CA Chorus™

Troubleshooting Guide

Version 03.0.00, Eighth Edition

CA Technologies Product References

This document references the following CA Technologies products:

- CA ACF2
- CA Chorus™
- CA Chorus™ for DB2 Database Management
- CA Chorus™ for Security and Compliance Management
- CA Chorus™ for Storage Management
- CA Chorus™ Infrastructure Management for Networks and Systems
- CA Chorus™ Software Manager
- CA Compliance Manager
- CA DSI Server
- CA LDAP Server
- CA NetMaster NM for TCP/IP
- CA SYSVIEW
- CA Top Secret
- CA Vantage

Contact CA Technologies

Contact CA Support

For your convenience, CA Technologies provides one site where you can access the information that you need for your Home Office, Small Business, and Enterprise CA Technologies products. At http://ca.com/support, you can access the following resources:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

Providing Feedback About Product Documentation

If you have comments or questions about CA Technologies product documentation, you can send a message to techpubs@ca.com.

To provide feedback about CA Technologies product documentation, complete our short customer survey which is available on the CA Support website at http://ca.com/docs.

Documentation Changes

The following documentation updates have been made since the seventh edition of this documentation:

- Errors While Configuring the Web Application Module (see page 53)—Noted that mixed content is not displayed if you are using SSL logins to CA Chorus.

The following documentation updates have been made since the sixth edition of this documentation:

- CA Chorus Known Issues (see page 32)—Added the following known issue:
  - Resource Adapter is Not Deployed and CHORJBOS Shuts Down During Data Source Deployment of JBoss Startup
- Error Dropping the TSF Database (see page 53)—Added this topic.
- Do Not See How to Disable SSL (see page 47)—Clarified the steps in the solution.
- Errors While Configuring the Web Application Module (see page 53)—Added this topic.

The following documentation updates have been made since the fifth edition of this documentation:

- Startup Problems (see page 26)—Added information about the Teiid Long Start Time.

The following documentation updates have been made since the fourth edition of this documentation:

- Enable the chorus-query.log for Diagnosis—Removed this topic.

The following documentation updates have been made since the third edition of this documentation:

- Legal Notices (see page 2)—Updated to reflect public documentation legal disclaimer.
- Limited Number of Records Appear While Expanding a Summarized Node in the Data Pane (see page 32)—Added this known issue.
- Select Button is Disabled While Creating the Policies (see page 31)—Modified the known issue Cannot Select Time-Based Objects While Creating Policies.
- Exported CSV Files Show Large Value for Time Interval (see page 32)—Added this known issue.
- Back-end Documentation with CA Chorus Updates Not Indexed—Removed this topic.

The following documentation updates have been made since the second edition of this documentation:

- Scenarios Listed Under Product Details in the Bookshelf Not Current—Removed this known issue. The bookshelf now has the links to the latest scenarios.

The following documentation updates have been made since the first edition of this documentation:

- Cannot Select Time-Based Objects While Creating Policies (see page 32)—Added this known issue.
- Database Issue Causes JBoss Shutdown (see page 32)—Clarified the message text.
- Error Appears After Starting JBoss (see page 52)—Added this topic.

The following documentation updates have been made since the last release of this documentation:

- Global—Updated the documentation to note disciplines.
- Global—Removed Visualizer issues/topics.
- Global—Updated CETJOPTN(ENV) references to be CETJOPTN(ENVETJ).
- Common Crawl Errors (see page 24)—Updated the Hertrix and order.xml paths.
- Do Not See how to Change the TSF Time Duration (see page 47)—Added this topic.
- Why Do Date/Time Changes in TSF/Charts Affect Cloned Charts (see page 47)—Added this topic.
- Do not See How to Disable SSL (see page 47)—Added this topic.
- Known Issues (see page 31)—Added this chapter from the *Release Notes* and included updates for this release.
- TSF Region Issues ETJTS809E and Automatically Stops with RC=0—Removed because this issue does not apply to Version 3.0.
- Troubleshooting (see page 59) Return Codes—Added this chapter from the *Installation Guide*.
- Knowledge Center Displays Irrelevant Topics (see page 48)—Added this topic.
- Missing Modules in an Imported Dashboard (see page 48)—Added this topic.
- QwikRef Message in Job Log (see page 49)—Added this topic.
- Export Fails Due to Query Execution Timeout (see page 49)—Added this topic.
- JBoss May Fail to Shut Down After Receiving the MVS STOP Command (see page 49)—Added this topic.
- Time Series Does Not Recognize New or Recycled CINET Stacks (see page 50)—Added this topic.
- Error Encountered While Querying Time Series Facility (see page 50)—Added this topic.

- Debug Security Discipline Datacom Connection Problems (see page 45)—Added this topic.
- Cannot Copy to Clipboard—Added this topic.
- Erroneous Messages in the JBoss Log (see page 51)—Added this topic.
- Error While Expanding the H2 Database zFS (see page 51)—Added this topic.
- Error While Modifying and Saving Date and Time Fields in the Details Pane (see page 52)—Added this topic.

Contents

Chapter 1: Information Gathering

If you encounter an issue in CA Chorus or any discipline, we recommend that you answer the following questions before contacting CA Technologies. Doing so can expedite the resolution.

- What product are you running?
- What software version are you running?
- In what module or component are you working?
- If you are working in the Investigator, which discipline category were you working in?
- What were you trying to do in the product?
- What path have you taken to get to this error?

We also recommend that you take a screen shot with the error message and any associated log files. Capturing this information lets us see exactly what you are seeing in the product and in the logs.

The following sections detail the main sources of diagnostic information:

- Data Definition (DD) Statements
- CA Chorus Log Files

DD Statements

JBoss writes the output to the following DD statements:

JESMSGLG

Displays the confirmation that the CA Chorus UI is available, the STOP command has been received, and other important messages.

Note: This data set is the first place to refer when investigating a problem.

SYSPRINT

Displays the startup information for the spawning of the internal CA DSI server, as well as messages whenever a login is made (no user ID or timestamp). Additionally, you see messages from the Data Source API code when it initiates the DATACOM connection and executes queries. You can also see messages from the QUIKREF data handler as it performs keyword searches. This is the output from the C code that is invoked through JNI.

SYSOUT

Displays the output from the JZOS launcher. If the confirmation does not appear, consider it as a sign of the task not responding. The values of all the environment variables and the JVM options are displayed here. So, look here verify the JVM options. If the server goes down with a program check abend, from here you get the PSW and registers at the time of the program check. It displays a stack trace from the abend here. However, you will probably not be able to resolve the symbols for functions that are located in JNI modules. This information should go with the system dump that is produced if a program check ("gpf signal") occurs.

STDOUT

Displays the debug messages and stacktraces coming from JBoss. This location should be the second place to look when troubleshooting a problem. Any relevant stacktraces or problems reported by JBoss usually appear here. Most of this information is also included in the server.log file, which is located in the $CHORUS_HOME/logs location as an ASCII file.

Note: An EBCDIC version of the same log file also resides in the $CHORUS_HOME/logs location.

STDERR

Displays the ERROR level output from log4j, typically stacktraces.

QWSFTRCE

Displays the diagnostic file for calls to QuickRef. If there are error messages that are produced while trying to access QuickRef, set CHORUS_QWS_DEBUG=YES in the CETJOPTN(ENVETJ) dataset. The QWSFTRCE output contains the trace information each time a call to QuickRef is done. QuickRef is usually searched each time a Knowledge Center search is executed. Because the number of QuickRef accesses can be high, we recommended not to use this debug option unless you are experiencing a problem.

QWSFDUMP

Displays the snap entries that are related to the calls to QuickRef. This is used with the above trace file.

Run the Logging Script

We provide the ETJLOGC job to help you quickly gather key diagnostic information when issues arise. Use this procedure when you detect an unexpected CA Chorus condition. You can run this job on your own or at the request of a CA support technician.

Before you can run this job, note the following prerequisites:

- Your user ID must be in the CHORGRP group.
- You must have write authority.

- You can run this job anytime after a deployment is complete. However, log files only exist after the server has started and in some cases, certain functions exercised. Configuration files will exist after the particular configuration tasks are completed.

For various reasons, a file may not exist even though a discipline is installed. Unfound files result in a message that begins with Log or Configuration. If no one has used the function that creates a log file, the log files may not exist. Configuration files exist if the CA Chorus discipline has been configured.

Note: If you encounter several CA Chorus errors, run EJTLOGC immediately. This timely saving of these files can provide better data because less extraneous data is included.

Follow these steps:

1. Edit ETJLOGC from the CETJJCL library. Follow the instructions in the member.
2. Save these changes, and submit the job.

   Note: If you experience another issue such that you must send files to support, run this job without any further editing.

   The job ends with condition code 0. The job output lists a number of pax files. These files reside in the /cai/cetjr3m0/CASupport directory. After you open an issue with CA Support, FTP the files in this directory to the CA Support SFTP site.

   The output includes two files:

   collections details

   Lists the installed disciplines, the accessed directories, and which files are included in the pax files or which files were not found.

   collection log

   Lists warnings about improper variable settings or other items to correct.
3. FTP the z/OS output from the CHORJBOS task and the ENV file from the CETJOPTN library.

Example FTP Steps

Use the sample with these steps.

1. Create an FTP file.
2. Replace the items in brackets with site-specific values.
3. Create a folder to hold the files (for example, FTP2CA).
4. Change directories to this folder (for example, cd FTP2CA).
5. Execute ftp –s:../example1.ftp > ../ftp1.log

6. Check that the files in FTP2CA are the same as the files listed in the output of ETJLOGC.
7. Transfer the contents of FTP2CA to the CA Support SFTP site for the issue.

Sample File for FTP Example

open [*hostname*]

[*userid*]

[*password*]

cd [*chorus_install_home*]/logs/CASupport

bin

PROMPT

mget *.pax

mget collection*

quit

More information:

Debug CA Chorus JBoss Problems (see page 25)
Gather Data for zFS File Systems (see page 22)
Debug the Web Crawler in the Knowledge Center (see page 22)
Diagnostics for Investigator Statistics and Metric Panel (see page 21)

USS Log Files

Use UNIX System Services (USS) to retrieve logs according to your site-specific practices.

Note: For information about changing parameters, see the *Administration Guide*.

Server, boot, chorus, and discipline-specific log files are available in the following location:

`/cai/cetjr3m0/logs`

The following list provides a high-level introduction to the types of USS logs.

Note: Some of the following log files are in ASCII (code page ISO8859-1) format. When you send the files through FTP to a PC, transfer them in binary mode. To look at the files in z/OS, use the View ASCII data option for browse or the EA line command from the directory list.

server.log

Includes all generated logging from the CA Chorus Teiid thread. You can change the value of the priority element to DEBUG, INFO, WARN, ERROR, and FATAL depending on the log requirement. Messages include a standard prefix with timestamp, time zone, and thread ID. End-user information is provided in chorus-status.log, JESMSGLG, or WTO.

Name: chorus-investigator.tmp and server-ebcdic.log

Location: $CHORUS_HOME/logs

Settings: JBoss environment file -Djboss.server.log.threshold=DEBUG

server-ebcdic.log

Includes the EBCDIC version of all generated logging from the CA Chorus Teiid thread.

Name: ebcdic log

Location: $CHORUS_HOME/logs

vantage-gmi.log

Includes all application trace and user activity for the Storage Management Interface. Access this interface through the Quick Links module. You can view the logging information that is pertaining to the interaction between the Storage Management Interface and the mainframe storage products here. You can view all errors that are occurred with the Storage Management Interface and reported back from the mainframe storage products here.

Name: Storage Management Interface application log

Location: $CHORUS_HOME/logs

CoptDsService-FFFFFF00000000C0.log

Includes the details that are generated whenever the code is invoked and the CA_AXIS2C_LOG_LEVEL variable is set to anything other than NONE. The Data Source API JNI code produces this log file. The USS thread ID is included in the file name. So, each thread writes to a separate log file.

Name: CoptDsService log

Location: $CHORUS_HOME/logs

Settings: JBoss ENV file CA_AXIS2C_LOG_LEVEL=INFO|DEBUG|ERROR|FATAL

Axis2c logs

The following log files are written during the operation of the JBoss server:

CoptDsService-*XXXXXXXX-XXXXXXXX*.log

Includes details about threads that execute a web service request. One file is created for every unique thread that executes a web service request.

SERVICE

Identifies the name of the service (the subdirectory of axis2/services) that is being executed.

XXXXXXXX-XXXXXXXX

Indicates the POSIX thread ID of the thread executing the web service request.

CoptDsStat.log

Includes summary and accounting information for web service operations. This file is written from the CoptDsService code. When the first web service request comes in, the data source API initializes and writes startup information to this file. The following list shows example startup information:

- Maximum threshold number
- URI
- Debug status
- Environment variable values
- Address of the global structure

Name: Copt ds log

Location: $CHORUS_HOME/logs

CoptThread.log

Includes watchdog thread data, which watches for sessions that are not active. If the idle time threshold is exceeded, the threads are removed. Messages appear when the thread wakes up and when it terminates any sessions. This file is written from the data source API service watchdog thread.

Name: Copt thread log

Location: $CHORUS_HOME/logs

Settings: JBoss ENV file CA_AXIS2C_LOG_LEVEL=INFO|DEBUG|ERROR|FATAL

PolicyAdmin.log

Includes the generated logging information from the Policy Admin UI. The logging information is based on the settings in the log4j.properties file. Based on the log requirement, one of the following values can be the logging information:

- DEBUG
- INFO
- WARN
- ERROR
- FATAL

Messages include a standard prefix with timestamp, log level, java file name, and message location.

Name: Policy admin log

Location: $CHORUS_HOME/logs

dsi_stderr.log and dsi_stdout.log

Includes the output that is written from the DSI (Distributed Security Interface) server that is spawned during JBoss initialization. These files contain meaningful data if the debug setting is set to a value other than zero. Sensitive information can be written to these files when the debug is enabled. So, enable this log only when necessary.

Name: DSI output

Location: $CHORUS_HOME/logs

Settings: Debug setting in dsi.conf (65535 is maximum detail).

chorus-status.log

Includes CA Chorus status, including error messages that indicate the following details:

- The reason for the failure.
- The part of the system that has failed.
- Suggested recovery actions.

Additionally, the log includes messages that indicate when the product starts and when it is available.

Name: status log

Location: $CHORUS_HOME/logs

SecAdmin.log

Includes the generated logging information from the Security Admin UI. The logging information is based on the settings in the log4j.properties file. Based on the log requirement, one of the following values can be the logging information:

- DEBUG
- INFO
- WARN
- ERROR
- FATAL

Messages include a standard prefix with timestamp, log level, java file name, and message location.

Name: Sec admin log

Location: chorus/logs

JBoss sysout class files

Includes multiple system output files. End-user information is provided in chorus-status.log, JESMSGLG, or WTO.

Location: Spool data sets in the z/OS job output for the task.

JBoss boot log

Includes JBoss application server messages that are produced during the bootstrap phase.

Name: boot.log

Location: $CHORUS_HOME/logs

CA Chorus query log

Includes Teiid queries and error messages.

Note: This log is disabled by default. Enable it only if CA Support requests that you do so.

Name: chorus-query.log

CA Datacom/AD Database

Includes database information. CA Chorus uses a database that is installed into the CA Datacom/AD environment.

Location: Spool data sets in the z/OS job output for the task.

Note: For the logs associated with a specific discipline, see the applicable *User Guide*.

Alert Log Files

From the error message that is displayed, you can retrieve any stack traces and messages to analyze the problem. From the CA Chorus installation, you can collect the following log:

/cai/cetjr3m0/logs/server.log

In the server.log file, look for the following log messages:

[STDOUT] (main) Starting DB2 Alerts Listener service...

[STDOUT] (Thread-23) 13:34:42,305 INFO [CAEventService] Successfully started the Event Listener Service!

[STDOUT] (Thread-23) DB2 Alerts Listener service started successfully.

These messages appear during the startup of JBoss, and they signify successful startup of the listener service for alerts.

Diagnostics for Times Series

The Time Series Facility (TSF) is used as the backend for the following CA Chorus components:

- TSF Charting
- Investigator—Security and Storage Statistics
- Metrics Panel

Collect the JESMSGLG and LOG1 for the TSF Started Task (CHORTSF).

JESMSGLG

Contains all initialization messages for TSF. If TSF fails to initialize properly, you can find details here. Review all ETJTS prefixed messages and confirmation that the region is initialized by seeing the N00503 * TSF INITIALIZATION COMPLETE TSF * message.

The following messages indicate the relevant ports that have been assigned for use by TSF. Ensure that these ports are as expected and match the specifications elsewhere (such as the JBoss ENV and TSF PARM TSFPARMS):

```
ETJTS802I TSF server QUERY socket registered on port 9317 token
"TSF QUERY API: A" servlet=$TFQY00H
```

```
ETJTS802I TSF server PDAPI socket registered on port 52393 token
"TSF PD API: A " servlet=$TFPD10H
```

LOG1

Contains all application messages. Of particular interest are messages indicating that TSF data is being received from each of the products. Detector (DBA) and Storage typically send feeds to TSF on an hourly basis. Security sends feeds every 15 seconds or 30 seconds. The absence of recent data causes no data in the queries from Time Series, Investigator Statistics, and Metrics Panel. An example of the messages for a successful data feed follows:

FMTDUMP

TSF data not being available could be due to the CHORTSF task not being active. If the TSF task has abended, obtain the formatted dump.

The CHORTSF LOG1 dd generates messages each time a discipline sends data to TSF. Verify that the data has been received recently for the discipline that you are investigating:

Security

```
ETJTS212I TSF PDAPI connection established for Security instance
CA Security for z/OS (141.202.200.46 9242)
```

```
ETJTS214I TSF PDAPI period processed: Security CA Security for
z/OS, 2011/05/1220:02:09 to 2011/05/12 20:02:30, metrics 61, recs
4, subrecs 70, elapsed 00:00:01, CPU +00:00:00.0136
(141.202.200.46 9242)ETJTS213I TSF PDAPI connection ended:
Security CA Security for z/OS, periods 1, metrics 61, recs 8,
subrecs 70, elapsed 00:00:01, CPU 0 00:00:00.0186 (141.202.200.46
9242)
```

DBA

```
ETJTS212I TSF PDAPI connection established for Detector instance
CA Detector for DB2 for z/OS (141.202.65.31 34984)

ETJTS214I TSF PDAPI period processed: Detector CA Detector for DB2
for z/OS, 2012/03/15 18:00:00 to 2012/03/15 19:00:00, metrics 2785,
recs 61, subrecs 11372, elapsed 00:00:19, CPU+00:00:01.5331
(141.202.65.31 34984)

ETJTS213I TSF PDAPI connection ended: Detector CA Detector for DB2
for z/OS, periods 1, metrics 2785, recs 65, subrecs 11372, elapsed
00:00:20, CPU +00:00:01.5375 (141.202.65.31 34984)
```

Storage

```
ETJTS213I TSF PDAPI connection ended: Storage Instance Info,
periods 1, metrics 833, recs8, subrecs 957, elapsed 00:00:02, CPU
+00:00:00.2111 (141.202.65.31 38980)

ETJTS214I TSF PDAPI period processed: Storage Instance Info,
2012/03/15 19:15:00 to 2012/03/15 19:16:00, metrics 1250, recs 6,
subrecs 1505, elapsed 00:00:05, CPU +00:00:00.3385 (141.202.65.31
39004)

ETJTS213I TSF PDAPI connection ended: Storage Instance Info,
periods 1, metrics 1250, recs10, subrecs 1505, elapsed 00:00:05,
CPU +00:00:00.3420 (141.202.65.31 39004)
```

Diagnostics for Investigator Statistics and Metric Panel

The following list summarizes the diagnostic steps for Investigator statistics and Metric Panel:

- Check the following ENV parameters to see TSF DEBUG messages:
  - Server debug, ENV through - IJO="$IJO -Djboss.server.log.threshold=DEBUG"
  - TSF debug, ENV through - export TSFII='*tsfsuffix*--5'
- Collect the $CHORUS_HOME/log/server-ebcdic.log

  Note: ETJTS* are from the TSF DEBUG.
- Retrieve any stack traces and messages from the error message box.

- Review the JBoss Logs:

  STDOUT

  Contains the initialization of the TSF Teiid Translator. Without the successful completion of this process, the Investigator statistics and Metric panel cannot retrieve Time Series data.

  Note: Time Series Charting may still function, because it does not use Teiid.

  The following messages indicate a successful initialization:

  ```
  ETJTS297I TSF metadata request: started.
  ETJTS297I TSF metadata request: retrieving data.
  Specific ETJTS messages for each role configured to the region....
  ETJTS297I TSF metadata request: building metadata.
  ETJTS297I TSF metadata request: ended.
  ```

The probable error that occurs in the TSF Teiid Translator initialization is a communication error. If this error occurs, ensure that the host and the port specified in the messages reflect what is specified for the TSF started task. If that is not the case, update the JBoss ENV file with the correct settings for TSFII.

Gather Data for zFS File Systems

If you are facing issues with the UNIX System Services file systems, provide the following information to the CA Support personnel:

- Mount information that is gathered by issuing the following console command:

  ```
  D OMVS,FILE
  ```

- USS logs

  Example: JESMSGLG

Debug the Web Crawler in the Knowledge Center

The Web Crawler in the Knowledge Center provides the capability to index the websites that are running on intranet or Internet. Note the following points:

- You can invoke the Web Crawler through the Knowledge Center Setting window. Click the Index URLs tab, enter the URL of the site that you want to index, and click Index. The web crawler initiates the crawling process in a separate JVM.
- Indexing of intranet URLs does not require any proxy information.

- If the crawl server is behind a proxy, then to index any internet URL user must provide proxy information. That is, proxy host, proxy port, domain name, user name, and password.
- If the Web Crawler does not start due to low memory space, the required JVM parameter to run Web Crawler is -Xms128m --Xmx768m.
- The UI displays the following indexing-statuses:
  - In-Progress—Indexing is running.
  - Failed—Indexing is failed due to some error.
  - Canceling—Canceling the indexing is in progress.
  - Canceled—User canceled the indexing.
  - Indexed—Indexing is completed.
  - Re-Indexed—User has reindexed the existing URL.

Index Location

The Web Crawler generates the indexes in the following location:

`<CHORUS_HOME>/userdoc/mfui/webcrawls/crawlresults/<DIRECTORY WITH URL NAME>`

URL Log

The URL indexing logs reside in the following location:

`<CHORUS_HOME>/userdoc/mfui/webcrawls/crawlresources/<DIRECTORY WITH URL NAME>`

The View Log screen shows only the files (along with timestamp and status) that are being sent for indexing.

Uploading documents and indexing are two separate actions. If any indexed file appears in the Index View log window, the file that you uploaded does not get indexed automatically. Index the folder (<CHORUS_HOME>/userdoc/*<folder with user name>*) explicitly by using the Index Documents tab.

Server Log

The server log in the following location can indicate what documents have been uploaded to <CHORUS_HOME>/userdoc folder:

`$CHORUS_HOME/logs`

order.xml

The order.xml file stores Web Crawler configuration information including the following:

- Website download limits.
- Download filters.
- Download depth.
- Page parsing information.
- Crawl output type and location.
- Proxy information in case of the Internet URL.

This file stores the proxy server name and port also. You can find this file in the following location:

`<CHORUS_HOME>/userdoc/mfui/webcrawls/crawlresources / <DIRECTORY WITH URL NAME>/order.xml`

Error Status FilecrawlErrorDetails.txt

The Error Status FilecrawlErrorDetails.txt file stores error information for which error has occurred and stores it in crawlErrorDetails.txt. You can find this file in the following location:

`<CHORUS_HOME>/userdoc/mfui/webcrawls/crawlresources / <DIRECTORY WITH URL NAME>/crawlErrorDetails.txt`

Common Crawl Errors

The following table describes common crawl error messages:

Error	Action
HERITRIX CRAWLER LIBRARIES NOT FOUND. COPY LIBRARIES AT - JBOSS_HOME\modules\third-party\kc\url-indexing\main	Heritrix crawler is an open-source third-party library. To crawl, place Heritrix libraries at specified location.
Failed to update order.xml	Check if the order.xml file is present at JBOSS_HOME\standalone\chorus\

Error	Action
Unable to create New JVM. Please check the server log for error details.	The possible reason is memory limitation on the server. Check server log for details. Verify that runjdwp is not enabled to debug something which blocks the port to launch the jvm. Verify the following parameters: -Xdebug -Xrunjdwp:transport=dt_socket,address=8787,server=y,suspend=n
Unable to connect to website.	Verify the URL in a new browser window.
Proxy validation failed.	Verify your proxy user login credentials and proxy domain.
Server Busy, Please try after some time.	Try later.

Debug CA Chorus JBoss Problems

The following procedure explains how to debug the CA Chorus JBoss problems.

Follow these steps:

1. Open the server.log in your editor or viewer.
2. Search from the beginning for the ERROR string (SPACE + ERROR + SPACE).

   The first occurrence of the error in most cases is the reason for JBoss failure.
3. Read a whole error stack carefully.

   When external systems cause the failure, the server.log file has SEVERE message instead of ERROR message.

   If you find nothing wrong in logs, or you do not have enough experience to deal with the error, refer the following topics:

   - Startup Problems
   - Permission Problems
   - JVM Dumps (see page 28)

Startup Problems

The following table describes the JBoss startup problems:

Problem	Description	Resolution
Teiid Timeouts	On slower LPARs the JBoss startup times out.	Add the following line to CETJOPTN(ENVETJ): IJO="$IJO -Dcom.ca.chorus.bootstrap.teiidVdbReadyTimeoutSecs=360"
Teiid Long Start Time	If you see the following messages in the server.log, the default SSL keystore password may have been changed: ■ Cannot connect to JBoss Admin Management, probably it is not started yet. Will reattempt after a short delay. ■ java.io.IOException: java.net.ConnectException: JBAS012174: Could not connect to remote://<*systemID*>. The connection failed.	If the default SSL keystore password has been changed, add the following line to CETJOPTN(ENVETJ): IJO="$IJO -Djavax.net.ssl.keyStorePassword=*newpassword*"
Resource Consumption	The default heap memory for CA Chorusassumes that all three disciplines are installed.	If only one discipline is installed, you can lower the heap size by updating CETJOPTN(ENVETJ). Change: IJO="-Xms1500m -Xmx1500m -Xss1024K -Xgcpolicy:gencon" to IJO="-Xms1240m –Xmx1500m -Xss1024K -Xgcpolicy:gencon" **Note:** For more information about heap requirements, see the *Site Preparation Guide*.

Problem	Description	Resolution
ZipExceptio n - XYZ	If you see the following when trying to start JBoss, you may not have enough file descriptors available to start JBoss: Caused by: java.util.zip.ZipException: error in opening zip file at java.util.zip.ZipFile.open(Native Method) at java.util.zip.ZipFile.[set the init variable for your book](ZipFile.java:137) at java.util.zip.ZipFile.[set the init variable for your book](ZipFile.java:154) at org.jboss.virtual.plugins.context.zip.ZipFileWrapper.ensureZipFile(ZipFileWrapper.java:175) at org.jboss.virtual.plugins.context.zip.ZipFileWrapper.acquire(ZipFileWrapper.java:245) at org.jboss.virtual.plugins.context.zip.ZipEntryContext.initEntries(ZipEntryContext.java:484) at org.jboss.virtual.plugins.context.zip.ZipEntryContext.ensureEntries(ZipEntryContext.java:619) ... 62 more	Check the number of USS file descriptors available to each user from a UNIX prompt with the following command: ulimit -a If the number of file descriptors is less than 64000, increase the number of file descriptors. To increase the number of file descriptors available, edit the appropriate BPXPRMxx member, or issue the following MVS console command: SETOMVS MAXFILEPROC=64000 Ensure that you have the appropriate permissions that are required to issue this command before trying.
Abends	U4080 - Cause unclear, User did not configure <hostname> in CETJJCL(CHORJBOS). For example: ++STEP00 EXEC PGM=JVMLDM67,PARM='+D org.jboss.Main -b <hostname>' User also added some missing authorization for TCPIP to the CHORADM user.	To get documentation for Abends, do the following steps: 1. Add the following option to the CETJOPTN(CEE) data set: TRAP(OFF,NOSPIE) The content of the line is now: HEAPPOOLS(ON),TRAP(OFF,NOSPIE) 2. Set a slip trap to get a dump when the program check occurs, by executing the following console command: SLIP SET,EN,ID=JBOS,C=0CX,A=SVCD,J=CHORJBOS,SDATA=(PSA,NUC,SQA,LSQA,RGN,LPA,TRT,CSA,SWA,SUMDUMP),ML=1,END **Note:** When the program check occurs, you should get an SVC DUMP generated.

If you are unable to resolve the startup problem, try adding the following property to CETJOPTN(ENVETJ):

```
IJO="$IJO --Dcom.ca.chorus.debugBootstrapFailure=true"
```

This property tells TeiidBootstrap to dump the stack trace information for all threads when the *CHORUS cannot complete BOOT sequence condition* is detected. Setting this property does not fix the problem, but it provides more detailed information for debugging.

JBoss uses the environment that the CETJOPTN(ENVETJ) member sets. If you add the following value in the beginning of the file, you see more debugging messages during JBoss startup:

```
set -x
```

Permission Problems

JBoss startup creates files and folders by unzipping the element bin/CHORDIR. JBoss also creates a number of folders and files in <chorus_home>/jboss/standalone/tmp. If someone other than the Chorus administrator, for example: CHORADM, runs JBoss, those files and folders will be owned by the person who ran JBoss. Later when starting JBoss as a started task running under the Chorus admin id, JBoss will fail to start successfully. This is because of the exceptions that the permission problems cause. You will see errors such as follows:

- EDC5111I Permission denied
- Data source not accessible

To identify the permission problems, check the USS file permissions by running the following command in <chorus_home>:

```
ls –lR >chorusfiles.txt
```

To view files that do not have the owner of CHORADM, run the following command:

```
find <chorus_home> ! -user CHORADM | xaarqs ls -l
```

To resolve the permission problems, rerun ETJI0100. This action sets the ownership of the files back to CHORADM.

JVM Dumps

JBoss may generate dumps for the following situations:

- When a program check in the native code ("gpf") encounters.
- When a system event, such as an Out Of Memory condition, occurs.

You see messages on the JESMSGLG output that look like the following messages:

```
10.55.59 STC48819 BPXM023I (CHORADM2) 547
547 JVMDUMP006I Processing dump event "systhrow", detail
"java/lang/OutOfMemoryError" - please wait.
10.55.59 STC48819 BPXM023I (CHORADM2) 548
548 JVMDUMP006I Processing dump event "systhrow", detail
"java/lang/OutOfMemoryError" - please wait.
```

In this case, there are two sets of files that get written to the file system for the server:

- javacore.yyyymmdd.hhmmss.pid.seq.txt—A human-readable text file (medium size, around 3 MB).
- heapdump.yyyymmdd.hhmmss.pid.seq.phd—A binary file (large size, around 255 MB).

Reading a javacore File

If you edit or browse the javacore file, you see some useful information about the JBoss server at the time of the failure. Also, the IBM Thread and the Monitor Dump Analyzer for the Java tool reads the file and provides more information.

The following procedure explains how to use the javacore analysis tool.

Follow these steps:

1. Download the IBM Thread and Monitor Dump Analyzer for Java from the IBM website.

   Note: You download a zip file named jca*nnn*.zip, where nnn is the version number.

2. Unzip the downloaded file to a directory.

3. Execute the following command from the directory where you unzipped the downloaded file:

   `"java -jar jca`*nnn*`.jar"`

   A GUI opens on your desktop.

4. Select File, Open Thread Dumps.

5. Locate the javacore file and click Open.

   A loading status appears. A thread dump list that shows every javacore file that you have opened appears.

6. Double-click the entry for the dump that you just opened.

   A summary of the information in the javacore appears. The summary includes date/time, system information, JVM information, environment information (including JVM arguments), memory statistics, and other information.

   Note: You can see more information available under Analysis on the menu bar.

Chapter 2: Known Issues

CA Chorus Known Issues

Important! CA Chorus known issues apply to all disciplines.

Equal sign does not work for date filtering

When filtering based on data in the Investigator, the equals option does not work properly. To navigate around this issue, use search criteria Column>=Day X and Column <=Day X+1.

100 Percent File System and zFS Growth

When the CA Chorus file system reaches 100 percent, the CPU spikes. Using the AGGRGROW option for your zFS0 data set may mitigate this issue, as noted in our installation materials. If this option does not help, move the zFS to a larger volume that allows for greater growth of the zFS.

User-Added Content Not Retained in Knowledge Center

If you upload and index documentation to the Knowledge Center and then install a new release of CA Chorus or apply an APAR, you must reindex your content. Otherwise, the content does not appear in your search results. For example, if you upload a file about your site policies and then apply an APAR, reindex to ensure that this information appears in the Knowledge Center.

Browser Refresh Closes Child Windows

If you use the browser refresh button while in a CA Chorus main window, child windows close (for example, Investigator and Knowledge Center). This issue applies to Internet Explorer and Mozilla Firefox.

Selecting Large Number of Objects While Creating Policy Can Cause High CPU Usage

Selecting large number of objects while creating a policy using the Object Picker can cause high CPU usage.

Best practice on Select All Usage:

Use Select All when building a policy rather than selecting individual objects. That way, if similar, new objects are created, they will be covered by the policy without any additional configuration. Note the following points to avoid high CPU usage:

- If there are groups of objects that you want to include or exclude, specify them through filters.
- If the count of objects included is in the tens of thousands or more, it can cause high CPU usage. If you are building policy for an object type that has thousands of instances, use appropriate filters to include only the objects needed for your policy.

Discrepancies in the Policy Status Light Module

When the objects associated with a policy are no longer available, users may observe the following discrepancies in the Policy Status Light module:

- The Show Overall or the Group By Object Type options show colored-lights for the object that is unavailable. But, the hover text indicates that the information about the object is unavailable. The Show Object Instances option does not show colored-lights for the objects that are unavailable.
- The Show Object Instances option shows less number of objects than the number of objects in the policy or the hover text indicates that the information about the object is unavailable.

ClientAbortException in the Server Log

When a connection is closed from the client (browser) side before the server sends all data, you may see a ClientAbortException in the Server log. Ignore this exception because it does not have any impact on the application.

Error While Navigating from Actions and Enabling Auto-Refresh

In the Investigator, with the auto-refresh option enabled, in some instances, when the data refreshes, you get an error.

Back-end Documentation with CA Chorus Updates Not Indexed

For use with CA Chorus, we have updated the following documentation:

- CA ACF2 Version 15
- CA Compliance Manager Version 2
- CA LDAP Server Version 15
- CA DSI Server Version 15
- CA NetMaster NM for TCP/IP Release 12.1
- CA SYSVIEW Release 13.7
- CA Top Secret Version 15
- CA Vantage Release 12.6

The updates for CA Chorus-related content since Release 2.5 are not yet generally available (GA); therefore, they cannot be posted on CA Support Online. The Knowledge Center requires that the content be on CA Support Online to be indexed. This content is not included in the Knowledge Center. Instead, the latest available GA release of these documentation sets is indexed. The documentation sets that include the CA Chorus Version 3.0 updates are posted on the beta FTP site.

Additionally, these documentation sets temporarily refer to the product as CA Mainframe Chorus.

User encounters error ‘bash: line 61: syntax error near unexpected token’ while using CA CSM to configure CA Chorus.

If the user encounters the error ‘bash: line 61: syntax error near unexpected token’ and the user has ‘exec bash’ in their .profile, replace ‘exec bash’ with the following code: TTY=`/bin/tty` if ["${TTY}" != "not a tty"];then stty erase ^? exec bash fi

Contradicting filter gives a possible result

If you enter contradicting filters in the Investigator, you may see search results when you should not see any rows of data.

Select Button is Disabled While Creating the Policies

The selection of the following type of objects is disabled while creating policies:

- Objects that have some mandatory and default filters, but do not have any columns available for filtering.

Limited Number of Records Appear While Expanding a Summarized Node in the Data Pane

You use the Group By option to group the data based on the selected columns when you customize your column settings. When you expand the grouped data, the Data pane displays a maximum of 100 records. Do a search to view the rest of the records.

Exported CSV Files Show Large Value for Time Interval

When you export time-based objects using the Export option in the Investigator, the CSV file may show a large value for the Time Interval column than it was displayed in the Data pane of the Investigator. This happens because the export functionality exports all the rows. If the rows to be exported exceed 1200, the Time Series Facility adjusts the interval value to display only 1200 rows.

Resource Adapter is Not Deployed and CHORJBOS Shuts Down During Data Source Deployment of JBoss Startup

When data sources are deployed during JBoss startup, the following error appears:

```
Failed to start service jboss.ra.deployment.vice thread 1-1
teiid-connector-file.rar_4
JBAS010446: Failed to start RA deployment [teiid-connector-file]
Caused by: javax.resource.spi.InvalidPropertyException:
ParentDirectory is not set.
```

The Resource Adapter (RA) file is not deployed or accessible and the JBoss server started task (CHORJBOS) shuts down. You must restart CHORJBOS.

CA Chorus for DB2 Database Management Known Issues

CA Chorus Infrastructure Management for Networks and Systems Known Issues

Erroneous Messages in the JBoss Log

If you use ETJI095R to configure CA Chorus Infrastructure Management for Networks and Systems using IBM RACF, when you try to start JBoss, you may see CA SYSVIEW permission warning messages in your JBoss log (for example, INSUFFICIENT AUTHORITY TO OPEN). JBoss tries to create an index file for each jar file that it loads in the same directory as the jar file.

Despite the failure to create the index files, JBoss starts correctly. If you see these messages, review them and manually grant authority, if applicable.

CA Chorus for Security and Compliance Management Known Issues

N/A

CA Chorus for Storage Management Known Issues

Multiple Host Records Returned on Navigational Actions for a Specific Host

When configured for multiple hosts, each of the Cost Analysis solutions is executed individually against each of the configured hosts. The results for each host are available in the Investigator.

While each of the results in the Investigator in this configuration is associated with a specific host, the navigational actions in the Investigator, which navigate to the specific tables referenced by the analysis, are not limited to a specific host. For example, information from all configured hosts is displayed when navigating from a specific Cost Analysis result to any of the tables that were processed by the analysis.

Website Not Displayed Properly When Configured in Web Application Module

If the Web Application that you configured does not show properly under Internet Explorer, switch to the Mozilla Firefox browser.

Chapter 3: Troubleshooting Articles

Login Window Does Not Open

Symptom:

When I try to log in to CA Chorus, the Login window does not open.

Solution:

Several issues could prevent the Login window from opening. Review the following areas. If you identify an issue that is based on a step, after you address it, try to log in before continuing.

1. Confirm that you are using the correct host and port in the product URL address.
2. Confirm that all CA Chorus tasks are running. To do so, review the data in CA SYSVIEW or a similar tool.
3. Review the JESMSGLG log to confirm that JBoss task is not taking a dump.
4. Review the server.log to identify out of memory issues for Java.
5. Review the chorus-status.log, server.log, and boot.log (in that order) for fatal error messages.

Cannot Access Product Documentation on CA Support Online

Symptom:

I cannot access non-CA Chorus documentation in the Knowledge Center search results.

Solution:

You must have a CA Support Online account to access the product documentation that is used with the CA Chorus. For example, for CA Chorus for DB2 Database Management, you use CA Chorus documentation *and* the CA Database Management Solutions for DB2 for z/OS documentation. When your Knowledge Center search returns CA Chorus documentation, the link takes you directly to the guide. When your Knowledge Center search returns non-CA Chorus documentation, the link takes you to the guide on CA Support Online.

Request an account through the http://ca.com/support.

To avoid viewing this documentation through CA Support Online, upload and index it directly in the Knowledge Center. However, if you do so, updates to the documentation on CA Support Online are lost.

Note: For the steps on indexing the documentation, see the *Product Guide*.

Knowledge Center Results Window Does Not Open

Symptom:

When I perform a search in the Knowledge Center, the results window does not open.

Solution:

A pop-up blocker or addition to your toolbar can stop the window from opening. To resolve this issue, use the following process:

1. Confirm that your browser does not have the pop-up blocker enabled.
2. Confirm that you have not added a third-party product toolbar to your browser. If you have, remove it.

Help Topics Do Not Appear After a Search

Symptom:

When I perform a search in the Knowledge Center, the correct topics do not appear in the search results.

Solution:

The Knowledge Center may not contain your search topics as a result of incorrect indexing. To index the documentation, use the following steps:

1. Enter the path of the documentation folder in the Knowledge Center Settings dialog. Conversely, click Browse to locate the documentation folder that contains the files you want to index.
2. Select the folders that you want to index and click Add.
3. Click Index.

User-Added Documentation Does Not Appear in the Knowledge Center

Symptom:

The documentation that I added to the Knowledge Center repository does not appear in the search results.

Solution:

If the documentation was incorrectly indexed or if the indexes were cleared for any reason, then your documentation does not appear in the search results. To reindex your documentation, use the following process:

1. Click the Index Documents tab in the Knowledge Center Settings dialog and browse to locate the folder that contains the files you want to index.
2. Select the folders that you want to index and click Add.
3. Click Index.

Note: You can view the status of the indexing process by clicking View Log.

One Line on a Multi-line TSF Chart is Flat

Symptom:

When I chart more than one entity using the Time Series Facility (TSF), one of the lines runs along the bottom of the chart.

Solution:

The vertical scale of the TSF chart is calculated on all of the entity values of all the entities. One of the entities in this chart has greater values than the other entities. To see a zoomed view of the entity at the bottom of the chart, create a chart specifically for that entity.

The Line on a Single-Line TSF Chart is Near the Bottom

Symptom:

When I chart an entity using the Time Series Facility (TSF), the line runs along the bottom of the chart.

Solution:

The vertical scale of the TSF chart is calculated on all of the entity values in the control range. The maximum value is not within the displayed section of the date slider range. Scroll the date slider control to investigate.

Lines Do Not Appear on the TSF Chart

Symptom:

Lines do not appear on the Time Series Facility (TSF) chart.

Solution:

No values are in the database for the displayed time range of the chart. Scroll the date slider control to a different date or set the period control to a higher value. If you cannot find data points, determine why data is not being collected and correct the problem.

Alternately for the selected entities and metrics, you can view the last recorded data for the charts that are currently displayed in the TSF. When no current data exists for a selected entity, this option helps you see the most recent recorded data.

Blank Sections Appear in the TSF Chart

Symptom:

Blank sections appear in the lines on the Time Series Facility (TSF) chart.

Solution:

The missing sections of the chart indicate times when data was not collected. For example, for DB2 entities, this issue is usually because the selected plan or package was not active then. Determine why the data was not collected and correct the problem.

Level Lines Appear on a TSF Chart

Symptom:

The left side of the Time Series Facility (TSF) chart has level lines.

Solution:

The TSF metric database is tiered so that data becomes less granular the longer it is stored. The records are aggregated when they reach the expiration age that is specified in the metric management settings. If a user request data at a granularity less than available for the time period, the aggregated values are split evenly into the smaller time intervals. When displayed in a chart, the averaged values appear as level lines. To view the chart without averaged values, reset the Period selector to a larger value.

Cannot Index Documentation in the Knowledge Center

Symptom:

I want to add documentation to the Knowledge Center. When I open it, I do not see the wrench icon that is required to accomplish this task.

Solution:

You must be authorized to add documentation to the Knowledge Center. If you are not authorized, the wrench icon does not appear in the upper-right corner of the Knowledge Center. To request access, contact your security administrator. If your security administrator indicates that you already have access, the system administrator can start or recycle JBoss.

Note: For the steps to grant access, see the *Site Preparation Guide*.

Cannot Find Information in Discipline-Specific User Guide

Symptom:

I am looking for CA back-end product information. I do not see it in my discipline-specific *User Guide*.

Solution:

The discipline-specific *User Guides* do not duplicate the back-end-product information. So, you may find technical product details in the applicable back-end bookshelf. You can access the back-end product bookshelf from the Knowledge Center. You must have a CA Support Online account to view the bookshelf. If you do not have a CA Support Online account, request an account through http://ca.com/support.

Follow these steps:

1. Click the Help icon on any CA Chorus window.
2. Select the required bookshelf from the Additional Information pane.
3. Log in to CA Support Online to view the bookshelf.

   Note: To avoid viewing this documentation through CA Support Online, upload and index it directly in the Knowledge Center. However, if you take this action, updates to the documentation on CA Support Online will be lost. For the steps to index documentation, see Using the Knowledge Center.
4. Search the CA back-end product bookshelf.

Cannot Locate a Definition of a Tree Object

Symptom:

I want to find the definition of a tree object and understand why I would use it. I cannot easily find a topic when I access the Knowledge Center from the Investigator.

Solution:

Each discipline-based *User Guide* includes topics to define tree objects and explain why and how you would use them.

To narrow your search and Knowledge Center results, complete the following steps:

1. Open the Investigator.
2. Select a discipline from the drop-down list.
3. Navigate to and select a tree entry.

   Object data appears in the center pane.
4. Highlight the object name from the center pane, and then click the question mark icon.

   The Knowledge Center opens with topics that match the highlighted text.

   Note: Customer-added content appears at the top of the search results. So, scroll down to see CA Chorus documentation topics, if necessary.

Example: Search for a Security Object

As a new security administrator, you want to learn how you can use the Investigator to manage your daily tasks. As you maneuver through the Investigator, you see the CA ACF2 Scope XREF field under Definitions. You are not certain how to use this specific object so you click the item. The center pane displays data for this object. You then highlight the *CA ACF2 Scope XREF* heading above the table, and click the question mark. The Knowledge Center displays several topics specific to this object.

Debug Security Discipline-DB2 Connection

Symptom:

I get one or more of the following failed-connection messages in the server.log:

- GMT ERROR com.ca.chorus.server.translator.delegator.LazyConnectionInvocationHandler (JBoss System Threads(1)-8) Unable to initialize connectionorg.jboss.util.NestedSQLException: Unable to get managed connection for chorus-cia-jdbc; - nested throwable: (javax.resource.ResourceException: Unable to get managed connection for chorus-cia-jdbc)
- TeiidProcessingException.SECURITY_DM_DB2_D91APTIB_CMGRD1: ETJJB012E Could not connect to DB2 ,SQLState=08001 ,ERRORCODE=-4499. Research the error code and correct the problem. TranslatorException.ETJJB012E Could not connect to DB2 ,SQLState=08001 ,ERRORCODE=-4499. Research the error code and correct the problem.

Solution:

CA Chorus for Security and Compliance Management connects to a DB2 subsystem using JDBC to access the CM or the CIA databases. The following data source XML files define the connection information:

- chorus-cm-jdbc
- chorus-cia-jdbc

After you identify that DB2 subsystem causes the connection problem, use the following procedure to resolve the problem.

Follow these steps:

1. Determine the DB2 subsystem and the system it runs.
2. Log in to the system, and enter SYSVIEW or SDSF.
3. Determine if the subsystem is running by setting the prefix to the DB2 subsystem name.

   Example: View the following active address spaces by using the DA command:

   - D91AIRLM
   - D91AMSTR

     Note: This value is the DB2 Master Address space. You find the DDF messages here.

     The list shows examples of DDF terminating messages:

     ```
     18.39.47 STC56790 DSNL007I !D91A DDF IS ABNORMALLY TERMINATING
     ```

     ```
     18.39.49 STC56790  DSNL008I  !D91A DDF ABNORMAL TERMINATION
     COMPLETE
     ```

   - D91ADBM1
   - D91ADIST

     Note: This value is the DB2 DIST Address space. You find information on ACID password, facility, or suspend problems here.

   - D91ACCA
4. Recycle the DB2 subsystem:

   Check the activity in the region before recycling.

   1. Stop the DB2 subsystem by issuing the following command:

      ```
      -stop db2
      ```

   2. Start the DB2 subsystem by issuing the following command:

      ```
      -start db2
      ```

Debug Security Discipline Datacom Connection Problems

Symptom:

I have the security discipline installed and configured to use the Datacom databases, and I encounter connection problems.

Or

When I try to open the security section tree in the Investigator, I receive the following error:

```
ETJDS091E An error occurred in a database: Group does not exist:
SECURITY_DM_DB2_D91APTIB_CMGRD1.VIEWADMPOLICY.
```

Solution:

The cause can be identified by analyzing the server log for the following error messages:

Invalid DBSRV_HOME

Follow these steps:

1. Verify setting in CETOPTN(ENVE1M).
2. Verify DBSRV_HOME directory is mounted and contains a lib folder of files.
3. Check that all files are present in the lib folder with r-x permissions and aps/s extended attributes.

Missing CCI Library

Follow these steps:

1. Verify that the CCI modules are not in a Linklist library. If not, add CAI CCS library (CAW0PLD) containing LIBCCI and LIBCCI6E modules to JBOSS STEPLIB.
2. Verify the CCI External Links in Chorus/bin/lib.

Invalid SYSTEMID or CCI down

Follow these steps:

1. Verify that SYSTEMID is correct for remote Datacom server system.
2. Verify that the CCITCP job is running on the remote system.

Unauthorized Chorus Admin Userid

Verify the CHORADM authorization for the Datacom APPLID.

Missing View Definition

Verify appropriate view job for database type (E1MI0011,12,16 or 17) was successful.

Datacom Server is down

Start the Datacom Server: Ex. /S CMADSVR from SYSVIEW or SDSF command line.

Datacom Server hung

Follow these steps:

1. Check Datacom Server status report: Ex. /F CMADAVR,STATUS from SYSVIEW or SDSF command line.
2. Find the status report in the Datacom Server job listing. If the status "WAITING FREE DB THREAD" is found, recycle the Datacom Server. Ex. /P CMADSVR, then /S CMADSVR.

Database Configuration

Follow these steps:

1. Browse the following files in chorus/config:
   - security-database.cfg – user-defined csv defining database config. One record per database.
   - security- database-model.xml - teiid model definition for each database.
   - security-database-jdbc-ds.xml – teiid datasource definition for each model including jdbc connection string.
2. Verify that the column values and database records that are defined in security-database.cfg correspond with models and datasource definitions.
3. If there are discrepancies or the configuration appears to be invalid, run the E1MI0010 security role database configuration job to regenerate the three configuration files. The input file is defined in the SYSUT1 DD in the COPY step. Verify that this dataset describes the desired database configuration before running.

Do Not See How to Change the TSF Time Duration?

Symptom:

I do not see how to change the time duration between original and cloned charts and perform charting.

Solution:

Take the reference of original charts date picker and change the duration. Doing so automatically maintains the time duration in the cloned charts date picker. You can then chart to see the desired metric values.

Why Do Date/Time Changes in TSF Charts Affect Cloned Charts?

Symptom:

When I make data/time changes in my original charts, my cloned charts change as well.

Solution:

We maintain the same duration (time difference, irrespective of from and to date/time values) among the dates/time values in both original and cloned charts. This configuration is how we usually compare charts.

Do Not See How to Disable SSL

Symptom:

Secure Socket Layer (SSL) refers to the standard method of encryption and authentication on the Internet. It is enabled when you run ETJI0110 with SSL_ENABLE set to yes.

I want to turn it off, but I do not see how.

Solution:

To disable SSL, follow these steps:

1. Go to ETJI0110 of *chorus_runtime_hlq*.CETJJCL, and set the SSL_ENABLE field to no.
2. Rerun ETJI0110.
3. Restart the JBoss server.

Knowledge Center Displays Irrelevant Topics

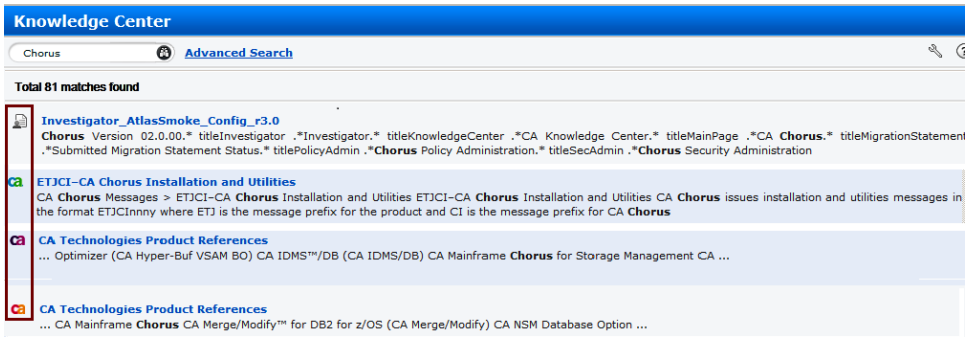
Symptom:

When I search the Knowledge Center, the result includes irrelevant topics.

Solution:

Along with the documentation that we provide, the Knowledge Center lists the documents and websites that the users index. The  icon indicates a user-indexed topic. The following screen capture shows some of the different icons we use in the Knowledge Center.

If you find irrelevant, outdated, or incorrect user-indexed-topics in the Knowledge Center, ask your system administrator to clear such indexes. You can also eliminate data sources to improve search results by selecting specific sources under Advanced Search.



Missing Modules in an Imported Dashboard

Symptom:

I imported a shared dashboard that contains three modules. When I started using the dashboard, I am seeing only two modules in the dashboard.

Solution:

The discipline-specific modules that you do not have access to are filtered out while importing a shared dashboard. If you need access to the missing module, contact your system administrator.

Note: You cannot have more than one DBA Command Manager for DB2 module on your dashboards. If you already have a DBA Command Manager for DB2 module on your dashboard and you have imported a dashboard that contains the same module, the DBA Command Manager for DB2 module is removed from the imported dashboard.

QwikRef Message in Job Log

Symptom:

If I initiate a search and the Knowledge Center does not find a QwikRef match, a message similar to the following appears in my job log:

+QWIKM008-No information was found matching your request

Solution:

This solution assumes that you have enabled QwikRef as a data source for your help searches. To block the message from your logs, contact ChicagoSoft, who owns the QwikRef product.

Export Fails Due to Query Execution Timeout

Symptom:

When I export data from the Investigator to a comma-separated value (CSV) file, the export takes more time, timeout happens, and finishes with no or partial output.

Solution:

The Teiid timeout value to execute a query is 300 seconds by default. To adjust the Teiid timeout value, see the *Administration Guide*.

JBoss May Fail to Shut Down After Receiving the MVS STOP Command

Symptom:

After receiving the MVS STOP command, the JBoss task fails to shut down.

Solution:

If CA Chorus experiences out of memory issues, the JBoss task may fail to shut down after receiving the MVS STOP command. In this case, cancel the task.

Note: Under rare circumstances, you may experience an out of memory issue.

Time Series Does Not Recognize New or Recycled CINET Stacks

Symptom:

When a stack is started after the Time Series address space, TSF does not recognize this stack. Should a request be forwarded using this stack, it fails.

Solution:

Restart the TSF engine whenever a CINET stack is cycled.

Error Encountered While Querying Time Series Facility

Symptom:

I am seeing the following error messages in the server.log:

1 [TSFException]ETJTS293E error encountered attempting to query Time Series Facility (TSF) for entityValueListQuery (Storage,CATALOGJ,0,CATALOGJ_SYSPLEX,0,interpretive,standard,interpretive,interpretive,[0={count=1,qualEntry[0={qualType=noqual,qualValue1=,qualValue2=}]},1={count=1,qualEntry[0={qualType=noqual,qualValue1=,qualValue2=}]}]), query aborted.

2 [TSFException]ETJTS281E error encountered attempting to query the TSF on port 20000 host 127.0.0.1, query aborted.

Solution:

ETJTS293E indicates that the query from JBoss to TSF failed for a query request of the storage data. To understand the reason completely, we would need the previous messages in the JBOSS log. The most common problem is that the TSF region was not up when the JBoss was started. So, the TSF metadata did not load.

Restart the TSF region, and then restart JBoss.

Erroneous Messages in the JBoss Log

Symptom:

If I use ETJI095R to configure the CA Chorus IM discipline using IBM RACF, when I try to start JBoss, I see CA SYSVIEW permission warning messages in my JBoss log (for example, INSUFFICIENT AUTHORITY TO OPEN).

Solution:

JBoss tries to create an index file for each jar file that it loads in the same directory as the jar file itself. Despite the failure to create the index files, JBoss starts correctly. If you see these messages, review them and manually grant the authority, if applicable.

Error While Expanding the H2 Database zFS

Symptom:

The current volume of the H2 database is full. So, I allocated a new file system on a larger volume, and copied all the files in the *database* folder to the new file system. When I tried to mount the new file system in the *database* folder, JBoss fails with the following message:

```
<messageString>An error occurred in a database:  Database may
be already in use: &quot;Lock file exists:
/u/users/evaadm/chorus/database/h2/chorus.lock.db&quot;. Possible
solutions: close all other connection ; use the server mode
.90020-168..  90020.  Error Code=90020</messageString>
```

Solution:

Delete **.lock.db* in the */database/h2* folder.

Error While Modifying and Saving Date and Time Fields in the Details Pane

Symptom:

When I try to modify and save date and time fields in the Details pane of the Investigator, I get an ETJDS091E error.

Solution:

Ensure that you adhere to the following format while editing the date and time fields:

Type	Format	Example
Date	yyyy-mm-dd	2012-12-20
Time	hh:mm:ss	10:30:00
Timestamp	EEE MMM dd HH:mm:ss zzzz yyyy	Fri May 24 11:55:48 GMT+530 2013

Error Appears After Starting JBoss

Symptom:

I am getting the following error few minutes after starting JBoss:

```
GMT ERROR [org.jboss.as.server.deployment.scanner]
(DeploymentScanner-threads - 1) JBAS015052: Did not receive a response
to the deployment operation within the allowed timeout period [1200
seconds]. Check the server configuration file and the server logs to
find more about the status of the deployment.
```

Solution:

Change the deployment interval in the in *standalone-chorus.xml* to 1600 or above.

Error Dropping the TSF Database

Symptom:

When I try to run the TSDB102 member in *custom_hlq*.CETJJCL, the job fails with RC=0020. The failing step is DBSQLPR, in which each SQL command fails with the following error:

```
SQLCODE = -20, SQLSTATE=42601
MESSAGE = BAD SYNTAX: <DROP TABLE TSF.tablename  QUERYNO
WHEN THE ERROR OCCURRED, THE SYNTAX BELOW HAD BEEN PARSED:
  DROP TABLE TSF.tablename   QUERYN
```

Solution:

Apply the current CA Datacom/AD maintenance.

For an immediate work-around, follow these steps:

1. Make a temporary copy of CETJDATA(DB400308).
2. Edit the copy to remove QUERYNO and the number following it.
3. Verify that each line ends with a semicolon.
4. Use this copy as the SYSIN data set in the DBSQLPR step of TSDB102.

Errors While Configuring the Web Application Module

When you are configuring the Web Application Module, you could come across the following situations:

Symptom:

Your CA Chorus environment has an SSL login enabled. After configuring the Web Application Module with a certain URL, you cannot see the page.

Solution:

The website contains mixed content. Depending on your browser and its settings unsecured pages might not be displayed and you may not be prompted on whether the page should be displayed. If you are using SSL logins to CA Chorus, ensure that any site that is selected as web application module is a secured site where the URL begins with https://.

Symptom:

You see the following pop-up message:

```
The page contains both secure and nonsecure items; do you want to
display the nonsecure items.
```

Solution:

Click Yes to see the configured web page.

To prevent the pop-up message from appearing, configure your browser settings to display “Mixed content”.

Note: For more information, see your browser documentation.

Symptom:

After configuring the Web Application Module with a certain URL, you cannot see the page.

Solution:

No solution. The Web site restricts the page to render in an Iframe.

Symptom:

When you click on a hyperlink within a web page that is configured in the Web Application Module, if that page tries to replace the main CA Chorus tab/window, the following message appears:

```
This page is asking you to confirm that you want to leave - data you
have entered may not be saved.
```

Note: This message is common to all browsers.

Solution:

You can choose to proceed, or you can abort the request.

Chapter 4: JBoss Environment Variables (ENVETJ)

Only change the following settings under the direction of CA Technical Support.

TZ_OFFSET

Specifies the time zone for your system. This variable lets you customize the data coming from your back-end products such that the time stamp is accurate.

Default: Greenwich Mean Time (GMT)

CHORUS_APPL

Specifies the APPL value that is used to verify users that connect to the CA Chorus server. If a user is using the CA Easytrieve Report Generator reporting or the Object Migrator features, this APPL is used to generate PassTickets to authenticate their connections to the server.

Note: For more information about configuring PassTickets, see Configure PassTickets for User Authentication.

Default: CHORWEBS

quicklinks.application.name

Specifies the application ID that is used to generate a PassTicket for user authentication with the Quick Links module and its associated interfaces.

Default: CALDAP

Note: If you change the default value, be sure to change the value specified in the CA LDAP Server slapd.conf file.

CHORUS_DSIENV

Specifies the path name of the dsi.env file that contains environment settings for the spawned CA Distributed Security Integration (DSI) component.

Default: /cai/cetjr3m0/config/dsi.env

Important! This value is not used for real-time Compliance Information Analysis (CIA) in CA Chorus for Security and Compliance Management. Do *not* alter this value as part of configuring CIA.

CHORUS_DSICONF

Specifies the path name of the dsi.conf file that contains configuration settings for the spawned CA Distributed Security Integration (DSI) component.

Default: /cai/cetjr3m0/config/dsi.conf

Important! This value is not used for real-time Compliance Information Analysis (CIA) in CA Chorus for Security and Compliance Management. Do *not* alter this value as part of configuring CIA.

STEPLIB

Specifies the z/OS data set that contains shared objects to support the CA Chorus environment.

Note: Specify STEPLIB=CURRENT to use the //STEPLIB concatenation in the batch JCL.

Default: CURRENT

CA_AXIS2C_LOG_LEVEL

Specifies the level of detail for information that is written to the log files. Valid values in ascending order by amount of detail are NONE, CRIT, ERROR, WARNING, INFO, DEBUG, and TRACE.

Default: DEBUG

Important! Log levels DEBUG and TRACE can cause high CPU usage.

CA_AXIS2C_IDLE_TIMEOUT

Specifies the amount of time (in seconds) that a session can remain idle before it is canceled automatically. This option is the default value that is used if a timeout value is not specified at session start time.

Default: 1800

CA_AXIS2C_SRVMAINT

Specifies whether the server is started in maintenance mode. In maintenance mode, connections to the data source web service are permitted from the client utility (CLIUTIL) only. Use this feature to perform an operation on a data source that requires exclusive access to a resource.

Default: NO

CA_AXIS2C_TRIGGER_THREAD

Controls the execution of the internal thread which processes trigger requests and terminates idle sessions. Do not change this value unless advised to do so by CA Technical Support.

Default: YES

DATACOM_MAX_LOCAL_THREADS

Specifies the maximum number of web service sessions that can be concurrently active.

Each session establishes a connection to the CA Chorus database, so this value must be coordinated with the CA Chorus MUF startup parameters:

- The value specified for DATACOM_MAX_LOCAL_THREADS must be less than the value of the TASKS parameter specified in the AXDATIN1 threads member of CETJOPTN.
- The TASKS parameter must be less than the number of buffers specified in the DATAPOOL parameter.

Default: 140

For example, before setting DATACOM_MAX_LOCAL_THREADS to 300, change AXDATIN1 in *chorus_runtime_hlq.*CETJOPTN:

```
'TASKS    1000, 32K,0,0,0' to    'TASKS    350, 33K,0,0,0'
'DATAPOOL 8K,2000,32767,1000' to 'DATAPOOL 32767,500'
```

_BPX_SHAREAS, _BPX_SPAWN_SHELL, _BPX_SPAWN_SCRIPT

Controls the address spaces used by the web server for spawned processes. Set each variable to YES so that spawned child processes run in the same address space as the parent process. This setting improves processing performance.

Defaults: NO

Note: If tcsh is your login shell, do not use.

CHORUS-QWS-DEBUG

Specifies whether to include the details of each Knowledge Center search request that includes the MVS/QuickRef ™ repository in a trace file for logging.

Default: NO

com.ca.chorus.datacom.querytimeout

Specifies the amount of time (in seconds) that a session that queries CA Datacom/AD data can remain idle before it is canceled automatically. If needed, you can override the default value.

Default: 60

com.ca.chorus.baseUrl

Specifies the base URL of the CA Chorus user interface. You use this URL to launch CA Chorus from browsers.

The environment variables ${TEIID_MACHINE} and ${ JBOSS_HTTP_PORT } are optional while setting *com.ca.chorus.baseUrl*.

Example**—with optional variables:**

IJO="$IJO -Dcom.ca.chorus.baseUrl=http://${TEIID_MACHINE}:${ JBOSS_HTTP_PORT }/Chorus/"

You can set the complete URL value also.

Example—with complete URL:

IJO="$IJO -Dcom.ca.chorus.baseUrl=http://ca11:8080/Chorus/"

Appendix A: TSF Data Relay Return Codes

The TSF data relay region terminates with one of the following return codes:

00

Indicates a normal termination.

08

Indicates an error. A write-to-operator (WTO) message is also generated.

12

Indicates a parameter setup error.

16

Indicates that the log could not be opened.

20

Indicates that ESTAEX failed.

24

Indicates that the APF is not authorized.

28

Indicates that the z/OS level is below 1.9.

32

Indicates an unknown operating system.

36

Indicates that there is no STG S/A POOL.

40

Indicates that there is no STG TRACE TAB.