WebSphere® Adapters
Version 7 Release 0 Feature Pack 1

*WebSphere Adapter for Siebel
Business Applications User Guide
Version 7 Release 0 Feature Pack 1*

IBM

WebSphere® Adapters
Version 7 Release 0 Feature Pack 1

*WebSphere Adapter for Siebel
Business Applications User Guide
Version 7 Release 0 Feature Pack 1*

IBM

Contents

WebSphere Adapter for Siebel Business Applications documentation

IBM® WebSphere® Adapters for Siebel Business Applications provides the ability for WebSphere Process Server and WebSphere Enterprise Service Bus to exchange information with a Siebel application server.

What is new in this release

This version includes several new features that enhance the business flexibility, user experience, and performance of the adapter.

Complete information about other supported features is available at the WebSphere Adapter for Siebel Business Applications information center, http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r0mx/index.jsp?topic=/com.ibm.wsadapters.jca.siebel.doc/doc/stbp_sba_welcome.html, which is periodically updated with the latest information.

WebSphere Adapter for Siebel Business Applications supports the following new features:

- Adding a new property, 'Show error on empty result set' in the managed connection factory properties to handle empty returned record.

Note: In WebSphere Integration Developer, ensure that you have only one version of the adapter imported into your workspace. You can either have the adapter Fix Pack version 7.0.0.1 or Feature Pack version 7.0.1.0.

In the runtime environment, the application (EAR) should contain only one version of the embedded RAR file, either the adapter Fix Pack version 7.0.0.1 or Feature Pack version 7.0.1.0. The node level deployed adapter should also have only any one version of the adapter.

Setting a deployment property in managed connection factory

You can configure a new property, 'Show error on empty result set' in the external service wizard. This property is added to the managed connection factory properties. It specifies if the adapter, returns an empty business object or RecordNotFoundException when the result of RetreiveAll operation does not return any records, in case of a business object and specifies if the adapter generates an exception when a returned Siebel message is null, in case of a business service.

Setting deployment properties and generating the service

After you select and configure business objects for your module, you can use the external service wizard to configure properties that the adapter uses to connect to Siebel Business Applications. Then, the wizard creates a new business integration module where all the artifacts and property values are saved.

Before you begin

Make sure that you have configured the business object. The Specify the Service Generation and Deployment Properties window is displayed.

About this task

Generate the module. The module contains the artifacts that you deployed on the server, which includes the adapter runtime files and the selected business objects. To generate the module, use the following procedure.

Procedure

1. Optionally select **Edit operations** if you want to change the default operation name. In the Edit Operation Names window, type a new name and optional description, and click **OK**.

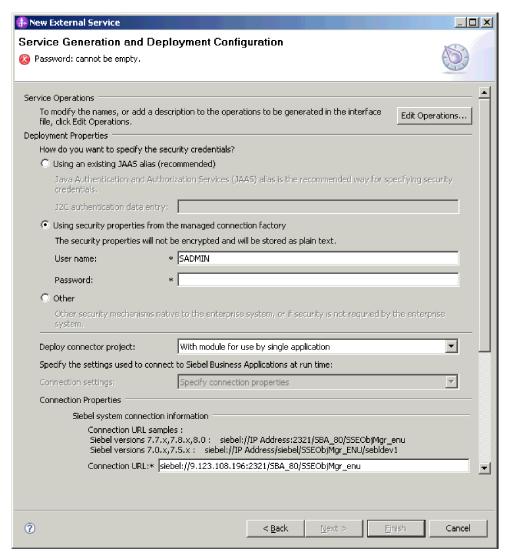*Figure 1. Service Generation and Deployment Configuration window, showing the* **Connection properties** *section*

    a. In the Edit Operation Names window, select the operation you want to edit, and then click **Edit**.

    b. In the Add/Edit properties window, type a new operation name and description, and then click **Finish**.

2. Specify the required security credentials in the **Deployment Properties** area:

- To use a J2C authentication alias, select the **Using an existing JAAS alias (recommended)** field, and specify the name of the alias in the **J2C Authentication Data Entry** field. You can specify an existing authentication alias or create one at any time before deploying the module. The name is case-sensitive and includes the node name.
- To use managed connection properties, select the **Using security properties from managed connection factory** field, and type the values in the **User name** and **Password** fields.
- To administer the user name and password from other mechanism, select **Other**.

3. In the **Deploy connector project** field, specify whether to include the adapter files in the module. Select one of the following values:

- **With module for use by single application**: With the adapter files embedded in the module, you can deploy the module to any application server. Use an embedded adapter when you have a single module using the adapter or if multiple modules need to run different versions of the adapter. Using an embedded adapter enables you to upgrade the adapter in a single module without the risk of destabilizing other modules by changing their adapter version.
- **On server for use by multiple applications**: If you do not include the adapter files in a module, you must install them as a stand-alone adapter on each application server where you want to run the module. Use a stand-alone adapter when multiple modules can use the same version of the adapter and you want to administer the adapter in a central location. A stand-alone adapter can also reduce the resources required by running a single adapter instance for multiple modules.

4. In the **J2C Authentication Data Entry** field, enter the name you specified in the Security section of the administrative console.

5. Click **Use discovered connection properties** to set the properties.

   If you select **Use connection properties specified on server**, you can configure properties later, using the administrative console.

6. In the Connection properties section, set or change any connection properties that apply to your configuration. See "Managed connection factory properties" on page 5 for more information about these properties.

   Properties marked with an asterisk (*) are required.

7. Optionally, specify advanced properties by clicking **Advanced**. Expand each of the following advanced sections to review the properties. The following figure shows the advanced property sections on the Specify the Service Generation and Deployment Properties window.
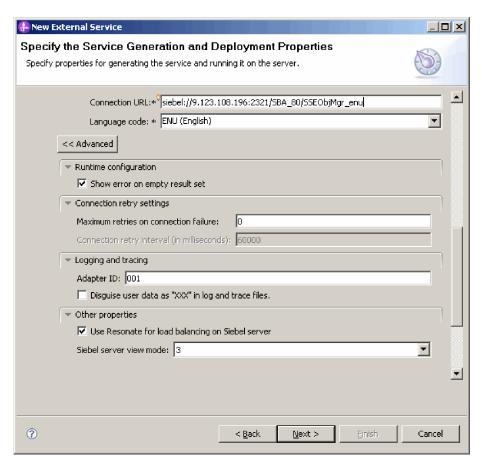
New External Service

Specify the Service Generation and Deployment Properties
Specify properties for generating the service and running it on the server.

Connection URL: * siebel://9.123.108.196:2321/SBA_80/SSEObjMgr_enu

Language code: * ENU (English)

<< Advanced

▼ Runtime configuration
☑ Show error on empty result set

▼ Connection retry settings
Maximum retries on connection failure: 0
Connection retry interval (in milliseconds): 60000

▼ Logging and tracing
Adapter ID: 001
☐ Disguise user data as "XXX" in log and trace files.

▼ Other properties
☑ Use Resonate for load balancing on Siebel server
Siebel server view mode: 3

< Back | Next > | Finish | Cancel

*Figure 2. Service Generation and Deployment Configuration window, showing the advanced property sections after clicking the **Advanced** button*

See "Managed connection factory properties" on page 5 for more information about these optional properties.

- **Logging and tracing**
  - If you have multiple instances of the adapter, set **Adapter ID** to a value that is unique for this instance.
  - If you want to mask sensitive information in log and trace files (for example, if you want to avoid making customer information visible in these files), select **Disguise user data as "XXX" in log and trace files**.

8. Click **Next**. The Specify the Location Properties window is displayed.

9. In the Specify the Location Properties window, specify the name of the module you want to create. It can be a new or an existing module.

   - If the required module name is displayed in the **Module** list, select its name.

     Note: If the module contains an interface or business object with the same name as any you are now configuring, the original interface or business object in the module can be replaced by the new version.

   - Otherwise, create a new module:
     a. Click **New**.
     b. In the Select a Business Integration Project Type window, select **Create a module project** and click **Next**.

   c. In the Create a Module window, type a name for the module. For example, SiebelOutboundModule.

   d. If you want the service description files (the `.import` and `.wsdl` files) to be located in the default folder in the module, leave **Use default location** selected. If you want to specify a different folder in the module, clear the option and then click **Browse** to specify a different folder in **Location**.

   e. If you want the module to be automatically opened in the assembly diagram in WebSphere Integration Developer when the wizard closes, select **Open module assembly diagram**. Otherwise, clear this option.

   f. Click **Finish** to create the new module.

10. Specify the namespace you want to use for your business objects.

- If you want the business objects in the module to use the default derived namespace, leave **Use default namespace** selected.
- To specify a different namespace, clear the option and type a different value in **Namespace**.

11. Optionally, specify the folder within the new module where the service description is saved. In **Folder**, type the folder name or browse to an existing folder. If you do not specify a folder name, the artifacts (the import, XSD, and WSDL files) are stored in the root folder of the module, that is, the folder with the module name.

12. In the **Name** field, accept the default import name or type a different name.

13. Optionally, if you want to save the business objects in a library where they can be used by other modules, select **Save business objects to a library** and specify the location of the library in **Library**.

14. Optionally, in **Description**, type a descriptive comment about the module.

15. When you finish setting the properties, click **Finish**.

Results

The new module is added to the Business Integration perspective.

What to do next

Export the module as an EAR file for deployment.

Related reference

"Managed connection factory properties"
Managed connection factory properties are used by the adapter at run time to create an outbound connection instance with the Siebel application.

Managed connection factory properties

Managed connection factory properties are used by the adapter at run time to create an outbound connection instance with the Siebel application.

You set the managed connection factory properties through either the external service wizard or the administrative console (after deployment).

The following table lists the managed connection factory properties for inbound communication. You set the activation specification properties using the external service wizard and can change them using the WebSphere Integration Developer Assembly Editor, or after deployment through the administrative console. A more detailed description of each property is provided in the sections that follow the

table. For information about how to read the property detail tables in the sections that follow, see http://publib.boulder.ibm.com/infocenter/dmndhelp/v7r0mx/ topic/com.ibm.wsadapters.jca.siebel.doc/shared/rsha_interpret_prop_details.html.

Note: The external service wizard refers to these properties as managed connection factory properties and the WebSphere Process Server or WebSphere Enterprise Service Bus administrative console refers to them as (J2C) connection factory properties.

Table 1. Managed connection factory properties

Property name		
In the wizard	**In the administrative console**	**Description**
Adapter ID	AdapterID	Identifies the adapter instance for PMI events and for logging and tracing.
Connection URL	connectString	The connection URL needed to connect to the Siebel application
Disguise user data as "XXX" in log and trace files	HideConfidentialTrace	Specifies whether to disguise potentially sensitive information by writing X strings instead of user data in the log and trace files.
Language code	languageCode	The language code used to log on to the Siebel server
"Maximum retries in case of system connection failure (connectionRetryLimit)" on page 9	connectionRetryLimit	Specifies the maximum number of times the adapter tries to reestablish an outbound connection to the EIS.
Password	password	The password for the corresponding user name
Prefix	prefix	The prefix for the business object name
"Retry interval if connection fails (in milliseconds) (connectionRetryInterval)" on page 10	connectionRetryInterval	Specifies the time interval between attempts to reconnect to the Siebel server if the connection fails.
Resonate support	resonateSupport	Specifies that if resonate support is installed on the Siebel server, and the value is set to true, the adapter takes advantage of the load balancing feature to connect to the Siebel server more efficiently.
"Show error on empty result set (errorOnEmptyResultSet)" on page 11	errorOnEmptyResultSet	Specifies if the adapter returns an empty business object or RecordNotFoundException when the result of RetreiveAll operation does not return any records, in case of a business object and specifies if the adapter generates an exception when a returned Siebel message is null, in case of a business service.
User name	userName	The user name that is used to log in to the Siebel application
View mode	viewMode	Specifies the Siebel view mode and controls the data that can be retrieved and what actions can be performed on it.

Adapter ID (AdapterID)

This property identifies a specific deployment or instance of the adapter.

Table 2. Adapter ID details

Required	Yes
Default	001
Property type	String
Usage	This property identifies the adapter instance in the log and trace files, and also helps identify the adapter instance while monitoring adapters. The adapter ID is used with an adapter-specific identifier, SEBLRA, to form the component name used by the Log and Trace Analyzer tool. For example, if the adapter ID property is set to 001, the component ID is SEBLRA001.
	If you run multiple instances of the same adapter, ensure that the first seven characters of the adapter ID property are unique for each instance so that you can correlate the log and trace information to a particular adapter instance. By making the first seven characters of an adapter ID property unique, the component ID for multiple instances of that adapter is also unique, allowing you to correlate the log and trace information to a particular instance of an adapter.
	For example, when you set the adapter ID property of two instances of WebSphere Adapter for Siebel Business Applications to 001 and 002. The component IDs for those instances, SEBLRA001 and SEBLRA002, are short enough to remain unique, enabling you to distinguish them as separate adapter instances. However, instances with longer adapter ID properties cannot be distinguished from each other. If you set the adapter ID properties of two instances to Instance01 and Instance02, you will not be able to examine the log and trace information for each adapter instance because the component ID for both instances is truncated to SEBLRAInstanc.
	For inbound processing, the value of this property is set at the resource adapter level. For outbound processing, the value can be set both at the resource adapter level and the managed connection factory level. After you use the external service wizard to configure the adapter for outbound processing, you can set the resource adapter and managed connection factory properties independently. If you use the WebSphere Integration Developer assembly editor or the administrative console to reset these properties, ensure that you set them consistently, to prevent inconsistent marking of the log and trace entries.
Globalized	Yes
Bidi supported	No

Connection URL (ConnectionURL)

This property specifies the connection URL needed to connect to the Siebel application.

Table 3. Connection URL details

Required	Yes
Default	No default value
Property type	String
Usage	`Protocol://machinename:port/enterprisename/object manager/server name`. For Siebel 7.0.5 to 7.5x: `siebel://<IP ADDRESS>/siebel/SSEObjMgr_ENU/sebldev1`. For Siebel 7.8: `siebel://<IP ADDRESS>:2321/Sieb78/SSEObjMgr_enu`. For Siebel 8: `siebel://<IP ADDRESS>:2321/SBA_80/SSEObjMgr_enu`. The default port number is 2320. In the examples above (for Siebel versions 7.8 and 8), another port (2321) has been specified.
Globalized	Yes
Bidi supported	Yes

Disguise user data as "XXX" in log and trace files (HideConfidentialTrace)

This property specifies whether to replace user data in log and trace files with a string of X's to prevent unauthorized disclosure of potentially sensitive data.

Table 4. Disguise user data as "XXX" in log and trace files details

Required	No
Possible values	True False
Default	False
Property type	Boolean
Usage	If you set this property to `True`, the adapter replaces user data with a string of X's when writing to log and trace files. For inbound processing, the value of this property is set at the resource adapter level. For outbound processing, the value can be set both at the resource adapter level and the managed connection factory level. After you use the external service wizard to configure the adapter for outbound processing, you can set the resource adapter and managed connection factory properties independently. If you use the WebSphere Integration Developer assembly editor or the administrative console to reset these properties, ensure that you set them consistently, to prevent inconsistent marking of the log and trace entries.
Globalized	No
Bidi supported	No

Language code (LanguageCode)

This property specifies the language code used to log on to the Siebel server.

Table 5. Language code details

Required	Yes
Possible values	None
Default	ENU
Property type	String

Table 5. Language code details (continued)

Usage	If the system locale is English, the value for this property is ENU (English). It is used to log on to the Siebel server.
Globalized	No
Bidi supported	No

Maximum retries in case of system connection failure (connectionRetryLimit)

This property specifies the number of times the adapter attempts to reestablish a connection to the Siebel server, when the adapter encounters an error related to the outbound connection.

Table 6. Maximum retries in case of system connection failure details

Required	No
Possible values	Integers equal to and greater than zero
Default	0
Property type	Integer
Usage	When this property is set to: **0** • The adapter does not attempt to reconnect to the Siebel server, if an error occurs during startup or while establishing a connection. • The adapter does not verify if the connection to the Siebel server is valid when there is an outbound request during run time. **>0** • The adapter attempts to reconnect to the Siebel server for the specified number of times, if an error occurs during startup or while establishing a connection. • The adapter verifies if the connection to the Siebel server is valid when there is an outbound request during run time. If the connection is not valid, it is terminated and a new connection is created to process the request. If the adapter fails to establish a connection after trying for the specified number of times, a connection error is generated. If the adapter is successful in reestablishing the connection, the outbound operation is completed.
Globalized	No
Bidi supported	No

Password (Password)

This property specifies the password for the corresponding user name.

Table 7. Password details

Required	Yes
Default	No default value
Property type	String
Example	sadmin

Table 7. Password details (continued)

Usage	This property will display after clicking the advanced button on the connection properties window on the external service wizard. The password is saved in .import and .export files. This makes it possible for the adapter to connect to the Siebel application after it has been deployed. If a J2C Authentication Alias is used, then a password is not required.
Globalized	Yes
Bidi supported	Yes

Prefix (Prefix)

This property specifies the prefix for the business object name.

Table 8. Prefix details

Required	No
Default	No default value
Property type	String
Usage	The prefix string is attached to the front of the business object name.
Example	If you use the prefix, IBM, generate a business object for the EAI Siebel Adapter and the Insert method, and choose the integration object, Account (PRM ANI), the corresponding business object generated is: IBMEAISiebelAdapterInsertAccountU40PRMANIU41, where U40 and U41 are the unicode value replacements of (and).
Globalized	Yes
Bidi supported	Yes

Retry interval if connection fails (in milliseconds) (connectionRetryInterval)

This property specifies the time interval between attempts to reconnect to the Siebel server if the connection fails.

Table 9. Retry interval if connection failure details

Required	No
Possible values	Integers equal and greater than 0
Default	60000
Unit of measure	Milliseconds
Property type	Integer
Usage	This property is applicable only if the value of the property "Maximum retries in case of system connection failure (connectionRetryLimit)" on page 9 is set to greater than 0. When the adapter encounters an error while establishing a connection to the Siebel server, this property specifies the time interval the adapter waits between attempts to reestablish a connection.
Globalized	No
Bidi supported	No

Resonate support (ResonateSupport)

This property indicates whether the Siebel server uses resonate support.

Table 10. Resonate support details

Required	No
Possible values	True False
Default	True
Property type	Boolean
Usage	If the check box is selected, it will be set to true, and the adapter takes advantage of the load balancing feature to connect to the Siebel server more efficiently. If the check box is not selected, it will be set to false.
Globalized	No

Show error on empty result set (errorOnEmptyResultSet)

This property specifies if the adapter returns an empty business object or RecordNotFoundException when the result of RetreiveAll operation does not return any records, in case of a business object and specifies if the adapter generates an exception when a returned Siebel message is null, in case of a business service.

Table 11. Show error on empty result set details

Required	No
Possible values	For business object: True For business service: False
Property type	Boolean

Usage	For business object, when this property is set to:
	• True:
	  Throws a RecordNotFoundException if no records are found in RetreiveAll operation.
	• False:
	  Returns an empty business object if no records are found in RetreieveAll operation.
	
	For business service, when this property is set to:
	• True:
	  Throws a RecordNotFoundException if no records are returned.
	• False:
	  Returns null Siebel message if no records are returned.

Globalized	No
Bidi supported	No

User name (UserName)

This property specifies the user name that is used to log in to the Siebel application.

Table 12. User name details

Required	Yes

Table 12. User name details (continued)

Possible values	None
Default	No default value
Property type	String
Usage	This property will display after clicking the advanced button on the connection properties window on the external service wizard. The user name is saved in .import and .export files. This makes it possible for the adapter to connect to the Siebel application after it has been deployed. If a J2C Authentication Alias is used, then a password is not required.
Globalized	Yes
Bidi supported	Yes

View mode (ViewMode)

This property specifies the Siebel view mode and controls the data that can be retrieved and what actions can be performed on it.

Table 13. View mode details

Required	Yes
Default	Although the adapter supports values 1 - 9, the default value is 3.
Property type	Integer
Usage	The View mode property applies only to Siebel business objects and not to Siebel business services. When this property is used for Siebel business objects, the default is 3.
Examples	The adapter supports values 1 - 9. For example, 1 is Manager View, 2 is Personal View, and 3 is All View.
Globalized	No

Related tasks

"Setting deployment properties and generating the service " on page 1
After you select and configure business objects for your module, you can use the external service wizard to configure properties that the adapter uses to connect to Siebel Business Applications. Then, the wizard creates a new business integration module where all the artifacts and property values are saved.

Notices

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:

IBM World Trade Asia Corporation Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106-0032, 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:

IBM Corporation
Department 2Z4A/SOM1
294 Route 100
Somers, NY 10589-0100
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 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.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows: (c) (your company name) (year). Portions of

this code are derived from IBM Corp. Sample Programs. (c) Copyright IBM Corp.
enter the year or years. All rights reserved.

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

Programming interface information

Programming interface information, if provided, is intended to help you create
application software using this program.

General-use programming interfaces allow you to write application software that
obtain the services of this program's tools.

However, this information may also contain diagnosis, modification, and tuning
information. Diagnosis, modification and tuning information is provided to help
you debug your application software.

Warning:

Do not use this diagnosis, modification, and tuning information as a programming
interface because it is subject to change.

Trademarks and service marks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of
International Business Machines Corporation in the United States, other countries,
or both. These and other IBM trademarked terms are marked on their first
occurrence in this information with the appropriate symbol ($^{®}$ or $^{™}$), indicating US
registered or common law trademarks owned by IBM at the time this information
was published. Such trademarks may also be registered or common law
trademarks in other countries. A complete and current list of IBM trademarks is
available on the Web at http://www.ibm.com/legal/copytrade.shtml

Linux is a registered trademark of Linus Torvalds in the United States, other
countries, or both.

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

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

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

Other company, product, or service names may be trademarks or service marks of
others.

This product includes software developed by the Eclipse Project
(http://www.eclipse.org).

IBM ®

Printed in USA