

Rational® Developer for System z
Version 8.0.1

Host Configuration Utility Guide



Rational® Developer for System z
Version 8.0.1

Host Configuration Utility Guide



Note

Before using this information, be sure to read the general information under “Notices” on page 13.

Second edition (December, 2010)

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.

Order publications by phone or fax. IBM Software Manufacturing Solutions takes publication orders between 8:30 a.m. and 7:00 p.m. eastern standard time (EST). The phone number is (800) 879-2755. The fax number is (800) 445-9269. Faxes should be sent Attn: Publications, 3rd floor.

You can also order publications through your IBM representative or the IBM branch office serving your locality. Publications are not stocked at the address below.

IBM welcomes your comments. You can send your comments by mail to the following address:

IBM Corporation
Attn: Information Development Department 53NA
Building 501 P.O. Box 12195
Research Triangle Park NC 27709-2195.
USA

When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

Note to U.S. Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

© **Copyright IBM Corporation 2010.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Figures v

Tables vii

About this document ix

Who should read this document ix

Chapter 1. Introduction 1

Components 1

 Product data sets 1

 User-specific data sets 1

 ISPF profile data set 2

Requirements 2

Chapter 2. First usage. 5

Startup 6

Available configurations 6

Library locations 7

Primary menu 8

Customization 8

Available configurations revisited 9

Executing workflow items 9

Chapter 3. Other actions 11

Notices 13

Figures

1. Configuration flow	5	3. Panel structure	11
2. FEKINIT startup parameters	6		

Tables

1. Product data sets	1	2. User-specific data sets	2
--------------------------------	---	--------------------------------------	---

About this document

This document discusses the use of the Host Configuration Utility which is part of IBM Rational Developer for System z Version 8.0.1. The Host Configuration Utility is an ISPF panel application that guides you through basic and common optional customization steps for Developer for System z. The application also allows you to execute Installation Verification Procedures (IVPs) and collect debug information. For complete details on the configuration of this product, refer to *Rational® Developer for System z® Host Configuration Guide* (SC23-7658).

For earlier releases, use the configuration information found in the Host Configuration Guide for those releases.

From here on, the following names are used in this manual:

- *IBM Rational Developer for System z* is called *Developer for System z*.
- *Common Access Repository Manager* is abbreviated to *CARMA*.
- *Software Configuration and Library Manager Developer Toolkit* is called *SCLM Developer Toolkit*, abbreviated to *SCLMDT*.
- *z/OS® UNIX System Services* is called *z/OS UNIX*.
- *Customer Information Control System Transaction Server* is called *CICSTS*, abbreviated to *CICS®*.

This document is part of a set of documents that describe Developer for System z host configuration. Each of these documents has a specific target audience. You do not have to read all documents to complete the Developer for System z configuration.

- *Rational Developer for System z Host Configuration Guide* (SC23-7658) describes in detail all planning tasks, configuration tasks, and options (including optional ones) and provides alternative scenarios.
- *Rational Developer for System z Host Configuration Reference* (SC14-7290) describes Developer for System z design and gives background information for various configuration tasks of Developer for System z, z/OS components, and other products (such as WLM and CICS) related to Developer for System z.
- *Rational Developer for System z Host Configuration Quick Start Guide* (GI11-9201) describes a minimal setup of Developer for System z.
- *Rational Developer for System z Host Configuration Utility* (SC14-7282) describes the Host Configuration Utility, an ISPF panel application that guides you through basic and common optional customization steps for Developer for System z.

The information in this document applies to all Rational Developer for System z v8.0.1 packages including IBM® Rational Developer for zEnterprise.

Who should read this document

This document is intended for system programmers who have been tasked to configure Rational Developer for System z Version 8.0.1.

This document describes the different steps needed to do a setup using the Host Configuration Utility. Refer to *Rational Developer for System z Host Configuration Guide* (SC23-7658) for complete details on the configuration of this product and non-default settings.

To use this guide, you need to be familiar with ISPF. Some z/OS UNIX experience is useful for a better understanding of certain aspects, but it is not required.

Chapter 1. Introduction

The Rational Developer for System z Host Configuration Utility is a utility created to assist customers with Developer for System z host installation customization, installation verification and debug reporting. The Host Configuration Utility is referred to as the "utility" within this document.

The utility is designed to manage multiple configurations of a single Rational Developer for System z service level, hence providing configurations for test and production implementations of the product.

The utility is intended to ease the complexity of installation and customization of required tasks and selected common optional tasks. This is paired with a detailed logged customization workflow that can be interrupted and restarted at will.

Multiple users can use the same set of configuration files (but not simultaneously). This allows one person to create a configuration, and someone else with proper authority can execute specific steps of the configuration.

Components

The utility consists of a series of partitioned data sets that can be divided into two groups, common product data sets and user-specific data sets created by the utility. There are also a few members added to the user's ISPF profile data set.

Product data sets

The product data sets listed in Table 1 contain REXX execs, ISPF panels, message files, and control files. These data sets should be available in read-only mode to all users of the utility.

Table 1. Product data sets

Data set name	Description
FEK.SFEKEXEC	REXX execs to run the utility
FEK.SFEKINPT	Control files
FEK.SFEKMSGs	ISPF message files
FEK.SFEKPANL	ISPF panels
FEK.SFEKSKEL	Skeleton members tailored by the utility
FEK.SFEKTABL	ISPF PF-key tables

User-specific data sets

The number of user-specific data sets created by the utility varies, because it depends heavily on the type of actions done by the user, and the number of configurations that are created. Each configuration is identified by a 4-digit number (*nnnn* in Table 2 on page 2). The data set names all start with a user-specified high-level qualifier, followed by a product-determined low-level qualifier (which can be one or two qualifiers long).

Table 2. User-specific data sets

Data set name	Description
hlq.\$R\$D\$Z	Temporary data set which is deleted during the termination procedure.
hlq.RDZLOG	Contains a log file for each version of the commands/JCL create by the utility. The member name is RDZnnnn.
hlq.RDZTABL	Contains the profile table.
hlq.RDZnnnn.ASM	Contains sample assembler code for configuration nnnn. This data set matches the FEK.#CUST.ASM data set referenced in the <i>Host Configuration Guide</i> (SC23-7658).
hlq.RDZnnnn.CMD	Contains generated command files for configuration nnnn.
hlq.RDZnnnn.CNTL	Contains generated command files for configuration nnnn. This data set matches the FEK.#CUST.CNTL data set referenced in the <i>Host Configuration Guide</i> (SC23-7658).
hlq.RDZnnnn.COBOLE	Contains generated command files for configuration nnnn. This data set matches the FEK.#CUST.COBOLE data set referenced in the <i>Host Configuration Guide</i> (SC23-7658).
hlq.RDZnnnn.JCL	Contains generated command files for configuration nnnn. This data set matches the FEK.#CUST.JCL data set referenced in the <i>Host Configuration Guide</i> (SC23-7658).
hlq.RDZnnnn.PARMLIB	Contains generated parmlib updates for configuration nnnn. This data set also matches the FEK.#CUST.PARMLIB data set referenced in the <i>Host Configuration Guide</i> (SC23-7658).
hlq.RDZnnnn.PROCLIB	Contains generated proclib updates for configuration nnnn. This data set matches the FEK.#CUST.PROCLIB data set referenced in the <i>Host Configuration Guide</i> (SC23-7658).
hlq.RDZnnnn.IVP	Contains generated IVP output for configuration nnnn.
hlq.RDZnnnn.DEBUG	This is a sequential data set that will contain the debug report file when run for version nnnn.

ISPF profile data set

FEK* members with user-specific preferences are added to the user's ISPF profile data set (DD ISPPROF in TSO) during execution of the utility.

Requirements

The system requirements match those of the Rational Developer for System z release it is part of, and are documented in *Prerequisites Guide* (SC23-7659), which is available in the Developer for System z online library at <http://www.ibm.com/software/rational/products/developer/systemz/library/index.html>.

The user ID running this utility must have (at least) the following attributes:

- TSO access with minimum region size of 128M (specify logon SIZE= 131072)
- An OMVS segment defined to the security system (for example, RACF®), both for the user ID and its default group.
 - The HOME field must refer to a home directory allocated for the user (with READ, WRITE and EXECUTE access).
 - The PROGRAM field should be /bin/sh or other valid z/OS UNIX shell

- The user ID does not require UID 0.
 - The user ID's default group requires a GID.
- User must have READ and EXECUTE access to the Java directories.
- User must have READ, WRITE and EXECUTE access to the /tmp directory

Chapter 2. First usage

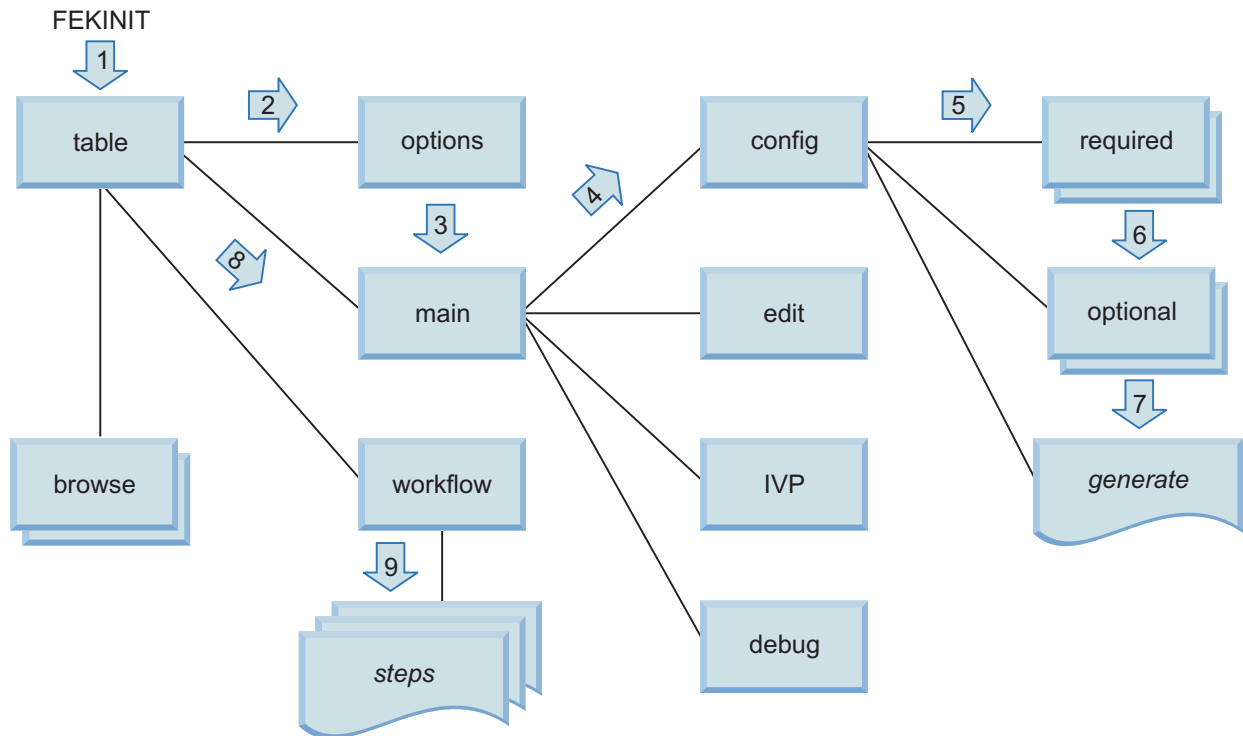


Figure 1. Configuration flow

Figure 1 shows a schematic overview of the panel structure used by the utility. It also marks the flow you follow during the initial configuration of Developer for System z.

1. Starting the utility brings you to a panel that shows all known configurations.
2. You start by specifying input and output locations.
3. That leads you to the main menu.
4. Here you indicate you want to configure Developer for System z.
5. The configuration panel leads you to defining required customization variables.
6. Then you can define optional customization variables.
7. When all input is provided, you generate workflow jobs, which brings you back to the table with the known configurations.
8. Now you select the workflow item.
9. Then execute the listed tasks to build the configured Developer for System z setup.

Startup

The utility is started by executing FEKINIT, which resides in SFEKEXEC, from within an ISPF environment. The following sample invocation command can be used from any ISPF panel command line:

```
TSO EXEC 'FEK.SFEKEXEC(FEKINIT)'
```

FEKINIT can accept optional positional parameters:

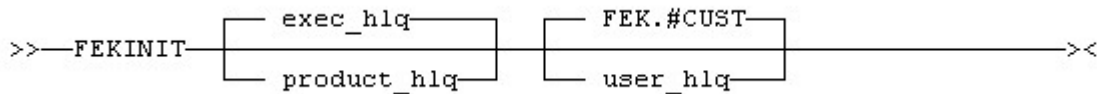


Figure 2. FEKINIT startup parameters

product_hlq

High-level qualifiers of the common product libraries. By default, the value is extracted from the exec startup information provided by TSO.

user_hlq

High-level qualifiers of the user-specific libraries. By default, FEK.#CUST is used.

The user will be asked to confirm or change this value during startup.

```
Rational Developer for System z Vx.x utility initialization
Driver level ddmmyyyy
HLQ for install datasets = FEK
A high level qualifier for user configuration datasets is required
Enter the HLQ or press enter to default to FEK.#CUST

HLQ for user datasets = FEK.#CUST
```

Note: Extensive help panels are available for each ISPF panel. They can be accessed with the PF1 key.

Available configurations

The initial panel shows the defined configurations.

```
Rational Developer for System z Vxx - Default      Row 1 to 1 of 1
Command ==>                                       Scroll ==> PAGE

N Create new configuration :
```

Date	Time	User	Id	Description
dd mmm yyyy	hh:mm:ss	DEFAULT	RDZ001	RDzx.x Default Configuration

On first invocation, or when all the user configurations have been deleted, the panel only displays the default configuration. In this case, the only selection option available is "N": New to display the options panel.

Library locations

The options panel specifies the names of input and output data sets and directories. MVS™ based output always goes to one of the user-specific data sets: user_hlq.RDZnnnn.*, where *nnnn* is a number that represents a single configuration.

Note that the input fields are verified, but invalid values are accepted (after a warning). This allows you to create all configurations on one system (the driving system), even if the naming conventions on the target system are different.

```
Rational Developer for System z Vxx - Options Menu
Command ==>

Customize and press ENTER to validate the input data
Press PF3 to exit and save or press PF12 to cancel changes

Base system parameters for Rational Developer for System z Vx.x

The data set qualifiers or directories below must exist

Enter the high-level qualifier(s) of the product install
    FEK

Enter the product installation directory (RSE home directory)
    /usr/lpp/rdz

Enter the Java directory location          Java Version : Unknown
    /usr/lpp/java/J5.0

The output directories below will be created if they do not exist as
part of running the work flow steps during customization

Enter the directory for the configuration files (RSE config directory)
    /etc/rdz

Enter the root path for host-based client control directories
    /var/rdz

Enter the root path for log and temporary file directories
    /var/rdz
```

Note: The **EXIT** command (**PF3**) is used throughout the input panels to save the data and continue to the next panel. The **CANCEL** command (**PF12**) returns to the previous panel without saving.

Usage of the PF keys requires that **KEYLIST ON** is specified in ISPF.

Primary menu

```
Rational Developer for System z Vxx - Primary Menu
Option ==>

Select Primary Customization Menus
C Initial Product Customization
E Edit active configuration files

Select after workflow configuration jobs have been run
I Installation verification

Select only for IBM service problem analysis
D Run debug reports
```

The primary menu groups several actions that can be done based upon the data provided in the active configuration. Except for the Initial Product Customization item, all items require a completed setup of Developer for System z.

Customization

Menu option "C" Initial Product Customization in the primary menu brings you to the customization overview panel. The options in this panel will guide you through mandatory and common optional customization tasks.

```
Rational Developer for System z Vxx - Customization
Option ==>

Required customization
1 Started tasks
2 Remote Systems Explorer (RSE)
3 JES Job Monitor (JMON)
4 TSO/ISPF Client Gateway

Optional product customization
5 Common Access Repository Manager (CARMA)
6 SCLM Developer Toolkit (SCLMDT)

Select after the above configuration steps have been completed
G Generate configuration jobs
```

The customization actions are grouped in three sections:

- Required customization: mandatory customization required for product startup
- Optional product customization: customization of optional product components.
- Optional runtime customizations: customizations so that other products can use Developer for System z functions and generated code. Note that runtime customizations are currently not implemented and thus not available on the panel.

Each option will bring you to an input panel where you can specify values for the related variables. Note that the panels might not cover all possible configuration options to reduce complexity. See the *Host Configuration Guide* (SC23-7658) for a detailed overview of each available option.

Note:

- The input panel might have more lines than supported by your current screen size. You can use **PF7** (up) and **PF8** (down), to navigate through a multi-screen panel.
- CA Endeavor[®] integration requires that CARMA is configured.

Once you completed the various customizations, select option **"G"** Generate to create a set of tasks (called the work items) that will create the configuration files and do related actions (such as security definitions) based upon the specified values.

Generating the work items completes the first step of the customization process for this configuration, so the provided information will be saved for future use. The utility will prompt you for a meaningful name for this configuration.

```
The configuration has been modified and will be saved on exit

Specified below is the default description for this configuration
Modify if desired : RDzx.x Configuration

Press Enter to continue
```

Available configurations revisited

Once the work items are generated and the configuration data is saved, you are back in the panel that shows the defined configurations.

```
Rational Developer for System z Vxx - Configuration    Row 1 to 2 of 2
Command ==>                                           Scroll ==> PAGE

Select the configuration you want to work with:

S Select N New D Delete W Work Flow
C Command Browse F File Browse L Log Browse

  Date          Time      User      Id      Description
dd mmm yyyy hh:mm:ss IBMUSER  RDZ002  test systems
dd mmm yyyy hh:mm:ss DEFAULT  RDZ001  RDzx.x Default Configuration
```

The newly created configuration is now part of the table, and more menu options became available.

Executing workflow items

By issuing the **"W"** Work Flow action against the newly created configuration, a table with the related work items is shown. The number of work items will vary, depending on the items that were configured earlier in the process. The following screen capture shows the work items created for a basic customization with CA Endeavor[®] integration using the CRASTART startup method.

The Work Items are listed in the suggested order of execution.
 To Generate work items, select G (Generate configuration jobs)
 under the main RDZ configuration panel.

Select the item you want to work with:

A Action Item E or S EDIT B Browse C Mark as Completed L Browse Action Log

Work Item	Type	Status	Authority/Action
FEKCSET	Command	Pending	Systems Programmer
FEKCOPY	Command	Pending	Systems Programmer
APF	PARMLIB	Pending	Systems Programmer
LINKLIST	PARMLIB	Pending	Systems Programmer
COMMNDXX	PARMLIB	Pending	Systems Programmer
BPXPRMXX	PARMLIB	Pending	Systems Programmer
FEJJCNFG	PARMLIB	Pending	Systems Programmer
JMON	PROCLIB	Pending	Systems Programmer
RSED	PROCLIB	Pending	Systems Programmer
LOCKD	PROCLIB	Pending	Systems Programmer
RSEENV	rsed.envvars	Pending	Systems Programmer
ISPFCONF	ISPF.conf	Pending	Systems Programmer
RACFINIT	RACF	Pending	RACF Administrator
USER	RACF	Pending	RACF Administrator
DATASET	RACF	Pending	RACF Administrator
STC	RACF	Pending	RACF Administrator
JESCMDS	RACF	Pending	RACF Administrator
SERVER	RACF	Pending	RACF Administrator
PROGCTLM	RACF	Pending	RACF Administrator
APPL	RACF	Pending	RACF Administrator
PSTICKET	RACF	Pending	RACF Administrator
PROGCTLU	Command	Pending	Systems Programmer
CARMAVDEF	Command	Pending	CARMA Administrator
CARMAVMSG	Command	Pending	CARMA Administrator
CARMAVSTR	Command	Pending	CARMA Administrator
CARMACRA	CRASRV.propert	Pending	CARMA Administrator
CARMCNFE	crastart.endev	Pending	CARMA administrator

You can now edit each item (E or S command) to verify what it exactly does, and then execute it (A command). Some items will be executed by the utility (such as copying members). Other items will prompt you to do a manual action with the provided information (for example, updating PARMLIB members).

Also note that some items require authority that you might not have (such as RACF administrator). In this case, just give the person with sufficient authority the following information and ask that person to execute the related work items:

- Startup instructions for the tool (product HLQ and user HLQ are the two related variables)
- Which configuration to select

Chapter 3. Other actions

The utility supports more than just initial product configuration. It allows you to build various configurations, define values and work items for them, edit existing configuration files, run Installation Verification Procedures (IVPs), and collect debug information.

All these actions are described in detail in the provided help panels.

Doing the initial configuration of Developer for System z will give you an idea how the utility is designed. The key concepts you need to remember are:

- The utility is started by executing SFEKEXEC(FEKINIT).
- Customizations are grouped in a configuration, which can be selected in the table that is shown when the tool is started.
- The configuration table leads you to the work items and to the configuration-specific options.
- The configuration-specific main panel allows you to customize the product, edit existing configuration files, execute IVPs, and collect debug information.

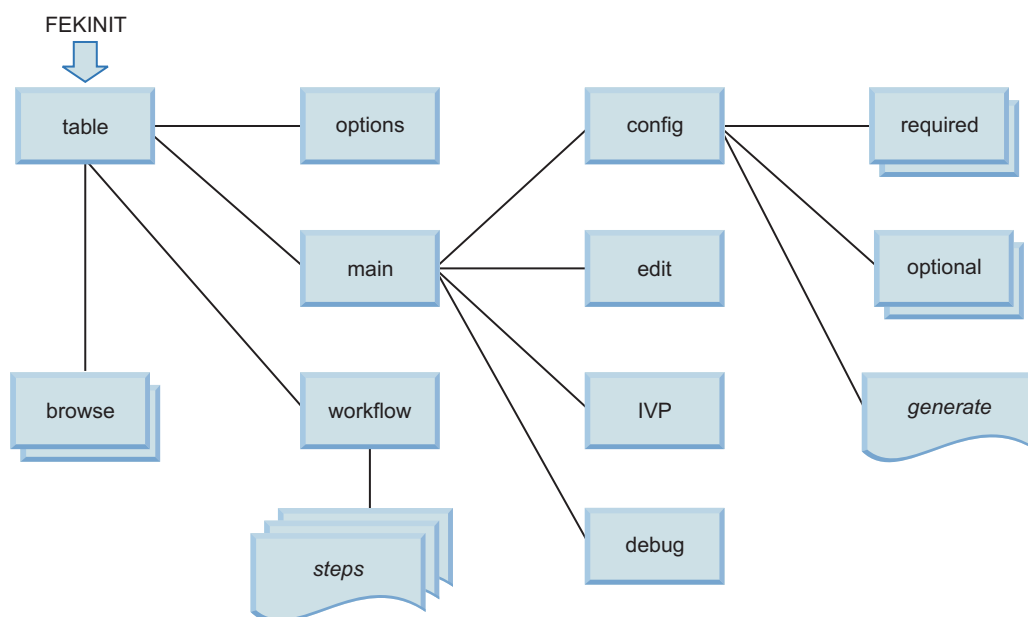


Figure 3. Panel structure

Notices

© Copyright IBM Corporation 2010.

U.S. Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Programming interfaces: Intended programming interfaces allow the customer to write programs to obtain the services of Rational Developer for System z.

The XDoclet Documentation included in this IBM product is used with permission and is covered under the following copyright attribution statement: Copyright © 2000-2004, XDoclet Team. All rights reserved.

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.*

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

*Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan, Ltd.
1623-14, Shimotsuruma, Yamato-shi
Kanagawa 242-8502 Japan*

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

*Intellectual Property Dept. for Rational Software
IBM Corporation
5 Technology Park Drive
Westford, MA 01886
U.S.A.*

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the

names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

Copyright license

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. 2005, 2010.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks and service marks

See www.ibm.com/legal/copytrade.shtml.

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml.

Rational are trademarks of International Business Machines Corporation and Rational Software Corporation, in the United States, other countries, or both.

Intel and Pentium are trademarks of Intel Corporation in the United States, or other countries, or both.

Microsoft, Windows, and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States, or other countries, or both.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

UNIX is a registered trademark of The Open Group in the United States and other countries.



Printed in USA

SC14-7282-01

