OFS Behavior Detection

Cloning Reference Guide

Release 8.0

Apr 2023

ORACLE
Financial Services

ORACLE

OFS Behavior Detection Cloning Reference Guide

Document Control

Version Number	Revision Date	Changes Log
1.0	December 2015	Captured steps to set up a BD Instance Clone for the 8.0.x.0.0 release.
2.0	May 2016	Added notes for Bug 23228276 and 22554485.
3.0	Jan 2018	Updated the document for Bug 27374642 and 27374657.
4.0	Nov 2018	• Added a prerequisite based on Bug 28715332. • Updated for Doc 28728073. • Updated for Doc 28929363.
5.0	Apr 2019	Updated the document for Doc 29722514.
6.0	May 2019	• Added the OFSAA_LOG_HOME variable in the section Copy and Restore the OFSAA File System (Doc 29641604). • Added note for the table batch_parameter in the section Run the Port Changer Utility (Doc 29448257). • Added note in the section Run the Port Changer Utility for the OFS AAI Versions 8.0.2.2.0, 8.0.3.3.0, 8.0.4.2.0 to 8.0.4.5.0, 8.0.5.2.0 to 8.0.5.4.0, or 8.0.6.0.0, and Higher for EncryptC.jar (Doc 29419498).
7.0	Aug 2019	Updated notes in the sections Run the Port Changer Utility and Run the EncryptC.jar Utility to Change the Key and Encryption Strings (Doc 29862507).

8.0	Dec 2019	• Added information for (Doc 30649409):
		  ▪ Versions 8.0.5.4.0, 8.0.6.0.0, and higher, in the General Requirements section.
		  ▪ Added the Provide Grants and Set Passwords Using the SysDBA User Login section.
		• Updated information for version 8.0.6.0.0 and higher in the Run the Port Changer Utility for the OFS AAI Versions 8.0.2.2.0, 8.0.3.3.0, 8.0.4.2.0 to 8.0.4.5.0, 8.0.5.2.0 to 8.0.5.4.0, or 8.0.6.0.0, and Higher section (Doc 30452275).

Version Number	Revision Date	Changes Log

9.0	Mar 2020	• Added a note in the Target System Requirements section to upgrade the Target OS (Doc 30849532).
		 • Updated the Appendix A for the following (Doc 30849532):
		   ▪ Step 1 - updated the table for new column names and added the note for value for V_DB_NAME.
		   ▪ Step 2 - updated the note for OFS AAI versions 8.0.6 and higher.
		   ▪ Step 3 - added one-off infomation for OFS AAI versions 8.0.6 and higher.
		   ▪ Step 4 - added note for OFS AAI versions 8.0.6 and higher.
		 • Added a note in the Run the EncryptC.sh Utility to Change the Key and Encryption Strings for the OFS AAI Versions 8.0.2.2.0, 8.0.4.2.0 to 8.0.4.5.0, and 8.0.5.2.0 to 8.0.5.4.0 section stating that it is an optional step (Doc 30740418).
		 • Added a quickstart table in the Cloning Process section.

10.0	April 2020	• Added steps to be done after cloning is completed.
11.0	April 2023	• Updated the document to address the Doc Bug 33751519.

Table of Contents

1 Preface

The purpose of this document is to serve as the reference material to the BD administrators. This document contains detailed steps to set up a BD Instance Clone for the 8.0.x.x.x releases.

1.1 Background

There is a consistent requirement for a faster and effective approach of replicating an existing BD instance for further project developments. The approach is to set up the BD instances that are exact copies of the current BD instance.

1.2 Assumptions

The assumptions made in this document are:

- A working source BD 8.0.x instance is in place.
- An appropriate target system exists for the new BD setup.

1.3 Audience

This reference guide is for the administrators and implementation consultants responsible for the cloning of a BD instance.

1.4 Conventions

The following text conventions are used in this document:

Conventions	Description
8.0.x	The BD 8.0.x release.
Atomic Schema	The Database Schema where the application data model is uploaded.
Boldface	The boldface font type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
Configuration Schema (Config Schema)	The Database Schema which contains setup related configurations and metadata.
Italic	The italic font type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
Monospace	The monospace font type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.
Source	The source BD system.

Conventions	Description
Target	The target BD system.

1.5 Abbreviations

The following table lists the abbreviations used in this document:

Abbreviations	Description
OS	Operating System
UI	User Interface of the application

2 Setting Up a BD Instance Clone for the 8.0.x Release

This chapter contains information about the prerequisites, cloning, and post-cloning configurations for the 8.0.x release when setting up a BD Instance Clone. For details, see the following sections:

- Prerequisites
- Cloning Process

2.1 Prerequisites

To set up a BD Instance Clone for the 8.0.x release, complete the following prerequisites:

1. General Requirements
2. Source System Requirements
3. Target System Requirements

> **NOTE**   Complete the prerequisites and then perform the procedures mentioned in the Cloning Process section.

2.1.1 General Requirements

Complete the following general requirements before beginning the cloning process:

1. The FTP/SFTP service is running on the BD target system and the User credentials are available before you begin the cloning activities.
2. For any specific version of the OFS AAI (platform) application installed on your system, perform the corresponding action mentioned in the following table:

Table 1: Version-Specific Upgrade Information

THE VERSION OF THE OFS AAI APPLICATION IN USE	PERFORM THE FOLLOWING ACTION
8.0.0.0.0	Download the patch **20422514** from My Oracle Support and install it in the source system.
8.0.1.0.0	Download the patch **22329222** from My Oracle Support and install it in the source system.
8.0.5.0.x	Download the OFS AAI 8.0.5.2.0 ML patch **27552096** from My Oracle Support and install it in the source system to upgrade it to version 8.0.5.2.0.
8.0.5.1.x	Download the OFS AAI 8.0.5.4.0 ML patch **29922464** from My Oracle Support and install it in the source system to upgrade it to version 8.0.5.4.0.

2.1.2 Source System Requirements

In the source system, complete the following requirements:

1. All the BD services are brought down.

2. Database connection details such as the RAC/NON-RAC URL, the SID/Service Name, and the User credentials are available.

2.1.3 Target System Requirements

In the target system, complete the following requirements:

1. All the basic software required for the installation of BD applications (including infrastructure) is installed and is working on the machine identified as the Target BD instance. You can use the Environment Check utility to verify system readiness. For details on how to use the Environment Check Utility, see the OFS Analytical Applications Environment Check Utility Guide.

   For details on the software and hardware requirements, see the *Hardware and Software Requirements* section in the Release 8.0.2.0.0 and Release 8.0.7.0.0 of the OFS AAAI Application Pack Installation and Configuration Guide.

   > **NOTE**   Upgrade the Target OS version to the same version as that of the Source OS. Binaries are OS version specific and cloning requires that there is no mismatch of library files.

2. The Web Server and the Web Application Server are configured. For details on how to configure web servers, see the *Configuring Web Server* section in the Release 8.0.2.0.0 and Release 8.0.7.0.0 of the OFS AAAI Application Pack Installation and Configuration Guide.

3. The BD installation directory is set as `$FIC_HOME` with the 750 permission.

   For example, `/scratch/ofsaanew/OFSAA`

4. The BD staging/metadata repository directory is set as `ftpshare` with the 775 permission.

   For example, `/scratch/ofsaanew/ftpsharenew`

5. The database connection details such as the RAC/NON-RAC URL, the SID/Service Name, and the User credentials are available.

   > **NOTE**   Create a new database instance that is different from the database instance used in the Source BD instance.

6. The Web Server and the Web Application Server identified for the deployment of the BD applications are installed and configured on the machine which is identified as the Web Server and Web Application Server.

> **NOTE** If you intend to use the same Web Application Server, then create a separate profile (WebSphere) or a domain (WebLogic).

7. The details of the WebSphere profile or the WebLogic domain or the Tomcat context are available.

> **NOTE** Before executing the utility, ensure to configure the file `RevLog4jConfig.xml` with the default log paths.

2.2 Cloning Process

Before initiating the cloning process, perform these steps to retrieve the schema names:

1. Log in to the Source Config Schema.

2. Execute the following query to retrieve the Config Schema name and Atomic Schema name.

```
select dbuserid from db_master;
```

In the **expdp** and **impdp** database utilities, you can use the schema names in the SCHEMAS attribute.

Subsequent steps for cloning are described in the subsections in this topic and the following table is a quickstart with a summary view of the cloning process:

Table 2: Quickstart for Cloning

Sl. No.	Cloning Process (click the links to go to the specified steps in the document)
1.	Export the complete Configuration and Atomic Schemas from the source environment
2.	Restore the complete exported dumps into the target environment database • Restore the complete exported dumps into the target environment database with a different database user name (schema)
3.	Provide grants and set passwords using the SysDBA user login **a.** Provide the select grants permission on the sys.V_$parameter view to the Config and Atomic Schemas of the target environment database **b.** When you import into different schema names, set the passwords for the Config and Atomic Schemas of the target environment database same as that of the password in the source
4.	Log in to the Config Schema of the target environment database
5.	Copy and restore the BD file system
6.	Modify files in the path $FIC_HOME when you import the files into different schemas

Sl. No.	Cloning Process (click the links to go to the specified steps in the document)
7.	Run the Port Changer utility • Run the Port Changer utility for the OFS AAI versions 8.0.2.2.0, 8.0.3.3.0, 8.0.4.2.0 to 8.0.4.5.0, 8.0.5.2.0 to 8.0.5.4.0, or 8.0.6.0.0, and higher

8.	Run the EncryptC.jar utility to change the key and encryption strings
	    a. Run the EncryptC.sh utility to change the key and encryption strings for the OFS AAI versions 8.0.2.2.0, 8.0.4.2.0 to 8.0.4.5.0, and 8.0.5.2.0 to 8.0.5.4.0
	    b. Run the EncryptC.sh utility to change the key and encryption strings for the OFS AAI versions 8.0.6.0.0 and higher

9.	Perform the post-cloning configurations
10.	Create and deploy the .ear/.war files
11.	Access the UI

2.2.1 Export the Complete Configuration and Atomic Schemas From the Source Environment

Export all the Configuration and Atomic Schemas from the Source environment.

For example:

```
expdp SYSTEM/oracle@OFSA12C2DB  DIRECTORY=data_pump_dir
DUMPFILE=ofsaaconf_ofsaaatm_%U.dmp filesize=2G
SCHEMAS=ofsaaconf,ofsaaatm LOGFILE=ofsaaconf_ofsaaatm_exp.log
```

NOTE	Running the preceding command creates data dumps in the files in multiples of 2GB. You can use any other equivalent commands/tools to archive the schemas.

2.2.2 Restore the Complete Exported Dumps Into the Target Environment Database

Restore all the exported dumps into the Target environment database.

For example:

```
impdp SYSTEM/oracle@OFSA12nDB  DIRECTORY=data_pump_dir
DUMPFILE=ofsaaconf_ofsaaatm_%U.dmp  SCHEMAS=ofsaaconf,ofsaaatm
LOGFILE=ofsaaconf_ofsaaatm_imp.log
```

NOTE	Restoring the exported dumps creates the Config and Atomic Schemas with the same user credentials as that of the user credentials in the Source, along with the existing grants.

2.2.2.1 Restore the Complete Exported Dumps Into the Target Environment Database With a Different Database User Name (Schema)

Restore all the exported dumps into the Target environment database with a different database user name (schema).

For Example:

```
impdp SYSTEM/oracle@OFSA12nDB DIRECTORY=data_pump_dir
DUMPFILE=ofsaaconf_ofsaaatm_%U.dmp REMAP_SCHEMA=
ofsaaconf:newofsaaconf,ofsaaatm:newofsaaatm
LOGFILE=new_ofsaaconf_ofsaaatm_imp.log
```

NOTE	• Restoring the exported dumps creates the Config and Atomic Schemas with the users mentioned under the *REMAP_SCHEMA* attribute. The *REMAP_SCHEMA* attribute is replaced as that of the Source along with the existing grants as in the Source environment.
	• Ignore the **ORA-39082** object type created with the compilation errors. You can rectify this later in the subsequent steps.

2.2.3 Provide Grants and Set Passwords Using the SysDBA User Login

Restore the Complete Exported Dumps into the Target Environment Database with a Different Database User Name (Schema) does not provide the select grants permission. You must log in with the SysDBA user role to provide the select grants permission and set the passwords. The following subsections provide the instructions.

2.2.3.1 Provide the Select Grants Permission on the `sys.V_$parameter` View to the Config and Atomic Schemas of the Target Environment Database

Provide the select grants permission on the `sys.V_$parameter` view to the Config and Atomic Schemas of the target environment database.

For example:

Log in as the sys user and run the following commands:

```
SQL> GRANT SELECT ON SYS.V_$PARAMETER TO ofsaaconf;

Grant succeeded

SQL> GRANT SELECT ON SYS.V_$PARAMETER TO ofsaaatm;

Grant succeeded
```

2.2.3.2 Set the Passwords for the Config and Atomic Schemas of the Target Environment Database with Different Schema Names

When you import into the Target environment database with different schema names, set the passwords for the Config and Atomic Schemas the same as that in the Source environment database.

> **NOTE** If this step is not applicable, ignore it and proceed to the next step.

For example:

Log in as the sys user and run the following commands:

```
SQL> ALTER USER newofsaaconf IDENTIFIED BY welcome1;
User Altered
SQL> ALTER USER newofsaaatm IDENTIFIED BY welcome1;
User Altered
```

2.2.4 Log In to the Config Schema of the Target Environment Database

Log in to the Config Schema of the Target environment database. Update the values in the Config Schema table as mentioned in *Table 1* in [Appendix A](#).

> **NOTE** This step is applicable if you have imported into different schema names for the OFS AAI (platform) versions 8.0.5.2.x, 8.0.5.3.x, 8.0.5.4.x, and higher.

2.2.5 Copy and Restore the BD File System

To copy and restore the BD file system, follow these steps:

1. Navigate to the `$FIC_HOME/utility/Clone/bin` path in the Source environment and grant the 750 permission to all the files present in the directory.

2. Execute the command:

   ```
   ./OFSAA_Archive.sh
   ```

   This step creates zipped files for the `$FIC_HOME` and `FTPSHARE` directories in their respective locations in the Source.

   For example:

   ```
   <FIC_HOME>.zip
   <FTPSHARE>.zip
   ```

3. Copy the `<FIC_HOME>` and `<FTPSHARE>` archive files from the Source to the Target in their respective locations, that is, as per the directories created in the `$FIC_HOME` and `FTPSHARE`

directories. For more information, see [Set the BD installation directory as $FIC_HOME](#) and [Set the BD staging/metadata repository directory as ftpshare](#) in the *Target System Requirements* section.

> | **NOTE** | Transfer the archives in the BINARY mode. |

4. The BD installer made entries in the *.profile* file of the Source. Copy the entries to the *.profile* file of the Target in the respective locations.

5. To unzip, navigate to the directory where the zipped directory is present in the Target environment and execute the following command:

   ```
   unzip –a <<Zipped_file>>
   ```

   For example:

   ```
   unzip –a ftpshare.zip
   ```

   Perform this step for both the `<FIC_HOME>` and `<FTPSHARE>` zipped files. This unzips both files in their respective locations in the Target environment.

6. Give the 750 permission recursively to the `$FIC_HOME` directory and the 775 permission to the `FTPSHARE` directory extracted in the Target environment.

   For example:

   ```
   chmod –R 750 $FIC_HOME
   chmod –R 775 FTPSHARE
   ```

7. In the *.profile* file of the Target environment, modify the variables `FIC_HOME`, `JAVA_BIN`, `PATH`, `ORACLE_HOME`, `TNS_ADMIN`, `ORACLE_SID` and `OFSAA_LOG_HOME` in the entries made by the installer according to the required values of the Target environment.

   For example, change the path to Java Runtime in the `JAVA_BIN` variable according to the Java Runtime installation on the Target environment.

8. Execute the *.profile* file in the Target environment.

9. Edit the `tnsnames.ora` file present in the `$TNS_ADMIN` directory to add or edit the connection details to the BD schemas of the Target environment.

2.2.6 Modify Files in the Path $FIC_HOME When You Import the Files into Different Schemas

After importing the files into different schemas, modify the files in the `$FIC_HOME` path. Follow these steps:

1. In the OFS AAI server, navigate to the `$FIC_HOME` directory.

2. Modify values in the files as specified in step 2 of [Appendix A](#) and follow subsequent steps in the Appendix.

> **NOTE** This step is applicable only for the OFS AAI (platform) versions 8.0.5.2.x to 8.0.5.4.x.

2.2.7   Run the Port Changer Utility

Before running the Port Changer Utility, complete the following prerequisites:

- Ensure that the `RevLog4jConfig.xml` file is configured with the default log paths.

- This utility connects to the Config Schema to collect all the configurations. Therefore, in the `$FIC_HOME/conf` directory, you must edit the `DynamicServices.xml` file for the DEFAULT_CONNECTION_URL attribute. Ensure that the VALUE is a qualified jdbc URL of the Target database.

> **NOTE** If your OFS AAI version is 8.0.2.2.0, 8.0.3.3.0, 8.0.4.2.0 to 8.0.4.5.0, 8.0.5.2.0 to 8.0.5.4.0, or 8.0.6.0.0, and higher, ignore the following instructions in this section and go to the section [Run the Port Changer Utility for the Versions 8.0.2.2.0, 8.0.3.3.0, 8.0.4.2.0 to 8.0.4.5.0, 8.0.5.2.0 to 8.0.5.4.0, or 8.0.6.0.0, and Higher](#).

To run the Port Changer Utility, follow these steps:

1. Navigate to the `$FIC_HOME` directory in the Target.

2. Run the **PortC.jar** utility using the command:

   ```
   java -jar PortC.jar DMP
   ```

   Running the above command creates a file with the name **DefaultPorts.properties** in the `$FIC_HOME` directory. The directory contains the information related to the ports, IPs, and paths currently in use.

   > **NOTE** It is mandatory to run the Port Changer utility using the DMP parameter every time before executing the utility using the UPD command.

3. Make the necessary changes to those ports, IPs, and paths in the **DefaultPorts.properties** file as per the Target environment. Save the changes.

   > **NOTE** In the properties file, ensure that the JDBC_URL parameter does not contain space(s). Entering the JDBC_URL parameter with space(s) leads to errors in accessing the *System Configuration* window.

4. Run the **PortC.jar** utility using the command:

```
java -jar PortC.jar UPD
```

Running the above command changes the ports, IPs and paths in the `.profile` file (in the home directory), all the files in the `$FIC_HOME` directory, and the database tables according to the values mentioned in the **DefaultPorts.properties** file.

5. Execute the `.profile` file and create the EAR/WAR file. Then restart the BD services and redeploy to the configured web application server.

> **NOTE**
> - The table `batch_parameter` is not updated with the new IP after you run the file `portc.jar`. The table holds the batch execution details of the batches that were executed earlier. The table `batch_parameter_master` holds the new IP after you run `portc.jar`.
> - Check the logs for more information, and contact My Oracle Support if you encounter any errors.

2.2.7.1 Run the Port Changer Utility for the OFS AAI Versions 8.0.2.2.0, 8.0.3.3.0, 8.0.4.2.0 to 8.0.4.5.0, 8.0.5.2.0 to 8.0.5.4.0, or 8.0.6.0.0, and Higher

To run the Port Changer Utility for the OFS AAI versions 8.0.2.2.0, 8.0.3.3.0, 8.0.4.2.0 to 8.0.4.5.0, 8.0.5.2.0 to 8.0.5.4.0 or 8.0.6.0.0, and higher, follow these steps:

1. Navigate to the `$FIC_HOME/utility/PortC/bin` directory on the Target.

2. Run the **PortC.sh** utility using the command:

```
./PortC.sh DMP
```

Running the above command creates a file with the name **DefaultPorts.properties** in the `$FIC_HOME` directory. The directory contains the information related to the ports, IPs, and paths currently in use.

> **NOTE**
> It is mandatory to run the Port Changer utility using the DMP parameter every time before executing the utility using the UPD command.

3. Make the necessary changes to those ports, IPs, and paths in the **DefaultPorts.properties** file as per the Target environment. Save the changes.

4. Run the **PortC.sh** utility using the command:

```
./PortC.sh UPD
```

Running the above command changes the ports, IPs and paths in the `.profile` file (in the home directory), all the files in the `$FIC_HOME` directory, and the database tables according to the values mentioned in the **DefaultPorts.properties** file.

5. Execute the `.profile` file and create the EAR/WAR file. Then restart the BD services and redeploy to the configured web application server.

2.2.8   Run the EncryptC.jar Utility to Change the Key and Encryption Strings

To change the key and encryption strings, run the **EncrptC.jar** utility. Perform the following steps:

> **NOTE**   This section is applicable to the OFS AAI 8.0.0.0.0 and later versions. However, there are a few versions that are exceptions. The information to run the `EncrptC.jar` utility for these versions is mentioned in separate sections. They are:
>
> - [Run the EncryptC.sh Utility to Change the Key and Encryption Strings for the OFS AAI Versions 8.0.2.2.0, 8.0.4.2.0 to 8.0.4.5.0, and 8.0.5.2.0 to 8.0.5.4.0](#)
> - [Run the EncryptC.sh Utility to Change the Key and Encryption Strings for the OFS AAI Versions 8.0.6.0.0 and Higher](#)

1. Navigate to the `$FIC_HOME` directory in the Target environment.

2. Execute the following command:

   ```
   java -jar EncryptC.jar
   ```

3. To access the log information, see the `Encrypt_utility.log` file in the `$FIC_HOME/utility/EncryptC/bin` directory.

2.2.8.1   Run the EncryptC.sh Utility to Change the Key and Encryption Strings for the OFS AAI Versions 8.0.2.2.0, 8.0.4.2.0 to 8.0.4.5.0, and 8.0.5.2.0 to 8.0.5.4.0

> **NOTE**   The file `EncryptC.jar` primarily maintains the new encrypt keys for a new environment. Therefore, there is no impact if you skip this optional step. You can choose to change the key and encryption strings at any time after cloning. However, we recommend that you complete this step now.

To change the key and encryption strings for the OFS AAI versions 8.0.2.2.0, 8.0.4.2.0 to 8.0.4.5.0, and 8.0.5.2.0 to 8.0.5.4.0, run the **EncrptC.sh** utility. Follow these steps:

1. Navigate to the `$FIC_HOME/utility/EncryptC/bin` directory in the Target environment.

2. Execute the following command:

   ```
   ./EncryptC.sh
   ```

3. To access the log information, check the `Encrypt_utility.log` file in the `$FIC_HOME/utility/EncryptC/bin` directory.

> **NOTE**   If you get the error message "`Error: Could not find or load main class OFSAAI.AESCrypter`" after you execute the command `./EncryptC.sh`, it is because the required jar file is missing in the `lib` directory.
>
> To execute the `EncryptC.jar` file in the version 8.0.4.2.0, update the `EncryptC.sh` file with the following entry and proceed with execution: Replace the following line:
>
> ```
> "JAR_FILELIST=`find ../lib \( -name "*.jar" \)`
> "
> ```
>
> with this line:
>
> ```
> "JAR_FILELIST=`find $FIC_HOME \( -name "*.jar"
> \)` "
> ```

2.2.8.2   Run the EncryptC.sh Utility to Change the Key and Encryption Strings for the OFS AAI Versions 8.0.6.0.0 and Higher

Run the **EncrptC.sh** utility to change the key and encryption strings for the OFS AAI 8.0.6.0.0 and higher versions.

> **NOTE**   This step is mandatory.

For more information, see the *Generating new AESCryptKey.ext and updating the keystore* section in the *Key management* section in the [OFS Analytical Applications Infrastructure Administration Guide](#).

2.2.9   Perform the Post-Cloning Configurations

Perform the post-cloning configurations as mentioned in the *Post Installation Configurations* section in the versions 8.0.2.0.0 and 8.0.7.0.0 of the [OFS AAAI Application Pack Installation and Configuration Guide](#).

2.2.10   Create and Deploy the .ear/.war files

To create and deploy the `.ear/.war` files, follow these steps:

1. Navigate to the `$FIC_WEB_HOME` directory in the Target environment.

2. Delete the BD application `*.war`/`*.ear` file present in this directory.

3. Execute the command:

    ```
    ./ant.sh
    ```

4. Copy the generated `.ear/.war` file to the Web Application Server identified for this BD instance.

5. Modify all the Database connection resources done on the Web Application Server that are mapped to the new JDBC URL and Database User Credentials. Verify the test connection to validate.

6. Deploy the `.ear/.war` file using the *Web Application Server Admin Console*.

2.2.10.1 Access the UI

Access the UI by using the new IP Address/Host Name, the new Port, and the new Context Name.

For example:

```
http://<IP ADDRESS/ HOSTNAME>:<PORT>/<CONTEXT NAME>/login.jsp
```

3   Steps To Be Done Post Cloning Completion

The following steps must be done after cloning is successfully completed to bring up the application.

1. Modify the below files with the new schema name to restore the complete exported dumps into the Target Environment database with a different database user name, that is, schema.

```
/applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml.t
emplate
 :  <Parameter name="DB.Connection.User" type="STRING"
value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml.
templat
e:  <Parameter name="DB.Alg.Connection.User" type="STRING"
value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml.
templat
e:  <Parameter name="DB.Schema.MANTAS" type="STRING"
value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml.
templat
e:  <Parameter name="DB.Schema.MARKET" type="STRING"
value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml.
templat
e:  <Parameter name="DB.Schema.BUSINESS" type="STRING"
value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml.
templat
e:  <Parameter name="DB.Schema.CASE" type="STRING" value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml:
<Parameter name="DB.Connection.User" type="STRING" value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml:
<Parameter name="DB.Alg.Connection.User" type="STRING"
value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml:
<Parameter name="DB.Schema.MANTAS" type="STRING" value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml:
<Parameter name="DB.Schema.MARKET" type="STRING" value="qa_atm806a"/>
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml:
<Parameter name="DB.Schema.BUSINESS" type="STRING" value="qa_atm806a"/>
```

```
./applications/BD806.ear/BD806.war/solution/bdf/config/install/BDF.xml:
```

```
<Parameter name="DB.Schema.CASE" type="STRING" value="qa_atm806a"/>
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:# sql.pool.analyst_pool.conn.user=qa_atm806a
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:# sql.pool.miner_pool.conn.user=qa_atm806a
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.schema.owner.mantas=qa_atm806a
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.schema.owner.kdd=qa_atm806a
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.schema.owner.business=qa_atm806a
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.schema.owner.market=qa_atm806a
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.schema.owner.default=qa_atm806a
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.table.qa_atm806a.1=KDD_ALGORITHM
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.table.qa_atm806a.2=KDD_ALGORITHM_PARAM
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.table.qa_atm806a.3=KDD_ATTR_TAG_TYPE_CD
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.table.qa_atm806a.4=KDD_BREAK_CLSG_CD
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.table.qa_atm806a.5=KDD_BREAK_DPSTN_CD
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg
```

```
:sql.table.qa_atm806a.6=KDD_MATCH_CD
```

```
./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.7=KDD_PARAM_DEFAULT

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.8=KDD_PARAM_ENUM

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.9=KDD_PRMTN_ST_CD

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.10=KDD_PTTRN_TYPE_CD

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.11=KDD_RULE_CLASS_CD

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.12=KDD_SCNRO_USE_CD

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.13=KDD_USER_ROLE_CD

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/install.cfg

:sql.table.qa_atm806a.14=KDD_WRKLD_CD

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/static.cfg:

datalookup.sql.codedescription.findByCompoundKey=SELECT B.SRC_SYS_CD,

B.CODE_DISP_TX FROM qa_atm806a.KDD_ATTR_CODE_SET A,

qa_atm806a.KDD_CODE_SET_TRNLN B WHERE A.ATTR = ? AND A.DMN_CD = ? AND

(A.CODE_SET = B.CODE_SET) AND B.CODE_VAL = ? AND B.SRC_SYS_CD = ?

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/static.cfg:

datalookup.sql.codedescription.findByAttr=SELECT B.SRC_SYS_CD,
B.CODE_DISP_TX

FROM qa_atm806a.KDD_ATTR_CODE_SET A,  qa_atm806a.KDD_CODE_SET_TRNLN B
WHERE

A.ATTR = ? AND A.DMN_CD = ? AND (A.CODE_SET = B.CODE_SET) AND
B.SRC_SYS_CD =

?

./applications/BD806.ear/BD806.war/WEB-
INF/classes/conf/mantas_cfg/static.cfg:
```

```
datalookup.sql.attributedescription.findByCompoundKey=SELECT
ATTR_FRMT_TX,
```

```
ATTR_DISP_TX FROM qa_atm806a.KDD_ATTR_CODE_SET WHERE ATTR = ? AND
DMN_CD = ?
```

2. Modify the database details in the check.txt file with paths that do not have .log, .par, and .sql extensions. Do not modify the other paths.

```
/scratch/ofsaadb/BD806/BD806/behavior_detection
```

```
/scratch/ofsaadb/BD806/BD806/bdf
```

```
/scratch/ofsaadb/BD806/BD806/database
```

```
/scratch/ofsaadb/BD806/BD806/ingestion_manager
```

The following are the detailed description file paths to change the database details:

```
/scratch/ofsaadb/BD806/BD806/behavior_detection:
```

```
/scratch/ofsaadb/BD806/BD806/behavior_detection/algorithms/MTS/mantas_c
fg/inst
```

```
all.cfg
```

```
/scratch/ofsaadb/BD806/BD806/behavior_detection/algorithms/MTS/logs/man
tas_cfg
```

```
/install.cfg
```

```
/scratch/ofsaadb/BD806/BD806/bdf:
```

```
/scratch/ofsaadb/BD806/BD806/bdf/config/install/BDF.xml.template
```

```
/scratch/ofsaadb/BD806/BD806/bdf/config/install/BDF.xml
```

```
/scratch/ofsaadb/BD806/BD806/database:
```

```
/scratch/ofsaadb/BD806/BD806/database/mantas_schema/ddl/teradata/kdd_va
riables
```

```
.cfg
```

```
/scratch/ofsaadb/BD806/BD806/database/db_tools/source/common/install.cf
g
```

```
/scratch/ofsaadb/BD806/BD806/database/db_tools/source/common/db_variabl
es.cfg
```

```
/scratch/ofsaadb/BD806/BD806/database/db_tools/source/scenario_migratio
n/Depri
```

```
cated/plattrans.cfg
```

```
/scratch/ofsaadb/BD806/BD806/database/db_tools/mantas_cfg/install.cfg
```

```
/scratch/ofsaadb/BD806/BD806/database/db_tools/mantas_cfg/db_variables.
cfg
```

```
/scratch/ofsaadb/BD806/BD806/ingestion_manager:
```

```
/scratch/ofsaadb/BD806/BD806/ingestion_manager/config/RefDataToTableMap
.proper
```

```
ties
```

```
/scratch/ofsaadb/BD806/BD806/ingestion_manager/config/DataIngest.proper
ties
```

> **NOTE**   If any additional files is present where DB details changes are required, please change it to target schema Name.

3.1   Reloading Scenarios in Cloned Environment

The following steps must be performed to reload the scenarios in the cloned environment.

1. Extract all scenarios from original database using the command `sm_extract.sh`.

2. Place the extracted XMLs in `$FIC_HOME/database/db_tools/data` folder of the copied environment.

3. Load all scenarios using the command `sm_load.sh`.

4   Appendix A

Manually modify the occurrences of the Source database user name with a new Target database user name (see the REMAP_SCHEMA attribute mentioned in the [Restore the Complete Exported Dumps Into the Target Environment Database](#) subsection of the [Cloning Process](#) section).

1. Log in to the newly imported Config Schema and update the column values as mentioned in the following table (Ignore if there are no rows found):

Table 3: Update Config Schema Columns

Sl. No.	TABLE NAME	COLUMN NAME
1.	DB_MASTER	DBUSERID
		DBNAME
2.	AAI_DB_AUTH_ALIAS	V_AUTH_USERNAME
		V_AUTH_ALIAS
3.	AAI_DB_DETAIL	V_SCHEMA_NAME
		V_DB_NAME
4.	AAI_DMT_SOURCE	V_TABLE_OWNER
		V_DB_NAME
5.	AAI_ETL_SOURCE	V_TABLE_OWNER
		V_DB_NAME
6.	ETLSOURCEDETAILS	V_SCHEMA
7.	DSNMASTER	DBNAME
		V_INFO_DB_NAME
		CREATEDUSR
8.	AAI_DB_PROPERTY	V_PROPERTY_VALUE
		V_DB_NAME
9.	METADATA_ELEMENT_MASTER	V_ELEMENT_VALUE
10.	VIEW_DERIVED_ENTITY_TPOSE	SCHEMA_NAME
11.	I18NMASTER	REVCONTEXT

NOTE	V_DB_NAME and DBNAME values are TNS aliases for Atomic Schema and must not contain underscores.
	For example, assuming that the Target Schema Name is `PROD_OFSAAATMNEW`, then the value for `V_DB_NAME` must be entered as `PRODOFSAAATMNEW`.

2. Manually modify the occurrences of the Source Config database user name with the new Target Config database user name. See the following table for details:

Table 4: Source and Target Config Database User Name Files

Sl. No.	Directory Path	File Name
1.	$FIC_HOME/conf/	Reveleus.SEC
2.	$FIC_HOME/utility/OFSAAGenerateRepository/conf/	Reveleus.SEC
3.	$FIC_HOME/conf/	DynamicServices.xml
4.	$FIC_HOME/MigrationUtilities/Migration_LDAP/conf/	DynamicServices.xml
5.	$FIC_HOME/utility/OFSAAGenerateRepository/conf/	DynamicServices.xml
6.	$FIC_HOME/ficweb/webroot/conf/	DynamicServices.xml
7.	$FIC_HOME/EXEWebService/Tomcat/ROOT/conf/	DynamicServices.xml
8.	$FIC_HOME/EXEWebService/WebSphere/ROOT/conf/	DynamicServices.xml
9.	$FIC_HOME/EXEWebService/weblogic/ROOT/conf/	DynamicServices.xml
10.	$FIC_HOME/commonscripts/	ofs_aai_create_atomic.ora

NOTE	• Based on the Web Application Server, choose the relevant directory path from Sl. No. 7, 8, or 9 from the preceding table.
	• The file mentioned in Sl. No. 10 is not applicable for new installations (are not upgrade installations from previous versions) of the OFS AAI versions 8.0.6 and higher. However, it is mandatory for OFS AAI upgrade installations for version 8.0.2.x.x and higher.

3. Execute the following one-off patch steps:

NOTE	• This step is applicable for new installations (are not upgrade installations from previous versions) of the OFS AAI versions 8.0.6 and higher.
	• Skip this step for OFS AAI versions 8.0.5.4.x and lower since it is not required.

a. Log in to https://support.oracle.com/ and search for the one-off patch **30828901** under the *Patches & Updates* tab.

b. Download the patch and apply it. See the *Readme.txt* file packaged with the patch for details on how to apply it.

c. Enter details for the following information when prompted:

```
Enter Connect String :
newofsaaatm/<PASSWORD>@OFSA12nDB
Enter Folder Path :
```

```
/scratch/ofsaaapp/tmp_stage

Enter new Config Schema name :

newofsaaconf

Enter infodom name :

OFSAAAIINFO
```

After entering the details, the patch creates the `SQLScripts_OFSAAI_$INFODOM` directory, replaces placeholder values in the metadom files, and then executes SQL scripts in the metaschema as mentioned in the connect string.

4. Execute scripts on the Atomic Schemas to update the new Target Config database user name as mentioned in the following steps:

> | **NOTE** | This step is not applicable for new installations (are not upgrade installations from previous versions) of the OFS AAI versions 8.0.6 and higher. However, it is mandatory for OFS AAI upgrade installations for version 8.0.2.x.x and higher. |

   a. On the *Putty* console, navigate to the `$FIC_HOME/commonscripts/` path on the OFS AAI server.

   b. Create a copy of the file `ofs_aai_create_atomic.ora` as `ofs_aai_create_atomic_<INFODOM>.ora`.

   c. Replace the $INFODOM placeholder with the actual infodom name in the file `ofs_aai_create_atomic_<INFODOM>.ora`.

> | **NOTE** | Enclose the actual infodom name within a single quote. |

   INFODOM is associated with each Atomic Schema. Therefore, you must create individual files for each Atomic Schema.

   You can fetch the INFODOM value associated with each Atomic Schema by executing the following query in the newly modified Config Schema.

```
SQL> select h.dbuserid, g.dsnid from dsnmaster g, db_master h
where g.dbname = h.dbname and h.dbname <> 'CONFIG';
```

   d. Connect to the Atomic Schemas using the sqlplus utility of the `$ORACLE_HOME/bin` directory.

   e. Execute the `ofs_aai_create_atomic_<INFODOM>.ora` file and ignore the **ORA-00001** and **ORA-02292** errors in the log file. If there are other errors, contact [My Oracle Support](#).

```
SQL> spool aai_create_<INFODOM>.log

SQL> @ofs_aai_create_atomic_<INFODOM>.ora

SQL> spool off

SQL> exit;
```

> **NOTE**   Repeat this step for all the Atomic Schemas.
>
> After the execution, delete all the files created as
> `ofs_aai_create_atomic_<INFODOM>.ora`.

f. Log in to the newly imported Atomic Schemas. Perform the following steps on each Atomic Schema to modify the interdependent object:

Run the following query in each Atomic Schema for the verification of invalid object status:

```
select object_type, object_name from user_objects
where object_type in ('FUNCTION','PACKAGE','PACKAGE
BODY','PROCEDURE','TRIGGER','VIEW') and status = 'INVALID'
order by object_type , object_name;
```

If the preceding query lists out the objects, then you can compile the invalid objects and enable the object registration elements by following these steps:

i. Run the following anonymous block to compile the invalid objects:

```
BEGIN

  FOR cur_rec IN ( select object_type, object_name from
user_objects

where object_type in ('FUNCTION','PACKAGE','PACKAGE
BODY','PROCEDURE','TRIGGER','VIEW') and status = 'INVALID'

order by object_type , object_name )

  LOOP

    BEGIN

IF cur_rec.object_type = 'PACKAGE BODY' THEN

 EXECUTE IMMEDIATE 'ALTER PACKAGE ' || ' "' ||
cur_rec.object_name || '" COMPILE BODY';

              COMMIT;

              ELSE

 EXECUTE IMMEDIATE 'ALTER ' || cur_rec.object_type || ' "' ||
cur_rec.object_name || '" COMPILE';

              COMMIT;

    END IF;

    EXCEPTION

      WHEN OTHERS THEN NULL;

    END;

  END LOOP;

END;
```

ii. Run the following scripts to enable the object registration elements:

```
spool <Validpath>/restore_owner.log
```

```
alter table REV_TABLES_TL disable constraint FK_REV_TABLES_TL_1
/
alter table REV_TABLE_CLASS_ASSIGNMENT disable constraint
FK_V_TABLE_CLASS_ASSIGNMENT_2
/
alter table REV_TAB_COLUMNS disable constraint
FK_REV_TAB_COLUMNS_1
/
alter table REV_TABLE_LOG_CLASS_ASMNT disable constraint
FK_V_TABLE_CLASS_LOG_ASMNT_2
/
alter table REV_TAB_CONSTRAINTS disable constraint
FK_REV_TAB_CONSTRAINTS
/
alter table REV_TAB_CONSTRAINT_COLUMNS disable constraint
FK_REV_TAB_CONST_COLUMNS
/
alter table REV_TAB_INDEXES disable constraint
FK_REV_TAB_INDEXES
/
update FSI_DB_INFO set owner=USER
/
update REV_COLUMN_PROPERTIES set owner=USER
/
update REV_DESCRIPTION_TABLES set owner=USER ,
DESCRIPTION_TABLE_OWNER=USER
/
update REV_TABLES_B set owner=USER
/
update REV_TABLES_TL set owner=USER
/
update REV_TABLE_CLASS_ASSIGNMENT set owner=USER
/
update REV_TAB_COLUMNS set owner=USER
/
update REV_TAB_COLUMNS_MLS set owner=USER
/
update REV_VIRTUAL_TABLES set owner=USER
/
update REV_VIRTUAL_TABLES_MLS set owner=USER
```

```
/

update REV_VIRTUAL_TABLES_TL  set owner=USER

/

update REV_TAB_CONSTRAINTS set owner=USER

/

update REV_SYNONYMS set table_owner=USER

/

update REV_TABLE_LOG_CLASS_ASMNT set owner=USER

/

update REV_TAB_CONSTRAINT_COLUMNS set owner=USER

/

update REV_TAB_INDEXES set owner=USER

/

update REV_TAB_REF_CONSTRAINTS set owner=USER

/

alter table REV_TABLE_LOG_CLASS_ASMNT enable constraint
FK_V_TABLE_CLASS_LOG_ASMNT_2

/

alter table REV_TAB_CONSTRAINTS enable constraint
FK_REV_TAB_CONSTRAINTS

/

alter table REV_TAB_CONSTRAINT_COLUMNS enable constraint
FK_REV_TAB_CONST_COLUMNS

/

alter table REV_TAB_INDEXES enable constraint FK_REV_TAB_INDEXES

/

alter table REV_TAB_COLUMNS enable constraint
FK_REV_TAB_COLUMNS_1

/

alter table REV_TABLE_CLASS_ASSIGNMENT enable constraint
FK_V_TABLE_CLASS_ASSIGNMENT_2

/

alter table REV_TABLES_TL enable constraint FK_REV_TABLES_TL_1

/

commit

/

spool off

exit;
```

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 which has all the revised/recently released documents.