

OFS Asset Liability Management

Installation Guide

Release 8.0.6.6.0

July 2020



OFS Asset Liability Management Installation Guide

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Document Control

Version Number	Revision Date	Change Log
1.0	Jul 2020	Created the document to capture OFSAAI 8.0.6.6.0 Maintenance Level Release.

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1 Preface

This section provides information about the Oracle Financial Services Asset Liability Management (OFS ALM) Application Pack.

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

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

Topics:

- [Intended Audience](#)
- [How this Guide is Organized](#)
- [Access to Oracle Support](#)
- [Related Information Sources](#)
- [Conventions](#)
- [Abbreviations](#)

1.1 Audience

OFS ALM Application Pack Installation Guide is intended for administrators and implementation consultants who handle installing and maintaining the application pack components.

This document assumes that you have experience in installing Enterprise components and basic knowledge about the following:

- OFS ALM pack components
- OFSAA Architecture
- UNIX Commands
- Database Concepts
- Web server or Web application server

1.2 How this Guide is Organized

The Installation Guide is organized into the following sections:

- [OFS ALM Release v8.0.6.6.0](#)
- [Appendix A - Installation of R and Oracle R Enterprise \(ORE\)](#)

1.3 Access to 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 list of related documents is provided here.

- [Oracle Financial Services Asset Liability Management User Guide](#)
- [Oracle Financial Services Asset Liability Management Analytics User Guide](#)
- [Oracle Financial Services Analytical Applications Technology Matrix](#)
- [Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide](#)

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.
<code>monospace</code>	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.

1.6 Abbreviations

The following table lists the abbreviations used in this document.

Table 2: Abbreviations

Abbreviation	Meaning
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
OLH	Oracle Loader for Hadoop

Abbreviation	Meaning
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 OFS ALM Release v8.0.6.6.0

OFS Asset Liability Management Installation Guide (OFS ALM) Maintenance Level (ML) release v8.0.6.6.0 includes all the bug fixes and minor enhancements done since the previous Minor release v8.0.6.0.0.

This ML release of OFS ALM can be installed on a setup with any Oracle Financial Services Analytical Applications (OFSAA) v8.0.6.0.0 Application Pack.

2.1 Pre-installation Requirements

The following pre-installation steps are required for this release:

- The minimum patch level installed must be OFS ALM Release **8.0.6.0.0**.
- Ensure that the unlimited cryptographic policy for Java is enabled during the installation of OFS ALM 8.0.6.0.0. For more information, see the *Enabling Unlimited Cryptographic Policy* section in the [OFS Analytical Applications Infrastructure Administration Guide](#).
- It is mandatory to install the OFS ALM 8.0.6.6.0 ML only on *Java 8 with JCE enabled*. Therefore, configure the Java version of the following to *Java 8 with JCE enabled*.
 - OFSAA Processing Tier (where this ML will be installed)
 - Web server (Tomcat, WebSphere, or WebLogic)

NOTE

To upgrade Java 7 to Java 8 in an existing OFSAA 8.0.6.x.x instance, see *Appendix P* in the [Oracle Financial Services Asset Liability Management Installation and Configuration Guide 8.0.6.0.0](#).

- The OFS ALM 8.0.6.6.x release supports Oracle Database 19c in addition to the continued support on Oracle Database 12c. For details about configuring the Oracle Database Release 19c Server and Client for existing installations of OFSAA running Oracle Database Release 12c Server and Client, see the MOS Doc ID: [2699715.1](#).
- In an environment consisting of multiple OFSAA applications, if the October 2020 Critical Patch Update is applied for any one application, it is mandatory to apply the respective October 2020 Critical Patch Updates for all other applications on that OFSAA instance, regardless of the application's version. See the My Oracle Support Doc ID [2724021.1](#) for details.

2.2 Installing this Release

To install this release patch, follow these steps:

1. Log in to [My Oracle Support](#) and search for **31520860** under the Patches & Updates tab.
1. Download the OFS ALM 8.0.6.6.0 ML Release archive file and copy to your OFSAA server in **Binary** mode.

NOTE

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

2. Stop all the OFSAAL services. For more information, see the *Stopping Infrastructure Services* section in the [Oracle Financial Services Asset Liability Management Installation and Configuration Guide 8.0.6.0.0](#).
3. 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](#).

4. Log in to the OFSAA server as a non-root user and navigate to the `$FIC_HOME` directory.
5. Assign WRITE permission to the files and directories such as commonscripts, EXEWebService, ficapp, ficweb, and ficdb using the command:


```
chmod -R 775 *
```
6. If you have the Unzip utility, skip to the next step or download the Unzip utility (OS-specific) and copy it in Binary mode to the directory that is included in your PATH variable, typically `$HOME` path or directory in which you have copied the 8.0.6.6.0 ML.
 - Uncompress the unzip installer file using the 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.

- Assign EXECUTE permission to the utility using the command:

```
chmod 751 unzip_<os>
```

For example, `chmod 751 unzip_aix`

7. Extract the contents of the 8.0.6.6.0 ML archive file using one of the following commands:

```
unzip_<os> -a <name of the file to be unzipped>
```

Or

```
unzip -a <name of the file to be unzipped>
```

NOTE

The above “-a” option is mandatory to extract the archive file.
An example for AIX operating system,
`unzip_aix -a p31284429_80660_AIX64.zip`

8. Update the parameters in the `params.conf` file present in the `/OFS_ALM_PACK/OFS_ALM/conf/` directory. The update instructions are present in the file itself.

9. Navigate to the `/OFS_ALM_PACK` directory to assign EXECUTE permission to the ML patch installer script using the command:

```
chmod 755 OFSAIUpdate.sh
```

10. Complete the patch upgrade using the command:

```
./OFSIAIUpdate.sh
```

11. Verify if the ML patch is applied successfully by checking the log file generated in the `/OFS_ALM_PACK/OFS_ALM/logs` directory. You can ignore error codes ORA-00001, ORA-02292, ORA-00955, and ORA-02260 in the log file. For any other errors, contact [My Oracle Support](#).

NOTE

For upgrade on Hive Infodom, you can encounter an exception "*PL/SQL: ORA-00942: table or view does not exist*". You can ignore this error.

12. After successful installation of the ML, follow these steps:

- Execute the `.profile` file using the following command:

```
. $HOME/.profile
```

- Clear the application cache. Navigate to the following path depending on the configured web application server and delete the files.

- Tomcat:

```
<Tomcat installation
folder>/work/Catalina/localhost/<Application
name>/org/apache/jsp
```

- WebLogic:

```
<WebLogic installation location>/domains/<Domain
name>/servers/<Server name>/tmp/_WL_user/<Application name>
```

- WebSphere:

```
<WebSphere installation directory>/AppServer/profiles/<Profile
name>/temp/<Node name>/server1/<Application name>/<.war file
name>
```

13. Delete the existing EAR or WAR file available in the `$FIC_HOME/ficweb` directory.

14. Install the OFSAI Runner package. This is an optional step and applicable only if you have installed Oracle R Enterprise Edition (ORE). For more information, see [Installing OFSAI Runner Package with Enhancements for OFSAI 8.0.6.6.0](#).

15. Restart all the OFSAI services. For more information, see the *Starting Infrastructure Services* section in the [Oracle Financial Services Asset Liability Management Installation and Configuration Guide 8.0.6.0.0](#).
16. Generate the application EAR or WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying the EAR or WAR file, see the *Post-installation Configurations* section in the [Oracle Financial Services Asset Liability Management Installation and Configuration Guide 8.0.6.0.0](#).

3 Post-installation Steps

The following post-installation steps are required for this release:

- Download and apply the 31846136 one-off patch. See the Readme packaged with the patch for further instructions on how to install.

4 Additional Configurations

Topics:

- [Install the Updated OFSAAI Runner](#)

4.1 Install the Updated OFSAAI Runner

NOTE

1. This is a post-installation configuration and is applicable if you have installed Oracle R Enterprise (ORE) for Oracle Financial Services Enterprise Modeling (OFS EMF) Application.
2. This configuration is not applicable for Tomcat web server.

If OFS Enterprise Modeling is licensed and enabled in your OFSAA instance, uninstall the OFSAAI Runner package and reinstall the latest available OFSAAI Runner package. For details on uninstallation and reinstallation, see the Configuring Oracle R distribution and Oracle R Enterprise (ORE) section in the [Oracle Financial Services Asset Liability Management Installation & Configuration Guide 8.0.7.0.0](#).

5 Appendix A - Installation of R and Oracle R Enterprise (ORE)

This is an optional step and required only if you intend to use Term Structure Parameter Estimation functionality under Interest Rates of Rate Management for computing term structure parameters. Both OFS Funds Transfer Pricing and OFS Asset Liability Management applications require term structure parameters for all Monte Carlo engine-based calculations (OAS, VaR, and EaR).

The following are the prerequisites:

- Install R and Oracle R Enterprise Server on the Oracle Database server. For more information, see the [Oracle® R Enterprise Installation and Administration Guide](#)
- Oracle R Enterprise (Server) version 1.4.1
- Configuration for Oracle R Enterprise
- Grant the RQADMIN role to atomic schema

You can grant the RQADMIN role in SQL*Plus by logging in to the database with DBA privileges and provide the following privilege to Atomic Schema:

```
RQADMIN by executing the command:  
GRANT RQADMIN TO < atomic_schema>;
```

OFSAA Support

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

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