IBM SPSS Collaboration and Deployment Services
Version 6 Release 0

Troubleshooting Guide

IBM

Product Information

This edition applies to version 6, release 0, modification 0 of IBM SPSS Collaboration and Deployment Services and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Chapter 1. Basic topics

Techniques for troubleshooting problems

Troubleshooting is a systematic approach to solving a problem. The goal of troubleshooting is to determine why something does not work as expected and how to resolve the problem.

The first step in the troubleshooting process is to describe the problem completely. Problem descriptions help you and the IBM technical-support representative know where to start to find the cause of the problem. This step includes asking yourself basic questions:

- What are the symptoms of the problem?
- Where does the problem occur?
- When does the problem occur?
- Under which conditions does the problem occur?
- Can the problem be reproduced?

The answers to these questions typically lead to a good description of the problem, which can then lead you to a problem resolution.

What are the symptoms of the problem?

When you start to describe a problem, the most obvious question is what constitutes the problem. This question might seem straightforward; however, you can break it down into several more-focused questions that create a more descriptive picture of the problem. These questions can include:

- Who, or what, is reporting the problem?
- What are the error codes and messages?
- How does the system fail? For example, is it a loop, hang, crash, performance degradation, or incorrect result?

Where does the problem occur?

Determining where the problem originates is not always easy, but it is one of the most important steps in resolving a problem. Many layers of technology can exist between the reporting and failing components. Networks, disks, and drivers are only a few of the components to consider when you are investigating problems.

The following questions help you to focus on where the problem occurs to isolate the problem layer:

- Is the problem specific to one platform or operating system, or is it common across multiple platforms or operating systems?
- Is the current environment and configuration supported?

If one layer reports the problem, the problem does not necessarily originate in that layer. Part of identifying where a problem originates is understanding the environment in which it exists. Take some time to completely describe the problem environment, including the operating system and version, all corresponding software and versions, and hardware information. Confirm that you are running within an environment that is a supported configuration. Many problems can be traced back to incompatible levels of software that are not intended to run together.

When does the problem occur?

Develop a detailed timeline of the events that lead up to a failure, especially for those cases that are one-time occurrences. You can most easily develop a timeline by working backward: Start at the time an error was reported (as precisely as possible, even down to the millisecond), and work backward through the available logs and information. Typically, you need to look only as far as the first suspicious event that you find in a diagnostic log.

To develop a detailed timeline of events, answer these questions:
* Does the problem happen only at a certain time of day or night?
* How often does the problem happen?
* What sequence of events leads up to the time that the problem is reported?
* Does the problem happen after an environment change, such as upgrading or installing software or hardware?

Responding to these types of questions can give you a frame of reference in which to investigate the problem.

Under which conditions does the problem occur?

Knowing which systems and applications are running at the time a problem occurs is an important part of troubleshooting. These questions about your environment can help you to identify the root cause of the problem:
* Does the problem always occur during the same task?
* Does a certain sequence of events need to occur for the problem to surface?
* Do any other applications fail at the same time?

Answering these types of questions can help you explain the environment in which the problem occurs and correlate any dependencies. Remember that just because multiple problems might occur around the same time, the problems are not necessarily related.

Can the problem be reproduced?

From a troubleshooting standpoint, the ideal problem is one that can be reproduced. Typically, when a problem can be reproduced you have a larger set of tools or procedures at your disposal to help you investigate. However, problems that you can reproduce can have a disadvantage: If the problem affects your business significantly, you do not want it to recur. If possible, re-create the problem in a test or development environment, which typically offers you more flexibility and control during your investigation.
* Can the problem be re-created on a test system?
* Do multiple users or applications encounter the same type of problem?
* Can the problem be re-created by running a single command, a set of commands, or a particular application?

Searching knowledge bases

You can often find solutions to problems by searching IBM knowledge bases. You can optimize your results by using available resources, support tools, and search methods.

About this task

You can find useful information by searching the information center for IBM® SPSS® Collaboration and Deployment Services, but sometimes you need to look beyond the information center to answer your questions or resolve problems.

Procedure

To search knowledge bases for information that you need, use one or more of the following approaches:

- Find the content you need by using the IBM Support Portal. Add **SPSS Collaboration and Deployment Services** to your list of products, along with any other IBM products you have. The IBM Support Portal is a unified, centralized view of all technical support tools and information for all IBM systems, software, and services. The IBM Support Portal lets you access the IBM electronic support portfolio from one place. You can tailor the pages to focus on the information and resources that you need for problem prevention and faster problem resolution. Familiarize yourself with the IBM Support Portal by viewing the demo videos about this tool. These videos introduce you to the IBM Support Portal, explore troubleshooting and other resources, and demonstrate how you can tailor the page by moving, adding, and deleting portlets.
- Search for content about IBM SPSS Collaboration and Deployment Services by using one of the following additional technical resources:
  - IBM SPSS Collaboration and Deployment Services technotes and APARs (problem reports)
  - IBM SPSS Collaboration and Deployment Services Support website
  - IBM Redbooks
- Search for content by using the IBM masthead search. You can use the IBM masthead search by typing your search string into the Search field on any ibm.com® page.
- Search for content by using any external search engine, such as Google, Yahoo, or Bing. If you use an external search engine, your results are more likely to include information that is outside the ibm.com domain. However, sometimes you can find useful problem-solving information about IBM products in newsgroups, forums, and blogs that are not on ibm.com.

  Tip: Include "IBM" and the name of the product in your search if you are looking for information about an IBM product.

Getting fixes

A product fix might be available to resolve your problem.

Procedure

To find and install fixes:

1. If it is not already installed, obtain the IBM Installation Manager.
2. Determine which fix you need.
   a. Check the recommended fixes for IBM SPSS Collaboration and Deployment Services to confirm that your software is at the latest maintenance level.
   b. Determine whether IBM has already published an individual fix to resolve your problem. Check the list of problems that have been fixed in the IBM SPSS Collaboration and Deployment Services readme file documentation that is available for each listed fix pack and refresh pack.
3. Download the fix.
   a. Open the download document and follow the link in the Download Package section.
   b. When downloading the file, ensure that the name of the maintenance file is not changed. Changes might be intentional changes or they might be inadvertent changes that are caused by certain web browsers or download utilities.

4. Apply the fix.
   a. Follow the instructions in the Installation Instructions section of the download document.
   b. Subscribe to receive weekly email notifications about fixes and other IBM Support information.

Contacting IBM Support

IBM Support provides assistance with product defects, answering FAQs, and performing rediscovery.

Before you begin

After trying to find your answer or solution by using other self-help options such as technotes, you can contact IBM Support. Before contacting IBM Support, your company must have an active IBM software subscription and support contract, and you must be authorized to submit problems to IBM. For information about the types of support available, see the Support portfolio topic in the *Software Support Handbook*.

Procedure

Complete the following steps to contact IBM Support with a problem:

1. Define the problem, gather background information, and determine the severity of the problem. For help, see the Getting IBM® support topic in the *Software Support Handbook*.
2. Gather diagnostic information.
3. Submit your problem to IBM Support in one of the following ways:
   - Using IBM Support Assistant (ISA): Use this feature to open, update, and view an Electronic Service Request with IBM. Any data that has been collected can be attached to the service request. This expedites the analysis and reduces the time to resolution.
   - Online through the IBM Support Portal: You can open, update, and view all your Service Requests from the Service Request portlet on the Service Request page.
   - By phone: For the phone number to call in your region, see the Directory of worldwide contacts web page.

Results

If the problem that you submit is for a software defect or for missing or inaccurate documentation, IBM Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Support provides a workaround that you can implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM Support website, so that other users who experience the same problem can benefit from the same resolution.

Be prepared to work with the IBM technical-support representative by using IBM Assist On-site, which is a remote-assistance plug-in that you can download to your computer. The IBM technical-support representative can use IBM Assist On-site to view your desktop and share control of your mouse and keyboard. This tool can shorten the time it takes to identify the problem, collect the necessary data, and solve the problem. For more information, see IBM Assist On-site.

Exchanging information with IBM

To diagnose or identify a problem, you might need to provide IBM Support with data and information from your system. In other cases, IBM Support might provide you with tools or utilities to use for problem determination.

Sending information to IBM Support

To reduce the time it takes to resolve your problem, you can send trace and diagnostic information to IBM Support.

Procedure

To submit diagnostic information to IBM Support:

1. Open a problem management record (PMR). You can use the IBM® Support Assistant or the Service Request tool.
2. Collect the diagnostic data you need. Diagnostic data helps reduce the time it takes to resolve your PMR. You can collect the diagnostic data manually or automatically:
   - Collect the data manually.
   - Collect the data automatically. Use IBM Support Assistant (ISA) Lite to collect the data you need.
3. Compress the files by using the `.zip` or `.tar` format.
4. Transfer the files to IBM. You can use one of the following methods:
   - IBM Support Assistant
   - The Service Request tool
   - Standard data upload methods: FTP, HTTP
   - Secure data upload methods: FTPS, SFTP, HTTPS
   - Email

   All of these data exchange methods are explained on the IBM Support website.

Receiving information from IBM Support

Occasionally an IBM technical-support representative will ask you to download diagnostic tools or other files. You can use FTP to download these files.

Before you begin

Ensure that your IBM technical-support representative provided you with the preferred server to use for downloading the files and the exact directory and file names to access.

Procedure

To download files from IBM Support:

1. Use FTP to connect to the site that your IBM technical-support representative provided and log in as **anonymous**. Use your email address as the password.
2. Change to the appropriate directory:
   a. Change to the `/fromibm` directory.
      ```
      cd fromibm
      ```
   b. Change to the directory that your IBM technical-support representative provided.
      ```
      cd nameofdirectory
      ```
3. Enable binary mode for your session.
   ```
   binary
   ```
4. Use the `get` command to download the file your IBM technical-support representative specified.
   ```
   get filename.extension
   ```
5. End your FTP session.
   ```
   quit
   ```

Subscribing to Support updates

To stay informed of important information about the IBM products you use, you can subscribe to updates.

About this task

By subscribing to receive updates, you can receive important technical information and updates for specific IBM Support tools and resources. You can subscribe to updates by using one of two approaches:

* RSS feeds and social media subscriptions

    The following RSS feeds and social media subscriptions are available for IBM SPSS Collaboration and Deployment Services:

    – IBM SPSS Collaboration and Deployment Services Information Center, which has an RSS feed you can use to be informed of regular updates to the information.

    For general information about RSS, including steps for getting started and a list of RSS-enabled IBM web pages, visit the www.ibm.com/software/support/rss/ site.

* My Notifications

    With My Notifications, you can subscribe to Support updates for any IBM product. (My Notifications replaces My Support, which is a similar tool you might have used in the past.) With My Notifications, you can specify that you want to receive daily or weekly email announcements. You can specify what type of information you want to receive (such as publications, hints and tips, product flashes (also known as alerts), downloads, and drivers). My Notifications enables you to customize and categorize the products about which you want to be informed and the delivery methods that best suit your needs.

Procedure

To subscribe to Support updates:

1. Subscribe to the IBM SPSS Collaboration and Deployment Services Information Center RSS feed, which enables you to stay informed of regular updates to the information. To set up your RSS feed, go to information center RSS feed setup page.
2. Subscribe to the IBM SPSS Collaboration and Deployment Services RSS feed, which enables you to stay up-to-date with the latest IBM Software Support content for the product. To subscribe, go to the IBM SPSS Collaboration and Deployment Services RSS feeds page.
3. To subscribe to My Notifications, go to the IBM Support Portal and click **Manage all my subscriptions** in the Notifications portlet.
4. Sign in using your IBM ID and password, and click **Submit**.
5. Identify what and how you want to receive updates.
    a. Click the **Subscribe** tab.
    b. Click **Information Management** or another software brand or type of hardware.
    c. Click **SPSS Collaboration and Deployment Services** and select the names of any additional products you use. Click **Continue**.
    d. Select your preferences for how to receive updates, whether by email, online in a designated folder, or as an RSS or Atom feed.
    e. Select the types of documentation updates you want to receive, for example, new information about product downloads and discussion group comments.
    f. Click **Submit**.

Results

Until you modify your RSS feeds and My Notifications preferences, you receive notifications of updates that you have requested. You can modify your preferences when needed (for example, if you stop using one product and begin using another product).

Related information

IBM Software Support RSS feeds

Subscribe to My Notifications support content updates

My notifications for IBM technical support sign-in page

My notifications for IBM technical support overview tour

Chapter 2. IBM SPSS Collaboration and Deployment Services Repository troubleshooting

The topics in this section provide troubleshooting information related to IBM SPSS Collaboration and Deployment Services Repository issues.

Obtaining logs

Certain error messages and symptoms are common when installing and working with IBM SPSS Collaboration and Deployment Services Repository. It is always a good practice to refer to the repository log files to help determine the cause of the problem.

Repository installation logs

If problems occur during the initial installation, you can troubleshoot them using IBM Installation Manager logs. The log files can be accessed from the main menu of IBM Installation Manager.

If problems occur during repository configuration, examine the log files in the *<IBM SPSS Collaboration and Deployment Services Repository installation directory>/log*:

- *engine.log*
- *engine_ant.log*
- *enginOutErr.log*

IBM SPSS Collaboration and Deployment Services Package Manager logs

IBM SPSS Collaboration and Deployment Services Package Manager logs can be found in *<repository installation directory>/log*:

- *packageManagerTool.log*
- *packageManager_ant.log*

Runtime logs

By default, the following time-stamped runtime logs are generated:
- Main log (*cds.log*)
- Export-import transactions log (*cds_transfer.log*)

The default location of log files varies depending on the host application server:
- **WebSphere:** *<WebSphere profile directory>/logs/*
- **JBoss:** *<JBoss server directory>/log/*
- **WebLogic:** *<WebLogic domain directory>/servers/<server name>/logs/*

If the log files are not generated when the server starts, verify that the `log4j.configuration` property is correctly referencing the location of the `log4j.properties` file. The format of the `log4j.configuration` system property for paths without a drive letter is the following:

`file://<path>/log4j.properties`

The format of the `log4j.configuration` system property for paths on Windows platforms with a drive letter is the following:

`file:///<path>/log4j.properties`

If the `log4j.configuration` property is not matching the `log4j.properties` file, other products or applications may be loading an alternative log4j configuration. Enable debug logging to send the location in which the log4j configuration is loaded to the system output. To enable the debug mode for log4j, add the following system property to the Java runtime settings:

```
log4j.debug=true
```

Note that logging output can be customized by modifying the log4j configuration file on the host application server. For more information, see the corresponding section of *IBM SPSS Collaboration and Deployment Services Repository Installation and Configuration Guide*.

General topics

How do I prevent performance bottlenecks and CPU usage issues when starting and deploying the repository?

Depending on your specific system configuration, previously installed antivirus or spyware software may be configured for "deep scanning" of application components. These third party applications can be reconfigured to scan during certain times, or they can be turned off during installation and manually restarted.

Additionally, some of the more strict server-side firewall settings may negatively impact startup performance and not allow access.

If you are experiencing significant system degradation when starting the service, disable any nonessential processes and restart the repository.

How can I determine which database I am accessing?

Detailed database connection information and other system and version details can be downloaded from the browser-based IBM SPSS Collaboration and Deployment Services Deployment Manager interface.
1. After logging in, click **About** from the navigation list options.
2. Click **Show Detail** and then click the **Download version and system details** link at the end of the list. When prompted, save the file.
3. Open the file in a text editor and search for `Database Details`. This section contains detailed information about the database being used, including name, version, and a table listing.

The application throws a java.lang.OutOfMemoryError: PermGen space exception

This error occurs when the JVM runs out of space in the permanent generation heap due to a large number of used classes. The error can occur when running IBM SPSS Collaboration and Deployment Services applications, including its utility applications such as configuration utility or package manager. Depending on the system's memory configuration, the solution may be to either increase or reduce the value specified with the `PermSize` JVM parameter in application server scripts and utility applications. If the total memory consumption of the application server and the utilities is a lot smaller than the system's free memory and the out of memory exception still occurs, you should increase the value. If the total memory consumption of the utilities and the application server is greater than the system's free memory, try to reduce the size of the permanent generation heap. Consult the vendor documentation and support notes for your application server for information on setting the JVM max perm size limit.

For example, for WebSphere installations on Windows, the size of the permanent generation heap available to the wrapper service can be changed in *<WebSphere directory>/bin/wsadmin.bat*:

```
set PERFJAVAOPTION=-Xms256m -Xmx256m -Xj9 -Xquickstart
```

For detailed information about increasing the permanent generation heap size for other application servers, see the application server vendor documentation.

If memory errors occur when running IBM SPSS Collaboration and Deployment Services Package Manager, you can enable additional JVM options for memory allocation and garbage collections by uncommenting the corresponding lines of the launching scripts for the utility. For example, in *cliPackageManager.bat* the following line must be uncommented:

```
REM SET MEM_SETTINGS=%MEM_SETTINGS% -XX:+CMSPermGenSweepingEnabled
 -XX:+CMSClassUnloadingEnabled
```

You can also reduce the value of maximum heap size and permanent generation space parameters. For example:

```
-Xmx1024m -XX:PermSize=512m
```

can be changed to:

```
-Xmx512m -XX:PermSize=256m
```

A SAS syntax job fails on a UNIX system with a database connection error

If a SAS job run processed by IBM SPSS Collaboration and Deployment Services running on a UNIX system fails with a database connection error due to an invalid library name (error in the LIBNAME statement), verify that the shared libraries path environment variable (LD_LIBRARY_PATH on Solaris, SHLIB_PATH on HP-UX, or LIBPATH on AIX) is set to an appropriate value.

How do I restore the repository if my keystore file has been lost?

The keystore file contains the keys used to encrypt passwords used by the repository, such as the master password for database access. If the keystore file is lost, the system becomes unusable. If a backup of the keystore is available, it can be restored to the original location. If you are unsure what the original path of the keystore was, you can look up the *keystorePath* property of the *keystoreSecurity* element in *<repository installation directory>/platform/engineConfig.properties*.

If the keystore file is lost and a backup is not available, the system must be reinstalled by re-running the configuration utility in *<repository installation directory>/bin* and pointing it to the existing repository database. All passwords that existed in the system, such as the passwords for external directory services, defined credentials, etc. must be manually reentered.

What to do in case of the repository database failure?
- If the database failure occurs at repository startup, correct the database problem and restart the repository.
- If the database goes down when the repository is running, correct the database problem. If the database is down for a long time, it is recommended to stop the repository so that repository users do not encounter unexpected errors. If the errors persist after the database is restarted, then the repository must also be restarted.

AIX

Memory errors when installing IBM SPSS Collaboration and Deployment Services Repository or adapters on AIX

The errors may occur when installation process exceeds memory use limits for the user. In such case it is recommended to use the `ulimit` command to check the size of the data area, physical memory, and stack size:

```
ulimit -d
ulimit -s
ulimit -m
```

The user's memory limits may need to be increased or set to unlimited, for example:

```
ulimit -d unlimited
ulimit -s unlimited
ulimit -m unlimited
```

It may also be necessary to update Java environment settings:

```
export LDR_CNTRL=MAXDATA=0XB0000000@DSA
export IBM_JAVA_MMAP_JAVA_HEAP=true
```

Linux

Too many files open error while installing or running the repository on Linux.

This error is generated when the open file limit for a user exceeds the default setting. You can check the user's open file limit with the following command:

```
ulimit -n
```

The default value is 1024. The user's open file limit can be increased by running the following command:

```
ulimit -n value
```

Because certain types of processing, for example, IBM SPSS Modeler jobs, can involve a very large number of files, it is recommended to set the value as high as possible. The system must be restarted for the new limit to take effect.

Windows

A warning about missing Microsoft Visual C++ Redistributable package is displayed after repository configuration utility is run

After IBM SPSS Collaboration and Deployment Services Repository configuration is completed on Windows, a warning about missing Microsoft Visual C++ Redistributable package may be displayed.

If the warning is displayed, download and install Microsoft Visual C++ Redistributable package for your version of Windows before starting the repository.

Solaris

Unable to cancel general work job steps on Solaris.

Occasionally, it may not be possible to cancel certain types of the general work jobs on Solaris. The problem may be resolved by changing the shell used to run general work steps.
1. In browser-based IBM SPSS Collaboration and Deployment Services Deployment Manager open

    Process management > **Hash-bang (#!) shell path**
2. Change the default value of #!/bin/sh -f (Bourne shell, "sh") to #!/bin/ksh -f (Korn Shell, "ksh").

HP-UX

Import failure when running the repository on HP-UX with NFS.

When importing resources into the repository running on HP-UX with NFS, the following exception may occur:

```
java.lang.RuntimeException: The database is already in use by another process:
org.hsqldb.persist.NIOLockFile@3ffdc36b[file=/qa/projects/pes/HPUX/appserv/bea11g/
user_projects/domains/Domain41B179a/cds_transfer_root/
0a0b0ad397fef2c500000126b4ca991881ab/0a0b0ad397fef2c500000126b4ca991881ad
_transfer_database.lck,
exists=true, locked=false, valid=false, fl =null]:
```

To resolve the problem, use browser-based IBM SPSS Collaboration and Deployment Services Deployment Manager to set the value of *Repository -> Resource Transfer Lookup Table* configuration option to MEMORY. For more information, see IBM SPSS Collaboration and Deployment Services administrator's documentation.

DB2

SQL errors when running the repository configuration utility

When running repository configuration utility with a DB2 database, the following error may occur:

```
ERROR: Rethrowing SQL Exception as MetaException: java.sql.SQLException:
[SPSSOEM][DB2 JDBC Driver]Invalid operation for the current cursor position...
```

The error is caused by incorrect DB2 configuration parameters. To set the parameters correctly, it is recommended to create the repository database using the script included in IBM SPSS Collaboration and Deployment Services distribution. For more information about the script, consult *IBM SPSS Collaboration and Deployment Services Repository 6 Installation and Configuration Guide*.

Oracle database

How do I create a user and table space?

To clear and reestablish a user and table space for the repository database connection (for example, *cds_user*), issue the following set of commands:

```
DROP USER CDS_USER CASCADE;  CREATE USER CDS_USER IDENTIFIED BY CDS_USERDEFAULT TABLESPACE
CDS_USER TEMPORARY TABLESPACE TEMPQUOTA UNLIMITED ON CDS_USER;@$ORACLE_HOME/sqlplus/admin/
pupbld;GRANT CONNECT, RESOURCE, UNLIMITED TABLESPACE TO CDS_USER;
```

WebSphere

WebSphere Application Server administrative security enabled after IBM SPSS Collaboration and Deployment Services Repository installation

If you enable WebSphere administrative security or change administrator credentials after IBM SPSS Collaboration and Deployment Services Repository is installed and configured, update the <repository server installation directory>/platform/engineConfig.properties file with the new credentials.

The credentials are specified as the following properties:
- appserver_admin_user=<user name>
- appserver_admin_password=<password>

To encrypt the value of appserver_admin_password rather than store it as clear text, run the <repository server installation directory>/bin/cliEncrypt utility with the -portable option to encrypt the password.

```
<repository server installation directory>/bin/cliEncrypt <password> -portable
```

Copy the resulting output (for example, [{AES}KrY+KLlOYo406545tgGsYQ==]) and paste it into <repository server installation directory>/platform/engineConfig.properties.

Miscellaneous errors occur during package installation (with Package Manager) into the repository using a WebSphere Application Server

Make sure the latest vendor patches have been applied to the application server.

Server log is reporting encryption errors, such as exception com.ibm.crypto.provider.AESCipher.engineGetKeySize(Unknown Source)

The error is caused by the incorrect password value. To correct the error, copy the value of `cds_keystore_password` from

`<repository installation directory>/platform/engineConfig.properties`

to `platform.keystore.password` in

`<WebSphere home>/profiles/<profile name>/config/cells/<cell name>/nodes/<node name>/servers/<server name>/server.xml`

The messaging engine unique ID does not match the ID found in the data store (error CWSIS1535E)

The error can be corrected by stopping the repository and deleting the repository database tables with names beginning with the *SIB* prefix. The tables will be re-created when the repository is restarted. Note that this solution applies only if you do not need to keep any of the currently stored persistent messages. For more information about WebSphere JMS troubleshooting, see .

WebSphere server crashes during job execution with J2CA0206W and J2CA0056I errors

WebSphere server crashes during job execution; the log indicates errors J2CA0206W and J2CA0056I, followed by internal messaging errors related to SIB database tables. WebSphere Application Server uses database tables to store Java Message Service (JMS) messages. Anytime the messaging engine loses its connection to the data store, the JVM shuts down in an orderly fashion to prevent data loss. If the messaging engine were to continue to run and accept work, results might be unpredictable and your messaging engine might be in an inconsistent state when the data store connection is restored.

To resolve the problem, correct the underlying database connection problem. If the problem persists, consider modifying the `Retry Interval` for existing pooled connections on your data source. This value specifies the length of time, in seconds, that the application server waits before reattempting to make a connection if the initial attempt fails. By default, this value is 0. If you set the value to 3, the connection is reattempted instead of holding onto a bad connection. To change this value, log in to the WebSphere and navigate to **Resources > JDBC > Data sources > datasource_name > WebSphere Application Server** data source properties. For more information, see .

Timeout error occurs when deploying IBM SPSS Collaboration and Deployment Services Repository or adapters

- Increase the value of the SOAP request timeout parameter in *<WebSphere profile>/properties/soap.client.props*, for example:
  `com.ibm.SOAP.requestTimeout=600`

Error 404 when accessing IBM SPSS Collaboration and Deployment Services Deployment Portal

If error 404 occurs when accessing IBM SPSS Collaboration and Deployment Services Deployment Portal through a WebSphere proxy server configured as a load balancer:

- Disable WebSphere proxy server caching.
- Make sure a valid URL is used for accessing IBM SPSS Collaboration and Deployment Services Deployment Portal: `http://<host>:<port>/peb/`.

BIRT reporting engine cannot be run on WebSphere with Java 2 Security enabled

- To enable BIRT report engine on WebSphere with Java 2 Security, add the following two entries to the *server.policy* file in the *<WebSphere profile>/properties* directory. Note that any spaces in the path should be replaced with %20.

```
// BIRT Report Engine
grant codeBase
"file:[cds_home]/components/reporting-engines/BIRT/ReportEngine/plugins/-" {
  permission java.security.AllPermission;
};

// BIRT viewer
grant codeBase "file:[profile_dir]/installedApps/[cell_name]/
IBM_SPSS_Collaboration_and_Deployment_Services_6.0.ear/birt-viewer.war/
WEB-INF/platform/plugins/-" {
  permission java.security.AllPermission;
};
```

JBoss

How is the session timeout value configured to adjust the amount of time a user can remain idle?

Once a user is logged in to the repository, a period of inactivity is allowed before the session is terminated and the user must reauthenticate. To increase or decrease this value:

1. From the installation directory, navigate to *\JBoss\server\default\deploy\jbossweb-tomcat50.sar*.
2. Open *web.xml* in a text editor.
3. Locate the section for *Default Session Configuration*, and edit the value for `<session-timeout>`.
4. Stop and restart the application.

Note: This file is processed when the application is deployed; configuration changes do not take effect until the server is restarted.

How do I determine the port on which my version of JBoss is running?

The JBoss application server's HTTP port is defined in the file:

```
<JBoss home>\server\default\deploy\jbossweb.sar\server.xml
```

with the attribute:

```
 /Server/Service/Connector@port
```

What additional settings are required for the repository FIPS 140-2 compliance on JBoss?

For the repository to function properly when running on JBoss in FIPS 140-2-compliant mode, {URIEncoding="UTF-8"} attribute must be specified for the HTTPS connector.

Alternatively, from the command line, the `netstat` command can be used to view applications and the ports that are in use.

WebLogic

Repository configuration utility fails with a null pointer exception

When the configuration utility is run to deploy IBM SPSS Collaboration and Deployment Services Repository with WebLogic application server (following the initial installation), server subsystem failure may be reported with `java.lang.NullPointerException`. The error is caused by the underscore ("_") character in host name.

Notification messages are not delivered to the RSS reader.

The error is caused by Basic HTTP Authentication failure on the domain level. It can be corrected by disabling Basic HTTP Authentication for the domain. Add the <enforce-valid-basic-auth-credentials> element to the domain's *config.xml* within the <security-configuration> element and set its value to false.

```
...
<enforce-valid-basic-auth-credentials>false</enforce-valid-basic-auth-credentials>

  </security-configuration>
```

OSGi class loader deadlock on WebLogic when BIRT reporting engine is initialized.

In very rare cases with WebLogic application server, the first time BIRT Report engine is initialized, it will cause a deadlock during its initialization process, as indicated by the following message in the application server log:

```
DEADLOCK DETECTED:
==================

[deadlocked thread] [ACTIVE] ExecuteThread: '11' for queue:
 'weblogic.kernel.Default (self-tuning)':
-------------
Thread '[ACTIVE] ExecuteThread: '11' for queue: 'weblogic.kernel.Default
 (self-tuning)
'' is waiting to acquire lock
'org.eclipse.birt.core.framework.osgi.
OSGILauncher$ChildFirstURLClassLoader@4030df7'
that is held by thread '[ACTIVE] ExecuteThread: '5' for queue:
'weblogic.kernel.Default (self-tuning)''
```

If the error occurs, stop and restart the server.

Severe and warning messages included in console window

The console window for the WebLogic application server may include warning and severe messages indicating problems with registering extensions and failures to create WSDL definition features. These messages typically have the following form:

```
weblogic.wsee.jaxws.framework.policy.advertisementimpl.AdvertisementHelperImpl registerExtension
WARNING: Registering oracle.j2ee.ws.wsdl.extensions.addressing.AddressingExtensionRegistry
extension failed; java.lang.ClassNotFoundException:
oracle.j2ee.ws.wsdl.extensions.addressing.AddressingExtensionRegistry
weblogic.wsee.jaxws.spi.WLSServiceDelegate addWsdlDefinitionFeature
SEVERE: Failed to create WsdlDefinitionFeature for wsdl location:
zip:client.jar!/WEB-INF/wsdl/client.wsdl,
error: com.sun.xml.ws.wsdl.parser.InaccessibleWSDLException,
message: 2 counts of InaccessibleWSDLException.
```

The messages are not included in any log files.

The issues generating these messages do not reflect any functional problems in the product and can be ignored.

Chapter 3. IBM SPSS Collaboration and Deployment Services Deployment Manager troubleshooting

The topics in this section provide troubleshooting information related to IBM SPSS Collaboration and Deployment Services Deployment Manager.

Obtaining logs

Certain error messages and symptoms are common when installing and working with IBM SPSS Collaboration and Deployment Services Deployment Manager. It is always a good practice to refer to the log files to help determine the cause of the problem.

- The file `spssemgr.log` contains log4j output for IBM SPSS Collaboration and Deployment Services Deployment Manager. The output in the file is generated exclusively by IBM SPSS Collaboration and Deployment Services Deployment Manager, not Eclipse RCP. The file is typically saved in one of the following locations:
  - Windows XP: `C:\Documents and Settings\`*`<UserName>`*`\Application Data\SPSSInc\Deployment Manager\`
  - Windows 7: `C:\Users\`*`<UserName>`*`\AppData\Roaming\SPSSInc\Deployment Manager\`
- The `.log` contains the Eclipse RCP log file from IBM SPSS Collaboration and Deployment Services Deployment Manager. The log entries that are written to this file are also mirrored to `spssemgr.log`. This file must be consulted if a problem occurred in the very early phases of application startup or if the application fails to start. The file is typically saved in one of the following locations:
  - Windows XP: `C:\Documents and Settings\`*`<UserName>`*`\Application Data\SPSSInc\Deployment Manager\workspace\.metadata\`
  - Windows 7: `C:\Users\`*`<UserName>`*`\AppData\Roaming\SPSSInc\Deployment Manager\workspace\.metadata\`

Timeout errors

There are various long-running tasks in IBM SPSS Collaboration and Deployment Services Deployment Manager that may time out in certain situations. For example, copying and pasting a complex IBM SPSS Modeler stream with a very large number of versions can cause a timeout.

If you frequently encounter timeout errors in IBM SPSS Collaboration and Deployment Services Deployment Manager, you can increase the timeout for communication between IBM SPSS Collaboration and Deployment Services Deployment Manager and the repository. This allows more time for long running operations to complete. Operations timeout after 180 seconds by default.

To increase the timeout:

1. Log on to browser-based IBM SPSS Collaboration and Deployment Services Deployment Manager.
2. In the Configuration list, under Deployment Manager, click **Protocol Timeout**. The current value appears.
3. In the Protocol Timeout text box, enter the number of seconds.
4. Click **Set**.

Incomplete Gains charts

If you are using the JRockit JVM, you may see incomplete Gains chart output (`.jpg`). When you run a job containing an IBM SPSS Modeler scenario file, with an Evaluation type of Gains, the resulting Gains chart may be incomplete.

JRockit produces wrong numerical results for expressions including NaN. To work around these issues, specify -XstrictFP as a parameter to the JVM or switch to a different JVM.

Scoring configuration dialog error

When configuring scoring on a non-Windows repository installation, a *Build New Scoring Configuration Details Failed* error message is displayed when the scoring configuration dialogue is opened in IBM SPSS Collaboration and Deployment Services Deployment Manager.

You can correct the problem by changing the permissions on the `<repository installation directory>/components/modeler/modelerserver` file on the repository host to *execute*. For example:

```
cd /usr/CDS/components/modeler/modelerserver
sudo chmod +x modelerserver
```

Application crash while editing a real-time DPD

When a real-time DPD is opened for editing in IBM SPSS Collaboration and Deployment Services Deployment Manager, the application may hang and subsequently crash.

To correct the problem, increase the amount of available memory by editing the maximum Java heap size in *<Deployment Manager installation directory>/spssemgr.ini*. For example:

```
-vmargs -Xms40m -Xmx512m
```

can be changed to

```
-vmargs -Xms40m -Xmx1024m
```

Chapter 4. BIRT Report Designer for IBM SPSS troubleshooting

The topics in this section provide helpful troubleshooting information related to BIRT Report Designer for IBM SPSS.

Missing tables when creating a new data set

In BIRT Report Designer for IBM SPSS, when creating a new data set based on an Oracle or InfoSphere Federation Server data source, synonyms (for Oracle) and nicknames (for InfoSphere Federation Server) are not shown in the New Data Set dialog box under **Available Items**.

As a workaround, you can enter a SQL `select` statement in the New Data Set dialog box to retrieve the table data. For example:

```
select *
from YourTableName
```

where `YourTableName` is the Oracle synonym or InfoSphere Federation Server nickname for the actual table.

Chapter 5. IBM SPSS Collaboration and Deployment Services Deployment Portal troubleshooting

As an IBM SPSS Collaboration and Deployment Services Deployment Portal user, you may be viewing files and running dynamic reports using a browser. Problems or errors associated with these tasks may be attributed to IBM SPSS Collaboration and Deployment Services Deployment Portal system problems or PC configuration problems.

Common system problems may include server(s) not running, while common PC problems may involve connection configurations such as server or ODBC data source naming. Contact your site administrator.

Common problems

Here are some possible explanations for problems running reports or opening files.

Server(s) running? The server may not be running. Ask your site administrator to start the server.

Proper authority? To perform certain tasks such as subscribing to content, running dynamic reports, and accessing My Reports, your site administrator must grant you proper authority. Your administrator can also restrict access to certain folders and files.

Report data source unavailable? Verify that the data source for the report is available (the database server is running and accessible from the network, login credentials for the database server are valid, and the correct ODBC or JDBC driver is specified; for file-based data sources, verify that the file is present and its URL is referenced correctly).

Errors

If you receive an error in IBM SPSS Collaboration and Deployment Services Deployment Portal, it may be caused by IBM SPSS Collaboration and Deployment Services system problems or PC configuration problems.

- See "Common problems" for possible explanations.
- If running reports, check the My Jobs folder for report status: Completed, Failed, or Running. If the report failed, see "Report problems"

Report problems

If a report fails, the My Jobs screen displays Failed in the Status column.

To see error messages associated with the failure, click **Failed**. Note any messages that appear and contact your site administrator.

When a BIRT Report Designer for IBM SPSS report is run in IBM SPSS Collaboration and Deployment Services Deployment Portal, the application is not able to authenticate my credentials for accessing the data source of the report and is repeatedly displaying the login screen

- Verify that the data source for the report and the credentials are defined correctly. For more information, see the corresponding section of the *IBM SPSS Collaboration and Deployment Services Deployment Manager User's Guide*.
- If the data source for the report is JDBC-based, verify that the proper driver is installed with the repository. For driver path information specific to the operating platform, see the installation instructions.

Report output generated as a PDF file does not display national character sets correctly

On certain UNIX systems, the default JVM font configuration may not be suitable for all national character sets, such as Asian language characters. In these cases, it may be necessary to specify the default JVM font using a font configuration file. For information about Java font configuration files, see the Sun documentation.

Trying to access file attachments that contain report output results in an IO exception (resource has been deleted) in IBM SPSS Collaboration and Deployment Services Deployment Portal

The exception can occur if the repository installation is running on WebLogic application server using the JRockit JRE. If the exception occurs, reconfigure WebLogic to use a Sun JRE. For more information, see the WebLogic documentation.

Cascading parameters are not displayed correctly in reports when the repository is run with WebLogic 10 on Solaris 10.

The `-Djava.awt.headless=true` startup argument must be added to the application server Java environment.

Trying to run a BIRT report against an IBM SPSS Statistics data source (with IBM SPSS Statistics data file JDBC driver) on a WebSphere cluster results in a remote exception

The problem may be resolved by adding `-Dcom.ibm.ws.classloader.encodeResourceURLs=true` to generic JVM arguments using the administrative console for every node of the cluster.

Running a BIRT report in the repository fails against a DB2 IBM i V6R1 database using prompted credentials

Add `prompt=false` parameter to the JDBC connection URL.

```
Driver Name: com.ibm.as400.access.AS400JDBCDriver
Driver URL: jdbc:as400://mySerever/B101E31E;prompt=false
```

Office documents open in new window

If you are using Microsoft Office 2007 and Internet Explorer 7, Office documents (such as `.xls`, `.xlsx`, `.csv`, `.doc`, and `.ppt`) may open in a new application window in IBM SPSS Collaboration and Deployment Services Deployment Portal.

To open Office 2007 documents inline, in the IBM SPSS Collaboration and Deployment Services Deployment Portal content frame, you must change your Windows Advanced Folder Options:

1. Open Windows Explorer and go to:

   Tools > **Folder Options** > **File Types**
2. Select the file extension (for example, *.xls*).
3. Click **Advanced**.
4. Select **Browse in same window**.

At your own risk, you can also follow instructions in Microsoft online Support center article 927009 (http://support.microsoft.com/kb/927009).

Note: These solutions only apply to Internet Explorer—not other supported browsers.

Related information

If you need to change the default viewer associated with a file type (for example, to open *.csv* files with Notepad instead of Excel), use the following steps:

1. Open Windows Explorer and go to:

   Tools > **Folder Options** > **File Types**

2. Select the registered file type such as *.csv*.

3. Click **Change** and select the program to use for opening the selected file type.

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