

Oracle Insurance Accounting Analyzer

Installation Guide

Release 8.1.1.2.0

September 2021

ORACLE
Financial Services

Oracle Insurance Accounting Analyzer Installation Guide

Copyright © 2022 Oracle and/or its affiliates. All rights reserved.

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

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are “commercial computer software” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware 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 that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about 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 unless otherwise set forth in an applicable agreement between you and Oracle. 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, except as set forth in an applicable agreement between you and Oracle.

For information on third party licenses, click [here](#).

Document Control

Version Number	Revision Date	Change Log
1	September 2021	Created the document with instructions for the installation of the Oracle Insurance Accounting Analyzer Release 8.1.1.2.0.

Table of Contents

1	Preface	5
1.1	Intended Audience	5
1.2	Related Documents	5
1.3	Conventions	6
1.4	Abbreviations	6
2	Introduction to Oracle Insurance Accounting Analyzer	9
2.1	Overview	9
2.2	Why Oracle Insurance Accounting Analyzer?	9
3	Oracle Insurance Accounting Analyzer (OFS IIA) Release 8.1.1.2.0	10
3.1	Pre Installation Requirements	10
3.2	Installing this Maintenance Level Release	10
3.3	Post Installation Configurations	12
3.3.1	<i>Mandatory Post Installation Patch</i>	12
3.3.2	<i>Editing Global Variables for OBIEE or OAS</i>	13
3.3.3	<i>Custom Variables</i>	15
3.3.4	<i>Deploying the Webserver using Tomcat</i>	15
3.3.5	<i>Update OBIEE URL</i>	15
3.3.6	<i>Customize the Repline Formula</i>	16
3.3.7	<i>Replacing Column Names in the Templates</i>	16
3.3.8	<i>Create the Business Unit Hierarchy</i>	16
3.4	Frequently Asked Questions (FAQs) and Error Dictionary	17
3.4.1	<i>Oracle Insurance Accounting Analyzer FAQ</i>	17

1 Preface

This section provides supporting information for the Oracle Insurance Accounting Analyzer Installation Guide.

You can find the latest copy of this document in the [OHC Documentation Library](#) which includes all the recent additions or revisions (if any) done to date.

Before you begin the installation, ensure that you have access to [My Oracle Support](#) with the required login credentials to quickly notify us of any issues at any stage.

Topics:

- [Intended Audience](#)
- [Related Documents](#)
- [Conventions](#)
- [Abbreviations](#)

1.1 Intended Audience

The Oracle Insurance Accounting Analyzer Installation Guide is intended for administrators, business users, strategists, data analysts, and implementation consultants who handle installing and maintaining the application pack components.

This document assumes that you have experience installing enterprise components and basic knowledge of the following:

- Oracle Insurance Accounting Analyzer Components
- OFSAA Architecture
- UNIX Commands
- Database Concepts
- The Web Server or Web Application Server

1.2 Related Documents

We strive to keep this document and all other related documents updated regularly. Visit the [OHC Documentation Library](#) to download the latest version available. The list of related documents is provided here:

- [OHC Documentation Library for Oracle Insurance Accounting Analyzer:](#)
 - For existing customers of Oracle Insurance Accounting Analyzer (IIA):
 - *OFS Insurance Accounting Analyzer 8.1.0.0.0 Installation Guide*
 - *OFS Insurance Accounting Analyzer 8.1.0.0.0 User Guide*
 - For new customers of Oracle Insurance Accounting Analyzer (IIA):
 - *OFS Insurance Accounting Analyzer 8.1.0.0.0 Release Notes*
 - *OFS Insurance Accounting Analyzer 8.1.0.0.0 Installation Guide*
 - *OFS Insurance Accounting Analyzer 8.1.0.0.0 User Guide*

- [OHC Documentation Library for OFS AAI Application Pack:](#)
 - *OFS Advanced Analytical Applications Infrastructure (OFS AAI) Application Pack Installation and Configuration Guide*
 - *OFS Analytical Applications Infrastructure User Guide*
 - *OFS Analytical Applications Infrastructure Administration Guide*
 - *Oracle Financial Services Analytical Applications Infrastructure Environment Check Utility Guide*
- **Additional Reference Documents:**
 - [OFSAA Licensing User Manual, Release 8.1.0.0.0](#)
 - [OFS Analytical Applications 8.1.0.0.0 Technology Matrix](#)
 - [OFS Analytical Applications Infrastructure Security Guide](#)
 - [Oracle Insurance Accounting Analyzer Security Guides Release 8.1.x](#)
 - [Oracle Financial Services Analytical Applications Infrastructure Cloning Guide](#)
 - [Oracle Insurance Accounting Analyzer Cloning Guide release 8.0.x](#)
 - [Oracle Insurance Accounting Analyzer Cloning Guide Release 8.1.x](#)
 - [OFSAAI FAQ Document](#)
 - Oracle Financial Services Data Foundation Technical Documents (MOS Doc ID: [2450653.1](#)). See the relevant version of the metadata sheet available in the MOS document (For CAS, see T2T Metadata Staging, and for SCD components, see SCD Metadata sheet).

1.3 Conventions

The following text conventions are used in this document.

Table 1: Document Conventions

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you need to update specific values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, file names, text that appears on the screen, or text that you enter.
Hyperlink	Hyperlink type indicates links to external websites and internal document links.

1.4 Abbreviations

The following table lists the abbreviations used in this document.

Table 2: Abbreviations

Abbreviation	Meaning
DBA	Database Administrator
DDL	Data Definition Language
DEFQ	Data Entry Forms and Queries
DML	Data Manipulation Language
EAR	Enterprise Archive
EJB	Enterprise JavaBean
ERM	Enterprise Resource Management
FTP	File Transfer Protocol
HDFS	Hadoop Distributed File System
HTTPS	Hypertext Transfer Protocol Secure
J2C	J2EE Connector
J2EE	Java 2 Enterprise Edition
JCE	Java Cryptography Extension
JDBC	Java Database Connectivity
JDK	Java Development Kit
JNDI	Java Naming and Directory Interface
JRE	Java Runtime Environment
JVM	Java Virtual Machine
LDAP	Lightweight Directory Access Protocol
LHS	Left Hand Side
MFA	Multi-Factor Authentication
MOS	My Oracle Support
OFSA	Oracle Financial Services Analytical Applications
OFSAI	Oracle Financial Services Analytical Application Infrastructure
OFSAAI	Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack
OFS IIA	Oracle Financial Services Insurance Accounting Analyzer
OHC	Oracle Help Center
OLAP	On-Line Analytical Processing
OLH	Oracle Loader for Hadoop
ORAAH	Oracle R Advanced Analytics for Hadoop
OS	Operating System
RAM	Random Access Memory
RDBMS	Relational Database Management System
RHEL	Red Hat Enterprise Linux

Abbreviation	Meaning
SFTP	Secure File Transfer Protocol
SID	System Identifier
SSL	Secure Sockets Layer
TNS	Transparent Network Substrate
URL	Uniform Resource Locator
VM	Virtual Machine
WAR	Web Archive
XML	Extensible Markup Language

2 Introduction to Oracle Insurance Accounting Analyzer

IFRS17 is an international norm that supersedes the current reporting standards, IFRS 4. The new standards provide the users of financial statements with a new perspective on the financial accounts of insurance companies.

2.1 Overview

Insurance companies need to identify the risks that arise from the insurance contracts along with the calculation of assets and liabilities. IFRS 4 was introduced in March 2004 and was intended to provide limited improvements to accounting for insurance contracts. IFRS 4 permitted companies to continue previous accounting practices for insurance contracts but did enhance the disclosure requirements.

IFRS17 standards, released in May 2017, supersedes the current reporting standards IFRS 4 on accounting for insurance contracts and has an effective date of 1 January 2021. The new standards provide users of financial statements with a new perspective of the financial accounts of insurance companies. IFRS 17 introduces an approach that tackles some challenges in accounting for insurance contracts currently addressed inconsistently when a company applies IFRS 4.

- IFRS 17 provides updated information about the obligations, risks, and performance of insurance contracts.
- Increases transparency in financial information reported by insurance companies, which will give investors and analysts more confidence in understanding the insurance industry.
- Introduces consistent accounting for all insurance contracts based on a Current Measurement Model.

2.2 Why Oracle Insurance Accounting Analyzer?

Oracle Insurance Accounting Analyzer application follows the Accounting standards diligently and enables insurance companies to adhere to the disclosure requirements as proposed under Accounting, along with an ability to compute Contractual Service Margin and Net Liabilities.

IFRS 17 requires Insurance companies to have consistent accounting standards for the Insurance contracts which ensure timely recognition of losses in the book of accounts. Insurance companies are required to identify and report the Fulfillment Cash Flows and Contractual Service Margin at every reporting date, based on the current market conditions. Oracle Insurance Accounting Analyzer Application helps the organizations in arriving at the insurance obligations (Insurance Contract liabilities reported on the balance sheet), using different methodologies for a set of portfolios, by assessing the net liability for every insurance contract.

3 Oracle Insurance Accounting Analyzer (OFS IIA) Release 8.1.1.2.0

Oracle Insurance Accounting Analyzer v8.1.1.2.0 Maintenance Level (ML) release includes all the bug fixes and minor enhancements since the previous release v8.1.1.1.0.

3.1 Pre Installation Requirements

The prerequisites are as follows:

- The minimum patch set level must be 8.1.1.0.0 or 8.1.1.1.0.
- AAI 8111 ML patch number **32487622**.
- Execute below query in the Config Schema:

```
update AAI_APP_B set V_VERSION='8.1.1.0.0' where  
V_APP_ID='OFS_IIA';
```

See the [OFS Analytical Applications Technology Matrix](#), for hardware and software requirements.

For more information on the OFS AAI requirements, see OFS Advanced Analytical Applications Infrastructure Application Pack 8.1.1.1.0 Release Notes in [OHC Documentation Library](#).

3.2 Installing this Maintenance Level Release

To install this ML release, follow these steps:

1. Login to [My Oracle Support](#) and search for **33300674** under the **Patches & Updates** tab.
2. Download the Erwin data model patch **33319558**.
3. Download the *OFSAA 8.1.1.2.0 IAA* archive file and copy it to your OFSAA server in Binary mode.

NOTE

There are different archive files for different operating systems such as Solaris, and RHEL/OEL.

4. Stop all the OFSAAI services. For more information, see the Start/Stop Infrastructure Services section in [Oracle Insurance IFRS 17 Pack Installation Guide Release 8.1.1.0.0](#).
5. Login to the OFSAA Server as a non-root user and navigate to the `$FIC_HOME` folder.
6. If you have to Unzip utility, skip to the next step or download the Unzip utility (OS-specific) and copy it in Binary mode to the directory that is included in your PATH variable, typically `$HOME` path or directory in which you have copied the 8.1.1.2.0 ML.
 - Unzip installer file using the command:

```
unzip -a <installer name>.zip
```

NOTE

If you notice an error message "*uncompress: not found [No such file or directory]*" when the package is not installed, contact your UNIX administrator.

7. Give EXECUTE permission to the utility by using the command:

```
chmod -R 751 <installer name>
```

8. Update the configuration file `params.conf` file present in the `OFS_IIA_PACK/appsLibConfig/conf` folder before triggering the installation. The update instructions are present in this file itself.

In case of customized Data Model upload, then update the `params.conf` file present in the `OFS_IIA_PACK/appsLibConfig/conf` folder accordingly.

9. Give EXECUTE permission to the ML patch installer script. Navigate to the `OFS_AAI` directory and execute the command:

```
chmod 755 OFSAAIUpdate.sh
```

10. Execute the following command:

```
./OFSAAIUpdate.sh
```

11. Verify if the ML is applied successfully by checking the log files generated in `OFS_IIA_PACK/OFS_IIA/logs` and `OFS_IIA_PACK/logs` directories. You can ignore ORA-00001 and ORA-02292 in the log file. In case of any other errors, contact [My Oracle Support](#).

12. After successful installation of the ML, perform the following steps:

- Clear the application cache. Navigate to the following path depending on the configured web application server and delete the files.
 - **Tomcat:** <Tomcat installation folder>/work/Catalina/localhost/<Application name>/org/apache/jsp
 - **Weblogic:** <Weblogic installation location>/domains/<Domain name>/servers/<Server name>/tmp/_WL_user/<Application name>
 - **Websphere:** <Websphere installation directory>/AppServer/profiles/<Profile name>/temp/<Node name>/server1/<Application name>/<.war file name>

13. Delete the existing EAR/WAR file available in the folder `$FIC_HOME/ficweb`.
14. Generate the application EAR/WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying the EAR/ WAR file, see [Create and Deploy the EAR or WAR Files](#) in OFS AAI Release 8.1.1.0.0 Installation and Configuration Guide.
15. Restart all the OFSAAI services. For more information, refer to the [Start/Stop Infrastructure Services](#) section in OFS AAI Release 8.1.1.0.0 Installation and Configuration Guide.
16. This step is applicable only if you are upgrading from release v8.1.1.0.0. After installing 8.1.1.2.0, all the custom calculation preference templates that were created before Release 8.1.1.2.0 will be in the *Draft* status. Make the required changes to the expressions and resubmit the templates for approval.

3.3 Post Installation Configurations

This section provides information on the post-installation configurations.

- [Editing Global Variables for OBIEE or OAS](#)
- [Custom Variables](#)
- [Deploying the Webserver Using Tomcat](#)

Post Installation Configurations if Upgrading from v8.1.1.0.0

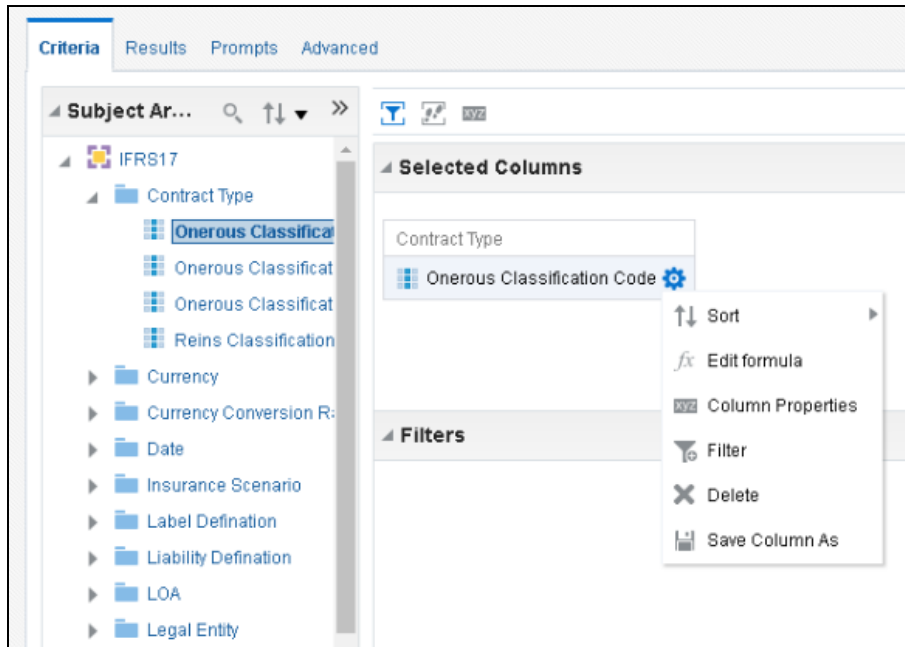
- [Replacing Column Names in the Templates](#)
- [Create the Business Unit Hierarchy](#)

3.3.1 Mandatory Post Installation Patch

You must download and install the mandatory patch **33663417**. Ensure that whenever any installation or upgrade or an incremental patch is applied, the mandatory patch **33663417** for Log4J must be reapplied.

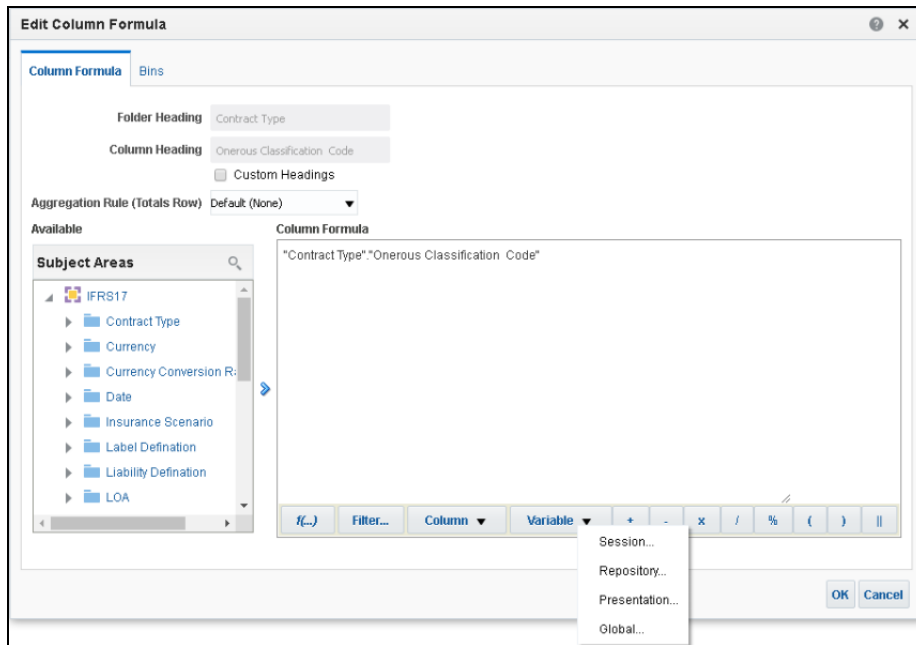
Install and apply the mandatory OFS IAA **33373646** patch.

Download and apply the AAI mandatory One-off Patches **33995565** and **34058716**.



8. Click **Edit** formula to open the **Edit Column Formula** window.

Figure 3: The Edit Column Formula



9. In the **Variables drop-down list**, select **Global...** to open the **Insert Global Variable** window.
10. Select the Global Variable that you want to edit, and then click **Edit Global Variable**
11. Edit a global variable with the following details:

Table 3: Required Values for the Global Variable

Field	Value to be added
Name	denomination
Type	Text
Value	case when '{@denomination}{In Thousand}' = 'In Thousand' then 1000 when '{@denomination}{In Thousand}' = 'In Million' then 1000000 else 1 end

This variable is used to divide all amount values by thousand or million, depending on the selected criteria.

12. Click **OK**, and then click **OK** again to save.

3.3.3 Custom Variables

If you have created Custom Direct Insurance and Reinsurance variables from the **Variable Maintenance** screen, then you must add the corresponding direct and Reinsurance variable columns in the following tables in the Erwin Data Model:

1. For Direct Insurance Variables, add the corresponding variable column into the following tables:
 - FSI_INS_CONTRACT_INPUT_DETAIL
 - FSI_INS_GROUP_INPUT_DETAIL
2. For Reinsurance Input Variables, add the corresponding variable column into the following tables:
 - FSI_RI_CONTRACT_INPUT_DETAIL
 - FSI_RI_GROUP_INPUT_DETAIL
3. Upload the Erwin Data Model.

3.3.4 Deploying the Webserver using Tomcat

Perform the following steps to deploy the Webserver by using Tomcat:

1. Configure the Apache Tomcat Server. For more information, see the **Configure the Apache Tomcat Server** section in [OFS Analytical Applications Infrastructure Installation and Configuration Guide](#).
2. After configuring the Apache Tomcat Server, create the Data Source. For more information, see the **Create Data Source** section in [OFS Analytical Applications Infrastructure Installation and Configuration Guide](#).

3.3.5 Update OBIEE URL

To access the respective Business Intelligence Analytics Application, you must update the OBIEE URL in the AAI_MENU_B table after the OBIEE environment is up and running. Use the following command:

```
UPDATE AAI_MENU_B
SET V_MENU_URL = '&obieeURL'
WHERE V_MENU_ID IN ('OFS_IIA_ANALYTICS')
/
```

 COMMIT

/

3.3.6 Customize the Repline Formula

If you need to create a custom formula for a Repline where you are using both Input and Output Variables in the formula, perform the below steps:

1. In the **DIM_INS_ACST_REP_LINE** table, create a separate row with the same Output Variable display name and use the Input Variable in the formula.
2. In the Repline name, column update the "MI" for the newly created row.
3. Make sure that the Reporting Flag is set to Y for this row and the variable sequence is the same as the Output Variable Repline Row.

3.3.7 Replacing Column Names in the Templates

For the column names in the templates to be replaced It is mandatory to execute the below file in the atomic schema and commit the changes:

```
<< installer
directory>>/OFS_IIA_PACK/OFS_IIA/bin/scripts/atomic/insert/iaa
_assumption_formula_migration.sql
```

3.3.8 Create the Business Unit Hierarchy

If any Level of Aggregation (LOA) is defined by enabling the Business Unit dimension, then it is mandatory to create a Business Unit Hierarchy where all the business units that are selected in the LOAs are at the leaf level. In **Dimension Management**, in the **Hierarchy Maintenance** section, create a hierarchy for the Business Unit Dimension. For more information on creating a hierarchy, see the **Hierarchy Maintenance** section in the [Oracle Financial Services Analytical Applications Infrastructure User Guide](#).

After the hierarchy is created, the below SQL statement must be executed in the atomic schema:

```
INSERT INTO FSI_M_IIA_AGGR_DIMENSION_DTLS (LEVEL_OF_AGGR_ID,
DIMENSION_ID, HIERARCHY_ID, DIM_MEMBER_ID)

SELECT DIM_MAP.LEVEL_OF_AGGR_ID, DIM_MAP.DIMENSION_ID,
DIM_MAP.HIERARCHY_ID, DIM_MAP.DIM_MEMBER_ID

FROM ( SELECT DISTINCT DM.LEVEL_OF_AGGR_ID, (SELECT DIMENSION_ID
FROM REV_DIMENSIONS_B WHERE MEMBER_B_TABLE_NAME =
'DIM_BUSINESS_UNIT_B' AND MEMBER_COL='BUSINESS_UNIT_ID')
DIMENSION_ID, &HIERARCHY_ID HIERARCHY_ID, DBUB.BUSINESS_UNIT_ID
DIM_MEMBER_ID

FROM FSI_IIA_AGGR_NON_HIER_DIM_MAP DM

INNER JOIN DIM_BUSINESS_UNIT DBU ON
DBU.N_BUSINESS_UNIT_SKEY = DM.DIM_CD AND DM.DYNA_NAME = 'BIUT'

INNER JOIN DIM_BUSINESS_UNIT_B DBUB ON
DBUB.BUSINESS_UNIT_CODE = DBU.V_BUSINESS_UNIT_CODE) DIM_MAP

WHERE NOT EXISTS (SELECT IAD.LEVEL_OF_AGGR_ID FROM
FSI_M_IIA_AGGR_DIMENSION_DTLS IAD WHERE IAD.LEVEL_OF_AGGR_ID =
DIM_MAP.LEVEL_OF_AGGR_ID AND IAD.DIMENSION_ID =
DIM_MAP.DIMENSION_ID AND IAD.DIM_MEMBER_ID = DIM_MAP.DIM_MEMBER_ID)
```


/

When prompted for the HIERARCHY_ID value, enter the ID of the Business Unit Hierarchy.

3.4 Frequently Asked Questions (FAQs) and Error Dictionary

For General FAQs and installation error-related information, see the following sections:

[Frequently Asked Questions \(FAQs\) and Error Dictionary](#) in the [OFS AAAI Installation and Configuration Guide](#).

3.4.1 Oracle Insurance Accounting Analyzer FAQ

How do I upgrade the Java version to JDK 11?

See the [Update the OFSAA 8.1.1.x Java 8 Instance to Java 11](#) section in the [OFS AAAI Installation and Configuration Guide](#).

OFSAA Support

Raise a Service Request (SR) in [My Oracle Support \(MOS\)](#) for queries related to the OFSAA applications.

Send Us Your Comments

Oracle welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, indicate the title and part number of the documentation along with the chapter/section/page number (if available) and contact the Oracle Support.

Before sending us your comments, you might like to ensure that you have the latest version of the document wherein any of your concerns have already been addressed. You can access My Oracle Support site that has all the revised/recently released documents.

