

Oracle Insurance

**Insbridge Rating and
Underwriting**

SoftData User Guide

For Java

Release 3.13

December 2009

Copyright © 2005, 2009, Oracle and/or its affiliates. All rights reserved.

Oracle Insurance Insbridge Rating and Underwriting SoftData for Java User Guide

Release 3.13

Part # E16320-01

Library # E16330-01

December 2009

Primary Authors: Stephan Fields, Mary Elizabeth Wiger

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Where an Oracle offering includes third party content or software, we may be required to include related notices. For information on third party notices and the software and related documentation in connection with which they need to be included, please contact the attorney from the Development and Strategic Initiatives Legal Group that supports the development team for the Oracle offering. Contact information can be found on the Attorney Contact Chart.

The information contained in this document is for informational sharing purposes only and should be considered in your capacity as a customer advisory board member or pursuant to your beta trial agreement only. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described in this document remains at the sole discretion of Oracle.

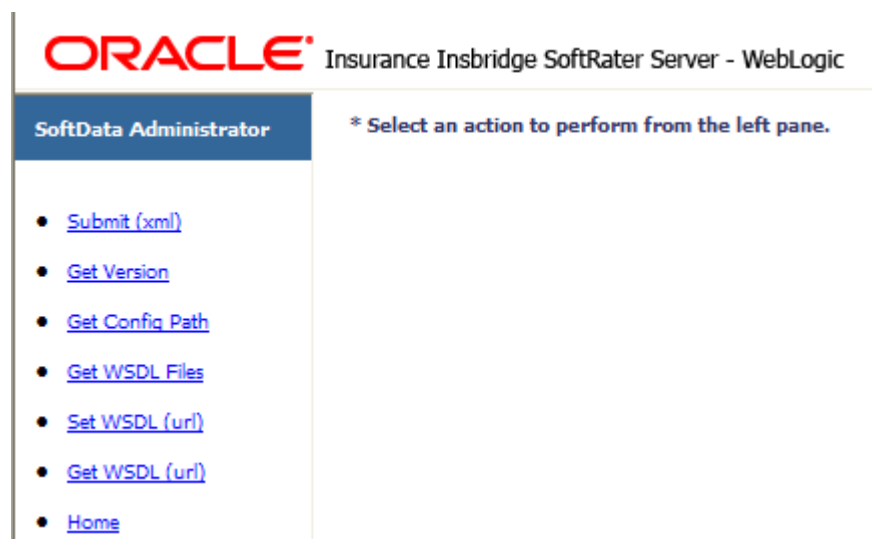
This document in any form, software or printed matter, contains proprietary information that is the exclusive property of Oracle. Your access to and use of this confidential material is subject to the terms and conditions of your Oracle Software License and Service Agreement, which has been executed and with which you agree to comply. This document and information contained herein may not be disclosed, copied, reproduced, or distributed to anyone outside Oracle without prior written consent of Oracle. This document is not part of your license agreement nor can it be incorporated into any contractual agreement with Oracle or its subsidiaries or affiliates.

CONTENTS

	PREFACE	III
	Audience	iii
	Related Documents	iii
	Conventions	iv
	System Requirements.....	iv
	Manual History	iv
CHAPTER 1		
	INTRODUCTION TO SOFTDATA	5
	Concept Diagram	5
	Software Integration	6
	Arguments	7
CHAPTER 2		
	INSBRIDGEDATA.XML REQUEST.FORMAT	8
	InsbridgeData.XML Overview	8
	Definitions	9
	Summary	10
CHAPTER 3		
	INSBRIDGEDATA.XML RESULT.FORMAT	11
	Definitions	12
	Summary	13
SUPPORT		
	CONTACTING SUPPORT	14
	TTY Access to Oracle Support Services	14
INDEX		
	INDEX	15

PREFACE

Welcome to the *Oracle Insurance Insbridge Rating and Underwriting SoftData for Java Guide*. This guide describes the usage and supported features of Oracle Insurance Insbridge Rating and Underwriting SoftData for Java (SoftData). SoftData is a feature of Oracle Insurance Insbridge Rating and Underwriting SoftRater Server (IBSS) that is used to test the SoftData engine. Soft Data is available from the IBSS **Menu Tree**.



This guide serves as a complementary document to the SoftRater for WebLogic Reference Guide, the SoftRater for WebSphere Reference Guide, and the SoftRater for Jboss Reference Guide. It provides a reference for developers to properly interact with the SoftData Engine either through SOAP, POST Web Services Interface (WSI) or Direct EJB Interfacing.

AUDIENCE

This guide is intended for system administrators who are tasked with administering SoftRater Server. A fundamental knowledge of SoftRater is required. Readers of this document should be familiar with XML, HTTP and the corresponding platforms; either WebLogic, WebSphere or Jboss.

RELATED DOCUMENTS

For more information, refer to the following Oracle resources:

The Oracle Insurance Insbridge Rating and Underwriting RateManager User Guide.

The Oracle Insurance Insbridge Rating and Underwriting SoftRater User Guide.

You can view these guides in-line at this address:

<http://www.oracle.com/technology/documentation/insurance.html>

CONVENTIONS

The following text conventions are used in this document:

Convention	Description
bold	Boldface type indicates graphical user interface elements associated with an action.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

SYSTEM REQUIREMENTS

For minimum operating system and hardware requirements, please see the Hardware Software requirements guide.

Manual History

New editions incorporate any updates issued since the previous edition.

Edition	Publication Number	Product Version	Publication Date	Comment
1 st Edition	P01-773-01	V 3.8.8	February 2008	
2 nd Edition	P01-773-02	V 3.11	February 2009	
3 rd Edition	P01-773-03	V 3.12	July 2009	
4 th Edition	P01-773-04	V 3.13	December 2009	

INTRODUCTION TO SOFTDATA

SoftData is a method designed to provide the maximum amount of integration flexibility while maintaining a high level of operational efficiency for rules and rating applications. It allows an application to dynamically retrieve values from SoftRater Packages (SRPs) so that values do not have to be hard coded into an application.

For example, if you had a web-based application that allowed a consumer or agent to request a quote, SoftData calls could be used to fill in drop down text boxes with valid values. This allows the same application to be used across multiple states and carriers. It also prevents duplicate data entry, reducing the chance of making a costly mistake.

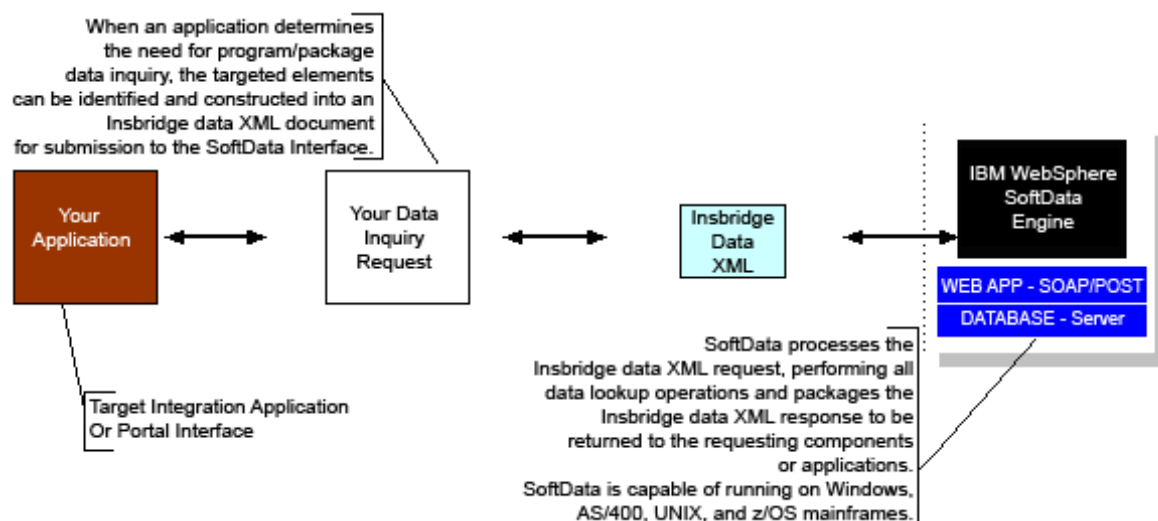
The core foundation is based on enumerated mappings to program based data elements built through the RateManager application. The schema model uses single character mapping node items, i.e. <m>, <q>, <i>, etc., which provide efficient document processing while gaining the system benefits of an extremely low XML document weight for small storage and faster transmission.

There are two parts to a SoftData call, the data request and the data result. For more information on these, see the following:

- [InsbridgeDataRequest.XML](#)
- [InsbridgeDataResult.XML](#)

Concept Diagram

The diagram below shows the high level interaction between the client application and the SoftData system. The SoftRater instance is responsible for all rating & underwriting processing but SoftData interface provides all the services for program data inquiry. The basic functionality of the SoftData system is demonstrated below. Input data is sent to the SoftData instance, processed and output data is returned.



SOFTWARE INTEGRATION

SoftData is an EJB component hosted in the Application Server and accessible through the following software integration methods.

1. HTTP SOAP Proxy – SoftRater Web Service – WSDL documents are included in the installation of the EJB component. From them, proxy classes can be generated to communicate with the installed SoftRater instance. The SoftData Web Service WSDL can be found on the Get WSDL Files link from the SoftData menu.

NOTE: *In IBSS, WebSphere will return different menu options than WebLogic or JBoss for the Get WSDL Files link.*

Also included is a sample SoftData SOAP proxy class instance along with the java file. They can be located in the installation directory under integration.

Whether sample SoftDataProxy class is used or a new one is generated from the WSDL interface, the integrating application must call the ([setEndPoint](#)) method to set the target hosting URL for the SoftRater instance. The target hosting URL may vary according to platform. Please refer to the SoftData Administrator page for the target hosting URL.

2. HTTP POST – A lite weight Web Service Interface JSP page is provided as an interface for clients with just web form POST abilities. The URL to the POST interface may vary according to platform. Please refer to the SoftData Administrator page for the URL to the POST interface.
3. EJB – Direct JNDI interfacing.

The EJB interfaces for creating service clients which are used to create SoftRater instances.

Typical JNDI Path – This value will be difference for each platform:

[ejb/com/insbridge/softdata/SoftDataHome](#) - WebSphere
[ejb.SoftDataEJBRemoteHome](#) - WebLogic
[IBSS/SoftDataEJB/local](#) - JBoss

Target JAR – [SoftRaterEJB.jar](#) is a part of the SoftRater.EAR file* that you downloaded. It contains the following standard EJB 2.0 interface files.

- [SoftData](#) – Remote interface for Enterprise Bean
- [SoftDataBean](#) – Bean implementation class for Enterprise Bean
- [SoftDataHome](#) – Home interface for Enterprise Bean

*The SoftRater.EAR file depends upon your selected platform:

[SR_WS_3.xx.xxx.EAR](#) - WebSphere
[SR_WL_3.xx.xxx.EAR](#) - WebLogic
[JBIBSS.EAR](#) - Jboss.

Where xx_xxx is the version number.

Interface Example:

```
package com.insbridge.softdata;

import java.rmi.RemoteException;

/**
 * Remote interface for Enterprise Bean: SoftRater
 */
public interface SoftData extends javax.ejb.EJBObject
{
    public String GetMapData (          final String XMLInput,
                                     final String TargetEnvironment
                                )

    throws RemoteException;

    public void ResetConfigInfo() throws RemoteException;

    public String getDefaultPath() throws RemoteException;

    public String getVersion() throws RemoteException;

    public String QueryAvailableEnvironments() throws RemoteException;
}
```

Arguments

The SoftRater engine rating arguments control the handling of XML data out of the system. For optimal performance use the following options if possible for your rating integration.

- String XMLInput – InsbridgeData.XML (Request) document containing the target data program data and lookup variables to be inquired against.
- String TargetEnvironment – (Optional) – Name of the SoftRater datasource environment to which the request should be processed against. If not provided the default will be obtained from the required target program data in the InsbridgeData.XML (Request).

INSBRIDGEData.XML REQUEST.FORMAT

INSBRIDGEData.XML OVERVIEW

InsbridgeData.XML is designed to provide the maximum amount of integration flexibility while maintain a high level of operational efficiency for rules & rating applications. The core foundation is based on enumerated mappings to program based data elements built through the RateManager application. The schema model uses single character mapping nodes items i.e. "<m>,<q>,<i>, etc" which provides efficient document processing while gaining the system benefits of an extremely low XML document weight for small storage and faster transmission.

The following is an example of an InsbridgeData request XML document:

Example:

```
<ibdoc>
  <datarequest lob="1" env_def="">
    <program parent_id="600" datastore_id="600" id="35" ver="2" datemask='mm/dd/yyyy'>
      <m i="35" r="2" n="Get BI Limits"/>
      <m i="135" r="1" p="25" c="25" n="Get BI factors">
        <q i="1" v="75025" o="" t='1' />
        <q i="6" v="Plano" o="" t='1' />
      </m>
    </program>
  </datarequest>
</ibdoc>
```

Definitions

ELEMENT	DATA TYPE	DESCRIPTION	REQUIRED
		Insbridge document namespace node	Y
<datarequest>		Data request node	Y
lob	Long	Line of Business identification number	Y
env_def	String	Insbridge SoftRater Explorer Environment Identifier	N
<program>		Program target node	Y
parent_id	Long	Insbridge public identification number for the target program	Y
datastore_id	Long	SoftRater Explorer managed subscriber's identification number	N
id	Long	Program identification number	Y
ver	Long	Program identification version number	Y
datemask	String	Date mask to use for any date queries	Y
		Mapped lookup variable node	N
i	Long	Lookup variable identification number	Y
r	Long	Lookup variable revision number	Y
p	Long	Lookup variable data row position to start querying new data from	N
c	Long	Lookup variable total count of data rows to be returned	N
n	Any	Lookup variable description	N
w	Int	Wildcard indicator	N
fq	String	List of qualifier filter	N
		Lookup variable qualification node	N
i	Long	Qualifier query identification number	Y
t	Long	Qualifier query type number: 0 – Integer, 1 – String, 2 – Decimal, or 3 – Date.	Y
v	Any	Qualifier query value	Y
o	String	Qualifier query operation selection	Y

SUMMARY

- To request data from multiple program data sources you can include 1 – N number of program nodes in the <datarequest> node.
- To request data from multiple mapped variables you can include 1 – N mapping nodes in the <program> target node.
- The Insbridge Published Program Summary Report, part of the SoftRater Package Listing Details View from Insbridge Framework Administrator, provides a list all available mapped variables for a program including the qualifiers needed to query data for the variable successfully. It will also have information on the qualifier and result variable data types and information on whether the mapped variable returns multiple results (RateManager-Linked Mapped Variables) for every item row.
- To request a dynamic revision lookup, the value of the revision attribute for that particular mapping item must be empty. SoftData would then retrieve the mapping item with the maximum revision number.
- Qualifier Types are enumerated as follows:
 - 0 = Integer
 - 1 = String
 - 2 = Decimal
 - 3 = Date
- Valid Qualifier Operators are entered as follows.

=	Equals
<	Less than
>	Greater than
<=	Less than or equal to
>=	Greater than or equal to
<>	Not equal to

INSBRIDGE DATA.XML RESULT.FORMAT

The following is an example of an InsbridgeData result XML document.

```
<ibdoc gen_date="2/9/2009 1:50:31 PM">
<dataresult>
  <program parent_id="600" id="35" ver="2">
    <m i="35" r="2" n="Get BI Limits" l="true">
      <d p="1">
        <v>100/200</v>
        <v>Our Standard Limit</v>
        <v>L100</v>
      </d>

      <d p="2">
        <v>200/300</v>
        <v>Optional Limit</v>
        <v>L200</v>
      </d>

      <d p="3">
        <v>300/400</v>
        <v>Highest Limit</v>
        <v>L300</v>
      </d>
    </m>
    <m i="135" r="2" p="50" c="25" n="Get BI factors">
      <d p="48">
        <v>0.001</v>
      </d>

      <d p="49">
        <v>0.235</v>
      </d>

      <d p="50">
        <v>0.906</v>
      </d>
    </m>
  </program>
</dataresult>
</ibdoc>
```

Definitions

ELEMENT	DATA TYPE	DESCRIPTION	OPTIONAL	ADDITIONAL INFORMATION
<ibdoc>		Insbridge document namespace node	N	
gen_date	Datetime	Document creation time stamp	N	
env_def	String	SoftRater Explorer Environment Identifier	N	
<dataresult>		Data result node	N	
<program>		Program selected node	N	
parent_id	Long	Insbridge public identification number for the selected program	N	
id	Long	Program identification number	N	
ver	Long	Program version number	N	
<m>		Mapped lookup variable node	Y	One node is returned for each corresponding node in the data request
i	Long	Lookup variable identification	N	
r	Short	Lookup variable identification revision number	N	
p	Long	Last data item row position retrieved	Y	
c	Long	Lookup variable total count of data nodes returned	Y	
n	Any	Lookup variable description request from the input	Y	
l	Boolean	Lookup variable flag indicating if the result contains linked results	N	
<d>		Data node	Y	One node is returned for each row returned
p	Long	Data row position indicator	N	
<v>	Any	Value node (Multiple will be returned for linked mapped variables)	N	One node is returned for each variable
<q>	Any	Lookup variable qualification node	N	One node is returned for each qualifier

SUMMARY

- For each target program node there will be one selected program node supplied in the <dataresult> results node. Each <program> will contain all queried mapped variables and data for that program.
- Mapped lookup variables nodes with the linked variable flag “l=true” will contain 1 – N value nodes <v> for each data <d> row node returned. The values in the <v> nodes are assigned respective to the order determined during variable setup in (RateManager-Linked Mapped Variables) and listed in the Insbridge Published Program Summary Report.

CONTACTING SUPPORT

If you need assistance with an Oracle Insurance Insbridge Rating and Underwriting System product, please log a Service Request using My Oracle Support at <https://support.oracle.com/>.

Address any additional inquiries to:

Oracle Corporation
World Headquarters
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Worldwide Inquiries:
Phone: +1.650.506.7000
Fax: +1.650.506.7200
oracle.com

TTY ACCESS TO ORACLE SUPPORT SERVICES

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, seven days a week. For TTY support, call 800.446.2398.

INDEX

<

- <d>
 - Requirements Table, 12
- <datarequest>
 - Requirements Table, 9
- <dataresult>
 - Requirements Table, 12
- <ibdoc>
 - Requirements Table, 9, 12
- <m>
 - Requirements Table, 9, 12
- <program>
 - Requirements Table, 9, 12
- <q>
 - Requirements Table, 9, 12
- <v>
 - Requirements Table, 12

D

- Data Request, 5
- Data Results, 5
- Definition SoftData for WebSphere, iii

E

- Edition Notice, 2
- Example

SoftData, 5

M

- Mapping Node Items, 5

O

- Overview
 - SoftData, 5

Q

- Qualifier Operators
 - Valid, 10

S

- SoftData
 - Example, 5
 - Overview, 5
 - Test Engine, iii
- SoftData for WebSphere Definition, iii

T

- Test
 - SoftData Engine, iii