Oracle Financial Services Analytical Applications Infrastructure

Installation Guide

Release 8.0.4.6.0

October 2021

ORACLE
Financial Services

ORACLE

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
1.0	October 2021	Created the document for the OFS AAI 8.0.4.6.0 Maintenance Level Release.

Table of Contents

1 Preface 5

1.1 Access to Oracle Support 5
1.2 Audience 5
1.3 Additional Resources 5
1.4 Conventions Used 5
1.5 Acronyms Used 6

2 OFS AAI Release v8.0.4.6.0 7

2.1 Pre-installation Requirements 7
2.1.1 Oracle Database 19c Server and Client Support 7
2.2 How to Install this Release 8

3 Additional Configurations 11

3.1 Configuring Application Security in WebSphere 11
3.2 Deploying on WebLogic 12.1.3+ (64 bit) with Java 8 11

1 Preface

This preface provides information for the Oracle Financial Services Analytical Applications Infrastructure (OFS AAI) Installation Guide.

Topics:

- Access to Oracle Support
- Audience
- Additional Resources
- Conventions Used
- Acronyms Used

1.1 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
- http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

1.2 Audience

This document is intended for the users installing the OFS AAI application.

1.3 Additional Resources

This section identifies additional resources for the OFS AAI application. You can access the online documentation for the OFS AAI 8.0.4.6.0 from the Oracle Help Center (OHC).

- OFS Advanced Analytical Applications Infrastructure (OFS AAAI) Application Pack Installation and Configuration Guide
- OFS Analytical Applications Infrastructure Administration Guide
- OFS Analytical Applications Infrastructure Release Notes

To find additional information about how Oracle Financial Services solves real business problems, see our website at www.oracle.com/financialservices.

1.4 Conventions Used

The following table lists the conventions used in this guide.

Table 1: Conventions Used in this Guide

Convention	Meaning
Italics	• Names of books, chapters, and sections as references • Emphasis
Bold	• The object of an action (menu names, field names, options, button names) in a step-by-step procedure • Commands typed at a prompt • User input
`Monospace`	• Directories and subdirectories • File names and extensions • Process names • Code sample, including keywords and variables within the text and as separate paragraphs, and user-defined program elements within the text
<Variable>	Substitute input value

1.5 Acronyms Used

The following table lists the acronyms used in this guide.

Table 2: Conventions Used in this Guide

Conventions	Description
IR	Interim Release
ML	Maintenance Level Release
OFS AAI	Oracle Financial Services Analytical Applications Infrastructure
OHC	Oracle Help Center
RHEL	Red Hat Enterprise Linux
OEL	Oracle Enterprise Linux
OS	Operating System
EAR/WAR	Enterprise Archive or 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.

2 OFS AAI Release v8.0.4.6.0

OFS Analytical Applications Infrastructure Installation Guide (OFS AAI) Maintenance Level (ML) release v8.0.4.6.0 includes all the bug fixes and minor enhancements done since the previous GA (General Availability) release v8.0.4.6.0.

This ML release of OFS AAI can be installed on a setup with any Oracle Financial Services Analytical Applications (OFSAA) v8.0.4.6.0 Application Pack.

2.1 Pre-installation Requirements

The minimum patch level installed must be OFS AAI Release **8.0.4.6.0**.

2.1.1 Oracle Database 19c Server and Client Support

The OFSAA 8.0.4.6.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.

2.1.1.1 Oracle Database 19c Server Configuration

To configure the Oracle Database 19c server if the OFS AAI version is 8.0.4.6.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 & Configuration Guide 8.0.2.0.0.

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

3. Upgrade the existing Oracle Database 12c/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/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.

2.1.1.2 Oracle Database 19c Client Configuration

To configure the Oracle Database 19c client if the OFS AAI version is 8.0.4.6.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.

2.2 How to Install this Release

To install this release patch, follow these steps:

1. Log in to My Oracle Support and search for **32917261** under the **Patches & Updates** tab.
2. Download the OFSAA 8.0.4.6.0 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 Solaris SPARC and Linux.

3. Stop all the OFS AAI services.
   For more information, see the *Stop the Infrastructure Services* section in the Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide.
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/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. If you do not have the utility, download the OS-specific Unzip utility 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 8.0.4.6.0 ML.
   - Uncompress the unzip installer file using the command:

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

> **NOTE** If you notice the 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_linux`

7. Extract the contents of the 8.0.4.6.0 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 "`-a`" option is mandatory to unzip the archive file. For example: For a Linux operating system,
   `unzip_linux -a p32917261_80460_linux.zip`

8. 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
   ```

9. Complete the patch upgrade using the command:

   ```
   ./OFSAAIUpdate.sh
   ```

10. 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 and ORA-02292 in the log file.

    For any other error, contact My Oracle Support.

11. If OFSAA is deployed on **Oracle WebLogic Server version 12.2.x**, install the one-off patch **25343603**. See the Readme available with the patch for further instructions on installing the patch.

    NOTE See the Technology Matrix for a list of supported servers for OFSAAI 8.0.4.0.0.

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

    - 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. Restart all the OFS AAI services.
    For more information, see the *Start the Infrastructure Services* section in the Oracle Financial Services Analytical Applications Infrastructure Installation and Configuration Guide.
15. 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.
16. Perform the configurations mentioned in the Additional Configurations section.

3 Additional Configurations

This section provides information about additional configuration steps in OFS AAI.

3.1 Configuring Application Security in WebSphere

This is a mandatory security procedure in WebSphere to restrict the unauthorized access of configuration files in directories.

For detailed information, see the Oracle Financial Services Analytical Applications Infrastructure Security Guide.

3.2 Deploying on WebLogic 12.1.3+ (64 bit) with Java 8

To deploy on Oracle WebLogic Server 12.1.3+ (64 bit) with Java 8, download and install the patch **18729264** from http://support.oracle.com/.

For more information, see 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 My 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 the My Oracle Support site that has all the revised or recently released documents.