duplicate exclude filters.

COPCOM411E The filter *VALUE_1* **is a duplicate for the filter list named** *VALUE_0*.

Explanation: There are duplicate include filters in the list.

Operator response: Ensure that the filter definition does not contain duplicate include filters.

COPCOM412E The filter *VALUE_1* **is in conflict with other filters in the filter list named** *VALUE_0*.

Explanation: The filter conflicts with other filters in the filter list.

Operator response: Ensure that there are no conflicts in the filter list.

COPCOM417E The filter *VALUE_0* **lacks a parent component.**

Explanation: The filter container or leaf lacks a valid parent component.

Operator response: Ensure that the filter definition is valid. Example: PR=region-one,PM=profile-one,EP=,I=T; or PR=region-two,PM=,SP=,I=F;

COPCOM418E The filter *VALUE_0* **lacks an include value.**

Explanation: The filter defined does not contain a valid Boolean value to indicate if it is an include or exclude type filter.

Operator response: Ensure that the filter definition is valid. Example: PR=region-one,PM=profile-one,EP=,I=T; or PR=region-two,PM=,SP=,I=F;

COPCOM419E The filter defined for TCM server *VALUE_0* **is null.**

Explanation: The defined filter is empty.

Operator response: Ensure that the filter definition is valid. Example: PR=region-one,PM=profile-one,EP=,I=T; or PR=region-two,PM=,SP=,I=F;

COPCOM420E The filter with PolicyRegion: *VALUE_0* **ProfileManager or Gateway:** *VALUE_1* **and Endpoint or Profile:** *VALUE_2* **is incomplete.**

Explanation: The filter defined for the TCM Discovered Object is incomplete and has some elements missing.

Operator response: Ensure that the filter definition is valid. Example: PR=region-one,PM=profile-one,EP=endpoint-one,I=T; or PR=region-two,PM=profile-two,SP=profile-two,I=F;

COPCOM426E The Discovery Execution record is not found for discovery-id *VALUE_0* **and dcm-object-id** *VALUE_1*.

Explanation: The discovery execution record was not found to update.

Operator response: The workflow should catch the exception and do a DCMInsert for this discovery execution data.

COPCOM428W The auditing that failed for operation 'VALUE_0**' has resulted in a database problem.**

Explanation: No additional information is available for this message.

COPCOM429E The script type *VALUE_0* **is not supported.**

Explanation: No additional information is available for this message.

COPCOM430E   The instance permission *VALUE_0* **is unknown.**

Explanation: No additional information is available for this message.

COPCOM431E   The instance access role *VALUE_0* **is unknown.**

Explanation: No additional information is available for this message.

COPCOM432E   The access domain *VALUE_0* **is unknown.**

Explanation: No additional information is available for this message.

COPCOM433E   The domain role *VALUE_0* **is unknown.**

Explanation: No additional information is available for this message.

COPCOM434E   CommonAgent port is not configured for the endpoint *VALUE_0*.

Explanation: Make sure the endpoint SAP is configured properly, with the host set to true and that the app-protocol is CommonAgent.

COPCOM435E   The system could not register with the AgentManager: *VALUE_0*.

Explanation: Make sure the endpoint.properties have the right AgentManager name and port.

COPCOM436E   The system could not get the endpoint proxy: *VALUE_0*.

Explanation: Make sure the endpoint can be pinged to and that the agent is running on the endpoint.

COPCOM437E   The RIM object INV_QUERY could not be found on the Tivoli Configuration Manager server: *VALUE_0*.

Explanation: The lookup of the RIM object INV_QUERY in the Tivoli Configuration Manager database failed when the exact object could not be identified.

Operator response: Verify that the hostname was specified for the IBM Tivoli Configuration Manager server.

Administrator Response: The Tivoli Configuration Manager database might need to be verified or the INV_QUERY RIM object might not exist. Run the command ckdb to fix any database errors. Run the

wrintest -l inv_query to test the rim object.

COPCOM438E   A Tivoli Configuration Manager object could not be found.

Explanation: An attempt to look up an object from the Tivoli Configuration Manager database failed. This failure could be due to errors in the database.

Operator response: The desired object might not be entered correctly into the filter data. Verify that the object name and type are correct.

Administrator Response: The Tivoli Configuration Manager database might need to be verified. Run the command ckdb to fix any database errors. This command identifies and repairs errors.

COPCOM439E   A connection to the RIM object *VALUE_0* **could not be created.**

Explanation: The RIM object provides all the interactions to the IBM Tivoli Configuration Manager database. A failure to connect to the RIM object could have various causes: a faulty network connection, an error of the IBM Tivoli Configuration Manager server, etc.

Operator response: Verify that the hostname of the IBM Tivoli Configuration Manager is correct and that a connection to the server can be established.

Administrator Response: Verify that the RIM object is valid. This verification can be done by running the command wrimtest -l inv at the IBM Tivoli Configuration Server.

COPCOM440E   The data returned from the RIM object is not valid.

Explanation: The RIM object provides all the interactions to the IBM Tivoli Configuration Manager database. A lookup of an item returned data that did not conform to the proper type format.

Administrator Response: Verify that the IBM Tivoli Configuration Manager database has no errors by running the ckdb. This command identifies and repairs errors.

COPCOM441E   A connection to the RIM object *VALUE_0* **could not be closed.**

Explanation: The RIM object provides all the interactions to the IBM Tivoli Configuration Manager database. A failure to disconnect to the RIM object could be caused by a network connection, an error with the IBM Tivoli Configuration Manager server, or some other error.

Operator response: Verify that the hostname of the IBM Tivoli Configuration Manager is correct and that a connection to the server can be established.

Administrator Response: Verify that the RIM object is valid. This can be done by running the command wrimtest -l inv at the IBM Tivoli Configuration Server.

COPCOM442E   The type *VALUE_0* **is not a valid filter type.**

Explanation: The only valid hardware filter types are Gateway and Subscribers.

Operator response: Verify that the type specified in the TCM_Import_Filtered_Endpoints workflow is either Gateway or Subscriber.

COPCOM443E   The system cannot create the file *VALUE_0*.

Explanation: The discovered IBM Tivoli Configuration data is written to an XML file so that it can be imported into the IBM server. An error occurred when attempting to create this XML file.

Operator response: Verify that the file *VALUE_0* does not already exist. Ensure that the file is not locked and has write permissions.

COPCOM444E   The user credentials provided for the IBM Tivoli Configuration Manager server are not valid or do not exist.

Explanation: The username password combination that is specified in the SAP credentials for the IBM Tivoli Configuration Manager values is incorrect or was not specified.

Operator response: Verify that the credentials for the data center model object *VALUE_0* are correct. The SAP name is ITCM_JCF_SAP, the default SAP operation type is unknown, and the search-key is ITCM_JCF_PASSWORD.

COPCOM445E   The user, *VALUE_0*, **does not have any of the following roles,** *VALUE_1*, **to access the resource.**

Explanation: The user does not have the appropriate permission to access the resource.

Operator response: Verify the roles that the user has been assigned. Assign another role to the user in order to grant the user sufficient permissions for accesssing the resource.

COPCOM446E   The software module *VALUE_0* **is not an operating system.**

Explanation: No additional information is available for this message.

COPCOM451E   The system failed to update the password for *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM452E   The wasadmin password is not valid. Please enter a valid wasadmin password.

Explanation: No additional information is available for this message.

COPCOM453E   Nesting role, *VALUE_0*, **contains cyclic relationship,** *VALUE_1*.

Explanation: No additional information is available for this message.

COPCOM454E   The file system size cannot be greater than the logical volume size.

Explanation: No additional information is available for this message.

COPCOM455E   No software module was found in the data center model to install the Common Agent for the "*VALUE_0***" operating system.**

Explanation: The system searched the software modules that can install the Tivoli Common Agent specific to the server operating system, but did not find one.

Operator response: Check the software catalog and ensure that there is a software module that can install Tivoli Common Agent on the specified operating system.

COPCOM456E   An event framework system exception occurred. Exception: *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM457E   An unknown event type *VALUE_0* **occured.**

Explanation: No additional information is available for this message.

COPCOM458E   An unknown event consumer *VALUE_0* **occured.**

Explanation: No additional information is available for this message.

COPCOM459E No software module was found in the data center model to install the Common Agent for the "*VALUE_0*" operating system and the "*VALUE_1*" platform.

Explanation: The system searched the software modules that can install the Tivoli Common Agent specific to the server operating system and hardware platform, but did not find one.

Operator response: Check the software catalog and ensure that there is a software module that can install Tivoli Common Agent on the specified operating system and platform.

COPCOM460E A duplicated role name, "*VALUE_0*", was found; the role name must be unique.

Explanation: No additional information is available for this message.

COPCOM461E The instance access role, "*VALUE_0*", cannot be deleted because it is being used by the domain role.

Explanation: No additional information is available for this message.

COPCOM462E Custom event handlers are not supported. Event subscription ID: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPCOM463E The system cannot find the External Repository. Repository ID: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPCOM464E The system cannot find the External Repository Entry. Repository Entry ID: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPCOM465E A Security Group with name "*VALUE_0*" already exists.

Explanation: No additional information is available for this message.

COPCOM466E Bad SI package image format with "*VALUE_0*".

Explanation: The SI package structure is not correct. The Tivoli Intelligent Orchestrator or requirements might be missing.

Operator response: Check the SI package IUDD file, the resource files and media file name and path.

COPCOM467E The system cannot find the SI image resource "*VALUE_0*".

Explanation: The system cannot find the resource file in the SI package (zip image).

COPCOM468E The SI image resource "*VALUE_0*" registers an error.

Explanation: Problems can occur during the SI package(ZIP image)registration into Tivoli Intelligent Orchestrator. Check the SI package format and file path.

Operator response: Check the SI package format and file path.

COPCOM471E The Software in SI image "*VALUE_0*" already exists in TIO DCM.

Explanation: The software described in SI package already exists in Tivoli Intelligent Orchestrator DCM.

COPCOM472E Invalid TEC class name "*VALUE_0*"

Explanation: No additional information is available for this message.

COPCOM473E The LCF installation directory is not specified.

Explanation: No additional information is available for this message.

COPCOM474E The operation could not be run on the specified platform.

Explanation:

Operator response:

COPCOM475E The endpoint label is not specified.

Explanation: No additional information is available for this message.

COPCOM476E The gateway port is not correct.

Explanation: No additional information is available for this message.

COPCOM477E The alternate gateway port is not correct.

Explanation: No additional information is available for this message.

COPCOM478E The endpoint port is not correct.

Explanation: No additional information is available for this message.

COPCOM479E The alternate endpoint port is not correct.

Explanation: No additional information is available for this message.

COPCOM480E The value for HTTP Disable must be a 0, 1, 2 or 3.

Explanation: No additional information is available for this message.

COPCOM481E The value for Broadcast Disable must be a 0 or 1.

Explanation: No additional information is available for this message.

COPCOM482E The Login Interval is not correct.

Explanation: No additional information is available for this message.

COPCOM483E The Host Name is not correct.

Explanation: No additional information is available for this message.

COPCOM486E The Software Installable is already used by another module.

Explanation: No additional information is available for this message.

COPCOM487E The resource group with ID: "*VALUE_0*" should only belong to one cluster domain.

Explanation: No additional information is available for this message.

COPCOM488E The system can not delete the subnetwork with ID: "*VALUE_0*", since it is assigned to one or more access rules or routes. Please review and delete them first if necessary.

Explanation: No additional information is available for this message.

COPCOM489E The system cannot delete "*VALUE_0*" access group because users "*VALUE_1*" are using it as the default access group.

Operator response: Make sure no user is using the selected access group as default access group, and then try again.

COPCOM490E The system cannot create the resource group with name: "*VALUE_0*", since there already exists a resource group with the same name in the same cluster domain with ID: "*VALUE_1*".

Operator response: Use a different resource group name, and then try again.

COPCOM491E The system cannot find a valid software installable.

Operator response: Validate software requirements, and then try again.

COPCOM492E The system cannot delete the current user *"VALUE_0"*.

Operator response: Please log on as another user that has the proper privileges, and then try again.

COPCOM493E Invalid end time entered for modifying subscription with ID *"VALUE_0"*.

Operator response: Enter an end time that is later than the start time and that is not in the past.

COPCOM494E Unable to connect to endpoint using RXA.

Explanation: Ensure the username and password are correct and that sshd or SMB is enabled on the endpoint.

COPCOM495E Error connecting to endpoint using RXA: *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM496E Error executing command on endpoint using RXA: *VALUE_0*.

Explanation: No additional information is available for this message.

COPCOM497E   Error copying file "*VALUE_0***" to endpoint using RXA: ***VALUE_1***.**

Explanation: No additional information is available for this message.

COPCOM498E   Error copying file "*VALUE_0***" from endpoint using RXA: ***VALUE_1***.**

Explanation: No additional information is available for this message.

COPCOM499E   Error copying file using RXA: ***VALUE_0*.**

Explanation: No additional information is available for this message.

COPCOM500E   Error creating directory "*VALUE_0***" on the endpoint using RXA: ***VALUE_1***.**

Explanation: No additional information is available for this message.

COPCOM501E   Error converting path ***VALUE_0* to DOS style path on endpoint.**

Explanation: Confirm that the ″cygpath″ command is working properly on the endpoint.

COPCOM502E   The system cannot create the directory "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPCOM503E   Error converting path ***VALUE_0* to DOS style path.**

Explanation: Confirm that the ″cygpath″ command is working properly on the local server.

COPCOM504E   Error converting path ***VALUE_0* to DOS style path. Error message is: ***VALUE_1***.**

Explanation: Confirm that the ″cygpath″ command is working properly on the local server.

COPCOM505E   The "*VALUE_0***" network interface is not unique for device "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPCOM511E   Circular inheritance relationship is not permitted. ***VALUE_0*.**

Explanation: No additional information is available for this message.

COPCOM512E   DCM type ***VALUE_0* is not recognized for the access group inheritance relationship.**

Explanation: The DCM type in the access group inheritance relationship is not recognized as one of the predefined type names.

COPCOM513E   The database URL "*VALUE_0***" for database type ***VALUE_1*** is not valid.**

Explanation: No additional information is available for this message.

COPCOM514E   The database sequence "*VALUE_0***" does not exist.**

Explanation: No additional information is available for this message.

COPCOM515E   The system could not run SCM collectors. The nested exception is: ***VALUE_0*.**

Explanation: Check scm.trace and scm.log on the end target to find the problem.

COPCOM516E   The system could not register the SCM collector subagent with the AgentManager:*VALUE_0***.**

Operator response: Ensure that the endpoint.properties have the right AgentManager name and port.

COPCOM517E   The date-time format ***VALUE_0* entered is not valid.**

Operator response: Ensure that the timestamp is entered using the yyyy-MM-dd′T′HH:mm:ss′Z′ format. For example, 2006-11-17T22:49:22Z

COPCOM518E   Internal Error: SapAndCredential object was null for Discovered Device: ***VALUE_0*.**

Explanation: This is an internal code error.

COPCOM519E   Incorrect IP Range. The start IP: ***VALUE_0* must be less than or equal to the end IP: ***VALUE_1***.**

Explanation: No additional information is available for this message.

COPCOM520E   Unable to parse attribute: *VALUE_0*
from xml config file: *VALUE_1*.

Explanation: No additional information is available
for this message.

COPCOM521E   Unable to read xml config file:
VALUE_0.

Explanation: No additional information is available
for this message.

COPCOM522E   Incorrect MAC address: *VALUE_0*. **A**
MAC address must have 12 hex digits.

Explanation: No additional information is available
for this message.

COPCOM523E   The template does not indicate the
software definition.

Explanation: No additional information is available
for this message.

COPCOM524E   Incorrect Property value position for
a non array property id *VALUE_0* **on the**
position *VALUE_1*.

Explanation: If a property is a non-array property, it
cannot create more than two property values. When
using createProperty or addPropertyValue to create a
new property and value, the position one will always
be used. Make sure that there is no property value
before adding a value entry for a non-array property

COPCOM525E   Cannot find DCM Property Id
VALUE_0.

Explanation: DCM Property ID does not exist

COPCOM526E   Property Value ID *VALUE_0* **does not**
exist.

Explanation: The property value ID does not exist

COPCOM527E   Cannot delete property value ID
VALUE_0.

Explanation: The property value ID cannot be deleted
if it is not an array property

COPCOM528E   Cannot add property value
ID*VALUE_0*.

Explanation: The property value ID cannot be added
if it is not an array property

COPCOM529E   Dynamic IP addresses are not
supported because the "*VALUE_0***" java**
security property is set to "*VALUE_1***".**
The value must be '0' (zero).

Explanation: The IP address caching is enabled in the
JDK, so the system cannot resolve hostnames to IP
addresses correctly.

COPCOM530E   The software resource with the ID
VALUE_0 **could not be found.**

Explanation: Either there is no software resource with
the indicated ID or there is another object with the
indicated ID that is of a different type than a software
resource or its subtypes (such as Installation or
Instance).

COPCOM531E   There is no software resource with
the ID *VALUE_0* **that is a member of the**
administrative domain with the ID
VALUE_1.

Explanation: The system initiated an operation
assuming that there is a software resource identified
with the administrative domain ID, but there was not.

COPCOM532E   The server "*VALUE_0***" cannot be**
accessed or updated.

Explanation: The MSAD server needs to be available
in local network and can be accessed from the TPM
server.

COPCOM533E   The DCM object "*VALUE_0***" cannot**
be updated.

Explanation: The TPM data center model needs to be
updated based on MS Active directory discovery
results.

COPCOM534E   The Software Resource with the ID
"*VALUE_0***" has a null or empty name.**

Explanation: A software resource with a null or empty
name cannot be exported as part of an administrative
domain. The name is used to associate the resource
with the administrative domain if the XML file is
imported later.

COPCOM535E   The method "*VALUE_0***" is not**
defined for class "*VALUE_1***".**

COPCOM536E   The method "*VALUE_0***" is not**
supported.

Explanation: LWIOS User Factory does not support
the specified method.

**COPCOM539E Task "*VALUE_0*" (Task Id: "*VALUE_1*")
failed.**

Explanation: The TPM task failed.

**COPCOM540E Task "*VALUE_0*" (Task Id: "*VALUE_1*")
failed". Here is the error: *VALUE_2*.**

Explanation: The TPM task failed, with an error log
appended

**COPCOM541E The system cannot delete the
"*VALUE_0*" device driver because one or
more devices are using it.**

Explanation: No additional information is available
for this message.

**COPCOM542E Task "*VALUE_0*" (Task Id: "*VALUE_1*")
failed on the following targets:
VALUE_2.**

Explanation: The task failed on the list of failed
targets.

**COPCOM543E The system cannot find the interface
card type: *VALUE_0*.**

Explanation: No additional information is available
for this message.

**COPCOM544E The file system size cannot be greater
than the physical volume size.**

Explanation: No additional information is available
for this message.

**COPCOM545E Failed query the Active Directory
server with: *VALUE_0*.**

Explanation: No additional information is available
for this message.

**COPCOM548E An unexpected error occurred: Class
VALUE_0 set in sourceClass attribute of
ka:search tag not found.**

Explanation: No additional information is available
for this message.

**COPCOM550E The software resource template
definition *VALUE_0* was not found.**

Explanation: No additional information is available
for this message.

**COPCOM551E The software resource template
definition parameter *VALUE_0* was not
found.**

Explanation: No additional information is available
for this message.

**COPCOM552E The software resource template
definition parameter value *VALUE_0*
was not found.**

Explanation: No additional information is available
for this message.

**COPCOM553E The template parameter value
VALUE_0 was not found.**

Explanation: No additional information is available
for this message.

Deployment engine subsystem messages

COPDEX001E   The system cannot get a JNDI context.

Explanation: No additional information is available for this message.

COPDEX002E   The system cannot use the "*VALUE_0*" JMS destination.

Explanation: No additional information is available for this message.

COPDEX003E   The system cannot perform the type conversion for *VALUE_0* because the type information that was set has an incorrect value. (Field argument type is *VALUE_1*.)

Explanation: No additional information is available for this message.

COPDEX004E   The system cannot perform the type conversion for *VALUE_0* because the type information was not set. (Field argument type is null.)

Explanation: No additional information is available for this message.

COPDEX005E   The "*VALUE_0*" logical operation does not exist.

Explanation: No additional information is available for this message.

COPDEX006E   "break" cannot be used outside of a "while" or "foreach" loop.

Explanation: No additional information is available for this message.

COPDEX007E   "break" cannot be used outside of a "while" or "foreach" loop.

Explanation: No additional information is available for this message.

COPDEX008E   "break" cannot be used inside of a "finally" block.

Explanation: No additional information is available for this message.

COPDEX009E   The *VALUE_0* condition is missing an equal (=) sign.

Explanation: No additional information is available for this message.

COPDEX010E   The system cannot add the *VALUE_0* condition to the *VALUE_1* table.

Explanation: No additional information is available for this message.

COPDEX011E   The system cannot find the DCM object *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX012E   The system cannot find the field for the attribute *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX013E   "break" cannot be used inside a "finally" block.

Explanation: No additional information is available for this message.

COPDEX014E   The system cannot resolve the variable *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX015E   The system cannot save the "*VALUE_0*" variable. The variable value is probably longer than 4000 bytes.

Explanation: No additional information is available for this message.

COPDEX016E   There is no default service access point for the execute command that is associated with the device ID:*VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX017E   The system requires the token *VALUE_0* to be here *VALUE_1*.

Explanation: No additional information is available for this message.

COPDEX018E   The system requires a *VALUE_0* at the beginning of the query.

Explanation: No additional information is available for this message.

COPDEX019E   The condition *VALUE_0* is not valid.

Explanation: No additional information is available for this message.

COPDEX020E   The system requires the *VALUE_0* attribute.

Explanation: No additional information is available for this message.

COPDEX021E   The system cannot find the field name for the attribute: *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX022E   The ID *VALUE_0* is not an integer.

Explanation: No additional information is available for this message.

COPDEX023E   The system cannot find the object that owns the attribute *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX024E   The *VALUE_0* Java plug-in is deprecated: *VALUE_1*

Explanation: No additional information is available for this message.

COPDEX025E   No relationship exists between *VALUE_0* and *VALUE_1*.

Explanation: No additional information is available for this message.

COPDEX026E   The system cannot find the table name for *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX027E   The system cannot run the query. A run error occurred when the system ran the *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX028E   The relationship status *VALUE_0* is not valid.

Explanation: No additional information is available for this message.

COPDEX029E   The system cannot continue a deployment request from a previous deployment engine VM session.

Explanation: No additional information is available for this message.

COPDEX030E   The *VALUE_0* workflow is deprecated: *VALUE_1*

Explanation: No additional information is available for this message.

COPDEX031E   The system cannot evaluate a Jython expression. Jython error message: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX032E   The system cannot evaluate the expression: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX033E   Error code for unit tests only.

Explanation: No additional information is available for this message.

COPDEX034E   The argument (*VALUE_0*="*VALUE_1*") is not valid. Make sure that the parameter is of the right type and that it is not empty.

Explanation: No additional information is available for this message.

COPDEX035E   The integer value "*VALUE_0*" is not valid.

Explanation: No additional information is available for this message.

COPDEX036E   An unassignable expression is bound to output parameter "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX037E   The *VALUE_0* logical operation is deprecated: *VALUE_1*

Explanation: No additional information is available for this message.

COPDEX038E   A database error occurred: *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX039E   A configuration error occurred.

Explanation: No additional information is available for this message.

COPDEX040E   A deployment engine exception occurred: *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX041E   A deployment error occurred.

Explanation: No additional information is available for this message.

COPDEX043E   The "*VALUE_0***" variable already exists.**

Explanation: No additional information is available for this message.

COPDEX044E   An error occurred in the embedded logical operation "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPDEX045E   The operation code "*VALUE_0***" is not valid.**

Explanation: No additional information is available for this message.

COPDEX046E   The deployment request ID *VALUE_0* **does not exist.**

Explanation: No additional information is available for this message.

COPDEX047E   The "*VALUE_0***" Java plug-in does not exist.**

Explanation: No additional information is available for this message.

COPDEX048E   The "*VALUE_0***" logical operation does not exist.**

Explanation: No additional information is available for this message.

COPDEX049E   The "*VALUE_0***" operand does not exist for instruction ID:** *VALUE_1*.

Explanation: No additional information is available for this message.

COPDEX050E   The "*VALUE_0***" variable does not exist.**

Explanation: No additional information is available for this message.

COPDEX051E   The "*VALUE_0***" workflow does not exist.**

Explanation: No additional information is available for this message.

COPDEX052E   The workflow ID *VALUE_0* **does not exist.**

Explanation: No additional information is available for this message.

COPDEX053E   The operation timed out after *VALUE_0* **seconds.**

Explanation: No additional information is available for this message.

COPDEX054E   The operand "*VALUE_0***" is duplicated.**

Explanation: No additional information is available for this message.

COPDEX055E   The operation type "*VALUE_0***" is not valid.**

Explanation: No additional information is available for this message.

COPDEX056E   The system cannot process an instruction operand that has no type.

Explanation: No additional information is available for this message.

COPDEX058E   The "*VALUE_0***" scriptlet type is not valid.**

Explanation: No additional information is available for this message.

COPDEX059E   The system does not support the "*VALUE_0***" node.**

Explanation: No additional information is available for this message.

COPDEX060E A workflow XML parser error "*VALUE_0*" occurred.

Explanation: No additional information is available for this message.

COPDEX061E The system expected a single value, but it received multiple values.

Explanation: No additional information is available for this message.

COPDEX062E A data insert error: "*VALUE_0*" occurred.

Explanation: No additional information is available for this message.

COPDEX063E An XML data parsing error "*VALUE_0*" occurred.

Explanation: No additional information is available for this message.

COPDEX064E "The *VALUE_0*" field cannot be a special field.

Explanation: No additional information is available for this message.

COPDEX065E "The system cannot close the database connection error: *VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX066E "The system cannot close the input stream error: *VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX067E "The system cannot parse the XML data: *VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX068E "The system cannot resolve the query: *VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX069E "The system cannot process the data update: *VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX070E The variable name "*VALUE_0*" is not valid.

Explanation: No additional information is available for this message.

COPDEX071E The system requires an object here: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX072E The system requires an attribute here: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX073E The system requires an object or an attribute here: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX074E The system requires an object, an attribute, or the end of the query here: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX075E The system expected a value here: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX076E The system cannot delete the object *VALUE_0* with the ID *VALUE_1*.

Explanation: No additional information is available for this message.

COPDEX077E The system cannot delete a query that begins with a *VALUE_0* variable.

Explanation: No additional information is available for this message.

COPDEX078E The *VALUE_0* query retrieved multiple objects.

Explanation: No additional information is available for this message.

COPDEX081E The system cannot specify an input file.

Explanation: No additional information is available for this message.

COPDEX082E The system cannot find the input file *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX083E The input file *VALUE_0* **is empty.**

Explanation: No additional information is available for this message.

COPDEX084E The operation type *VALUE_0* **is not identified.**

Explanation: No additional information is available for this message.

COPDEX085E On the second line of the input file, the system cannot find the query.

Explanation: No additional information is available for this message.

COPDEX087E The workflow expects a locale that is different from the one that is specified. The locale of the device *VALUE_0* **is set to** *VALUE_1*. **The workflow expects the locale to be:** *VALUE_2*.

Explanation: No additional information is available for this message.

COPDEX092E The system cannot find the *VALUE_0* **workflow. The system cannot export the execution logs for this workflow.**

Explanation: No additional information is available for this message.

COPDEX093E The system cannot create the *VALUE_0* **output file. Verify the directory path and then try again.**

Explanation: No additional information is available for this message.

COPDEX094E The system cannot recognize the *VALUE_0* **command option. Valid options are -n[workflow name] or -r[request id], -i[input file name] and -f[output file name].**

Explanation: No additional information is available for this message.

COPDEX096E The property retrieval query *VALUE_0* **is not valid. Review the documentation to find the recommended procedures.**

Explanation: No additional information is available for this message.

COPDEX097E The discovery keys file *VALUE_0* **is not valid.**

Explanation: The system cannot read the DiscoveryKeys.ini file because the file includes errors.

Operator response: Correct the errors in the DiscoveryKeys.ini file located in the TIO_HOME/config subdirectory.

COPDEX098E The system obtained an empty profile XML file name.

Explanation: The ITM Obtain OS Profiles workflow generates an XML file that contains the list of profiles installed in Tivoli Management Agent. This profile XML file is copied to the IBM Tivoli Provisioning Manager and then it is parsed by the Profile XML Parser. The system encountered a problem when the name of the profile XML file was an empty string.

Operator response: Verify that the ITM Obtain OS Profiles workflow specifies the correct path to the ProfileXMLParser Java plug-in.

COPDEX099E An IO error occurred when the SAX XML parser parsed the profile XML file.

Explanation: The ITM Obtain OS Profiles workflow generates an XML file that contains the list of profiles that are installed in the Tivoli Management Agent. This profile XML file is copied to the IBM Tivoli Provisioning Manager and then it is parsed by the Profile XML Parser. The SAX XML parser cannot read the profile XML file. Because the XML file could not be read, an IO exception occured.

Operator response: Verify that the ITM Obtain OS Profiles workflow specifies the correct path to the ProfileXMLParser Java plug-in. Verify that the system correctly copied the XML file that contains the list of profiles to the IBM Tivoli Provisioning Manager server. Also verify that the parent directory of the XML file includes the appropriate credentials.

COPDEX100E A parsing error occurred while the system parsed the profile XML file.

Explanation: The ITM Obtain OS Profiles workflow generates an XML file that contains the list of profiles that are installed in Tivoli Management Agent. This profile XML file is copied to the IBM Tivoli Provisioning Manager and then it is parsed by the Profile XML Parser. The XML parser cannot read the profile XML file because it encountered a parsing error.

Typically this error is caused by the condition of the XML file. The XML file might be damaged, or it might not be valid, or it might include a character that is not valid.

Operator response: Verify that the wdmlseng command is working properly from the command line at the IBM Tivoli Monitoring server.

COPDEX101E   A security exception occurred while the system parsed the profile XML file.

Explanation: The ITM Obtain OS Profiles workflow generates an XML file that contains the list of profiles installed in Tivoli Management Agent. This profile XML file is copied to the IBM Tivoli Provisioning Manager and then it is parsed by the Profile XML Parser. The XML parser cannot read the profile XML file because a security error occurred. This is a file permissions issue. Either the parent directory of the profile XML file is missising appropriate file permissions, or the profile XML file is missing the appropriate file permissions.

Operator response: Verify that the login user is assigned read and write access to the parent directory of the ProfileXMLParser.

COPDEX102E   An error occurred when the DOM parser returned an empty document.

Explanation: The XML parser did not produce a parsed XML document. The jdom.jar file might be damaged, or the XML file that contains the list of profiles was not transferred or generated correctly.

Operator response: Verify that the system successfully processed the jdom.jar file, the XML data produced by the wdmlseng command at the ITM server, and the file transfer from the IBM Tivoli Monitoring server to the server.

COPDEX103E   An error occurred when the DOM parser returned an empty root XML element.

Explanation: The XML parser did not produce a parsed XML document. The jdom.jar file might be damaged, or the XML file that contains the list of profiles was not transferred or generated correctly.

Operator response: Verify that the system successfully processed the jdom.jar file, the XML data produced by the wdmlseng command at the ITM server, and the file transfer from the IBM Tivoli Monitoring server to the server.

COPDEX104E   An IO error occurred while the system tried to verify the profile XML file.

Explanation: The ITM Obtain OS Profiles workflow generates an XML file that contains the list of profiles that are installed in Tivoli Management Agent. This

profile XML file is copied to the IBM Tivoli Provisioning Manager and then it is parsed by the Profile XML Parser. The system verifies the consistency of the file before it parses the file. An error occurred, and then the system threw an IOException when it tried to verify the profile XML file.

Operator response: Verify that no other process is trying to access this XML file. Also verify that the profile XML file on the local system is valid.

COPDEX106E   An error occurred when the system did not find the *VALUE_0* Tivoli Enterprise Console (TEC) configuration file.

Explanation: The Send TEC Event Java plug-in obtains its configuration information from a fully configured TEC configuration file. This file must be TIO_HOME/config/tivoli.send.conf.

Operator response: Verify that the TEC configuration file exists, and verify that the file is fully configured. Refer to the Tivoli Enterprise Console product manual for more information.

COPDEX107E   An error occurred while the system initialized the Tivoli Enterprise Console (TEC).

Explanation: The Send TEC Event Java plug-in uses the Tivoli Enterprise Console TECAgent code base to transmit TEC events to the Tivoli Enterprise Console server. The TECAgent obtains its configuration information from the TEC configuration file: TIO_HOME/config/tivoli.send.conf. The TECAgent did not initialize correctly when it tried to send a TEC event.

Operator response: Verify that the TEC configuration file exists, and verify that it is fully configured. Refer to the Tivoli Enterprise Console product manual for more information.

COPDEX109E   The Tivoli Enterprise Console (TEC) cannot use *VALUE_0* as the event class name.

Explanation: The Send TEC Event Java plug-in uses the Tivoli Enterprise Console TECAgent code base to transmit TEC events to the Tivoli Enterprise Console server. All TEC events sent by the Send TEC Event Java plug-in must conform to the Tivoli Enterprise Console standards. In this event, the TEC event class name did not conform to these standards.

Operator response: Verify that the TEC event name contains only alphanumeric characters and does not contain any white space. Refer to the Tivoli Enterprise Console product manual for more information.

COPDEX110E An internal error occurred when the system tried to generate the name of the Tivoli Enterprise Console (TEC) configuration file.

Explanation: The Send TEC Event Java plug-in uses the Tivoli Enterprise Console TECAgent code base to transmit TEC events to the Tivoli Enterprise Console server. The TECAgent receives configuration information from a TEC configuration file. In this event, the system did not produce that internal file name.

Operator response: This is an internal error. Contact your IBM service representative.

COPDEX111E An internal error occurred when the system tried to open the *VALUE_0* Tivoli Enterprise Console (TEC) configuration file.

Explanation: The Send TEC Event Java plug-in uses the Tivoli Enterprise Console TECAgent code base to transmit TEC events to the Tivoli Enterprise Console server. The TECAgent receives configuration information from a TEC configuration file. The system encountered an error because the TECAgent threw an IOException when it accessed the configuration file.

Operator response: Verify that the configuration file exists in the correct location, verify that it is usable, and verify that it includes the appropriate user permission. Refer to the Tivoli Enterprise Console product manual for more information.

COPDEX115E The system did not find the device ID "*VALUE_0*" in the data center model.

Explanation: No additional information is available for this message.

COPDEX116E The *VALUE_0* is not locale sensitive. It must include the "LocaleInsensitive" qualifier.

Explanation: No additional information is available for this message.

COPDEX117E An error occurred when the system tried to read the input file *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX118E An error occurred when the system tried to export the workflow execution log. The error is *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX119E No workflow is specified for export. Use the command option or the input file to specify the workflow names.

Explanation: No additional information is available for this message.

COPDEX120E The workflow *VALUE_0* is sensitive to locale, but it is qualified as "LocaleInsensitive".

Explanation: No additional information is available for this message.

COPDEX121E A workflow parser error occurred. The error is *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX123E The workflow threw a *VALUE_0* exception. The message is *VALUE_1*.

Explanation: No additional information is available for this message.

COPDEX127E The *VALUE_0* variable is already declared.

Explanation: No additional information is available for this message.

COPDEX128E The *VALUE_0* variable does not exist.

Explanation: No additional information is available for this message.

COPDEX129E A workflow compiler error occurred *VALUE_0*.

Explanation: No additional information is available for this message.

COPDEX130E The deployment request (id=*VALUE_0*) was cancelled.

Explanation: No additional information is available for this message.

COPDEX131E The workflow signature does not match the logical operation that it implements.

Explanation: No additional information is available for this message.

COPDEX132E   The system is running a workflow *VALUE_0*. **No modifications can be made to the workflow while the workflow is running.**

Explanation: No additional information is available for this message.

COPDEX134E   A logical operation must have at least one parameter.

Explanation: No additional information is available for this message.

COPDEX135E   "InvokeImplementation" can be called only from a logical operation.

Explanation: No additional information is available for this message.

COPDEX136E   "InvokeImplementation" can be called only from a logical operation.

Explanation: No additional information is available for this message.

COPDEX137E   There is no workflow that implements the "*VALUE_0***" logical operation associated with device "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPDEX138E   The number of arguments required "*VALUE_0***" is inconsistent with the number of arguments supplied "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPDEX139E   The name of the argument that is required "*VALUE_0***" is inconsistent with the name of argument supplied "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPDEX140E   The deployment request "*VALUE_0***" is not found.**

Explanation: No additional information is available for this message.

COPDEX141E   The specified LDO "*VALUE_0***" is not found.**

Explanation: No additional information is available for this message.

COPDEX142E   The specified workflow "*VALUE_0***" is not found.**

Explanation: No additional information is available for this message.

COPDEX143E   The previous task "*VALUE_0***" with deployment request ID "***VALUE_1***" is still running.**

Explanation: No additional information is available for this message.

COPDEX144E   The number of parameters is not valid. The workflow/LDO/JavaPlugin: "*VALUE_0***" requires** *VALUE_1* **variables instead of** *VALUE_2*.

Explanation: No additional information is available for this message.

COPDEX145E   The number of parameters is not valid. The workflow/LDO/JavaPlugin: "*VALUE_0***" requires** *VALUE_1* **variables instead of** *VALUE_2*.

Explanation: No additional information is available for this message.

COPDEX146E   The index "*VALUE_0***" for array "***VALUE_1***" is out of bound.**

Explanation: No additional information is available for this message.

COPDEX147E   The command options "*VALUE_0***" , "***VALUE_1***" and "***VALUE_1***" are mutually exclusive.**

Explanation: No additional information is available for this message.

COPDEX148E   The request ID parameter "*VALUE_0***" is not valid. An integer value is expected.**

Explanation: No additional information is available for this message.

COPDEX149E   No such parameter "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX150E   Unknown instance permission "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX151E   Duplicate permission "*VALUE_0*" for parameter "*VALUE_1*".

Explanation: No additional information is available for this message.

COPDEX152E   The system cannot specify the permission for the output only parameter "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX153E   The size of input arrays are different.

Programmer response: Make sure that all of the input arrays contain the same number of elements.

COPDEX154E   The system cannot find the "*VALUE_0*" server.

Explanation: No additional information is available for this message.

COPDEX155E   The system cannot find the "*VALUE_0*" storage allocation pool.

Programmer response: Make sure that the storage allocation pool ID is valid.

COPDEX156E   The system cannot find the "*VALUE_0*" storage capabilities settings.

Programmer response: Make sure that the storage capabilities settings ID is valid.

COPDEX157E   The system cannot find the storage volumes that satisfy the following storage capabilities settings: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPDEX158E   The deprovision operation cannot be scheduled for the service instance with ID *VALUE_0*. The service ID is *VALUE_1*.

Explanation: No additional information is available for this message.

COPDEX161E   The deployment request was interrupted.

Explanation: No additional information is available for this message.

COPDEX162E   The '*VALUE_0*' expression language is not valid.

Explanation: No additional information is available for this message.

COPDEX163E   Java plug-ins do not support array parameters.

Explanation: No additional information is available for this message.

COPDEX164E   The variable '*VALUE_0*' is not an array variable.

Explanation: No additional information is available for this message.

COPDEX165E   The workflow signature does not match the logical operation that it implements. There is an 'array' definition mismatch.

Explanation: No additional information is available for this message.

COPDEX166E   The system cannot find the *VALUE_0* fibre channel port.

Explanation: No additional information is available for this message.

COPDEX167E   The world-wide name of *VALUE_0* fibre channel port is not defined.

Explanation: No additional information is available for this message.

COPDEX168E   The system cannot find the *VALUE_0* fibre channel switch.

Explanation: No additional information is available for this message.

COPDEX169E   The *VALUE_0* dcmobject is deprecated. Use *VALUE_1* instead.

Explanation: No additional information is available for this message.

COPDEX170E   The "*VALUE_0*" Java plug-in does not exist.

Explanation: No additional information is available for this message.

COPDEX171E   The system cannot update the Service Instance of ID *VALUE_0* with status *VALUE_1*.

Explanation: There might be a problem when connecting to the database. Check the SQLException message for further details about the problem.

COPDEX172E   The *VALUE_0* variable is a single value variable, cannot assign an array value to it.

Explanation: No additional information is available for this message.

COPDEX176E   The parameter *VALUE_0* cannot be null.

Explanation: No additional information is available for this message.

COPDEX177E   Usage: workflowdoc [-d destinationdirectory] [-pd packagedescriptor] [-p packagename] [sourcefiles]\n -d destinationdirectory The destination directory where the generated files.\n If it is not specified, the current directory will be used.\n -pd packagedescriptor The file name of an automation package descriptor file (i.e. tc-driver.xml file).\n The documentation will be generated for all workflows specified in the descriptor file.\n It cannot be used together with the -p option or sourcefiles.\n -p packagename The name of the automation package for which the documentation will be generated.\n If it is not specified, only the workflow documentation is generated.\n It cannot be used together with the -pd option.\n -todos Include @todo annotations in the generated files.\n sourcefiles List of workflow source file names separated by spaces.\n The elements in this list might contain paths. Wild cards are allowed in file names, but not in path names.\n If it is not specified, the system will generate documentation for all .wkf files in the current directory. It cannot be used together with the -pd option.\n

Explanation: No additional information is available for this message.

COPDEX178E   To do: *VALUE_0*

Explanation: No additional information is available for this message.

COPDEX179E   The "invokeimplementation" instruction cannot be used in a conditional scope. It can be used only at "workflow", "try" or "finally" scopes or a combination of these scopes.

Explanation: No additional information is available for this message.

COPDEX180E   Usage: automationpackagedoc -pd packagedescriptor\n -pd packagedescriptor The file name of an automation package descriptor file (i.e. tc-driver.xml file).

Explanation: No additional information is available for this message.

COPDEX183E   DCM object *VALUE_0* does not have attribute *VALUE_1*.

Explanation: No additional information is available for this message.

COPDEX184E   *VALUE_0* is not a tcdriver directory. (Missing TC-INF/tc-driver.xml file)

Explanation: No additional information is available for this message.

COPDEX185E   *VALUE_0*/TC-INF/tc-driver.xml is not valid.

Explanation: No additional information is available for this message.

COPDEX186E   *VALUE_0* is not a tcdriver directory

Explanation: No additional information is available for this message.

COPDEX187E   'invokeimplementation' is missing from LDO: *VALUE_0*

Explanation: No additional information is available for this message.

COPDEX188E   *VALUE_0* contains more than one 'invokeimplementation'.

Explanation: No additional information is available for this message.

COPDEX189E   The tc-driver.xml in *VALUE_0* refers to a workflow *VALUE_1* that does not exist.

Explanation: No additional information is available for this message.

COPDEX190E   The index "*VALUE_0*" for array "*VALUE_1*" is out of bounds.

Explanation: No additional information is available for this message.

COPDEX191E   The index "*VALUE_0*" for array "*VALUE_1*" is not valid.

Explanation: No additional information is available for this message.

COPDEX192E   The method *VALUE_0* with *VALUE_1* parameters is not found.

Explanation: No additional information is available for this message.

COPDEX193E   The system expected one or more values, but it did not receive any value.

Explanation: No additional information is available for this message.

Job Distribution Service (JDS) subsystem messages

COPJDS001E   An incorrect value was specified for parameter *VALUE_0*

Explanation: No additional information is available for this message.

COPJDS002E   Unable to submit job with description *VALUE_0*

Explanation: No additional information is available for this message.

COPJDS003E   Unable to cancel job with id *VALUE_0*

Explanation: No additional information is available for this message.

COPJDS004E   Unable to remove job with id *VALUE_0*

Explanation: No additional information is available for this message.

COPJDS005E   Unable to find job with id *VALUE_0*

Explanation: No additional information is available for this message.

COPJDS006E   Work item operation is not supported or accessible by the endpoint

Explanation: No additional information is available for this message.

COPJDS007E   Work item binding is not supported by the endpoint

Explanation: No additional information is available for this message.

J2ee subsystem messages

COPJEE001E The system was unable to generate the logical deployment because it cannot find the application module "*VALUE_0*".

Explanation: No additional information is available for this message.

COPJEE002E The system was unable to map resources to the data center fragment "*VALUE_0*"

Explanation: No additional information is available for this message.

COPJEE003E The module *VALUE_0*has already been deployed.

Explanation: No additional information is available for this message.

COPJEE004E The software repository server cannot be deployed because an incompatible DCM object of the type *VALUE_0*was chosen.

Explanation: The software repository server can be hosted on the boot server or file repository. All other DCM object types are not compatible.

COPJEE005E The network topology template node definition: "*VALUE_0*" of type: "*VALUE_1*" is not valid.

Explanation: No additional information is available for this message.

COPJEE006E The user factory *VALUE_0* does not feature customizable role support.

Explanation: The user factory implementation that

you are using to manage users in your LDAP database does not have the support for customizable roles. You can either specify a different factory class name in user-factory.xml or continue using pre-defined roles.

COPJEE007E The destination for a network configuration item cannot be null.

Explanation: No additional information is available for this message.

COPJEE008E The source for a network configuration item cannot be null.

Explanation: No additional information is available for this message.

COPJEE009E This feature is not supported.

Explanation: No additional information is available for this message.

COPJEE010E The logical deployment template node *VALUE_0***is not supported.**

Explanation: The logical deployment template node supports physical machine, virtual machine, application tier, external, and load balancer. All other logical deployment template node types are not compatible.

COPJEE011E The system tried to access a user interface configuration instance before it was initialized. Reload the page, wait for the page to load completely, and then proceed.

Explanation: No additional information is available for this message.

COPJEE013E The system cannot initialize the deployment request *VALUE_0***.**

Explanation: No additional information is available for this message.

COPJEE014E The deployment engine was unable to complete the request. The request domain *VALUE_0* **is missing EJB interaction class information. The ejbInteractionProxy attributes and the ejbInteractionMethod attributes must be specified.**

Explanation: No additional information is available for this message.

COPJEE015E The application cannot find the host system for ID *VALUE_0***.**

Explanation: No additional information is available for this message.

COPJEE016E The system cannot find the license broker for ID *VALUE_0***.**

Explanation: No additional information is available for this message.

COPJEE017E There is not enough data to validate the pool and application tier. Either the application tier is not managed or the application tier pool ID is null.

Explanation: No additional information is available for this message.

COPJEE018E There is not enough data to validate the pool and application tier. The application tier ID is null and the pool ID is null.

Explanation: No additional information is available for this message.

COPJEE019E The system cannot find the software product ID *VALUE_0***.**

Explanation: No additional information is available for this message.

COPJEE020E An error occurred. The unknown credentials type ID is *VALUE_0***.**

Explanation: No additional information is available for this message.

COPJEE025E A deployment engine exception occurred. The lock manager ID *VALUE_0* **is not valid.**

Explanation: No additional information is available for this message.

COPJEE026E The subnetwork "*VALUE_0***" cannot be created in the database. Try to add the subnetwork again. If the problem continues, contact your database system administrator.**

Explanation:

COPJEE027E The system cannot copy credentials ID "*VALUE_0*" specified in stack *VALUE_1* and service access point *VALUE_2*.

Explanation: No additional information is available for this message.

COPJEE028E The system cannot identify credentials ID "*VALUE_0*" specified in *VALUE_1* and service access point *VALUE_2*.

Explanation: No additional information is available for this message.

COPJEE029E The relationship between the network interface ID "*VALUE_0*" and the router ID: "*VALUE_1*" is not valid.

Explanation: No additional information is available for this message.

COPJEE030E The system cannot delete *VALUE_0* with the ID *VALUE_1* because it is not in maintenance.

Explanation: No additional information is available for this message.

COPJEE031E The system cannot find the required data center model object. The object either does not exist, or exists but is not the expected object type (type *VALUE_0*, ID *VALUE_1*).

Explanation: No additional information is available for this message.

COPJEE032E The system cannot recognize the database type.

Explanation: No additional information is available for this message.

COPJEE033E The system cannot find the association between the monitoring application ID "*VALUE_0*" and the resource ID "*VALUE_1*".

Explanation: An error occurred when the system tried to update the status of a monitoring configuration that is associated with a resource.

Operator response: Verify that the resource is still associated with the monitoring configuration, and then try again.

COPJEE034E The system cannot find the password credentials "*VALUE_0*".

Explanation: No additional information is available for this message.

COPJEE035E The system cannot find the RSA credentials "*VALUE_0*".

Explanation: No additional information is available for this message.

COPJEE036E The system cannot find the SNMP credentials "*VALUE_0*".

Explanation: No additional information is available for this message.

COPJEE037E The system cannot find the software association between the software=*VALUE_0*, and the device=*VALUE_1*).

Explanation: No additional information is available for this message.

COPJEE038E The system cannot find the user credentials "*VALUE_0*".

Explanation: No additional information is available for this message.

COPJEE039E The argument (*VALUE_0*="*VALUE_1*") is not valid. Make sure that the parameter is of the right type and that it is not empty.

Explanation: No additional information is available for this message.

COPJEE040E The value of the variable *VALUE_0* is not specified.

Explanation: No additional information is available for this message.

COPJEE041E There is no workflow specified for the logical device operation. The logical operation is "*VALUE_0*" and the device is "*VALUE_1*".

Explanation: No additional information is available for this message.

COPJEE042E A real IP with virtual IP ID *VALUE_0* and network interface ID *VALUE_1*) exists already.

Explanation: No additional information is available for this message.

COPJEE043E **The system cannot add server "*VALUE_0*" to application tier "*VALUE_1*" because the application tier already includes the server.**

Explanation: No additional information is available for this message.

COPJEE044E **The system cannot allocate a new IP address for subnetwork "*VALUE_0*" and for the NIC ID "*VALUE_1*".**

Explanation: No additional information is available for this message.

COPJEE045E **The system cannot resolve the protocol endpoint located at device "*VALUE_0*", protocol "*VALUE_1*",and port "*VALUE_2*".**

Explanation: No additional information is available for this message.

COPJEE046E **The system cannot resolve credentials from the default protocol endpoint "*VALUE_0*" and search key "*VALUE_1*".**

Explanation: No additional information is available for this message.

COPJEE047E **The software license is unavailabe because all available licenses have expired from resource pool *VALUE_0*. Review the expiration dates.**

Explanation: No additional information is available for this message.

COPJEE048E **"*VALUE_0*" is not an attribute for "*VALUE_1*" with ID "*VALUE_2*".**

Explanation: No additional information is available for this message.

COPJEE049E **The operating mode "*VALUE_0*" is not valid.**

Explanation: No additional information is available for this message.

COPJEE050E **The specified resource pool "*VALUE_0*" is not valid.**

Explanation: No additional information is available for this message.

COPJEE051E **No default credentials are associated with protocol endpoint "*VALUE_0*".**

Explanation: No additional information is available for this message.

COPJEE052E **No additional servers are available in the spare pool ID "*VALUE_0*".**

Explanation: No additional information is available for this message.

COPJEE053E **At least one NIC is required for device ID "*VALUE_0*".**

Explanation: No additional information is available for this message.

COPJEE054E **No operating system is installed and operating on device ID "*VALUE_0*".**

Explanation: No additional information is available for this message.

COPJEE055E **No software stack is associated with "*VALUE_0*".**

Explanation: No additional information is available for this message.

COPJEE056E **The requested object "*VALUE_0*" is already locked.**

Explanation: No additional information is available for this message.

COPJEE057E **The requested object "*VALUE_0*" is not locked, or the object is locked but the wrong key is specified.**

Explanation: No additional information is available for this message.

COPJEE058E **The system cannot allocate *VALUE_0* software licenses from license pool ID *VALUE_1* because the maximum number of software licenses have been issued.**

Explanation: No additional information is available for this message.

COPJEE059E **The system cannot complete the EJB call. See the EJB server logs for more details.**

Explanation: No additional information is available for this message.

COPJEE060E Server: "*VALUE_0***" was not removed from the spare resource pool "***VALUE_1***".**

Explanation: A server can be dedicated to a designated application tier, or it can be a part of the resource pool. To remove a server from the spare resource pool, the server must be dedicated to an application tier or to another resource pool.

COPJEE061E The system cannot perform the specified operation. The server "*VALUE_0***" is assigned to an application tier.**

Explanation: No additional information is available for this message.

COPJEE062E The system cannot remove server "*VALUE_0***" from the application tier because it is not in an application tier.**

Explanation: No additional information is available for this message.

COPJEE063E Server "*VALUE_0***" was not added to the spare resource pool.**

Explanation: To release a server to a spare resource pool, the server must be a member of a defined resource pool. If a server is dedicated to an application tier, the server must first be deleted and then entered back again as a resource pool server so that it can be added to the spare resource pool.

COPJEE064E The system has identified an exception in the fault management integration subsystem. See the nested exception for more details.

Explanation: No additional information is available for this message.

COPJEE065E The system does not support manual deployment when you operate in "*VALUE_0***" mode.**

Explanation: No additional information is available for this message.

COPJEE068E The deployment request parameter "*VALUE_0***"is missing.**

Explanation: No additional information is available for this message.

COPJEE069E The NIC ID must be specified when the device includes more than one NIC.

Explanation: No additional information is available for this message.

COPJEE070E The recommendation "*VALUE_0***" is obsolete and has been replaced.**

Explanation: No additional information is available for this message.

COPJEE071E This request conflicts with application reservation ***VALUE_0*.**

Explanation: No additional information is available for this message.

COPJEE074E The system cannot delete category "*VALUE_0***" because it contains subcategories.**

Explanation: No additional information is available for this message.

COPJEE075E The system cannot delete category "*VALUE_0***" because it contains device drivers.**

Explanation: No additional information is available for this message.

COPJEE076E The system cannot delete this network interface because it is mapped to a real IP. Remove this device from the load balancer to release the real IP mapping.

Explanation: No additional information is available for this message.

COPJEE077E The system cannot delete this network interface because one or more routes are assigned to it. Review the routes on the "Routing" page and delete them if necessary.

Explanation: No additional information is available for this message.

COPJEE078E The system cannot delete driver "*VALUE_0***" because one or more devices are using the driver.**

Explanation: No additional information is available for this message.

COPJEE079E The system cannot complete the database operation. Try the operation again. If the problem continues, contact your database system administrator.

Explanation: A database error occurred. Check the j2ee/console.log file and consult with the database administrator.

Operator response: This error is reported when an SQL exception is thrown from the database access code

(and usually happens when the user is updating some data). The most likely reason for it is a constraint violation or a miscellaneous database error. Inspecting the logs should help to localize the problem.

COPJEE080E A record with this name already exists. A record name must be unique.

Explanation: No additional information is available for this message.

COPJEE081E The system was unable to invoke EJB. Ask your system administrator if the EJB server is available.

Explanation: No additional information is available for this message.

COPJEE082E The system cannot load datasource "*VALUE_0*".

Explanation: A database connection problem is the most frequent cause of this failure. Ask your system administrator to correct the database connection problem and then restart the user interface.

COPJEE084E The system will not swap positions on the software stack because it has identified an incorrect position. Type a position value that is greater than or equal to zero.

Explanation: No additional information is available for this message.

COPJEE085E The system will not be moved to a VLAN because the system cannot find managed system *VALUE_0*(*VALUE_1*).

Explanation: No additional information is available for this message.

COPJEE086E A monitoring configuration was not selected.

Explanation: A monitoring configuration must be selected before it can be associated with the current resource.

Operator response: Create at least one or more monitoring configurations.

COPJEE089E The managed system *VALUE_1* of type "*VALUE_0*" is connected to *VALUE_2* switch ports. Use the icon view to precisely specify the port that will be moved to a new VLAN.

Explanation: No additional information is available for this message.

COPJEE090E The *VALUE_0* "*VALUE_1*" is not connected to any switch ports.

Explanation: No additional information is available for this message.

COPJEE092E The system cannot save a service access point. An access point of type "*VALUE_0*" is already defined for port *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE093E The specified position is already occupied.

Explanation: No additional information is available for this message.

COPJEE094E The device driver and the monitoring application are already associated with this resource.

Explanation: The list of associated monitoring configurations already contains a monitoring configuration with the same device driver and monitoring application for this resource.

Operator response: If the monitoring configuration selected is correct, then nothing more is needed. Otherwise, add an association with the desired monitoring configuration.

COPJEE095E The requested end time *VALUE_0* is earlier than or the same as the start time *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE096E The system cannot delete a blade chassis when one or more servers are installed in the chassis. Remove all servers from the blade chassis and then try again to delete it.

Explanation: No additional information is available for this message.

COPJEE100E The system cannot connect the NIC to port *VALUE_0* because the port is being used by another device.

Explanation: No additional information is available for this message.

COPJEE101E A user interface error occurred *VALUE_0*

Explanation: Please consult the j2ee/console.log file for more information.

Operator response: This is a generic error message that's used when the UI does not have enough information about the error. Checking the error logs should help in localizing the problem.

COPJEE102E The system does not support object type "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPJEE103E A deployment engine exception occurred: *VALUE_0*.

Explanation: No additional information is available for this message.

COPJEE105E An error occurred: *VALUE_0*

Explanation: No additional information is available for this message.

COPJEE106E The upgrade type is not valid.

Explanation: No additional information is available for this message.

COPJEE107E The object type is not valid.

Explanation: Patch installations are only supported by cluster and application object types.

COPJEE108E Unable to remove workflow association

Explanation: No additional information is available for this message.

COPJEE109E Unable to add workflow association.

Explanation: No additional information is available for this message.

COPJEE110E No workflow selected.

Explanation: No additional information is available for this message.

COPJEE111E No workflows retrieved

Explanation: No additional information is available for this message.

COPJEE112E A power outlet already exists.

Explanation: No additional information is available for this message.

COPJEE113E The specified IP address *VALUE_0* **is not associated with a valid subnetwork** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE114E The product *VALUE_0* **is already in this stack.**

Explanation: No additional information is available for this message.

COPJEE118E One or more server access points are associated with this device.

Explanation: No additional information is available for this message.

COPJEE144E The system cannot move the object in or out of Maintenance because it is not a DCM object.

Explanation: No additional information is available for this message.

COPJEE149E One or more service access points are associated with this device.

Explanation: No additional information is available for this message.

COPJEE150E One or more serial cards are associated with this device.

Explanation: No additional information is available for this message.

COPJEE152E The network interface card is either not valid or it does not exist.

Explanation: No additional information is available for this message.

COPJEE153E The system denied the request because cluster *VALUE_0* **is not managed.**

Explanation: No additional information is available for this message.

COPJEE154E Not enough servers are available to complete this task.

Explanation: No additional information is available for this message.

COPJEE160E The system cannot delete the power unit. Power outlets for this unit are still being used by devices.

Explanation: Power outlets for this unit are still being used by devices.

COPJEE163E Service access points and/or credentials are associated with this device.

Explanation: No additional information is available for this message.

COPJEE167E The server ID is not valid.

Explanation: No additional information is available for this message.

COPJEE176E This product has already been added. Perhaps it is nested in other stacks.

Explanation: No additional information is available for this message.

COPJEE177E This stack has already been added. Perhaps it is nested in other stacks.

Explanation: No additional information is available for this message.

COPJEE178E The system cannot delete the terminal server because service access points and/or credentials are associated with the device.

Explanation: No additional information is available for this message.

COPJEE179E The system cannot delete the terminal server because NICs are associated with the device.

Explanation: No additional information is available for this message.

COPJEE181E The system cannot add the virtual IP to the load balancer because the load balancer ID is not valid.

Explanation: No additional information is available for this message.

COPJEE183E The system cannot process request ID: _VALUE_0 VALUE_1_ to remove the virtual IP from the load balancer because the load balancer is not valid and/or the virtual IP is not valid.

Explanation: No additional information is available for this message.

COPJEE190E The system cannot remove the real IP from the virtual IP because the virtual IP is not valid, or because the load balancer is not valid, or because the real IP ID is not valid.

Explanation: No additional information is available for this message.

COPJEE192E The system cannot add a real IP to the virtual IP because the virtual IP is not valid, or because the load balancer is not valid, or because the real IP ID is not valid.

Explanation: No additional information is available for this message.

COPJEE193E The system cannot delete the VLAN because devices are associated with the VLAN.

Explanation: No additional information is available for this message.

COPJEE199E The upgrade type is not valid.

Explanation: No additional information is available for this message.

COPJEE200E The system cannot create the ACL because mapping for the selected network interface already exists.

Explanation: No additional information is available for this message.

COPJEE201E Both objects must be of the type: DcmObject.

Explanation: No additional information is available for this message.

COPJEE202E The system cannot add the device. Try to add the device again. If the problem continues, contact your database system administrator.

Explanation: No additional information is available for this message.

COPJEE205E A software requirement occurred. Verify the requirement name, type, and value.

Explanation: No additional information is available for this message.

COPJEE206E The system cannot find the Tivoli Data Warehouse report.properties file in the config subdirectory.

Explanation: In this instance, either the system cannot find the Tivoli Data Warehouse report.properties file in the config subdirectory or the file is not configured correctly. The report.properties file contains the list of URLs that point to the Tivoli Data Warehouse reports.

Operator response: Install Tivoli Data Warehouse 1.2 and the Tivoli Data Warehouse enablement pack. Then update the report.properties file in the config subdirectory accordingly.

COPJEE207E A discovery technology was not selected.

Explanation: A discovery technology must be selected before it can be associated with the current resource.

Operator response: Create one or more discovery technologies. On the 'Data center assets and resources' tab, click Discovery and then click Edit --> Add Discovery.

COPJEE208E The discovery technology is already associated with this resource.

Explanation: The list of associated discovery technologies for this resource already contains a discovery technology with the same name.

Operator response: If the discovery technology selected is correct, then nothing more is needed. If it is not correct, add an association with the desired discovery technology.

COPJEE209E The system cannot create the discovery technology association with this resource.

Explanation: An error occurred when the system tried to create a discovery technology association.

Operator response: Try to create the discovery technology association again. If the problem continues, contact your data center database administrator.

COPJEE210E The system cannot delete the discovery technology association with this resource.

Explanation: An error occurred when the system tried to delete the discovery technology association.

Operator response: Try to delete discovery technology

association again. If the problem continues, contact your data center database administrator.

COPJEE211E The system cannot validate the application topology resource.

Explanation: No additional information is available for this message.

COPJEE212E The system cannot validate the logical application structure template.

Explanation: No additional information is available for this message.

COPJEE213E The system cannot validate the application logical deployment template.

Explanation: No additional information is available for this message.

COPJEE214E The system cannot find a corresponding LDT Node for the application module "*VALUE_0*". The specified application module must be hosted by an LDT node.

Explanation: No additional information is available for this message.

COPJEE217E The registration of the application topologies software failed. The system cannot register the software product based on software capabilities and requirements.

Explanation: No additional information is available for this message.

COPJEE218E The network address membership type does not support a fiber channel port.

Explanation: No additional information is available for this message.

COPJEE220E The object "*VALUE_0*" is not configured for switching functionality.

Explanation: No additional information is available for this message.

COPJEE232E The "*VALUE_0*" module type is not valid.

Explanation: No additional information is available for this message.

COPJEE235E No additional servers are available in the application tier ID: "_VALUE_0_**".**

Explanation: No additional information is available for this message.

COPJEE236W   WARNING: Do not modify these settings unless you have been instructed to do so by IBM Tivoli Software Support.

Explanation: No additional information is available for this message.

COPJEE240E The system cannot create the deployment plan.

Explanation: No additional information is available for this message.

COPJEE245E To create the deployment plan, include at least one router.

Explanation: No additional information is available for this message.

COPJEE246E To create the deployment plan, include at least one load balancer.

Explanation: No additional information is available for this message.

COPJEE262E The system cannot delete the resource pool with ID: _VALUE_0_**. Servers are still associated with this pool.**

Explanation: No additional information is available for this message.

COPJEE263E The system cannot initialize with configuration data from the database.

Explanation: No additional information is available for this message.

COPJEE264E The system cannot add the switch with ID _VALUE_0_ **to the DCF with ID** _VALUE_1_**. The switch is already part of the DCF.**

Explanation: No additional information is available for this message.

COPJEE268E The system cannot add the DcmObject with ID _VALUE_0_ **to the DCF with ID** _VALUE_1_**. The DcmObject is already a part of the DCF.**

Explanation: No additional information is available for this message.

COPJEE269E The system cannot add the DcmObject with ID _VALUE_0_ **to the DCF with ID:** _VALUE_1_**. The DcmObjectType is not supported by the DCF.**

Explanation: No additional information is available for this message.

COPJEE270E The system cannot add the DcmObject with ID _VALUE_0_ **to the DCF with ID** _VALUE_1_**. Try to add the DcmObject again. If the problem continues, contact your database system administrator.**

Explanation: No additional information is available for this message.

COPJEE271E UI Exception: (Problem ID: UI_VALUE_0_**, user=**_VALUE_1_**).**

Explanation: No additional information is available for this message.

COPJEE272E (Problem ID: UI_VALUE_0_**).**

Explanation: No additional information is available for this message.

COPJEE275E The network interface ["_VALUE_0_**"] defined in the IpSytem ["**_VALUE_1_**"] is not used in any subnet.**

Explanation: No additional information is available for this message.

COPJEE276E The ["_VALUE_0_**"] interface on IpSystem ["**_VALUE_1_**"] is not configured properly.**

Explanation: No additional information is available for this message.

COPJEE278E The system cannot delete the load balancer with ID: "_VALUE_0_**" because it is associated with the following data center fragment IDs: "**_VALUE_1_**".**

Explanation: No additional information is available for this message.

COPJEE280E The system cannot delete the switch with ID: "_VALUE_0_**" because it is associated with following data center fragment IDs: "**_VALUE_1_**".**

Explanation: No additional information is available for this message.

COPJEE281E **The system cannot delete the resource pool with ID: "***VALUE_0***" because it is associated with the following data center fragment IDs: "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPJEE282E **The system cannot delete the server with ID: "***VALUE_0***" because is is associated with the following data center fragment IDs: "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPJEE283E **The system cannot find the object of type "***VALUE_0***" by "***VALUE_0***".**

Explanation: No additional information is available for this message.

COPJEE284E **The system cannot find ID "***VALUE_0***" in the object of type "***VALUE_0***" that has the ID "***VALUE_0***".**

Explanation: No additional information is available for this message.

COPJEE285E **The system cannot add storage volume ID "***VALUE_0***" to host ID "***VALUE_0***" because no fibre channel ports belong to the storage volume.**

Explanation: No additional information is available for this message.

COPJEE286E **The system cannot add storage volume ID "***VALUE_0***" to host ID "***VALUE_0***" because no interface cards belong to the host.**

Explanation: No additional information is available for this message.

COPJEE287E **The system cannot add storage volume ID "***VALUE_0***" to host ID "***VALUE_0***" because no fibre channel ports belong to the host.**

Explanation: No additional information is available for this message.

COPJEE288E **The system cannot add zone members for zone ID "***VALUE_0***" because no fibre channel ports are present.**

Explanation: No additional information is available for this message.

COPJEE289E **The deployment request ID *VALUE_0* does not exist.**

Explanation: No additional information is available for this message.

COPJEE291E **The system cannot create the zone because there is no active zone set for the storage area network fabric with ID *VALUE_0*.**

Explanation: No additional information is available for this message.

COPJEE296E **The system cannot perform LUN masking because the given SAN port with ID *VALUE_0* does not belong to a server.**

Explanation: No additional information is available for this message.

COPJEE299E **The system cannot realize the deployment plan.**

Explanation: No additional information is available for this message.

COPJEE300E **The LUN must be an integer in decimal or hexadecimal format.**

Explanation: No additional information is available for this message.

COPJEE301E **The size must consist of an integer value and an unit value in 'K', 'M', 'G' or 'T'; if the size is in bytes, do not enter any unit value.**

Explanation: No additional information is available for this message.

COPJEE302E **The stripe size must consist of an integer value and an unit value in 'K', 'M', 'G' or 'T'; if the size is in bytes, do not enter any unit value.**

Explanation: No additional information is available for this message.

COPJEE303E **The consumable size must consist of an integer value and an unit value in 'K', 'M', 'G' or 'T'; if the size is in bytes, do not enter any unit value.**

Explanation: No additional information is available for this message.

COPJEE304E The LUN *VALUE_0* **in fibre channel port** *VALUE_1* **is not available.**

Explanation: No additional information is available for this message.

COPJEE305E Storage volume *VALUE_0* **in storage subsystem** *VALUE_1* **already exists.**

Explanation: No additional information is available for this message.

COPJEE308E The HBA port or FA Port with ID *VALUE_0* **does not have a WWN defined.**

Explanation: No additional information is available for this message.

COPJEE309E The fibre channel switch with ID *VALUE_0* **does not have a domain ID defined.**

Explanation: No additional information is available for this message.

COPJEE310E The system cannot remove zone members for a zone because no fibre channel ports are present.

Explanation: No additional information is available for this message.

COPJEE311E The storage volume with ID *VALUE_0* **does not belong to the storage pool with ID** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE312E The storage volume with ID *VALUE_0* **does not belong to the storage subsystem with ID** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE313E The given SAN port with ID *VALUE_0* **does not belong to the SAN fabric with ID** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE314E There is no matching disk partition settings found for the given logical volume settings with ID *VALUE_0* **and the given physical volume with ID:** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE315E The volume container with ID *VALUE_0* **does not belong to the storage manager with ID** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE316E The logical volume with ID *VALUE_0* **does not belong to the storage manager with ID** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE317E The physical volume with ID *VALUE_0* **does not belong to the storage manager with ID** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE319E There are no data path settings defined for storage multipath settings with ID *VALUE_0*.

Explanation: No additional information is available for this message.

COPJEE320E The system can not delete the Customer "ptarmVALUE_0**" when applications are still associated.**

Explanation: A customer can not be deleted when it has one or more applications associated with it.

Operator response: Before deleting the customer, select the customer and put all associated applications to maintenance and delete the associated applications.

COPJEE322E The selected device does not have any available serial port connections.

Explanation: No additional information is available for this message.

COPJEE324E A connection with the same parameters already exists.

Explanation: No additional information is available for this message.

COPJEE325E Can not create access rule, an identical access rule already exists in this ACL.

Explanation: No additional information is available for this message.

COPJEE326E The system failed to delete deployment request.

Explanation: No additional information is available for this message.

COPJEE327E Fibre adapter port, with port ID "*VALUE_0*", does not belong to "*VALUE_1*" storage subsystem.

Explanation: No additional information is available for this message.

COPJEE329E An error occured while updating the data center model. Status, *VALUE_0*, is not valid.

Explanation: No additional information is available for this message.

COPJEE330E The system cannot add *VALUE_0* server to *VALUE_1* volume container because *VALUE_2* storage manager does not manage remote volumes.

Explanation: No additional information is available for this message.

COPJEE332E The system cannot cancel a finished deployment request (deployment request ID *VALUE_0*).

Explanation: No additional information is available for this message.

COPJEE333E The system cannot find DB driver *VALUE_0*.

Explanation: No additional information is available for this message.

COPJEE334E The access to DB driver *VALUE_0* is not allowed.

Explanation: No additional information is available for this message.

COPJEE335E Instantiation of DB driver *VALUE_0* failed.

Explanation: No additional information is available for this message.

COPJEE336E An SQL exception occured while executing the reporting SQL statement *VALUE_0* for report *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE337E Required inputs, *VALUE_0*, for report, *VALUE_1* is missing.

Explanation: No additional information is available for this message.

COPJEE338E The request to decrypt the database password from dcm.xml failed.

Explanation: No additional information is available for this message.

COPJEE339E The system cannot create a logical volume for *VALUE_0* server in *VALUE_1* volume container because the server does not have access to the volume container.

Explanation: No additional information is available for this message.

COPJEE340E The specified server ID was not found.

Explanation: A server was selected from a list but it no longer exists.

COPJEE341E The user ID is invalid.

Explanation: The user ID entered is not valid.

Operator response: Re-enter the user ID using valid characters.

COPJEE342E The system could not retrieve the application protocol type.

Explanation: The application protocol type specified could not be located.

Operator response: Contact your system administrator.

COPJEE343E Multiple protocol endpoints were returned.

Explanation: The system contains multiple protocol endpoints that have the same protocolType.

Operator response: Contact your system administrator.

COPJEE344E Multiple RSA credentials were returned.

Explanation: The system contains multiple RSA credentials that have the same search key.

Operator response: Contact your system administrator.

COPJEE345E Multiple Password credentials were returned.

Explanation: The system contains multiple Password credentials that have the same search key.

Operator response: Contact your system administrator.

COPJEE347E The operation *VALUE_0* is not implemented.

Explanation: No additional information is available for this message.

COPJEE348E The system cannot complete the database operation. Try the operation again. If the problem continues, contact your database system administrator.

Explanation: No additional information is available for this message.

COPJEE349E The system cannot find the required resource object (type *VALUE_0*, ID *VALUE_1*).

Explanation: No additional information is available for this message.

COPJEE350E A data insert error "*VALUE_0*" occurred.

Explanation: No additional information is available for this message.

COPJEE351E "The system cannot process the data update: *VALUE_0*".

Explanation: No additional information is available for this message.

COPJEE352E The system cannot delete the resource *VALUE_0* with the ID *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE353E A deployment engine exception occurred: *VALUE_0*.

Explanation: No additional information is available for this message.

COPJEE354E The requested resource "*VALUE_0*" is already locked.

Explanation: No additional information is available for this message.

COPJEE355E The requested resource "*VALUE_0*" is not locked, or the resource is locked but the wrong key is specified.

Explanation: No additional information is available for this message.

COPJEE356E A system error *VALUE_0* occurred.

Explanation: No additional information is available for this message.

COPJEE357E The user must be registered to run the report. The user does not exist in the directory *VALUE_0*.

Explanation: The user is not found in the directory. Only the registered user is allowed to run the report.

COPJEE358E The report cannot be found in the database *VALUE_0*. Make sure the report is registered and check whether the report is in the REPORT database table.

Explanation: The report cannot be found in the REPORT database table.

COPJEE359E The database connection failed to commit when creating the user specification for the report. Report: *VALUE_0*, report ID: *VALUE_1*, User specification name: *VALUE_2*, User ID: *VALUE_3*.

Explanation: The database connection fails to commit.

COPJEE360E The database connection failed to commit when creating the report. Report: *VALUE_0*.

Explanation: The database connection fails to commit.

COPJEE361E The database connection failed to close when creating the report. Report: *VALUE_0*.

Explanation: The database connection fails to close.

COPJEE362E The JSP file was not created when using report creator. JSP file: *VALUE_0*.

Explanation: File IO exception.

COPJEE363E The JSP file path for the report already exists. Path: *VALUE_0*.

Explanation: The file already exists.

COPJEE364E The report was not created when using report creator. Report: *VALUE_0*.

Explanation: The database transaction failed.

COPJEE365E The report name is required to create the user's report definition.

Explanation: The required input, report name, is not passed in.

COPJEE366E The user's report definition was not created. Report: *VALUE_0*.

Explanation: This is an internal code error.

COPJEE367E Storage Volume *VALUE_0* **is already mapped to port** *VALUE_0*.

Explanation: No additional information is available for this message.

COPJEE368E The report *VALUE_0* **was not created in the database. Check the database to make sure it is operating properly and check the database connection.**

Explanation: No additional information is available for this message.

COPJEE369E A security exception occurred while creating the directory, *VALUE_0* **. Check the file system configuration.**

Explanation: No additional information is available for this message.

COPJEE370E Directory *VALUE_0* **cannot be created in the file system . Check the file system configuration.**

Explanation: No additional information is available for this message.

COPJEE371E Directory *VALUE_0* **already exists in the file system. The report creation stopped because of duplication. Create the report with a different name.**

Explanation: No additional information is available for this message.

COPJEE372E The directory, *VALUE_0* **, is not a valid directory. Make sure that the tcEAR.home property in the configuration file, report.xml, is correct.**

Explanation: No additional information is available for this message.

COPJEE373E The *VALUE_0* **from the configuration file, report.xml, is not configured properly or is not loaded properly.**

Explanation: No additional information is available for this message.

COPJEE374E The directory *VALUE_0* **is not a valid directory. Make sure that the tc.customReportRelativeDirectory property in the configuration file, report.xml, is correct.**

Explanation: No additional information is available for this message.

COPJEE375E The file system size cannot be greater than the logical volume size.

Explanation: No additional information is available for this message.

COPJEE376E System *VALUE_0* **cannot be added to the application tier domain** *VALUE_1*. **The system** *VALUE_0* **already exists in the application tier domain** *VALUE_1*.

Explanation: No additional information is available for this message.

COPJEE377E At least one template parameter has not been given a value *VALUE_0*.

Explanation:

Operator response:

COPJEE378E Fibre channel port number *VALUE_0* **is out of range in the fibre channel switch.**

Explanation: No additional information is available for this message.

COPJEE379E The workflow was already added.

Explanation: No additional information is available for this message.

COPJEE380E An SQL exception occurred while executing the scheduled Group_Status_Updater snapshot task.

Explanation: The database failed to commit.

Operator response: Verify that the database is operating correctly.

COPJEE381E A user interface error occurred. The configuration is incorrect for: action="*VALUE_0*", objectType="*VALUE_1*".

Explanation: No additional information is available for this message.

COPJEE382E The system can not find the VLAN in the switch port with ID: "*VALUE_0*".

Explanation: No additional information is available for this message.

COPJEE384E You cannot delete the user-defined report *VALUE_0*, because you are not its owner.

Explanation: No additional information is available for this message.

COPJEE385E You cannot delete the report definition *VALUE_0*, because you are not its owner.

Explanation: No additional information is available for this message.

COPJEE386E IP address *VALUE_0* is already used by other network interface of this system.

Explanation: No additional information is available for this message.

COPJEE387E The system cannot create the credential since its search key *VALUE_0* is already used by other credential of this access point.

Explanation: No additional information is available for this message.

COPJEE389E The report contains too many objects. Retry with fewer selections.

Explanation: No additional information is available for this message.

COPJEE390E The report contains more than *VALUE_0* records. Retry with fewer selections.

Explanation: No additional information is available for this message.

COPJEE391E You are not authorized to view this report. Ask your administrator to assign you to the appropriate access permission group to be able to view the report.

Explanation: No additional information is available for this message.

Policy engines subsystem messages

COPPEZ005E The system cannot create the SNMP connection.

Explanation: No additional information is available for this message.

COPPEZ008E The system cannot estimate the number of servers.

Operator response: Configure the Resource-poll.xml file properly.

COPPEZ009E The system cannot open the *VALUE_0* file.

Explanation: No additional information is available for this message.

COPPEZ023E An error occurred because the simulator is not enabled.

Explanation: No additional information is available for this message.

COPPEZ024E An error occurred because the simulator cannot recognize the *VALUE_0* application.

Explanation: No additional information is available for this message.

COPPEZ038E The *VALUE_0*" driver cannot load for `*VALUE_1*".

Explanation: No additional information is available for this message.

COPPEZ039E An exception occurred in a data acquisition driver for `*VALUE_0*".

Operator response: Validate the configuration of the acquisition engine.

COPPEZ040E The driver timed out during data acquisition from `*VALUE_0*".

Explanation: No additional information is available for this message.

COPPEZ041E   A generic data acquisition configuration error occurred.

Operator response: Validate the configuration of the acquisition engine.

COPPEZ042E   *VALUE_0*" is not a valid device type.

Operator response: Validate the configuration of the acquisition engine.

COPPEZ043E   The management IP address "*VALUE_0*" is not valid for device "*VALUE_1*".

Operator response: Verify the IP address of the device.

COPPEZ044E   *VALUE_0*" is not valid for a *VALUE_1*" context.

Operator response: Validate the configuration of the acquisition engine.

COPPEZ045E   The *VALUE_0*" application tier is not configured on load balancer *VALUE_1*".

Operator response: Validate the configuration of the acquisition engine.

COPPEZ046E   A generic data acquisition subscription error occurred.

Operator response: Validate the configuration of the acquisition engine.

COPPEZ047E   The data acquisition thread is not working.

Operator response: Review the data acquisition driver.

COPPEZ048E   The system is running too many concurrent data acquisition tasks.

Explanation: No additional information is available for this message.

COPPEZ049E   *VALUE_0*" is not a valid *VALUE_1*" metric.

Operator response: Validate the configuration of the acquisition engine.

COPPEZ050E   *VALUE_0*" is not a valid aggregation type.

Operator response: Validate the configuration of the acquisition engine.

COPPEZ051E   *VALUE_0*" is not a valid device type.

Explanation: This error can be triggered by a tier/application configuration problem: all tiers and active/online (instead of "not in maintenance") applications must be configured for data acquisition.

COPPEZ052E   The *VALUE_0*" signal is not configured for application tier *VALUE_1*".

Operator response: Validate the configuration of the acquisition engine.

COPPEZ053E   The system does not support data acquisition for *VALUE_0*".

Explanation: No additional information is available for this message.

COPPEZ058E   The IP address *VALUE_0* is not valid.

Operator response: Review the server IP address in the configuration file.

COPPEZ060E   One of the expected fitness parameters is not present in the PROPERTIES table.

Explanation: The policy engine evaluates a number of parameters to calculate the fitness, or appropriateness, of a decision to add or remove servers. These are called fitness parameters. The fitness parameters are stored in the PROPERTIES table in the database. In this instance, one of the expected parameters is not present in the PROPERTIES table.

Operator response: Confirm that there are no typing errors in the Resource-Pool.xml file. Also verify that the file was imported properly.

COPPEZ062E   The system passed a null value for the data center model instead of a valid accessor object.

Explanation: No additional information is available for this message.

COPPEZ064E   The object ID includes less than two numbers.

Operator response: Review the workflow parameters for the object ID.

COPPEZ070E   An SNMP packet decode or structure error occurred.

Explanation: No additional information is available for this message.

COPPEZ071E **An SNMP error (Error code=*VALUE_0* occurred in response to Error name=*VALUE_1*).**

Explanation: No additional information is available for this message.

COPPEZ072E **The SNMP GET request cannot return any results.**

Explanation: No additional information is available for this message.

COPPEZ073E **An SNMP IO error occurred.**

Explanation: No additional information is available for this message.

COPPEZ074E **The SNMP SET™ request cannot return any results.**

Explanation: No additional information is available for this message.

COPPEZ077E **An error *VALUE_0* occurred.**

Explanation: No additional information is available for this message.

COPPEZ079E **A resource broker error occurred.**

Explanation: No additional information is available for this message.

COPPEZ081E **The system identified an incorrect optimizer when it registered the optimizer mbean.**

Explanation: No additional information is available for this message.

COPPEZ082E **The system identified an incorrect pool optimizer class "*VALUE_0*".**

Operator response: Confirm that there are no typing errors in the Resource-Pool.xml file. Also verify that the file was imported properly.

COPPEZ096E **The system cannot create an ObjectiveAnalyzer instance for dcmObjectId=*VALUE_0* using class *VALUE_1*.**

Operator response: An ObjectiveAnalyzer cannot be created for an Application. The appropriate Automation Extention Package might need to be installed.

COPPEZ097E **No LoadObject exists for the *VALUE_0* application.**

Explanation: No additional information is available for this message.

COPPEZ098E **A resource broker error occurred. It is missing the *VALUE_0* object.**

Explanation: No additional information is available for this message.

COPPEZ099E **A resource broker error occurred. The *VALUE_0* application tier is not valid.**

Explanation: No additional information is available for this message.

COPPEZ100E **The *VALUE_0* application does not exist in the DCM.**

Explanation: No additional information is available for this message.

COPPEZ108W **The application with ID *VALUE_0* does not have any objective analyzers.**

Explanation: No additional information is available for this message.

COPPEZ109E **The objective analyzer property *VALUE_0* is not valid for the application with ID *VALUE_1* and the objective analyzer name *VALUE_2*.**

Explanation: No additional information is available for this message.

COPPEZ110E **A task library lookup error occurred.**

Explanation: No additional information is available for this message.

COPPEZ111E **The property *VALUE_0* is not defined for device *VALUE_1*.**

Explanation: No additional information is available for this message.

COPPEZ112E **An error occurred when the system ran a task.**

Explanation: No additional information is available for this message.

COPPEZ113E   An error occurred. The Tivoli Management Region orb object is null.

Explanation: No additional information is available for this message.

COPPEZ114E   The system cannot obtain an application tier properties instance.

Explanation: No additional information is available for this message.

COPPEZ115E   The system cannot obtain a application tier ID.

Explanation: No additional information is available for this message.

COPPEZ116E   The endpoint label is null or empty.

Explanation: No additional information is available for this message.

COPPEZ117E   The credentials for the IBM Tivoli Monitoring server are not configured properly.

Explanation: No additional information is available for this message.

COPPEZ118E   Either the application tier is not configured properly or the IBM Tivoli Monitoring server is not configured properly.

Explanation: No additional information is available for this message.

COPPEZ119E   An error occurred. The task library object is null.

Explanation: No additional information is available for this message.

COPPEZ120E   A error occurred. A Tivoli Management Region directory object is null.

Explanation: No additional information is available for this message.

COPPEZ121E   An error occurred. The system cannot initialize a Tivoli Management Region orb.

Explanation: No additional information is available for this message.

Common agent subsystem messages

COPTCA001E   Cannot get proxy for interface on Agent: *VALUE_0*.

Explanation: The Agent Manager cannot communicate properly with the agent. Verify that the Agent is configured correctly and the appropriate subagents are installed.

COPTCA002E   Cannot get proxy for interface on Agent.

Explanation: The Agent Manager cannot communicate properly with the agent. Verify that the Agent is configured correctly and the appropriate subagents are installed.

COPTCA003E   The argument *VALUE_0* is not valid. Make sure that the parameter is of the right type and that it is not empty.

Explanation: No additional information is available for this message.

COPTCA004E   The subagent *VALUE_0* failed to install on the endpoint.

Explanation: For more information, check the log file logs/msgAgent.log on the endpoint in the agent install directory.

COPTCA005E   The subagent *VALUE_0* failed to start on the endpoint.

Explanation: For more information, check the log file logs/msgAgent.log on the endpoint in the agent install directory.

COPTCA006E   Error installing subagent *VALUE_0* on the endpoint: *VALUE_1*.

Explanation: For more information, check the log file logs/msgAgent.log on the endpoint in the agent install directory.

COPTCA007E   The subagent *VALUE_0* failed to uninstall on the endpoint.

Explanation: For more information, check the log file logs/msgAgent.log on the endpoint in the agent install directory.

COPTCA008E   Error uninstalling subagent *VALUE_0* on the endpoint.

Explanation: For more information, check the `logs/msgAgent.log` file on the endpoint in the agent install directory.

COPTCA009E Error copying Subagent jar *VALUE_0*
to the endpoint.

Explanation: For more information, check the
`logs/msgAgent.log` file on the endpoint in the agent
install directory.

COPTCA010E Error during Agent operation:
VALUE_0.

Explanation: No additional information is available
for this message.

COPTCA011E Error during WGet from the CopyFile
subagent.

Explanation: For more information, check the
`logs/tioCopyFileTrace.log` file on the endpoint in the
agent install directory.

COPTCA012E File *VALUE_0* **not found on endpoint.**
File copy or download failed.

Explanation: No additional information is available
for this message.

COPTCA013E File *VALUE_0* **not found on endpoint.**

Explanation: No additional information is available
for this message.

COPTCA014E File *VALUE_0* **not found on local**
server.

Explanation: No additional information is available
for this message.

COPTCA015E Error converting path *VALUE_0* **to**
DOS style path.

Explanation: Confirm the `cygpath` command is
working properly on the local server.

COPTCA016E Error creating subdirectory for file
VALUE_0 **on local server.**

Explanation: No additional information is available
for this message.

COPTCA017E Error executing command on
endpoint: *VALUE_0*

Explanation: For more information, check the
`logs/tioExecuteCommandTrace.log` file on the endpoint
in the agent install directory.

COPTCA018E Error executing command on
endpoint: output is null

Explanation: For more information, check the
`logs/tioExecuteCommandTrace.log` file on the endpoint
in the agent install directory.

COPTCA019E Error converting path *VALUE_0* **to**
DOS style path. Error message is:
VALUE_1.

Explanation: Confirm the `cygpath` command is
working properly on the local server.

COPTCA020E Error during WGet from the CopyFile
subagent: *VALUE_0*.

Explanation: No additional information is available
for this message.

COPTCA021E Error from the CopyFile subagent:
VALUE_0.

Explanation: For more information, check the
`logs/tioCopyFileTrace.log` file on the endpoint in the
agent install directory.

COPTCA022E Java VM property not set: *VALUE_0*.

Explanation: No additional information is available
for this message.

COPTCA023E Error loading agent config file
VALUE_0. **Error message is:** *VALUE_1*.

Explanation: No additional information is available
for this message.

TC driver manager subsystem messages

COPTDM001E   The system does not support the
VALUE_0 **operating system running Kula.**

Explanation: No additional information is available for this message.

COPTDM003E   The application is not specified.

Explanation: No additional information is available for this message.

COPTDM004E   Authentication is required, but the system cannot find the credentials for SAP ID "*VALUE_0***" and search key "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPTDM005E   The system cannot activate the server on the load balancer.

Explanation: No additional information is available for this message.

COPTDM006E   The system cannot add an inherited stack ID "*VALUE_0***" to another stack.**

Explanation: No additional information is available for this message.

COPTDM007E   The system cannot add the "*VALUE_0***" server to "***VALUE_1***" load balancer.**

Explanation: No additional information is available for this message.

COPTDM008E   The system cannot add new software stack entry parent ID "*VALUE_0***" and child ID "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPTDM009E   The system cannot copy the file "*VALUE_0***" to "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPTDM010E   The stack entry with parent ID "*VALUE_0***" and child stack ID "***VALUE_1***" already exists.**

Explanation: No additional information is available for this message.

COPTDM013E   The system cannot associate the "*VALUE_0***" stack with object ID *VALUE_1*.**

Explanation: No additional information is available for this message.

COPTDM014E   The system cannot deactivate the server on the load balancer.

Explanation: No additional information is available for this message.

COPTDM015E   The system cannot find the "*VALUE_0***" application protocol.**

Explanation: No additional information is available for this message.

COPTDM016E   The system cannot find the service access point for the "*VALUE_0***" protocol.**

Explanation: No additional information is available for this message.

COPTDM017E   The system cannot find the default protocol endpoint for device ID "*VALUE_0***", operation "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPTDM018E   The system cannot find the device operation type "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM020E   The system cannot find the service access point ID "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM021E   The system cannot find the server with IP address *VALUE_0*.

Explanation: No additional information is available for this message.

COPTDM022E   The system cannot find the "*VALUE_0***" software product.**

Explanation: No additional information is available for this message.

COPTDM023E   The system cannot find the virtual IP address *VALUE_0*.

Explanation: No additional information is available for this message.

COPTDM024E   The system cannot install the "_VALUE_0_**" software product. Review the execution logs for more details.**

Explanation: No additional information is available for this message.

COPTDM025E   The system cannot install the "_VALUE_0_**" software stack. Review the execution logs for more details.**

Explanation: No additional information is available for this message.

COPTDM026E   The system cannot open the *VALUE_0* **file.**

Explanation: No additional information is available for this message.

COPTDM027E   The system cannot remove the *VALUE_0* **network interface.**

Explanation: No additional information is available for this message.

COPTDM028E   The system cannot remove the "_VALUE_0_**" server from load balancer "**_VALUE_1_**".**

Explanation: No additional information is available for this message.

COPTDM029E   The system cannot retrieve the root element from the XML file.

Explanation: No additional information is available for this message.

COPTDM030E   The system cannot save the changes.

Explanation: No additional information is available for this message.

COPTDM032E   The system cannot uninstall the "_VALUE_0_**" software product. Review the execution logs for more details.**

Explanation: No additional information is available for this message.

COPTDM033E   The system cannot uninstall the "_VALUE_0_**" software stack. Review the execution logs for more details.**

Explanation: No additional information is available for this message.

COPTDM034E   The system cannot update the status for the "_VALUE_0_**" software.**

Explanation: No additional information is available for this message.

COPTDM036E   The system cannot remove the *VALUE_0* **network interface. Remove the real IP and then try again to remove the network interface.**

Explanation: No additional information is available for this message.

COPTDM037E   The system cannot find the real IP address with network interface ID *VALUE_0*.

Explanation: No additional information is available for this message.

COPTDM038E   The system cannot find the service access point from device ID *VALUE_0*.

Explanation: No additional information is available for this message.

COPTDM039E   The system cannot find the local server in the DCM database to perform the logical operation.

Explanation: No additional information is available for this message.

COPTDM040E   The system cannot uninstall the application. The site name is null.

Explanation: No additional information is available for this message.

COPTDM041E   The left hand side string is null, but the right hand side string is *VALUE_0*.

Explanation: No additional information is available for this message.

COPTDM042E   The left hand side string is *VALUE_0*, **but the right hand side string is different.**

Explanation: No additional information is available for this message.

COPTDM044E   The argument is not valid. The RuntimeParameters value is null.

Explanation: No additional information is available for this message.

COPTDM045E   The argument is not valid because the RuntimeParameters value cannot be null.

Explanation: No additional information is available for this message.

COPTDM051E   The system cannot find the *VALUE_0* software stack within *VALUE_1*.

Explanation: No additional information is available for this message.

COPTDM052E   The system cannot look up the software stack entry with parent ID *VALUE_0* and child stack ID *VALUE_1*.

Explanation: No additional information is available for this message.

COPTDM054E   An error occurred. The system cannot find the *VALUE_0* workflow.

Explanation: No additional information is available for this message.

COPTDM057E   A driver error occurred. The *VALUE_0* server is already known by the load balancer *VALUE_1*.

Explanation: No additional information is available for this message.

COPTDM059E   The database connection is not functioning properly.

Explanation: No additional information is available for this message.

COPTDM060E   The JDBC driver caused an SQL exception.

Explanation: No additional information is available for this message.

COPTDM061E   The DCM object is not configured to retrieve the packager information.

Explanation: No additional information is available for this message.

COPTDM062E   The system cannot allocate the IP address.

Explanation: No additional information is available for this message.

COPTDM063E   The system cannot allocate the server.

Explanation: No additional information is available for this message.

COPTDM064E   The system cannot allocate virtual server "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM065E   The system cannot commit unknown discovered devices from the NetView® dump file: *VALUE_0*.

Explanation: An error occurred while the system attempted to commit the unknown devices to the database from the Java plug-in DiscoveryNetviewGetNewDevices.

Operator response: Try running the NetView Discover workflow again. If the problem continues, contact your database system administrator.

COPTDM066E   The system cannot configure monitoring for the "*VALUE_0*" resource that uses the "*VALUE_1*" monitoring application. Request ID: "*VALUE_2*".

Explanation: The system cannot configure monitoring for the resource.

Operator response: Search the workflow execution history for errors that use the request ID. Review all the transitions and then try again.

COPTDM068E   The layer 1 interface type is not valid for switch port "*VALUE_0*/*VALUE_1*" on device ID "*VALUE_2*".

Explanation: No additional information is available for this message.

COPTDM069E   The system cannot find the access control list by network interface ID "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM070E The system cannot find the service access point for device ID "*VALUE_0*" with protocol "*VALUE_1*" and context "*VALUE_2*".

Explanation: No additional information is available for this message.

COPTDM071E The system cannot find a service access point for device ID "*VALUE_0*" with protocol "*VALUE_1*" and credentials key "*VALUE_2*".

Explanation: No additional information is available for this message.

COPTDM072E The system cannot find the service access point for device ID "*VALUE_0*" with protocol "*VALUE_1*" on port "*VALUE_2*" and context "*VALUE_3*".

Explanation: No additional information is available for this message.

COPTDM073E The system cannot find the *VALUE_0* discovery keys file.

Explanation: The DiscoveryKeys.ini file might not be located in the config subdirectory.

Operator response: Create the DiscoveryKeys.ini file and copy it to the TIO_HOME/config subdirectory.

COPTDM074E The system cannot find the software entity parameter for entry ID "*VALUE_0*" named "*VALUE_1*".

Explanation: No additional information is available for this message.

COPTDM075E The system cannot find the management IP address for device ID "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM076E There are no client credentials on device ID "*VALUE_0*" that are usable for the host SAP ID "*VALUE_1*". Please review the documentation for SAPs and credentials and ensure your client and host credentials match.

Explanation: No additional information is available for this message.

COPTDM077E The system cannot find the monitoring application with ID "*VALUE_0*".

Explanation: The system cannot find the monitoring application with the given ID.

Operator response: Provide a valid monitoring application ID.

COPTDM078E The system cannot find the netboot-enabled NIC for system ID "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM079E The system cannot find the network interface name for network interface ID "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM080E The system cannot find the password credentials "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM081E The system cannot find the software product parameter for product ID "*VALUE_0*" named "*VALUE_1*".

Explanation: No additional information is available for this message.

COPTDM082E The system cannot find the RSA credentials "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM083E The system cannot find credentials for the file copy with the SAP ID "*VALUE_0*" and credentials key "*VALUE_1*".

Explanation: No additional information is available for this message.

COPTDM084E The system cannot find the SNMP credentials "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM085E **The system cannot find the credentials for device ID "***VALUE_0***" and the SAP ID "***VALUE_1***" with the credentials key "***VALUE_2***".**

Explanation: No additional information is available for this message.

COPTDM087E **The system cannot find the software product ID "***VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM088E **The subnetwork ID is not specified and the system cannot derive the subnetwork ID from the IP address.**

Explanation: No additional information is available for this message.

COPTDM089E **The system cannot find the switch port ID "***VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM090E **The system cannot find the user credentials "***VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM091E **The system cannot install the application on ***VALUE_0***.**

Explanation: No additional information is available for this message.

COPTDM092E **The system cannot install the "***VALUE_0***" software fix pack because it is not approved.**

Explanation: No additional information is available for this message.

COPTDM093E **The system cannot process the live upgrade for application tier ID: ***VALUE_0*** with the "***VALUE_1***" software fix pack because a server with an installed fix pack cannot coexist in the same application tier with servers that have not installed the fix pack.**

Explanation: No additional information is available for this message.

COPTDM094E **The system cannot find the local server "***VALUE_0***" in the DCM database for the performing operation.**

Explanation: No additional information is available for this message.

COPTDM095E **The system cannot locate the "***VALUE_0***" repository host property.**

Explanation: No additional information is available for this message.

COPTDM096E **The system cannot locate the "***VALUE_0***" repository server.**

Explanation: No additional information is available for this message.

COPTDM097E **The system cannot locate the "***VALUE_0***" software product in the "***VALUE_1***" stack.**

Explanation: No additional information is available for this message.

COPTDM098E **The system cannot move port #***VALUE_0*** on switch "***VALUE_1***".**

Explanation: No additional information is available for this message.

COPTDM099E **The system cannot reboot device ID "***VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM100E **The system cannot remove the monitoring function for resource "***VALUE_0***" from the "***VALUE_1***" monitoring application. Request ID "***VALUE_2***".**

Explanation: The system cannot remove the monitoring function for the resource.

Operator response: Search the workflow execution history for errors that use the request ID. Review all the transitions and then try again.

COPTDM101E **The system cannot start the monitoring resource "***VALUE_0***" using the "***VALUE_1***" monitoring application. Request ID "***VALUE_2***".**

Explanation: The system cannot start monitoring the resource.

Operator response: Search the workflow execution history for errors that use the request ID. Review all

the transitions and then try again.

COPTDM102E   The system cannot stop the monitoring resource "*VALUE_0***" using the "***VALUE_1***" monitoring application. Request ID "***VALUE_2***".**

Explanation: The system cannot stop monitoring the resource.

Operator response: Search the workflow execution history for errors that use the request ID. Review all the transitions and then try again.

COPTDM103E   The system cannot uninstall the application on ***VALUE_0*.**

Explanation: No additional information is available for this message.

COPTDM104E   The system detected an exception in the Java Static Method Invocation command driver (MethodInvocationVariableBroker).

Explanation: No additional information is available for this message.

COPTDM105E   An error occurred in the embedded logical device operation.

Explanation: No additional information is available for this message.

COPTDM106E   The system cannot find compatible SAPs between device ID "*VALUE_0***" and "***VALUE_1***" for operation "***VALUE_2***".**

Explanation: No additional information is available for this message.

COPTDM107E   The argument (*VALUE_0***="***VALUE_1***") is not valid. Make sure that the parameter is of the right type and that it is not empty.**

Explanation: No additional information is available for this message.

COPTDM108E   The integer value "*VALUE_0***" is not valid.**

Explanation: No additional information is available for this message.

COPTDM109E   The load balancing algorithm "*VALUE_0***" is not valid.**

Explanation: No additional information is available for this message.

COPTDM110E   The SNMP value (*VALUE_0***="***VALUE_1***", type ***VALUE_2***) is not valid.**

Explanation: No additional information is available for this message.

COPTDM111E   The SSH path is not valid.

Explanation: No additional information is available for this message.

COPTDM112E   The SSH user name "*VALUE_0***" is not valid.**

Explanation: No additional information is available for this message.

COPTDM113E   The value of the variable ***VALUE_0* is not specified.**

Explanation: No additional information is available for this message.

COPTDM114E   The DCM object ID ***VALUE_0* is locked in the same deployment request (ID: ***VALUE_1***).**

Explanation: No additional information is available for this message.

COPTDM115E   No device model is associated with resource "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM116E   At least one power supply is required for device ID "*VALUE_0***".**

Explanation: No additional information is available for this message.

COPTDM117E   The system cannot unlock the DCM object ID ***VALUE_0* because it is not locked.**

Explanation: No additional information is available for this message.

COPTDM118E   The ***VALUE_0* output file is not specified.**

Explanation: The output dump file or scan file from the discovery technology has not been specified.

Operator response: Verify that the discovery workflows specify a valid file name.

**COPTDM119E   No device is associated with SAP ID:
"*VALUE_0*".**

Explanation: No additional information is available
for this message.

**COPTDM120E   The system cannot reach IP address
"*VALUE_0*" by SNMP.**

Explanation: No additional information is available
for this message.

COPTDM121E   A driver error occurred.

Explanation: No additional information is available
for this message.

**COPTDM123E   The SNMP type "*VALUE_0*" is not
valid.**

Explanation: No additional information is available
for this message.

**COPTDM124E   The system cannot find the file
"*VALUE_0*".**

Explanation: No additional information is available
for this message.

**COPTDM126E   For this operation, the credentials ID
"*VALUE_0*" must be password
credentials.**

Explanation: No additional information is available
for this message.

COPTDM128E   Protocol type "*VALUE_0*" is not valid.

Explanation: No additional information is available
for this message.

**COPTDM129E   For this operation, the credentials ID
"*VALUE_0*" must be RSA credentials.**

Explanation: No additional information is available
for this message.

**COPTDM130E   For this operation, the credentials ID
"*VALUE_0*" must be SNMP credentials.**

Explanation: No additional information is available
for this message.

**COPTDM131E   The SecureShell (SSH) configuration
is not valid.**

Explanation: No additional information is available
for this message.

**COPTDM132E   For this operation, the credentials ID
"*VALUE_0*" must be password
credentials or RSA credentials.**

Explanation: No additional information is available
for this message.

**COPTDM133E   The timeout value
VALUE_0=*VALUE_1* is not valid.**

Explanation: No additional information is available
for this message.

**COPTDM134E   The switch configuration for VLAN #
VALUE_0 is not correct.**

Explanation: No additional information is available
for this message.

COPTDM136E   "The IP address cannot be null.

Explanation: No additional information is available
for this message.

**COPTDM137E   The load balancer reached its
maximum number of real servers.**

Explanation: No additional information is available
for this message.

**COPTDM138E   A default route must be specified for
the destination subnetwork.**

Explanation: No additional information is available
for this message.

COPTDM141E   The PING failed.

Explanation: No additional information is available
for this message.

COPTDM142E   The protocol "*VALUE_0*" is not valid.

Explanation: No additional information is available
for this message.

**COPTDM143E   The root virtual directory must be
defined.**

Explanation: No additional information is available
for this message.

COPTDM144E   A *VALUE_0* server already exists.

Explanation: No additional information is available
for this message.

COPTDM148E The system cannot create the new device model "*VALUE_0*" because it already exists.

Explanation: No additional information is available for this message.

COPTDM150E An error occurred while the system installed the driver "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM151E The format for the TC Driver item "*VALUE_0*" is not valid.

Explanation: No additional information is available for this message.

COPTDM152E The TCDriver "*VALUE_0*" is missing item "*VALUE_1*".

Explanation: No additional information is available for this message.

COPTDM153E The "*VALUE_0*" parameter from the TC Driver item "*VALUE_1*" is missing.

Explanation: No additional information is available for this message.

COPTDM154E An error occurred while the system uninstalled driver "*VALUE_0*".

Explanation: No additional information is available for this message.

COPTDM155E An error occurred when the system tried to execute the "*VALUE_0*" workflow.

Explanation: No additional information is available for this message.

COPTDM157E The request timed out after *VALUE_0* milliseconds.

Explanation: No additional information is available for this message.

COPTDM158E The system cannot perform a live upgrade of the software fix pack *VALUE_0* on the *VALUE_1* application tier.

Explanation: No additional information is available for this message.

COPTDM159E The system cannot find the sitename in the *VALUE_0* XML file.

Explanation: No additional information is available for this message.

COPTDM160E The system cannot locate the source package path.

Explanation: No additional information is available for this message.

COPTDM161E A deployment engine exception occurred: *VALUE_0*.

Explanation: No additional information is available for this message.

COPTDM162E A deployment error occurred.

Explanation: No additional information is available for this message.

COPTDM165E A RemoteInstaller error occurred.

Explanation: No additional information is available for this message.

COPTDM166E The utility path must be specified.

Explanation: No additional information is available for this message.

COPTDM167E VLAN *VALUE_0* does not exist.

Explanation: No additional information is available for this message.

COPTDM169E An error occurred while the system installed the "*VALUE_0*" driver. The driver status must be *VALUE_1*.

Explanation: No additional information is available for this message.

COPTDM170E An error occurred while the system installed the "*VALUE_0*" driver because the system cannot install a dependent TC driver.

Explanation: No additional information is available for this message.

COPTDM171E An error occurred while the system installed the "*VALUE_0*" driver because the system cannot execute a post-installation on a dependent TC driver.

Explanation: No additional information is available for this message.

COPTDM172E   An error occurred while the system uninstalled the "*VALUE_0*"driver because the driver status must be *VALUE_1*.

Explanation: No additional information is available for this message.

COPTDM173E   The configuration directory must be specified in the tcdrivermanager.xml file.

Explanation: No additional information is available for this message.

COPTDM174E   The driver directory must be specified in the "-Dkanaha.drivers=" VM property.

Explanation: No additional information is available for this message.

COPTDM175E   The format for the TC driver documentation item is not valid. An exception occurred while the system was reading the documentation item.

Explanation: No additional information is available for this message.

COPTDM176E   An error occurred while the system invoked the configureMonitoring logical device operation for the "*VALUE_0*" resource using the "*VALUE_1*" monitoring application.

Explanation: An error occurred while the system invoked the MonitoringApplication.ConfigMonitoring logical device operation.

Operator response: Search for a workflow that implements the MonitoringApplication.ConfigMonitoring logical device operation. If the workflow exists, examine the transitions in the workflow.

COPTDM177E   An error occurred while the system invoked the removeMonitoring logical device operation for the "*VALUE_0*" resource using the "*VALUE_1*" monitoring application.

Explanation: An error occurred while the system invoked the MonitoringApplication.RemoveMonitoring logical device operation.

Operator response: Search for a workflow that implements the

MonitoringApplication.RemoveMonitoring logical device operation. If the workflow exists, examine the transitions of the workflow.

COPTDM178E   An error occurred while the system invoked the startMonitoring logical device operation for the "*VALUE_0*" resource that is using the "*VALUE_1*" monitoring application.

Explanation: An error occurred while the system invoked the MonitoringApplication.StartMonitoring logical device operation.

Operator response: Search for a workflow that implements the MonitoringApplication.StartMonitoring logical device operation. If the workflow exists, examine the transitions of the workflow.

COPTDM179E   An error while the system invoked the stopMonitoring logical device operation occured for the "*VALUE_0*" resource using the "*VALUE_1*" monitoring application.

Explanation: An error occurred while the system invoked the MonitoringApplication.StopMonitoring Logical Device Operation.

Operator response: Search for a workflow that implements the MonitoringApplication.StopMonitoring logical device operation. If the workflow exists, examine the transitions of the workflow.

COPTDM181E   The workflow *VALUE_0* is already installed in TCDriver *VALUE_1*.

Explanation: Workflow name must be unique.

COPTDM182E   The system cannot install the software stack because the specified software stack ID *VALUE_0* does not exist.

Explanation: The system cannot find the software stack by using the specified software stack ID.

COPTDM183E   Upgrade of TCDriver *VALUE_0* is not allowed

Explanation: Reinstall TCDriver with removed workflows or Java-plug-ins is not allowed if the removed workflow or Java-plug-in is referenced by other components of the system.

COPTDM184E   Overwriting of file *VALUE_0* is not allowed.

Explanation: No additional information is available for this message.

COPTDM185E   The file *VALUE_0* **is already used by TCDriver** *VALUE_1***.**

Explanation: TCDriver file cannot be overwritten by a file from another tcdriver.

COPTDM186E   The TCDriver object *VALUE_0***:** *VALUE_1* **is still used by other DCM objects.**

Explanation: Remove all references to the TCDriver and try again. You can also try to force the action.

COPTDM187E   The TCDriver *VALUE_0* **is not found in the directory** *VALUE_1* **specified by tcdrivermanager.xml in your configuration directory.**

Explanation: No additional information is available for this message.

COPTDM188E   The Installed TCDriver *VALUE_0* **has a newer version. Installed Version:** *VALUE_1* **To be installed version:** *VALUE_2*

Explanation: No additional information is available for this message.

COPTDM193E   Multiple default values were set for template property *VALUE_0***.**

Explanation: No additional information is available for this message.

COPTDM194E   No license is found for TCDriver *VALUE_0***.**

Explanation: No additional information is available for this message.

COPTDM195E   No driver information is found for TCDriver *VALUE_0***.**

Explanation: No additional information is available for this message.

COPTDM196E   The argument is not valid. The TCDriver cannot be null.

Explanation: The method for installing tcdriver has been passed an illegal or inappropriate argument.

Operator response: For more information, check the log file $TIO_LOGS\tcdrivermanager\ tcdrivermanager.log.

Utilities subsystem messages

COPUTL001E   A data migration system exception occurred. Exception: *VALUE_0***.**

Explanation: No additional information is available for this message.

COPUTL002E   The *VALUE_0* **script caused an error.**

Explanation: No additional information is available for this message.

COPUTL003E   The *VALUE_0* **LDAP migration caused an error.**

Explanation: No additional information is available for this message.

COPUTL004E   User Registry in LDAP already migrated to *VALUE_0*

Explanation: No migration is needed.

COPUTL005E   LDAP is not at the right state for coexisting migration.

Explanation: Coexisting migration cannot be used, select another migration method to continue migration.

Operator response: Check whether the LDAP is started. Make sure the LDAP has version 2.1 data in it

before running coexisting migration.

COPUTL006E   LDAP is not at the right state for creating a new LDAP for V5.1.

Explanation: The new user registry for V5.1cannot be started.

Operator response: Check whether the LDAP is started. Ensure that the LDAP does not have version 3.1 user registry data in it.

COPUTL007E   LDAP is not at the right state for transferring migrated data.

Explanation: The transfer of data between LDAPs cannot be started.

Operator response: Check whether the LDAP is started. Make sure that the LDAP does not have version 2.1 user registry data in it.

COPUTL008E   LDAP is not at the right state for cleanup mode.

Explanation: The cleanup mode cannot be started.

Operator response: Check whether the LDAP is started. The cleanup mode can only be started after coexisting migration or transfer of version 5.1 data is completed.

COPUTL009E   Usage: IDSCoexistMigration Migration-path root-userName password hostname port SSL(true/false) source-baseDN target-baseDN

Explanation: No additional information is available for this message.

COPUTL010E   Usage: IDSPostCoexist Migration-root userName password hostname port SSL(true/false) source-baseDN target-baseDN

Explanation: No additional information is available for this message.

COPUTL011E   Usage: IDSNewMigration Migration-path root-userName password hostname port SSL(true/false) source-baseDN

Explanation: No additional information is available for this message.

COPUTL012E   Usage: TransferMigration Migration-path source-userName source-password source-hostname source-port source-SSL(true/false) source-baseDN target-userName target-password target-hostname target-port target-SSL(true/false) target-baseDN

Explanation: No additional information is available for this message.

COPUTL013E   Usage: MSADMigration migration_homePath hostname principalFullDN(e.g. cn=hosting,cn=Users,dc=ibm,dc=com) password port ssl(true/false) baseDN(e.g. OU=TIO,DC=IBM,DC=com)

Explanation: No additional information is available for this message.

COPUTL014E   Cannot create a JDOM document object from the xml file *VALUE_0*.

Explanation: No additional information is available for this message.

COPUTL015E   Try to obtain file *VALUE_0* **from environment.**

Explanation: No additional information is available for this message.

COPUTL023E   Processing Migration Step: *VALUE_0*

Explanation: No additional information is available for this message.

COPUTL029E   Validation failed, the migrated db does not contain the following entries: *VALUE_0*

Explanation: No additional information is available for this message.

COPUTL033E   Failed SQL Message: *VALUE_0*

Explanation: No additional information is available for this message.

COPUTL042E   Creating group *VALUE_0* **failed, but process continue.**

Explanation: No additional information is available for this message.

COPUTL043E   Error Message: *VALUE_0*

Explanation: No additional information is available for this message.

COPUTL056E   LDAP migration failed. Check the log for error messages.

Explanation: No additional information is available for this message.

COPUTL057E   Cannot add group membership in user. Message from LDAP: *VALUE_0*

Explanation: No additional information is available for this message.

COPUTL058E   Cannot add user into group. Message from LDAP: *VALUE_0*

Explanation: No additional information is available for this message.

COPUTL059E   Cannot remove group membership from user. Message from LDAP: *VALUE_0*

Explanation: No additional information is available for this message.

COPUTL060E   Cannot remove member from the group. Message from LDAP: *VALUE_0*

Explanation: No additional information is available for this message.

Compliance Messages

COPDSE001E The system cannot update the given guest access desired state element because it is not stored in DCM. Its SecurityDesiredStateElementId is *VALUE_0*, **its UserAccountDesiredStateElmentId is** *VALUE_1*.

Explanation: No additional information is available for this message.

COPDSE002E The system cannot update the given root remote login desired state element because it is not stored in DCM. Its SecurityDesiredStateElementId is *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE003E The system cannot represent the object from class name as: *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE004E The system cannot update the attribute because there is no field name *VALUE_0* **in the class** *VALUE_1*.

Explanation: No additional information is available for this message.

COPDSE005E The system cannot update the attribute because there is no setter method name *VALUE_0* **in the class** *VALUE_1*.

Explanation: No additional information is available for this message.

COPDSE006E The system cannot update the attribute because the attribute value *VALUE_0* **cannot be converted into type** *VALUE_1*.

Explanation: No additional information is available for this message.

COPDSE007E The system cannot update the attribute because no object with name *VALUE_0* **can be found.**

Explanation: No additional information is available for this message.

COPDSE008E The property with the key value *VALUE_0* **in the device with ID** *VALUE_1* **is not defined.**

Explanation: No additional information is available for this message.

COPDSE009E The system cannot update the given boot password enablement desired state element because it is not stored in the data center model. Its SecurityDesiredStateElementId is *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE010E The system cannot update the given hard disk password enablement desired state element because it is not stored in the data center model. Its SecurityDesiredStateElementId is *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE011E The system cannot add the rule that is not of type: *VALUE_0* **to DesiredStateElement with type as:** *VALUE_1*.

Explanation: No additional information is available for this message.

COPDSE012E The system cannot remove the rule with ID *VALUE_0* **from DesiredStateElement with ID** *VALUE_1* **because the rule does not belong to the given DesiredStateElement.**

Explanation: No additional information is available for this message.

COPDSE013E The system cannot update the given AIX system logging desired state element because it is not stored in the data center model. Its DesiredStateElementId is *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE014E The system cannot update the given Linux system logging desired state element because it is not stored in the data center model. Its DesiredStateElementId is *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE015E **The DSE setting value to be validated cannot be null.**

Explanation: No additional information is available for this message.

COPDSE016E **The system cannot validate the non-supported DSE setting type:** *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE017E **The system cannot delete the file with ID** *VALUE_0*. **There is an associated** *VALUE_1* **with ID:** *VALUE_2* **that must be deleted first.**

Explanation: No additional information is available for this message.

COPDSE018E **The property with the key value as** *VALUE_0* **in the device with ID:** *VALUE_1* **is not defined.**

Explanation: No additional information is available for this message.

COPDSE019E **The system cannot update the given screen saver setting because the user account it belongs to is not stored in the data center model. The user name of the account is** *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE020E **The "Message log file name" setting for facility "***VALUE_0***" is not defined in "***VALUE_1***" with ID:** *VALUE_2*.

Explanation: No additional information is available for this message.

COPDSE021E **The system cannot instantiate the DesiredStateElement with type: "***VALUE_0***".**

Explanation: No additional information is available for this message.

COPDSE022E **An event cannot be fired because one or more of the broker, event, or eventType objects is null. Their values are broker: "***VALUE_0***", event: "***VALUE_1***", and eventType: "***VALUE_2***".**

Explanation: No additional information is available for this message.

COPDSE023E **The system cannot update the given customized desired state element because it is not stored in the data center model. Its DesiredStateElementId is** *VALUE_0*.

Explanation: No additional information is available for this message.

COPDSE024E **An unexpected error occurred when trying to invoke method "***VALUE_0***" on "***VALUE_1***" with ID:***VALUE_2***.**

Explanation: No additional information is available for this message.

COPDSE025E **Only a single computer can be used as the source of actual state information for the purpose of creating compliance checks.**

Explanation: No additional information is available for this message.

COPDSE026E **Only a computer or a computer group can be the target of a compliance check. The given device with ID "***VALUE_0***" is neither a computer group nor a computer.**

Explanation: No additional information is available for this message.

COPDSE100E **The input applied time** *VALUE_0* **for** *VALUE_0* **should be no later than current time.**

Explanation: No additional information is available for this message.

COPDSE101E **The input maximum password valid period** *VALUE_0* **must be equal to or longer than one day.**

Explanation: No additional information is available for this message.

COPDSE102E **The input setting** *VALUE_0* **value:** *VALUE_0* **must be non-negative.**

Explanation: No additional information is available for this message.

COPDSE103E Each permission character in the input permission string *VALUE_0* must be one of "-", "r", "w", "x", or "s".

Explanation: No additional information is available for this message.

COPDSE104E The input desired state name *VALUE_0* should be no longer than 256 characters.

Explanation: No additional information is available for this message.

COPDSE105E The input desired state description *VALUE_0* should be no longer than 2000 characters.

Explanation: No additional information is available for this message.

COPDSE106E The input service description *VALUE_0* should be no longer than 2000 characters.

COPDSE107E The input service name *VALUE_0* should be no longer than 256 characters.

Explanation: No additional information is available for this message.

COPDSE108E The input expected protocol *VALUE_0* should be no longer than 20 characters.

Explanation: No additional information is available for this message.

COPDSE109E The length of the input permission string *VALUE_0* should be no longer than 256 characters.

Explanation: No additional information is available for this message.

Group Messages

COPGRP001E Cannot add the object *VALUE_0* with type *VALUE_1* to the group *VALUE_2* with type *VALUE_3* because their types are incompatible.

Explanation: The object cannot be added because the type of the group and the type of the object to be added are not compatible.

COPGRP002E Cannot add the group *VALUE_0* to the group *VALUE_1* because it would cause a membership cycle.

Explanation: The source group cannot be added to the target group because the target group is already a member of the source group or another group that is a member of the source group.

COPGRP003E An error occurred during XML import processing. The group with object ID *VALUE_0* could not be updated because it could not be found.

Explanation: An update operation for a group failed because the group could not be found.

COPGRP004E An error occurred during XML import processing. The group with object ID *VALUE_0* could not be deleted because it could not be found.

Explanation: A delete operation for a group failed because the group could not be found.

COPGRP005E An error occurred during XML import processing. The group membership with object ID *VALUE_0* could not be updated because it could not be found.

Explanation: An update operation for a group membership failed because the group could not be found.

COPGRP006E An error occurred during XML import processing. The group membership with object ID *VALUE_0* could not be deleted because it could not be found.

Explanation: A delete operation for a group membership failed because the group could not be found.

COPGRP007E An error occurred during XML import processing. The group member with name "*VALUE_0*", type "*VALUE_1*", and object ID *VALUE_2* could not be added to the group with name "*VALUE_3*" and ID *VALUE_4*.

Explanation: An operation to add a member to a group failed because the member is not a valid member for the group.

COPGRP008E Cannot add the object "*VALUE_0*" to the group "*VALUE_1*" because it is a dynamic group.

Explanation: The members of a dynamic group are

determined by a database query. It is not possible to add members to a dynamic group.

COPGRP009E   Cannot remove the object "*VALUE_0***" from the group "***VALUE_1***" because it is a dynamic group.**

Explanation: The members of a dynamic group are determined by a database query. It is not possible to remove individual members from a dynamic group.

COPGRP010E   Cannot remove all the members from the group "*VALUE_0***" because it is a dynamic group.**

Explanation: The members of a dynamic group are determined by a database query. It is not possible to

remove members from a dynamic group.

COPGRP011E   The group "*VALUE_0***" cannot become a dynamic group because it already has members in it.**

Explanation: The members of a dynamic group are determined by a database query. A group that already has one or more members cannot become a dynamic group.

COPGRP012E   The query "*VALUE_0***" could not be found.**

Explanation: A query was specified as an attribute of a group but that query could not be found. The XML import for the group failed.

Networking Messages

COPNET001E   There are multiple MPLS paths with name *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET002E   The system cannot delete the "*VALUE_0*" MPLS path because it is the active MPLS path for at least one MPLS tunnel.

Explanation: No additional information is available for this message.

COPNET003E   The system cannot delete the subnetwork with the ID "*VALUE_0*" because it is assigned to one or more access rules or routes. Review the access rules and delete them if necessary.

Explanation: No additional information is available for this message.

COPNET004E   The system cannot find the switch or the endstation endpoint *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET005E   The system did not find the *VALUE_0* switch port.

Explanation: No additional information is available for this message.

COPNET006E   The switch endpoint *VALUE_0* is not connected to a peer endpoint.

Explanation: No additional information is available for this message.

COPNET007E   The system cannot find the switch endpoint *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET008E   The system cannot find the MPLS path: *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET009E   The system cannot find the MPLS tunnel: *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET010E   The system cannot find the MPLS path hop: *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET011E   The system cannot find subnetwork *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET012E   The system cannot find the virtual IP: *VALUE_0*.

Explanation: No additional information is available for this message.

COPNET013E   The system cannot find the *VALUE_0* switch.

Explanation: No additional information is available for this message.

COPNET014E   The system cannot find VLAN:
VALUE_0.

Explanation: No additional information is available for this message.

COPNET015E   The switch endpoint mode VALUE_0 is
not valid.

Explanation: No additional information is available for this message.

COPNET016E   The switch endpoint encapsulation
VALUE_0 is not valid.

Explanation: No additional information is available for this message.

COPNET017E   There is no association between the
"VALUE_0" MPLS tunnel and the
"VALUE_1" MPLS path.

Explanation: No additional information is available for this message.

COPNET018E   The switch port "VALUE_0" is already
connected.

Explanation: No additional information is available for this message.

COPNET019E   The system cannot find the load
balancer: VALUE_0.

Explanation: No additional information is available for this message.

COPNET020E   The system cannot find the route:
VALUE_0.

Explanation: No additional information is available for this message.

COPNET021E   The system cannot find real IP:
VALUE_0.

Explanation: No additional information is available for this message.

COPNET022E   The system cannot find the load
balancer type: VALUE_0.

Explanation: No additional information is available for this message.

COPNET023E   The system cannot find the VALUE_0
router.

Explanation: No additional information is available for this message.

COPNET024E   The system cannot find the VALUE_0
access control list.

Explanation: No additional information is available for this message.

COPNET025   The system cannot find the address
space VALUE_0.

Operator response: Define the address space.

COPNET026E   The system cannot find the VALUE_0
access rule.

Explanation: No additional information is available for this message.

COPNET027E   The system cannot find the dynamic
IP address range VALUE_0.

Explanation: No additional information is available for this message.

COPNET028E   Invalid subnetwork netmask:
VALUE_0. A netmask must be in IP
format (nnn.nnn.nnn.nnn) or netmask
length format (a number between 1 and
32).

Explanation: No additional information is available for this message.

COPNET029E   Invalid VLAN number: VALUE_0. The
VLAN number must be between 1 and
4095.

Explanation: No additional information is available for this message.

RXA Messages

CTGRI0000E Could not establish a connection to the target machine with the authorization credentials that were provided.

Explanation: A connection to the target machine was denied. This is probably due to improper authorization credentials being specified.

Programmer response: Verify that the login name and password are valid for the target machine. For SSH logins, also verify that the key store name and passphrase are correctly specified. Retry the connection.

CTGRI0001E The application could not establish a connection to *machine hostname*

Explanation: A connection to the target machine is not possible because the hostname specified is not a valid hostname, or because of problems with the network.

Programmer response: Verify the specified hostname is valid and that the network connection to the target is active and retry the connection.

CTGRI0002E Session not established.

Explanation: An attempt was made to perform a remote operation before a session has been established with the target.

Programmer response: Call the beginSession() method before calling other remote methods.

CTGRI0003E The remote pathname specified could not be found: *pathname***.**

Explanation: The remote file or directory specified does not exist or cannot be accessed.

Programmer response: Verify that the path you specified exists and that it is accessible by remote operations with the proper ACLs.

CTGRI0004E An error occurred when reading from the local file: *pathname***.**

Explanation: The application could not successfully read the specified file from the local filesystem.

Programmer response: Verify that the local file specified exists and is readable.

CTGRI0005E An error occurred when writing to the local file: *pathname***.**

Explanation: The application could not successfully write the specified file to the local filesystem. The file might be read-only, in use, or there might be insufficient space on the local machine.

Programmer response: Verify that the local file

specified is not open or in read-only mode, and that it exists. Also verify that enough space is available on the target system.

CTGRI0006E An error occurred when writing to the remote file: *pathname***.**

Explanation: The specified file might be read-only, in use, or there might be insufficient space on the target.

Programmer response: The remote file specified is not open or in read-only mode, and that enough space is available on the target system.

CTGRI0007E An error occurred when reading the remote file: *pathname***.**

Explanation: The application could not successfully read the specified file from the target filesystem.

Programmer response: Verify that the file named on the target exists and is readable.

CTGRI0008E A unique directory could not be created.

Explanation: The application could not successfully create a uniquely-named directory on the remote system when a mkRandomDirectory method was called.

Programmer response: Remove unneeded ~CSRI* directories in the remote machine's temporary directory.

CTGRI0009E *pathname* **cannot be removed.**

Explanation: The application could not remove the specified file or directory.

Programmer response: Use the recursive flag on rmdir() to recursively remove directories, or use the force flag for files.

CTGRI0010E An error occurred when accessing the remote filesystem.

Explanation: The application encountered an error when accessing the remote filesystem.

Programmer response: Ensure that the remote machine is available and can be remotely accessed.

CTGRI0011E An error occurred when accessing the remote registry or service control manager.

Explanation: Access to the remote machine's remote registry access or service control might not be enabled or the specified login may not have the authorization to perform such actions.

Programmer response: Have the remote machine's

administrator enable remote registry access and verify that the credentials your application is submitting have sufficient privileges on the target to perform remote registry operations.

CTGRI0012E The requested registry key does not exist on the target machine.

Explanation: The HKEY_LOCAL_MACHINE registry key specified does not exist on the target machine.

Programmer response: Verify the syntax of the registry entry and retry the operation. If the syntax is valid, the key does not exist in the target.

CTGRI0013E The target machine's service list cannot be retrieved.

Explanation: An error occurred when trying to access the remote machine's service control manager to retrieve the service list.

Programmer response: Ensure that remote administration is enabled on the target.

CTGRI0014E A unique service name cannot be found on the target machine.

Explanation: An attempt was made to use a run() method but a uniquely-named Windows service could not be created on the remote machine.

Programmer response: All current service names are in use. Stop any unneeded services named *trisvc#* on the target machine.

CTGRI0015E The native Windows service binary cannot be read.

Explanation: The application cannot find the native Windows binary, which is used to run remote applications, anywhere in the classpath.

Programmer response: The trisvc.exe binary, which is normally located in an IBM Tivoli Remote Execution and Access JAR file, cannot be located. Verify that the TRIsvc.exe file is in the JAR file.

CTGRI0016E The target machine's remote service could not be started.

Explanation: The application could not start the native Windows service binary (*trisvc.exe*) on the remote machine.

Programmer response: Ensure that the *trisvc.exe* binary has been copied to the target machine.

CTGRI0017E An error occurred in RCP communication.

Explanation: A remote copy (rcp) operation failed.

Programmer response: Ensure that the rsh/rexec remote protocols are enabled on the target.

CTGRI0018E An error occurred in SCP communication.

Explanation: A secure copy (SCP) operation failed.

Programmer response: Ensure that the SSH remote protocol is enabled on the target.

CTGRI0019E RSH could not bind to any local privileged port.

Explanation: An RSH operation was attempted but failed because RSH could not bind to a privileged port.

Programmer response: nsure that the local machine has administrative privileges to open restricted ports.

CTGRI0020E Could not find the remote user *RemoteUser*.

Explanation: The specified remote username could not be found.

Programmer response: Verify that the specified username exists on the target machine.

CTGRI0021E The *charset_name* **character set is not supported.**

Explanation: This exception is thrown when no support is available for a requested charset.

Programmer response: Verify that the specified codeset is valid and any additional support JAR files are included in the CLASS_PATH.

CTGRI0022E *RemoteUser* **is not authorized to run shutdown.**

Explanation: This exception is thrown when shutdown is attempted from a non-privileged account.

Programmer response: Run shutdown as a privileged user.

CTGRI0023E An error occurred when executing the command: *command*.

Explanation: The remote command returned a non 0 return code, indicating a failure. This could be a permissions, syntax or path problem.

Programmer response: Verify the remote command is in the current path, the user has permissions to execute the command, and that the command syntax is correct.</

CTGRI0024E Access to *Resource* **is denied.**

Explanation: The operation failed because access to a resource has been denied. This could be due to a permission problem or a sharing violation.

Programmer response: Verify that the user has sufficient authority to perform the operation and that the resource being accessed is not locked.

CTGRI0025E The file *File* **is not a valid SSH key.**

Explanation: The format of the specified SSH key file is not valid or not supported.

Programmer response: Verify that the file is a valid

SSH key and that the format is supported.

CTGRI0026E A connection could not be completed to *target* **during the specified timeout interval.**

Explanation: The connection process is taking longer than the specified time interval. This may be due to slow network connections, or because a problem is preventing completion of the connection process.

Programmer response: Verify that there isn't a problem preventing completion of the connection process or specify a longer connection timeout interval.

Software Distribution Messages

DISSP6001E File not found.

Explanation: The system does not recognize the file name you specified.

System action: Operation failed.

Operator response: Specify the correct file name.

DISSP6002E File not found. Are you sure you want to use this name?

Explanation: The system does not recognize the file name you specified.

System action: Operation failed.

Operator response: Specify the correct file name.

DISSP6003E Directory not found. Are you sure you want to use this name?

Explanation: The system does not recognize the directory path you specified.

System action: Operation failed.

Operator response: Specify the correct directory path.

DISSP6004W The variable *variable name* **is not present in the variable list. Select YES to insert it now, or NO to cancel the operation**

Explanation: See message.

Message Variables: where
variable name
      The name of the variable

System action: Operation failed.

Operator response: Follow the instructions presented in the user interface.

DISSP6005W You cannot change the package name

Explanation: See message.

System action: Operation failed.

Operator response: Specify the correct package name.

DISSP6006W Check that all the nested variables are defined

Explanation: You specified one or more nested environment variables in the software package that are not defined to the system.

System action: Operation failed.

Operator response: Make sure that you define all the nested variables to the system before specifying them in the software package.

DISSP6007W The specified PDF name is not valid. The item *item name* **is required.**

Explanation: The system does not recognize the name of the package definition file you specified. The item name is also required.

Message Variables: where
item name
      The name of the item.

System action: Operation failed.

Operator response: In the package definition file, specify the item name.

DISSP6008W The specified PDF name is not valid. The section *section name* **is required.**

Explanation: The name of the software package definition file you specified is not correct. The section name is also required.

Message Variables: where
section name
      The name of the section.

System action: Operation failed.

Operator response: In the package definition file, specify the section name.

DISSP6009W File *file name* **not found in** *directory name* **Would you correct it?**

Explanation: The name of the file you specified does not exist in the specified directory.

Message Variables: where
file name
　　　The name of the file.
directory name
　　　The name of the directory.

System action: Operation failed.

Operator response: Specify the correct file name, or verify that it was created in the specified directory.

DISSP6010W The file *file name* **doesn't exist**

Explanation: The system does not recognize the file name you specified.

Message Variables: where
file name
　　　The name of the file.

System action: Operation failed.

Operator response: Specify the correct file name.

DISSP6011W Enter a valid image directory

Explanation: You have specified an incorrect name for the image directory.

System action: Operation failed.

Operator response: Specify the correct image directory name.

DISSP6012W Enter a valid Solaris Package File

Explanation: You have specified an incorrect name for the Solaris package file.

System action: Operation failed.

Operator response: Specify the correct Solaris package file name.

DISSP6013E File not found

Explanation: The system does not recognize the file name you specified.

System action: Operation failed.

Operator response: Specify the correct file name.

DISSP6014W *file name* **file not found. Please verify the correct file name was given**

Explanation: The system does not recognize the file name you specified.

Message Variables: where
file name
　　　The name of the file.

System action: Operation failed.

Operator response: Specify the name of a existing file.

DISSP6015E An error occurred loading the package

Explanation: An error occurred when an attempt was made to load the software package.

System action: The operation is not performed.

Operator response: Check that the package contains no incorrect values. Verify that all the libraries are present on the system.

DISSP6016E An error occurred saving the package

Explanation: An error occurred when an attempt was made to save the software package.

System action: The operation is not performed.

Operator response: Verify that the package was created correctly. Verify that all the libraries are present on the system.

DISSP6018E Failed to build *file name*

Explanation: An error occurred while the file was being built.

Message Variables: where
file name　　　The name of the file.

System action: The operation is not performed.

Operator response: Check the integrity of the file by, for example, re-importing the software package or rebuilding the software package block. Verify that the connection to the server has been correctly established.

DISSP6019E Failed to build *file name***. The OS/400 Preparation Site software could not be correctly installed on your OS/400 system, or your Software Package could contain invalid objects, or the user is not authorized to perform the operation**

Explanation: See message.

Message Variables: where
file name　　　The name of the file.

System action: Operation failed.

Operator response: Verify that the following conditions apply to the system:

- The OS/400® Preparation Site was installed correctly on the system.
- The software package contains valid objects.
- The user is authorized to perform the operation.

DISSP6020E Failed to export *file name*

Explanation: An error occurred while the file was being exported.

Message Variables: where
file name   The name of the file.

System action: The operation is not performed.

Operator response: Check that the package contains no incorrect values. Verify that all the libraries are present on the system.

DISSP6021E Failed to import *file name*

Explanation: An error occurred while the file was being imported.

Message Variables: where
file name
       The name of the file.

System action: The operation is not performed.

Operator response: Check that the package contains no incorrect values. Verify that all the libraries are present on the system.

DISSP6022E Failed to run *command name*. **Check the path variable**

Explanation: See message.

Message Variables: where
command name
       The name of the variable.

System action: Operation failed.

Operator response: Verify that the path variable is correct and submit the command again.

DISSP6023E Directory not found

Explanation: The system does not recognize the directory name you specified.

System action: Operation failed.

Operator response: Specify the correct directory name.

DISSP6024E Link not found

Explanation: The system does not recognize the link you specified.

System action: Operation failed.

Operator response: Specify the correct link path.

DISSP6025W The changes made on this package cannot be saved

Explanation: The system cannot save the changes made on this package. The managed node from which you want to save the changes is not the source host.

System action: The operation is not performed.

Operator response: Open the Software Package Editor from the source host on which the software package is located.

DISSP6026E Packages containing both device and desktop actions are not supported. Include either desktop or device actions.

Explanation: You cannot create a software package that contains actions for both devices and desktop systems

System action: Operation failed.

Operator response: Create a software package for devices and a separate software package for desktop systems.

DISSP6027W The minimum value specified must not be greater than the maximum value specified

Explanation: In the range you specified the minimum value is greater than the maximum value.

System action: The operation is not performed.

Operator response: Specify a correct range of values.

DISSP6028W Invalid value: *value* **Max value allowed: 65535**

Explanation: You specified an invalid value.

Message Variables: where
value   The specified value.

System action: The operation is not performed.

Operator response: Specify a correct value.

DISSP6029W The specified value is not within the valid range.

Explanation: You specified a value that is not within the valid range.

System action: The operation is not performed.

Operator response: Specify a value within the valid range.

DISSP6030W The configuration file *file name* **was not found**

Explanation: You specified a configuration file that does not exist.

Message Variables: where
file name   The name of the file.

System action: The operation is not performed.

Operator response: Specify the correct file name and try the operation again.

DISSP6031W The sample file *file name* **was not found**

Explanation: You specified a sample file that does not exist.

Message Variables: where
file name   The name of the file.

System action: The operation is not performed.

Operator response: Specify the correct file name and try the operation again.

DISSP6032W You must select a file from the browser to open the Software Package Editor

Explanation: See message.

System action: The operation is not performed.

Operator response: Select a file from the browser and then open the Software Package Editor.

DISSP6033W Unable to create the working directory

Explanation: You specified an incorrect path for the working directory.

System action: The operation is not performed.

Operator response: Specify a correct path and try the operation again.

DISSP6034E Enter a valid MSI file

Explanation: You specified an invalid MSI file.

System action: The operation is not performed.

Operator response: Specify a valid MSI file.

DISSP6036W Enter a valid Device Application file

Explanation: You specified an invalid device application file.

System action: The operation is not performed.

Operator response: Specify a valid file.

DISSP6037W The configuration file specified is not valid

Explanation: You specified an invalid configuration file.

System action: The operation is not performed.

Operator response: Specify a valid file.

DISSP6038W Enter a valid Provisioning file

Explanation: You specified an invalid provisioning file.

System action: The operation is not performed.

Operator response: Specify a valid file.

DISSP6039W This package contains at least one action that cannot be managed using the Software Package Editor. The remaining actions, if any, will be displayed correctly. To edit the whole package content, save it to .SPD format and modify it.

Explanation: The package you are trying to open contains actions for Nokia 9500 devices, which cannot be viewed or edited using the Software Package Editor. If the package contains other actions for devices, these actions will be displayed and edited correctly.

System action: The software package is displayed in the Software Package Editor, but the actions for Nokia 9500 devices are not displayed.

Operator response: To edit the whole software package, save it to .spd format and modify it as necessary.

DISSP6040E Package version and Package location are required fields.

Explanation: You must fill in all fields in this dialog box.

System action: The operation is not performed.

Operator response: Fill in all fields.

DISSP6042W Enter a value for the caption.

Explanation: You must fill in the caption field.

System action: The operation is not performed.

Operator response: Fill in the caption field.

DISSP6042E Enter a valid directory.

Explanation: The directory format you specified is not valid.

System action: The operation is not performed.

Operator response: Enter the path to a valid directory.

DISSP6044E Enter a value in the suggested range.

Explanation: You have entered a value which is outside the supported range. The correct range is displayed in the GUI by the relevant text field.

System action: The operation is not performed.

Operator response: Enter a value in the suggested range.

DISSP6044E Enter a value in the suggested range.

Explanation: You have entered a value which is outside the supported range. The correct range is displayed in the GUI by the relevant text field.

System action: The operation is not performed.

Operator response: Enter a value in the suggested range.

DISSP6046E An error occurred while unpacking the SPB.

Explanation: An error occurs when you try to unpack an SPB by selecting **Open → Open from local filesystem**.

System action: The operation is not performed.

Operator response: To investigate the problem see the following file:

$BINDIR/../swdis/work/*software_package_name.version*.log

DISSP6047E An error occurred while retrieving the list of packages. See the log for details.

Explanation: An error occurs when you try to retrieve the list of packages by selecting **Open → Open from repository**. This is due to communication problems.

System action: The operation is not performed.

Operator response: Verify the following conditions:

- The connection to Tivoli Provisioning Manager by checking the hostname, the port, and the URL definition in the **Preferences** page of
- The presence of a firewall.
- The Tivoli Provisioning Manager is up and running.

DISSP6048E An error occurred while retrieving the list of file repositories. See the log for details.

Explanation: An error occurs when you try to retrieve the list of file repositories by selecting **Open → Open from repository**. This is due to communication problems.

System action: The operation is not performed.

Operator response: Check the communication between the Software Package Editor and the Tivoli Provisioning Manager repository.

DISSP6049E An error occurred while downloading the package. See the log for details.

Explanation: An error occurs when you download a software package from a repository by selecting **Open → Open from repository**.

System action: The operation is not performed.

Operator response: Check the configuration of the Tivoli Provisioning Manager file repository that contains the software package and then retry.

For additional details see the workflow log in the Tivoli Provisioning Manager WebUI, and the swdisGUI.tr1 and swdisGUI.tr2 trace files.

DISSP6050E An error occurred while uploading the package. See the log for details.

Explanation: An error occurs when you upload a software package to a repository by selecting **Save → Save to repository**.

System action: The operation is not performed.

Operator response: Check the configuration of the Tivoli Provisioning Manager file repository and then retry.

For additional details see the workflow log in the Tivoli Provisioning Manager WebUI, and the swdisGUI.tr1 and swdisGUI.tr2 trace files.

DISSP6051E An error occurred while saving the package to a temporary file *value*

Explanation: An error occurs when you save the package to a temporary file by selecting by selecting **Save → Save to local filesystem**. The file system might be full or the path does not exist.

Message Variables: where
value   The temporary file name.

System action: The operation is not performed.

Operator response: Check the disk space and the existence of the temporary folder in the Software Package Editor configuration parameters.

DISSP6052E Authentication error. The username or password are not correct.

Explanation: The connection to Tivoli Provisioning Manager fails because you entered a wrong username or password.

System action: The operation is not performed.

Operator response: Check that both username and

password are defined in Tivoli Provisioning Manager
WebUI.

Chapter 11. Tivoli Common Agent Services messages

This chapter lists the available Tivoli Common Agent Services messages.

Common Agent messages

BTC0006I   The common agent has stopped.

Explanation: No additional information is available for this message.

BTC0007I   The common agent MBeanServer has started.

Explanation: No additional information is available for this message.

BTC0008I   The common agent is ready for autonomic on demand e-business.

Explanation: The common agent has started, and it is running.

BTC1003I   The security service started successfully and has been deployed.

Explanation: The common agent security service started successfully and has been deployed.

BTC1004I   The security service stopped successfully and has been undeployed.

Explanation: The common agent security service stopped successfully and has been undeployed.

BTC1005I   The system is attempting to register or obtain credentials with the agent manager *manager_name***.**

Explanation: The service is attempting to register with the specified agent manager.

BTC1006I   The system is attempting to unregister with the agent manager *manager_name***.**

Explanation: The service is attempting to unregister with the specified agent manager.

BTC1007E   The system failed to access the properties that are needed to perform registration. Verify that the registration properties exist in the endpoint.properties file.

Explanation: The common agent registration service was unable to register the common agent because the

necessary properties could not be accessed. The endpoint.properties file might be corrupted or missing.

System action: If the common agent cannot register, it will not be able to communicate with the agent manager. The product subagent bundle will not be able to provide data to its resource manager.

Administrator Response: Check the endpoint.properties file to make sure that it is not corrupted and that the properties it contains are correct for your environment. If necessary, correct the information in the properties file. Then stop and restart the common agent on the machine.

BTC1008W   An error occurred when the common agent registration service attempted to access an important registration parameter. The default value *value* **will be used.**

Explanation: The common agent registration service was unable to access an important registration parameter. The endpoint.properties file might be corrupted or missing.

System action: The common agent registration service will attempt to access the properties file again. If the next attempt is unsuccessful, the service will use the specified default value for this parameter.

Administrator Response: Check the endpoint.properties file to see if it is corrupted or missing. If the parameters in the endpoint.properties file are correct, stop and restart the common agent. If the error continues, contact customer support.

BTC1009I   Registration parameter: *variable*

Explanation: This variable is used by the common agent registration service to register the common agent.

BTC1010E   The common agent registration service failed to obtain a certificate and key pair from the agent manager.

Explanation: The common agent registration service was unable to obtain the security certificate and key pair from the agent manager.

System action: The common agent is unable to initialize security credentials. If this continues, the

common agent will send a notification to the agent recovery service.

Administrator Response: Check the agent manager logs to find information that might help you diagnose the problem. Security issues should be resolved as soon as possible.

BTC1011E   **A failure occurred while accessing the key store. The common agent was unable to store the certificate on the local machine.**

Explanation: The common agent registration service was unable to store the security certificate on the common agent machine. This might be caused by a network problem, or the machine might be offline.

System action: The common agent will not be able to make nor accept secure network connections. The common agent will send a notification to the agent recovery service.

Administrator Response: Make sure the machine is running and is reachable through the network.

BTC1012E   **The encryption algorithm was not found. The JVM might not support** *variable* **or** *variable*. **Changing JVMs or JSSE providers might resolve this issue.**

Explanation: The required encryption algorithm was not found. The encryption algorithm is necessary for proper security authentication.

System action: The common agent will not start unless this problem is resolved.

Administrator Response: Make sure the JVM that is shipped with the common agent is being used.

BTC1016I   **The common agent registration service successfully obtained key and certificate from the agent manager.**

Explanation: The security certificate and key were successfully obtained from the agent manager.

BTC1017I   **The security certificate and key has been stored on the local file system.**

Explanation: The security certificate and key were successfully stored on the local file system. No user action is necessary.

BTC1018I   **The common agent security credentials are being regenerated.**

Explanation: The system is creating a new set of security credentials for the common agent.

BTC1019I   **The common agent needs to register for credentials. Credentials do not exist, or they are not valid.**

Explanation: When the common agent first starts, this message is expected because there are no credentials. After a successful registration, this message should not appear.

System action: The common agent will try to register and get credentials.

BTC1021E   **The common agent registration failed. It will wait** *number* **seconds before attempting to register again.**

Explanation: The common agent was not able to register. It will wait, and try again.

Administrator Response: No action required.

BTC1022I   **The registration succeeded after** *number* **attempts.**

Explanation: No additional information is available for this message.

BTC1023E   **The common agent was unable to register and obtain the necessary security credentials. All possibilities have been exhausted at host** *host_name*, **port** *number*. **This error is being sent to the agent recovery service.**

Explanation: The resource manager will not work properly, and other products will not be able to use its functionality.

System action: The common agent will not start.

Administrator Response: Look for other messages in the log that might be preventing the registration. Review the common agent registration server log. Resolve the problem with common agent registration server. Then, restart the common agent.

BTC1024I   **The common agent will now wait for** *number* **seconds before performing initial registration.**

Explanation: No additional information is available for this message.

BTC1025I   **The common agent is attempting to register and obtain security credentials from common agent registration service** *name* **at port** *number*.

Explanation: No additional information is available for this message.

BTC1026I **The common agent credentials are valid. The common agent has determined that it does not need to register for security credentials at this time.**

Explanation: No additional information is available for this message.

BTC1027E **The common agent failed to renew client credentials with the common agent registration service** *name* **at port** *number***.**

Explanation: If existing credential are not valid, this is an unrecoverable error. If existing credentials are valid, the common agent will still be able to run.

System action: The common agent will fail if existing credentials are not valid.

Administrator Response: The certificates were not renewed. Check the common agent registration server logs to determine the cause of the credential renewal failure. Resolve the problem. Then, if the common agent has been stopped, restart it. If the common agent is running, reissue the certificate renewal request.

BTC1029E **The common agent failed to update the certificate revocation list because a failure occurred when it tried to get the trust managers from the trust certificate file.**

Explanation: The trust certificate file might be missing or corrupted.

System action: The certificate revocation list was not updated. This can cause an SSL connection handshaking failure.

Administrator Response: Delete the trust certificate store file, and then, attempt to register the common agent. The trust certificate store file is automatically created during registration.

BTC1030I **The system is attempting to reset the common agent. This includes regenerating the common agent ID information and registering with the agent manager.**

Explanation: No additional information is available for this message.

BTC1031I **The common agent has been reset.**

Explanation: No additional information is available for this message.

BTC1032E **An error occurred when the system bundle attempted to regenerate the host ID while resetting the common agent.**

Explanation: The error occurred during the regeneration of the host GUID.

System action: The new identity of the common agent has not been completed. The registration has not been performed.

Administrator Response: To force re-registration, delete the agentKeys.jks file, and then, restart the common agent. It will obtain a new certificate. Check the common agent to verify that it is still operational.

BTC1033I **The system is attempting to renew the certificate revocation list.**

Explanation: No additional information is available for this message.

BTC1034I **The certificate revocation list has been renewed.**

Explanation: No additional information is available for this message.

BTC1035I **The common agent is attempting to renew the client credentials.**

Explanation: No additional information is available for this message.

BTC1036I **The common agent successfully renewed its client credentials.**

Explanation: No additional information is available for this message.

BTC1038I **The common agent registered with the agent registration service again.**

Explanation: No additional information is available for this message.

BTC1039I **The credentials have been renewed.**

Explanation: No additional information is available for this message.

BTC1040I **The common agent ID and credentials have been reset.**

Explanation: No additional information is available for this message.

BTC1041I   **command to register the common agent with the agent registration service**

Explanation: No additional information is available for this message.

BTC1042I   **command to renew the certificate revocation list**

Explanation: No additional information is available for this message.

BTC1043I   **command to renew the certificate of the common agent**

Explanation: No additional information is available for this message.

BTC1044I   **command to reset the security credentials**

Explanation: No additional information is available for this message.

BTC1045E   **The security service failed to obtain the common agent description.**

Explanation: The registration is missing the common agent description. The description is required. If the description is missing, the registration will fail.

System action: The registration failed because the common agent description is missing.

Administrator Response: The agent_mgrclient bundle might not be deployed correctly within the common agent framework. Try to reinstall the common agent or contact customer support.

BTC1046E   **The common agent failed to validate security credentials.**

Explanation: Either the credentials are currently not valid, or the ID information in the credentials is incorrect.

System action: Communication from the common agent will fail.

Administrator Response: Update the common agent with valid credentials.

BTC1047E   **The common agent failed to renew its security credentials.**

Explanation: The common agent failed to renew its certificate with the certificate authority of the agent manager. This message appears if one of the following conditions is met:

- The certificate renewal port of the agent manager could not be reached, either because it is not active, an error exists involving network configuration, or

the service location information stored in the common agent properties file is incorrect.

- The common agent does not trust the agent manager certificate authority because the current certificate used by the agent manager certificate authority does not exist in the common agent truststore.

- The common agent certificate is not valid. The operating system GUID or the installation location of the common agent has been modified since the initial registration. The change is causing the client authentication that is required for the certificate renewal to fail.

- The common agent certificate has expired. This might have caused the client authentication that is required for the certificate renewal to fail.

- The common agent certificate has been revoked. This might have caused the client authentication that is required for the certificate renewal to fail.

System action: The common agent will continue to run with its existing credentials. Attempting to contact the common agent might result in a failure, particularly if its credentials are not valid.

Administrator Response: Attempt to determine which condition that was described in the explanation is met. Check for exceptions and associated messages in the trace output file, traceAgent.log, to help find the problem.

If the log indicates that the common agent was not able to contact the certificate renewal port of the agent manager, make sure the agent manager is up and running, ensure that the location information stored in the common agent properties file is correct, verify that the agent manager can be reached from the common agent using the host name specified in the common agent properties file, and make another attempt to renew its certificate.

If the log indicates that the SSL handshake between the common agent and the agent manager failed, either the common agent does not trust the agent manager, or the common agent credentials are not valid. Attempt to resolve the situation by completing the following steps:

1. Shutdown the common agent.
2. Backup and delete the contents of the cert directory.
3. Place the agentTrust.jks file from the agent manager in the empty cert directory.
4. Start the common agent. Since the cert/agentKeys.jks file does not exist, the common agent will attempt to register again. If the common agent has the correct registration password, and the agent manager allows duplicate registration, the common agent should register successfully and receive a new certificate.

If the common agent does not have renewed or new credentials after completing the steps above, contact customer support.

BTC1048E   The common agent failed to renew its certificate revocation list.

Explanation: The common agent failed to renew its certificate revocation list with the certificate authority of the agent manager. One of the following reasons might be the cause of the failure:

- The certificate revocation list port of the agent manager cannot be reached, either because the agent manager is not active, an error exists in the network configuration, or the service location information stored in the common agent properties file is incorrect.
- An error occurred on the agent manager while constructing a new certificate revocation list.

System action: The common agent will continue to run with its existing certificate revocation list. However, various components, for example, resource managers with revoked certificates will be able to successfully contact the common agent and invoke operations on the common agent.

Administrator Response: Attempt to determine if the certificate revocation list renewal failed because the common agent was not able to reach the certificate revocation list port of the agent manager. Check the traceAgent.log file for exceptions and messages.

If the log indicates that the common agent was not able to contact the certificate revocation list port of the agent manager, do the following:

- Make sure the agent manager is up and running.
- Make sure the location information stored in the common agent properties file is correct.
- Make sure the agent manager can be reached from the common agent using the host name specified in the common agent properties file.
- Make another attempt to renew the certificate revocation list.

If the log indicates that a problem occurred on the agent manager, check the agent manager log file for associated exceptions and error messages. If the problem persists, contact customer support.

BTC1049E   The common agent failed to reset its GUID and security credentials.

Explanation: The common agent failed to reset its operating system GUID and register for a new certificate. This message appears if one of the following conditions is met:

- An error occurred while resetting the operating system GUID.
- The registration port of the agent manager could not be reached because either the agent manager is not active, an error exists involving network

configuration, or the service location information stored in the common agent properties file is incorrect.

- The common agent does not trust the agent manager certificate authority because the current certificate used by the agent manager certificate authority does not exist in the common agent truststore.
- The common agent made another attempt to register with the incorrect registration password.

System action: The common agent will continue to run with its existing credentials. Depending on whether or not the operating system GUID was successfully set, those credentials might be not valid because the identification information stored in the certificate might not match the information of the common agent and its underlying system. Credentials that are not valid will not block components from successfully contacting the common agent. However, the common agent will be unable to invoke operations on the agent manager that require client authentication For example, renewing certificates and sending status updates will not be allowed.

Administrator Response: Examine the traceAgent.log trace output file and attempt to determine which one of the conditions mentioned in the explanation invoked the message.

If the log indicates that the common agent was not able to contact the registration port of the agent manager, do the following:

- Make sure the agent manager is up and running.
- Make sure the location information stored in the common agent properties file is correct.
- Make sure the agent manager can be reached from the common agent using the host name specified in the common agent properties file.
- Make another attempt to register the common agent.

If the log indicates that the SSL handshake between the common agent and agent manager failed because the common agent did not trusting the agent manager, attempt to resolve the problem by doing the following:

1. Shutdown the common agent.
2. Backup and delete the contents of the cert directory.
3. Place the agentTrust.jks file from the agent manager in the empty cert directory.
4. Start the common agent. Because the cert/agentKeys.jks file is missing, it will attempt to register. If the common agent has the correct registration password, the registration should be successful, and the common agent should receive a new certificate.

If the agent manager rejected the password supplied by the common agent, update the Registration.Server.PW property in the common agent properties file, and attempt to register again.

If resetting the GUID failed, or the problem persists, contact customer support.

BTC1050I   true

Explanation: No additional information is available for this message.

BTC1051I   false

Explanation: No additional information is available for this message.

BTC1052I   The common agent successfully renewed its security credentials.

Explanation: No additional information is available for this message.

BTC1053I   The common agent failed to renew its security credentials. See the common agent logs for details about the problem.

Explanation: No additional information is available for this message.

BTC1054I   The common agent successfully renewed its certificate revocation list.

Explanation: No additional information is available for this message.

BTC1055I   The common agent failed to renew its certificate revocation list. See the common agent logs for details about the problem.

Explanation: No additional information is available for this message.

BTC1056I   The common agent successfully reset its GUID and security credentials.

Explanation: No additional information is available for this message.

BTC1057I   The common agent failed to reset its GUID and security credentials. See the common agent logs for details about the problem.

Explanation: No additional information is available for this message.

BTC1058E   The common agent registered with the agent manager, but the credentials are not valid because the common agent and the agent manager clocks are not synchronized.

Explanation: The validation dates for the certificate are set using the agent manager clock, but the clock on the common agent has one of the following problems:

- It is earlier than the not valid before date in the certificate.
- It is later than the not valid after date, or expiration date in the certificate.

System action: Without valid credentials, the common agent will not function correctly. Local command-line interface commands will not work. Resource managers with clocks that are synchronized with the agent manager will be unable to contact the common agent. Direct interaction with the agent manager might also fail.

Administrator Response: To correct this problem:

1. Verify that the clock on the agent manager server is correct. If necessary, update the clock and restart the agent manager.
2. Stop the agent.
3. If the agentKeys.jks file exists, delete it from the cert directory on the common agent.
4. Change the clock on the computer where the common agent is installed to match the clock on the agent manager server. Set the clocks to local time. Time zones are not important because the values are compared in coordinated universal time (UTC).
5. Start the agent.

The agent will register again when it starts.

BTC2003I   The configurator service was successfully started and deployed.

Explanation: No additional information is available for this message.

BTC2004I   The configurator service was successfully stopped and undeployed.

Explanation: No additional information is available for this message.

BTC2005I   The system is updating the port to *port_number*. **The listening port will change during the next startup of the common agent or after the connector is restarted.**

Explanation: The request to update the listening port has been processed. The new port will be used the next time the common agent is started or after the connector is restarted.

BTC2200I   The system is restarting the common agent.

Explanation: No additional information is available for this message.

BTC2201E   The system encountered an error while reading the common agent configuration properties. Verify that the *file_name* **file exists in the config directory on the common agent.**

Explanation: A required properties file does not exist.

System action: The common agent will be unable to register or contact the agent manager.

Administrator Response: Reinstall the common agent or contact customer support.

BTC2201I   The controller component was successfully deployed and started.

Explanation: The controller component was successfully deployed and started.

System action: The controller component was successfully deployed and started.

BTC2202E   The system was unable to retrieve the host name for this common agent.

Explanation: The common agent failed to retrieve an object representing the IP address of its underlying system.

System action: The common agent will continue to run without any knowledge of the IP address of its underlying system. If the IP configuration of its underlying system is incorrect, network communications involving the common agent will not work.

Administrator Response: Verify that the IP configuration of the system on which the common agent is installed is correct. If the problem persists, contact customer support.

BTC2202I   The controller component has been successfully undeployed and stopped.

Explanation: The controller component was successfully undeployed and stopped.

System action: The controller component was successfully undeployed and stopped.

BTC2203E   The port number stored in endpoint.properties file is an inappropriate number format. The default port, *port*, **will be used.**

Explanation: The port number must be an integer.

System action: The port specified will not be used because it is not in a valid format.

Administrator Response: Make sure the port number in the endpoint.properties file is an integer.

BTC2204I   The controller is waiting a few seconds before shutting down the common agent.

Explanation: While the common agent is shutting down, the controller pauses for several seconds to allow cleanup.

System action: The common agent will pause before continuing its shutdown process.

BTC2205E   The system failed to obtain an installation date from endpoint.properties file.

Explanation: The error occurred when the system attempted to get the common agent description. The endpoint.properties file might be corrupted.

System action: The common agent will be installed but the agent manager will not be sent the installation date.

Administrator Response: Attempt to reinstall the common agent. If the problem continues, contact customer support.

BTC2205I   The common agent is stopping.

Explanation: During the shutdown of the common agent, the controller pauses for several seconds to allow time for cleanup.

System action: The common agent is shutting down.

BTC2207E   The system failed to retrieve the certificate information from the file system.

Explanation: The common agent either failed to read its certificate information from the file system because of one of the following reasons:

- A disk error or a key store error occurred,
- The cert/agentKeys.jks file was not locked with the password specified by the password stash file, cert/pwd.
- The key store was empty.

System action: The common agent attempted to read its certificate information from the file system for inclusion in a description object that will be sent to the agent manager. The common agent will continue to run although the field in the description object associated with its certificate will be empty.

Administrator Response: Contact customer support.

BTC2209I   The common agent is being initialized.

Explanation: No additional information is available for this message.

BTC2210E   The shutdown worker failed to sleep while restarting the common agent. Negligible stack traces might have been thrown.

Explanation: The shutdown worker failed to sleep while restarting the common agent. Negligible stack traces might have been thrown.

Administrator Response: Verify that the common agent was successfully restarted.

BTC2300E   The system failed to obtain an endpoint ID or system GUID.

Explanation: The GUID was not obtained. This might mean that the GUID is not installed on the local machine. The common agent invokes native code that attempts to obtain the GUID. The GUID is required for much of the common agent function to run.

System action: There is no GUID; therefore, invoking clients might fail. The agent manager requires the GUID. Therefore, security management functions might not work properly.

Administrator Response: Verify that the GUID was successfully installed. If the GUID was not, install it and restart the common agent.

BTC2301I   The system GUID, or endpoint ID, identifies this common agent as one that has an OEM installation. An ID is being regenerated.

Explanation: During an OEM installation, a hard coded GUID is set so that a unique GUID will be manufactured at start time.

System action: The ID is X'FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF'. It will be regenerated to obtain a unique value.

BTC2401I   The log manager service (LogMgr) was successfully started and deployed.

Explanation: No additional information is available for this message.

BTC2402I   The log manager service (LogMgr) was successfully stopped and undeployed.

Explanation: No additional information is available for this message.

BTC2403E   The system encountered a problem while saving the logging property information to persistent storage.

Explanation: The logging property information could not be saved.

System action: The logging property information was not saved.

Administrator Response: Verify that there is sufficient free space on the file system where the common agent is installed, and that the appropriate write privileges are granted.

BTC2404I   command to set the locale to the language

Explanation: No additional information is available for this message.

BTC2405I   command to set the locale to the language and region

Explanation: No additional information is available for this message.

BTC2406I   command to get the locale language and/or region

Explanation: No additional information is available for this message.

BTC2407E   The JLog service (JLogService) was not found.

Explanation: The JLog service, which is required by the log manager service to supply logging and tracing capability, was not found.

Administrator Response: Verify that all bundles started successfully.

BTC2408I   The locale was successfully set to *language*.

Explanation: No additional information is available for this message.

BTC2409I   The specified language is not valid.

Explanation: No additional information is available for this message.

BTC2410I   The specified region is not valid.

Explanation: No additional information is available for this message.

BTC2411I   The locale was successfully set to *language_code* **and** *region_code***.**

Explanation: No additional information is available for this message.

BTC2412I   The locale was not set. The default locale is *language_code_ region_code***.**

Explanation: No additional information is available for this message.

BTC3001E   The system encountered an error while creating the *file_name* **file.**

Explanation: The system cannot create the specified file in OSGi storage.

System action: The bundle could not be created; therefore, the installation or update has failed.

Administrator Response: Verify that there is sufficient disk space and that the user has the appropriate authority to write to the file system.

BTC3002E   The *file_name* **file was not found.**

Explanation: The system cannot find the specified file in OSGi storage.

System action: The specified bundle name was not found on the file system.

Administrator Response: Verify that the bundle location was specified correctly and that the user has the appropriate authority to read the file.

BTC3003E   The *bundle_name* **bundle was not found.**

Explanation: The system could not find the specified bundle to install. The bundle might be missing or corrupted.

System action: The bundle was not installed.

Administrator Response: Verify that the specified bundle exists at the specified location, the location is accessible, and the user account has the appropriate authority to read the file.

BTC3004E   The update target file, *bundle_name***, was not found.**

Explanation: The specified update file was not found in OSGi storage. The file might be missing or corrupted, or the target bundle might be specified incorrectly.

System action: The bundle was not updated.

Administrator Response: Verify that the specified bundle exists at the specified location, the location is accessible, and the user account has the appropriate authority to read the file.

BTC3005E   The update source file, *bundle_name***, was not found.**

Explanation: The source file for the update operation was not found. The file might be missing, inaccessible, or corrupted.

System action: The bundle was not updated.

Administrator Response: Verify that the specified bundle exists at the given location, the location is accessible, and the user account has the appropriate authority to read the file.

BTC3006E   The *bundle_name* **bundle was not found; therefore, it cannot be started.**

Explanation: The specified bundle was not found in OSGi storage. The bundle might be missing, inaccessible, corrupted, or it might not contain the necessary components.

System action: The bundle was not started.

Administrator Response: Verify that the specified bundle exists at the given location, the location is accessible, and the user account has the appropriate authority to read the file. If necessary, reinstall the bundle.

BTC3007E   The *bundle_name* **bundle cannot be stopped because the system cannot find it in the OSGi storage.**

Explanation: The specified bundle was not found in OSGi storage. The bundle might be missing, inaccessible, corrupted, or it might not be running.

System action: The bundle was not stopped.

Administrator Response: Verify that the specified bundle exists at the given location, the location is accessible, and the user account has the appropriate authority to read the file. If necessary, reinstall the bundle.

BTC3008E   The *bundle_name* **bundle cannot be uninstalled because the system cannot find it in the OSGi storage.**

Explanation: The specified bundle was not found in the OSGi storage. The bundle might be missing, inaccessible, corrupted, or it might not be installed.

System action: The specified bundle was not uninstalled.

Administrator Response: Verify that the specified bundle exists at the given location, the location is accessible, and the user account has the appropriate authority to read the file.

BTC3009E   The *bundle_name* **bundle cannot be deleted because system cannot be found in the OSGi storage.**

Explanation: The specified bundle was not found in the OSGi storage. The bundle might be missing, inaccessible, corrupted, or it might not be installed.

System action: The specified bundle was not deleted.

Administrator Response: Verify that the specified bundle exists at the given location, the location is accessible, and the user account has the appropriate authority to read the file.

BTC3010E   The installation of the *bundle_name* **bundle failed.**

Explanation: Installation of the bundle failed. Verify that the bundle location is accessible, the bundle is not corrupted, and the bundle manifest is valid.

System action: The bundle was not installed.

Administrator Response: Verify that the specified bundle exists at the specified location, the location is accessible, the bundle is not corrupted, and the bundle manifest is valid.

BTC3011E   Updating the *bundle_name* **bundle failed.**

Explanation: Updating the bundle failed. Verify that the bundle location is accessible, the bundle is not corrupted, and the bundle manifest is valid.

System action: The bundle was not updated.

Administrator Response: Verify that the specified bundle exists at the given location, the location is accessible, the bundle is not corrupted, and the bundle manifest is valid.

BTC3012E   The attempt to start the *bundle_name* **bundle failed.**

Explanation: The bundle failed to start. Verify that the bundle is not corrupted, and the bundle manifest is valid. The logic in the bundleActivator might not have returned successfully.

System action: The bundle was not started.

Administrator Response: Verify that the bundle is installed, is not corrupted, and the bundle manifest is valid. If necessary, install a new version of the bundle.

BTC3013E   An error occurred while stopping the *bundle_name* **bundle failed.**

Explanation: A error occurred while stopping the bundle. Verify that the bundle is running.

System action: The bundle was not stopped.

Administrator Response: Verify that the bundle is running and is not corrupted.

BTC3014E   An error occurred while uninstalling the *bundle_name* **bundle.**

Explanation: An error occurred while uninstalling the bundle. Verify that the bundle is installed.

System action: The bundle was not uninstalled.

Administrator Response: Verify that the bundle is installed.

BTC3015E   An error occurred while deleting the *bundle_name* **bundle.**

Explanation: The specified bundle cannot be deleted. The bundle might not exist, or it might be in use.

System action: The bundle was not deleted.

Administrator Response: Verify that the bundle exists and is not in use. If necessary, stop the endpoint and delete it manually.

BTC3100I   The *bundle_name* **bundle was successfully installed from storage.**

Explanation: The specified bundle was successfully installed from storage.

System action: The bundle was successfully installed.

BTC3101I   The bundle was successfully updated.

Explanation: The bundle was successfully updated.

System action: The bundle was successfully updated.

BTC3102I   The bundle was successfully started.

Explanation: No additional information is available for this message.

BTC3103I   The bundle was successfully stopped.

Explanation: No additional information is available for this message.

BTC3104I   The bundle was successfully uninstalled.

Explanation: The bundle was successfully uninstalled.

System action: The bundle was successfully uninstalled.

BTC3105I   The *bundle_name* **bundle is already installed in the OSGi storage:**

Explanation: The specified bundle is already installed. If you want to replace this bundle you must first uninstall it, then install the bundle again, or try updating it.

System action: The bundle was not installed.

Administrator Response: Verify that the specified bundle is the one you intended to install. If you want to replace this bundle you must first uninstall it, then install the bundle again, or try updating it.

BTC3106I   The system is retrieving a LifecycleActivator from the *bundle_name* **bundle.**

Explanation: A lifecycle activator was found in the bundle and retrieved.

System action: A lifecycle activator was found in the bundle and retrieved.

BTC3107I   The system has invoked preUpdate in the LifecycleActivator for the *bundle_name* **bundle.**

Explanation: The preUpdate logic defined in the LifecycleActivator was invoked.

System action: The preUpdate logic defined in the LifecycleActivator was invoked.

BTC3108I   The system has invoked postUpdate in the LifecycleActivator for the *bundle_name* **bundle.**

Explanation: The postUpdate logic that is defined in the LifecycleActivator was invoked.

System action: The postUpdate logic that is defined in the LifecycleActivator was invoked.

BTC3109I   The system has invoked preUninstall in the LifecycleActivator for the *bundle_name* **bundle.**

Explanation: The preUninstall logic defined in the LifecycleActivator was invoked.

System action: The preUninstall logic defined in the LifecycleActivator was invoked.

BTC3110I   The system invoked postInstall in the LifecycleActivator for the *bundle_name* **bundle.**

Explanation: The postInstall logic defined in the LifecycleActivator was invoked.

System action: The postInstall logic defined in the LifecycleActivator was invoked.

BTC3111E   The system cannot read or write to the config/endpoint.properties file. Verify that the agent configuration file is on the file system.

Explanation: The config/endpoint.properties file does

not exist or the user account that runs the common agent does not have the correct file permissions.

Administrator Response: Verify that the file exists and that the user account has the appropriate read and write permission.

BTC3112E   The system encountered an error while handling the subagent bundle count variable in endpoint.properties. Make sure it is stored in the correct numerical format.

Explanation: The subagent bundle count variable in the config/endpoint.properties file could not be interpreted.

System action: The number of subagent bundles that are installed on the system might be misrepresented.

Administrator Response: Verify that the config/endpoint.properties file exists and that the user account has the appropriate read/write permission. Make sure that the subagent bundle count variable is present in the file.

BTC3113I   The deployer service has been successfully deployed and started.

Explanation: No additional information is available for this message.

BTC3114I   The deployer service has been successfully undeployed and stopped.

Explanation: No additional information is available for this message.

BTC3115E   The post installation failed.

Explanation: The postInstall logic specified in the bundle LifecycleActivator failed.

System action: The postInstall logic was not completed successfully. The bundle might not be installed correctly.

Administrator Response: If you continue to encountered problems with the bundle, attempt to uninstall and reinstall the bundle.

BTC3116E   The post activity update of the bundle failed.

Explanation: postUpdate logic specified in the bundle LifecycleActivator failed.

System action: The postUpdate logic was not completed successfully. The bundle might not be updated correctly.

Administrator Response: If you continue to experience problems with the bundle, try uninstalling and reinstalling the bundle.

BTC3117E   The preupdate of the bundle,
bundle_name **failed.**

Explanation: The preUpdate logic specified in the
bundle LifecycleActivator failed.

System action: The preUpdate logic was not
completed successfully. The bundle might not be
updated correctly.

Administrator Response: If you continue to
experience problems with the bundle, try uninstalling
and reinstalling the bundle.

**BTC3118I   command to install a bundle from the
specified URL**

Explanation: No additional information is available
for this message.

**BTC3119I   command to update the specified
bundle**

Explanation: No additional information is available
for this message.

**BTC3120I   command to uninstall the specified
bundle**

Explanation: No additional information is available
for this message.

**BTC3121I   command to refresh bundle
dependencies and attempt garbage
collection**

Explanation: No additional information is available
for this message.

BTC3122I   command to start the specified bundle

Explanation: No additional information is available
for this message.

BTC3123I   command to stop the specified bundle

Explanation: No additional information is available
for this message.

BTC3124I   command to list all installed bundles

Explanation: No additional information is available
for this message.

**BTC3125I   command to list all installed bundles
and their states**

Explanation: No additional information is available
for this message.

BTC3126I   command to list all registered services

Explanation: No additional information is available
for this message.

**BTC3127I   command to list services registered by
specified bundle**

Explanation: No additional information is available
for this message.

**BTC3128I   command to list services used by
specified bundle**

Explanation: No additional information is available
for this message.

**BTC3129I   command to get the base directory for
subagent bundles**

Explanation: No additional information is available
for this message.

**BTC3130I   command to create a directory in the
subagent bundle base directory**

Explanation: No additional information is available
for this message.

**BTC3131I   command to delete a directory from the
subagent bundle base directory**

Explanation: No additional information is available
for this message.

**BTC3132I   command to copy the file from the URL
to the directory in the subagent bundle
base directory**

Explanation: No additional information is available
for this message.

**BTC3133I   command to delete the file from the
directory in the subagent bundle base
directory**

Explanation: No additional information is available
for this message.

**BTC3134I   command to get the base directory for
the common agent**

Explanation: No additional information is available
for this message.

BTC3135I command to create a directory in the common agent base directory

Explanation: No additional information is available for this message.

BTC3136I command to delete a directory from the common agent base directory

Explanation: No additional information is available for this message.

BTC3137I command to copy the file from the URL to the directory in the common agent base directory

Explanation: No additional information is available for this message.

BTC3138I command to delete the file from the directory in the common agent base directory

Explanation: No additional information is available for this message.

BTC3139I The bundle location was not specified

Explanation: No additional information is available for this message.

BTC3140I The *bundle_name* bundle was successfully installed.

Explanation: No additional information is available for this message.

BTC3141I The installation of the *bundle_name* bundle failed. The error is *cause*.

Explanation: No additional information is available for this message.

BTC3142I The *bundle_name* bundle was successfully updated.

Explanation: No additional information is available for this message.

BTC3143I The update to the *bundle_name* bundle failed. *cause*.

Explanation: No additional information is available for this message.

BTC3144I The *bundle_name* bundle was uninstalled successfully.

Explanation: No additional information is available for this message.

BTC3145I The uninstallation of the *bundle_name* bundle failed. *cause*.

Explanation: No additional information is available for this message.

BTC3146I The *bundle_name* bundle was successfully started.

Explanation: No additional information is available for this message.

BTC3147I The *bundle_name* bundle failed to start. *cause*.

Explanation: No additional information is available for this message.

BTC3148I The *bundle_name* bundle stopped successfully.

Explanation: No additional information is available for this message.

BTC3149I The *bundle_name* bundle failed to start. *cause*.

Explanation: No additional information is available for this message.

BTC3150I The system failed to get the state of the *bundle_name* bundle. *cause*.

Explanation: No additional information is available for this message.

BTC3151I unknown list command

Explanation: No additional information is available for this message.

BTC3152I failed to get list

Explanation: No additional information is available for this message.

BTC3153I missing directory name

Explanation: No additional information is available for this message.

BTC3154I   The system failed to create the *directory_name* **directory because the specified directory name is not valid.**

Explanation: No additional information is available for this message.

BTC3155I   The system encountered an error while attempting to delete the *directory_name* **directory.**

Explanation: No additional information is available for this message.

BTC3156I   missing parameter

Explanation: No additional information is available for this message.

BTC3157I   The *directory_name* **directory has been created.**

Explanation: No additional information is available for this message.

BTC3158I   The *directory_name* **directory has been deleted.**

Explanation: No additional information is available for this message.

BTC3159I   The *file_name* **file has been copied.**

Explanation: No additional information is available for this message.

BTC3160I   The copy of the *file_name* **file failed.**

Explanation: No additional information is available for this message.

BTC3161I   ** *file_name* **has been deleted.

Explanation: No additional information is available for this message.

BTC3162I   The *file_name* **file was not deleted.**

Explanation: No additional information is available for this message.

BTC3163I   Unknown subagent bundle command

Explanation: No additional information is available for this message.

BTC3164I   Unknown common agent command

Explanation: No additional information is available for this message.

BTC3165I   Active

Explanation: No additional information is available for this message.

BTC3166I   Installed

Explanation: No additional information is available for this message.

BTC3167I   Resolved

Explanation: No additional information is available for this message.

BTC3168I   Starting

Explanation: No additional information is available for this message.

BTC3169I   Stopping

Explanation: No additional information is available for this message.

BTC3170I   Uninstalled

Explanation: No additional information is available for this message.

BTC3171I   Unknown

Explanation: No additional information is available for this message.

BTC3172W   The bundle was updated, but it cannot be found.

Explanation: There was an error locating the newly updated bundle.

System action: The bundle might not function properly.

Administrator Response: Verify that the bundle exists in the specified bundle location, and make sure it is valid bundle.

BTC3173E   The instance of the *bundle_name* **bundle was not found; therefore, it cannot be started.**

Explanation: The instance of the specified bundle to start was not found in the OSGi storage. The bundle might be missing or corrupted, or it might not contain the necessary components.

System action: The bundle was not started.

Administrator Response: Verify that the bundle is in the OSGi storage and that it has all of the necessary components. If necessary, update the bundle in the OSGi storage.

BTC3174E   The deployer service failed to save the installation status.

Explanation: The deployer service encountered a problem while saving its properties to the local file system. There might be a problem with the file system.

System action: The common agent was unable to record the status of the bundle, which might affect future processing of the bundle.

Administrator Response: Verify that the local file system has sufficient space and that the common agent has the appropriate write privileges.

BTC3175I   command to get the state of the specified bundle

Explanation: No additional information is available for this message.

BTC3301I   Configuration properties have not been set for the registered bundle service, *pid*.

Explanation: No additional information is available for this message.

BTC3302E   A problem occurred while performing the configuration properties operation for the registered bundle service, *operation*. *pid*. *cause*.

Explanation: One of the following problems occurred while performing the configuration properties operation for the registered bundle service:

- IOException - if access to persistent storage fails.
- SecurityException - if the caller does not have AdminPermission.
- IllegalStateException - if this configuration has been deleted.
- ServiceNotRegisteredException - if ConfigurationAdmin is not registered.
- DeployerException - Other errors in the deployer service.

System action: The configuration management bundle is not working properly.

Administrator Response: Make sure the configuration management service bundle (cm.jar) is started and active and the administrator has proper authority.

BTC3303I   Improper parameters are specified for the configuration properties operation.

Explanation: No additional information is available for this message.

BTC3304I   command to get the registered bundle service configuration properties.

Explanation: No additional information is available for this message.

BTC3305I   command to set the registered bundle service configuration properties.

Explanation: No additional information is available for this message.

BTC3306I   command to delete the registered bundle service configuration properties.

Explanation: No additional information is available for this message.

BTC3307I   The configuration properties for the registered bundle service, *pid*, were successfully set.

Explanation: No additional information is available for this message.

BTC3308I   The configuration properties for the registered bundle service, *pid*, were deleted.

Explanation: No additional information is available for this message.

BTC4003I   The connector service was successfully started and deployed.

Explanation: No additional information is available for this message.

BTC4004I   The connector service has been stopped and undeployed.

Explanation: No additional information is available for this message.

BTC4007I   The common agent is caching the service tracker for the *interface_name* interface.

Explanation: No additional information is available for this message.

BTC4008I   **The common agent is reducing the service tracker cache size.**

Explanation: No additional information is available for this message.

BTC4009E   **The connector cannot list the OSGi services properly.**

Explanation: The connector cannot list the OSGi services. This might be caused by a problem that occurred when the connector attempted to obtain information from the OSGi container.

System action: This might cause a problem obtaining information from the OSGi container.

Administrator Response: Try to reinstall the common agent. If the problem continues, contact customer support.

BTC4012E   **The system is unable to set secure socket properties. The keystore, truststore, alias, and corresponding password properties must be set in the endpoint.properties file.**

Explanation: This error occurs when the SSL properties are not specified in properties file.

System action: This might cause common agent registration failure.

Administrator Response: Try to reinstall the common agent. If the problem continues, contact customer support.

BTC4013I   **To list services accessible via the command-line interface:**

Explanation: No additional information is available for this message.

BTC4014I   **To get help for a service:**

Explanation: No additional information is available for this message.

BTC4015I   **To invoke commands on a command-line interface service:**

Explanation: No additional information is available for this message.

BTC4016I   **To get help:**

Explanation: No additional information is available for this message.

BTC4017I   **ERROR:**

Explanation: No additional information is available for this message.

BTC4018I   **The service *service_name* either does not exist or does not provide command-line interface access.**

Explanation: No additional information is available for this message.

BTC4019I   **Commands available:**

Explanation: No additional information is available for this message.

BTC4020I   **command to list services accessible via the command-line interface**

Explanation: No additional information is available for this message.

BTC4021I   **No services are accessible via the command-line interface.**

Explanation: No additional information is available for this message.

BTC4022I   **The connector is active.**

Explanation: No additional information is available for this message.

BTC4023I   **command to check if the connector service is alive**

Explanation: No additional information is available for this message.

BTC4024I   **The common agent is stopping.**

Explanation: No additional information is available for this message.

BTC4025I   **The common agent is restarting.**

Explanation: No additional information is available for this message.

BTC4026I   **command to stop the common agent**

Explanation: No additional information is available for this message.

BTC4027I command to restart the common agent

Explanation: No additional information is available for this message.

BTC4028I unknown parameter

Explanation: No additional information is available for this message.

BTC4029I command to get the ID of the machine that the common agent is running on

Explanation: No additional information is available for this message.

BTC4030I command to get the ID of the common agent

Explanation: No additional information is available for this message.

BTC4031I command to regenerate the ID of the machine the common agent is running on

Explanation: No additional information is available for this message.

BTC4032I command to regenerate the ID of the common agent

Explanation: No additional information is available for this message.

BTC4033I The connector could not get the configured port number. The default port will be used.

Explanation: The connector could not get the configured port number. The default port will be used.

BTC4035E The attempt to invoke the method failed because either the service, *service_name*, or the method, *method_name*, does not exist.

Explanation: The attempt to invoke the method failed because the service or method does not exist.

System action: The invocation to this service will fail. The common agent cannot find this service in its runtime environment.

Administrator Response: Verify that the service name and method name are accurate.

BTC4036E The source type, *sType*, is not valid.

Explanation: The component that attempted to connect and invoke an operation on the common agent is not a valid component. The common agent rejected its request. This message indicates the component type that is listed in the certificate of the component that attempted to contact the common agent.

System action: After rejecting the connection from the component of the specified type, the common agent will begin listening for more incoming connections.

Administrator Response: Communication between multiple common agents is not supported.

BTC4037E The target type, *tType*, is not valid.

Explanation: The component type listed in the common agent certificate is incorrect. The certificate might have been replaced since the common agent registered.

System action: The common agent will refuse any incoming requests.

Administrator Response: Contact customer support.

BTC4041E The HTTP headers are longer than the maximum header length of *length*.

Explanation: The SOAP requests were sent to the common agent via HTTP. The common agent received a request in which the length of the HTTP header exceeds the specified maximum allowable value.

System action: The common agent ignored the request because it is not valid, and closed the socket on which it was received. Then, the common agent returned to listen for new incoming requests.

Administrator Response: Contact customer support.

BTC4042E The command-line interface command failed. The common agent configuration could not be retrieved from the *file_name* file.

Explanation: This message is displayed when the command-line interface command invocation fails due to a problem that occurs while loading the common agent configuration from the specified file.

System action: Because the common agent cannot be contacted, it is not affected by the failure of the command-line interface command.

Administrator Response: Verify that the specified properties file exists, and that it is populated with the appropriate configuration information. If the configuration information is correct, but the problem persists, contact customer support.

BTC4043E   The command-line interface command failed. A communication error occurred. Verify that the common agent is registered and active on port *port_number***.**

Explanation: This message is displayed when command-line interface command invocation fails due to a communication problem with the common agent. The communication failure might be caused by one of the following reasons:

- The common agent is not active.
- The common agent does not have valid security credentials.
- An attempt was made to contact the common agent on an incorrect port.
- The connection established with the common agent was terminated.

System action: If the common agent is running, it will continue to run. It will continue to listen for incoming connections and command-line interface requests.

Administrator Response: Verify that the common agent is both active and registered, and that the correct port was specified for command-line interface command invocation. If the problem persists, contact customer support.

BTC4044W   The common agent port in the properties file is not an integer. The default port, *port_number***, will be used.**

Explanation: The command-line interface attempts to determine the port on which to contact the common agent by reading the contents of its properties file. This warning is displayed if the value associated with the port property in the common agent properties file is not an integer. The port must be an integer.

System action: The command-line interface will attempt to contact the common agent on the specified default common agent port.

Administrator Response: Set the value associated with the ep.port property in the common agent properties file to the port on which the common agent runs.

BTC4045E   The connection from *IP_address* **was rejected.**

Explanation: Another entity attempted to connect to the common agent, but was rejected. The connection was probably rejected because of one of the following reasons:

- The common agent does not have valid credentials, which might mean it failed to register, or a time synchronization issue exists between the common agent and the agent manager.

- The entity that tried to connect to the common agent does not have either a valid resource manager or valid agent manager credentials. Note: Communication between common agents is not allowed.
- The entity that attempted to connect to the common agent did not send the information required to establish the connection.
- An I/O error occurred.

System action: After rejecting the incoming connection, the common agent returned began to listening on the port specified in its properties file.

Administrator Response: Verify that both the common agent and the entity that is attempting to contact it, has valid credentials. If the problem persists, contact customer support.

BTC4046I   config_file

Explanation: No additional information is available for this message.

BTC4047I   service_name

Explanation: No additional information is available for this message.

BTC5000I   The monitoring service was successfully started and deployed.

Explanation: The monitoring service was successfully started and deployed.

BTC5001I   The monitoring service was successfully stopped and undeployed.

Explanation: The monitoring service was successfully stopped and undeployed.

BTC5002I   The *subagent* **subagent bundle has been successfully registered as a status provider.**

Explanation: The specified subagent bundle was successfully registered as a status provider. The subagent bundle can now begin providing status to the common agent. No user action is necessary.

BTC5006I   The *process_name* **status collection process is starting.**

Explanation: No additional information is available for this message.

BTC5007I   **The** *process_name* **status collection process is ending.**

Explanation: No additional information is available for this message.

BTC5015I   **A new subagent bundle status report has been created for the** *subagent_name* **subagent bundle.**

Explanation: No additional information is available for this message.

BTC5018I   **The status report for host** *host_name*, **URI** *URI_name*, **and port number** *port_number* **was delivered successfully.**

Explanation: No additional information is available for this message.

BTC5019E   **The status report delivery failed for host** *host_name*, **URI** *URI_name*, **and port** *port_number*.

Explanation: The specified status report was not delivered.

System action: The common agent will continue to run but the agent manager will not know the status of the common agent.

Administrator Response: The agent manager probably cannot be contacted for the common agent to send the status update. Check the network connectivity to the agent manager. Call customer support if necessary.

BTC5020I   **The last common agent attempted status report is** *report*.

Explanation: The specified report was the last attempted status report for this common agent. No user action is necessary.

BTC5021I   **The next scheduled common agent status report is** *report*.

Explanation: The specified report is the next scheduled status report for this common agent. No user action is necessary.

BTC5022E   **An error occurred while the common agent was trying to compile status.**

Explanation: An error occurred while the common agent was building a status report to send to the agent manager.

System action: The common agent will continue to run, but its status information will not be sent to the agent manager. As a result, the agent manager will not know the current of the common agent.

Administrator Response: Contact customer support.

BTC5024E   **The common agent was unable to obtain the agent manager configuration. Therefore, it cannot send an update to the agent manager. The common agent will try again when the next update occurs.**

Explanation: The common agent was unable to send update information to the agent manager, because it was unable to get the necessary agent manager information.

System action: The common agent will continue to run. At the next scheduled time for sending update information to the agent manager, the common agent will attempt to send status again.

Administrator Response: Check the agent manager configuration information to make sure the values are set correctly.

BTC5025E   **The common agent was unable to obtain the client component for accessing the agent manager. Status cannot be sent at this time.**

Explanation: The common agent failed to obtain and initialize the client object that is used to send status updates to the agent manager.

System action: The common agent will continue to run. However, common agent status information will not be sent to the agent manager. As a result, the agent manager will not know the current state of the common agent.

Administrator Response: Contact customer support.

BTC5026W   **The agent manager returned an ID reset exception. The common agent should reset its ID, and then, try to register again.**

Explanation: When the common agent tried to register with the agent manager using its current ID, the agent manager returned an ID reset exception. The common agent should reset its ID, and then, try to register again.

System action: The common agent will generate a new ID, and then, using the new ID, it will try to register again.

Administrator Response: No action is required if this is happening the first time the common agent is being started. If this happens several times, you should check the logs for other failures. Look for failures related to ID generation.

BTC5027I   Status has been sent.

Explanation: No additional information is available for this message.

BTC5028I   The status report for host *host_name*, **URI** *URI_name*, **and port** *port_number* **was not delivered.**

Explanation: The specified status report was not delivered.

System action: The common agent will continue to run, but the agent manager will not know the common agent status.

Administrator Response: The credentials on the common agent are not valid. Before status updates can be sent to the agent manager, the common agent will need to register, or re-register with the agent manager. Call customer support if necessary.

BTC5042I   command to upgrade a common agent

Explanation: No additional information is available for this message.

BTC5043I   command to upgrade a common agent and its JRE

Explanation: No additional information is available for this message.

BTC5044I   command to obtain the status of a common agent upgrade

Explanation: No additional information is available for this message.

BTC5045I   The common agent upgrade completed successfully.

Explanation: No additional information is available for this message.

BTC5046E   An error occurred during the common agent upgrade. Look in the logs/upgradeAgentTrace.log and logs/upgradeAgentMessage.log files for information about the exception: *exception*

Explanation: An unexpected exception was caught during the common agent upgrade.

System action: The upgrade of the common agent stopped and the common agent version is unchanged.

Administrator Response: Collect the common agent log files and contact customer support.

BTC5047E   The upgrade bundle cannot retrieve the upgrade status from the logs/install/epInstallStatus.log file. Look in the logs/upgradeAgentTrace.log and logs/upgradeAgentMessage.log files for information about the exception: *exception*

Explanation: An exception was caught while reading the epInstallStatus.log file, which contains the status of the upgrade. Possible exceptions include:

- FileNotFoundException - The file does not exist or cannot be opened for reading.
- IOException - An error occurred while reading from the file.
- NumberFormatException - The status value cannot be parsed as an integer.

Administrator Response: Make sure that the logs/install/epInstallStatus.log file exists. Open the file with a text editor to obtain the upgrade status.

BTC5048E   The upgrade bundle cannot read the CAUpgrade.properties file from the agent manager using the URL, *url*. **Look in the logs/upgradeAgentTrace.log and logs/upgradeAgentMessage.log files for information about the exception:** *exception*

Explanation: An error occurred while reading the CAUpgrade.properties file from the agent manager using the URL, *url*. Possible exceptions include:

- MalformedURLException - The URL, *url*, specifies an unknown protocol.
- FileNotFoundException - The file does not exist or it cannot be opened for reading.
- IOException - An error occurred while reading from the file.

System action: The upgrade of the common agent stopped and the version of the common agent is unchanged.

Administrator Response: Perform these actions to correct the problem:

1. Make sure the agent manager is running.
2. If the agent manager is version 1.1 or version 1.2 with fix pack 1 or earlier, make sure that the common agent upgrade instructions on the support web site have been followed. The upgrade instructions help you configures the agent manager to upgrade common agents.
3. Verify that the CAUpgrade.properties file is accessible by performing these tests:
   - On the agent manager server, open the CAUpgrade.properties file. The file is located under the $WAS_HOME directory, in the directory for the AgentManager application.

- Using a Web browser, access the URL, *url*.

4. Start the upgrade again.

5. If the common agent upgraded continues to fail, collect the common agent logs and contact customer support.

BTC5049E **The upgrade bundle cannot retrieve the value for the *key* key from CAUpgrade.properties file.**

Explanation: The CAUpgrade.properties file contains key/value pairs that provide platform-specific information that is needed to upgrade the common agent. The value for the required key was not found in the file. This typically indicates a programming error or that the file was changed after it was created.

System action: The upgrade of the common agent stopped and the version of the common agent is unchanged.

Administrator Response: If the agent manager is version 1.1 or version 1.2 with fix pack 1 or earlier, completed the following steps:

1. Repeat the steps in the common agent upgrade instructions on the support web site to reconfigure the agent manager to upgrade common agents.

2. Start the upgrade again.

If the upgrade still fails, or if the agent manager is already at version 1.2 with fix pack 2 or greater, collect the common agent log files and contact customer support.

BTC5050E **The upgrade bundle cannot create a response file to use with the installation program. Look in the logs/upgradeAgentTrace.log and logs/upgradeAgentMessage.log files for information about the exception: *exception*.**

Explanation: An error occurred while creating the response file that is needed to drive the upgrade path of the common agent installation. Possible exceptions include:

- IOException - The response file cannot be created or opened for writing, or an error occurred when writing to the file.

System action: The upgrade of the common agent stopped and the version of the common agent is unchanged.

Administrator Response: Look in the logs/upgradeAgentTrace.log file for information about the exception. The trace log contains information about the error.

Correct the problem, and then start the upgrade again.

BTC5051E **The upgrade bundle cannot unpack the image at *location* into the *data_directory* directory. Look in the logs/upgradeAgentTrace.log and logs/upgradeAgentMessage.log files for information about the exception: *exception***

Explanation: An error occurred while unpacking the installation image *image* into the *data_directory* directory. Possible exceptions include:

- MalformedURLException - The URL, *location*, specifies an unknown protocol.
- ZipException - There was a problem with the zipped image file.
- IOException - An error occurred while reading from the zipped image file or while creating the unpacked version of a file on the local file system.

System action: The upgrade of the common agent stopped and the version of the common agent has not been changed.

Administrator Response: Look in the logs/upgradeAgentTrace.log and logs/upgradeAgentMessage.log files to find details about the error, and then, take corrective action. Possible actions include:

- Making sure there is enough disk space on the common agent machine to hold the uncompressed files.
- Make sure the target directory, *data_directory*, is writable.

After you correct the problem, start the upgrade again.

BTC5052E **The upgrade bundle cannot copy the image from *location* to *relative_path/file_name*.**

Explanation: Before the upgrade can occur, the deployer service must copy the compressed image file from *location* to the *file_name* file in the *relative_path* directory on the common agent machine. This error indicates that the copy was not successful.

System action: The upgrade of the common agent stopped and the version of the common agent has not been changed.

Administrator Response: Perform these actions to correct the problem:

1. Make sure that the agent manager is running.

2. If the agent manager is version 1.1 or version 1.2 with fix pack 1 or earlier, make sure the common agent upgrade instructions on the support Web site have been followed. The instructions help you configure the agent manager to upgrade common agents.

3. Make sure that common agent has enough disk space for the file.

4. Make sure that the common agent has write permission to the *relative_path* target directory. This path is relative to the common agent installation directory.

After you correct the problem, start the upgrade again.

BTC5053E   **The upgrade bundle cannot look up the deployer service.**

Explanation: The deployer service is used to copy the image to the common agent. Because the deployer service was not found, the upgrade cannot continue.

System action: The upgrade of the common agent stopped and the version of the common agent has not been changed.

Administrator Response: Collect the common agent logs and contact customer support.

BTC5054E   **The upgrade bundle cannot create the URL for the agent manager context root. The common agent configuration for the agent manager contains the agent manager host value of** *AM_host* **and the agent manager public port number** *AM_public_port*. **One or both of these values is incorrect.**

Explanation: The upgrade bundle constructs an HTTP URL in the form of http://AM_host:AM_public_port/ AgentMgr/... to download the needed information from the agent manager. This error indicates that the URL cannot be created because one of the *AM_host* or *AM_public_port* values is null.

System action: The upgrade of the common agent stopped and the version of the common agent has not been changed.

Administrator Response: Verify that the endpoint.properties file has valid values for the AgentManagerQuery.host and ARS.port.public keys.

If the values are correct, collect the common agent logs and properties files, and then contact customer support.

BTC5055E   **The upgrade bundle cannot invoke the** *system_command* **system command. Look in the logs/upgradeAgentTrace.log and logs/upgradeAgentMessage.log files for information about the exception:** *exception*

Explanation: A system command that is required for the upgrade failed with the *exception* exception.

System action: The upgrade of the common agent stops and the version of the common agent is unchanged.

Administrator Response: Collect the common agent logs and contact customer support.

BTC5057I   **This error code indicates that a specific key was not found in the CAUpgrade.properties file. Look for the previously logged message BTC5049E in the logs/upgradeAgentMessage.log file in the logs directory for more information about the key that could not be found.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the specific key that was incorrect, look in the logs for the message that was recorded when the error occurred.

BTC5058I   **This error code indicates that the upgrade response file could not be created. The response file is used to drive the upgrade portion of the common agent installation. Look for the previously logged message BTC5050E in the logs/upgradeAgentMessage.log file in the logs directory for more information about the error that occurred.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the specific exception, look in the logs for the message that was recorded when the error occurred.

BTC5059I   **This error code indicates that a system command failed. Look for the previously logged message BTC5055E in the logs/upgradeAgentMessage.log file in the logs directory for more information about the error that occurred.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the specific system command that failed, look in the logs for the message that was recorded when the error occurred.

BTC5060I   **This error code indicates that there was an error unpacking an image file. The image is either the common agent installation image or the JRE image. Look for the previously logged message BTC5051E in the logs/ upgradeAgentMessage.log file in the logs directory for more information**

about the error that occurred.

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the name of the file being unpacked and the specific exception that resulted, you must look in the logs for the message that was recorded when the error occurred.

BTC5061I **This error code indicates that there was an error copying an image from the agent manager. The image is either the common agent installation image or the JRE image. Look for the previously logged message BTC5052E in the logs/upgradeAgentMessage.log file in the logs directory for more information about the error that occurred.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the name of the file being copied, look in the logs for the message that was recorded when the error occurred.

BTC5062I **This error code indicates that the deployer service could not be located. This error is recorded in the previously logged message BTC5053E in the logs/upgradeAgentMessage.log file in the logs directory.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. Although you do not need to look for details about this error, you can find details about the original error message in the logs/upgradeAgentMessage.log file.

BTC5063I **This error code indicates that the CAUpgrade.properties file could not be loaded from the agent manager. Look for the previously logged message BTC5048E in the logs/ upgradeAgentMessage.log file in the logs directory for more information about the error that occurred.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the URL for the file being copied and the specific exception that was reported, look in the logs for the message that was recorded when the error occurred.

BTC5064I **This error code indicates that the agent manager context root could not be created. Look for the previously logged message BTC5054E in the logs/upgradeAgentMessage.log file in the logs directory for more information about the error that occurred.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as values in the agent manager context root, look in the logs for the message that was recorded when the error occurred.

BTC5065I **This error code indicates that an unexpected error occurred during the common agent upgrade. Look for the previously logged message BTC5046E in the logs/upgradeAgentMessage.log file in the logs directory for more information about the error that occurred.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the specific exception, in the logs for the message that was recorded when the error occurred.

BTC5066I **There was a problem retrieving the upgrade status from the epInstallStatus.log file. Look for the previously logged message BTC5047E in the logs/upgradeAgentMessage.log file in the logs directory for more information about the error that occurred.**

Explanation: You are checking the status of the upgrade after it failed, recovered from the error, and restarted, so this command does not have access to the complete context of the error. To get the details of the error, such as the specific exception, look in the logs for the message that was recorded when the error occurred.

BTC5067I **The upgrade of the common agent was started, but it did not finish. Look in the common agent installation log at logs/agentInstall.log for more information.**

Explanation: No additional information is available for this message.

BTC5068I   **The upgrade of the common agent failed. Look in the common agent installation log at logs/agentInstall.log for more information.**

Explanation: No additional information is available for this message.

BTC5069E   **The upgrade status retrieved from the logs/install/epInstallStatus.log file contained the following unrecognized value:** *unrecognized_status*

Explanation: The value for the upgrade status was not one of the defined values.

Administrator Response: Collect the common agent logs and properties files, and contact customer support.

BTC5070I   **The IP address of the common agent has changed. The detected IP addresses are the following ones:** *IP_addresses* **The updated configuration status will be sent to the agent manager.**

Explanation: No additional information is available for this message.

BTC5071E   **The agent query can not be run because there is a problem with the certificate or because the common agent has not yet registered with the agent manager.**

Explanation: This message indicates a communication problem between the common agent and the agent manager. The communication failure might be caused by one of the following reasons:

- The common agent does not have valid security credentials.
- The common agent has not yet registered with the agent manager.

System action: The common agent will continue to run but cannot report status to the agent manager.

Administrator Response: Verify that the common agent is registered, and that it has valid security credentials.

BTC5072E   **The time interval for IP address polling that is specified in the ipaddress.poll.timeinterval key in the endpoint.properties file is not a valid positive integer. This value should be within range** *min_value* **and** *max_value***. The value specified is** *value***. The default value of 300 seconds will be used.**

Explanation: The ipaddress.poll.timeinterval key in the endpoint.properties file controls how often the common agent checks the IP address of the common agent for changes.

Administrator Response: Correct the value in the ipaddress.poll.timeinterval property and restart the common agent. Specify the polling interval in seconds. For example, to set the interval to 2 minutes, set the property as follows:

ipaddress.poll.timeinterval = 120

BTC5073I   **command [args]**

Explanation: The translatable part of the agentcli command's output.

BTC5074E   **The common agent registration failed. The failure was caused by exception:** *exception*

Explanation: The common agent was not able to register. It describes reason.

Administrator Response: No action required.

Agent Manager messages

CTGEM0000E   **An error occurred while loading information from the agent manager configuration file, AgentManager.properties.**

Explanation: An error occurred while loading the agent manager configuration information from the AgentManager.properties file.

System action: Agent manager initialization stops. The agent manager is not operational.

Administrator Response: Make sure that the agent manager configuration file (AgentManager.properties) is in the correct location, and then restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0001E   **The agent certificate request listener was not loaded. The listener class name is** *listener_class_name***.**

Explanation: An error occurred while loading the listener specified by *listener_class_name*. The agent certificate request listener was not loaded.

System action: The function provided by the specified agent certificate request listener will not be available. The absence of a certificate request listener can result in the rejection of all agent registration attempts.

Administrator Response: Check the WebSphere application server message and trace files. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem. If tracing is

not turned on, you might have to turn tracing on and restart the application server.

If the exception indicates an I/O error (IOException), try to restart the application server. If the problem continues, there might be either a problem with the file system permissions or a disk failure.

For other errors, contact IBM Customer Support.

Programmer response: If the exception indicates that the class was not found (ClassNotFoundException), make sure that the name of the class is spelled correctly in the Registration.Listeners.Agent.Request property of the agent manager configuration file (AgentManager.properties). If the name of the class is correct, make sure that the class is in the class path of the agent manager.

If the exception is ClassCastException, then the specified class does not implement the appropriate interface, and is thus not a valid agent certificate request listener. Modify your program and try again.

CTGEM0002E   The manager certificate request listener was not loaded. The listener class name is *listener_class_name***.**

Explanation: An error occurred while loading the listener specified by *listener_class_name*. The manager certificate request listener was not loaded.

System action: The function provided by the specified manager certificate request listener will not be available. The absence of a certificate request listener can result in the rejection of all resource manager registration attempts.

Administrator Response: Check the application server log and trace files. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem. If tracing is not turned on, you might have to turn tracing on and restart the application server.

If the exception indicates an I/O error (IOException), try to restart the application server. If the problem continues, there might be either a problem with the file system permissions or a disk failure.

For other errors, contact IBM Customer Support.

Programmer response: If the exception indicates that the class was not found (ClassNotFoundException), make sure that the name of the class is spelled correctly in the Registration.Listeners.Manager.Request property of the agent manager configuration file (AgentManager.properties). If the name of the class is correct, make sure that the class is in the class path of the agent manager.

If the exception is ClassCastException, then the specified class does not implement the appropriate interface, and is thus not a valid manager certificate request listener. Modify your program and try again.

CTGEM0003E   A manager certificate issued listener was not loaded. The listener class name is *listener_class_name***.**

Explanation: An error occurred while loading the listener specified by *listener_class_name*. The manager certificate issued listener was not loaded.

System action: The function provided by the specified manager certificate issued listener will not be available.

Administrator Response: Check the application server log and trace files. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem. If tracing is not turned on, you might have to turn tracing on and restart the application server.

If the exception indicates an I/O error (IOException), try to restart the application server. If the problem continues, there might be either a problem with the file system permissions or a disk failure.

For other errors, contact IBM Customer Support.

Programmer response: If the exception indicates that the class was not found (ClassNotFoundException), make sure that the name of the class is spelled correctly in the Registration.Listeners.Manager.Issue property of the agent manager configuration file (AgentManager.properties). If the name of the class is correct, make sure that the class is in the class path of the agent manager.

If the exception is ClassCastException, then the specified class does not implement the appropriate interface, and is thus not a valid manager certificate issued listener. Modify your program and try again.

CTGEM0004E   The agent certificate issued listener was not loaded. The listener class name is *listener_class_name***.**

Explanation: An error occurred while loading the agent certificate issued listener specified by *listener_class_name*.

System action: The function provided by the specified agent certificate issued listener will not be available.

Administrator Response: Check the application server log and trace files. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem. If tracing is not turned on, you might have to turn tracing on and restart the application server.

If the exception indicates an I/O error (IOException), try to restart the application server. If the problem continues, there might be either a problem with the file system permissions or a disk failure.

For other errors, contact IBM Customer Support.

Programmer response: If the exception indicates that the class was not found (ClassNotFoundException), make sure that the name of the class is spelled correctly in the Registration.Listeners.Agent.Issue property of the agent manager configuration file (AgentManager.properties). If the name of the class is correct, make sure that the class is in the class path of the agent manager.

If the exception is ClassCastException, then the specified class does not implement the appropriate interface, and is thus not a valid agent certificate issued listener. Modify your program and try again.

CTGEM0005E   A configuration update listener was not loaded. The listener class name is *listener_class_name*.

Explanation: The listener specified by *listener_class_name* was not loaded as a configuration update listener.

System action: The function provided by the specified configuration update listener is not available.

Administrator Response: Check the application server log and trace files. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem. If tracing is not turned on, you might have to turn tracing on and restart the application server.

If the exception indicates an I/O error (IOException), try to restart the application server. If the problem continues, there might be either a problem with the file system permissions or a disk failure.

For other errors, contact IBM Customer Support.

Programmer response: If the exception indicates that the class was not found (ClassNotFoundException), make sure that the name of the class is spelled correctly in the Config.Listener.Agent and Config.Listener.Manager properties of the agent manager configuration file (AgentManager.properties). If the name of the class is correct, make sure that the class is in the class path of the agent manager.

If the exception is ClassCastException, then the specified class does not implement the appropriate interface, and is thus not a valid configuration update listener. Modify your program and try again.

**CTGEM0006E   The renewal of a certificate was rejected because a certificate in its chain of trust was revoked.
The distinguished name (DN) of the rejected certificate is** "*rejected_distinguished_name*".
The distinguished name of the revoked certificate is "*revoked_distinguished_name*".

Explanation: A certificate cannot be renewed if a

certificate in its chain of trust has been revoked.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

Administrator Response: Identify the computer system that is trying to renew its certificate and determine whether it should be allowed to reregister. If you want to allow the computer system to register as an agent, ask for agent recovery. If you do not want it to reregister, no action is required.

CTGEM0007E   The renewal of a certificate was rejected because a valid trust path to the certificate authority was not found. The distinguished name (DN) of the rejected certificate is "*rejected_distinguished_name*".

Explanation: A certificate cannot be renewed without a trust path to the certificate authority. The certificate that was submitted for renewal might have been generated by a different certificate authority. For example, you typically use a different certificate authority in a test environment than you do in your production environment. If you created an agent in a test environment and did not completely reconfigure it for the production environment, you will receive this message.

In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

Administrator Response: Make sure that all of the certificates for this agent or resource manager are issued by the certificate authority for your environment, or force it to reregister.

CTGEM0008W   A certificate was renewed even though the associated information was not in the agent registry. The distinguished name (DN) of the renewed certificate is "*renewal_distinguished_name*".

Explanation: The certificate to be renewed is signed and valid, but is not listed in the agent registry. The certificate is renewed and its information is added to the registry.

CTGEM0009E   The agent manager cannot create the public / private key pair of type *key_pair_type* **using algorithm** *key_pair_algorithm*.

Explanation: The agent manager is unable to create a public / private key pair of type *key_pair_type* using the algorithm *key_pair_algorithm*.

Administrator Response: Contact IBM Customer Support.

CTGEM0010E   The agent manager cannot open the root private key associated with the certificate authority.

Explanation: The root private key of the certificate authority cannot be opened. This means that one or both of the key store or password stash file are missing or damaged.

System action: The certificate authority is not initialized. The certificate authority cannot generate and renew certificates, so registration requests cannot be processed.

Administrator Response: Check the CA.keyRing.name and CA.keyPWfile.name properties in the agent manager configuration file, AgentManager.properties. Make sure that the file specified by each property is in the directory specified by the ARS.directory property. If both files are present, restart the agent manager. If the problem continues, or if either file is missing, contact IBM Customer Support.

CTGEM0011E   The certificate authority was not initialized.

Explanation: An error occurred while initializing the certificate authority. As a result, the certificate authority is not operational.

System action: The certificate authority was not initialized. The certificate authority cannot generate and renew certificates, so registration requests cannot be processed.

Administrator Response: Check the agent manager log and trace files for error messages and exception traces that were generated during the initialization of the agent manager. If the messages do not suggest a solution, contact IBM Customer Support.

CTGEM0012E   The certificate authority did not get a block of serial numbers from the serial number table in the agent registry.

Explanation: The serial number table in the agent registry is a locked table. To improve performance when assigning serial numbers to certificates, the certificate authority does not lock the serial number table for each serial number. Instead, it gets a block of numbers and assigns new serial numbers from the block.

This message indicates that the certificate authority was unable to get a block of serial numbers from the table.

System action: The certificate authority cannot generate and renew certificates, so registration requests cannot be processed.

Administrator Response: Verify that the agent registry

database is available. If it is not in a local database, make sure that you can connect to it from the agent manager server. Look in the WebSphere trace log for the SQL error associated with this problem for additional information about the problem. Turn tracing on, if it is not already on, and restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0013E   The following Web Services Description Language (WSDL) file was not found: *file_name***.**

Explanation: The WSDL file specified by *file_name* was not found.

System action: The Web service port implementation associated with the *file_name* WSDL file was not initialized. The function it provides is not available.

Administrator Response: Collect the message and trace files and contact IBM Customer Support.

CTGEM0014E   The following Web Services Description Language (WSDL) file cannot be loaded: *file_name***.**

Explanation: An error occurred while loading the WSDL file.

System action: The Web service port implementation associated with the *file_name* WSDL file was not initialized, so the function it provides is not available.

Administrator Response: Collect the message and trace files and contact IBM Customer Support.

CTGEM0015E   Use a secure connection (HTTPS) for this request.

Explanation: A client program attempted to use a TCP/IP port that is not secure to invoke an operation that requires a secure connection. This typically indicates one of the following problems:

- The client program is using the wrong port for this request.
- The port numbers in the agent configuration file were modified after the agent was installed.
- The agent manager was originally configured to run in non-secure mode, but has been partially reconfigured for secure mode.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

Administrator Response: Collect the message and trace files and contact IBM Customer Support.

CTGEM0016E   The *parameter_name* **parameter cannot be NULL.**

Explanation: A client program specified NULL for the *parameter_name* parameter. This parameter must have a non-NULL value.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

Administrator Response: Make sure that the agent configuration file (AgentManager.properties) lists the correct port numbers for each agent manager request type. If the configuration file is correct, collect the message and trace files and contact IBM Customer Support.

CTGEM0017E   Client authentication is required to process the request.

Explanation: A client program issued a request to perform an action that requires authentication, but did not supply a certificate with the request. This can indicate that the agent is not correctly configured or that the program is sending the request to the wrong TCP/IP port.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

Administrator Response: Collect the message and trace files and contact IBM Customer Support.

CTGEM0018E   An internal HTTP or application server error prevented a request from being fulfilled.

Explanation: An internal HTTP or application server error prevented the request from being fulfilled. Look at the exception information in the agent manager trace log to determine the problem.

Administrator Response: Check the agent manager message and trace files. If a solution to the problem is not apparent, contact IBM Customer Support.

CTGEM0019E   The agent with the operating system GUID "*operating_system_GUID***" and component ID "***component_ID***" is already registered, but duplicate registration is not enabled. The registration is not allowed.**

Explanation: An agent with the same identification is already registered, but the agent manager is configured to prevent duplicate registration.

The component ID *component_ID* identifies the specific instance of the agent on a computer system by using

the root configuration directory, or installation directory, of the agent.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

Administrator Response: If you want to allow duplicate registration, change the value of the Registration.Agent.Reregistration.Policy property in the agent manager configuration file, AgentManager.properties. To allow a specific agent to reregister, delete the certificates for that agent from the registry. If the Registration.Agent.Reregistration.Policy setting allows reregistration, delete the certificates for all agents running the same operating system on the target agent.

CTGEM0020E   An agent registration request from *IP_address* **was rejected because the password is not correct. The password that was specified is** *password***.**

Explanation: Agent registration was blocked because the password submitted is incorrect.

Administrator Response: Configure the agent to provide the correct password.

CTGEM0021E   The agent manager instance cannot be retrieved.

Explanation: An error occurred while running the agent manager getInstance() method to retrieve the instance of the agent manager, which is class AgentManager. To determine the original point of failure, examine the trace log file to see the series of exception traces for this failure.

System action: The agent manager is not operational.

Administrator Response: Collect the message and trace files and contact IBM Customer Support.

CTGEM0022E   The agent manager cannot connect to the agent registry.

Explanation: A database error occurred while connecting to the agent registry.

System action: Information gathered by the agent manager will not be written to the agent registry. However, the agent manager continues to run.

Administrator Response: Verify that the agent registry database is operational. If it is not running locally, make sure that you can connect to it from the agent manager server. Turn on tracing (if it is not already on), and restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0023E   The agent manager cannot store information about the agent with the operating system GUID "*operating_system_GUID*" and component ID "*component_ID*" in the agent registry.

Explanation: The agent manager cannot store information about the specified agent in the agent registry. This indicates a possible problem with the database or a problem in the agent manager. The agent or resource manager that called the agent manager is not affected by this problem.

The component ID *component_ID* identifies the specific instance of the agent on a computer system by using the root configuration directory, or installation directory, of the agent.

Administrator Response: Verify that the agent registry database is operational. If it is not running locally, verify that you can connect to it from the agent manager server. Turn on tracing (if it is not already on), and restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0024E   The agent manager cannot store information about the certificate with serial number "*serial_number*" and distinguished name (DN) "*distinguished_name*" in the agent registry.

Explanation: The agent manager cannot store information about a certificate in the agent registry. This indicates a possible problem with the database or a problem in the agent manager. The agent or resource manager that called the agent manager is not affected by this problem, because it receives the certificate, even though the certificate is not stored in the registry. The next time the agent or resource manager contacts the agent manager, the agent manager authenticates the caller using the certificate that is presented at that time.

System action: The agent manager logs the exception in its trace log file. No exception is thrown for the calling program.

Administrator Response: Verify that the agent registry database is operational. If it is not running locally, verify that you can connect to it from the agent manager server. After correcting any database access problem, turn on agent manager tracing (if it is not already on), and restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0025E   The client certificate has an unrecognized format: *class_name*.

Explanation: The client certificate specified by the *class_name* class has an unrecognized format.

Administrator Response: Collect the message and trace files and contact IBM Customer Support.

CTGEM0026E   The agent manager cannot store information that is provided in a configuration update into the agent registry.

Explanation: The information in a configuration update cannot be stored in the agent registry.

Administrator Response: Verify that the agent registry database is operational. If it is not running locally, make sure that you can connect to it from the agent manager server. Turn on tracing (if it is not already on), and restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0027E   The agent manager cannot load the root certificate for the certificate authority that uses the following alias: *root_certificate_alias*.

Explanation: The agent manager cannot load its root certificate.

System action: The certificate authority is not initialized. Certificate generation and renewal cannot occur, so registration requests cannot be processed.

Administrator Response: Collect the agent manager and trace files and contact IBM Customer Support.

CTGEM0028E   The identification information in the certificate request is incomplete. Both the operating system GUID and the component ID must be specified.

Explanation: An agent or a resource manager submitted a certificate request that does not contain complete identification information. The calling program must provide both an operating system GUID and a component ID.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

Administrator Response: This message indicates a programming problem. Collect the agent manager message and trace files and contact IBM Customer Support.

Programmer response: Modify the calling program to provide complete information for the certificate request.

CTGEM0029E   A Web service port implementation class cannot be loaded. The implementation class name is *class_name*.

Explanation: An error occurred while loading the Web service port implementation class specified by *class_name*.

System action: The function provided by the specified Web service port implementation is not available.

Administrator Response: Check the WebSphere application server log and trace files. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem. If tracing is not turned on, turn it on and restart the application server.

If the exception indicates an I/O error (IOException), try to restart the application server. If the problem continues, there might be either a file system permissions problem or a disk failure.

Programmer response: For a ClassNotFoundException exception, make sure that the name of the class is spelled correctly in the WSDL.Ports.Impl property in the agent manager configuration file (AgentManager.properties). If the name of the class is correct, make sure that the class is in the class path of the agent manager.

If the exception is ClassCastException, the specified class does not implement the appropriate interface, and is thus not a valid Web service port implementation.

CTGEM0030E   The agent manager cannot initialize the authorization validation listener (AuthorizationValidator).

Explanation: The agent manager cannot initialize the authorization validation listener (AuthorizationValidator).

System action: The agent manager continues to run. However, all resource manager registration requests will be rejected.

Administrator Response: Check the WebSphere application server log and trace files to see exactly what happened. This message is associated with an additional message (CTGEM0031E, CTGEM0032E, or CTGEM0033E) that gives more detail about the problem.

CTGEM0031E   The initialization of the authorization validation listener (AuthorizationValidator) failed because it cannot reference the agent manager instance.

Explanation: The initialization of the authorization validation listener failed because it cannot reference the agent manager instance.

System action: The agent manager continues to run. However, all resource manager registration attempts will be rejected.

Administrator Response: Collect the WebSphere application server message and trace logs and contact IBM Customer Support.

CTGEM0032E   The initialization of the authorization validation listener (AuthorizationValidator) failed because the *file_name* **file does not exist.**

Explanation: The initialization of the authorization validation listener failed because it cannot find the XML configuration file specified by *file_name*.

System action: The agent manager continues to run. However, all resource manager registration attempts will be rejected.

Administrator Response: Check the Registration.Manager.Authorization.Config property in the agent manager configuration file, AgentManager.properties. Make sure that the file that it points to, specified by *file_name*, is in the correct directory. The location of the file is relative to the directory specified by the ARS.directory property.

When the information in the configuration file is correct, restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0033E   The initialization of the authorization validation listener (AuthorizationValidator) failed because an error was detected while parsing the agent manager configuration file, AgentManager.properties.

Explanation: The initialization of the authorization validation listener failed because an error occurred while parsing agent manager configuration file, AgentManager.properties.

System action: The agent manager continues to run. However, all resource manager registration attempts will be rejected.

Administrator Response: This error might be caused by an error in the configuration file. Verify that the syntax of the file is correct and then restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0034W   The agent manager cannot write the agent manager ID to the *file_name* **file.**

Explanation: An error occurred while writing the agent manager ID to the file system.

System action: The agent manager can run even if the agent manager ID is not saved to the file system. The next time the agent manager needs to use its ID, it creates a new one. If the operating system GUID has not been changed, the new agent manager ID is the same as the original one.

Creating a new agent manager ID is a problem only when both of the following conditions are met:

- The agent manager ID is changed because an administrator requested a new GUID.

- The client program uses the agent manager ID to verify that it is talking to the same agent manager as in previous requests, and therefore compares the new agent manager ID to a saved copy of the original ID.

Administrator Response: Make sure that the directory to which the agent manager ID file was to be written exists. If the directory exists, verify that the base directory specified by the ARS.directory property in the agent manager configuration file (AgentManager.properties) is correct. If it does, check its associated permissions, and verify that the user running the agent manager has the necessary authorization to write to the directory. After making sure that everything is in order, restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0035E   An agent registration was rejected because the agent supplied a registration password, but no agent registration password is defined for the agent manager.

Explanation: This message is generated when the agent provides an agent registration password with a request for registration, but the agent manager is not configured to require an agent registration password.

System action: The agent manager continues to run. However, without an agent registration password, all agent registration attempts are rejected.

Administrator Response: Configure the agent to provide the correct password. Make sure that the Registration.Agent.Access.Password property in the agent manager configuration file, AgentManager.properties, contains the agent registration password and then restart the agent manager. If the problem continues, contact IBM Customer Support.

CTGEM0036E   The resource manager with component ID "*resource_manager_ID*" cannot register because it did not specify a manager type.

Explanation: A resource manager registration request was rejected because the request did not specify the manager type.

The resource manager ID uses the context URL, or installation directory, of the resource manager to uniquely identify the resource manager instance.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

CTGEM0037E   The resource manager with component ID "*resource_manager_ID*" cannot register because the combination of registration ID, password, and manager type is not correct. The registration ID is "*registration_ID*". The password is "*password*". The manager type is "*manager_type*".

Explanation: A resource manager cannot register because it provided incorrect authentication or authorization information.

The resource manager ID uses the context URL, or installation directory, of the resource manager to uniquely identify the resource manager instance.

System action: In addition to logging this message in the agent manager message and trace files, the agent manager throws an exception to notify the calling program about the problem.

CTGEM0038I   The agent with the operating system GUID "*operating_system_GUID*" and component ID "*agent_ID*" registered successfully from IP address "*IP_address*".

Explanation: No additional information is available for this message.

CTGEM0039I   The resource manager with the operating system GUID "*operating_system_GUID*", component ID "*resource_manager_ID*", and feature name "*feature_name*" registered successfully from IP address "*IP_address*".

Explanation: No additional information is available for this message.

CTGEM0040I   The agent manager successfully renewed the certificate with serial number "*certificate_serial_number*" and distinguished name (DN) "*distinguished_name*".

Explanation: No additional information is available for this message.

CTGEM0041I   The agent manager successfully revoked the certificate with serial number *certificate_serial_number*.

Explanation: No additional information is available for this message.

CTGEM0042I   The agent manager successfully revoked one or more certificates assigned to the component with managed element GUID *GUID***.**

Explanation: The agent manager successfully revoked the registration of a certificate for a component identified by *GUID*, which is a type 3 GUID.

CTGEM0043E   The agent manager received the exception *exception* **while attempting to run the query** *query* **with a desired Detail Level of** *detail***.**

Explanation: An error occurred while running a query against the registry.

System action: No common agents are returned from a failed query attempt. The caller of the query will not be able to display or process any results.

Administrator Response: Check the WebSphere application server message and trace files. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem. If tracing is not turned on, you might have to turn tracing on, restart the application server, and rerun the query.

Gather the log files and contact IBM Customer Support.

Programmer response: A query may consist of SQL provided by the Agent Manager itself, or written by a Resource Manager using the Agent Manager. Failing Resource Manager queries should be examined to verify that the generated SQL is valid, by attempting to run an identical query directly against the database.

Failures which occur when running Agent Manager provided SQL should be reported to the Agent Manager development team.

CTGEM0043I   The agent manager successfully revoked one or more certificates associated with the components installed on the operating system with GUID *GUID***.**

Explanation: The agent manager successfully revoked one or more certificates for a component identified by *GUID*, which is a type 1 (operating system) GUID.

CTGEM0044I   The resource manager registration user ID *user_ID* **was disabled because too many registration attempts for this ID failed. The final failed attempt was received from IP address** *IP_address***. The ID will be reenabled in** *seconds* **seconds.**

Explanation: The user ID *user_ID* was disabled because it exceeded the threshold for resource manager registration failures. Either the user ID does not exist or the password that was specified in the registration

request does not match the password in the Authorization.xml file. Each registration failure is logged as message CTGEM0037E.

The account will automatically be reenabled after *seconds* seconds. The number of registration attempts that are allowed before the ID is locked and the length of the lockout interval are set in the agent manager configuration file (AgentManager.properties).

CTGEM0045I   The resource manager registration user ID "*user_ID***" was reenabled for resource manager registration.**

Explanation: No additional information is available for this message.

CTGEM0046E   Information cannot be loaded from the agent manager configuration file, AgentManager.properties.

Explanation: An error occurred while loading the configuration information from the AgentManager.properties.

Administrator Response: Make sure that the AgentManager.properties file is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable. When the file is available and readable, retry the operation. If the problem continues, contact IBM Customer Support.

CTGEM0047E   The registration encryption keystore file cannot be accessed because the following exception occurred: *exception*

Explanation: The specified exception occurred while attempting to read the registration encryption keystore file. The location of this file is specified by the REG.keyPWfile.name property in the file AgentManager.properties. The location is relative to the directory specified by the ARS.directory property in the same AgentManager.properties file.

Administrator Response: Follow these steps to verify that the information needed to locate the registration encryption keystore file is available:

1. Ensure that the agent manager properties file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable.

2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable.

3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file points to a readable registration encryption keystore file. The location of this file is relative to the directory specified by ARS.directory.

4. Ensure that the AgentManager.properties file contains an encrypted string for the value of the Registration.Agent.Access.Password property.

5. When the files and properties are correct, retry the operation that failed.

6. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.

7. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0048E   The agent registration password cannot be updated in the agent manager configuration file (AgentManager.properties) because the following exception occurred: *exception*

Explanation: The specified exception occurred while attempting to update the agent registration password in the Registration.Agent.Access.Password property in the AgentManager.properties file. The password was not changed.

Administrator Response: Follow these steps to verify that the information needed to encrypt and update passwords is available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the user who encountered the problem.

2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable.

3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location.

4. When the files and properties are correct, retry the operation that failed.

5. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.

6. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0049E   An error occurred while trying to encrypt the passed value. The exception is: *exception*

Explanation: An error occurred while attempting to encrypt the passed value.

System action: The command-line utility will attempt to encrypt the value passed according to the previously saved key and display the encrypted string to the user.

Administrator Response: Follow these steps to verify

that the information needed to encrypt and compare passwords are available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the current user.

2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable.

3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location, and that the file is readable.

4. Ensure that the AgentManager.properties file contains an encrypted string for the value of the Registration.Agent.Access.Password property.

5. When the files and properties are correct, retry the operation that failed.

6. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.

7. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0050E   The Authorization.xml file cannot be upgraded because the following exception occurred: *exception*

Explanation: In version 1.1 of the agent manager, passwords in the Authorization.xml file were saved as readable, unencrypted text. The current version stores passwords as encrypted text. When the agent manager is upgraded from version 1.1, the existing passwords are encrypted.

This message indicates that an exception occurred while the passwords in the original Authorization.xml file were being encrypted or updated in the file. The file is not unchanged.

System action: The upgrade continues. The passwords in the Authorization.xml file are not encrypted. The agent manager will not be able to register resource managers until the passwords in the file are encrypted.

Administrator Response: Follow these steps to encrypt the passwords:

1. Make sure that you have the authority to write the Authorization.xml file and then open it in a text editor.

   To locate Authorization.xml, use the Registration.Manager.Authorization.Config property in agent manager configuration file (AgentManager.properties). The location is relative to the directory specified in the ARS.directory

property. The AgentManager.properties file is in the WEB-INF/classes/resources directory of the AgentManager.war file.

2. Use the EncryptPW command to encrypt the password for each user in the Authorization.xml file. The EncryptPW command writes the encrypted password to standard output. Copy and paste the output string into the password= attribute of the <user> element.

3. Save the file.

If you cannot encrypt the passwords using the EncryptPW command, contact IBM Customer Support.

CTGEM0051E   A resource manager user ID cannot added to the Authorization.xml file because the following exception occurred: *exception*

Explanation: An error occurred while attempting to add a resource manager user ID to the Authorization.xml file.

Administrator Response: Follow these steps to verify that the information needed to locate files and to encrypt passwords is available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the current user.

2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable by the current user.

3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location.

4. Ensure that the Authorization.xml file exists and is readable. The Registration.Manager.Authorization.Config property in the AgentManager.properties file points to the Authorization.xml file, relative to the ARS.directory location.

5. When the files and properties are correct, retry the operation that failed.

6. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.

7. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0052E   A resource manager user ID cannot removed from the Authorization.xml file because the following exception occurred: *exception*

Explanation: An error occurred while attempting to remove a resource manager user from the Authorization.xml file.

Administrator Response: Follow these steps to verify that the information needed to locate files and to encrypt passwords is available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the current user.

2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable by the current user.

3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location.

4. Ensure that the Authorization.xml file exists and is readable. The Registration.Manager.Authorization.Config property in the AgentManager.properties file points to the Authorization.xml file, relative to the ARS.directory location.

5. When the files and properties are correct, retry the operation that failed.

6. If the problem continues, contact IBM Customer Support.

CTGEM0053E   The UpdatePW program encountered an error. It was called by the *command* **command. The exception was** *exception*.

Explanation: UpdatePW is the Java application that provides the functions made available to users by the EncryptPW, EncryptAMProps, AuthXMLAddUser, AuthXMLRemoveUser and AuthXMLRemoveAuthType commands. UpdatePW should be invoked only by one of those commands.

This message indicates that the specified exception occurred while running the UpdatePW program. The variable *command* identifies the function that UpdatePW was attempting to perform. It is possible to get a null pointer exception that specifies the command "null".

Administrator Response: Follow these steps to verify that the information needed to locate files and encrypt passwords is available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the

WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the current user.

2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable.

3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location. Ensure that the file is readable.

4. Ensure that the AgentManager.properties file contains an encrypted string for the value of the Registration.Agent.Access.Password property.

5. Ensure that the Registration.Manager.Authorization.Config property specifies the Authorization.xml file and that the current user can read this file. It is possible to use a different file name, so check the contents of the file pointed to by this property.

6. When the files and properties are correct, retry the operation that failed.

7. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.

8. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0054E   The UpdatePW program received incorrect input arguments.

Explanation: UpdatePW is the Java application that provides the functions made available to users by the EncryptPW, EncryptAMProps, AuthXMLAddUser, AuthXMLRemoveUser and AuthXMLRemoveAuthType commands. UpdatePW should be invoked only by one of those commands.

This error might indicate that an unauthorized program called the UpdatePW program or that there is a programming error in one of the authorized commands.

Administrator Response: If there is an error in the authorized commands, contact IBM Customer Support.

If UpdatePW was called by an unauthorized program, change the unauthorized program to use one of the authorized commands. The purpose and syntax of the authorized commands is as follows:

- EncryptPW *password*

  Encrypts *password* and writes the resulting string to standard output. This allows you to either verify or manually update an encrypted password.

- EncryptAMProps *password*

  Changes the value of the Registration.Agent.Access.Password parameter in the

agent manager configuration file (AgentManager.properties) with the encrypted form of the specified password.

- AuthXMLAddUser *user_ID password type_name* [*type_name* ...]

  Creates a resource manager user ID in the Authorization.xml file, sets its password to the encrypted form of the password specified, and adds the user to the user list (userList=) of the specified authorization types. If the user is listed in the userList attribute of any <authType> elements that were not listed in the command, it is removed. When the userList of an authType is empty, the authType is deleted.

- AuthXMLRemoveUser *user_ID*

  Removes the user identified by *user_ID* from the Authorization.xml file. When the last user is removed from a userList attribute of an authorization type (authType), that authType element will be removed.

- AuthXMLRemoveAuthType *type_name*

  Removes the authorization type identified by *type_name* from the Authorization.xml file.

CTGEM0055E   The EncryptPW command received incorrect input arguments. This command takes a single argument, which is the string you want to encrypt.

Explanation: No additional information is available for this message.

CTGEM0056E   The EncryptAMProps command received incorrect input arguments. This command takes a single argument, which is the unencrypted password to be used for agent registration.

Explanation: No additional information is available for this message.

CTGEM0057E   The AuthXMLAddUser command received incorrect input arguments. This command takes the following positional arguments: the resource manager ID that you want to add, the unencrypted password to be used for that ID, and one or more authorization types which the user will be allowed to access. All arguments are separated by one or more space characters.

Explanation: No additional information is available for this message.

CTGEM0058E   The AuthXMLRemoveUser command received incorrect input arguments. This command takes a single argument, which is the ID of the resource manager user ID that you want to remove.

Explanation: No additional information is available for this message.

CTGEM0059E   An error occurred while attempting to retrieve the key used to encrypt resource manager passwords. The exception is: *exception*

Explanation: The specified exception was caught while trying to retrieve the previously saved encryption key that is used during registration. Existing resource manager passwords cannot be validated and new resource manager passwords cannot be created.

Administrator Response: Follow these steps to verify that the information needed to encrypt and compare passwords are available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the current user.
2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable.
3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location.
4. When the files and properties are correct, retry the operation that failed.
5. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.
6. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0060E   An error occurred while attempting to encrypt the resource manager registration password. The exception is: *exception*

Explanation: The specified exception was caught while trying to encrypt the resource manager password so that it can be compared to the previously saved encrypted password. The resource manager registration password cannot be validated, so the operation that required password validation cannot take place.

Administrator Response: Follow these steps to verify that the information needed to encrypt and compare passwords are available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the current user.
2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable.
3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location.
4. When the files and properties are correct, retry the operation that failed.
5. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.
6. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0061E   An error occurred while attempting to encrypt the agent registration password. The exception is: *exception*

Explanation: The specified exception was caught while encrypting the agent registration password, so that it can be compared to the previously saved encrypted password. The agent registration password cannot be validated, so the operation that required password validation cannot take place.

Administrator Response: Follow these steps to verify that the information needed to encrypt and compare passwords are available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable.
2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable.
3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location.
4. When the files and properties are correct, retry the operation that failed.
5. If the problem continues, regenerate the registration encryption keystore file and retry the operation that failed. Instructions for regenerating the keystore file are located in the agent manager documentation.
6. If the problem continues after regenerating the keystore file, contact IBM Customer Support.

CTGEM0062E   The AuthXMLRemoveAuthType command received incorrect input arguments. This command takes a single argument, which is the ID of the resource manager user ID that you want to remove.

Explanation: No additional information is available for this message.

CTGEM0063E   A resource manager authorization type cannot removed from the Authorization.xml file because the following exception occurred: *exception*

Explanation: An error occurred while attempting to remove a resource manager authorization type from the Authorization.xml file.

Administrator Response: Follow these steps to verify that the information needed to locate files and to encrypt passwords is available:

1. Ensure that the agent manager configuration file (AgentManager.properties) is in the WEB-INF/classes/resources directory of the AgentManager.war file and that the file is readable by the current user.
2. Ensure that the directory pointed to by the ARS.directory property in the AgentManager.properties file exists and is readable by the current user.
3. Ensure that the value of the REG.keyPWfile.name property in the AgentManager.properties file is the name of the registration encryption keystore file, relative to the ARS.directory location.
4. Ensure that the Authorization.xml file exists and is readable. The Registration.Manager.Authorization.Config property in the AgentManager.properties file points to the Authorization.xml file, relative to the ARS.directory location.
5. When the files and properties are correct, retry the operation that failed.
6. If the problem continues, contact IBM Customer Support.

CTGEM0150I   Initializing the recovery service ...

Explanation: No additional information is available for this message.

CTGEM0151I   Loading the recovery listeners ...

Explanation: No additional information is available for this message.

CTGEM0152I   The recovery listener *class_name* **was loaded.**

Explanation: No additional information is available for this message.

CTGEM0153E   The agent manager cannot load the recovery listener: *class_name*. **An exception was caught:** *exception_class_name*.

Explanation: The agent manager cannot load the class specified by *class_name* as a recovery listener because of the exception identified by *exception_class_name*. The name of the exception typically indicates the problem.

System action: If the recovery service cannot load a recovery listener, it cannot handle recovery requests.

Administrator Response: Check the WebSphere application server log and trace files. If tracing is not turned on, you might have to turn tracing on and restart the application server. Look at the log information that is generated with this error to determine the name of the exception. The name of the exception typically indicates the problem.

If the exception indicates an I/O error (IOException), try to restart the application server. If the problem continues, there might be a problem with the file system permissions or a disk failure.

For other errors, contact IBM Customer Support.

Programmer response: If the exception indicates that the class was not found (ClassNotFoundException), check the properties file for the agent recovery service (RecoveryServiceConfiguration.properties) to make sure that the name of the class is spelled correctly. If the name of the class is correct, make sure that the class is in the class path of the agent manager.

If the exception is ClassCastException, then the specified class does not implement the appropriate interface, and is thus not a valid recovery listener. Modify your program and try again.

CTGEM0154E   The recovery service cannot be initialized.

Explanation: The recovery service cannot be initialized. This can happen if the recovery service configuration file (RecoveryServiceConfiguration.properties) is missing, or if WebSphere Application Server is incorrectly configured.

System action: If the agent recovery service does not start, common agents will not be able to make recovery requests.

Administrator Response: Examine the application server log and trace files for an exception that indicates the problem. If tracing is not already turned on, you might have to turn tracing on and restart the

application server for the recovery service.

CTGEM0155I   The recovery service started successfully.

Explanation: No additional information is available for this message.

CTGEM0156I   The registration server was missing

Explanation: No additional information is available for this message.

CTGEM0157I   Registration server trust failure

Explanation: No additional information is available for this message.

CTGEM0158I   The registration was rejected

Explanation: No additional information is available for this message.

CTGEM0159I   The status server was missing

Explanation: No additional information is available for this message.

CTGEM0160I   Status server trust failure

Explanation: No additional information is available for this message.

CTGEM0161I   Unknown reason

Explanation: No additional information is available for this message.

CTGEM0162I   The recovery service received a recovery request.
Reason: *reasons_for_recovery_request*
Operating system GUID of the common agent: *GUID*
Reported host name: *host_name*
Observed host name: *host_name*
Reported IP address: *IP_address*
Observed IP address: *IP_address*

Explanation: This message records that a common agent submitted a recovery request. The message contains information about the agent that submitted the recovery request and the reasons that it submitted a recovery request.

Potential reasons for submitting a recovery request are listed in messages CTGEM0155I through CTGEM0161I.

CTGEM2000E   The agent manager cannot find the requested message.
The message key is *message_key*.
The message bundle is *message_bundle*.

Explanation: The agent manager attempted to log the message identified by message key *message_key*, but the message is not in the message bundle. Probable causes for this problem are:

* The message bundle file, *message_bundle*, does not exist
* The message bundle was found but does not contain the specified message key
* The message bundle is in the wrong directory

Administrator Response: Collect the message and trace files and contact IBM Customer Support.

CTGEM2100I   The WebSphere configuration script *script_name* **started. The action taken is** *action_code*.

Explanation: No additional information is available for this message.

CTGEM2101I   The WebSphere configuration script *script_name* **completed successfully.**

Explanation: No additional information is available for this message.

CTGEM2102E   The WebSphere configuration script *script_name* **completed with the following error:** *error*

Explanation: The WebSphere configuration script *script_name* completed but returned the error identified by *error*. This can indicate a programming error.

Administrator Response: Save the message and trace files (msg_EPM_Install.log and trace_EPM_Install.log), and then contact IBM Customer Support.

CTGEM2103E   The required property *property* **is missing.**

Explanation: The property *property* is required but was not supplied. To find out which script failed, read the text of message CTGEM2100I, which occurs earlier in this message file (msg_EPM_Install.log).

Administrator Response: Save the message and trace files (msg_EPM_Install.log and trace_EPM_Install.log), and then contact IBM Customer Support.

CTGEM2104E   The action specified by the *action* **argument is not accepted by this script. The action must be either** *action_1* **or** *action_2*.

Explanation: The command-line argument *action* is not

accepted by this script. To find out which script failed, read the text of message CTGEM2100I, which occurs earlier in this message file (msg_EPM_Install.log).

Administrator Response: Save the message and trace files (msg_EPM_Install.log and trace_EPM_Install.log), and then contact IBM Customer Support.

CTGEM2105E The installation program cannot get the ID for the object specified by the search string *search_string*.

Explanation: The internal identifier for the WebSphere configuration object specified by the search string *search_string* was not found. This typically happens when you provide incorrect input to the installation program, for example, if you misspell the name of the WebSphere cell.

Administrator Response: Start the installation again, providing the correct data in all input fields.

CTGEM2106I The object of type *object_type* **and ID** *object_ID* **was created.**

Explanation: No additional information is available for this message.

CTGEM2107I The object of type *object_type* **and ID** *object_ID* **was deleted.**

Explanation: No additional information is available for this message.

CTGEM2108I The object with ID *object_ID* **and attribute name** *attribute_name* **was modified.**

Explanation: No additional information is available for this message.

CTGEM2109I The environment variable *variable_name* **was modified. The original value was** *original_value*. **The new value is** *new_value*.

Explanation: No additional information is available for this message.

CTGEM2110E The installation program cannot load the resource bundle *resource_bundle* **for the current locale,** *current_locale*.

Explanation: The installation program cannot locate the resource bundle *resource_bundle* in the current locale, *current_locale*. This indicates a problem in the files used by the installation program.

You do not get this error if you start the installation in a locale that is not supported by the agent manager component. In that situation, the installation uses the resource bundle for the default locale.

Administrator Response: If possible, obtain a new copy of the installation media and start the installation again. If you get the same message again, save the message and trace files (msg_EPM_Install.log and trace_EPM_Install.log), and then contact IBM Customer Support.

Programmer response: This error can be caused by one of the following problems:

- The install.jar file is not in the correct directory
- The -wsadmin_classpath parameter does not point to the location of the install.jar file.

Make sure that the installation image contains the jar file in the correct directory, and that the program passes the correct value for the -wsadmin_classpath parameter.

CTGEM2111I The WebSphere application *application_name* **was installed.**

Explanation: No additional information is available for this message.

CTGEM2112I The WebSphere application *application_name* **was uninstalled.**

Explanation: No additional information is available for this message.

CTGEM2113E A WebSphere configuration script cannot complete because the properties file *properties_file_name* **was not found.**

Explanation: The installation program creates the properties file to pass configuration information to the scripts that configure the agent manager in WebSphere Application Server. Because the configuration script cannot locate the properties file, the configuration cannot be performed and the agent manager installation cannot complete.

To find out which script failed, read the text of message CTGEM2100I, which occurs earlier in this message file (msg_EPM_Install.log).

Administrator Response: This message typically indicates a problem in the installation program. Save the message and trace files (msg_EPM_Install.log and trace_EPM_Install.log), and then contact IBM Customer Support.

CTGEM2114E A WebSphere configuration script cannot complete because it cannot read the installation properties file *properties_file_name*. **Error information:** *error_information*

Explanation: The installation program creates the properties file to pass configuration information to the scripts that configure the agent manager in WebSphere

Application Server. Because the configuration script cannot read the properties file, the configuration cannot be performed and the agent manager installation cannot complete.

To find out which script failed, read the text of message CTGEM2100I, which occurs earlier in this message file (msg_EPM_Install.log).

Administrator Response: This message typically indicates a problem in the installation program. Save the message and trace files (msg_EPM_Install.log and trace_EPM_Install.log), and then contact IBM Customer Support.

CTGEM2115E The value of the *property* **property in the properties file is incorrect. The value is:** *value*

Explanation: The installation program creates the properties file to pass configuration information to the scripts that configure the agent manager in WebSphere Application Server. Because the *property* property in this file is required but does not contain an acceptable value, the configuration cannot be performed.

To find out which script failed, read the text of message CTGEM2100I, which occurs earlier in this message file (msg_EPM_Install.log).

Administrator Response: This message typically indicates a problem in the installation program. Save the message and trace files (msg_EPM_Install.log and trace_EPM_Install.log), and then contact IBM Customer Support.

CTGEM2120E The GetAMInfo command encountered an error while accessing the version information for *application_name***.**

Explanation: The GetAMInfo command cannot read the version information for the *application_name* application because of an unspecified error. The variable *application_name* specifies one of the following applications:

- AgentManager: The agent manager application.
- AgentRecoveryService: The agent recovery service.

This message is displayed when GetAMInfo encounters an error that is not covered by messages CTGEM2121E or CTGEM2122E. Possible causes for this error are that the application is not installed, the version information file has been deleted, or the user does not have permission to access the version information file.

Administrator Response: Use the WebSphere Administrative Console to verify that the *application_name* application is installed and is readable. If the application is installed, verify that the version information file exists and that the user has permission to read the file. The file is located in the following directory:

installedApps/*node*/*application_name*.ear/
application_name.war/WEB-INF

The name of the version information file for the agent manager application is CTGEMAM*vvrrmm*.sys, where *vvrrmm* is the version information. The name of the file for the agent recovery service application is CTGEMREC*vvrrmm*.sys.

CTGEM2121E The version information file for the *application_name* **application was not found.**

Explanation: The GetAMInfo command cannot locate the version information file for the *application_name* application. The variable *application_name* specifies one of the following applications:

- AgentManager: The agent manager application.
- AgentRecoveryService: The agent recovery service.

Possible causes for this error are that the application is not installed or that the version information file has been deleted.

Administrator Response: Use the WebSphere Administrative Console to verify that the application named *application_name* is installed. If the application is installed, verify that the version information file exists and that the user has permission to read the file. The file is located in the following directory:

installedApps/*node*/*application_name*.ear/
application_name.war/WEB-INF

The name of the version information file for the agent manager application is CTGEMAM*vvrrmm*.sys, where *vvrrmm* is the version information. The name of the file for the agent recovery service application is CTGEMREC*vvrrmm*.sys.

CTGEM2122E An error occurred while trying to read the version information file for the *application_name***.**

Explanation: An IOException was caught while trying to read the version information file for *application_name*. The variable *application_name* specifies one of the following applications:

- AgentManager: The agent manager application.
- AgentRecoveryService: The agent recovery service.

Administrator Response: Use the WebSphere Administrative Console to verify that the application named *application_name* is installed. If the application is installed, verify that the version information file exists and that the user has permission to read the file. The file is located in the following directory:

installedApps/*node*/*application_name*.ear/
application_name.war/WEB-INF

The name of the version information file for the agent manager application is CTGEMAM*vvrrmm*.sys, where

vvrrmm is the version information. The name of the file for the agent recovery service application is CTGEMREC*vvrrmm*.sys.

If the file exists and the user has permission to read the file, retry the GetAMInfo command again. If the problem persists, either the file system or the version information file is damaged. Locate the version information file if possible and then contact IBM Customer Support.

CTGEM2123I   The wrong number of parameters was specified. The GetAMInfo command takes the following parameters, in this order:
1. WebSphere Application Server installation directory
2. WebSphere node name
3. Application name (optional)
The application name is either AgentManager (the agent manager application) or AgentRecoveryService (the agent recovery service application). If you omit the application name, GetAMInfo displays the status of both applications.

Explanation: No additional information is available for this message.

CTGEM2124I   *application_name***: version** *version* **build** *build*

Explanation: This message shows the version and build information for the specified application (*application_name*), which is one of the following applications:

- AgentManager: The agent manager application.
- AgentRecoveryService: The agent recovery service.

Appendix A. Common Agent serviceability tool

This section describes the serviceability tool that captures information about the common agent and the machine the agent is running on.

The serviceability tool is a script that can be run from the common agent installation directory, also referred to as the base directory. The tool collects diagnostic information about the agent and packs the information into an archive that can be used for troubleshooting or can be sent to IBM Customer Support for analysis in the event of problems with the common agent. The archive includes an HTML compilation of the information gathered.

Components

The serviceability tool consists of three key components:

1. A **script** that runs the tool, which is stored in the base directory of the agent (default: `C:\Program Files\tivoli\ep`):
   - Windows: `service.bat`
   - Unix: `service.sh`

2. A **jar file** located in the lib directory (default `C:\Program Files\tivoli\ep\lib`):
   `casservice.jar`

   Note: This tool also depends on the `guid.jar` file being in the lib directory, so it can get the GUID.

3. An output file, `CASservice.zip`, which is created in the base directory of the agent.

Running the serviceability tool

To run the common agent serviceability tool:

1. Open an Command prompt window.
2. Switch to the base directory of the common agent. 3)
3. Invoke the following script to create a `CASservice.zip` file in the base directory of the common agent:
   - Windows: `service`
   - UNIX/Linux: `./service.sh`

   Note: If you have multiple common agents on a machine, you need to run the tool in the base directory of each agent that you want to gather service information about. If you intend to send multiple `CASservice.zip` files to IBM Customer Support, be sure to rename them so they don't all have the same name.

Contents of the CASservice.zip file

The CASservice.zip file contains the following files:

1. Key system information stored as a file called `CASserviceInfo.html` that can be viewed by an HTML browser (Internet Explorer 6 recommended). The file is located in the `<basedir>\` directory:

- GUID
- SysInfo (Host Name, IP addr, OS Arch, OS Name, OS Ver, Java Ver, Java VM, Java VM Ver, CA Install Dir)
- common agent version number
- ipconfig /all ("ifconfig -a" on UNIX or Linux)
- netstat -a
- Listing of following directories:
    - base directory
    - cert directory
    - config directory
    - installableBundles directory and subdirectories
    - installedBundles directory and subdirectories
    - jre directory
    - lib directory
    - logs directory and subdirectories
    - subagents directory and subdirectories
2. System and common agent logs and other key files, as described in the following table:

Table 14. Files included in the CASservice.zip file

File name	File path
HTML service file:	
CASserviceInfo.html (described above)	\<basedir>\
MSinfo output file (Windows only):	
msinfo.txt	\<basedir>\
Key files from base directory:	
BTCJ010200.sys	\<basedir>\
epInstall.log	\<basedir>\
All files from cert directory	
agentKeys.jks	\<basedir>\cert\
agentTrust.jks	\<basedir>\cert\
CertificateRevocationList	\<basedir>\cert\
pwd	\<basedir>\cert\
All files from config directory:	
endpoint.properties	\<basedir>\config\
logging.properties	\<basedir>\config\
nonstop.properties	\<basedir>\config\
smfnonstop.properties	\<basedir>\config\

Table 14. Files included in the CASservice.zip file (continued)

File name	File path
All files from logs directory:	
msgAgent.log	<basedir>\logs\
nonstop.log	<basedir>\logs\
smfnonstop.log	<basedir>\logs\
SystemErr.log	<basedir>\logs\
SystemOut.log	<basedir>\logs\
traceAgent.log	<basedir>\logs\
All files from logs\install directory:	
ep_install.err	<basedir>\logs\install\
ep_install.log	<basedir>\logs\install\
epInstallStatus.log	<basedir>\logs\install\
guid_install.err	<basedir>\logs\install\
guid_install.log	<basedir>\logs\install\
trace_ep_install.err	<basedir>\logs\install\
trace_ep_install.log	<basedir>\logs\install\

Appendix B. Support information

This section describes the following options for obtaining support for IBM products:

- "Searching knowledge bases"
- "Obtaining fixes"
- "Contacting IBM Software Support" on page 226

Searching knowledge bases

If you have a problem with your IBM software, you want it resolved quickly. Begin by searching the available knowledge bases to determine whether the resolution to your problem is already documented.

Search the information center on your local system or network

IBM provides extensive documentation that can be installed on your local computer or on an intranet server. You can use the search function of this information center to query conceptual information, instructions for completing tasks, reference information, and support documents.

Search the Internet

If you cannot find an answer to your question in the information center, search the Internet for the latest, most complete information that might help you resolve your problem. To search multiple Internet resources for your product, expand the product folder in the navigation frame to the left and select **Web search**. From this topic, you can search a variety of resources including:

- IBM technotes
- IBM downloads
- IBM Redbooks
- IBM developerWorks®
- Forums and newsgroups
- Google

Obtaining fixes

A product fix might be available to resolve your problem. You can determine what fixes are available for your IBM software product by checking the product support Web site:

1. Go to the IBM Software Support Web site (http://www.ibm.com/software/support/).
2. Under **Product support pages A to Z**, click **I**, and then select IBM Tivoli Intelligent Orchestrator. This opens the IBM Tivoli Intelligent Orchestrator Support site.
3. Under **Self help**, follow the link to **All Updates**, where you will find a list of fixes, fix packs, and other service updates for Tivoli Intelligent OrchestratorTivoli Provisioning Manager. For tips on refining your search, click **Search tips**.

4. Click the name of a fix to read the description and optionally download the fix.

To receive weekly e-mail notifications about fixes and other news about IBM products, follow these steps:

1. From the support page for any IBM product, click **My support** in the upper-right corner of the page.
2. If you have already registered, skip to the next step. If you have not registered, click register in the upper-right corner of the support page to establish your user ID and password.
3. Sign in to **My support**.
4. On the My support page, click **Edit profiles** in the left navigation pane, and scroll to **Select Mail Preferences**. Select a product family and check the appropriate boxes for the type of information you want.
5. Click **Submit**.
6. For e-mail notification for other products, repeat Steps 4 and 5.

For more information about types of fixes, see the *Software Support Handbook* (http://techsupport.services.ibm.com/guides/handbook.html).

Contacting IBM Software Support

IBM Software Support provides assistance with product defects.

Before contacting IBM Software Support, your company must have an active IBM software maintenance contract, and you must be authorized to submit problems to IBM. The type of software maintenance contract that you need depends on the type of product you have:

- For IBM distributed software products (including, but not limited to, Tivoli, Lotus®, and Rational® products, as well as DB2 Universal Database and WebSphere products that run on Windows or UNIX operating systems), enroll in Passport Advantage in one of the following ways:
  - **Online**: Go to the Passport Advantage Web page

    (http://www-306.ibm.com/software/howtobuy/passportadvantage/)

    and click **How to Enroll**
  - **By phone**: For the phone number to call in your country, go to the IBM Software Support Web site (http://techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region.
- For IBM eServer™ software products (including, but not limited to, DB2 Universal Database and WebSphere products that run in zSeries®, pSeries®, and iSeries environments), you can purchase a software maintenance agreement by working directly with an IBM sales representative or an IBM Business Partner. For more information about support for eServer software products, go to the IBM Technical Support Advantage Web page (http://www.ibm.com/servers/eserver/techsupport.html).

If you are not sure what type of software maintenance contract you need, call 1-800-IBMSERV (1-800-426-7378) in the United States or, from other countries, go to the contacts page of the IBM Software Support Handbook on the Web (http://techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region for phone numbers of people who provide support for your location.

Follow the steps in this topic to contact IBM Software Support:

1. Determine the business impact of your problem.

2. Describe your problem and gather background information.
3. Submit your problem to IBM Software Support.

Determine the business impact of your problem

When you report a problem to IBM, you are asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem you are reporting. Use the following criteria:

Severity 1	**Critical** business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution.
Severity 2	**Significant** business impact: The program is usable but is severely limited.
Severity 3	**Some** business impact: The program is usable with less significant features (not critical to operations) unavailable.
Severity 4	**Minimal** business impact: The problem causes little impact on operations, or a reasonable circumvention to the problem has been implemented.

Describe your problem and gather background information

When explaining a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Software Support specialists can help you solve the problem efficiently. To save time, know the answers to these questions:

- What software versions were you running when the problem occurred?
- Do you have logs, traces, and messages that are related to the problem symptoms? IBM Software Support is likely to ask for this information.
- Can the problem be re-created? If so, what steps led to the failure?
- Have any changes been made to the system? (For example, hardware, operating system, networking software, and so on.)
- Are you currently using a workaround for this problem? If so, please be prepared to explain it when you report the problem.

Submit your problem to IBM Software Support

You can submit your problem in one of two ways:

- **Online**: Go to the "Submit and track problems" page on the IBM Software Support site (http://www.ibm.com/software/support/probsub.html). Enter your information into the appropriate problem submission tool.
- **By phone**: For the phone number to call in your country, go to the contacts page of the IBM Software Support Handbook on the Web (techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region.

If the problem you submit is for a software defect or for missing or inaccurate documentation, IBM Software Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Software Support provides a workaround for you to implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM product support Web pages daily, so that other users who experience the same problem can benefit from the same resolutions.

For more information about problem resolution, see Searching knowledge bases and Obtaining fixes.

Appendix C. Notices

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