

Developer for System z
Version 8.0.3

Release Notes



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Note!

Before using this information, be sure to read the general information under “Notices” on page 89.

Third edition (October, 2011)

This edition applies to IBM Rational Developer for System z Version 8.0.1 (program number 5724-T07) and to all subsequent releases and modifications until otherwise indicated in new editions.

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IBM Rational Developer for System z Version 8.0.3 release notes

The following release notes provide information about new features and enhancements included in Rational® Developer for System z® Version 8.0.3 and lists the known limitations in the release.

This information is for developers using Rational Developer for System z Version 8.0.3 and Rational Developer for zEnterprise™ Version 8.0.3.

Finding known problems for Rational Developer for System z

As problems are discovered and resolved, known problems are documented in the form of individual technotes in the Support knowledge base found at the IBM® Support Portal

To find release-specific information on limitations, restrictions, and known problems that did not become available until after the product documentation and product release notes were finalized, you can search the knowledge base.

The following link launches a customized query of the live Support knowledge base: View all known problems for Rational Developer for System z.

Note: The following RSS feeds allow you to stay up-to-date with the latest content created for IBM Rational Developer for System z. Feeds are updated throughout the day.

- Latest updates for Rational Developer for System z
- Latest updates for Rational Developer for System z Unit Test
- Latest updates for Rational Developer for System z with EGL
- Latest updates for Rational Developer for System z with Java
- Latest updates for Rational Developer for zEnterprise

Hardware Requirements

For hardware and software requirements, see the following documents:

- **z/OS® host requirements:** Rational Developer for System z Host Configuration Guide
- **AIX® and Intel Linux requirements:** Rational Developer for System z RSE Server Installation Guide: AIX and Linux
- **Linux on System z requirements:** Rational Developer for System z RSE Server Installation Guide: Linux on System z
- **Client requirements:** Rational Developer for System z Installation Guide

Installation and Configuration

For information on installing and configuring Rational Developer for System z, see the following documents:

- **z/OS host installation:** Program Directory for Rational Developer for System z
- **Basic z/OS host configuration:** Rational Developer for System z Host Configuration Quick Start Guide

- **Detailed z/OS host configuration:** Rational Developer for System z Host Configuration Guide
- **Background and supporting z/OS host configuration information:** Rational Developer for System z Host Configuration Reference
- **Basic and common z/OS optional host customization:** Rational Developer for System z Host Configuration Utility Guide
- **AIX installation:** Rational Developer for System z RSE Server Installation Guide: AIX
- **Linux installation:** Rational Developer for System z RSE Server Installation Guide: Linux
- **Linux on System z installation:** Rational Developer for System z RSE Server Installation Guide: Linux on System z
- **AIX and Linux on Power® systems installation:** Rational Developer for System z RSE Server Installation Guide: AIX and Linux on Powers Systems
- **Client installation:** Rational Developer for System z Installation Guide

Note: Considerations when installing in the Linux 64 bit operating system:

- “Issues with Rational Developer for System z running on a Linux 64-bit operating system” on page 9
- “Features that use the COBOL importer do not work properly” on page 11
- “IBM Installation Manager cannot be installed or started” on page 13
- “The Welcome page of a perspective is blank” on page 15

For the most up to date versions of the complete documentation, including installation instructions, white papers, podcasts and tutorials, see the library page of the Rational Developer for System z website (<http://www-01.ibm.com/software/rational/products/developer/systemz/library/>).

Note:

If you are using Rational Developer for System z, the installation and configuration guides are also available on the *IBM Rational Developer for System z Quick Start Disc*.

If you are using Rational Developer for System z, the Host installation and configuration guides are also available on the *IBM Rational Developer for System z Server for z/OS and Multiplatforms Installation DVD*.

If you are using Rational Developer for zEnterprise, the installation and configuration guides are also available on the *IBM Rational Developer for zEnterprise Quick Start Disc*.

If you are using Rational Developer for zEnterprise, the Host installation and configuration guides are also available on the *IBM Rational Developer for zEnterprise Server for z/OS and Multiplatforms Installation DVD*.

Web-based helps

- Chapter 1, “Web-based help content,” on page 19
 - “Accessing Web-based help” on page 19
 - “Installing help content locally using the Local Help Updater and the RDz8.0_updateSite.zip file” on page 20
 - “Updating help content” on page 21
 - “Removing help content” on page 22
 - “Setting up an intranet server for help content” on page 22

- “Changing the way that you access help content” on page 23

Context help

- When using the Rational Developer for System z client on Windows, use F1, Ctrl-F1, or Shift-F1 to open the context help.
- When using the Rational Developer for System z client on Linux, use Ctrl-F1 or Shift-F1 to open the context help.
- In previous releases, accessing the context help displayed the context help specific to your current context, and a Dynamic Help section that showed some search results that may have been related. In Rational Developer for System z v8.0.3, accessing context help displays context help specific to your current context, and a new Search link allows you to search for more results based on the name of the view or dialog that has focus.
- To enable Language Sensitive Help for EXEC CICS®, EXEC SQL and EXEC DLI statements, see Chapter 2, “Enabling Language Sensitive Help for EXEC CICS, EXEC SQL, and EXEC DLI statements,” on page 29.
 - “Installing and initializing the Information Management Software for z/OS Solutions (IMS) information center” on page 30
 - “Installing and initializing the CICS Transaction Server information center” on page 31

What's new in Version 8.0.3

New functions have been added for IBM Rational Developer for System z Release 8.0.3. For additional information on these enhancements, see What's new in Rational Developer for System z (<http://publib.boulder.ibm.com/infocenter/ratdevz/v8r0/index.jsp?topic=/com.ibm.etools.getstart.wsentdev.doc/topics/whatsnew80.html>).

Version 8.0.3 limitations and known problems

For information on limitations and known problems in the Rational Developer for System z, see the following summary:

- Chapter 3, “Limitation: JavaIOException error occurs when using the Rational Developer for System z Manage Licenses panel on the Rational Developer for System z Windows 7 client,” on page 35.
- Chapter 4, “Limitation: Push-to-client update is only supported for remote system connections made using the Remote Systems view,” on page 37.
- Chapter 5, “Limitation: Rational Developer for System z v8.0.1 push-to-client does not work with Installation Manager v1.4.3 and higher,” on page 39.
- Limitation: When using Rational Developer for System z Refactor/Rename, there is no indication that a change was made. Even though there is no indication, the change has been made and saved on the host in the original member.
- Limitation: Remote Index Search does not support searching DBCS or bi-directional files.
- Limitation: The Rational Developer for System z Client running on SLED/SLES 10 64 bit hosted on VMware ESX is not supported.
- Limitation: When connecting to the helps for the first time in the first workspace of a new build, several indexing errors may be logged to the error log. These errors can be ignored. The condition that generates these errors will not impact your ability to access helps within Rational Developer for System z.

z/OS Integrated Development Environment

- “Limitation: Getting the output of active jobs is not supported for JES3 releases earlier than z/OS V1R10” on page 41.
- Limitation: The Browse and View action on MVS™ resources is only supported by some types of editors.

BMS Screen Designer (BMS Map Editor) and MFS Screen Designer (MFS Editor)

- “Limitation: Modifying or removing the alternate map name Developer for System z style comment in the Source Page of the BMS editor does not reliably update the Properties” on page 45.
- “Limitation: Modifying or removing the alternate structure start level Developer for System z style comment in the Source Page of the BMS editor does not reliably update the Properties of the BMS map” on page 45.
- “Limitation: When edited on Linux systems or systems outside of the native language, BMS Maps with characters that are not UTF-8 can show parse errors in the source and parse and lexical errors can occur when generating symbolic maps” on page 45.
- Limitation: Save as for BMS and MFS editors is not supported for remote resources.
- “Limitation: BMS and MFS fields might not appear properly on the Design page when opened in Linux SUSE 10” on page 45.

Service Component Architecture

- “Limitation: Editing the URI of the web service binding and saving the resource does not update the WSDL file” on page 43.

CICS

- “Limitations: Error messages that you can ignore” on page 47.
- “Limitation: Errors that do not generate a message” on page 54.
- “Limitation: When deploying a CICS Bundle with the Deploy CICS Bundle wizard, it is possible that an error will occur with the details reporting a NullPointerException in Java” on page 60

File Manager Integration

Note: File Manager Integration function, which is being deprecated in Developer for System z v8.0.3, is now provided by IBM File Manager plug-in for Eclipse.

For information about obtaining IBM File Manager plug-in for Eclipse, see File Manager plug-in for Eclipse. Before installing IBM File Manager plug-in for Eclipse, uninstall the Developer for System z FMI feature. IBM File Manager plug-in for Eclipse has its own perspective and related views to achieve File Manager integration.

- “File Manager Integration has renamed some of the views found within the Formatted Data Editor” on page 63.
- “Limitation: Certain complex criteria created in the Build Criteria editor are not supported” on page 63.
- “Limitation: Data is lost when saving a data set and the RSE connection is lost” on page 63.
- “Limitation: Creating templates with COBOL copybooks containing a COPY command with a REPLACING clause” on page 63.

- Limitation: When the network connection to the host is lost abnormally during an edit session, the data set can be locked and cannot be opened again. Contact your system administrator to release the data set.
- Limitation: File Manager Integration is not supported on by the Developer for System z client running on Linux

Code Review for COBOL

- “Limitation: Code Review for COBOL can be run on a remote COBOL file only if the file is open in an editor session” on page 65.
- “Limitation: Context sensitive help is not currently available for the COBOL rule set on the Rules tab of the Software Analyzer Configuration dialog” on page 65.
- “Limitation: The Import function on the Software Analyzer Preferences Custom Rules and Categories page should only be used initially when there are no existing categories and rules defined” on page 65.
- Limitation: When reviewing the results from a COBOL code review: if the COBOL source file is opened in the Developer for System z LPEX editor, when hovering over the annotation icon, the annotation text is duplicated for each instance that the analysis is run.
- Limitation: Generating a results report to an HTML file can only be saved if displayed in an external browser. Use File->Save as.... action.
- Limitation: When specifying a save location for a generated results report, you must save to a folder different than the default (\workspace\.metadata\.plugins\com.ibm.xtools.analysis.reporting\reports\codereview_cobol_result_report). Otherwise, the file will be overwritten during a subsequent report generation.
- Limitation: Ignore the “No results to display” message at the bottom of the generated results report.

COBOL Language Support

- “Limitation: When using content assist in the COBOL editors, the IF statement or any variation of it is not shown in content assist directly after SQL statement” on page 67
- Limitation: When using the System z LPEX Editor, refactor operations cannot be undone.
- Limitation: When using either the System z LPEX Editor or the COBOL Editor, the Open Perform Hierarchy operation will not be in sync if the source file is modified or closed.
- Limitation: The local COBOL native compilers are not supported in the Windows 7 environment. The COBOL local syntax check is supported in Windows 7.
- Limitation: Two **Toggle Mark Occurrences** toolbar buttons are present when working with the COBOL Editor. The button that works with this editor is in the **Editor Presentation** action set, between the **Toggle Hex Editing** and **Toggle Block Selection Mode** toolbar buttons.
- Limitation: The COBOL Editor does not support saving the contents of the editor into a new file on the MVS system.

PL/I Language Support

- “Limitation: When using either the System z LPEX Editor or the PL/I Editor, Syntax checking incorrectly identifies errors” on page 69.
- “Limitation: Editor tooling such as open declaration and hover help does not work for PL/I variables with names that are PL/I keywords” on page 69.

- Limitation: Remote DBCS characters are not supported by the PL/I Editor. Files encoded in a DBCS code page can only be opened as read-only. Use the System z LPEX Editor to edit these files.
- Limitation: Remote bidirectional characters are not supported by the PL/I Editor. Files encoded in a bidirectional code page can only be opened as read-only. Use the System z LPEX Editor to edit these files.
- Limitation: The local PL/I native compilers are not supported in the Windows 7 environment. The PL/I local syntax check is supported in Windows 7.
- Limitation: Two **Toggle Mark Occurrences** toolbar buttons are present when working with the PL/I Editor. The button that works with this editor is in the **Editor Presentation** action set, between the **Toggle Hex Editing** and **Toggle Block Selection Mode** toolbar buttons.
- Limitation: The PL/I Editor does not support saving the contents of the editor into a new file on the MVS system.

C/C++ Language Support

- Limitation: The System z C/C++ Editor does not perform sequence number maintenance. System z LPEX Editor is recommended for editing files with sequence numbers.

Compiled language debugger

- “Limitation: When there is an active debug session, pressing F5 may cause the debugger to do a Step Into instead of performing the Refresh action” on page 71.
- “Limitation: Variables displayed by hovering over the variable name in the editor cannot be changed” on page 71.

Common Access Repository Manager (CARMA)

- Limitation: When a z/OS subproject is associated with CARMA at the RAM level, CARMA will lose the ability to update project properties at the subproject level. CARMA will still retain the ability to update project properties at the data set and member levels.

Application Deployment Manager

- Limitation: Filtering resources within CICS Explorer views when connected to a CICS Resource Definition server is limited to the name of the resource.
- “Limitation: Connections to a CICS Resource Definition server using the Web services connection type do not support new CICS resource types” on page 75.
- “Limitation: Only regions that host a CICS Resource Definition server are listed in dialogs that generate code or CICS resources” on page 75.
- “Limitation: The password of an existing connection to a CICS Resource Definition (CRD) server cannot be changed” on page 75.

Software Configuration Library Manager (SCLM) Developer Toolkit

- “Limitation: 'SCLM Search' and 'SCLM member security' are not supported for z/OS 1.8” on page 77.
- Limitation: A z/OS host connection must be active before SCLM member edit.

AIX, Linux, and Linux on System z

- “Limitation: When running Installation Manager on Linux on System z, run Installation Manager as the root user” on page 79.

- A version of Perl must be installed to start the Rational Developer for System z Remote Systems Explorer (RSE) server on AIX, x86 Linux, and Linux on System z.
- Limitation: There is no integrated debug support on Linux on System z.
- “Limitation: The remote Shell, for z/OS UNIX subsystems, and for Linux on System z systems is not a fully featured shell, and may not operate as expected with all shell commands” on page 79.
- “Limitation: Some Rational Developer for System z features are not supported in the Linux environment” on page 79
- “Limitation: When using Rational Developer for System z in the Linux environment, Content Assist does not work with Ctrl-space” on page 79
- “Limitation: New/Local Remote Action button is disabled” on page 80

Bidirectional support

- Limitation: Some of the features in Rational Developer for System z v8.0.3 do not have bidirectional support.

Enterprise Service Tools

- Single-service projects
 - “Limitation: Meet-in-middle mapping file appears blank” on page 81.
 - “Limitation PL/I Compiled XML Conversion does not support mapping or generation of XML attributes, except in the top-down scenario” on page 81.
 - “Limitation: 01 level scalar element is not supported” on page 81.
 - “Limitation: PL/I Compiled XML Conversion does not honor the optional "aligned" or "unaligned" attributes” on page 81.
 - “Limitation: Bottom-Up conflict with old WSDL/XSD files and new WSDL files and XSD files” on page 81.
 - “Limitation: COBOL conversion routines generated by single-service wizards run in z/OS only” on page 82.
 - “Limitation: The Top-down and Meet-in-middle scenarios with importing remote (z/OS UNIX) WSDL file which includes, imports, or redefines a schema is not supported” on page 82.
 - “Limitation: XML Element nesting depth” on page 82.
 - “Limitation: OPT compiler option conflict” on page 82.
 - “Limitation: Case sensitivity of certain text entry fields in XML Enablement wizards” on page 82.
 - “Limitation: Invalid pointers cause infinite loop” on page 83.
 - “Limitation: FILLER items in COBOL data structures” on page 83.
 - “Limitation: **Generate>XML** File menu item does not honor XSD schema restrictions” on page 83.
 - “Limitation: XML and Web Services batch processor: Invalid entries in configuration XML may cause null pointer exceptions during the batch process” on page 83.
 - “Limitation: Restriction on figurative constants LOW-VALUES and HIGH-VALUES” on page 83.
 - “Limitation: Temporary files are not always cleaned up” on page 84.
 - “Limitation: Temporary projects are not always cleaned up” on page 84.
 - “Limitation: When migrating version 6.0 mapping files (.cmx files) source files referenced by the .cmx file must be in the same folder” on page 84.

- "Limitation: Support for DBCS data members with SOAP for CICS and Web Services for CICS" on page 84.
- "Limitation: DBCS characters are not allowed in the name of the generated XML converter files" on page 84.
- "Limitation: Global element names in generated XML schemas are not consistent between Interpretive and Compiled XML conversion types" on page 85.
- "Limitation: Enterprise COBOL issues message IGYOP3094 when compiling COBOL XML Converters using the OPTIMIZE (OPT) option" on page 85.
- Service flow projects
 - "Limitation: A Web service generated from a service flow project cannot call itself (recursive call)" on page 85.
 - "Limitation: A limitation on a flow with a connection wired back onto itself" on page 86.
 - "Limitation: Importing a COBOL copy book file fails when the path or file name contains non-English characters" on page 86.
 - "Limitation: Conflicting message and field names cause compile error" on page 86.
 - "Limitation: A limitation on imported source code with a usage clause of POINTER" on page 86.
 - "Limitation: Screen messages are not easily replaced" on page 87.
 - "Limitation: Importing a COBOL program for use as a LINK with Channel node and opening the operation in the operations editor prevents modifying the generation properties" on page 87.
 - Limitation: Flows that begin with a while loop and contain input actions will not play back correctly.

Issues with Rational Developer for System z running on a Linux 64-bit operating system

This group of topics contains solutions and workarounds for problems that might occur in Rational Developer for System z when it is running on a Linux 64-bit operating system.

Note: Rational Developer for System z runs in 32-bit compatibility mode on Linux 64-bit operating systems.

For a list of the Linux 64-bit operating systems, their versions, and their update levels supported by Rational Developer for System z, see *IBM Rational Developer for System z 8.0.3: Installation Guide*.

Features that use the COBOL importer do not work properly

To resolve this problem, install the required 32-bit Linux package from the Linux install disk or package repository.

Note: For a partial list of 32-bit Linux packages that are prerequisites for running Developer for System z on a supported 64-bit Linux operating system, see *IBM Rational Developer for System z Version 8.0.3: Installation Guide*.

Operating systems:

- Red Hat Enterprise Linux V6 64-bit

Problem:

Features of Rational Developer for System z that invoke the COBOL importer do not work properly or fail completely. These features include:

- Local syntax checking of a COBOL source file.
- Enterprise Service Tools: Many source-code generation scenarios.
- Other features that use the importer.

Symptoms:

- A feature that relies on the COBOL importer does not work properly or fails.
- The error log contains error messages saying that the importer cannot be run. For example:

```
java.io.IOException: Cannot run program "/opt/IBM/SDPShared/plugins/com.ibm.etools.cobol
```

Analysis:

The COBOL importer requires 32-bit versions of the Linux operating system libraries. Some of these libraries are not installed by default with Red Hat Enterprise Linux V6 64-bit.

Resolution:

To resolve the problem:

1. Install the 32-bit package `redhat-lsb-4.0-2.1.el6.i686` from the Linux install disk or package repository. For example, from the command line of a terminal window enter the following:

```
yum install redhat-lsb-4.0-2.1.el6.i686
```

2. Close and reopen Rational Developer for System z.

The features of Rational Developer for System z that rely on the COBOL importer should now work properly.

IBM Installation Manager cannot be installed or started

To resolve this problem, install the required 32-bit Linux packages from the Linux install disk or package repository.

Note: For a partial list of 32-bit Linux packages that are prerequisites for running Developer for System z on a supported 64-bit Linux operating system, see *IBM Rational Developer for System z Version 8.0.3: Installation Guide*.

Operating systems:

- Red Hat Enterprise Linux V6 64-bit

Problem:

When you try to install or start the IBM Installation Manager you receive an error message similar to the one shown in the example below. In this example the `install` command was run in a terminal window from a directory containing the installation files for Installation Manager:

```
[root@zahar-rhel64 IMinstallKit]# ./install
bash: ./install: /lib/ld-linux.so.2: bad ELF interpreter: No such file or directory
```

Analysis:

The Installation Manager requires 32-bit versions of the Linux operating system libraries. Some of these libraries are not installed by default with Red Hat Enterprise Linux V6 64-bit.

Resolution:

To resolve the problem, install the following 32-bit packages from the Linux install disk or package repository:

- `libgtk-x11-2.0.so.0`
- `libpk-gtk-module.so`
- `libcanberra-gtk-module.so`

For example, from the command line of a terminal window enter the following:

```
yum install libgtk-x11-2.0.so.0
```

Do this for all three packages listed above.

The Installation Manager should now install and start correctly

The Welcome page of a perspective is blank

To resolve this problem, install the required 32-bit Linux package from the Linux install disk or package repository.

Note: For a partial list of 32-bit Linux packages that are prerequisites for running Developer for System z on a supported 64-bit Linux operating system, see *IBM Rational Developer for System z Version 8.0.3: Installation Guide*.

Operating systems:

- Red Hat Enterprise Linux V5 or V6 64-bit
- SUSE Linux Enterprise V10 or V11 64-bit

Problem:

When a perspective is opened for the first time in a new work area, the Welcome page of the perspective is blank and an error message is displayed when the Welcome tab is closed.

Symptoms:

1. The Welcome page of the perspective is blank, as described above.
2. When the Welcome tab is closed a **Problem Occurred** error window opens with the following error message:
Unhandled event loop exception
No more handles [Unknown Mozilla path (MOZILLA_FIVE_HOME not set)]
3. When this window is closed an **Internal Error** window opens with the following error message:
An SWT error has occurred.
You are recommended to exit the workbench.

Analysis:

The Welcome page requires 32-bit versions of the Linux operating system libraries. Some of these libraries are not installed by default when the Linux 64-bit operating system is installed.

Resolution:

To resolve the problem:

1. Install the required 32-bit package from the Linux install disk or package repository:

Table 1. Required 32-bit package

| Operating system: | 32-bit package: |
|--|----------------------------|
| Red Hat Enterprise Linux V5 or V6 64-bit | xulrunner.i686 |
| SUSE Linux Enterprise V10 64-bit | mozilla-xulrunner-32bit |
| SUSE Linux Enterprise V11 64-bit | mozilla-xulrunner190-32bit |

For example:

- For Red Hat Enterprise Linux V5 or V6 64-bit, enter the following command on the command line of a terminal window:
`yum install xulrunner.i686`
- For SUSE Linux Enterprise V10 64-bit, enter:
`zypper install mozilla-xulrunner-32bit`
- For SUSE Linux Enterprise V11 64-bit, enter:

```
zypper install mozilla-xulrunner190-32bit
```

2. Close and reopen Rational Developer for System z.
The Welcome pages should now work properly.

Web-based helps

Chapter 1. Web-based help content

The Rational Developer for System z help system is configured to use remote help so that you can pull in content from the Web dynamically. With Web Delivery help, you always have the latest content available from within Rational Developer for System z. Some help systems are not configured to access help content on the Web; in such cases, help content is included with the installation.

You can obtain help three ways. One of these options is best for you, depending on your needs and situation:

- **Access help from the Web** - The help content can be accessed on the Web so that you can have the smallest installation footprint and the most up-to-date information.
- **Download help and access the content locally** - Only limited help content is included during installation. When you first start the product, the complete online help is downloaded and installed provided that you have an Internet connection. On subsequent startups, available updates to the help are downloaded and installed. The help content can be downloaded and accessed on your computer so that you can work disconnected from the Internet with periodic updates. If you do not have an internet connection, you need to install the help content using the local help updater and the RDz8.0_updateSite.zip file found in the install_localhelp directory of the Quick Start Disk. For additional information on installing helps locally using the local help updater and the RDz8.0_updateSite.zip file, see "Installing help content locally using the Local Help Updater and the RDz8.0_updateSite.zip file" on page 20.

Note: The most current version of the RDz8.0_updateSite.zip file is available from the update download site at: <http://download.boulder.ibm.com/ibmdl/pub/software/rationalsdp/documentation/updatesites/>.

- **Access help from a server on your intranet** - The help content can be deployed on an intranet server so that you can work behind a firewall with administrative updates.

You can change your access decision at any time. If you install multiple products together, you can use different locations for the help for each product, depending on installation footprint, frequency of use, and internet policies. If internet speed is an issue, a longer one-time download and local access might be preferable. Later help updates include only differences.

If you are an administrator and you want users to access help content from an intranet server, see the Installation Manager information center for instructions on how to install the help WAR file on a server. In the Installation Manager information center, select **Installing and upgrading->Enterprise installation articles -> Delivering help content from an intranet server**.

Accessing Web-based help

Help for Rational Developer for System z is available on a product information center on the Internet. You can view this help from within Rational Developer for System z.

Before you begin

During installation, the option to access help from a remote information center was selected. This option is the default selection.

About this task

The Rational Developer for System z help system can retrieve content installed with the product, as well as content from a remote server running an information center. The information center for Rational Developer for System z has the most current help content and when Rational Developer for System z is configured to retrieve content from a remote information center, the contents of the information center can be accessed by selecting **Help > Help Contents** to open your help system.

During installation, Rational Developer for System z was configured to access the help from the product information center.

The information center for Rational Developer for System z is available from the following Web address:

<http://publib.boulder.ibm.com/infocenter/ratdevz/v8r0/index.jsp>.

Follow these steps to check your connection to the information center:

Procedure

1. Open the Preferences dialog
2. Select **Help > Content**
3. Ensure that the URL for the Rational Developer for System z information center is in the list of available information centers. If the Rational Developer for System z information center is not listed, complete the following steps:
 - a. Click **New**
 - b. In the **Name** field, enter a name for the connection.
 - c. In the **URL** field, enter <http://publib.boulder.ibm.com/infocenter/ratdevz/v8r0>
 - d. Click **Test Connection**
 - e. If **Test Connection** is successful, click **OK**. If **Test Connection** fails, verify the URL you entered and try again.

Installing help content locally using the Local Help Updater and the RDz8.0_updateSite.zip file

If you are not going to use remote help to access the help content from the Web and you do not have internet access, you must install the help content locally. This topic explains how to install the help content using the Local Help System Updater and the RDz8.0_updateSite.zip file provided in the install image. The RDz8.0_updateSite.zip file is located on the IBM Rational Developer for System z Quick Start Disk.

Before you begin

During installation, the help access option, **Download help and access the content locally**, was selected.

About this task

Before using the help for the product, you have to install the help to your local system.

To install the help content on the workstation using the Local Help System Updater and the RDz8.0_updateSite.zip file, complete the following steps:

Procedure

1. Extract the contents of the file RDz8.0_updateSite.zip to a temporary location on your system. Remember this location.
2. Using Windows Internet Explorer as your default browser, open IBM Rational Developer for System z, click **Help > Local Help Updater**. The Local Help Updater opens.
3. Specify the location of the extracted RDz8.0_updateSite.zip file.
 - a. Select **Internal Sites** from the **Sites** pull down.
 - b. Select the + icon to add a location.
 - c. Select **Local**.
 - d. Type a name for the site.
 - e. Click **Browse** and browse to the location where you extracted the contents of RDz8.0_updateSite.zip.
 - f. Double click on the site.xml file, and then Click **OK**. A progress bar opens and tracks the status as the Local Help Updater searches for the available features included in the RDz8.0_updateSite.zip file. The internal site you specified is created and appears in the Site List in the Available Content pane.
 - g. Select the internal site you created. The Rational Developer for System z documentation features that are available for download appear.
4. Select the IBM Rational Developer for System z documentation you want to install. The **Install** button is now active (no longer grayed).
5. Click **Install**. A progress bar opens and tracks the status of the install.
6. When the installation is complete, Close and restart Rational Developer for System z.
7. Select **Window > Preferences** and then **Help>Content..** Verify that the Local infocenter is enabled. Close the **Preferences** window.
8. Select **Help > Help Contents** to open the product help.

Results

The help that you selected to install locally is installed and available on your system.

Updating help content

Use the Local Help System updater to ensure that you have the latest help content.

Before you begin

You have installed help features from the Local Help System Updater Web site.

About this task

Updates are automatically installed each time you start the product, if you have an Internet connection.

To update the help without restarting the product, complete the following steps:

Procedure

1. Close the product help system window.
2. Open the Local Help System Updater by selecting **Help > Local Help Updater**. The Updater site opens.
3. Click the **Installed Features** tab.
4. Click **Search for Updates**. If updates to the content you have installed are available, they are installed to your system. A progress bar indicates the status of the request.
5. When the update is completed, open the help in the product by selecting **Help > Help Contents**.

Removing help content

You can use the Local Help System Updater to remove installed help content.

Before you begin

You have downloaded help features using the Local Help System Updater.

About this task

To remove installed help content, complete the following steps:

Procedure

1. Close the product help system window.
2. Open the Local Help System Updater by clicking **Help > Local Help Updater**. The Updater site opens.
3. In the **Installed Features** pane, select the features that you want to remove, then click **Remove**. The help features you selected are removed from your system. A progress bar indicates the status of the request.
4. When the removal is completed, open the help in the product by selecting **Help > Help Contents**.

Setting up an intranet server for help content

You can set up an intranet server behind a firewall to provide help content to users. With this method, users do not have to download and save help content to their computers.

Before you begin

You have a server available that can be accessed by users behind a firewall.

About this task

See the Installation Manager information center for the instructions for setting up an intranet server for help content. In the Installation Manager information center,

select **Installing and upgrading->Enterprise installation articles -> Delivering help content from an intranet server.**

Changing the way that you access help content

You can change the way that you access help content.

When using Rational developer for System z, you can access the help content remotely (where the help content resides out on the web or a server on your intranet) or you can download and install the help content on your workstation and access the helps locally. Once installed locally, Rational Developer for System z allows you to select which of these access methods you want to use (the default is accessing the help content remotely on the web).

Close the help browser before you change the way that you access help content.

During the installation process, you selected one of the following methods for accessing help content:

- Access help from the Web.
- Download help and access content locally.
- Access help from a server on your intranet.

To change the way that you access help content, complete the following steps:

1. Click **Window > Preferences**. The Preferences window opens.
2. Expand the **Help** entry, and then click **Content**. A list displaying the currently configured information center or centers opens. Depending on the access method that was chosen, complete one of the following procedures.
 - To change from accessing help content from an information center on an IBM Web site to accessing help content on an intranet server, follow these steps:
 - a. Disable the link to the internet site by selecting the Web address in the Contents list, and then clicking **Disable**.
 - b. Click **New**; then name the intranet connection, specify the intranet Web address for the server that contains the help content, and then click **OK**.
 - c. Click **OK** to close Preferences.
 - d. Save any work and close and restart the product.
 - e. Click **Help > Help Contents**, to open your help.
 - To change from accessing help content from an information center on an IBM Web site to downloading and accessing help content locally, follow these steps:
 - a. Disable the link to the remote product Information Center by selecting that connection in the Contents list, and then clicking **Disable**.
 - b. Enable the the local host by selecting Local (URL http://127.0.0.1:63650/help) in the Contents list, and then clicking **Enable**.
 - c. Click **OK** to close Preferences.
 - d. Save any work and close and restart the product.
 - e. When you restart the product, the complete online help is downloaded and installed provided that you have an Internet connection. On subsequent startups, available updates to the help are downloaded and installed. If you do not have an internet connection, you need to install the help content using the local help updater and the RDz8.0_updateSite.zip file found in the install_localhelp directory of the Quick Start Disk. For additional information on installing helps

locally using the local help updater and the RDz8.0_updateSite.zip file, see “Installing help content locally using the Local Help Updater and the RDz8.0_updateSite.zip file” on page 20.

- To change from accessing help content locally to accessing help content from an IBM Web site, follow these steps:
 - a. Disable the link to local host by selecting that connection in the Contents list, and then clicking **Disable**.
 - b. Click **New**; then name the connection, specify the Web address for the IBM Web site that contains the help content (<http://publib.boulder.ibm.com/infocenter/ratdevz/v8r0/>), and then click **OK**. This Web address might already be available in the list of connections. If it is listed, select the connection and click **Enable**.
 - c. Click **OK** to close Preferences.
 - d. Save any work and close and restart the product.
 - e. Click **Help > Help Contents**, to open your help.
- To change from accessing help content locally to accessing help content from an intranet server, follow these steps:
 - a. Disable the link to local host by selecting that connection in the Contents list, and then clicking **Disable**.
 - b. Click **New**; then name the connection, specify the intranet Web address for the server that contains the help content, and then click **OK**.
 - c. Click **OK** to close Preferences.
 - d. Save any work and close and restart the product.
 - e. Click **Help > Help Contents**, to open your help.
- To change from accessing help content from an intranet server to downloading and accessing help content locally, follow these steps:
 - a. Disable the link to the intranet server by selecting that connection in the Contents list, and then clicking **Disable**.
 - b. Enable the local host by selecting Local (URL <http://127.0.0.1:63650/help>), and then click **Enable**.
 - c. Click **OK** to close Preferences.
 - d. Save any work and close and restart the product.
 - e. When you restart the product, the complete online help is downloaded and installed provided that you have an Internet connection.

If you do not have an internet connection, you need to install the help content using the local help updater and the RDz8.0_updateSite.zip file found in the `install_localhelp` directory of the Quick Start Disk. For additional information on installing helps locally using the local help updater and the RDz8.0_updateSite.zip file, see “Installing help content locally using the Local Help Updater and the RDz8.0_updateSite.zip file” on page 20.
- To change from accessing help content from an intranet server to accessing help from an IBM Web site, follow these steps:
 - a. Disable the link to your intranet site by selecting the intranet Web address in the Contents list, and then clicking **Disable**.
 - b. Click **Add**; then name the connection, specify the Web address for the IBM Web site that contains the help content, and then click **OK**.
 - c. Click **OK** to close Preferences.
 - d. Save any work and close and restart the product.
 - e. Click **Help > Help Contents**, to open your help.

Note: When you change your access method by going to **Window>Preferences**, **Help>Content**, you need to close and then restart Rational Developer for system z for the change to take affect. If you do not restart Rational Developer for System z, the help behavior may become erratic and unpredictable.

Context help

Chapter 2. Enabling Language Sensitive Help for EXEC CICS, EXEC SQL, and EXEC DLI statements

Enabling Language Sensitive Help for EXEC CICS, EXEC SQL, and EXEC DLI statements requires access to the IMS™ and CICS information centers.

The online version of these information centers can be found at:

CICS: <http://publib.boulder.ibm.com/infocenter/cicsts/v4r2/index.jsp>

IMS: <http://publib.boulder.ibm.com/infocenter/dzichelp/v2r2/index.jsp>

The IMS and CICS information centers can also be installed locally or on an intranet server. For information about obtaining, installing, and initializing the IMS information center, see “Installing and initializing the Information Management Software for z/OS Solutions (IMS) information center” on page 30. For information about obtaining, installing, and initializing the CICS Information Center, see “Installing and initializing the CICS Transaction Server information center” on page 31

To access the IMS and CICS information centers on the web, select **Window>Preferences, Help>EXEC Statements** and in the **Information Center Access** field, select **On the Internet**. This is the default.

To access the IMS and CICS information centers on the local workstation or intranet server after they have been installed, select **Window>Preferences, Help>EXEC Statements**, select the access method, and configure the **Host** and **Port** number if necessary.

To include the IMS and CICS information centers on the web as part of the Rational Developer for System z information center, select **Window>Preferences, Help>Content** and add the information center URLs to the **Content** list. To add the information center URLs to the **Content** list:

1. Click **New**
2. In the **Name** field, enter a name for the information center.
3. In the **URL** field, enter the one of the following URLs:
 - CICS: <http://publib.boulder.ibm.com/infocenter/cicsts/v4r2>
 - IMS: <http://publib.boulder.ibm.com/infocenter/dzichelp/v2r2>
4. Click **Test Connection**.
5. If Test Connection is successful, click **OK**. If Test Connection fails, verify the URL you entered and try again.
6. Select **Help>EXEC Statements**.
7. In the **Information Center Access** field, select **Enabled in Help Content**.
8. Repeat steps 1-7 for the other URL.

Note: Language Sensitive Help for EXEC CICS, EXEC SQL, and EXEC DLI statements is only available for Microsoft Windows.

Installing and initializing the Information Management Software for z/OS Solutions (IMS) information center

The Information Management Software for z/OS Solutions (IMS) information center is available as an installable information center for Microsoft Windows XP Professional systems. The installable information center can run on a local system or on an intranet Windows server.

The Information Management for z/OS Solutions information center DVD (SK5T-7377) can be ordered from the IBM Publication Center for a low cost. The installable information center is available only in English and might not be available for ordering in your country or region. To order the Information Management for z/OS Solutions information center DVD:

1. Go to the IBM publications center website: <http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>.

Note: There is a known problem with accessing this site using Firefox. The workaround is to use a different browser.

2. Select your country, region, or language from the drop-down menu, and click **Go**.
3. On the next page, select **Search for publications**.
4. On the Quick Publications Center search page, enter SK5T-7377 in the Publication number field, and click **Go**.
5. Complete your order to receive a copy of the Information Management Software for z/OS Solutions (IMS) information center DVD.

After you receive your IMS information center DVD and install the information center, follow the instructions provided in the information center for obtaining the latest updates.

Note: When you install the IMS information center, you can select to install just the latest DB2[®] and IMS topics. These topics are the only topics you need to enable Language Sensitive Help for EXEC SQL and EXEC DLI statements.

To enable Language Sensitive Help for EXEC SQL and EXEC DLI statements, go to where you installed the information center and initialize the information center by running `IC_start.bat` - this routine initializes the information center on port 8801 (default). The information center must be initialized using a known port to ensure that the help information can be found by Language Sensitive Help. If port 8801 is not available, you can edit the `IC_start.bat` batch file to change the port number and specify the new port number in the help preferences. To change the port in the preferences, go to **Window>Preferences, Help>EXEC Statements** and enter the new port number you specified in the batch file.

Note: Initializing the IMS information center using the shortcuts in the **Start** menu randomly assigns a port number. If you use the shortcuts provided in the **Start** menu, Language Sensitive Help cannot locate and display the appropriate documentation.

To open the IMS information center, use your browser to link to <http://127.0.0.1:8801/help/index.jsp> after initializing the information center by running `IC_start.bat`.

Note: You only need to initialize the IMS information center for the Language Sensitive helps to work. You do not need to open the information center.

Installing and initializing the CICS Transaction Server information center

The CICS Transaction Server information center for Windows is provided on the IBM® Publications Center. This package contains all the Eclipse code and CICS documentation that is required to run an information center on a workstation or a server.

To Download the CICS Transaction Server information center for Windows:

1. Go to the IBM publications center website: <http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>.

Note: There is a known problem with accessing this site using Firefox. The workaround is to use a different browser.

2. Select your country, region, or language from the drop-down menu, and click **Go**.
3. On the next page, select **Search for publications**.
4. On the Quick Publications Center search page, enter SK4T-2666 in the Publication number field, and click **Go**.
5. Download the information center package.
6. Extract the package and follow the instructions in the readme file to install the information center.

After you have installed the information center, follow the instructions provided in the information center for obtaining the latest updates.

To enable Language Sensitive Help for EXEC CICS statements, go to where you installed the information center and initialize the information center by running `IC_start.bat` - this routine initializes the information center on port 9999 (default). The information center must be initialized using a known port to ensure that the help information can be found by Language Sensitive Help. If port 9999 is not available, you can edit the `IC_start.bat` batch file to change the port number and specify the new port number in the help preferences. To change the port in the preferences, go to **Window>Preferences, Help>EXEC Statements** and enter the new port number you specified in the batch file. To open the CICS Information Center, you can either run `help_cd_start.bat` or, use your browser to link to <http://127.0.0.1:9999/help/index.jsp> after initializing the information center by running `IC_start.bat`.

Note: You only need to initialize the CICS Information Center for the Language Sensitive helps to work. You do not need to open the information center.

Limitations

Chapter 3. Limitation: JavaIOException error occurs when using the Rational Developer for System z Manage Licenses panel on the Rational Developer for System z Windows 7 client

Problem: Using the Rational Developer for System z Manage Licenses panel on the Rational Developer for System z Windows 7 client results in a JavaIOException error for the Simplified Chinese, Traditional Chinese, Japanese, Spanish, and French versions of Rational Developer for System z.

Workaround: To update the license for Simplified Chinese, Traditional Chinese, Japanese, Spanish, and French versions of Rational Developer for System z, launch Installation Manager from the Installation Manager program shortcut and use Installation Manager to update your license.

Chapter 4. Limitation: Push-to-client update is only supported for remote system connections made using the Remote Systems view

Problem: Push-to-client update is only supported for remote system connections made using the Remote Systems view.

Workaround: When connecting to a remote system that has been configured for push-to-client, connect by using the Remote Systems view instead of the SCLM perspective.

Chapter 5. Limitation: Rational Developer for System z v8.0.1 push-to-client does not work with Installation Manager v1.4.3 and higher

Problem: If you are using Installation Manager v1.4.3 or higher, the Rational Developer for System z push-to-client feature cannot be used to update from Rational Developer for System z v8.0.1 to any other level.

Installation Manager v1.4.3 has changed how users indicate acceptance of the software license terms and conditions from an attribute in the user provided Response.xml file to a parameter passed on Installation Manager invocation.

Rational Developer for System z v8.0.2 or higher includes an update that synchronizes the Developer for System z invocation of Installation Manager with this change. Once Developer for System z v8.0.2 or higher is installed, you can install future updates using the push-to-client feature with Installation Manager v1.4.3 or higher.

Note: You can use the push-to-client feature to update Rational Developer for System z to v8.0.2 or higher if you are still using Installation Manager v1.4.2.

Workaround: Update Rational Developer for System z to v8.0.2 before updating Installation Manager v1.4.2 to a newer version of Installation Manager. If you have already updated to Installation Manager v1.4.3 or higher, manually install Rational Developer for System z v8.0.2 or higher without using the push-to-client feature.

Chapter 6. z/OS Integrated Development Environment

Limitation: Getting the output of active jobs is not supported for JES3 releases earlier than z/OS V1R10

Problem: For obtaining up-to-date output for active jobs, getting the active job output is not supported for JES3 releases earlier than z/OS V1R10. This limitation is caused by JES API limitations in the earlier releases.

Workaround: Use JES3 release z/OS V1R10 or later.

Chapter 7. Service Component Architecture

Limitation: Editing the URI of the web service binding and saving the resource does not update the WSDL file

After deploying an SCA Composite as a CICS bundle, editing the URI of the web service binding and saving the resource does not update the WSDL file used for the promoted service. If the composite is redeployed after saving the modified URI, the web service will not work using the unmodified WSDL.

Chapter 8. BMS and MFS

Limitation: BMS and MFS fields might not appear properly on the Design page when opened in Linux SUSE 10

Work Around: Change the display font for the BMS and MFS Design Page to GNU Unifont Mono.

1. From the **File** menu, select **Window > Properties**.
2. From the left menu, expand BMS Editor or MFS Editor and select **Design Page**.
3. Select **GNU Unifont Mono** from the drop-down menu.

Limitation: When edited on Linux systems or systems outside of the native language, BMS Maps with characters that are not UTF-8 can show parse errors in the source and parse and lexical errors can occur when generating symbolic maps

Work Around: Update the code page to reflect the current character set used in the BMS map.

1. Right click the BMS map and select **Properties**.
2. From the left menu, select **Mapping**.
3. For the **Local Code Page**, select the **Other** radio button and select the specific code page from the drop-down.

Limitation: Modifying or removing the alternate map name Developer for System z style comment in the Source Page of the BMS editor does not reliably update the Properties

Work Around: Modify or remove the alternate map name for a BMS map by using the Map Properties dialog.

1. Right click a BMS map and select **Map Properties** from the menu.
2. From the left menu of options, select **Symbolic Map**.
3. Provide changes in the **Alternate Map Name** field.

Alternate Work Around: Save , close, and reopen the BMS map. This action causes a full parse of the source.

Limitation: Modifying or removing the alternate structure start level Developer for System z style comment in the Source Page of the BMS editor does not reliably update the Properties of the BMS map

Work Around: Modifying or removing the alternate structure start level Developer for System z style comment in the Source Page of the BMS editor does not reliably update the Properties of the BMS map.

1. On the **Design Page**, right click a BMS map and select **Map Properties** from the menu.

2. From the left menu of options, select **Symbolic Map**.
3. Provide changes in the **Alternate Structure Start Level** field.

Alternate Work Around: Save , close, and reopen the BMS map. This action causes a full parse of the source.

Chapter 9. CICS

Limitations: Error messages that you can ignore

Some of the keywords associated with CICS command have changed over the years, but have been retained for compatibility reasons. A few of these obsolete keywords are incorrectly flagged as invalid by the syntax checker. These are listed in Table 1, together with an explanation of the problem, and the action that you should take if you encounter it.

Table 2. Keywords incorrectly flagged as invalid by the syntax checker

| Command | Description | Action |
|---------------------|--|---|
| ALLOCATE | <p>The NOSUSPEND keyword is an alternative to the NOQUEUE keyword for this command.</p> <p>If you specify NOSUSPEND, the syntax checker returns: Invalid command option 'NOSUSPEND'</p> | You can ignore this error because the syntax is correct. |
| ASSIGN | <p>The OPSECURITY and OPERKEYS keywords are supported for compatibility reasons.</p> <p>If you specify either of these keywords, the syntax checker returns: Invalid command option 'OPSECURITY' Invalid command option 'OPERKEYS'</p> | You can ignore these errors because the syntax is correct. |
| CSD GETNEXTRSRCE | <p>If using a resource name (For example: PROGRAM) instead of the RESTYPE keyword the syntax checker will return: Invalid command option 'PROGRAM'.</p> | You can ignore this error because the syntax is correct |
| DELETE | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |

Table 2. Keywords incorrectly flagged as invalid by the syntax checker (continued)

| Command | Description | Action |
|-------------------|--|---|
| DELETEQ TS | <p>The keyword TS is optional for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do not specify the TS option, the syntax checker assumes that the command is DELETEQ TD, and returns: Command is ambiguous, 'TD' has been assumed</p> <p>This causes other options to be flagged as invalid.</p> | <p>You can ignore this error because the syntax is correct.</p> <p>However, if you want to check the other options that were flagged as invalid you must specify TS to check that there are no other errors.</p> |
| DEQ | <p>A CVDA value of LUW is supported as an alternative to UOW for compatibility reasons.</p> <p>If you specify LUW, the syntax checker returns: Invalid command option 'LUW'</p> | <p>You can ignore this error because the syntax is correct.</p> |
| DOCUMENT RETRIEVE | <p>The CLNTCODEPAGE keyword is an alternative to the CHARACTERSET keyword for this command.</p> <p>If you specify CLNTCODEPAGE, the syntax checker returns: Invalid command option 'CLNTCODEPAGE'</p> | <p>You can ignore this error because the syntax is correct.</p> |
| ENDBR | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| ENQ | <p>A CVDA value of LUW is supported as an alternative to UOW for compatibility reasons.</p> <p>If you specify LUW, the syntax checker returns: Invalid command option 'LUW'</p> | <p>You can ignore this error because the syntax is correct.</p> |
| INQUIRE DSNNAME | <p>The BKOUTSTATUS option is obsolete on this command, but has been retained for compatibility with earlier releases.</p> <p>If you specify BKOUTSTATUS, the syntax checker returns: Invalid command option 'BKOUTSTATUS'</p> | <p>You can ignore this error because the syntax is correct.</p> <p>However, CICS will accept the keyword and issue an informational message</p> |

Table 2. Keywords incorrectly flagged as invalid by the syntax checker (continued)

| Command | Description | Action |
|-----------------------|--|---|
| INQUIRE JOURNALNUM | <p>This command is obsolete and is retained only for compatibility reasons.</p> <p>If you specify this command, the syntax checker returns: Invalid command option 'JOURNALNUM'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore these errors because the syntax is correct.</p> <p>However, CICS will accept the command and issue an informational message</p> |
| INQUIRE NETNAME | <p>The SCREENWIDTH and SCREENHEIGHT keywords have been replaced by SCRNHHT and SCRHWWD on this command, but are supported for compatibility reasons.</p> <p>If you specify either of these keywords, the syntax checker returns: Invalid command option 'SCREENWIDTH'Invalid command option 'SCREENHEIGHT'</p> | <p>You can ignore these errors because the syntax is correct.</p> |
| INQUIRE PROGRAM | <p>The JVMDEBUG option is obsolete on this command, but has been retained for compatibility with earlier releases.</p> <p>If you specify JVMDEBUG, the syntax checker returns: Invalid command option 'JVMDEBUG'</p> | <p>You can ignore this error because the syntax is correct.</p> <p>CICS returns NODEBUG as the CVDA value.</p> |
| INQUIRE TASK | <p>The DTB option is obsolete and was replaced by INDOUBT on this command. However, it has been retained for compatibility with earlier releases.</p> <p>If you specify DTB, the syntax checker returns: Invalid command option 'DTB'</p> | <p>You can ignore this error because the syntax is correct.</p> <p>CICS returns NOTSUPPORTED as the CVDA value.</p> |
| INQUIRE TERMINAL | <p>The SCREENWIDTH and SCREENHEIGHT keywords have been replaced by SCRNHHT and SCRHWWD on this command, but are supported for compatibility reasons.</p> <p>If you specify either of these keywords, the syntax checker returns: Invalid command option 'SCREENWIDTH'Invalid command option 'SCREENHEIGHT'</p> | <p>You can ignore these errors because the syntax is correct.</p> |

Table 2. Keywords incorrectly flagged as invalid by the syntax checker (continued)

| Command | Description | Action |
|-------------------|--|---|
| INQUIRE VOLUME | <p>This command is obsolete and is retained only for compatibility reasons.</p> <p>If you specify this command, the syntax checker returns: Invalid command option 'VOLUME'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore these errors because the syntax is correct.</p> <p>However, CICS will accept the command and issue an informational message</p> |
| READ | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| READNEXT | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| READPREV | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |

Table 2. Keywords incorrectly flagged as invalid by the syntax checker (continued)

| Command | Description | Action |
|------------|--|---|
| READQ TS | <p>The keyword TS is optional for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do not specify the TS option, the syntax checker assumes that the command is READQ TD, and returns: Command is ambiguous, 'TD' has been assumed</p> <p>This causes other options to be flagged as invalid.</p> | <p>You can ignore this error because the syntax is correct.</p> <p>However, if you want to check the other options that were flagged as invalid you must specify TS to check that there are no other errors.</p> |
| RESETBR | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| REWRITE | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| SET DSNAME | <p>The FAILEDBKOUT, NORMALBKOUT and BKOUTSTATUS options are obsolete on this command, but have been retained for compatibility with earlier releases.</p> <p>If you specify any of these keywords, the syntax checker returns: Invalid command option 'FAILEDBKOUT'Invalid command option 'NORMALBKOUT'Invalid command option 'BKOUTSTATUS'</p> | <p>You can ignore these errors because the syntax is correct.</p> <p>However, CICS will accept the keywords and issue informational messages</p> |

Table 2. Keywords incorrectly flagged as invalid by the syntax checker (continued)

| Command | Description | Action |
|-------------------|--|---|
| SET JOURNALNUM | <p>This command is obsolete and is retained only for compatibility reasons.</p> <p>If you specify this command, the syntax checker returns: Invalid command option 'JOURNALNUM'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore these errors because the syntax is correct.</p> <p>However, CICS will accept the command and issue an informational message</p> |
| SET VOLUME | <p>This command is obsolete and is retained only for compatibility reasons.</p> <p>If you specify this command, the syntax checker returns: Invalid command option 'VOLUME'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore these errors because the syntax is correct.</p> <p>However, CICS will accept the command and issue an informational message</p> |
| STARTBR | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| UNLOCK | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| WEB READ | <p>The CLNTCODEPAGE keyword is an alternative to the CHARACTERSET keyword for this command.</p> <p>If you specify CLNTCODEPAGE, the syntax checker returns: Invalid command option 'CLNTCODEPAGE'</p> | <p>You can ignore this error because the syntax is correct.</p> |

Table 2. Keywords incorrectly flagged as invalid by the syntax checker (continued)

| Command | Description | Action |
|-----------------|---|---|
| WEB RECEIVE | <p>The CLNTCODEPAGE keyword is an alternative to the CHARACTERSET keyword for this command.</p> <p>If you specify CLNTCODEPAGE, the syntax checker returns: Invalid command option 'CLNTCODEPAGE'</p> | <p>You can ignore this error because the syntax is correct.</p> |
| WEB SEND | <p>The CLNTCODEPAGE keyword is an alternative to the CHARACTERSET keyword for this command.</p> <p>If you specify CLNTCODEPAGE, the syntax checker returns: Invalid command option 'CLNTCODEPAGE'</p> | <p>You can ignore this error because the syntax is correct.</p> |
| WEB STARTBROWSE | <p>The CLNTCODEPAGE keyword is an alternative to the CHARACTERSET keyword for this command.</p> <p>If you specify CLNTCODEPAGE, the syntax checker returns: Invalid command option 'CLNTCODEPAGE'</p> | <p>You can ignore this error because the syntax is correct.</p> |
| WRITE | <p>You can use the keyword DATASET as an alternative to FILE for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do this, the syntax checker returns: Invalid command option 'DATASET'</p> <p>This might cause other options to be flagged as invalid.</p> | <p>You can ignore this error because DATASET is accepted as an alternative to FILE.</p> <p>If this problem has caused other options to be flagged as invalid, you might want to change DATASET to FILE to check that there are no other errors.</p> |
| WRITEQ TS | <p>The keyword TS is optional for this command. (This is for compatibility with earlier releases, and is not documented.)</p> <p>If you do not specify the TS option, the syntax checker assumes that the command is WRITEQ TD, and returns: Command is ambiguous, 'TD' has been assumed</p> <p>This causes other options to be flagged as invalid.</p> | <p>You can ignore this error because the syntax is correct.</p> <p>However, if you want to check the other options that were flagged as invalid you must specify TS to check that there are no other errors.</p> |
| WEB ENDBROWSE | <p>If using the HTTPHEADER keyword the SESSTOKEN keyword is optional, however if you omit it then the syntax check returns: Command requires the option '<Expression>'</p> | <p>You can ignore this error because the syntax is correct.</p> |

Table 2. Keywords incorrectly flagged as invalid by the syntax checker (continued)

| Command | Description | Action |
|-----------------|---|--|
| WEB READ | If using the HTTPHEADER keyword the SESSTOKEN keyword is optional, however if you omit it then the syntax check returns: Command requires the option '<Expression>' | You can ignore this error because the syntax is correct. |
| WEB STARTBROWSE | If using the HTTPHEADER keyword the SESSTOKEN keyword is optional, however if you omit it then the syntax check returns: Command requires the option '<Expression>' | You can ignore this error because the syntax is correct. |

Limitation: Errors that do not generate a message

Some coding errors do not cause the syntax checker to issue a message. These errors are listed in Table 1. If your program contains one of these errors, it will not be flagged by the syntax checker, but it will be flagged when you translate the program using the CICS translator.

Table 3. Errors that do not cause the syntax checker to issue a message

| Command | Error |
|---|---|
| All INQUIRE and FEPI INQUIRE commands that support browsing | You cannot use any other keywords if you use the START, AT, or END keywords to start or finish browsing. You cannot provide a resource name if you use the START, AT, or END keywords to start or finish browsing. |
| ALLOCATE | You cannot use the PARTNER and PROFILE keywords together. |
| COLLECT STATISTICS | If you specify the NODE keyword, you must also specify the TARGET keyword. |
| CONNECT PROCESS | You must specify either SESSION or PARTNER. If you specify the PARTNER keyword, you must also specify the CONVID keyword. |
| CONVERSE | You cannot use the ATTACHID keyword with the CTLCHAR, DEST, ERASE, DEFAULT, ALTERNATE, LDC, LINEADDR, PSEUDOBIN, or STRFIELD keywords You cannot use the FMH and LDC keywords together. If you specify the SET keyword you must also specify either the TOLENGTH or TOFLLENGTH keyword. |
| CSD DELETE | You must only specify one resource type keyword. |
| CSD GETNEXTGROUP | You must specify the GROUP keyword. |
| CSD GETNEXTLIST | You must specify the LIST keyword. |

Table 3. Errors that do not cause the syntax checker to issue a message (continued)

| Command | Error |
|--------------------------|--|
| CSD GETNEXTRSRCE | You must specify the RESTYPE, RESID and GROUP keywords. |
| CSD INQUIREGROUP | You must specify the GROUP keyword. |
| CSD INQUIRELIST | You must specify the LIST keyword. |
| CSD INQUIRERSRCE | You must only specify one resource name keyword. |
| DEFINE TIMER | You cannot use the AT and DAYS keywords together. You cannot use the AFTER keyword with the ON, YEAR, MONTH, DAYOFMONTH, or DAYOFYEAR keywords. |
| DELETE CONTAINER | You cannot use the CHANNEL keyword with the ACTIVITY, ACQACTIVITY, PROCESS, or ACQPROCESS keywords. |
| DELETE FILE | You cannot use the RBA, XRBA or RRN keywords with the KEYLENGTH, GENERIC, or NUMREC keywords. |
| DISABLE PROGRAM | You cannot use the EXIT keyword with the FORMATEDEF, PURGEABLE, SHUTDOWN, SPI or TASKSTART keywords. |
| ENABLE PROGRAM | You cannot use the EXIT keyword with the FORMATEDEF, INDOUBTWAIT, LINKEDITMODE, OPENAPI, PURGEABLE, QUASIRENT, SHUTDOWN, SPI, TALENGTH, TASKSTART, or THREADSAFE keywords. |
| EXTRACT ATTACH | You cannot use the SESSION or CONVID keywords with the ATTACHID keyword. |
| EXTRACT WEB | You cannot use the SESSTOKEN keyword with the REQUESTTYPE keyword. |
| EXTRACT TCPIP | No errors are returned by the syntax checker for this command. |
| EXTRACT WEB | If you use EXTRACT WEB for CICS as an HTTP server you must not specify the SESSTOKEN keyword. If you use EXTRACT WEB for CICS as an HTTP client you must specify the SESSTOKEN keyword. If you specify the HOST, HTTPVERSION, PATH, PORTNUMBER, REALM or QUERYSTRING keywords, you must specify their corresponding length keywords. |
| FEPI CONVERSE DATASTREAM | You cannot use the CHAIN or RU keywords with the POOL keyword. You can use the POOL keyword only if you also use the UNTILCDEB keyword. |
| FEPI CONVERSE FORMATTED | You cannot use the AID or FROMCURSOR keywords with the POOL keyword. |

Table 3. Errors that do not cause the syntax checker to issue a message (continued)

| Command | Error |
|--------------------------|---|
| FEPI INQUIRE CONNECTION | You cannot use the other keywords apart from NODE or TARGET if you use the START or END keywords to start or finish browsing all FEPI connections |
| FORMATTIME | You cannot use the TIMESEP keyword without specifying the TIME keyword. |
| GET CONTAINER | You cannot use the INTOCCSID, INTOCODEPAGE, CONVERTST, CCSID keyword with the ACTIVITY, ACQACTIVITY, PROCESS, or ACQPROCESS keywords. |
| INQUIRE ASSOCIATION LIST | You cannot use any INQUIRE ASSOCIATION LIST options with any of the INQUIRE ASSOCIATION options. You must specify the LISTSIZE keyword. |
| INQUIRE CORBASERVER | If you specify the NUMCIPHERS keyword you must also specify the CIPHERS keyword. |
| INQUIRE MODENAME | If you use the NEXT keyword, you must also use the CONNECTION keyword. |
| INQUIRE MONITOR | You must specify all of FREQUENCYHRS, FREQUENCYMIN and FREQUENCYSEC if you use any of them. You cannot use the FREQUENCY keyword with the FREQUENCYHRS, FREQUENCYMIN or FREQUENCYSEC keywords. |
| INQUIRE TASK | You cannot use any INQUIRE TASK LIST options with any of the INQUIRE TASK options. |
| INQUIRE TCPIP SERVICE | If you specify the NUMCIPHERS keyword you must also specify the CIPHERS keyword. |
| INQUIRE URIMAP | If you specify the NUMCIPHERS keyword you must also specify the CIPHERS keyword. |
| INQUIRE VTAM® | You must specify all of PSDINTHRS, PSDINTMIN and PSDINTSEC if you use any of them. You cannot use the PSDINT keyword with the PSDINTHRS, PSDINTMIN or PSDINTSEC keywords. |
| INVOKE SERVICE | You cannot use the SCOPELEN keyword without specifying the SCOPE keyword. |
| MOVE CONTAINER | You cannot use the CHANNEL keyword with the TOPROCESS or TOACTIVITY keywords. You cannot use the TOCHANNEL keyword with the FROMPROCESS or FROMACTIVITY keywords. |

Table 3. Errors that do not cause the syntax checker to issue a message (continued)

| Command | Error |
|-----------------|--|
| PERFORM JVMPOOL | If you use the START or INITIALIZE keyword, you must also use the JVMPROFILE, JVMCOUNT and one of: (EXECKEY, CICSEXECKEY, USEREXECKEY) keyword. |
| PUT CONTAINER | You cannot use the FROMCCSID or DATATYPE keywords with the ACTIVITY, ACQACTIVITY, PROCESS, or ACQPROCESS keywords. |
| READ | You cannot use the KEYLENGTH keyword with the RBA, XRBA or RRN keywords. You cannot use the GENERIC or GTEQ keywords with the RBA, XRBA, DEBREC, or DEBKEY keywords. You must use the EQUAL keyword if you use the RBA, XRBA, DEBREC or DEBKEY keywords. You cannot use the RRN keyword with the GENERIC keyword. |
| READNEXT | You cannot use the KEYLENGTH keyword with the RBA, RRN or XRBA keywords. You must use the UPDATE keyword if you use the TOKEN keywords |
| READPREV | You cannot use the KEYLENGTH keyword with the RBA, RRN or XRBA keywords. You must use the UPDATE keyword if you use the TOKEN keywords |
| READQ TS | If you use the SET keyword, you must also use the LENGTH keyword. |
| RECEIVE | If you use the SET keyword, you must also use the LENGTH or FLENGTH keyword. |
| RESETBR | You cannot use the KEYLENGTH keyword with the RBA, XRBA or RRN keywords. You cannot use the GENERIC keyword with the RBA, XRBA or RRN keywords. You must use the EQUAL keyword if you use the RBA or XRBA keywords. You cannot use the RBA or XRBA keywords with the GTEQ keyword. |
| RETURN | You cannot use any other keywords with the ENDACTIVITY keyword. You cannot use the CHANNEL keyword with the COMMAREA or LENGTH keywords. |

Table 3. Errors that do not cause the syntax checker to issue a message (continued)

| Command | Error |
|---------------------|--|
| SEND | <p>You cannot use the ATTACHID keyword with the CBUFF, CNOTCOMPL, CTLCHAR, DEST, ERASE, DEFAULT, ALTERNATE, LDC, LEAVEKB, LINEADDR, PASSBK, PSEUDOBIN, or STRFIELD keywords.</p> <p>You cannot use the CNOTCOMPL keyword with the CONFIRM or INVITE keywords.</p> <p>You cannot use the ERASE, DEFAULT or ALTERNATE keywords with the STRFIELD keyword.</p> <p>You cannot use the LAST keyword with the PASSBK or CBUFF keywords.</p> <p>You cannot use the LDC keyword with the FMH keyword.</p> <p>Must use WAIT if PASSBK or CBUFF is used.</p> |
| SEND MAP | <p>You cannot use the MAPPINGDEV keyword with the NLEOM, MSR, FMHPARM, LDC, OUTPARTN, ACTPARTN, ACCUM, REQID, or NOFLUSH keywords.</p> |
| SET CONNECTION | <p>You cannot use the ACQUIRED keyword with the OUTSERVICE keyword.</p> |
| SET JOURNALNAME | <p>You cannot use the STATUS, ENABLED, or DISABLED keywords with the ACTION, FLUSH, or RESET keywords.</p> |
| SET MONITOR | <p>When using some, but not all, of the FREQUENCYHRS, FREQUENCYMIN, FREQUENCYSEC keywords (which can be used together or separately) syntax errors may not be reported.</p> |
| SET TRANSACTION | <p>You cannot use the RUNAWAY keyword with the SYSTEM keyword.</p> |
| SIGNAL EVENT | <p>You cannot use the FROM keyword with the FROMCHANNEL keyword.</p> |
| STARTBR | <p>You cannot use the KEYLENGTH keyword with the RBA, XRBA or RRN keywords.</p> <p>You cannot use the GENERIC or GTEQ keywords with the RBA, XRBA, DEBREC, or DEBKEY keywords.</p> <p>You must use the EQUAL keyword if you use the RBA, XRBA, DEBREC or DEBKEY keywords.</p> <p>You cannot use the RRN keyword with the GENERIC keyword.</p> |
| TRANSFORM DATATOXML | <p>If you use any of the ELEMNAMELEN, ELEMNSLEN, TYPENAMELEN and TYPENSLEN keywords you must use the corresponding ELEMNAME, ELEMNS, TYPENAME and TYPENS keywords. More than one of this type of error will not be detected. If more than one of this type of error is present then any subsequent errors will also not be detected.</p> |

Table 3. Errors that do not cause the syntax checker to issue a message (continued)

| Command | Error |
|------------------------|--|
| TRANSFORM XMLTODATA | If you use any of the ELEMNAMELEN, ELEMNSLEN, TYPENAMELEN and TYPENSLEN keywords you must use the corresponding ELEMNAME, ELEMNS, TYPENAME and TYPENS keywords. More than one of this type of error will not be detected. If more than one of this type of error is present then any subsequent errors will also not be detected. |
| WEB EXTRACT | If you use EXTRACT WEB for CICS as an HTTP server you must not specify the SESSTOKEN keyword. If you use EXTRACT WEB for CICS as an HTTP client you must specify the SESSTOKEN keyword. You cannot use the SESSTOKEN keyword with the REQUESTTYPE keyword. If you specify the HOST, HTTPVERSION, PATH, PORTNUMBER, REALM or QUERYSTRING keywords, you must specify their corresponding length keywords. |
| WEB EXTRACT | You cannot use the SESSTOKEN keyword with the REQUESTTYPE keyword. |
| WEB OPEN | If you must specify the HOST keyword, you must specify the HOSTLENGTH and PORTNUMBER keywords. If you must specify the CIPHERS keyword, you must specify the NUMCIPHERS keyword. If you must specify the HTTPVNUM keyword, you must specify the HTTPRNUM keyword. |
| WEB PARSE | You must specify the URL keyword. |
| WEB READ | If you use the HTTPHEADER keyword, you must also use the NAMELENGTH, VALUE and VALUELENGTH keywords. You can also optionally use the SESSTOKEN keyword. No other keywords must be used with HTTPHEADER. |
| WEB RECEIVE | You cannot use the SESSTOKEN, MEDIATYPE, STATUSCODE, STATUSTEXT, STATUSLEN, CLIENTCONV, CLICONVERT, or NOCLICONVERT keywords with the TYPE, CLNTCODEPAGE, or HOSTCODEPAGE keywords. If you use the CLIENTCONV, CLICONVERT, or NOCLICONVERT keywords, you must also use the SESSTOKEN keyword. You cannot use the SESSTOKEN keyword with the SERVERCONV, SRVCONVERT, or NOSRVCONVERT keywords. |

Table 3. Errors that do not cause the syntax checker to issue a message (continued)

| Command | Error |
|------------------|--|
| WEB SEND | <p>You cannot use the SESSTOKEN keyword with the CLNTCODEPAGE, HOSTCODEPAGE, STATUSCODE, STATUSTEXT, STATUSLEN, LENGTH, SERVERCONV, SRVCONVERT, or NOSRVCONVERT keywords.</p> <p>If you use the CLIENTCONV, CLICONVERT, or NOCLICONVERT keywords, you must also use the SESSTOKEN keyword.</p> |
| WEB STARTBROWSE | <p>If you use the HTTPHEADER keyword, you may optionally use the SESSTOKEN keyword. No other keywords must be used with HTTPHEADER.</p> |
| WRITE | <p>You cannot use the RBA, XRBA or RRN keywords with the KEYLENGTH keyword.</p> |
| WSACONTEXT BUILD | <p>You must use at one or more of the ACTION, MESSAGEID, RELATESURI or ERTYPE keywords.</p> <p>If you use the RELATESTYPE keyword, you must specify the RELATESURI keyword.</p> <p>You must either specify all of the EPRTYPE, EPRFIELD, EPRFORM and EPRLLENGTH keywords, or specify none of them.</p> |
| WSACONTEXT GET | <p>You must use one of the CONTEXTTYPE, REQCONTEXT or RESPCONTEXT keywords.</p> <p>You must use at one or more of the ACTION, MESSAGEID, RELATESURI or ERTYPE keywords.</p> <p>You must either specify all of the EPRTYPE, EPRFIELD, (EPRINTO or EPRSET) and EPRLLENGTH keywords, or specify none of them.</p> |
| WSAEPR CREATE | <p>You must use one of the ADDRESS, METADATA or REFPARMS keywords.</p> <p>If you specify METADATALLEN you must specify METADATA</p> |
| XCTL | <p>You cannot use the CHANNEL keyword with the COMMAREA or LENGTH keywords.</p> |

Limitation: When deploying a CICS Bundle with the Deploy CICS Bundle wizard, it is possible that an error will occur with the details reporting a NullPointerException in Java

Problem: When deploying a CICS Bundle with the Deploy CICS Bundle wizard, it is possible that an error will occur with the details reporting a NullPointerException in Java. This error can appear when the communication between the client and the CICS target region is slow.

The responses for the requests to inquire about the target region connection and to inquire about the default bundle attributes are processed out of sequence.

Workaround: Attempting to re-deploy the bundle a second time typically results in a successful operation.

Chapter 10. File Manager Integration

File Manager Integration has renamed some of the views found within the Formatted Data Editor

File Manager Integration has renamed some of the views found within the Formatted Data Editor.

The following views are equivalent despite the difference in name:

- Formatted page / Formatted mode
- Character page / Character mode
- Table format / Table mode
- Single format / Single mode
- Hex format / Hex mode

Limitation: Certain complex criteria created in the Build Criteria editor are not supported

Problem: Certain complex criteria created in the Build Criteria editor are not supported by File Manager. These criteria report an error of “FMNBB310 Unbalanced parenthesis” when leaving the Build Criteria editor.

Workaround: Rearrange the criteria to have **AND** and **OR** branches that are less nested.

Limitation: Data is lost when saving a data set and the RSE connection is lost

Problem: If you are editing a dataset in the FMI Formatted Data Editor and the RSE connection to the host is lost, any changes made to the data set in the edit session since the last save, are lost.

Workaround: Save your changes frequently.

Limitation: Creating templates with COBOL copybooks containing a COPY command with a REPLACING clause

When you create a template from a COBOL copybook, File Manager must compile the copybook as one step in the process of creating the template. When your COBOL copybook has a COPY command with a REPLACING clause, you might see a compile failure when attempting to create the template.

This compile failure is caused by, in most cases, File Manager inserting your COBOL copybook into a simple COBOL program using a COPY statement. The COPY command with a REPLACING clause in your copybook becomes nested in another COPY statement. Nested COPY commands with REPLACING clauses are illegal in COBOL, and the compile error results. However, when you specify a range in advanced copybook selection, the selected portion of the copybook is copied inline into the simple COBOL program, rather than being inserted using a

COPY statement. Therefore, the COPY command with the REPLACING clause would not be nested and the compile would complete successfully.

To successfully create a template with a COBOL copybook containing a COPY command with a REPLACING clause:

1. Be sure to place the copybook and nested copybooks into the same PDS.
2. Choose "Advanced copybook template" in the Create Template" wizard.
3. Edit the copybook selection to specify a range (specifying a "From statement" of 1 and leaving the "To statement" blank selects the entire contents of the copybook).

Chapter 11. Code Review for COBOL

Limitation: Code Review for COBOL can be run on a remote COBOL file only if the file is open in an editor session

From the editor's context menu, select **Software Analyzer** and then the appropriate analysis configuration. When specifying the **Scope** in the **Software Analyzer Configuration** dialog, if selecting individual projects to be analyzed, select only your local COBOL projects.

Running COBOL code review on RDz internal projects such as SCLMConfigProject, RemoteSystemsTempFiles, and wdz_proj_xxx (where xxx is the z/OS subproject name) will produce unexpected results.

Work Around: Copy your z/OS PDS or member to a local project.

1. Create a local project (**File->New->Workstation->COBOL->Local Project**).
2. Add (or drag and drop) your z/OS PDS or member to the new project
3. Run the COBOL code review on the local project.

Limitation: Context sensitive help is not currently available for the COBOL rule set on the Rules tab of the Software Analyzer Configuration dialog

Work Around: See http://publib.boulder.ibm.com/infocenter/ratdevz/v8r0/index.jsp?topic=/com.ibm.rsar.analysis.codereview.cobol.doc/topics/cac_main_g.html in the Rational Developer for System z Information Center (<http://publib.boulder.ibm.com/infocenter/ratdevz/v8r0/index.jsp>).

Limitation: The Import function on the Software Analyzer Preferences Custom Rules and Categories page should only be used initially when there are no existing categories and rules defined

Subsequent imports will produce unexpected results.

Work around: None

Chapter 12. COBOL Language Support

Limitation: When using content assist in the COBOL editors, the IF statement or any variation of it is not shown in content assist directly after SQL statement

Problem: When using content assist in the COBOL editors, the IF statement or any variation of it is not shown in content assist directly after SQL statement.

The "sentence" ending period in COBOL following END-EXEC is optional in many cases depending on the program structure. If the sentence ending period is not included, the IF statement or any variation of it will not be displayed.

Workaround: Add the "sentence" ending period in COBOL following END-EXEC

Note: The IF statement is not valid in DATA DIVISION / WORKING-STORAGE SECTION, so if you place the cursor in that area, IF will not be proposed by content assist.

Chapter 13. PL/I Language Support

Limitation: When using either the System z LPEX Editor or the PL/I Editor, Syntax checking incorrectly identifies errors

The PL/I enhanced editing functionality consists of real-time syntax checking. Some legal PL/I syntax is marked as errors, and some illegal PL/I syntax is not marked as an error.

The following legal PL/I syntax is marked as an error:

- Illegal PL/I syntax in macro preprocessor input, when the macro preprocessor output is legal PL/I
- Labels on preprocessor directives
- Entry constants
- Type functions
- Generic attributes
- Factoring of attributes when declaring structures
- isub option with defined attribute
- tstack attribute of the attach statement
- Implicit variable declarations
- Some legal expressions are marked as errors

The following illegal PL/I syntax is not marked as an error:

- Condition prefixes for do statements
- Label prefixes for declare, default, when, otherwise, and on statements
- Scaling factors for float or fixed
- Duplicate attributes for declaration statements
- Syntax errors in macro preprocessor output

Compiler options are ignored.

Limitation: Editor tooling such as open declaration and hover help does not work for PL/I variables with names that are PL/I keywords

PL/I variables with names that are the same as PL/I Keywords will be interpreted by the PL/I Tooling as keywords and not variables. This affects functionality like Open Declaration, Hover Info, Syntax Coloring, and Formatting in the PL/I Editor, and Hover Info and Open Declaration in the System z LPEX Editor.

Work Around: Use variable names that do not match PL/I keyword names.

Chapter 14. Compiled language debugger

Limitation: When there is an active debug session, pressing F5 may cause the debugger to do a Step Into instead of performing the Refresh action

This is true for any perspective that was open when a debug session was started.

If you start a debug session while in a perspective other than the **Debug perspective**, Rational Developer for System z might add the "Debug" view to that perspective. After this, the debug shortcuts are added to all the views. In some cases (like F5), it overrides existing shortcuts.

Work around: In the perspective other than the **Debug perspective**, do the following steps:

1. If the Debug view is open, close it.
2. Click **Window->Customize Perspective**.
3. In the **Customize Perspective** window, click on the **Commands** tab.
4. In the **Available command group**, uncheck **Debug**.
5. Click on **OK**.

Limitation: Variables displayed by hovering over the variable name in the editor cannot be changed

For the LPEX-based editors used for COBOL and PL/I debugging, the hover displays the structure or array with one level expanded but you cannot expand additional levels.

You can expand additional levels in the Variables and Monitors view.

Chapter 15. Common Access Repository Manager (CARMA)

Chapter 16. Application Deployment Manager

Limitation: Connections to a CICS Resource Definition server using the Web services connection type do not support new CICS resource types

Connections to a CICS Resource Definition server using the Web services connection type do not support new CICS TS v3.2 resource types such as bundles, XML transforms, and event bindings.

Limitation: Only regions that host a CICS Resource Definition server are listed in dialogs that generate code or CICS resources

Only regions that host a CICS Resource Definition server (connection regions) are listed in dialogs that generate code or CICS resources such as EST and SCA.

Regions connected to those connection regions are not listed in the generation dialogs. Therefore generated artifacts can be deployed only to the region that runs the CICS Resource Definition server. CICS resources can be in defined, installed, and discarded from other regions through the Application Deployment Manifest Editor by selecting a different target region while editing a manifest. The New ADM Manifest dialogs available from the File menu and z/OS project pop-up menu support creating ADM manifests that are not in the same region as the CICS Resource Definition server.

Limitation: The password of an existing connection to a CICS Resource Definition (CRD) server cannot be changed

To change the password of an existing connection to a CICS Resource Definition (CRD) server, you may need to alter the user ID to a nonexistent ID, click the **Apply** button, change the user ID back, and then click the **Connect** button. This action causes the connection dialog to prompt for a new password.

Chapter 17. Software Configuration Library Manager (SCLM) Developer Toolkit

Limitation: 'SCLM Search' and 'SCLM member security' are not supported for z/OS 1.8

SCLM Search and SCLM member security are not supported in base SCLM for z/OS 1.8 and are therefore unavailable through SCLM Developer Toolkit for z/OS 1.8.

For SCLM Search support, one of the following levels must be installed on the host:

| Program Number | Product Name | PTFs or Service Levels Required |
|----------------|-----------------------|------------------------------------|
| 5694-A01 | z/OS v 1.10 or higher | |
| 5694-A01 | z/OS v 1.9 | APAR OA27379 - all applicable PTFs |

For SCLM member security support, one of the following levels must be installed on the host:

| Program Number | Product Name | PTFs or Service Levels Required |
|----------------|--------------|--|
| 5694-A01 | z/OS v 1.11 | APAR OA26997 - all applicable PTFs |
| 5694-A01 | z/OS v 1.10 | APAR OA26997 - all applicable PTFs |
| 5694-A01 | z/OS v 1.9 | APAR OA26997 - all applicable PTFs APAR OA27379 - all applicable PTFs |

Chapter 18. AIX, Linux, and Linux on System z

Limitation: When running Installation Manager on Linux on System z, run Installation Manager as the root user

Installation Manager on Linux on System z SuSE will not work correctly unless the root user is running the program.

Limitation: The remote Shell, for z/OS UNIX subsystems, and for Linux on System z systems is not a fully featured shell, and may not operate as expected with all shell commands

The remote Shell does not support all shell commands. This is true on all AIX (UNIX connection type), Intel Linux, and zLinux connections.

Rational Developer for zEnterprise has both remote Shells and Ssh Terminals. The Ssh Terminals does not have the limitation that exists in Rational Developer for System z.

To view the return code of a command, issue the command as: (command; echo \$)

Limitation: Some Rational Developer for System z features are not supported in the Linux environment

Problem: The following Rational Developer for System z features are not supported in the Linux environment:

- Local COBOL and PL/I native compiler
- Local COBOL and PL/I debug
- PL/I local syntax checking and show dependencies
- PL/I EST scenarios
- File Manager
- Fault Analyzer
- BIDI-enablement
- CICS TX Series

Limitation: When using Rational Developer for System z in the Linux environment, Content Assist does not work with Ctrl-space

Problem: When using Rational Developer for System z in the Linux environment, Content Assist does not work with Ctrl-space.

Workaround: Change the content-assist key binding to a different keystroke pattern in the Developer for System z Preferences. Go to **Windows > Preferences > General > Keys** and change the key binding for content-assist. For additional information, see http://wiki.eclipse.org/IRC_FAQ#Why_did_Content_Assist_stop_working.3F

Alternatively to changing the key binding for Content Assist within Developer for System z, you can change or remove the key binding in the tool that is conflicting

with Developer for System z. If you change that, then you can keep content-assist bound to Ctrl-space. Some example of tools which may be intercepting the control-space keystrokes are:

- Non-English software or keyboards
- Accessibility software such as screen readers
- Background processes with key bindings

Limitation: New/Local Remote Action button is disabled

This topic describes a workaround for the situation in which the **New Local/Remote Action** button in the **Menu Manager** section of the Preferences is disabled.

Operating systems:

- Red Hat Enterprise Linux V5 and V6 32-bit and 64-bit
- SUSE Enterprise Linux V10 and V11 32-bit and 64-bit

Problem:

A new local or remote action cannot be created because the **New Local/Remote Action** button is disabled. This button is located in the Preferences window on the **Menu Manager > Actions and Menus** page, on the **Action** tab.

Analysis:

Regular users do not have write access to the TPF information directory TPFSHARE. An example of the full path of this directory is: `/opt/ibm/SDPShared/Config/TPFSHARE`. This directory is the default directory for the action files shown in the **File Selection** list.

Resolution:

To resolve this problem:

1. Create a new actions file in a directory to which you have write access:
 - a. On the **Actions and Menus** page, in the **File Selection** group, click **New**.
 - b. In the New File wizard:
 - 1) Specify a directory and a name for the new actions file. The directory must be one to which you have write access.
 - 2) Click **Finish**.

The **New Local/Remote Action** button should now be enabled.

2. When you are finished adding actions to the new actions file, have someone with superuser privileges copy your actions file to the TPFSHARE directory.

Note: Other ways to resolve this problem include the following:

- Log on as a superuser before you launch Rational Developer for System z.
- Grant regular users write privileges to the TPFSHARE directory.

Chapter 19. Enterprise Service Tools

Single-service projects

Limitation: Meet-in-middle mapping file appears blank

Problem: In Linux, in the meet-in-middle development scenario, the Response.mapping file in the editor appears to be blank when the **Create mappings** wizard finished. This also happens occasionally on Windows.

Workaround: Re-opening the mapping file will show the mapping file contents in the mapping editor.

Limitation PL/I Compiled XML Conversion does not support mapping or generation of XML attributes, except in the top-down scenario

Problem: The Enterprise Service Tools PL/I Compiled XML conversion does not support mapping of attributes from an existing XSD to PL/I data items in the Meet-in-middle scenario and does not generate attributes in the bottom-up scenario.

Workaround: None. This condition is a limitation of PL/I Compiled XML Conversion.

Limitation: 01 level scalar element is not supported

In the Enterprise Service Tools Single service projects that enable PL/I application as Web services, the 01 level scalar element (Example: DCL 01 CHARARRAY char(255);) is not supported. Only *composed types* are supported.

Limitation: PL/I Compiled XML Conversion does not honor the optional "aligned" or "unaligned" attributes

Problem: Enterprise Service Tools PL/I Compiled XML conversion does not honor the optional "aligned" or "unaligned" attributes on PL/I language structures or language structure members.

Workaround: None; This condition is a limitation of PL/I Compiled XML Conversion.

Limitation: Bottom-Up conflict with old WSDL/XSD files and new WSDL files and XSD files

Problem: In the bottom-up development scenario, using an older version of generated WSDL files and XSD files with newly generated converters can cause errors at runtime. For example, the following runtime error message can occur:
IGZ0282S XML to data structure conversion could not complete in program PGMNAME because no element names in the XML document were recognized by the converter.

Solution: WSDL/XSDs generated with a converter should always be coupled with the converters.

Limitation: COBOL conversion routines generated by single-service wizards run in z/OS only

Even though the workstation COBOL compiler supports XML PARSE statements at both compile time and runtime, the COBOL programs generated by the single-service wizards are designed to run in the z/OS environment only

Limitation: The Top-down and Meet-in-middle scenarios with importing remote (z/OS UNIX) WSDL file which includes, imports, or redefines a schema is not supported

Problem: In an Enterprise Service Tools project, if you are running Create New Service Implementation (top-down) scenario or Map to an Existing Service Interface (meet-in-middle) scenario, with the WSDL file (that was originally imported from a remote location) that includes, imports, or redefines a schema, it would fail with an error.

Workaround: Copy all the required files to the workstation or to a general project in the workspace and import the local WSDL file into the "Web Services for CICS Project" using **RMB>Import>Source files** and try the top-down scenario.

Limitation: XML Element nesting depth

Problem: The XML to language structure converter returns the following exception message:

```
IGZ0291S XML to data structure conversion could not complete
in program program-name because the maximum XML element
nesting depth was exceeded. The error occurred at element
element-name with character content character-content.
```

Workaround: The XML to language structure converter could not handle the nesting depth of a particular XML element. Though there is an allowance for nesting levels beyond that of the original COBOL structure, it can be exceeded. If an element exists in the request XML document that is not in the schema, the element will cause this condition if its nesting level is too deep.

Limitation: OPT compiler option conflict

Problem: The OPT compiler option in the generated PROCESS statement in driver and converter programs will conflict with the TEST option if you specify it as a compile option in your JCL.

Workaround: If you want to debug the generated XML converter programs, deselect the "Optimization" check box in the "Specify compiler-related preferences" group on the "Generation options" page in the Web service wizard.

Limitation: Case sensitivity of certain text entry fields in XML Enablement wizards

Problem: Folder and file name entries are case sensitive in Eclipse on Windows.

Workaround: Make sure that you enter folder and file names consistently. For example, if your folder name shows as MyFolder in the Workbench, you must type MyFolder in an entry field requesting a folder name. If you enter myfolder, for example, the tools may flag this as an invalid or nonexistent folder name.

Limitation: Invalid pointers cause infinite loop

Problem: Providing non-null invalid pointers to XML converters or drivers causes an infinite loop.

Workaround: The XML converters attempt to detect and report null pointers passed by the caller. For non-null invalid pointers, the XML Converters will likely encounter and return, a protection exception (SOC4).

Limitation: FILLER items in COBOL data structures

Problem: Unnamed groups and their elementary items are not available for selection on the data structure selection page or the mapping session editor because the parent item is filtered out along with its elementary items.

Workaround: Edit the COBOL data structure and give names to the groups and/or elementary data items that require conversion. Giving a name to the COBOL group makes its non-filler elementary items available for selection.

Limitation: Generate>XML File menu item does not honor XSD schema restrictions

Problem: The Generate -> XML File menu item does not honor restrictions in an XSD schema. Using the Generate XML File action on an XSD created by Enterprise Service Tools could lead to the generation of invalid XML files.

Workaround: Edit the generated XML file so that the tag contents conform to the restrictions specified in the XSD schema.

Limitation: XML and Web Services batch processor: Invalid entries in configuration XML may cause null pointer exceptions during the batch process

Problem: Invalid entries in the options XML files (Container.xml, PlatformProperties.xml, ServicesSpecification.xml) may cause null pointer exceptions during the execution of the batch processor.

Workaround: Follow the format for correctly specifying entries in the options XML files.

Limitation: Restriction on figurative constants LOW-VALUES and HIGH-VALUES

Figurative constants LOW-VALUE(S) and HIGH-VALUE(S) can be present in COBOL data structures used in the single-service wizards, but their semantic meaning is ignored by the single-service wizards and is not carried into the artifacts generated by these Enterprise Service Tools single-service wizards

Limitation: Generate>XML File menu item does not honor XSD schema restrictions

Problem: The Generate -> XML File menu item does not honor restrictions in an XSD schema. Using the Generate XML File action on an XSD created by Enterprise Service Tools could lead to the generation of invalid XML files.

Workaround: Edit the generated XML file so that the tag contents conform to the restrictions specified in the XSD schema.

Limitation: Temporary files are not always cleaned up

Problem: After running an Enterprise Service Tools single-service wizard, you may sometimes notice that temporary files (for example, ~DF45B.tmp) are left in the Enterprise Service Tools single-service project folder.

Workaround: If you see similarly named files in your Enterprise Service Tools single-service project after running an Enterprise Service Tools single-service wizard, you can safely delete such files

Limitation: Temporary projects are not always cleaned up

Problem: The migration process for the old mapping files requires that the referenced mapped source files be in the same folder as the mapping file. If this requirement is not met, the Mapping migration tool will fail with the following error message: "Resource [filename].mapping is not local".

Workaround: If you see similarly named projects in your workspace after running an Enterprise Service Tools single-service wizard, you can safely delete those projects.

Limitation: When migrating version 6.0 mapping files (.cmx files) source files referenced by the .cmx file must be in the same folder

Problem: The migration process for the old mapping files requires that the referenced mapped source files be in the same folder as the mapping file. If this requirement is not met, the Mapping migration tool will fail with the following error message: "Resource [filename].mapping is not local".

Workaround: Move the referenced source files into the same folder as the mapping file that is being migrated.

Limitation: Support for DBCS data members with SOAP for CICS and Web Services for CICS

Support for DBCS data items in Enterprise Service Tools single-service projects requires that the request and response XML documents are encoded in UTF-16 or UTF-8. If the target runtime of the Web service is SOAP for CICS, configure the feature to exchange XML in UTF-8 or UTF-16 with the XML Converter Driver. The Web Services for CICS runtime will exchange XML in UTF-8 with a client by default while the XML Converter Driver exchanges XML with CICS in UTF-16; when UNICODE is needed, UTF-16 is the most efficient choice currently for the XML Converters. For either runtime, it might be necessary to configure z/OS support for UNICODE with a conversion image that supports conversion between UNICODE and the DBCS host codepage.

Limitation: DBCS characters are not allowed in the name of the generated XML converter files

Problem: DBCS characters are not allowed in the names of Partitioned Data Set members on z/OS.

Workaround: Omit DBCS characters when specifying the name of the XML converter files. Also, check that the default file names suggested by the Wizard do not contain DBCS characters.

Limitation: Global element names in generated XML schemas are not consistent between Interpretive and Compiled XML conversion types

Problem: The web service message root element names in the XML schemas generated by default generation of Interpretive and Compiled XML conversion do not match. You may need to change the generation default of the Compiled XML conversion to match the Interpretive conversion case as described below in the Workaround section. This will let you change the conversion type from interpretive to compiled if needed later without having to republish the WSDL file and without changing code in clients of the web service.

Workaround: When generating the artifacts for Compiled XML conversion you can use the wizard to change the root element name to match the Interpretive XML conversion. This new option called "Root element name" is located in the **Generation Options** page, on the **WSDL and XSD options** tab, in the **request and response XML Schema properties** group.

For example, the COBOL group named A-B-C will cause the Interpretive conversion artifacts to have the message root element name "a_b_c". The default Compiled conversion artifacts will have the root element name "ABC". As described earlier you can change "ABC" in the wizard to "a_b_c" to match with the WSDL generated for the interpretive conversion.

Limitation: Enterprise COBOL issues message IGYOP3094 when compiling COBOL XML Converters using the OPTIMIZE (OPT) option

Problem: The Enterprise COBOL optimizer flags several PERFORM statements in the Compiled XML Conversion code generated by RD/z Enterprise Service Tools Wizards when using the COBOL optimizer. The format message of the message is "IGYOP3094-W There may be a loop from the "PERFORM" statement at "PERFORM (line n)" to itself. "PERFORM" statement optimization was not attempted."

Workaround: The control flow of the XML2LS converter is too complex for the COBOL optimizer to process. The algorithm used by the COBOL optimizer is currently unable to recognize that a GO TO statement in the XML2LS converter that leads to a previous point in the program is not unconditional; therefore, in this case, the message IGYOP3094 represents an optimizer limitation, not a problem with the correctness of the generated code. For additional information, see Enterprise COBOL APAR PQ74496.

Service flow projects

Limitation: A Web service generated from a service flow project cannot call itself (recursive call)

A Web service generated from a service flow project cannot call itself, either directly or indirectly. In general, the service flow project tools do not allow you to create a recursive invocation of a flow, that is, a flow invoking itself, either directly or through intermediate calls.

However, the service flow project tools currently do not detect the following type of recursion:

- You generate a Web service (for example, WS01) from a service flow project.
- The generated Web service (WS01) invokes some other Web service (for example, WS02). (By the way, in the Enterprise Service Tools, WS02 is termed an "outbound Web service", because it is external to the Web service that invokes it.)
- The invoked Web service (WS02) in turn invokes the original Web service (WS01).

In this situation: The flow editor does not detect the recursion when you create it and does not display an error message. You can successfully generate runtime code for the CICS Service Flow Runtime and deploy the Web service (WS01). When you run the Web service (WS01), the invocation to the second Web service (WS02) is successful. However, the recursive invocation (from WS02 back to WS01) fails.

Limitation: A limitation on a flow with a connection wired back onto itself

Problem: The flow editor does not prevent you from adding connections that wire the execution path of a flow back onto itself (at an earlier point in the flow's execution path). This situation may not cause errors when you generate runtime code. However it is very likely to lead to errors during runtime processing.

Workaround: When you want part of a flow to be iterated multiple times so long as a certain condition is true, use a While node (see the topic "Creating a loop" in the Enterprise Service Tools documentation).

Limitation: Importing a COBOL copy book file fails when the path or file name contains non-English characters

Problem: If you attempt to import a COBOL copy book file, and the file path or the file name contains non-English characters, then the import fails.

Workaround: Rename the PL/I include file so that the name contains only English characters. Locate the file in a directory whose path contains only English characters.

Limitation: Conflicting message and field names cause compile error

Problem: When you model a flow, and a field of one message has the same name as another message, the generated COBOL code may not compile, reporting a IGYPS0037 error, due to the naming conflict. For example, if the flow references (1) a message called 'X' with a field called 'Y' and (2) a message called 'Y', when the generated code refers to item 'Y' the COBOL compiler will not know whether the reference is to the message 'Y' or the field 'Y OF X'.

Workaround: Refactor either the message or the field to resolve the name conflict. In the EST Project Explorer, select one of the items with the duplicate names. Open the context menu and choose Rename.

Limitation: A limitation on imported source code with a usage clause of POINTER

Problem: Importing COBOL or PL/I source code data structures containing fields with a usage type of POINTER will create a message with a corresponding field of type hexBinary. This will cause the Generate Runtime Code wizard to fail.

Workaround: Edit the message in the Message Editor. On the Advanced tab of the editor, change the field's type from hexBinary to int. This change enables the generation to complete successfully.

Limitation: Screen messages are not easily replaced

Problem: If you accidentally delete screen message files and attempt to re-import or re-capture screens to replace them, references to the messages in those files may remain broken. This is because for each screen message, a unique identifier is generated, and this unique identifier is used to identify the screen messages in other files.

Workaround: Back up your projects often. If you accidentally delete screen message files and do not wish to re-model your flows, bring screen messages back by importing the backed up versions of the files rather than re-importing or re-capturing your screens.

Limitation: Importing a COBOL program for use as a LINK with Channel node and opening the operation in the operations editor prevents modifying the generation properties

Problem: After importing a COBOL program for use as a LINK with Channel node, and opening the operation in the operations editor, you cannot modify the generation properties to select Service Flow runtime: level 1.0 is not listed as a choice for selection.

Workaround: Change the program type to commarea or MQ, press **OK**, save your changes, then reopen the generation properties editor. Then the choice for runtime level 1.0 is available.

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