

Oracle Insurance

**Insbridge Enterprise
Rating**

SoftData User Guide

For Windows

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PREFACE

Welcome to the *Oracle Insurance Insbridge Enterprise Rating SoftData for Windows Guide*. This guide describes the usage and supported features of Oracle Insurance Insbridge Enterprise Rating SoftData (SoftData). SoftData is a feature of Oracle Insurance Insbridge Enterprise Rating Framework Administrator (IBFA) that allows you to retrieve values dynamically from SoftRater Packages. Soft Data for Windows is available from the IBFA menu tree.



This guide serves as a supplemental document to the Insbridge Framework Administrator Guide. It provides a reference for developers to properly interact with the SoftData Engine.

AUDIENCE

This guide is intended for system administrators who are tasked with administering RateManager. A fundamental knowledge of RateManager and SoftRater is required. Readers of this document should be familiar with Insbridge XML.

RELATED DOCUMENTS

For more information, refer to the following Oracle resources:

- The Oracle Insurance Insbridge Enterprise Rating RateManager User Guide.
- The Oracle Insurance Insbridge Enterprise Rating SoftRater User Guide.
- You can view these guides on-line at this address:

<http://www.oracle.com/technetwork/documentation/insurance-097481.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.
Monospace	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 Insbridge Enterprise Rating System Operating Environments for Hardware and Software

Manual History

New editions incorporate any updates issued since the previous edition.

Edition	Publication Number	Product Version	Publication Date	Comment
1 st Edition	P01-725-01	V 3.5	November 2005	
2 nd Edition	P01-725-02	V 3.5	June 2006	Update
3 rd Edition	P01-725-03	V 3.6	June 2006	Update Version
4 th Edition	P01-725-04	V 3.7	December 2006	Update Version
5 th Edition	P01-725-05	V 3.8	July 2007	Update Version
6 th Edition	P01-725-06	V 3.8.3	October 2007	Update Version
7 th Edition	P01-725-07	V 3.8.5	November 2007	Update Version
8 th Edition	P01-725-08	V 3.8.7	January 2008	Update Version
9 th Edition	P01-725-09	V 3.8.8	March 2008	Update Version
10 th Edition	P01-725-10	V 3.9	May 2008	Update Version
11 th Edition	P01-725-11	V 3.10	September 2008	Update Version
12 th Edition	P01-725-12	V 3.11	December 2008	Update Version
13 th Edition	P01-725-13	V 3.12	July 2009	Update Version
14 th Edition	P01-725-14	V 3.13	December 2009	Update Version
15 th Edition	P01-725-15	R 4.0	April 2010	Update Release
16 th Edition	P01-725-16	R 4.0.1	August 2010	Update Release
17 th Edition	P01-725-17	R 4.1	December 2010	Update Release
18 th Edition	P01-725-18	R 4.5	May 2011	Update Release

19 th Edition	P01-725-19	R 4.5.1	September 2011	Update Release
20 th Edition	P01-725-20	R 4.6	May 2012	Update Release
21 st Edition	P01-725-21	R 4.6.1	November 2012	Update Release
22 nd Edition	P01-725-22	R 4.7	September 2013	Update Release
23 rd Edition	P01-725-23	R 4.8	August 2014	Update Release
24 th Edition	P01-725-24	R 4.9	December 2014	Update Release
25 th Edition	P01-725-25	R 5.0.1	August 2015	Update Release
26 th Edition	P01-725-26	R 5.1	December 2015	Update Release
27 th Edition	P01-725-27	R 5.1.1	March 2016	Update Release
28 th Edition	P01-725-28	R 5.2	July 2016	Update Release
29 th Edition	P01-726-29	R 5.4	January 2017	Update Release
30 th Edition	P01-726-30	R 5.5	September 2017	Update Release

SoftData Announcement

SoftData for Windows uses SoftData Version 1. SoftData Version 2 is a feature of Oracle Insurance Insbridge Enterprise Rating SoftRater Server (IBSS) that allows for values to be retrieved dynamically from SoftRater Packages and has expanded features such as, grouping and default values. SoftData Version 2 is only for Java environments only and will not be incorporated in to IBFA.

Moving forward enhancements may be added to SoftData Version 2 and may not be incorporated in SoftData Version 1. Bug fixes will still be addressed for SoftData Version 1.

Chapter 1

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.

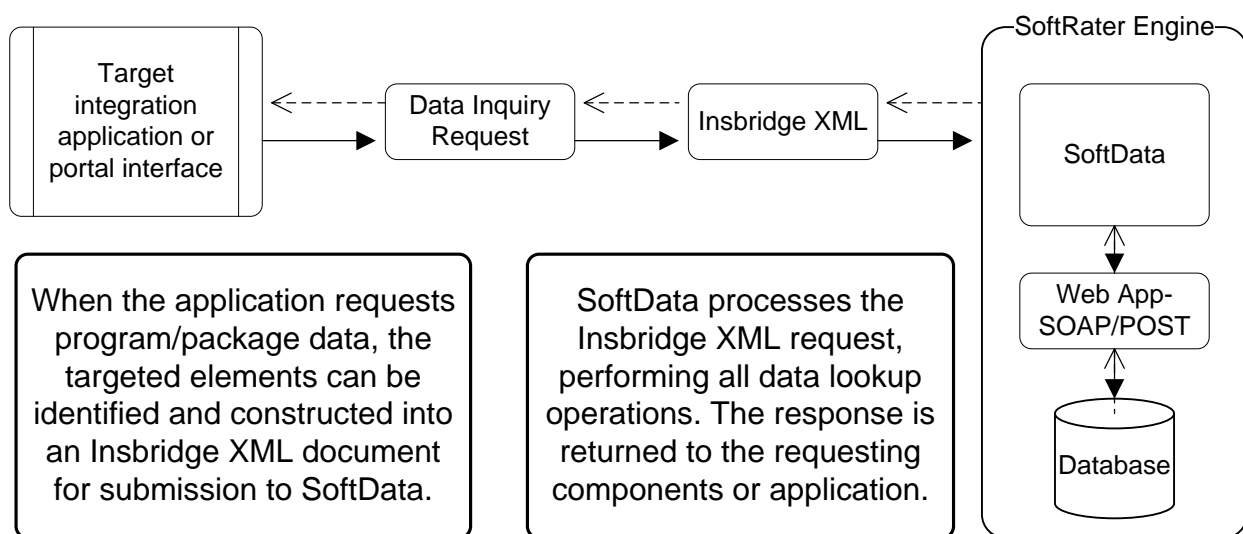
The core foundation is based on enumerated mappings to program based data elements built through the RateManager application. The schema model uses single character mapping node items, i.e. <m>, <q>, <i>, etc., which provide efficient document processing while gaining the system benefits of an extremely 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](#)
- [InsbridgeDataResults.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 and 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.



The SoftRater Web Service WSDL should be located at the following URL.

<http://<yourserver>/ibfa/connectors/softdata.asmx?WSDL>

Sorting Results

In previous releases, SoftData results could not be sorted in ascending or descending order. This meant that when SoftData results populated outside application lists for example, the results may have been presented to users in a way that forced them to scroll for the option they wanted. In addition to being inconvenient, it could slow down application completion time and is counter intuitive to how most users select options.

Sorting has been added to SoftData. Sorting allows for SoftData results to be returned in either ascending or descending order by criteria that you select. For example, if you have a table with city, county, and territory code, you can have SoftData results returned by any one of those three options in ascending or descending order.

Results can be sorted by a specified column either in ascending or descending order. To sort, a qc attribute and an sc attribute must be added to the m node. A qc attribute is required only if the variable's qualifier count is larger than 10.

The sc attribute is where you specify the column that is to be used for sorting.

Format for the sc attribute is: column # | data type | ascending or descending

- Column # can be 0 - 50. 0 for value column; 1 – 50 for qualifiers
- The data type of the column. 0 – Integer, 1 – String, 2 – Decimal, or 3 – Date.
- How the sort is to be done. Ascending = 0 and Descending = 1

The entries are separated by a vertical bar (|).

For example: sc="2 | 2 | 0"

Sorting by multiple columns can be done. The format for each is separated by a comma (,). The first sorting rule is met, and then the second will be met and so on.

For example: sc="2 | 2 | 0, 7|1|1"

The qc attribute defines the total number of qualifiers. For example qc="12"

Sort and paging are mutually exclusive.

The sorting attribute should be used alone. There may be conflicts with other attributes.

Sorting Example

Example of a variable with 12 qualifiers sorting by column number 2, a City Name with data type String, in ascending order:

<ibdoc>

```

<datarequest project_id="3" env_def="IBSR_DB2">
  <program parent_id="8659" id="623458646" ver="6" datemask='yyyy/mm/dd'>
    <m i="59" r="1" product_id="1" n="Territory Code" qc="12" sc="2 | 1 | 0" >
    </m>
  </program>
</datarequest>
</ibdoc>

```

When sorting linked variables by value, the first value is the one where the sorting is done. To sort by value, set the column # to 0.

SoftData Test Interface

This page will test SoftData request submittals. Click [here](#) to view the SoftData help document.

REQUEST INFORMATION

Select an XML file or enter text below:

```

<ibdoc>
<datarequest project_id="3" env_def="RM">
<program parent_id="8659" id="0" ver="1">
<m i="2" r="1" product_id="1" n="Option_Code" qc="1" sc="2 | 1 | 0">
</m>
</program>
</datarequest>

```

Sorting attribute

Results

Any results received from the Inbridge SoftData Engine request will be in the text area below.

RESULT INFORMATION

```

<ibdoc gen_date="2/3/2016 3:06 PM" timespan="0.008788" site_location="10.100.10.100"><dataresults lob="3"
env_def="rm"><program parent_id="8659" id="0" ver="1"><m i="2" r="1" n="Option_Code" l="false"><d
p="1"><v>10</v><v>3</v><q>Audio</q></d><d p="3"><v>5</v><v>7</v><q>Body</q></d><d
p="4"><v>12</v><v>2</v><q>GPS</q></d><d p="6"><v>5</v><v>8</v><q>Finance</q></d><d
p="9"><v>4</v><v>9</v><q>Leather</q></d><d p="5"><v>15</v><v>1</v><q>Satellite</q></d><d
p="10"><v>6</v><v>5</v><q>Seat</q></d><d p="8"><v>3</v><v>10</v><q>Security</q></d><d
p="7"><v>8</v><v>4</v><q>Video</q></d><d

```

Sorting by Multiple Columns Example

Example of a variable with 12 qualifiers sorting by column number 2, a City Name with data type String, in ascending order and by expiration date in ascending order:

```

<ibdoc>
  <datarequest project_id="3" env_def="IBSR_DB2">
    <program parent_id="8659" id="46" ver="6" datemask='yyyy/mm/dd'>
      <m i="59" r="1" product_id="1" n="Territory Code" qc="12" sc="2|1|0, 10|3|0">
      </m>
    </program>
  </datarequest>
</ibdoc>

```

Sorting Example By Value

Example of a linked variable with 15 qualifiers sorting by column number 4, a ZIP code with data type integer, in ascending order:

```
<ibdoc>
  <datarequest project_id="3" env_def="IBSR_DB1">
    <program parent_id="8659" id="52" ver="2" datemask='yyyy/mm/dd'>
      <m i="61" r="2" product_id="2" n="ZIP Code" qc="15" sc="0|0|0" >
      </m>
    </program>
  </datarequest>
</ibdoc>
```

Quick Summary

The basic required settings for specific data requests are.

- All requests must have project_id and parent_id.
- env_def can be left off when rating to the default environment. If rating to any other environment an env_def is required. If rating using web services, an env_def is required.
- Operators for global versioning report must in the same order as the program.
- Locals require: id #, ver#, table var#, revision#, product_id#
- Globals require: id=0, ver#, table var#, revision#, product_id#
- Universals require: id=0, ver#, table var#, revision#, product_id=0
- Global versioning report requires: id#, ver=0, table var#, revision=0, product_id#

In certain situations, more information may be required. For example, date masks may be required when querying for date values.

Chapter 2

INSBRIDGE.XML DATA REQUEST FORMAT

InsbridgeData.XML is designed to provide the maximum amount of integration flexibility while maintaining a high level of operational efficiency for rules and 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” that provides efficient document processing while gaining the system benefits of an extremely low XML document weight for small storage and faster transmission.

InsbridgeDataRequest.XML is the format in which requests are sent to SoftData. The table below outlines the nodes and attributes and whether or not they are required.

ELEMENT	DATA TYPE	DESCRIPTION	REQUIRED
<ibdoc>		Insbridge document namespace node. This is the requesting server, not the responding server.	Y
<datarequest>		Data request node	Y
project_id	Long	The project identification number	Y
env_def	String	SoftRater Explorer environment identifier. If no environment is defined, the default environment is used.	N
<program>		Program target node	Y
parent_id	Long	Your company’s subscriber ID	Y
datastore_id	Long	SoftRater Explorer managed subscriber’s identification number – this is rarely used and not required.	N
id	Long	Program identification number. Global = 0 Universal = 0	Y
ver	Long	Program version number. Global = 0 Universal = 0 If the program version specified is not found, the variable revision is used.	Y
datemask	String	Date mask to use for any date queries	Y
<m>		Table lookup variable node	N
i	Long	Lookup variable identification number	Y
r	Short	Lookup variable revision number NOTE: Leaving this field may result in unexpected results. Only local values may be returned.	Y
product_id	Long	The product identification number. Universal = 0	Y
p	Long	Lookup variable for the data row position to start querying new data	N

c	Long	Lookup variable total count of data rows to be returned	N
n	Any	Lookup variable description	N
empty_qual	Long	Returns empty fields. The default is 0. 0=DO NOT return empty fields. 1=Return empty fields This is an optional field. Results are turned to the highest 10 value. For example, if there are 8 qualifiers then 10 values are showed. The 8 qualifiers and then 2 empty fields. 25 qualifiers shows 30, 41 shows 50.	N
sc	Long	Sort columns either ascending or descending. Specify the column that is to be used for sorting. The data type of the column and how the sort is to be done. The entries are separated by a vertical bar ().	N
qc	Long	Total number of qualifiers. This field is required if there are more than 10 qualifiers or sorting is to be done.	N
<q>		Lookup variable qualification node	N
i	Long	Qualifier identification number	Y
t	Long	Qualifier query type number: 0 – Integer, 1 – String, 2 – Decimal, or 3 – Date.	Y
v	Any	Qualifier value	Y
o	String	Qualifier operation selection	Y
w	Int	Wildcard indicator. 1=true	N

Figure 1 InsbridgeDataRequest.XML Table

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

Example

```

<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="1" ver="4" datemask='mm/dd/yyyy'>
      <m i="10" r="1" product_id="101" n="BI_Limit_per_Occurrence"/>
      <m i="10" r="1" p="28" c="10" product_id="101" n="BI_Limit_Factor">
        <q i="2" t="0" v="75287" o="="/>
        <q i="4" t="1" v="Dallas" o="="/>
      </m>
    </program>
  </datarequest>
</ibdoc>

```

Figure 2 Example InsbridgeDataRequest.XML

Global Variable Data Request

To obtain a global variable data result, the program node requires that the id be set to zero (0) and version attribute be set to zero (0). On the table lookup node, the identification node must be set to the XML id found in RateManager, a revision ID and the product ID must be entered.

ELEMENT	DATA TYPE	DESCRIPTION	REQUIRED
<ibdoc>		Insbridge document namespace node. This is the requesting server, not the responding server.	Y
<datarequest>		Data request node	Y
project_id	Long	The project identification number	Y
env_def	String	SoftRater Explorer environment identifier	N
<program>		Program target node	Y
parent_id	Long	Your company's subscriber ID	Y
datastore_id	Long	SoftRater Explorer managed subscriber's identification number– this is rarely used and not required.	N
id	Long	Program identification number must be set to 0. This indicates a global variable data request.	Y
ver	Long	Program version number must be 0. This indicates a global variable data request.	Y
datemask	String	Date mask to use for any date queries	Y
<m>		Table lookup variable node	N
i	Long	Lookup variable identification number.	Y
r	Short	Lookup variable revision number NOTE: Leaving this field may result in unexpected results. Only local values may be returned.	Y
product_id	Long	The product identification 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

empty_qual	Long	Returns empty fields. The default is 0. 0=DO NOT return empty fields. 1=Return empty fields This is an optional field. Results are turned to the highest 10 value. For example, 8 qualifiers shows 10 25 qualifiers shows 30, 41 shows 50.	N
sc	Long	Sort columns either ascending or descending. Specify the column that is to be used for sorting. The data type of the column and how the sort is to be done. The entries are separated by a vertical bar ().	N
qc	Long	Total number of qualifiers. This field is required if there are more than 10 qualifiers or sorting is to be done.	N
<q>		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
w	Int	Wildcard indicator. 1=true	N

Example

```

<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="0" ver="0" datemask='mm/dd/yyyy'>
      <m i="74" r="1" product_id="101" n="BI_Limit_per_Occurrence"/>
      <m i="74" r="1" p="28" c="10" product_id="101" n="BI_Limit_Factor">
        <q i="2" t="0" v="75287" o="="/>
        <q i="4" t="1" v="Dallas" o="="/>
      </m>
    </program>
  </datarequest>
</ibdoc>

```

Figure 3 Example Insbridge Global Data Request.XML

Universal Variable Data Request

To obtain a universal variable data result, the program node requires that the id be set to zero (0) and version attribute be set to zero (0). On the table lookup node, the identification node must be set to the XML id found in RateManager, a revision ID must be entered and the product ID must be set to zero (0).

ELEMENT	DATA TYPE	DESCRIPTION	REQUIRED
<ibdoc>		Insbridge document namespace node. This is the requesting server, not the responding server.	Y
<datarequest>		Data request node	Y
project_id	Long	The project identification number	Y
env_def	String	SoftRater Explorer environment identifier	N
<program>		Program target node	Y
parent_id	Long	Your company's subscriber ID	Y
datastore_id	Long	SoftRater Explorer managed subscriber's identification number– this is rarely used and not required.	N
id	Long	Program identification number must be set to 0. This indicates a universal variable data request.	Y
ver	Long	Program version number must be 0. This indicates a universal variable data request.	Y
datemask	String	Date mask to use for any date queries	Y
<m>		Table lookup variable node	N
i	Long	Lookup variable identification number.	Y
r	Short	Lookup variable revision number NOTE: Leaving this field may result in unexpected results. Only local values may be returned.	Y
product_id	Long	The product identification number must be set to zero (0). This indicates a universal variable data request.	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

empty_qual	Long	Returns empty fields. The default is 0. 0=DO NOT return empty fields. 1=Return empty fields This is an optional field. Results are turned to the highest 10 value. For example, 8 qualifiers shows 10 25 qualifiers shows 30, 41 shows 50.	N
sc	Long	Sort columns either ascending or descending. Specify the column that is to be used for sorting. The data type of the column and how the sort is to be done. The entries are separated by a vertical bar ().	N
qc	Long	Total number of qualifiers. This field is required if there are more than 10 qualifiers or sorting is to be done.	N
<q>		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
w	Int	Wildcard indicator. 1=true	N

Example

```

<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="0" ver="0" datemask='mm/dd/yyyy'>
      <m i="74" r="1" product_id="0" n="BI_Limit_per_Occurrence"/>
      <m i="74" r="1" p="28" c="10" product_id="0" n="BI_Limit_Factor">
        <q i="2" t="0" v="75287" o="="/>
        <q i="4" t="1" v="Dallas" o="="/>
      </m>
    </program>
  </datarequest>
</ibdoc>

```

Figure 4 Example Insbridge Universal Data Request.XML

Global Versioning for the Program

To obtain the global versioning for the program, the program node requires that the id be set to the program XML id found in RateManager and version attribute be set to zero (0). On the table lookup node, the identification node must be set to zero (0) and the product ID must be included.

Operators for global versioning report must in the same order as the program. For example, if your program uses the effective date to determine what program version should be run and the date values are listed as less than (q1) and greater than (q2). You need to list those values in the request as less than first and greater than second.

```
<ibdoc>
  <datarequest project_id="201" env_def="rm">
    <program parent_id="101" id="3" ver="0" datemask="mm/dd/yyyy">
      <m i="1" r="0" n="Program Versioning" product_id="201">
        <q i="1" v="08/01/2016" o="&lt;=" t="3" w="1"/>
        <q i="2" v="08/01/2016" o="&gt;=" t="3" />
      </m>
    </program>
  </datarequest>
</ibdoc>
```

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 table variables you can include 1 – N mapping nodes in the <program> target node.
- To request global variable data, the program node requires that the id and version attributes both be set to zero. On the table lookup node, the identification node must be set to the program XML id found in RateManager, the revision and the product id must be included.
- To request universal variable data, the program node requires that the id and version attributes both be set to zero. On the table lookup node, the product id must be set to zero and the identification node must be set to the program XML id found in RateManager and the revision must be included.
- The Insbridge Published Program Summary Report lists all available table variables for a program including the qualifiers needed to query data for the variable successfully. It also has information on the qualifier and result variable data types and information on whether the table variable returned multiple results (see the RateManager topic - Linked Variables) for every item row.
- Qualifier Types are enumerated as follows:
 - 0 = Integer
 - 1 = String
 - 2 = Float
 - 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

Environments

If no environment is specified, the default environment selected on the SoftRater Explorer subscriber environments will be used.

If submitting via web services, an environment must be specified in the request.

Chapter 3

INSBRIDGE.XML DATA RESULTS FORMAT

InsbridgeDataResults.XML is the format that results are received in from a data request. The table below shows the information returned.

ELEMENT	DATA TYPE	DESCRIPTION	ADDITIONAL INFORMATION
<ibdoc>		Insbridge document namespace node. This is the requesting server, not the responding server.	
gen_date	Datetime	Document creation time stamp	
timespan	String	Time to process the request	
site_location	String	The name of the physical server	
<dataresults>		Data result node	
project_id	Long	The project identification number	
env_def	String	SoftRater Explorer Environment Identifier	Optional element. If not specified, then the default is used.
<program>		Program selected node	
parent_id	Long	Your company's subscriber ID	
id	Long	Program identification number	
ver	Long	Program version number	
<m>		Table lookup variable node	One node is returned for each corresponding node in the data request
i	Long	Lookup variable identification number	
r	Short	Lookup variable identification revision number	
product_id	Long	The product identification number	
p	Long	Last data item row position retrieved	
c	Long	Lookup variable total count of data nodes returned	

n	Any	Lookup variable description – from the input request	
l	Boolean	Lookup variable flag indicating if the result contains linked results	
<d>		Data node	One node is returned for each row returned
p	Long	Data row position indicator	
<v>	Any	Value node (Multiples are returned for linked table variables)	One node is returned for each variable
<q>	Any	Lookup variable qualification node	One node is returned for each qualifier

Figure 5 InsbridgeDataResults.XML

An example data result is shown below.

Example

```
<ibdoc gen_date="2/10/2015 1:25:28 PM" timespan="0.0250000" site_location="DB003" xmlns="">
  <dataresults project_id="1" env_def=" SR_win">
    <program parent_id="8659" id="35" ver="2">
      <m i="10" r="1" n="BI_Limit_per_Occurrence" l="true" product_id="101">
        <d p="1">
          <v>100/200</v>
          <v>Our_Standard_Limit</v>
          <v>L100</v>
          <q>100</q>
        </d>
        <d p="2">
          <v>300/400</v>
          <v>Optional_Limit</v>
          <v>L200</v>
          <q>200</q>
        </d>
        <d p="3">
          <v>200/300</v>
          <v>Highest_Limit</v>
          <v>L300</v>
          <q>300</q>
        </d>
      </m>
      <m i="10" r="1" p="28" c="10" n="BI_Limit_Factor" product_id="101">
        <d p="1">
          <v>0.001</v>
          <q>75025</q>
          <q>Plano</q>
          <q>Collin</q>
          <q>Texas</q>
        </d>
      </m>
    </program>
  </dataresults>
</ibdoc>
```

```

<d p="2">
  <v>0.235</v>
  <q>75025</q>
  <q>Plano</q>
  <q>Collin</q>
  <q>Texas</q>
</d>
<d p="3">
  <v>0.906</v>
  <q>75025</q>
  <q>Plano</q>
  <q>Collin</q>
  <q>Texas</q>
</d>
</m>
</program>
</dataresults>
</ibdoc>

```

Figure 6 Example InsbridgeDataResults.XML

Table Variable Report

Program Name: AUTO GLOBAL
 Variable Revision: 1
 Variable Request ID: 10
 Working Category: Vehicle
 Limits: 500 Data Rows

Variables				CRITERIA					
BI Limit Factor	BI Coverage Type	BI Limit Code	BI Limit Per Occurrence	BI Limit Per Accident Occurrence	ZIP Code	City	County	State	
type: Decimal default: 1.0	type: String default: Our_Standard_Limit	type: String default: L100	type: String default: 100/200	type: String condition: [=]	type: Integer condition: [=]	type: String condition: [=]	type: String condition: [=]	type: String condition: [=]	
1	0.001	Our_Standard_Limit	L100	100/200	100	75025	Plano	Collin	Texas
2	0.235	Optional_Limit	L200	300/400	200	75025	Plano	Collin	Texas
3	0.906	Highest_Limit	L300	200/300	300	75025	Plano	Collin	Texas
4	0.012	Our_Standard_Limit	L100	100/200	100	75013	Allen	Collin	Texas
5	0.445	Optional_Limit	L200	300/400	200	75013	Allen	Collin	Texas
6	1.236	Highest_Limit	L300	200/300	300	75013	Allen	Collin	Texas
7	0.081	Our_Standard_Limit	L100	100/200	100	75023	Plano	Collin	Texas
8	0.245	Optional_Limit	L200	300/400	200	75023	Plano	Collin	Texas
9	0.905	Highest_Limit	L300	200/300	300	75023	Plano	Collin	Texas
10	0.081	Our_Standard_Limit	L100	100/200	100	75024	Plano	Collin	Texas
11	0.245	Optional_Limit	L200	300/400	200	75024	Plano	Collin	Texas
12	0.904	Highest_Limit	L300	200/300	300	75024	Plano	Collin	Texas
13	0.055	Our_Standard_Limit	L100	100/200	100	75025	Frisco	Collin	Texas
14	0.212	Optional_Limit	L200	300/400	200	75025	Frisco	Collin	Texas
15	0.908	Highest_Limit	L300	200/300	300	75025	Frisco	Collin	Texas
16	0.071	Our_Standard_Limit	L100	100/200	100	75074	Plano	Collin	Texas
17	0.231	Optional_Limit	L200	300/400	200	75074	Plano	Collin	Texas
18	0.937	Highest_Limit	L300	200/300	300	75074	Plano	Collin	Texas
19	0.061	Our_Standard_Limit	L100	100/200	100	75075	Plano	Collin	Texas
20	0.239	Optional_Limit	L200	300/400	200	75075	Plano	Collin	Texas
21	0.948	Highest_Limit	L300	200/300	300	75075	Plano	Collin	Texas

Figure 7 Table Variable Report on Queried Table

SUMMARY

- For each target program node there is one selected program node supplied in the <dataresults> node. Each <program> contains all queried table variables and data for that program.
- Table lookup variable nodes with the linked variable flag l=true 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/Table Variables) and listed in the Insbridge Published Program Summary Report.

Chapter 4

COMMON ERRORS

There are some common errors that may be returned with a request.

Unable to Validate Document against Schema

This error results from a required value not being submitted in the request.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="1" ver="4" datemask='mm/dd/yyyy'>
      <m i="10" r="1" n="BI_Limit_per_Occurrence" product_id="101"/>
      <m i="10" r="1" p="28" c="10" n="BI_Limit_Factor" product_id="101">
        <q i="2" v="75287" o="="/>
        <q i="4" v="Dallas" o="="/>
      </m>
    </program>
  </datarequest>
</ibdoc>
```

RETURNED

```
<ibdoc gen_date="3/29/2015 3:54 PM" timespan="0.015625" site_location="DB002">
  <dataresults project_id="1" env_def="rm">
    <program parent_id="8659" id="1" ver="4">
      <error>Unable to validate document against schema. Qualifier attributes or program
      attribute (datemask) not found.</error>
    </program>
  </dataresults>
</ibdoc>
```

In this example, the qualifier type ("t" value) was not submitted in the lookup variable qualification node. To correct the error in this example, a "t" value needs to be added:

```
<q i="2" t="0" v="75287" o="="/>
<q i="4" t="1" v="Dallas" o="="/>
```

Unexpected Token

This error results from an unexpected character or incorrect spacing being in the request. The character or spacing is non-compliant with the expected format and may appear in any line in the request. The character (token) and the location may be defined in the message. You may also receive this error for a carriage return at the end of the request.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="1" ver="4" datemask='mm/dd/yyyy'>
      <m i="10" r="1" n="BI_Limit_per_Occurrence" product_id="101"/>
      <m i="10" r="1" p="28" c="10" n="BI_Limit_Factor" product_id="101">
        <q i="2" t="0" v="75287" o="="/>
        <q i="4" t="1" v="Dallas" o="="/>
      </m>
    </program>
  </datarequest>
</ibdoc>
```

RETURNED

```
<description>'" is an unexpected token. The expected token is '"' or '"'. Line 6, position 12.</description>
```

In this example, on line 6 position 12 a quotation mark has been rejected. The quotation mark is in an unacceptable font. To correct the error in this example, acceptable quotation marks must be used.

```
<q i="2" t="0" v="75287" o="="/>
<q i="4" t="1" v="Dallas" o="="/>
```

System Exception

This error results from a request being sent to a SoftRater for Java engine and the application server has not been started.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="QA">
    <program parent_id="8659" id="1" ver="3" datemask='mm/dd/yyyy'>
      <m i="1" r="1" n="BIBaseRate" product_id="101"/>
    </program>
  </datarequest>
</ibdoc>
```

RETURNED

```
<ibdoc gen_date="3/29/2015 4:38 PM" timespan="0.015625" site_location="DB003"><dataresults
project_id="1" env_def="SR_WEBLOGIC"><program parent_id="8659" id="1"
ver="3"><error>System.Exception: An error has occurred while communicating with the SoftData
for WebLogic Proxy : System.Net.WebException: The request failed with HTTP status 404: Not
Found.
</error></program></dataresults></ibdoc>
```

In this example, the request was sent to a WebLogic application server. WebLogic could not be found. To correct the error in this example, you must start the application server or request the system administrator to start the application server.

No Data

A request that does not contain any information or error message may be because the table variable is a global or the wrong table has been queried.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="1" ver="4" datemask='mm/dd/yyyy'>
      <m i="16" r="1" product_id="101"/>
    </program>
  </datarequest>
</ibdoc>
```

RETURNED

```
<ibdoc gen_date="3/29/2015 6:49 PM" timespan="0.000000" site_location="DB002">
  <dataresults project_id="1" env_def="rm">
    <program />
  </dataresults>
</ibdoc>
```

In this example, the request was for a table variable that did not exist in this program. To correct the error in this example, the table variable id needs to be verified.

```
<m i="6" r="1" product_id="101"/>
```

No Data for a Global Variable

A request for a global variable that does not contain any information or error message may be because the request is not formatted correctly. Global variables belong to all programs in the subline and cannot be identified by program version. To obtain a global variable data result, the program node requires that the id be set to the program XML id found in RateManager and version attribute be set to zero. On the table lookup node, the identification node must be set to 0.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="1" ver="2" datemask='mm/dd/yyyy'>
      <m i="0" r="1" product_id="101"/>
    </program>
  </datarequest>
</ibdoc>
```

RETURNED

```
<ibdoc gen_date="3/29/2015 6:49 PM" timespan="0.000000" site_location="DB002">
  <dataresults project_id="1" env_def="rm">
    <program />
  </dataresults>
</ibdoc>
```

In this example, the request was for a global table variable. To correct the error in this example, the version must be changed to 0.

```
<program parent_id="8659" id="0" ver="0" datemask='mm/dd/yyyy'>
```

Invalid Object Name

This error results from the table not being found for the subscriber and product or project.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="Production">
    <program parent_id="8647" id="29" ver="1" datemask='mm/dd/yyyy'>
      <m i="4" r="1" n="BI Territory Factor" product_id="101"/>
      <m i="4" r="1" p="5" c="2" n="PD Territory Code" product_id="101">
        <q i="1" t="0" v="8" o="="/>
        <q i="1" t="0" v="11" o="="/>
      </m>
    </program>
  </datarequest>
</ibdoc>
```

RETURNED

```
<ibdoc gen_date="3/29/2015 7:30 PM" timespan="0.078125" site_location="DB001"><dataresults
project_id="1" env_def="production"><program parent_id="8647" id="5"
ver="1"><error>System.Data.SqlClient.SqlException: Invalid object name 'DT18647'.
</error></program></dataresults></ibdoc>
```

In this example a request was made against the auto line in the “Production” environment. When the query was made, the requested table could not be found. To correct the error in this example, verify that the package has been loaded to the proper environment and that the correct subscriber and product or projects were used.

```
<program parent_id="8659" id="29" ver="1" datemask='mm/dd/yyyy'>
```

Object Reference Not Set to an Instance of an Object

This error commonly results from the environment or other data request elements not being found in the IBFA instance that is being queried.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="Production">
    <program parent_id="8647" id="5" ver="1" datemask='mm/dd/yyyy'>
      <m i="4" r="1" n="BI Territory Factor" product_id="101"/>
      <m i="4" r="1" p="5" c="2" n="PD Territory Code" product_id="101">
        <q i="1" t="0" v="8" o="="/>
      </m>
    </program>
  </datarequest>
</ibdoc>
```

```
        <q i="1" t="0" v="11" o="="/>
    </m>
</program>
</datarequest>
</ibdoc>
```

RETURNED

```
<error>System.NullReferenceException: Object reference not set to an instance of an object.
</error>
```

In this example a request was made against the auto line in the “Production” environment for subscriber 8647. When the query was made, the environment requested and the subscriber both could not be found. To correct the error in this example, verify that the package has been loaded to the proper environment and that the correct subscriber and project or product was used.

Bad Format

Similar to unexpected token, bad format errors occur when the submitted format does not meet the required format. The error message may give the line and position of the error.

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="0" ver="0" datemask='mm/dd/yyyy'>
      <m i="6" r="1" product_id="101">
    </program>
  </datarequest>
</ibdoc>
```

RETURNED

```
<description>The 'm' start tag on line 4 does not match the end tag of 'program'. Line 6, position 3.</description><app_description>The system is unable to execute a SoftData request at this time.</app_description>
```

In this example, an end slash is missing from the table lookup node. To correct the error in this example, a slash needs to be added.

```
<m i="6" r="1" product_id="101"/>
```

SUBMITTED

```
<ibdoc>
  <datarequest project_id="1" env_def="RM">
    <program parent_id="8659" id="1" ver="4" datemask='mm/dd/yyyy'>
      <m i="10" r="1" n="Bl_Limit_per_Occurrence" product_id="101"/>
      <m i="10" r="1" p="28" c="10" n="Bl_Limit_Factor" product_id="101">
        <q i="2" t="0" v="75287" o="="/>
        <q i="4" t="1" v="Dallas" o="="/>
      </m>
    </program>
```

```
</datarequest>  
</ibdoc>
```

RETURNED

```
<description>Name cannot begin with the "" character, hexadecimal value 0x22. Line 6, position  
10.</description><app_description>The system is unable to execute a SoftData request at this  
time.</app_description>
```

In this example, there is an extra quotation mark (**''**) in front of the t value. To correct this error in this example, remove the extra quotation mark

```
<q i="2" t="0" v="75287" o="="/>
```

CONTACTING SUPPORT

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

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