

**Oracle Financial Services
Analytical Applications
Infrastructure**

Installation Guide

Release 8.0.9.4.0

December 2021

ORACLE[®]
Financial Services

OFS Analytical Applications Infrastructure Installation Guide

Copyright © 2021 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

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

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

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

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

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

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

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

Document Control

Version Number	Revision Date	Change Log
1.1	December 2021	Updated the How to Install this Release Section for 33663417 Mandatory Patch instructions (Doc 33668822).
1.0	April 2021	Created the document for the OFS AAI 8.0.9.4.0 Maintenance Level Release.

Table of Contents

- 1 OFS AAI Release v8.0.9.4.0..... 5**
 - 1.1 Conventions and Acronyms 5
 - 1.2 Pre-installation Requirements 6
 - 1.2.1 *Oracle Database 19c Server and Client Support*..... 6
 - 1.3 How to Install this Release 7

- 2 Additional Configurations.....11**
 - 2.1 Installing the OFSAAI Runner Package with Enhancements for OFS AAI 8.0.9.4.0 11

1 OFS AAI Release v8.0.9.4.0

OFS Analytical Applications Infrastructure Installation Guide (OFS AAI) Maintenance Level (ML) release v8.0.9.4.0 includes all the bug fixes and minor enhancements done since the previous GA (General Availability) release v8.0.9.0.0.

This ML release of OFS AAI can be installed on a setup with any Oracle Financial Services Analytical Applications (OFSAA) v8.0.9.0.0 Application Pack.

1.1 Conventions and Acronyms

Conventions	Description
Screen actions are indicated in Bold	
IR	Interim Release
ML	Maintenance Level Release
OFSAAI	Oracle Financial Services Analytical Applications Infrastructure
OHC	Oracle Help Center
AIX	Advanced Interactive eXecutive
RHEL	Red Hat Enterprise Linux
OEL	Oracle Enterprise Linux
OS	Operating System
EAR / WAR	Enterprise Archive / Web Archive
J2EE	Java 2 Enterprise Edition
OTN	Oracle Technology Network
JCE	Java Cryptography Extension
Atomic Schema	Database schema where the application data model is uploaded.
Configuration Schema	Database schema which contains setup-related configurations and metadata.

1.2 Pre-installation Requirements

- The minimum patch level installed must be OFS AAI Release **8.0.9.0.0**.
- OFS AAI Release v8.0.9.4.0 is compatible with WebLogic **12.2.x** and does not support WebLogic **12.1.3**. If the WebLogic version is 12.1.3, upgrade to WebLogic 12.2.x.
- Ensure that the unlimited cryptographic policy for Java is enabled during the installation of OFS AAI 8.0.9.0.0.

For more information, see the *Enabling Unlimited Cryptographic Policy* section in the [OFS Analytical Applications Infrastructure Administration Guide](#).

- It is mandatory to install the OFSAAI 8.0.9.4.0 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 the ML will be installed)
 - Web server (Tomcat/WebSphere/WebLogic)

NOTE To upgrade Java 7 in an existing OFSAA 8.0.9.x.x instance to Java 8, see *Appendix P* in the [Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide](#).

1.2.1 Oracle Database 19c Server and Client Support

The OFSAA 8.0.9.4.x release supports Oracle Database 19c in addition to the continued support on Oracle Database 12c.

NOTE The [Oracle Database 19c Server Configuration](#) and [Oracle Database 19c Client Configuration](#) sections apply to upgrade installation of OFS AAI and the [New Installation of OFSAA 8.0.9.0.0 with Oracle Database 19c](#) section applies to a new installation of OFS AAI.

1.2.1.1 Oracle Database 19c Server Configuration

To configure the Oracle Database 19c server if the OFS AAI version is 8.0.9.x.x, follow these prerequisite steps:

1. Stop all the OFS AAI services.

For more information, see the Starting/Stopping Infrastructure Services section in the [Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide](#).

2. Back up the `tnsnames.ora` file from the existing OFSAA Processing Tier `$ORACLE_HOME` directory.

3. Upgrade the existing Oracle Database 12c or 18c server to the Oracle Database 19c server.

If there are challenges in the upgrade, configure a new instance of the Oracle Database 19c server and follow these steps:

- a. Ensure to restore all the schemas from the Oracle Database 12c or 18c instance to the 19c instance using the Oracle DB Data Pump feature.
- b. Modify the `.profile` file of the OFSAA Processing Tier for the `ORACLE_SID` environment variable to the Oracle Database 19C PDB (Pluggable Database) Service Name.
- c. Modify the `JDBC_URL` of the new Oracle Database 19c server using the **Portc** utility.

1.2.1.2 Oracle Database 19c Client Configuration

To configure the Oracle Database 19c client if the OFS AAI version is 8.0.9.x.x, follow these prerequisite steps:

1. Install the Oracle Database 19c client on the OFSAA Processing Tier.
2. Modify the `.profile` file of the OFSAA Processing Tier for the `$ORACLE_HOME` environment variable to point to the Oracle Database 19c client home directory.
3. Modify the `tnsnames.ora` file to point to the new Oracle Database 19c instance.

1.2.1.3 New Installation of OFSAA 8.0.9.0.0 with Oracle Database 19c

To Install the OFSAA 8.0.9.0.0 base installer with Oracle Database 19c, follow the instructions in the My Oracle Support note [Doc ID 2691006.1](#) and then upgrade to OFSAA 8.0.9.4.0.

1.3 How to Install this Release

To install the release patch, follow these steps:

1. Log in to [My Oracle Support](#) and search for **32150935** under the **Patches & Updates** tab.
2. Download the OFSAA 8.0.9.4.0 OFS AAI ML Release archive file and copy it to your OFSAA server in **Binary** mode.

NOTE

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

3. Stop all the OFS AAI services.

For more information, see the *Starting/Stopping Infrastructure Services* section in the [Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide](#).

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 before 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 **33663417** Mandatory Patch whenever you install or upgrade the application, or apply an incremental patch.

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

```
chmod -R 775 *
```
7. 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 8.0.9.4.0 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.

- Give EXECUTE permission to the utility using the command:

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

For example, `chmod 751 unzip_aix`
8. Extract the contents of the 8.0.9.4.0 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 unzip the archive file. For example: For the AIX operating system,

```
unzip_aix -a p32150935_80940_AIX64.zip
```

9. Navigate to the path where the folder OFS_AAI exists to give EXECUTE permission to the ML patch installer script using the command:

```
chmod 755 OFSAAIUpdate.sh
```


10. Complete the patch upgrade using the command:

```
./OFSAAIUpdate.sh
```

11. Verify if the ML patch is applied successfully by checking the log file generated in the `OFS_AAI/logs` directory. You can ignore error codes ORA-00001, ORA-00955, ORA-01430, and ORA-02292 in the log file.

For any other errors, contact [My Oracle Support](#).

NOTE

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

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

- Execute `.profile` 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/WAR file available in the `$FIC_HOME/ficweb` directory.**14.** Install the OFSAAIRunner package.

This is an optional step and applicable only if you have installed Oracle R Enterprise Edition (ORE).

For more information, see [Installing OFSAAIRunner package with enhancements for OFS AAI 8.0.9.4.0](#).

15. Apply the **33663417** Mandatory Patch.

See the Readme that is packaged with the patch for further instructions on how to install and apply it.

16. Restart all the OFSAAI services.

For more information, see the *Starting/Stopping Infrastructure Services* section in the [Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide](#).

17. Generate the application EAR/WAR file and redeploy the application onto your configured web application server.

For more information on generating and deploying the EAR/ WAR file, see the *Post Installation Configurations* section in the [Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide](#).

18. Configure the document upload settings.

See the *Configure Document Upload Settings* section in the [Oracle Financial Services Analytical Applications Infrastructure Administration and Configuration Guide](#) for more information.

2 Additional Configurations

2.1 Installing the OFSAAI Runner Package with Enhancements for OFS AAI 8.0.9.4.0

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 does not apply to the 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 Analytical Applications Infrastructure 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.

