Oracle Insurance Performance Insight Pack

Installation and Configuration Guide

Release 8.1.1.0.0

Sep 2021

F41571-01

ORACLE
Financial Services

ORACLE

Oracle Insurance Performance Insight Pack Installation and Configuration Guide

Document Control

Version Number	Revision Date	Change Log
1.0	Jun-2021	Created the document with instructions for the installation of the OIPI Application Pack Release 8.1.1.0.0.

Table of Contents

1   Preface

This section provides information about the Oracle Insurance Performance Insight Pack (OIPI Pack) Installation and Configuration Guide.

You can find the latest copy of this document in the OHC Documentation Library which includes all the recent additions and 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
- How this Guide is Organized
- Related Documents
- Conventions
- Abbreviations

1.1   Intended Audience

The OIPI Pack Installation and Configuration Guide is intended for administrators and implementation consultants who are responsible for installing and maintaining the application pack components.

Anyone performing the installation is expected to be experienced in installing enterprise components and possess basic knowledge of the following:

- OIPI Pack components
- OFSAA architecture
- UNIX commands
- Database concepts
- Web server or web application server

1.2   How this Guide is Organized

The Installation Guide consists of the following sections:

- Complete Installation Checklist
- Pre-installation
- Installation
- Post-installation
- RPD and Catalog Deployment and Map View Configuration For OAS
- Frequently Asked Questions (FAQs) and Error Dictionary

1.3 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 the OIPI Release 8.1.1.0.0:

- Oracle Insurance Performance Insight Release Notes Release 8.1.1.0.0
- Oracle Insurance Performance Insight User Guide Release 8.1.1.0.0
- Oracle Insurance Performance Insight Security Guide Release 8.1.1.0.0
- Oracle Insurance Performance Insight Cloning Reference Guide Release 8.1.1.0.0

OHC Documentation Library for OFS AAAI Application Pack:

- OFS Analytical Applications Infrastructure Installation Guide Release 8.1.1.0.0
- OFS Analytical Applications Infrastructure User Guide Release 8.1.1.0.0
- OFS Analytical Applications Infrastructure Environment Check Utility Guide Release 8.1.x
- OFS Analytical Applications Infrastructure Application Pack Administration and Configuration Guide Release 8.1.x
- OFS AAAI Application Security Guide Release 8.1.x
- OFS Analytical Applications Infrastructure Cloning Guide Release 8.1.x
- OFSAA Licensing User Manual, Release 8.1.1.0.0

You can access the common document from the OHC Documentation Library:

- OFS Analytical Applications 8.1.1.0.0 Technology Matrix

1.4 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.
italic	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, file names, text that appears on the screen, or text that you enter.
Hyperlink	Hyperlink type indicates the links to external websites and internal document links.

1.5   Abbreviations

The following table lists the abbreviations used in this document:

Table 2: Abbreviations

Abbreviation	Meaning
AIX	Advanced Interactive eXecutive
BDP	Big Data Processing
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
OFSAA	Oracle Financial Services Analytical Applications
OFSAAI	Oracle Financial Services Analytical Application Infrastructure
OFSAAAI	Oracle Financial Services Advanced Analytical Applications Infrastructure Application Pack
OHC	Oracle Help Center
OLAP	On-Line Analytical Processing

Abbreviation	Meaning
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
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 About Oracle Financial Services Analytical Applications (OFSAA)

In today's turbulent markets, financial institutions require a better understanding of their risk-return, while strengthening competitive advantage and enhancing long-term customer value. Oracle Financial Services Analytical Applications (OFSAA) enable financial institutions to measure and meet risk-adjusted performance objectives, cultivate a risk management culture through transparency, lower the costs of compliance and regulation, and improve insight into customer behavior.

OFSAA uses industry-leading analytical methods, shared data models, and applications architecture to enable integrated risk management, performance management, customer insight, and compliance management. OFSAA actively incorporates risk into decision making, enables to achieve a consistent view of performance, promote a transparent risk management culture, and provide pervasive intelligence.

Oracle Financial Services Analytical Applications delivers a comprehensive, integrated suite of financial services analytical applications for both banking and insurance domains.

The following figure depicts the various application packs that are available across the OFSAA Banking and Insurance domains.

Figure 1: OFSAA Application Packs
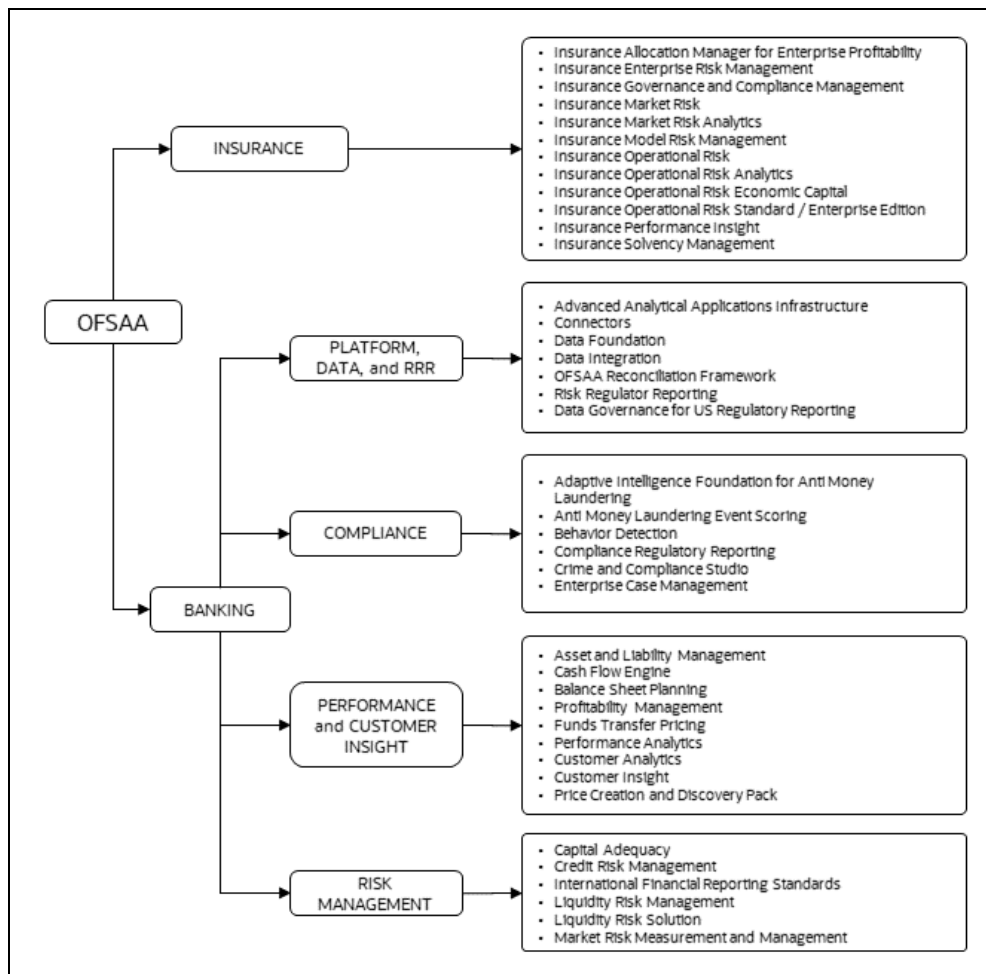
Topics:

- Oracle Financial Services Analytical Applications Infrastructure (OFS AAI)

- OFS Performance Analytics Applications Pack

2.1 Oracle Financial Services Analytical Applications Infrastructure (OFS AAI)

Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) powers the Oracle Financial Services Analytical Applications family of products to perform the processing, categorizing, selection, and manipulation of data and information required to analyze, understand and report on specific performance, risk, compliance, and customer insight issues by providing a strong foundation for the entire family of Oracle Financial Services Analytical Applications across the domains of Risk, Performance, Compliance and Customer Insight.

Topics:

- Components of OFSAA Infrastructure

- OFSAA Infrastructure High Availability

- Deployment Topology

2.1.1 Components of OFSAA Infrastructure

The OFSAA Infrastructure includes frameworks that operate on and with the Oracle Financial Services Analytical Applications Data Model and forms the array of components within the Infrastructure.

The OFSAA Infrastructure components/frameworks are installed as two layers; primarily, the metadata server and Infrastructure services run on one layer, while the UI and presentation logic run on the other. The UI and presentation layer are deployed on any of the supported J2EE Servers.

The following figure depicts the various frameworks and capabilities that make up the OFSAA Infrastructure.

Figure 2: Components of OFSAAI
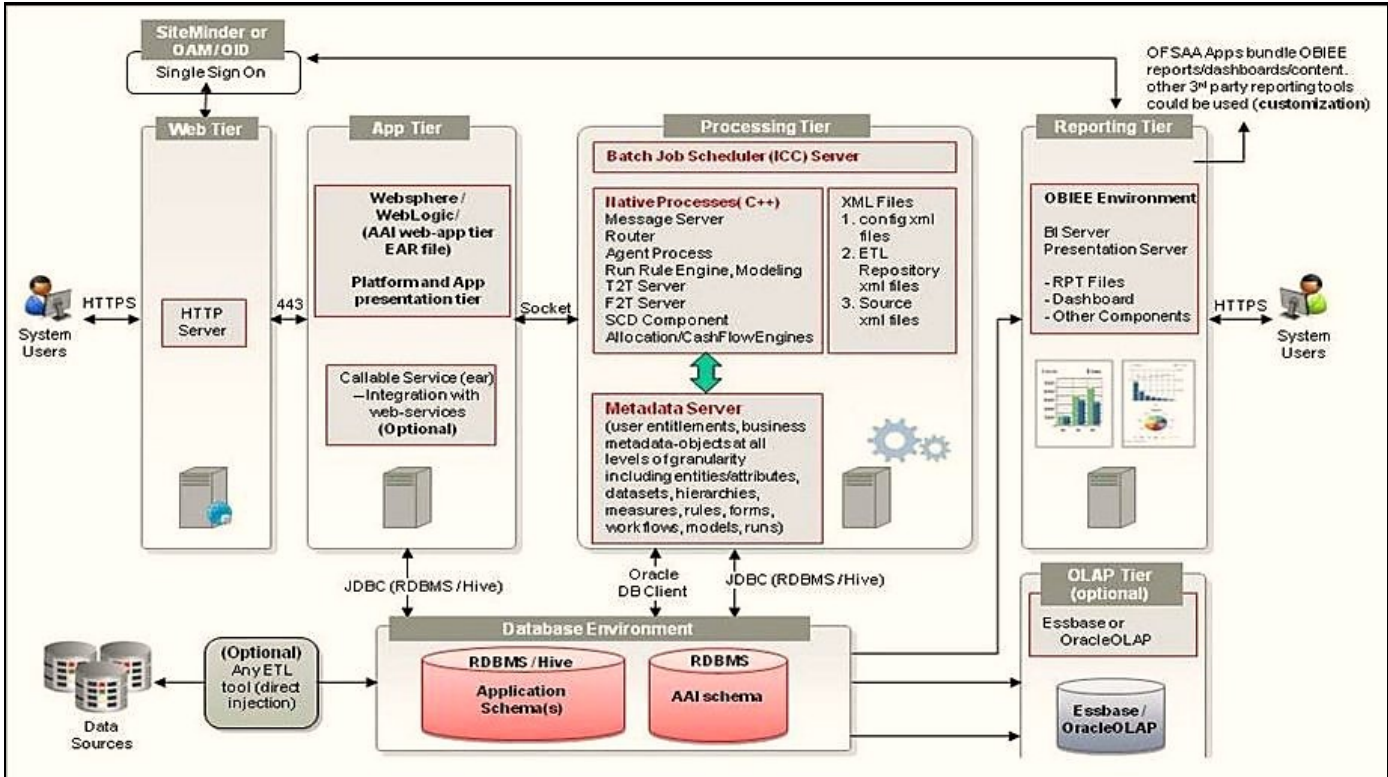
2.1.2 OFSAA Infrastructure High Availability

The current release of the OFSAA Infrastructure supports only the "Single Instance" installation for the Infrastructure components. However, the High Availability (HA) for the Database Server and/ or the Web application server clustering and deployment is supported in this release.

This release supports the Active-Passive model of implementation for OFSAAI components. For more information, see the Oracle Financial Services Analytical Applications Configuration for High Availability Best Practices Guide.

2.1.3 Deployment Topology

The following figure illustrates the deployment topology of OFSAA application packs.

Figure 3: Logical Architecture Implemented for OFSAA Application Packs
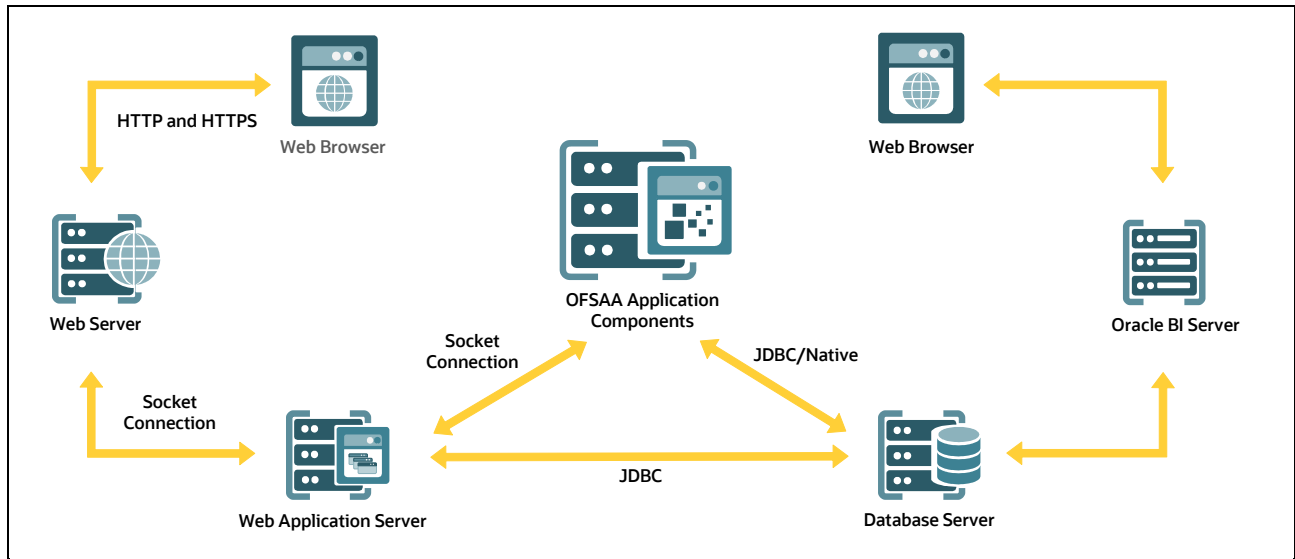
2.2 Oracle Insurance Performance Insight Pack

Oracle Insurance Performance Insigh Pack (OIPI Pack) provides integrated stress testing and modeling capabilities that you can readily apply across multiple risk areas enabling institutions to devise appropriate enterprise-wide and holistic risk and economic capital strategies.

OIPI Pack enables you to comply with regulatory requirements on stress testing, enables advanced customer and portfolio analytics, utilize multiple industry-standard techniques, test and model with complete data integrity.

OIPI Pack includes the following applications:

- **Financial Services Analytical Applications Infrastructure**: This application powers the Oracle Financial Services Analytical Applications family of products to perform the processing, categorizing, selection, and manipulation of data and information required to analyze, understand and report on specific performance, risk, compliance, and customer insight issues by providing a strong foundation for the entire family of Oracle Financial Services Analytical Applications across the domains of Risk, Performance, Compliance and Customer Insight.

- **Oracle Insurance Performance Insight (OIPI)**: This application is a comprehensive business intelligence system created exclusively for the insurance industry. OIPI provides a complete set of web-based analytical and reporting components that enables you to generate, view, analyze, distribute, electronically store, and retrieve critical reports. It provides tools for data integration and includes customizable, pre-built dashboards and reports, a reporting data model, and user-friendly functional subject areas for ad-hoc reporting. It enables you to actively plan, manage, and track key areas measuring organizational performance with pre-built reports, dashboards, and underlying data structures.

2.3 OFS AAI Extension Pack

The Oracle Financial Services Analytical Applications Infrastructure Extension (OFS AAIE) Pack adds a set of new advanced features for the 8.1.1.0.0 Release across OFSAA applications. This pack can be installed on an OFSAA instance having one or more OFSAA application packs.
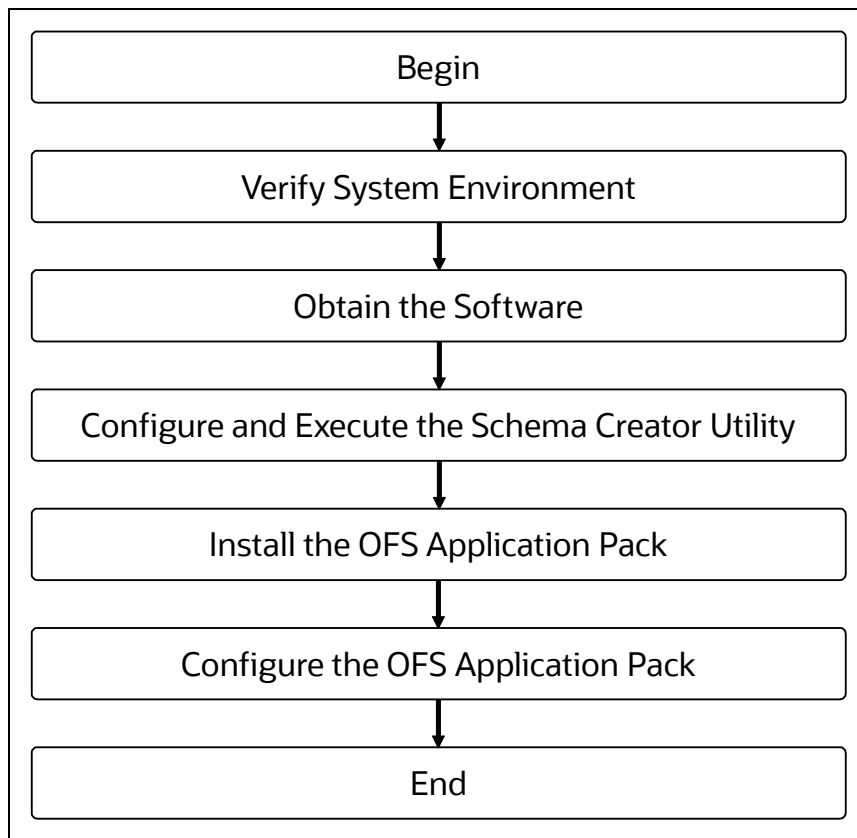
3 Complete Installation Checklist

For a successful installation, perform the steps listed in the Complete Installation Checklist. You can use this checklist to have a quick glance at everything that you will be doing to install this application. The link provided in each step takes you to a section either within this document or to another referenced document.

Table 3: Pre-installation Checklist

Sl. No.	Pre-installation Activity
1	Install all the prerequisite hardware and software given in the Tech Stack.
2	Verify the System Environment using the Environment Check Utility.
3	Configure the Database Instance settings.
4	Install and configure the web application server.
5	Configure the HTTP settings on the webserver.
6	Create the Installation, Download, and Metadata Repository Directories: • Installation directory • Temporary directory • Staging Area/Metadata Repository • Download directory
7	Configure the following Operating System and File System settings: • File Descriptor • Total number of processes • Port(s) • `.profile` file permissions • Add FTP/SFTP configuration for file transfer
8	Update the following Environment Settings required for the installation in the `.profile` file: • Java Settings • Oracle Database Server and Client Settings • Add TNS entries in the `tnsnames.ora` file • Oracle Essbase Settings • Time Zone Settings
9	Download the installer kit and erwin data models.
10	Perform prerequisites for installation.

Table 4: Installation Checklist

Sl. No.	Installation Activity
1	Extract the installer kit.
2	Configure the `OFS_IP_PACK.xml` file.

Sl. No.	Installation Activity
3	Configure the `OFS_IP_SCHEMA_IN.xml` file.
4	Execute the Schema Creator Utility in Offline, Online, or TCPS modes and verify the log file.
5	Configure the `OFSAAI_InstallConfig.xml` file.
6	Configure the `Silent.props` file.
7	Trigger the application installation.

Table 5: Post-installation Checklist

Sl. No.	Post-installation Activity
1	Verify the installation logs.
2	Back up the `SCHEMA_CREATOR.xml`, `OFS_IP_SCHEMA_OUTPUT.xml`, and `Silent.props` files.
3	Stop the OFSAA Infrastructure services.
4	Create and deploy EAR/WAR files.
5	Start the OFSAA Infrastructure services.
6	Configure the webserver.
7	Configure the Resource Reference in web application servers.
8	Configure the Work Manager in the Web Application Servers.
9	Access the OFSAA application.
10	OFSAA Landing Page
11	Configure the `excludeURLList.cfg` file.
12	Change the ICC batch ownership.
13	Create Application Users.
14	Map the Application User(s) to User Groups.
15	Set TDE and Data Redaction in OFSAAI.
16	Implement Data Protection in OFSAA.

Table 6: Additional Configuration

Sl. No.	Additional Configuration Activity
1	Add the FTP/SFTP configuration for file transfer.
2	Configure the Infrastructure Server Memory.
3	Retrieve the Patch Information
4	Change IP/Hostname, Ports, Deployed Paths of the OFSAA Instance.

Sl. No.	Additional Configuration Activity
5	Execute the OFSAAI setup information fetching tool.
6	Execute the Encryption Changer.
7	Configure the Infrastructure LDAP.
8	Configure and deploy the OFSAAI web services.
9	Enable the parallel execution of DML statements.
10	Configure the message details in the Forms Designer.
11	Clear the application cache.
12	Configure the password changes.
13	Configure the Java Virtual Machine.
14	Configure the internal service (Document Upload/Download).

4 Hardware and Software Requirements

This section describes the Operating Systems, Database, Web Servers, and Web Application Server versions, and other variants on which this release of the OIPI Pack is qualified.

Topics:

- Third-Party Licensing Information

- Verify System Environment

> **NOTE** OIPI Pack installation can be performed on both Virtual and Physical servers.

See the OFSAA Technology Matrix for the hardware and software required to install OIPI 8.1.1.0.0.

The following software combinations are recommended.

Table 7: Recommended Software Combinations

Operating System	Database	Web Application Server	Web Server
Oracle Linux	Oracle Database	Oracle WebLogic Server/ Apache Tomcat Server/ IBM WebSphere Application Server	Oracle HTTP Server/ Apache HTTP Server/ IBM HTTP Server
Oracle Solaris	Oracle Database	Oracle WebLogic Server/ Apache Tomcat Server	Oracle HTTP Server/ Apache HTTP Server

4.1 Third-party Licensing Information

For details on the third-party software tools used in OIPIPack, see the OFSAA Licensing Information User Manual Release 8.1.0.0.0.

4.2 Verify System Environment

To verify that your system environment meets the minimum requirements for the installation, a Pre-Install Check Utility is available within the Install Kit archive file. This utility notifies you if any requirements are not met.

It can also be obtained separately by contacting Oracle Support.

Though the system environment verification is an integral and automated part of the installation of this software product, Oracle strongly recommends running this utility before beginning the installation as part of your organization's "Installation Readiness Verification Process".

For more details on download and usage of this utility, see the Oracle Financial Services Analytical Applications Infrastructure Environment Check Utility Guide.

5   Pre-installation

This section contains the pre-installation requirements to install the OIPI Pack.

Topics:

- Pre-installation Checklist
- Hardware and Software Requirements and Specifications
- Preparing for Installation
- Installation Overview
- Installation and Upgrade Scenarios
- Compatibility Matrix

5.1   Pre-installation Checklist

You can use this checklist to have a quick glance at everything that you will be doing before installing this application. The link provided in each step takes you to a section either within this document or to another referenced document.

Table 8: Pre-installation Checklist

Sl. No.	Pre-installation Activity
1	Install all the prerequisite hardware and software given in the Tech Stack.
2	Verify the System Environment using the Environment Check Utility.
3	Configure the Database Instance settings.
4	Install and configure the web application server.
5	Configure the HTTP settings on the webserver.
6	Create the Installation, Download, and Metadata Repository Directories: • Installation directory • Temporary directory • Staging Area/Metadata Repository • Download directory
7	Configure the following Operating System and File System settings: • File Descriptor • Total number of processes • Port(s) • `.profile` file permissions • Add FTP/SFTP configuration for file transfer

Sl. No.	Pre-installation Activity
8	Update the following Environment Settings required for the installation in the `.profile` file: • Java Settings • Oracle Database Server and Client Settings • Add TNS entries in the `tnsnames.ora` file • Oracle Essbase Settings • Time Zone Settings
9	Download the installer kit and erwin data models.
10	Perform prerequisites for installation.

5.2   Preparing for Installation

This section describes how to download the installer and the mandatory prerequisites you must ensure installing the OIPI Pack.

5.2.1   Download the OIPI Pack Installer and Erwin Data Models

To download the OIPI Pack Installer Release v8.1.1.0.0, follow these steps:

1. Log in to the Oracle Software Delivery Cloud with a valid Oracle account.

2. Search for the full product name **Oracle Insurance Performance Insight Applications Pack** and download the installer archive.
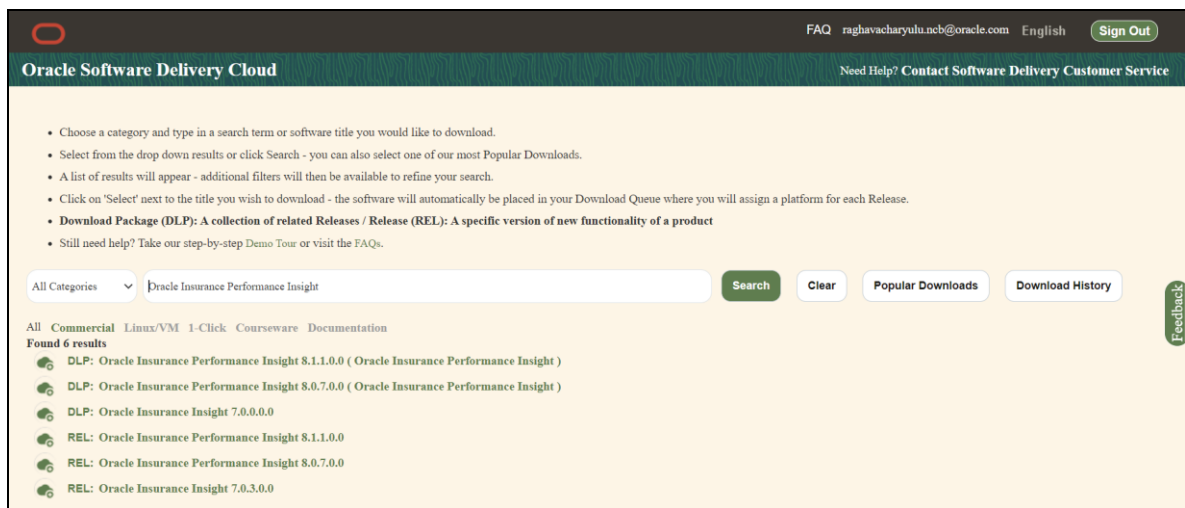
3. Download the following erwin data models from My Oracle Support:

   ▪ OIPI erwin data model: Patch ID **32749964**

   You can search for the patch number in the **Patches and Updates** tab and download it.

NOTE	Data model patches are released at the granularity of each application. Customers must download the data models as per the application licenses they hold and merge them with the custom data model.

5.2.2   Prerequisites for Installation

Before beginning the installation, ensure that:

- You have executed the `.profile` file.

- The FICServer is up and running. For information on restarting the services, see the *Start the Infrastructure Services* section in the OFS Advanced Analytical Applications Infrastructure Release 8.1.1.0.0 Installation and Configuration Guide.

NOTE	If you are upgrading the OFSAA Application Pack to release v8.1.1.0.0, you must upgrade the other packs installed in the same environment to release v8.1.1.0.0, to ensure successful deployment.
	For example, If you are upgrading the OIPI Applications Pack to release v8.1.1.0.0, you must upgrade the other packs installed in the same environment to release v8.1.1.0.0, to ensure successful deployment.

6   Installation

This section provides detailed steps to install the OIPI Pack.

Topics:

- [Installation Checklist](#)
- [Extract the Software](#)
- [Configure OFS_IP_PACK.xml File](#)
- [Configure Schema Creator Utility](#)
- [Execute the Schema Creator Utility](#)
- [Configure the OFSAAI_InstallConfig.xml File](#)
- [Configure the Silent.props file](#)
- [Install the OIPI Pack](#)

6.1   Installation Checklist

You can use this checklist to have a quick glance at everything that you will be doing to install this application. The link provided in each step takes you to a section either within this document or to another referenced document.

Table 9: Installation Checklist

Sl. No.	Installation Activity
1	[Extract](#) the installer kit.
2	[Configure](#) the `OFS_IP_PACK.xml` file.
3	[Configure](#) the `OFS_IP_SCHEMA_IN.xml` file.
4	[Execute](#) the Schema Creator Utility in [Offline](#), [Online](#), or [TCPS](#) modes and verify the log file.
5	[Configure](#) the `OFSAAI_InstallConfig.xml` file.
6	[Configure](#) the `Silent.props` file.
7	[Trigger](#) the application installation.

6.2   Extract the Software

You must be logged in to the UNIX operating system as a non-root user to perform the following steps.

1. If you already have an unzip utility to extract the contents of the downloaded archive, skip this step.

   Download the unzip utility (OS-specific) `unzip_<os>.Z` and copy it in Binary mode to the directory that is included in your PATH variable.

   Uncompress the unzip installer file with the command:

```
uncompress unzip_<os>.Z
```

> **NOTE**   If an error message "`uncompress: not found [No such file or directory]`" is displayed, contact your UNIX administrator.

2. Assign 751 permission to the file using the following command:

    ```
    chmod 751 unzip_<OS>
    ```

    For example: `chmod 751 unzip_sparc`

3. Extract the contents of the OIPI Pack Release 8.1.1.0.0 installer archive file in the download directory using the following command:

    ```
    unzip OFS_IP_PACK.zip
    ```

4. Navigate to the download directory and assign 750 permission to the installer directory using the following command:

    ```
    chmod -R 750 OFS IP Pack
    ```

6.3   Configure the OFS_IP_PACK.xml File

The `OFS_IP_PACK.xml` file contains details on the various products that are packaged in the OIPI Pack.

The `OFS_IP_PACK.xml` file has details of the products that are packaged in the OIPI Pack. This section provides information about the tags and parameters available in this file and the values you must update before installing the OIPI Pack. Enable licenses as per your Service Level Agreement (SLA).

To configure the `OFS_IP_PACK.xml` file, follow these steps:

1. Navigate to the `OFS_IP_PACK/conf` directory.

2. Open the `OFS_IP_PACK.xml` file in a text editor.

Figure 5: Sample OFS_IP_PACK.xml File

```xml
<APP_PACK_CONFIG>
    <APP_PACK_ID>OFS_IP_PACK</APP_PACK_ID>
    <APP_PACK_NAME>Oracle Insurance Performance Applications Pack</APP_PACK_NAME>
    <APP_PACK_DESCRIPTION>Applications for Insurance Performance</APP_PACK_DESCRIPTION>
    <VERSION>8.1.1.0.0</VERSION>
    <APP>
        <APP_ID PREREQ="" DEF_SEL_FLG="YES" ENABLE="YES">OFS_AAI</APP_ID>
        <APP_NAME>Financial Services Analytical Applications Infrastructure</APP_NAME>
        <APP_DESCRIPTION>Base Infrastructure for Analytical Applications</APP_DESCRIPTION>
        <VERSION>8.1.1.0.0</VERSION>
    </APP>
    <APP>
        <APP_ID PREREQ="OFS_AAI" ENABLE="YES">OFS_OIPI</APP_ID>
        <APP_NAME>>Oracle Insurance Performance Insight</APP_NAME>
        <APP_DESCRIPTION>Application for Oracle Insurance Performance Insight</APP_DESCRIPTION>
        <VERSION>8.1.1.0.0</VERSION>
    </APP>
</APP_PACK_CONFIG>
```

3. Configure the `OFS_IP_PACK.xml` file as mentioned in the following table.

Table 10: OFS_IP_PACK.xml File Parameters

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Comments
APP_PACK_ID	Unique Application Pack Identifier	Y	Unique Seeded Value. Do not modify this value.
IS_OPT_INSTALL VALUE="TRUE"	Unique Application Entry	Y	Unique Seeded Value. Do not modify this value.
APP_PACK_NAME	Unique Application Pack Name	Y	Unique Seeded Value. Do not modify this value.
APP_PACK_DESCRIPTION	Unique Application Pack Description	Y	Unique Seeded Value. Do not modify this value.
VERSION	Unique release version	Y	Unique Seeded Value. Do not modify this value.
APP	Unique Application Entries	Y	Unique Seeded Value. Do not modify this value.
APP_ID	Unique Application Identifier	Y	Unique Seeded Value. Do not modify this value.
APP_ID/ PREREQ	Prerequisite Application or Product	Y	Unique Seeded Value. For most applications, the prerequisite that is set is OFS AAAI. For all other applications, the default Application ID is set to none. You can set it for the applications you want to install. Do not modify this value.
APP_ID/ DEF_SEL_FLAG	Default Selected Flag	Y	In all Application Packs, Infrastructure would have this value set to YES. Do not modify this value.
APP_ID/ ENABLE	Enable Application or Product	Y	• Default YES for Infrastructure • NO for others Set this attribute value to YES against every APP_ID which is licensed and must be enabled for use. **NOTE**: The Application/Product cannot be disabled once enabled. Only Applications/Products which are enabled are installed. In order to enable other licensed Applications/Products, you need to reinstall by making the flag as Y for the App_ID. However, in case of reinstallation to enable the other Applications/Products, execution of the schema creation utility must be skipped if it does not include any additional sandboxes to be created.
APP_NAME	Unique Application or Product Name	Y	Unique Seeded Value. Do not modify this value.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Comments
APP_DESCRIPTION	Unique Application or Product Name	Y	Unique Seeded Value. Do not modify this value.
VERSION	Unique release version	Y	Unique Seeded Value. Do not modify this value.

4. Save and close the file.

6.4 Configure the Schema Creator Utility

Creating database users/schemas (RDBMS) is one of the primary steps in the complete OIPI Pack installation process. The Schema Creator utility enables you to quickly get started with the installation by creating Database User (or Users) or Schema (or Schemas) (RDBMS), assigning the necessary GRANT (or Grants), creating the required entities in the schemas, and so on.

Configure and execute the schema creator utility before installing the OIPI Pack.

Topics:

- Prerequisites
- Configure Schema Creator Utility for RDBMS Installation
- Execute the Schema Creator Utility

6.4.1 Prerequisites

To configure the Schema Creator Utility, ensure that you obtain the following details:

- Oracle User ID and Password with SYSDBA privileges
- JDBC Connection URL for RAC or Non-RAC database
- The HOSTNAME and IP of the server on which OFSAA is being installed.

6.4.2 Configure the Schema Creator Utility for RDBMS Installation

If the installation is performed for RDBMS, provide the application-specific schema details in the `OFS_IP_SCHEMA_IN.xml` file.

You can configure the following schema types:

- **CONFIG**: This schema holds the entities and other objects required for OFSAA setup configuration information. Only one CONFIG schema per OFSAA instance.
- **ATOMIC**: This schema holds the data model entities. One ATOMIC schema is attached to one Information Domain. You can have multiple ATOMIC schemas for a single OFSAA instance.

6.4.2.1 Configure the OFS_IP_SCHEMA_IN.xml File

This section describes how to create database schemas, objects within schemas, and assign appropriate grants.

Specify the database schemas required for the installation in the `OFS_IP_SCHEMA_IN.xml`. Update the required values in this file before executing the Schema Creator Utility.

To configure the `OFS_IP_SCHEMA_IN.xml` file, follow these steps:

1. Log in to the system as a non-root user.

2. Navigate to the `OFS_IP_PACK/schema_creator/conf` directory.

3. Edit the `OFS_IP_SCHEMA_IN.XML` file using a text editor and configure the values as mentioned in the following table.

Figure 6: Sample OFS_IP_SCHEMA_IN.xml File

```xml
<APPPACKSCHEMA>
    <APP_PACK_ID>OFS_IP_PACK</APP_PACK_ID>
    <IS_TCPS>FALSE</IS_TCPS>
    <JDBC_URL>jdbc:oracle:thin:@whf00aqw.in.oracle.com:1521/OFSAAWS2</JDBC_URL>
    <JDBC_DRIVER>oracle.jdbc.driver.OracleDriver</JDBC_DRIVER>
    <HOST>whf00glz</HOST>
    <SETUPINFO NAME="IUT" PREFIX_SCHEMA_NAME="N"/>
    <PASSWORD APPLYSAMEFORALL="Y" DEFAULT="" />
    <!-- Uncomment for data encryption and redaction -->

    <!--<ADV_SEC_OPTIONS>
        <OPTION NAME="TDE" VALUE="FALSE"/>
        <OPTION NAME="DATA_REDACT" VALUE="TRUE" />
    </ADV_SEC_OPTIONS>

    <TABLESPACES>
        <TABLESPACE NAME="OFSAA_CONF_TBSP" VALUE="OFSAA_CONF_IP_TBSP"
        DATAFILE="/scratch/oraofss/app/oraofss/oradata/OFSAADB/OFSAAWS2/OFSAA_CONF_IP_TBSP.dbf" SIZE="128M"
        AUTOEXTEND="ON" ENCRYPT="OFF" />
        <TABLESPACE NAME="OFSAA_DATA_TBSP" VALUE="OFSAA_DATA_IP_TBSP"
        DATAFILE="/scratch/oraofss/app/oraofss/oradata/OFSAADB/OFSAAWS2/OFSAA_DATA_IP_TBSP.dbf"  SIZE="512M"
        AUTOEXTEND="ON" ENCRYPT="OFF" />
    </TABLESPACES> -->
    <SCHEMAS>
        <SCHEMA TYPE="CONFIG" NAME="<CONFIG SCHEMA NAME>" PASSWORD="" APP_ID="OFS_AAI" DEFAULTTABLESPACE=
        "##OFSAA_CONF_TBSP##" TEMPTABLESPACE="TEMP" QUOTA="UNLIMITED" />
        <SCHEMA TYPE="ATOMIC" NAME="<ATOMIC SCHEMA NAME" PASSWORD="" APP_ID="OFS_OIPI" APP_GRP="1" INFODOM=
        "OFSIPINFO" DEFAULTTABLESPACE="##OFSAA_DATA_TBSP##" TEMPTABLESPACE="TEMP" QUOTA="UNLIMITED" />
    </SCHEMAS>
</APPPACKSCHEMA>
```

Table 11: OFS_IP_SCHEMA_IN.xml file (APPPACKSCHEMA Parameters)

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<APP_PACK_ID>	Seeded unique ID for the OFS Application Pack.	Y	Seeded	Do not modify this value.
<IS_TCPS>	Enter if the TCPS configuration is required.	Y	Seeded, with FALSE as the default value.	Modify this to TRUE if you require the installer to uptake the configuration.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<JDBC_URL>	Enter the JDBC URL. You can enter the RAC/ NON-RAC enabled database connectivity URL.	Y	Example: jdbc:oracle:thin:@< DBSERVER IP/ HOST/ IP>:<PORT>:<SID> or jdbc:oracle:thin:@//[HOS T][:PORT]/ SERVICE or jdbc:oracle:thin:@(DESCRI PTION=(ADDRESS_ LIST=(ADDRESS=(PROT OCOL=TCP)(HOST=[HO ST])(port=[PORT]))(ADD RESS=(PROTOCOL=TCP) (HOST=[HOST])(PORT=[PORT]))(LOAD_ BALANCE=yes)(FAILOV ER=yes))(CONNECT_ DATA=(SERVICE_ NAME=[SERVICE]))) For example: jdbc:oracle:thin:@//dbhos t.server.com:1521/service 1 or jdbc:oracle:thin:@//dbsho st.server.com:1521/scan-1 or jdbc:oracle:thin:@(DESCRI PTION=(ADDRESS_ LIST=(ADDRESS=(PROT OCOL=TCP)(HOST=dbho st1.server.com)(port=1521))(ADDRESS=(PROTOCO L=TCP)(HOST=dbhost2.s erver.com)(PORT=1521))(LOAD_ BALANCE=yes)(FAILOV ER=yes))(CONNECT_ DATA=(SERVICE_ NAME=service1)))	Ensure that you add an entry (with SID/ SERVICE NAME) in the tnsnames.ora file on the OFSAA server. The entry must match the SID/ SERVICE NAME used in the JDBC URL. Ensure that you have configured: 1. The correct Oracle Wallet with the credentials for stored Sys, Config, and Atomic Users. 2. The JDBC URL as follows: jdbc:oracle:thin:/@ For more information on how to configure Oracle Wallets for OFSAA Installation and Data Sources, see the OFS Analytical Applications Infrastructure Administration Guide.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<JDBC_DRIVER>	The name of the driver is seeded.	Y	Example: oracle.jdbc.driver.OracleDriver	Only JDBC Thin Driver is supported. Do not modify this value.
<HOST>	Enter the Hostname/ IP Address of the system on which you are installing the OFSAA components.	Y	Host Name/IP Address	
<SETUPINFO>/PREFIX_SCHEMA_NAME	Identifies whether the value specified in <SETUPINFO>/NAME attribute must be prefixed to the schema name.	N	YES or NO	The default value is YES.
<SETUPINFO>/NAME	Enter the acronym for the type of implementation. This information is displayed in the OFSAA Home Page. On executing the schema creator utility, this value is prefixed with each schema name. For example: dev_ofsaaconf, uat_ofsaatm.	Y	Accepts strings with a minimum length of two and a maximum of four. Example: DEV, SIT, PROD	This message appears in the OFSAA Landing Page as, "Connected To: DEV". The schemas being created get this prefix. For example, dev_nameconf, uat_nameconf, and so on.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<PASSWORD>/ DEFAULT*	Enter the password if you want to set a default password for all schemas. You also must set the APPLYSAMEFORALL attribute as Y to apply the default password for all the schemas.	N	The maximum length allowed is 30 characters. Special characters are not allowed.	On successful execution of the utility, the entered password in the `OFS_IP_SCHEMA_IN.xml` file is nullified.
<PASSWORD>/ APPLYSAMEFORALL	If you have entered Y in the APPLYSAMEFORALL attribute and also have specified individual passwords for all the schemas, then the specified individual passwords will take precedence.	Y	Default value: N Permissible value: Y or N Enter Y if you want to apply the password specified in the DEFAULT attribute for all the schemas. If you enter N, provide individual passwords for all schemas.	Setting this attribute value is mandatory if the DEFAULT attribute is set.
<SCHEMA>/TYPE	The types of schemas supported in this release are: ATOMIC, CONFIG, SANDBOX, and ADDON. By default, the schema types are seeded based on the Application Pack.	Y	ATOMIC/CONFIG/SANDBOX/ADDON SANDBOX and ADDON schemas do not apply to OFS_IP_PACK.	Only One CONFIG schema can exist in the file. Do not edit this attribute value. This schema identifies as the CONFIGURATION schema that holds the OFSAA setup details and other Metadata information. Multiple ATOMIC/ SANDBOX/ADDON schemas can exist in the file.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<SCHEMA>/NAME	The schemas' names are seeded based on the Application Pack by default. You can edit the schema names, if required. The Schema Name will have a prefix of the SETUPINFO/ NAME attribute. SCHEMA NAME must be the same for all the ATOMIC Schemas of the applications within an Application Pack.	Y	The permissible length is 15 characters and only alphanumeric characters are allowed. No special characters are allowed except underscore _.	The SETUPOINFO/NAME attribute value is prefixed to the schema name being created. For example, if a name is set as 'ofsaatm' and setupinfo as 'uat', then the schema created is 'uat_ofsaatm'. NAME must be the same where APP_GRP=1 for all SCHEMA tags (not applicable for this Application).
<SCHEMA>/PASSWORD	Enter the password of the schema to be created. If this attribute is left blank, then the password specified in the <PASSWORD>/DEFAULT attribute is taken as the Schema Password.	N	The maximum length allowed is 30 characters. Special characters are not allowed.	It is mandatory to enter the password if you have set the <PASSWORD>/ APPLYSAMEFORALL attribute as N.
<SCHEMA>/APP_ID	The Application ID is seeded based on the Application.	Y	Unique Seeded Value	Identifies the Application/ Product for which the schema is being created. Do not modify this attribute value.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<SCHEMA>/DEFAULTTABLESPACE	Enter the available default tablespace for DB User. If this attribute is left blank, then USERS is set as the default tablespace.	N	Default value: USERS Permissible value: Any existing valid tablespace name.	Modify this value to associate any valid tablespace with the schema.
<SCHEMA>/TEMPTABLESPACE	Enter the available temporary tablespace for DB User. If this attribute is left bank, TEMP is set as the default tablespace.	N	Default value: TEMP Permissible value: Any existing valid temporary tablespace name.	Modify this value to associate any valid tablespace with the schema.
<SCHEMA>/QUOTA	Enter the quota to be set on the DEFAULTTABLESPACE attribute for the schema/ user. By default, the quota size is set to 500M. Minimum: 500M or Unlimited on default Tablespace.	N	Example: 600M or 600m 20G or 20g UNLIMITED or unlimited	Modify this value to grant the specified quota on the mentioned tablespace to the user.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<SCHEMA>/ INFODOM	Enter the name of the Information Domain to associate this schema. The schema creator utility automatically derives an Information Domain Name based on the Application Pack if no value is specified for this attribute.	N	The permissible length is 16 characters and only alphanumeric characters are allowed. No special characters are allowed.	
<ADV_SEC_OPTIONS>/	Parent tag to hold Advance Security Options.	N	NA	Uncomment the tag and edit if you want to add security options. For example, TDE and Data Redact. For details, see the example following the rows.
<ADV_SEC_OPTIONS>/TDE	Tag to enable/disable TDE feature.	N	The default value is FALSE. To enable TDE, set this value to TRUE.	Ensure this tag is not commented if you have uncommented <ADV_SEC_OPTIONS>.
<ADV_SEC_OPTIONS>/DATA_REDACT	Tag to enable/disable the Data Redaction feature.	N	The default value is FALSE. To enable DATA_REDACT, set this value to TRUE.	Ensure this tag is not commented if you have uncommented<ADV_SEC_OPTIONS>.
<TABLESPACES>	Parent tag to hold <TABLESPACE> elements	N	NA	Uncomment the tag and edit only if tablespaces are to be created as part of the installation. For details, see the example that follows the table. When TDE is TRUE in ADV_SEC_OPTIONS, it is mandatory for the <TABLESPACES> tag to be present in the XML file.

Tag Name and Attribute Name	Description	Mandatory (Y or N)	Default Value or Permissible Value	Comments
<TABLESPACE>/NAME	Logical Name of the tablespace to be created.	Y	OFSAA_CONF_TBSP OFSAA_DATA_TBSP	Name, if specified, must be referred in the <SCHEMA DEFAULTTABLESPACE= "##NAME##"> attribute. Note the ## syntax.
<TABLESPACE>/VALUE	Physical Name of the tablespace to be created.	Y	NA	Value, if specified, is the actual name of the TABLESPACE.
<TABLESPACE>/DATAFILE	Specifies the location of the data file on the server.	Y	NA	Enter the absolute path of the file to be created.
<TABLESPACE>/AUTOEXTEND	Specifies if the tablespace must be extensible or have a hard limit.	Y	ON or OFF	Set to ON to ensure that the tablespace does not run out of space when full.
<TABLESPACE>/ENCRYPT	Specifies if the tablespace (or tablespaces) must be encrypted using TDE.	Y	ON or OFF	Set to ON to ensure that the tablespaces when created are encrypted using TDE. **NOTE**: Encryption of tablespaces requires enabling Transparent Data Encryption (TDE) on the Database Server.

4. Save and close the file.

Example: The following snippet shows that TDE is enabled and hence the tablespace is shown with encryption ON.

```
------------------------------------------------------------------------------------
<ADV_SEC_OPTIONS>
<OPTION NAME="TDE" VALUE="TRUE"/>
<OPTION NAME="DATA_REDACT" VALUE="FALSE" />
</ADV_SEC_OPTIONS>
<TABLESPACES>
```

```
<TABLESPACE NAME="OFS_AAI_TBSP_1" VALUE="TS_USERS1" DATAFILE="/

scratch/ora12c/app/oracle/oradata/OFSPQA12CDB/ts_users1.dbf" SIZE="500M" AUTOEXTEND="ON"
ENCRYPT="ON" />

<TABLESPACE NAME="OFS_AAI_TBSP_2" VALUE="TS_USERS2" DATAFILE="/

scratch/ora12c/app/oracle/oradata/OFSPQA12CDB/ts_users2.dbf" SIZE="500M" AUTOEXTEND="ON"
ENCRYPT="ON" />

</TABLESPACES>


<SCHEMAS>

<SCHEMA TYPE="CONFIG" NAME="ofsaaconf" PASSWORD="" APP_ID="OFS_AAI"
DEFAULTTABLESPACE="##OFS_AAI_TBSP_1##" TEMPTABLESPACE="TEMP"

QUOTA="unlimited"/>

<SCHEMA TYPE="ATOMIC" NAME="ofsaaatm" PASSWORD="" APP_ID="OFS_AAAI"
DEFAULTTABLESPACE="##OFS_AAI_TBSP_2##" TEMPTABLESPACE="TEMP" QUOTA="unlimited"
INFODOM="OFSAAAIINFO"/>

</SCHEMAS>

------------------------------------------------------------------------------------------------------------------------
```

6.5 Execute the Schema Creator Utility

Depending on your requirement, select the appropriate schema creator utility execution option.

Topics:

- Execute the Schema Creator Utility in Offline Mode
- Execute the Schema Creator Utility in Online Mode
- Execute the Schema Creator Utility in TCPS Mode
- Execute the Schema Creator Utility while Installing Subsequent Applications Pack

6.5.1 Execute the Schema Creator Utility in Offline Mode

Choose the Offline Mode option if you do not have login credentials to the database with SYSDBA privileges.

In this mode, the utility generates an SQL script with all the required DDLs for Users, Objects, and Grants. That script must be executed by the DBA on the appropriate database identified for OFSAA usage.

To execute the schema creator utility in the offline mode, you must have the following privileges:

- SELECT ON DBA_ROLES
- SELECT ON DBA_USERS
- SELECT ON DBA_DIRECTORIES
- SELECT ON DBA_TABLESPACES
- CREATE SESSION

> **NOTE**   Explicit Grants to the User are required. Grants assigned through Roles are not supported.

To execute the schema creator utility in the offline mode, follow these steps:

1. Log in to the system as a non-root user.
2. Navigate to the `OFS_IP_PACK/schema_creator/bin` directory.
3. Execute the `osc.sh` file using the following command:

   `./osc.sh -o -s`

   The following message is displayed:

   You have chosen OFFLINE mode. Triggering the utility in OFFLINE mode will generate the script. Do you wish to proceed? (Y/y or N/n).

   Enter **Y** to proceed.
4. Enter the DB Username with SELECT privileges.
5. Enter the User Password.

The console runs the initial validation checks and displays the following message:

You have chosen to install this Application Pack on <Name of the Atomic Schema> ATOMIC schema. Do you want to proceed? (Y/N).

6. Enter **Y** to start the script generation.

The following message is displayed:

You have chosen to install this Application Pack on <Name of the Infodom>. Do you want to proceed? (Y/N).

Enter **Y** to proceed.

Figure 7: Schema Creation in Offline Mode – Script Generation

7. On successful execution of the schema creator utility, the console displays the following status message:

Schema Creator executed successfully. Execute the file `scratch/ofsaaapp/OFS_IP_PACK/schema_creator/sysdba_output_scripts.sql` *before proceeding with the installation.*

> **NOTE**   If there are any errors during the SQL script execution, reconfigure the `OFS_IP_SCHEMA_IN.xml` file and repeat steps in this procedure to execute the utility. This regenerates the script with the correct information.

8. Navigate to the `OFS_IP_PACK/schema_creator` directory.

9. Log in to the database using credentials with SYSDBA privileges.

10. Execute the `sysdba_output_scripts.sql` file using the following command:

`@sysdba_output_scripts.sql`

Alternatively, you can copy the `sysdba_output_scripts.sql` file and SQLScripts folder to a remote server, and execute the `sysdba_output_scripts.sql` file after providing appropriate execute permissions.

> **NOTE** See the `sysdba_output_scripts.log` file for execution status. If there are any errors, contact My Oracle Support. If there are no errors in the execution, the log file is empty.

The `OFS_IP_SCHEMA_OUTPUT.XML` file is successfully generated. Do not modify this file.

6.5.2 Execute the Schema Creator Utility in Online Mode

In Online mode, the utility connects to the database and executes the DDLs for Users, Objects, and Grants. If you have SYSDBA privileges you can execute the Schema Creator Utility in Online mode and thereby create the Users, Objects, and Grants during the execution process. To execute the utility in the Online mode, you must connect as "<User> AS SYSDBA".

To execute the utility in Online mode, follow these steps:

1. Log in to the system as a non-root user.

2. Navigate to the `OFS_IP_PACK/schema_creator/bin` directory.

3. Execute the utility.

   For Example: `./osc.sh -s`

The `OFS_IP_SCHEMA_OUTPUT.XML` file is successfully generated. Do not modify this file.

6.5.3 Execute the Schema Creator Utility in TCPS Mode

If you intend to run the OIPI Application Pack Installer in TCPS mode, it is mandatory to execute the schema creator utility with the -s option and in the Online mode.

6.5.3.1 Prerequisites

The following are the prerequisites for this configuration:

1. UNIX user credentials used for installing OFSAA.

2. UNIX user credentials with which Web Application Server (Oracle WebLogic (WLS)/Apache Tomcat/ IBM WebSphere) was installed.

3. OFSAAI version should be 8.1.0.0.0 or later.

4. Ensure OFSAA installed and deployed has JAVA 8 (Java version must support Java unlimited cryptographic policy. Java version 1.8.0_161+ supports the unlimited cryptographic policy.)

> **NOTE** If you are going create a Oracle Wallet, then the following steps are applicable. Otherwise, you can skip them.

5. Create Oracle Wallet on the OFSAA processing tier.

   For information on Creating and Managing Oracle Wallet, see
   https://blogs.oracle.com/dev2dev/ssl-connection-to-oracle-db-using-jdbc,-tlsv12,-jks-or-
   oracle-wallets and https://blogs.oracle.com/weblogicserver/weblogic-jdbc-use-of-oracle-
   wallet-for-ssl.

6. Configure the Oracle Wallet with trusted certificates between the database server with TCPS
   configured and the database client to enable communication through the SSL protocol. For
   example, all the database utils such as sqlplus, tnsping, and sqlldr must work between the Client
   and the Server.

6.5.3.1.1 Configure OFSAA to Store Config Schema, Atomic Schema, and SysDBA Credentials with Oracle Wallet

To configure OFSAA to store the Config and Atomic schema credentials with Oracle Wallet, follow
these steps:

1. Log in as a UNIX user with the permission to modify the Oracle Wallet.

2. Execute the following command to configure Config Schema credentials. Enter the password to
   store the credentials in the Wallet when prompted.

   ```
   $ORACLE_HOME/bin/mkstore -wrl <WALLET_HOME> -createCredential  -nologo
   CONFIG  <CONFIG_DATABASE_USERNAME>  <CONFIG_DATABASE_PASSWORD>
   ```

3. Execute the following command to configure the Atomic Schema credentials, Enter the
   password to store the credentials in the Wallet when prompted.

   ```
   $ORACLE_HOME/bin/mkstore -wrl <WALLET_HOME> -createCredential  -nologo
   <ATOMICALIASNAME>  <ATOMIC_DATABASE_USERNAME>
   <ATOMIC_DATABASE_PASSWORD>
   ```

4. Configure SysDBA credentials. Execute the following command to configure SysDBA Schema
   credentials. Enter the password to store the credentials in the Wallet when prompted.

   ```
   $ORACLE_HOME/bin/mkstore -wrl <WALLET_HOME> -createCredential  -nologo
   SYS  <SYS_DATABASE_USERNAME>  <SYS_DATABASE_PASSWORD>
   ```

NOTE	ATOMICALIASNAME value is a TNS alias for Atomic Schema and must not contain underscores.
	For example, if the Atomic Schema Name is PROD_OFSAAATM, then the value for ATOMICALIASNAME must be entered as PRODOFSAAATM.

6.5.3.2 Execute the Schema Creator Utility

To execute the utility, follow these steps:

1. Edit the `OFS_IP_PACK/schema_creator/conf/OFS_IP_SCHEMA_IN.xml` file in a text
   editor. See the tables in Configure the OFS_IP_SCHEMA_IN.xml File for the values that you must
   modify in the XML file.

2. Execute the utility with the -s option.

   ```
   ./osc.sh -s    TCPS  <WALLET_HOME>
   ```

For example: `$    ./osc.sh -s TCPS /scratch/oraofss/wallet`

Figure 8: Schema Creation in the TCPS Mode

```
/scratch/aai81ssl>cd /scratch/aai81ssl/OFS_AAAI_PACK/schema_creator/bin
/scratch/aai81ssl/OFS_AAAI_PACK/schema_creator/bin>./osc.sh TCPS /scratch/aai81ssl/wallet
Error: - Please provide proper arguments
/scratch/aai81ssl/OFS_AAAI_PACK/schema_creator/bin>./osc.sh -s TCPS /scratch/aai81ssl/wallet
-s
TCPS
/scratch/aai81ssl/wallet
-Doracle.net.tns_admin=/scratch/aai81ssl -Doracle.net.wallet_location=(SOURCE=(METHOD=file)(METHOD_DATA=(DIRECTORY=/scratc
h/aai81ssl/wallet))) -Doracle.net.ssl_server_dn_match=true -Djavax.net.ssl.trustStoreType=SSO -Djavax.net.ssl.trustStore=c
wallet.sso -Doracle.net.ssl_version=1.2
exporting wallet FALSE
##Entries created by schema creator ##
========================================================
You have chosen ONLINE mode
========================================================
Triggering the utility in ONLINE mode will execute the DDLs directly on the Database. Do you wish to proceed? (Y/N):
Y
```

The following message is displayed:

Triggering the utility in ONLINE mode will execute the DDLS directly on the Database. Do you wish to proceed? (Y/y or N/n).

3. Enter `Y` to proceed.

   The following message is displayed:

   You have chosen to install this application pack on "<ATOMIC_SCHEMA_NAME>" ATOMIC schema. Do you wish to proceed? (Y/y or N/n).

Figure 9: Schema Creation in the TCPS Mode – Install on Atomic Schema

```
0430: 58 8D 05 B2 02 0F 2D 01    0C 00 00 00 00 00 00 04   X.....-.........
0440: 01 01 02 23 E4 00 02 05    7B 00 00 01 0C 01 0E 03   ...#............
0450: 00 00 00 00 00 00 00 00    00 00 00 00 10 00 01 01   ................
0460: 00 00 00 00 02 05 7B 00    19 4F 52 41 2D 30 31 34   .........ORA-014
0470: 30 33 3A 20 6E 6F 20 64    61 74 61 20 66 6F 75 6E   03: no data foun
0480: 64 0A 61 1D D5 6D 51 10    60 C1 A6 85 B4 88 52 0F   d.a..mQ.`.....R.
0490: A4 F8 CA 1B 2C F2 09 09    09 09 09 09 09 09 09 09   ....,...........
You have chosen to install this Application Pack on "t81s_ofsaaatm" ATOMIC schema. Do you want to proceed? (Y/N)
Y
```

4. Enter `Y` to proceed.

5. After Schema creation is successful, proceed to [Configure the OFSAAI_InstallConfig.xml File](#).

Figure 10: Schema Creation in the TCPS Mode

```
0030: 05 02 24 2C 00 00 00 00    01 10 00 2B 00 00 00 00   ..$,.......+....
0040: 00 00 00 00 00 00 00 00    58 00 01 01 00 00 00 00   ........X.......
0050: 00 00 EE 63 D9 C7 F0 3C    A2 23 E1 34 68 01 68 96   ...c...<.#.4h.h.
0060: 4F 69 FD 59 9F 23 09 09    09 09 09 09 09 09 09 09   Oi.Y.#..........
Grants creation scripts execution completed...
========================================================================
                      Schemas Creation Completed
========================================================================
Schema Creator executed Successfully.Please proceed with the installation.
/scratch/aai81ssl/OFS_AAAI_PACK/schema_creator/bin>
```

The result of this task is that the `<PACK>_SCHEMA_OUTPUT.XML` file is generated. Do not modify this file.

6.5.4 Execute the Schema Creator Utility while Installing Subsequent Applications Pack

When executing the Schema Creator Utility during the installation of a subsequent application pack, you can choose to install the pack either on the same Information Domain/Atomic Schema of the existing application pack or on a new Information Domain/Atomic Schema. You can execute the Schema Creator Utility either in the Online or Offline modes.

To execute the Schema Creator Utility while creating the schemas for a subsequent application pack, follow these steps:

1. Edit the `OFS_IP_PACK/schema_creator/conf/OFS_IP_SCHEMA_IN.xml` file in a text editor. See the OFS_IP_SCHEMA_IN.xml file for values you must modify in the XML file.

2. Execute the utility.

   For Example: `./osc.sh –s`

Figure 11: Schema Creator Utility

> **NOTE** You must use the same config schema user name as the previous application pack.

3. The utility identifies the application packs that are already installed on the current OFSAA setup and displays the following on the console:

   - Atomic schema of the existing application pack

   - Information Domain Name of the existing pack

   - List of installed application packs

4. Select the Atomic User on which you want to install the application pack.

Figure 12: Select the Atomic User

```
Validating the dat file OFS_IP_CFG.dat started...
The path is:/scratch/bcuser/kit/OFS_IP_PACK/schema_creator/conf
Sucessfully validated OFS_IP_CFG.dat file
Validating the input XML file.../scratch/bcuser/kit/OFS_IP_PACK/schema_creator/conf/OFS_IP_SCHEMA_IN.xml
Input XML file validated successfully.
=========================================================================
Validating Connection URL ...jdbc:oracle:thin:@whf00atu.in.oracle.com:1521/ORCLPDB1
Connection jdbc:oracle:thin:@whf00atu.in.oracle.com:1521/ORCLPDB1
Successfully connected to User - sys as sysdba URL - jdbc:oracle:thin:@whf00atu.in.oracle.com:1521/ORCLPDB1
Connection URL successfully validated...
localhost name - whf00ots IPAddress - 10.40.158.56
INT_LB_HOST not there in schema
IS_HYBRID not there in schema
ADV_SEC_TAG not there in schema
Parsing file: /scratch/bcuser/kit/OFS_IP_PACK/schema_creator/../conf/OFS_IP_PACK.xml
Checking: app: OFS_AAI schema_name: T2_BCCONFIG81T schema_type: CONFIG
Checking: app: OFS_IP schema_name: T2_BCATOMIC81T schema_type: ATOMIC
You have chosen to install this Application Pack on "t2_bcatomic81t" ATOMIC schema. Do you want to proceed? (Y/N)
Y
You have chosen to install this Application Pack on INFODOM "bcinfo". Do you want to proceed? (Y/N)
Y
```

On successful execution of the Schema Creator Utility, the console displays the following status message:

Success. Please proceed with the installation.

NOTE	**1.** See the log file in the `OFS_IP_PACK/schema_creator/logs` directory for the execution status.
	2. See the `sysdba_output_scripts.log` file for execution status if executed in offline mode. This log will be empty if there are no errors in the execution.
	3. If there are any errors, contact My Oracle Support.

6.6 Configure the OFSAAI_InstallConfig.xml File

To configure the `OFS_InstallConfig.xml` file, follow these steps:

1. Navigate to the `OFS_IP_PACK/OFS_AAI/conf/` folder.

2. Open the `OFSAAI_InstallConfig.xml` file in a text editor.

3. Configure the `OFSAAI_InstallConfig.xml` file as mentioned in the following table.

You must manually set the **InteractionVariable** parameter values as mentioned in the table. If a value is not applicable, enter NA. Ensure that the value is not entered as NULL.

Table 12: OFSAA Infrastructure Installation Tasks and Descriptions

InteractionVariable Name	Significance and Expected Value	Mandatory
<Layer name="GENERAL">		
InteractionGroup name="WebServerType"		
WEBAPPSERVERTYPE	Identifies the web application server on which the OFSAA infrastructure web components are deployed. Set the following numeric value depending on the type of web application server: • Apache Tomcat = 1 • IBM WebSphere Application Server = 2 • Oracle WebLogic Server = 3 For example, `<InteractionVariable name="WEBAPPSERVERTYPE">3</InteractionVariable>`	Yes
InteractionGroup name="OFSAA Infrastructure Server Details"		
DBSERVER_IP	Identifies the hostname or IP address of the system on which the Database Engine is hosted. **NOTE:** For RAC Database, the value must be NA. For example, `<InteractionVariable name="DBSERVER_ IP">14.15.16.17</InteractionVariable>` or `<InteractionVariable name="DBSERVER_ IP">dbhost.server.com</InteractionVariable>`	Yes
InteractionGroup name="Database Details"		
ORACLE_SID/SERVICE_NAME	Identifies the Oracle DB Instance SID or SERVICE_NAME **NOTE:** The `Oracle_SID` value must be exactly the same as it is mentioned in `JDBC_URL`. For example, `<InteractionVariable name="ORACLE_SID/SERVICE_ NAME">ofsaser</InteractionVariable>`	Yes
ABS_DRIVER_PATH	Identifies the directory where the JDBC driver (`ojdbc<version>.jar`) exists. This would typically be the `$ORACLE_HOME/jdbc/lib` directory. For example, `<InteractionVariable name="ABS_DRIVER_ PATH">">/oradata6/revwb7/ oracle </InteractionVariable>`	Yes

InteractionVariable Name	Significance and Expected Value	Mandatory
	Note: See the JDBC Jar files to identify the correct `ojdbc<version>.jar` version to be copied.	
InteractionGroup name="OLAP Detail		
OLAP_SERVER_ IMPLEMENTATION	Identifies whether the OFSAA infrastructure OLAP component needs to be configured. It depends on whether you intend to use the OLAP feature. The following numeric value must be set depending on your choice: • YES: 1 • NO: 0 **Note:** If the value for `OLAP_SERVER_IMPLEMENTATION` is set to 1, the installer checks if the following environment variables are set in the .profile file: • ARBORPATH • HYPERION_HOME • ESSBASEPATH	No
InteractionGroup name="SFTP Details"		
SFTP_ENABLE	Identifies if the SFTP (Secure File Transfer Protocol) feature is to be enabled. The following numeric value must be set depending on your choice: • SFTP: 1 • FTP: 0	Yes
NOTE: The default value for `SFTP_ENABLE` is **1**, which signifies that SFTP is used. Oracle recommends using SFTP instead of FTP because SFTP is more secure. However, you can ignore this recommendation and use FTP by setting `SFTP_ENABLE` to **0**. You can change this selection later from the OFSAAI administration interface. Set `SFTP_ENABLE` to **-1** to configure ftpshare and weblocal path as a local path mounted for the OFSAAI server.		
FILE_TRANSFER_PORT	Identifies the port used for the file transfer service. The default value specified is **22** (SFTP). Specify a value like **21** or any other PORT value if the value for `SFTP_ENABLE` is **0**. For example, `<InteractionVariable name="FILE_TRANSFER_PORT">21</InteractionVariable>`	Yes
InteractionGroup name="Locale Detail"		
LOCALE	Identifies the locale information to be used during the installation. This release of the OFSAA Infrastructure supports only US English.	Yes

InteractionVariable Name	Significance and Expected Value	Mandatory
	For example, `<InteractionVariable name="LOCALE">en_US</InteractionVariable>`	
InteractionGroup name="OFSAA Infrastructure Communicating ports" **Note:** The following ports are used internally by the various OFSAA infrastructure services. The default values mentioned are set in the installation. If you intend to specify a different value, update the parameter value accordingly, ensure that the port value is in the range 1025 to 65535, and the respective port is enabled.		
JAVAPORT	9999	Yes
NATIVEPORT	6666	Yes
AGENTPORT	6510	Yes
ICCPORT	6507	Yes
ICCNATIVEPORT	6509	Yes
OLAPPORT	10101	Yes
MSGPORT	6501	Yes
ROUTERPORT	6500	Yes
AMPORT	6505	Yes
InteractionGroup name="Web Details" **Note:** If the value for `HTTPS_ENABLE` is set to **1**, ensure that you have a valid certificate available from a trusted CA and it is configured on your web application server. For more details on configuring your setup for HTTPS.		
HTTPS_ENABLE	Identifies whether the UI must be accessed using HTTP or HTTPS scheme. The default value is set to **0**. The numeric value must be set depending on the following options: • YES: 1 • NO: 0 For example, `<InteractionVariable name="HTTPS_ENABLE">0</InteractionVariable>`	Yes
WEB_SERVER_IP	Identifies the HTTP Server IP/ Hostname or Web Application Server IP/ Hostname, to be used to access the UI. This IP is typically the HTTP Server IP.	No

InteractionVariable Name	Significance and Expected Value	Mandatory
	If a separate HTTP Server is not available, then the value must be Web Application Server IP/Hostname. For example, `<InteractionVariable name="WEB_SERVER_IP">10.11.12.13</InteractionVariable>` or `<InteractionVariable name="WEB_SERVER_IP">myweb.server.com</InteractionVariable>`	
WEB_SERVER_PORT	Identifies the webserver port, which is typically 80 for non SSL and 443 for SSL. If a separate HTTP server exists, the port value must be the value configured for the webserver. **Warning:** The installer will not accept the port value as: • 80, if the `HTTPS_ENABLE` variable is 1 • 443, if the `HTTPS_ENABLE` variable is 0 For example, `<InteractionVariable name="WEB_SERVER_PORT">80</InteractionVariable>`	No

CONTEXT_NAME	Identifies the web application context name which is used to build the URL to access the OFSAA application. You can identify the context name from the following URL format:
	
	`<scheme>://<host>:<port>/<context-name>/login.jsp`
	
	For example:
	
	`https://myweb:443/ofsaadev/login.jsp`
	
	For example, `<InteractionVariable name="CONTEXT_ NAME">ofsaadev</InteractionVariable>`
		Yes

WEBAPP_CONTEXT_PATH	Identifies the absolute path of the exploded EAR file on the web application server. • For Tomcat, specify the Tomcat directory path till /webapps. For example: `/oradata6/revwb7/tomcat/webapps/`. • For WebSphere, specify the WebSphere path as <WebSphere profile directory>/installedApps/<NodeCellName>. For example: `/data2/test//WebSphere/AppServer/profiles/<Profile_Name>/installedApps/aiximfNode01Cell`, where aix-imf is the Host name. • For WebLogic, specify the WebLogic home directory path. For example: `/<WebLogic home directory path>/bea/wlserver_10.3` **Note:** For WebLogic, the value specified for this attribute is ignored and the value provided against the attribute WEBLOGIC_DOMAIN_HOME is considered.	Yes

InteractionVariable Name	Significance and Expected Value	Mandatory
WEB_LOCAL_PATH	Identifies the absolute path to any directory on the web application server that can hold temporary files, which are uploaded as part of the application's usage. Set this in the FTPSHARE location. **Note:** During a clustered deployment, ensure that this path and the directory are the same on all the nodes.	Yes
InteractionGroup name="Weblogic Setup Details"		
WEBLOGIC_DOMAIN_HOME	Identifies the WebLogic Domain Home. For example, `<InteractionVariable name="WEBLOGIC_DOMAIN_HOME">/home/weblogic/bea/user_ projects/ domains/mydomain</InteractionVariable>`	Yes. Specify the value only if WEBAPPSERVERTYPE is set as 3 (WebLogic)
InteractionGroup name="OFSAAI FTP Details"		
OFSAAI_FTPSHARE_PATH	Identifies the absolute path of the directory that is identified as the file system stage area. **Note:** The directory must exist on the same system on which the OFSAA infrastructure is being installed (can be on a separate mount). The user mentioned in the APP_SFTP_USER_ID parameter in the following example must have RWX permission on the directory. For example, `<InteractionVariable name="APP_FTPSHARE_PATH">">/oradata6/revwb7/ftpshare</ InteractionVariable>`	Yes
OFSAAI_SFTP_USER_ID	Identifies the user who has RWX permissions on the directory identified for the parameter APP_FTPSHARE_PATH.	Yes
OFSAAI_SFTP_PRIVATE_KEY	Identifies the SFTP private key for OFSAAI. For example, `<InteractionVariable name="OFSAAI_SFTP_PRIVATE_KEY">/home/ofsaapp/.ssh/id_rsa</Interacti onVariable>` By default, the value is **NA**, which indicates that for authentication, you are prompted to enter the password for the user <OFSAAI_SFTP_USER_ ID>. For more information on how to generate an SFTP Private key, see the <u>Setting Up SFTP Private Key</u> section.	No

InteractionVariable Name	Significance and Expected Value	Mandatory
OFSAAI_SFTP_PASSPHRASE	Identifies the passphrase for the SFTP private key for OFSAAI. For example: `InteractionVariable name="OFSAAI_SFTP_PASSPHRASE">enter a pass phrase here</InteractionVariable>` By default, the value is **NA**. If the `OFSAAI_SFTP_PRIVATE_KEY` value is given and the `OFSAAI_SFTP_PASSPHRASE` value is **NA**, then the passphrase is identified as empty.	No

6.6.1 Set Up the SFTP Private Key

Log in to OFSAA UNIX user using the Putty tool, where you plan for installation and generate a pair of authentication keys using the `ssh-keygen` command. If required, set passphrase. Otherwise, the OFSAAI_SFTP_PASSPHRASE tag must be set to NA.

To generate a private key, enter the commands as shown:

```
ssh-keygen -t rsa

Generating public/private rsa key pair.

Enter file in which to save the key (/home/ofsaapp/.ssh/id_rsa):

Created directory '/home/ofsaapp/.ssh'.

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /home/ofsaapp/.ssh/id_rsa.

Your public key has been saved in /home/ofsaapp/.ssh/id_rsa.pub.

The key fingerprint is:

3e:4f:05:79:3a:9f:96:7c:3b:ad:e9:58:37:bc:37:e4

ofsaapp@OFSASERVER:~> cat /home/ofsaapp/.ssh/id_rsa.pub >>
/home/ofsaapp/.ssh/authorized_keys
```

Ensure the following permissions exist for the given directories:

- permissions of .ssh must be 700

- permissions of .ssh/authorized_keys must be 640

- permission of .ssh/id_rsa must be 400

- Permission of UNIX User created must be 755

6.7 Configure the Silent.props File

This section is applicable for a new installation of OIPI Pack Release 8.1.1.0.0. In the installer kit path `OFS_IP_PACK/appsLibConfig/conf/`, rename the `Silent.template` file to `Silent.props`. Edit the `Silent.props` file and modify only the following parameters.

| NOTE | In the pack-on-pack scenario, the parameter `SEGMENT_1_CODE` must be same as the parameters `SEGMENT_1_CODE` of the previously installed application pack. |
| | Do not modify these parameters if there are no other packs than the OIPI Pack installed. |

Figure 13: Sample Silent.props File

```
########################################
### START OF PACK LEVEL_INPUTS ########
########################################
# Specify the Infodom Maintenance log path(to be created) for the new Infodom
# Please ignore if you are doing installation on an existing information domain
APPFTP_LOG_PATH=/scratch/newipuser/CHEF_OFSAA/logs/OFSIPINFO/app
DBFTP_LOG_PATH=/scratch/newipuser/CHEF_OFSAA/logs/OFSIPINFO/db

# Specify whether you want to perform Model Upload
# 0 = If you have already performed Model Upload and want to skip model upload process
# 1 = If you want to perform Model Upload
UPLOAD_MODEL=1

# Specify whether you want to use the released datamodel or customized datamodel for model
upload process
# 0 = If you want to upload the released datamodel
# 1 = If you want to upload the customized datamodel
MODEL_TYPE=0

# Specify the path(DM_DIRECTORY) and file(DATAMODEL) name for the cutomized datamodel
# Mandatory only if you want to upload the customized datamodel
# i.e you have specified MODEL_TYPE=1
DATAMODEL=
DM_DIRECTORY=
########################################
### END OF PACK_LEVEL_INPUTS ##########
########################################


########################################
### START OF OFS_OIPI ##########
########################################

# Specify the Insurance Performance Insight Segment Code
SEGMENT_1_CODE=COMMON
SEGMENT_2_CODE=OIPI


# Specify the Host Name of the OBIEE Server
OBI_HOST=whf00atp.in.oracle.com
# Specify the Port Number of the OBIEE Server
OBI_PORT=9502
# Specify the Context Name of the OBIEE Server
OBI_CONTEXT=analytics
# Specify the web protocol of the OBIEE Server
OBI_PROTOCOL=http

#Please specify if you want create new ETL App/Src pair or use an existing one.
# 0 = If you want to create a new ETL app/src pair
# 1 = If you want to use an existing pair
ETL_APPSRC_TYPE=0

# Please give description for the ETL Sources
# Mandatory if you want to create new ETL Sources
#i.e you have specified ETL_APPSRC_TYPE=0

#ETL Staging source description
ETL_SRC_1_DESC=OFSAA Staging
#ETL Processing source description
ETL_SRC_2_DESC=OFSAA Processing and Results

#ETL RESULTS source description
ETL_SRC_3_DESC=Results

# Specify the ETL Source Name into ETL Area Definitions will be deployed
#ETL Staging source name
ETL_SRC_1_NAME=STAGING
#ETL Processing source name
ETL_SRC_2_NAME=PROCESSING

#ETL RESULTS source name
ETL_SRC_3_NAME=RESULTS


########################################
### END OF OFS_OIPI ##########
########################################
```

Table 13: Parameters for the Silent.props File

Property Name	Description of Property	Permissible Values	Comments
SEGMENT_1_CODE	Segment Code	COMMON	Mandatory **NOTE**: The Segment Code should be in upper case.
SEGMENT_2_CODE	Segment Code	OIPI	Mandatory **NOTE**: The Segment Code should be in upper case.
APPFTP_LOG_PATH	Infodom Maintenance log path (to be created) for the new Infodom for applayer	Not Applicable	# Mandatory if this an App Layer Installation and if you want to create a new infodom. # That is, you have specified INSTALL_APP=1 and INFODOM_TYPE=0
DBFTP_LOG_PATH	Infodom Maintenance log path (to be created) for the new Infodom for DBLayer	Not Applicable	# Mandatory if this an App Layer Installation and if you want to create a new infodom. # That is, you have specified INSTALL_APP=1 and INFODOM_TYPE=0
UPLOAD_MODEL	To perform the Model Upload.	0: No 1: Yes	Mandatory
MODEL_TYPE	The released data model or a customized data model.	0: Released 1: Customized	Mandatory only if you want to upload the data model.
DATAMODEL	The path for the customized data model.	Not Applicable	Mandatory only if you want to upload the customized data model.
DM_DIRECTORY	The file name for the customized data model.	Not Applicable	Mandatory only if you want to upload the customized data model.
OBI Parameters			
OBI_HOST	The hostname or IP Address of the OBIEE server.	For example: 10.11.12.13 Or myweb.server.com	Mandatory
OBI_PORT	The port number of the OBIEE server.	For example: 9500	Mandatory
OBI_CONTEXT	The context of the OBIEE.	For example: Analytics	Mandatory

Property Name	Description of Property	Permissible Values	Comments
OBI_PROTOCOL	The protocol details of the OBIEE server.	http or https	Mandatory
ETL_APPSRC_TYPE	Create new ETL App or Src pair or use an existing one	0 = New 1 = Existing	#Mandatory if this an App layer installation. # That is, you have specified INSTALL_APP=1. # 0 = If you want to create a new ETL app or src pair # 1 = If you want to use an existing pair **NOTE**: If any other pack is already installed, then specify the value as 1.
ETL_SRC_1_DESC	Description for the ETL Staging source description	Not Applicable	# Mandatory if you want to create a new ETL app or src pair. #That is, you have specified ETL_APPSRC_TYPE=0
ETL_SRC_2_DESC	Description for the ETL Processing source description	Not Applicable	# Mandatory if you want to create a new ETL app or src pair. #That is, you have specified ETL_APPSRC_TYPE=0
ETL_SRC_3_DESC	Description for the ETL Processing source description	Not Applicable	# Mandatory if you want to create a new ETL app or src pair. #That is, you have specified ETL_APPSRC_TYPE=0 For example, Results
ETL_SRC_1_NAME	ETL Staging source name	Not Applicable	# Mandatory if you want to create a new ETL app or src pair. #That is, you have specified ETL_APPSRC_TYPE=0 This Source must be mapped to the above ETL Application. For example, PROCESSING.

Property Name	Description of Property	Permissible Values	Comments
ETL_SRC_2_NAME	ETL Processing source name	Not Applicable	# Mandatory if you want to create a new ETL app or src pair. #That is, you have specified ETL_APPSRC_TYPE=0 This Source must be mapped to the above ETL Application. For example, OFSAA Processing and Results
ETL_SRC_3_NAME	ETL Results source name	Not Applicable	# Mandatory if you want to create a new ETL app or src pair. #That is, you have specified ETL_APPSRC_TYPE=0 This Source must be mapped to the above ETL Application. For example, RESULTS.

6.8 Install the OIPI Pack

ATTENTION Before you begin the installation, ensure you have configured and executed the following files:

1. Configure the OS File System Settings and Environment Settings in .profile File

2. Configure the OFS_IP_PACK.xml File

3. Configure the OFS_IP_SCHEMA_IN.xml File

4. Configure the OFSAAI_InstallConfig.xml File (Do not configure this file if an installation of OFSAAI 8.1 already exists.)

5. Execute the Schema Creator Utility

6. Configure the Silent.props File

To install the OIPI Pack, follow these steps:

1. Log in to the system as a non-root user.

2. Identify a directory for installation and set the same in the user `.profile` file as follows:

   ```
   FIC_HOME=<OFSAA Installation Directory>
   ```

```
export FIC_HOME
```

3. Execute the user .profile file.

```
. ./.profile
```

4. Navigate to the OFS_IP_PACK/bin directory.

ATTENTION	Do not install the new applications in the same segment if the preinstalled applications use the Run Management functionality of OFSAAI.

5. Enter the following command in the console to execute the application pack installer.

```
./setup.sh SILENT
```

The installer proceeds with the pre-installation checks.

Figure 14: Installation

6. Enter the OFSAA Processing Tier FTP/SFTP password value when prompted in the Command Prompt and proceed.

Figure 15: OFSAA Processing Tier FTP/SFTP password

7. The process displays the OFSAA License. Enter **Y** and proceed.

Figure 16: OFSAA License Agreement

8. The installer installs the OFS AAI application.

Figure 17: OFS AAI Installation

9. After OFS AAAI is installed, the OIPI Application Pack installation begins.

Figure 18: OIPI Installation

The OFSAA Infrastructure installation performs a post-install health check automatically on the successful installation of the product.

The following message is displayed in the console: *Installation completed*

10. To verify if the release is applied successfully, check the log files mentioned in the Verify the Log File Information section.

11. After the installation OIPI Pack 8.1.1.0.0 is successful, complete the required Post-installation steps.

7   Post-installation

After the successful installation of the OIPI Pack Release 8.1.1.0.0, follow the post-installation procedures.

Topics:

- Post-installation Checklist
- Verify the Log File Information
- Backup the SCHEMA_CREATOR.xml, OFS_IP_SCHEMA_OUTPUT.xml, and Silent.props Files
- Change the ICC Batch Ownership
- Excel Upload Mapping and Template
- Additional Configuration

7.1   Post-installation Checklist

You can use this checklist to have a quick glance at everything that you will be doing post installing this application. The link provided in each step takes you to a section either within this document or to another referenced document.

| NOTE | See the *Post-Installation* section in the OFS Advanced Analytical Applications Infrastructure Installation Guide Release 8.1.1.0.0 to complete these procedures. |

Table 14: Post-installation Checklist

Sl. No.	Post-installation Activity
1	Verify the installation logs.
2	Back up the `SCHEMA_CREATOR.xml`, `OFS_IP_SCHEMA_OUTPUT.xml`, and `Silent.props` files.
3	Stop the OFSAA Infrastructure services.
4	Create and deploy EAR/WAR files.
5	Start the OFSAA Infrastructure services.
6	Configure the webserver.
7	Configure the Resource Reference in web application servers.
8	Configure the Work Manager in the Web Application Servers.
9	Access the OFSAA application.
10	OFSAA Landing Page
11	Configure the `excludeURLList.cfg` file.
12	Change the ICC batch ownership.

Sl. No.	Post-installation Activity
13	Create Application Users.
14	Map the Application User(s) to User Groups.
15	Set TDE and Data Redaction in OFSAAI.
16	Implement Data Protection in OFSAA.

7.2 Verify the Log File Information

See the following logs files for more information:

- `Pack_Install.log` file in the `OFS_IP_PACK/logs/` directory.

- Infrastructure installation log files in the `OFS_IP_PACK/OFS_AAI/logs/` directory.

- `OFS_IP_PACK_installation.log` file in the `OFS_IP_PACK/OFS_OIPI/logs` directory

7.3 Backup SCHEMA_CREATOR_IN.xml, OFS_IP_SCHEMA_OUTPUT.xml and Silent.props Files

Back up the `SCHEMA_CREATOR.xml`, `OFS_IP_SCHEMA_OUTPUT.xml`, and `Silent.props` files as they can be reused when upgrading existing applications or installing new applications.

Table 15: Directory of Files to Backup

File Name	Directory
OFS_IP_SCHEMA_IN.xml	OFS_IP_PACK/schema_creator/conf
OFS_IP_SCHEMA_OUTPUT.xml	OFS_IP_PACK/schema_creator/
Silent.props	OFS_IP_PACK/appsLibConfig/conf

7.4 Access the OFSAA Application

To access the OFSAA application, follow these steps:

1. Open a browser and enter the URL in the following format:

   `<scheme>://<IP address/ hostname>:<port>/<context-name>/login.jsp`

   For example, `https://192.0.2.2/ofsaa/login.jsp`

   The OFSAA Login window is displayed.

Figure 19: OFSAA Login Window
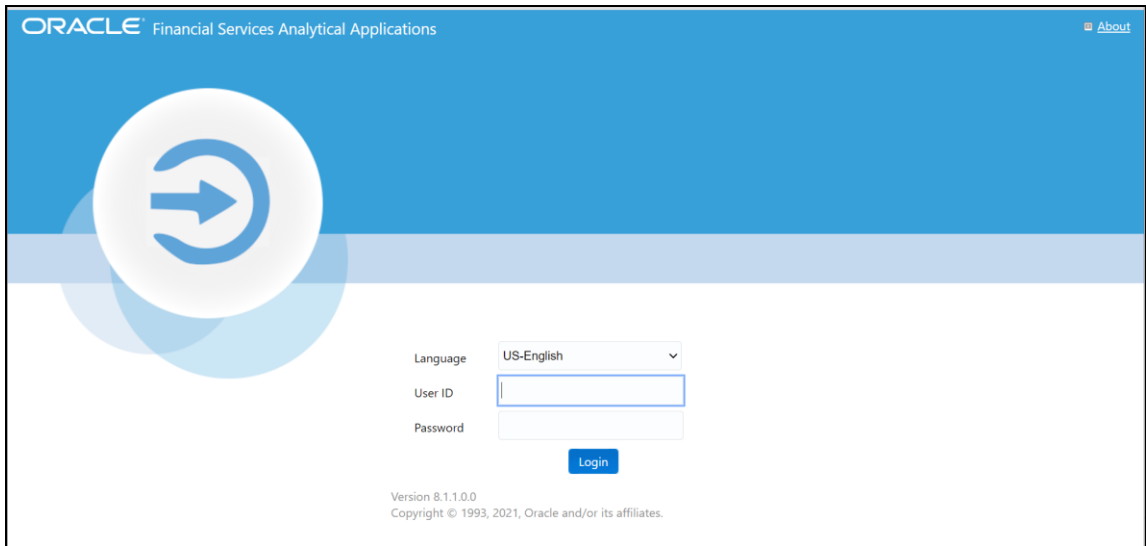
With the installation of every OFSAA Application Pack, there are two seeded user profiles configured in the system:

- SYSADMN System Administrator

- SYSAUTH System Authorizer

The SYSADMN and SYSAUTH users are configured with a default password, which you will require to log in for the first time. See the MOS Doc ID: 2691681.1 for the password.

2. Log in to the application using the "SYSADMN" User ID and the default password. After the first log in, you are prompted to change the password.

ATTENTION	The password change is required only for a new installation scenario and not for upgrade scenarios.

7.5   OFSAA Landing Page

On successful log in, the **OFSAA Landing** page is displayed.

Figure 20: OFSAA Landing Page
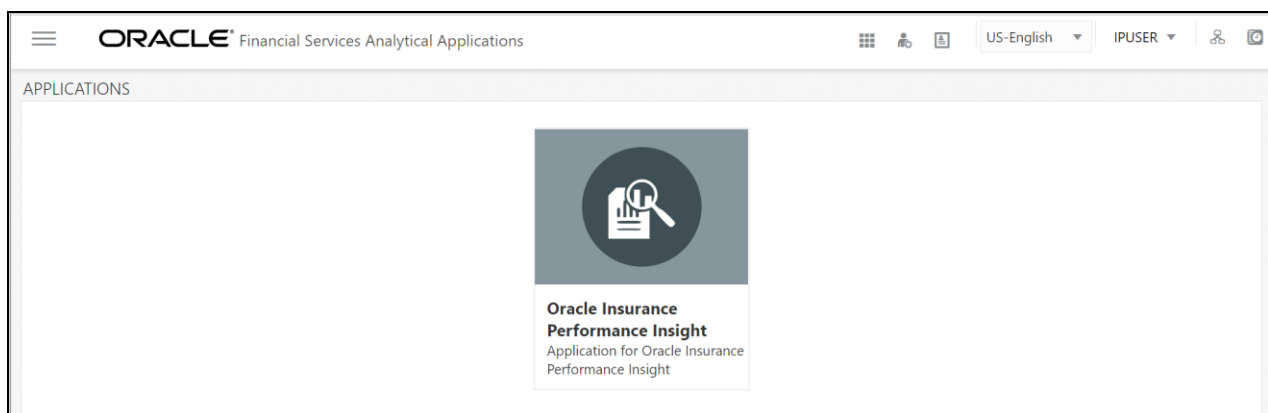
OFSAA Landing page shows the available Applications as tiles, for which a user has access. Click the respective Application tile to launch that particular application. You can change the landing page based on your preference.

7.6 View OFSAA Product Licenses after Installation of Application Pack

In an integrated environment, where you have multiple applications installed on the same domain or infrastructure, OFSAAI allows you to see the other licensed applications through the UI. For more information, see the *View OFSAA Product Licenses after Installation of Application Pack* in the OFS Analytical Applications Infrastructure User Guide Release 8.1.1.0.0.

7.7 Change the ICC Batch Ownership

All the seeded batches in the OIPI application are automatically assigned to the SYSADMN user during installation. To see the batches in the Batch Maintenance menu, you must execute the following query in the Config Schema of the database:

```
-------------------------------------------------------------------------------------------------------
begin
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP ('fromUser','toUser','infodom');
end;
OR
begin
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP ('fromUser','toUser');
end;


-------------------------------------------------------------------------------------------------------
```

Where:

- `fromUser` indicates the user who currently owns the batch

- `toUser` indicates the user to whom the ownership must be transferred

- `infodom` is an optional parameter. If specified, the ownership of the batches pertaining to that infodom will be changed.

7.8 Excel Upload Mapping and Template

This section provides steps about the Excel Upload.

1. Post-installation, navigate to the `ExcelUpload` directory present in the path `Extracted Installer location/OFS_OIPI/bin/dumps`.

2. In the `ExcelUpload` directory, change the directory name from `infodom` to the name of the respective infodom.

3. Copy the `ExcelUpload` directory to the `ftpshare/STAGE` directory.

4. Create the `STAGE` directory in the path `<TOMCAT_HOME>`.

5. Copy the `ExcelUpload` directory to the `STAGE` directory in the path `<TOMCAT_HOME>`.

7.9 Additional Configuration

You can use this checklist to have a quick glance at some additional configurations. The link provided in each step takes you to a section either within this document or to another referenced document.

> **NOTE**   See the *Additional Configuration* section in the OFS Advanced Analytical Applications Infrastructure Installation Guide Release 8.1.1.0.0 to complete these procedures.

Table 16: Directory of Files to Backup

Sl. No.	Additional Configuration Activity
1	Add the FTP/SFTP configuration for file transfer.
2	Configure the Infrastructure Server Memory.
3	Retrieve the Patch Information
4	Change IP/Hostname, Ports, Deployed Paths of the OFSAA Instance.
5	Execute the OFSAAI setup information fetching tool.
6	Execute the Encryption Changer.
7	Configure the Infrastructure LDAP.
8	Configure and deploy the OFSAAI web services.
9	Enable the parallel execution of DML statements.
10	Configure the message details in the Forms Designer.
11	Clear the application cache.
12	Configure the password changes.
13	Configure the Java Virtual Machine.
14	Configure the internal service (Document Upload/Download).

8 RPD and Catalog Deployment and Map View Configuration For OAS and OBIEE

Topics:

- [Deploying the Report Analytics](#)
- [Mapview Configuration for OBIEE](#)

8.1 Deploying the Report Analytics

The deployment of OIPI Report Analytics involves the following tasks:

- [Deploying OIPI RPD Files](#)
- [Deploying OIPI Catalog File](#)

8.1.1 Deploying OIPI RPD Files

To deploy the RPD file, follow these steps:

1. Copy the RPD file from the following location for the OIPI application.

Table 17: RPD File

Application	File Name	Location
OIPI	OFS_IA_Analytics.rpd	OFS_OIPI_DASHBOARDS/12.2.1.4.0/datamodel

> **NOTE** It is recommended to merge the OFS_IA_Analytics.rpd file by creating fresh dummy.rpd files. You can then ignore the merge issues.
>
> Keep the merged rpd as the base in order to avoid the merge errors.

2. Paste the copied RPD file in the Windows machine where the OBIEE Windows Administration client or OAS Analytics client is installed and deploy. For more information on deployment, refer to your OBIEE 12c or OAS documentation.

3. Open the RPD file online with the default password.

> **NOTE** The RPD files are configured with a default password, which you will require to open for the first time. See the [MOS Doc ID: 2691681.1](#) for the password.

4. In the OBIEE Windows Administration client, from the **File** menu, select **Save**.

5. Click **Yes** in the dialog box, **Do you want to check global consistency?**

6. Click **OK** to acknowledge the message, *Consistency check didn't find any errors, warning, or best practices violations*.

You can ignore the warnings on the consistency check.

8.1.2　Deploying OIPI Catalog File

To deploy the Catalog files, follow these steps:

1. Copy the Catalog files from the following locations for the OIPI application.

Table 18: Catalog Files

Application	File Name	Location
OIPI	`OFS_GIA_Reporting.catalog` `OFS_LAA_Reporting.catalog`	`OFS_OIPI_DASHBOARDS/12.2.1.4.0/content/catalog`

2. Paste the copied catalog files to a local folder.

3. Open the analytics OBIEE URL-(`http://<ipaddress>:<port>/analytics`) and login with your server credentials.

4. Click the **Catalog** link available on the top right corner.

5. Click **Shared Folders** and then click **Un-Archive**.

6. Browse the path where catalog files are copied in the local folder. Select a file and click **Open**. Then click **OK**. Repeat this for the remaining catalog files.

7. Click any of the **Dashboards** and verify if all the reports are available.

8.1.3　Port OBIEE Artifacts to Oracle Analytics Server

You can deploy the OBIEE artifacts in two ways as follows:

- Directly deploy the artifacts distributed with OFSAA on the Oracle Analytics Server (OAS).

- Perform an in-place upgrade from OBIEE to OAS and deploy the artifacts. For more information, see Upgrade from Oracle Business Intelligence 12c documentation.

> **NOTE**　See the MOS Doc ID 2648055.1 to confirm if your application or pack is certified for Oracle Analytics Server.

8.2　Post-Installation Steps

After successfully deploying the RPD and Catalog files, perform the following steps:

1. Apply the patch **Bundle Patch** for OBIEE 12.2.1.4.0. See the **Readme** packaged with the patch for further instructions on how to install the patch. See the Doc ID 2070465.1 for more information about the bundle patch.

2. Do the following changes in the `instanceconfig.xml` file:

   - Backup and edit the `instanceconfig.xml` file located at:

     `$ORACLE_HOME/user_projects/domains/bi/config/fmwconfig/biconfig/OBIPS`

Table 19: Tags and Changes for instanceconfig.xml File

Tag to be changed or added	Changes
Change the following tag: `<Views>`	``` <Charts> <DefaultWebImageType>html5</DefaultWebImageType> <MaxVisibleColumns>10000</MaxVisibleColumns> <MaxVisiblePages>600000</MaxVisiblePages> <MaxVisibleRows>900000</MaxVisibleRows> <MaxVisibleSections>600000</MaxVisibleSections> <JavaHostReadLimitInKB>8192</JavaHostReadLimitInKB> </Charts> <Cube> <CubeMaxRecords>9999999</CubeMaxRecords> <CubeMaxPopulatedCells>999999999</CubeMaxPopulatedCells> </Cube> ```
Change the following tag: `<Security>`	``` <Security> <CheckUrlFreshness>false</CheckUrlFreshness> <EnableSavingContentWithHTML>true</EnableSavingContentWithHTML> </Security> ```
Add the following tag: `<ServerInstance>`	``` <Prompts> <MaxDropDownValues>256</MaxDropDownValues> <ResultRowLimit>65000</ResultRowLimit> <AutoApplyDashboardPromptValues>true</AutoApplyDashboardPromptValues> <AutoSearchPromptDialogBox>true</AutoSearchPromptDialogBox> <AutoCompletePromptDropDowns> <SupportAutoComplete>true</SupportAutoComplete> <CaseInsensitive>true</CaseInsensitive> <MatchingLevel>MatchAll</MatchingLevel> <ResultsLimit>50</ResultsLimit> </AutoCompletePromptDropDowns> <ShowNullValueWhenColumnIsNullable>never</ShowNullValueWhenColumnIsNullable> </Prompts> ```

- Save and close the file.
- Restart the presentation server for the changes to take effect.

3. Do the following changes in the `NQSConfig.INI` file.

   Evaluate function is used in filters of many reports. To support the evaluation function in reports, the value of `EVALUATE_SUPPORT_LEVEL` must be set as **2** instead of **0** in the `NQSConfig.INI` file of the OBIEE server present in the `$ORACLE_HOME/user_projects/domains/bi/config/fmwconfig/biconfig/OBIS` directory.

8.3   Online Mapview Configuration for OBIEE

To configure the Mapview, follow these steps:

1. Log in to the **Analytic screen** and select **Administration**.

2. Click **Manage map Data**.

3. Click **Import Layer** and then select **World_Countries**.

4. Choose **Preview MAP** as **ORACLE_MAPS**.

5. Click **Import Layer** and then select **World_States_Provinces**.

6. Choose **Preview MAP** as **ORACLE_MAPS**.

7. Select **Background Maps**.

8. Use import Background maps and choose **ORACLE_MAPS**.

9. Edit the same, add the layer **World_Countries** and then **World_States_Provinces**. While choosing, select the location **ORACLE_MAPS** for a higher Zoom value.

10. Select the zoom level for country 0 and country 2...15.

11. Navigate back to the **Layers** tab.

12. Edit **World_Countries** (select Name as the Layer Key) and **World_States_Provinces** (select State Province Name as the Layer Key) by adding BI Key Columns:

    For Country:

    - Choose Insurance Claims > Location > Country Description

    - Choose Insurance Policy > Location > Country Description

    - Choose Insurance Quotes > Location > Country Description.

    For State:

    - Choose Insurance Claims > Location > State Description

    - Choose Insurance Policy > Location > State Description

    - Choose Insurance Quotes > Location > State Description.

9   Migrate Excel Upload Functionality

See the *Migrate Excel Upload* section in the [OFS Advanced Analytical Applications Infrastructure Installation Guide Release 8.1.1.0.0](#) to complete the procedures.

10 Frequently Asked Questions (FAQs) and Error Dictionary

For FAQs and installation error-related information, see the section *Frequently Asked Questions (FAQs) and Error Dictionary* in the [OFS AAAI Release 8.1.0.0.0 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.