

Oracle Financial Services Data Foundation Application Pack

Installation and Configuration Guide

Release 8.0.9.4.0

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Financial Services

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OFS Data Foundation Application Pack Installation and Configuration Guide

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Document Control

Version Number	Revision Date	Change Log
1.0	11-December-2020	Created the document for the installation and configuration of the OFSDF Release 8.0.9.4.0.
2.0	14-Dec-2020	Added the WebLogic upgrade information in the Pre-installation Requirements section.
3.0	22-December-2020	Added details about the OFSDF mandatory one-off patch 32310622 . See the Applying Mandatory OFSDF Patch section.
4.0	17-December-2021	The OFSAAI mandatory patch 33663417 information is added.

Table of Contents

1	Preface	5
1.1	Audience	5
1.2	How this Guide is Organized	5
1.3	Access to the Oracle Support	5
1.4	Related Documents	6
1.5	Conventions	6
1.6	Abbreviations	7
2	OFS Data Foundation Application Pack Maintenance Release v8.0.9.4.0	9
2.1	Pre-installation Requirements	9
2.2	Applying this Maintenance Release	10
2.2.1	<i>Downloading OFS Data Foundation Application Pack</i>	10
2.2.2	<i>Pre-installation Activities</i>	12
2.2.3	<i>Installing the OFS Data Foundation Application Pack</i>	13
2.2.4	<i>Post-installation Activities</i>	13
3	Appendix A	17
3.1	Frequently Asked Questions	17

1 Preface

This document provides instructions to install the Oracle Financial Services Data Foundation (OFSDF) Application Pack v8.0.9.4.0 Maintenance Level (ML) Release.

Topics:

- [Audience](#)
- [How this Guide is Organized](#)
- [Access to the Oracle Support](#)
- [Related Documents](#)
- [Conventions](#)
- [Abbreviations](#)

1.1 Audience

This document is intended for Administrators, Business Users, Strategists, and Data Analysts, who are responsible for installing and maintaining the application pack components.

- OFSAA application components
- OFSAA architecture
- UNIX commands
- Database concepts
- OFSDF Data Model

1.2 How this Guide is Organized

The OFSDF Application Pack Installation Guide includes the following sections:

- [OFS Data Foundation Application Pack Maintenance Release 8.0.9.4.0](#): This section provides information about the prerequisites, pre-installation, installation, and post-installation procedures for the OFSDF Application Pack Release v8.0.9.4.0.
- [Appendix A](#): This section provides information about the FAQs for the OFSDF Application Pack Release v8.0.9.4.0.

1.3 Access to the Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

1.4 Related Documents

We strive to keep this and all other related documents updated regularly; visit the [OHC Documentation Library](#) to download the latest version available there. The following is a list of related documents:

- The following are the OFSDF Application Pack Release 8.0.9.x.x documents:
 - [Oracle Financial Services Data Foundation Application Pack Release Notes 8.0.9.3.2](#)
 - [Oracle Financial Services Data Foundation Application Pack Installation and Configuration Guide Release 8.0.9.0.0](#)
 - [Oracle Financial Services Data Foundation Application Pack User Guide Release 8.0.9.0.0](#)
 - [Oracle Financial Services Data Foundation Application Pack Release Notes 8.0.9.4.0](#)
- The following are the OFS AAI Application Pack Release 8.0.9.x.x documents:
 - [Oracle Financial Services Advanced Analytical Applications Infrastructure Installation and Configuration Guide Release 8.0.9.0.0](#)
 - [Oracle Financial Services Advanced Analytical Applications Infrastructure Installation and Configuration Guide Release 8.0.9.3.0](#)
 - [Oracle Financial Services Advanced Analytical Applications Infrastructure User Guide Release 8.0.9.0.0](#)
- [Oracle Financial Services Analytical Applications Technology Matrix Release 8.0.9.0.0](#)

1.5 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 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, internal document links to sections.

1.6 Abbreviations

The following table lists the abbreviations used in this document.

Table 2: Abbreviations

Conventions	Description
AIX	Advanced Interactive eXecutive
DEFQ	Data Entry Forms and Queries
DML	Data Manipulation Language
EAR	Enterprise Archive
EJB	Enterprise JavaBean
ERM	Enterprise Resource Management
FTP	File Transfer Protocol
GUI	Graphical User Interface
HTTPS	Hypertext Transfer Protocol Secure
J2C	J2EE Connector
J2EE	Java 2 Enterprise Edition
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
OFS	Oracle Financial Services
OFSAAI	Oracle Financial Services Analytical Application Infrastructure
OFSDF	Oracle Financial Services Data Foundation
OHC	Oracle Help Center
OLAP	On-Line Analytical Processing
OS	Operating System
RAM	Random Access Memory
RDMS	Relational Database Management System
SFTP	Secure File Transfer Protocol

Conventions	Description
SID	System Identifier
SSL	Secure Sockets Layer
TDE	Transparent Data Encryption
TNS	Transparent Network Substrate
URL	Uniform Resource Locator
VM	Virtual Machine
Web Archive	WAR
XML	Extensible Markup Language

2 OFS Data Foundation Application Pack Maintenance Release v8.0.9.4.0

This Maintenance Release of the OFS Data Foundation Application Pack includes all enhancements and bug fixes that are done since the OFSDF Application Pack v8.0.9.3.2 release.

Topics:

- [Pre-installation Requirements](#)
- [Applying this Maintenance Release](#)

NOTE

The schemas or domains for OFSDF are referred to as BFND.

2.1 Pre-installation Requirements

These are the pre-installation requirements for the OFSDF Application Pack v8.0.9.4.0 release:

NOTE

Before installing OFSDF Application Pack v8.0.9.4.0, if Data Management Release v8.0.5.0.0 Application Pack (full installer) is already installed on the system, then execute the following statements in the Atomic schema:

- DROP INDEX DIM_DATES_CALENDAR_DATE;
 - DROP INDEX DIM_KI_GROUP_LRI;
- The OFSDF Application Pack Release v8.0.9.4.0 is compatible with the WebLogic v12.2.x and does not support the WebLogic v12.1.3. If the WebLogic version is 12.1.3, upgrade to the WebLogic 12.2.x version.
 - Oracle Financial Services Advanced Analytical Applications Infrastructure (OFSAAI) Application Pack v8.0.9.3.0 Maintenance Release patch ID **31656153** (download from [My Oracle Support \(MOS\)](#)) plus other prerequisite OFSAAI patches (see the *Pre-installation Requirements* section of the [Oracle Financial Services Advanced Analytical Applications Infrastructure Installation and Configuration Guide Release 8.0.9.3.0](#)) must be installed and configured on your machine.
 - Oracle Financial Services Data Foundation Application Pack v8.0.9.3.2 One-off Release patch ID **32168535** (download from [My Oracle Support \(MOS\)](#)) must be installed and configured on your machine (see the [Oracle Financial Services Data Foundation Application Pack Release Notes 8.0.9.3.2](#)).

NOTE

The erwin files for OFSDF Application Pack v8.0.9.4.0 is available on [My Oracle Support \(MOS\)](#) in patch **32162752**.

- Enable the unlimited cryptographic policy. By default, JCE Policy JAR files are available for the Java versions mentioned in the following link and for later versions:

https://bugs.java.com/view_bug.do?bug_id=JDK-8170157

For the Java versions, where unlimited cryptographic policy is disabled by default, follow these steps:

- a. Download the JCE Policy related jar files `local_policy.jar` and `US_export_policy.jar`.
 - For Oracle Java, download the `local_policy.jar` and `US_export_policy.jar` files from <http://www.oracle.com/technetwork/java/javase/downloads/jce-7-download-432124.html>.
 - For IBM Java, download the `local_policy.jar` and `US_export_policy.jar` files from <https://www14.software.ibm.com/webapp/iwm/web/preLogin.do?source=jcesdk>.
- b. Copy (or replace) the downloaded JCE Policy related jar files `local_policy.jar` and `US_export_policy.jar` to the `/jre/lib/security` directory of the Java installation directory used for OFSAAI and the web application servers.

NOTE For information about the hardware and software requirements, see the [Oracle Financial Services Analytical Applications Technology Matrix Release 8.0.9.0.0](#).

2.2 Applying this Maintenance Release

This section provides information about installing this Maintenance Release.

NOTE This Maintenance Release patch is applicable only for an RDBMS mode of installation.

Topics:

- [Downloading OFS Data Foundation Application Pack](#)
- [Pre-installation Activities](#)
- [Installing the OFS Data Foundation Application Pack](#)
- [Post-installation Activities](#)

2.2.1 Downloading OFS Data Foundation Application Pack

To download and extract the release contents, follow these steps:

NOTE Enable the unlimited cryptographic policy. By default, JCE Policy JAR files are available for Java.

1. Log in to [My Oracle Support](#). In the **Patches & Updates** tab, search for patch ID **32107412**.
2. Download the OFSDF Application Pack v8.0.9.4.0 archive file and copy it to your OFSAA server in the **Binary** mode.

NOTE The archive files are different for different operating systems such as AIX, Solaris, and RHEL or Oracle Linux.

3. Stop all the OFSAAI Services. For more information, see the *Stopping Infrastructure Services* section in the [Oracle Financial Services Advanced Analytical Applications Infrastructure Installation and Configuration Guide Release 8.0.9.0.0](#).
4. Log in to [My Oracle Support](#), search for the **33663417** Mandatory Patch in the **Patches & Updates** Tab and download it.

ATTENTION On the 10th of December 2021, Oracle released Security Alert CVE-2021-44228 in response to the disclosure of a new vulnerability affecting Apache Log4J prior to version 2.15. The application of the **33663417** Mandatory Patch fixes the issue.

For details, see the My Oracle Support Doc ID [2827801.1](#).

Ensure that you reapply the OFSAAI Mandatory Patch **33663417** whenever you Install or Upgrade the Application, or whenever you apply an Incremental Patch.

5. Log in to the OFSAA Server as a non-root user.
6. Execute the following command:

```
chmod -R 750 $FIC_HOME
```
7. Assign the WRITE permission to the files and folders such as `commonscripts`, `EXEWebService`, `ficapp`, `ficweb`, and `ficdb` by using the following command:

```
chmod -R 775 *
```
8. If you have an Unzip utility, skip to the next step. Download the Unzip utility (OS-specific) `unzip_<os>.Z` and copy it in the Binary mode to the directory that is included in the `PATH` variable, in the `$HOME` path or directory in which you copied the OFSDF Application Pack v8.0.9.4.0 installer.
 - a. Extract the unzip installer file using the following command:

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

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.

- b. Give the EXECUTE permission to the file using the following command:

```
chmod 751 OFS_BFND_8.0.9.4.0_<OperatingSystem>.zip
```

9. Extract the contents of the OFSDF v8.0.9.4.0 archive file using the following command:

```
unzip_<os> -a <name_of_the_file_to_be_unzipped>
```

NOTE

- Rename or remove the existing OFSAA Application Pack folder from the OFSAA server before extracting the contents from the release archive (.zip).
For example: When this release is extracted from the archive, it creates a folder named `OFS_BFND_PACK`. Rename or remove any existing folder with the same name, which exists in the path where the release archive is copied.
- a option in this step is mandatory to unzip the archive file.
For example:

```
unzip_aix -a
OFS_BFND_8.0.9.4.0_<OperatingSystem>.zip
```

2.2.2 Pre-installation Activities

This section provides pre-installation activities required for the installation of the OFSDF Application Pack v8.0.9.4.0 release.

Topic:

- [Model Upload Parameter](#)

2.2.2.1 Model Upload Parameter

You must upload the configuration file `params.conf` before triggering the installation. The `params.conf` file is present in the `/OFS_BFND_PACK/OFS_BFND/conf/` directory.

The following are the input parameters for the `params.conf` file:

- Model Upload Process**
 - The required input value is 0 or 1.
 - 0 is an indication to skip the model upload process.
 - 1 is an indication to trigger the model upload process.
 - If the value is 1, then select the type of the model for the model upload process:

- **0** indicates the Released Data Model.
- **1** indicates a Customized Data Model.

If the value is **1**, then provide the inputs for the Data Model Name and the Path of the Data Model.

2.2.3 Installing the OFS Data Foundation Application Pack

To install the OFSDF Application Pack v8.0.9.4.0 release, follow these steps:

1. Assign the EXECUTE permission to the Maintenance Release archive file. Navigate to the `./OFS_BFND_PACK` directory and execute the following command:

```
chmod 750 OFSAAIUpdate.sh
```
2. Execute the `OFSAAIUpdate.sh` file using the following command:

```
./OFSAAIUpdate.sh
```
3. If OFSAA is deployed on the Oracle WebLogic Server v12.2.x, install the one-off patch **25343603**. See the ReadMe available with the patch for further instructions on installing the patch.

NOTE

If this one-off patch is already applied as a part of the v8.0.9.0.0 release, this step is not required.

For a list of supported servers for OFSAA v8.0.9.0.0, see the [Oracle Financial Services Analytical Applications Technology Matrix Release 8.0.9.0.0](#).

Verify if the release is applied successfully by checking the log file generated in the installation folder. You can find the log files in the `./OFS_BFND_PACK/logs` and `./OFS_BFND_PACK/OFS_BFND/logs` directories. You can ignore the ORA-00001, ORA-00955, ORA-02260, ORA-01031, and ORA-01430 errors in the log files. For any other errors, contact [My Oracle Support](#).

2.2.4 Post-installation Activities

The following sections provide information about the post-installation activities for the OFSDF Application Pack v8.0.9.4.0 release.

Topics:

- [Platform-related Post-installation Activities](#)
- [OFSDF Related Post-installation Activities](#)

2.2.4.1 Platform-related Post-installation Activities

After OFSDF Application Pack is successfully installed, to perform the OFSAAI related post-installation activities, follow these steps:

1. Clear the application cache.

2. Navigate to the following directory depending on the configured web application server and delete the following 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>/<auto generated folder>/jsp_servlet
```
 - **Websphere:**

```
<Websphere installation directory>/AppServer/profiles/<Profile name>/temp/<Node name>/server1/<Application name>/<.war file name>
```
3. Add `umask 0027` in the `.profile` file of the UNIX account, which manages the webserver to ensure restricted access permissions.
4. Perform any necessary additional configuration mentioned in the *Additional Configurations* section in the [Oracle Financial Services Data Foundation Application Pack Installation and Configuration Guide Release 8.0.9.0.0](#).
5. Apply the OFSAAI Mandatory Patch **33663417**.
See the Readme that is packaged with the Patch for instructions about installing the Patch.

ATTENTION

On the 10th of December 2021, Oracle released Security Alert CVE-2021-44228 in response to the disclosure of a new vulnerability affecting Apache Log4J prior to version 2.15. The application of the **33663417** Mandatory Patch fixes the issue.

For details, see the My Oracle Support Doc ID [2827801.1](#).

Ensure that you reapply the OFSAAI Mandatory Patch **33663417** whenever you Install or Upgrade the Application, or whenever you apply an Incremental Patch.

6. Generate the application EAR or WAR file and redeploy the application on the configured web application server. For more information on generating and deploying the EAR or WAR files, see the *Post Installation Configuration* section in the [Oracle Financial Services Data Foundation Application Pack Installation and Configuration Guide Release 8.0.9.0.0](#).
7. After the successful installation of the release, restart all the OFSAAI services. For more information, see the *Start/Stop Infrastructure Services* section in the [Oracle Financial Services Data Foundation Application Pack Installation and Configuration Guide Release 8.0.9.0.0](#).

2.2.4.2 OFSDF Related Post-installation Activities

This section provides the OFSDF related post-installation procedures for the OFSDF Application Pack v8.0.9.4.0 release.

Topics:

- [Applying Mandatory OFSDF Patch](#)
- [Change Batch ICC Ownership](#)
- [Configuration to Enable the Restatement Support](#)

2.2.4.2.1 Applying Mandatory OFSDF Patch

Apply the OFSDF mandatory one-off patch **32310622** (Download the patch from [My Oracle Support](#)). See the ReadMe document attached with the patch for instructions about installing the patch.

2.2.4.2.2 Change Batch ICC Ownership

All the seeded batches in the OFSDF Application Pack are automatically assigned to the SYSADMIN user during the installation process. To see batches in the **Batch Maintenance** menu, execute the following queries in the Config schema of the database.

Syntax:

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

- `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 you specify this parameter, the ownership of the batches of that `infodom` is changed.

For example:

```
begin
AAI_OBJECT_ADMIN.TRANSFER_BATCH_OWNERSHIP
('SYSADMIN','FSDFOP','OFSBFNDINFO');
end;
```

2.2.4.2.3 Configuration to Enable the Restatement Support

The Restatement Support feature enables the backdated Run execution for any Start Date and End Date explicitly on a specific list of metadata for data refiling in the OFSDF Application Pack.

NOTE

This section is applicable only for an RDBMS mode of installation.

To enable the Restatement Support feature in the OFSDF Application Pack, see the procedure in the *Configurations to Enable the Restatement Support* section in the [Oracle Financial Services Data Foundation Application Pack Installation and Configuration Guide Release 8.0.9.0.0](#).

3 Appendix A

This chapter includes FAQs for the OFSDF Application Pack v8.0.9.4.0 release.

Topic:

- [Frequently Asked Questions](#)

3.1 Frequently Asked Questions

What checks does the v8.0.9.4.0 release patch perform?

This release patch performs the following checks:

- Environment Check: During the environment check, it performs Java validation, Environment Variables validation, OS-specific validation, DB specific validation, and shuts down all the OFSAAI Services (Infrastructure Server, ICC Server, and back-end services).
- Post-installation check: As a part of the Post-installation check, the patch checks if the OFSAAI services can be successfully started.

Which version of the erwin Data Modeler does OFSAAI support?

OFSAAI now supports the erwin Data Modeler versions 2019 R1 and 2020 R2 generated XMLs.

What should I do for viewing the log files at the Debug level for troubleshooting?

By default, the log level is set as **INFO**. You must manually change the log level to **Debug** to view the log files in the debug level. Based on your requirements, you can also change the log level to Warn, Error, or Fatal. To view log files, follow these steps:

1. Navigate to the `$FIC_HOME/conf` directory in the APP layer of your OFSAAI installation.
 - Change the priority value to **Debug** in the `RevLog4jConfig.xml` file.

For example:

```
<root>
<priority value ="debug" />
<appender-ref ref="ConsoleAppender1"/>
</root>
```

- Replace the value of the `LOGGERLEVEL` parameter in the `DynamicServices.xml` file from 20 with 0 (20 is the value for Info and 0 for Debug).

NOTE

For a multi-tier installation, also change the `LOGGERLEVEL` value to 0 (Debug) in the `DynamicServices.xml` and `RevLog4jConfig.xml` files, which are present in the `$FIC_APP_HOME/conf`, `$FIC_DB_HOME/conf`, and `$FIC_WEB_HOME/conf` directories.

2. Navigate to the `$FIC_WEB_HOME/webroot/conf` directory and change the **priority** value to **Debug** in the `ExportLog4jConfig.xml`, `MDBLogger.xml`, and `PR2Logger.xml` files to view

the log files at the Debug level for the modules Archive or Restore, Metadata Browser, and RRF, respectively.

3. Generate the application EAR or WAR file and redeploy the application on the configured web application server. For more information on generating and deploying the EAR or WAR file, see the *Post Installation Configuration* section in the [Oracle Financial Services Advanced Analytical Applications Infrastructure Installation and Configuration Guide Release 8.0.9.0.0](#).
4. Restart the OFSAAI Services (APP and WEB). For more information, see the *Start/Stop Infrastructure Services* section in the [Oracle Financial Services Advanced Analytical Applications Infrastructure Installation and Configuration Guide Release 8.0.9.0.0](#).

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?
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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.

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