Oracle Financial Services Analytical Applications Infrastructure

Installation Guide

Release 8.0.7.5.0

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Financial Services

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OFS Analytical Applications Infrastructure Installation Guide

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Document Control

Version Number	Revision Date	Change Log
1.3	March 2022	Updated the How to Install this Release Section for 33849379 Mandatory Patch instructions (Doc 33934617).
1.2	December 2021	Updated the How to Install this Release Section for 33663417 Mandatory Patch instructions (Doc 33668822).
1.1	November 2020	• Added WebLogic upgrade information in the Pre-installation Requirements section (Doc 32117028). • Added a note for the October CPU information in the How to Install this Release section (Doc 32150738).
1.0	October 2020	Created the document for the OFS AAI 8.0.7.5.0 Maintenance Level Release.

Table of Contents

1 OFS AAI Release v8.0.7.5.0 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 Install the Updated OFSAAI Runner 11

1 OFS AAI Release v8.0.7.5.0

OFS Analytical Applications Infrastructure Installation Guide (OFS AAI) Maintenance Level (ML) release v8.0.7.5.0 includes all the bug fixes and minor enhancements done since the previous GA (General Availability) release v8.0.7.0.0.

This ML release of OFS AAI can be installed on a setup with any Oracle Financial Services Analytical Applications (OFSAA) v8.0.7.0.0 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 **8.0.7.0.0**.
- OFS AAI Release v8.0.7.5.0 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 8.0.7.0.0. 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 8.0.7.5.0 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 8.0.7.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 8.0.7.5.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 8.0.7.0.0 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 8.0.7.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. Backup 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 8.0.7.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 8.0.7.0.0 with Oracle Database 19c

To Install the OFSAA 8.0.7.0.0 base installer with Oracle Database 19c, follow the instructions in the My Oracle Support note Doc ID 2691006.1 and then upgrade to OFSAA 8.0.7.5.0.

1.3 How to Install this Release

To install this release patch, follow these steps:

1. Log in to My Oracle Support and search for **31656139** under the **Patches & Updates** tab.

> **NOTE** 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. Download the OFSAA 8.0.7.5.0 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. 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.

4. If you want to enable Big Data with Apache Hadoop, log in to My Oracle Support, search for the **33849379** Patch in the **Patches & Updates** Tab and download it.
5. 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.
6. Log in to the OFSAA server as a non-root user and navigate to the `$FIC_HOME` directory.
7. Assign WRITE permission to the files/directories such as commonscripts, EXEWebService, ficapp, ficweb, and ficdb using the command:

   ```
   chmod -R 775 *
   ```

8. 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 8.0.7.5.0 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`

9. Extract the contents of the 8.0.7.5.0 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 p31656139_80750_AIX64.zip`

10. 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
    ```

11. Complete the patch upgrade using the command:

    ```
    ./OFSAAIUpdate.sh
    ```

12. Verify if the ML patch is applied successfully by checking the log file generated in the `OFS_AAI/logs` directory. Ignore the 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.

13. Post 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>`

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

15. 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 8.0.7.5.0.

16. Apply the **33663417** Mandatory Patch.

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

17. To enable Big Data with Apache Hadoop, apply the **33849379** Patch. Otherwise, you can skip this step.

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

18. 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.

19. 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.

20. 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

Topics:

- Install the Updated OFSAAI Runner

2.1 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 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.

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