Oracle Financial Services Analytical Applications Infrastructure

Installation & Configuration Guide

Release 7.3.1.0.0

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DOCUMENT CONTROL

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Version 7.3.1.0.0	Created: May 2012	Interim Release process enhancement updates.
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Executive Summary

This document includes the necessary instructions to apply 7.3.1.0.0 Interim Release and perform the required post update configurations.

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1   OFSAAI Release 7.3.1.0.0

This Interim Release (IR) of Oracle Financial Services Analytical Applications Infrastructure includes bug fixes and enhancements done since the previous release.

1.1   Pre Installation Requirements

- OFSAAI 7.3 has to be successfully installed.

- At least one Information Domain should exist or has to be created prior to applying this IR.

    For detailed instructions, refer to OFSAAI 7.3 Installation and Configuration Guide.

1.2   How to Apply this Interim Release?

Refer to the following instructions to extract the contents of this IR.

1. Shutdown all the OFSAAI Services.

2. Navigate to **$FIC_HOME** folder and execute the command "**chmod -R 775 ***" prior to applying the IR to ensure that all the files / folders (commonscripts, EXEWebService, ficapp, ficweb, and ficdb) under the **$FIC_HOME** folder have write permissions assigned. In case of multi-tier installation, repeat this step on all tiers.

3. Download the 7.3.1.0.0 IR from https://support.oracle.com/ and copy it to your AAI server in **Binary** mode.

NOTE: The archive files are different for every operating system i.e. for AIX, Solaris, and RHEL/OEL.

    In case of a multi-tier deployment, the IR needs to be copied and installed on each tier in the following order:

    - APP tier

    - DB tier

    - WEB tier

NOTE: If APP and WEB are in same tier, then execute the IR in DB tier first.

4. Download the Unzip utility (OS specific) **unzip_<os>.Z** from the location https://updates.oracle.com/unzips/unzips.html 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 7.3.1.0.0 IR.

5. Uncompress the unzip installer file using the command **uncompress unzip_<os>.Z**.

> **NOTE:** In case you notice an error message "**uncompress: not found [No such file or directory]**" when the package is not installed, contact your UNIX administrator.

6. Ensure that the file has execute permissions set. If not, run the following command:

   chmod 751 unzip_<os>

7. Extract the contents of the 7.3.1.0.0 IR archive file using the following command:

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

   > **NOTE:** The above "**-a**" option is mandatory to unzip the service pack. For example:
   > **unzip_aix -a OFSAAI_7.3.1.0.0_<OperatingSystem>_Oracle<Version>.zip**

8. Navigate to path *OFSAAI_7.3.1.0.0_<OperatingSystem>_Oracle<Version>* and execute **OFSAAIUpdate.sh**.

   Verify if the IR is applied successfully by checking the log file generated in the folder. Contact Oracle Support in case of any errors. You can ignore ORA-00001, ORA-00955, and ORA-01430 errors in log file. If you observe any other warning/error reported in the log, bring it to the notice of Oracle Support.

   > **NOTE:** If the OS is **Solaris**, you need to apply the patch for Bug # **14123886**, post successful installation of this IR. This patch can be applied even after performing the following post install configurations.

1.3 Post Installation Configuration

Once the IR is applied successfully, the following post-installation steps are required to set certain configuration parameters.

1.3.1 AAI Artifacts Configuration

Refer to the following instructions and make the necessary configurations to the AAI artifacts (tables / files).

a) **LHSMenuen_US.xml** present under *$FIC_APP_HOME/common/FICServer/conf* location on the APP tier should be modified as given below:

   1. **Replace the following tag**:

   ```
   <MENUITEM  ID="DCDQ00"  PROTECTED="true"  LINK_TEXT="Data
   Quality  Framework"  TOOLTIP_TEXT="Data  Quality  Framework"
   FGCOLOR="#000000"          FONT_FACE="Arial,Helvetica"
   FONT_STYLE="normal"                    FONT_SIZE="12"
   BGIMAGE="images/rev_menu_level3.gif"
   CLOSE_ON_LOGOUT="false" ALLOWS_DUPLICATE="false" >
   ```

```
<SUB_MENU>

    <MENUITEM          ID="DCDQ01"          PROTECTED="true"
    LINK_TEXT="Data            Quality            Summary"
    URL="dataQuality/index.jsp"              TARGET="DQ_1"
    TOOLTIP_TEXT="Data Quality Summary" FGCOLOR="#000000"
    FONT_FACE="Arial,Helvetica"       FONT_STYLE="normal"
    FONT_SIZE="12"   BGIMAGE="images/rev_menu_level3.gif"
    CLOSE_ON_LOGOUT="true"        ALLOWS_DUPLICATE="false"
    FUNCTION_LIST="DQ_ADD + DQ_EDT + DQ_DEL + DQ_AUTH +
    DQ_CPY + DQ_VIW">

    </MENUITEM>

    <MENUITEM          ID="DCDQ02"          PROTECTED="true"
    LINK_TEXT="Data       Quality       Group       Summary"
    URL="dataQuality/group_index.jsp"       TARGET="DQ_2"
    TOOLTIP_TEXT="Data      Quality      Group      Summary"
    FGCOLOR="#000000"         FONT_FACE="Arial,Helvetica"
    FONT_STYLE="normal"                     FONT_SIZE="12"
    BGIMAGE="images/rev_menu_level3.gif"
    CLOSE_ON_LOGOUT="true"        ALLOWS_DUPLICATE="false"
    FUNCTION_LIST="DQ_GP_ADD + DQ_GP_EDT + DQ_GP_DEL +
    DQ_GP_EXEC + DQ_GP_CPY + DQ_GP_VIW">

    </MENUITEM>

  </SUB_MENU>

</MENUITEM>
```

With:

```
<MENUITEM  ID="DCDQ00"  PROTECTED="true"  LINK_TEXT="Data
Quality  Framework"  TOOLTIP_TEXT="Data  Quality  Framework"
FGCOLOR="#000000"                 FONT_FACE="Arial,Helvetica"
FONT_STYLE="normal"                        FONT_SIZE="12"
BGIMAGE="images/rev_menu_level3.gif"
CLOSE_ON_LOGOUT="false" ALLOWS_DUPLICATE="false" >

  <SUB_MENU>

    <MENUITEM          ID="DCDQ01"          PROTECTED="true"
    LINK_TEXT="Data            Quality            Rules"
    URL="dataQuality/index.jsp"              TARGET="DQ_1"
    TOOLTIP_TEXT="Data  Quality  Rules"  FGCOLOR="#000000"
    FONT_FACE="Arial,Helvetica"       FONT_STYLE="normal"
```

```
        FONT_SIZE="12"    BGIMAGE="images/rev_menu_level3.gif"
        CLOSE_ON_LOGOUT="true"       ALLOWS_DUPLICATE="false"
        FUNCTION_LIST="DQ_ADD + DQ_EDT + DQ_DEL + DQ_AUTH +
        DQ_CPY + DQ_VIW">

        </MENUITEM>

        <MENUITEM        ID="DCDQ02"        PROTECTED="true"
        LINK_TEXT="Data           Quality            Groups"
        URL="dataQuality/group_index.jsp"       TARGET="DQ_2"
        TOOLTIP_TEXT="Data Quality Groups" FGCOLOR="#000000"
        FONT_FACE="Arial,Helvetica"        FONT_STYLE="normal"
        FONT_SIZE="12"    BGIMAGE="images/rev_menu_level3.gif"
        CLOSE_ON_LOGOUT="true"       ALLOWS_DUPLICATE="false"
        FUNCTION_LIST="DQ_GP_ADD + DQ_GP_EDT + DQ_GP_DEL +
        DQ_GP_EXEC + DQ_GP_CPY + DQ_GP_VIW">

        </MENUITEM>

    </SUB_MENU>

</MENUITEM>
```

2. **Add the following**:

```
<MENUITEM  ID="UMM050"  PROTECTED="true"  LINK_TEXT="Forms
Authorization"   URL="DeFi/FormsDesigner/FormAuthorize.jsp"
TARGET="_blank"        TOOLTIP_TEXT="Forms       Designer"
FGCOLOR="#000000"              FONT_FACE="Arial,Helvetica"
FONT_STYLE="normal"                       FONT_SIZE="12"
BGIMAGE="images/rev_menu_level3.gif"
CLOSE_ON_LOGOUT="true"             ALLOWS_DUPLICATE="false"
FUNCTION_LIST="DEFAUTH">

   <PARAMETERS>

      <PARAM NAME="userid" VALUE="%{userid}"/>

      <PARAM NAME="dsn" VALUE="%{dsn}"/>

      <PARAM NAME="mode" VALUE="2"/>

      <PARAM NAME="ISFIC" VALUE="Y"/>

   </PARAMETERS>

</MENUITEM>
```

After:

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```
<MENUITEM   ID="UMM051"   PROTECTED="true"   LINK_TEXT="Forms
Designer"        URL="DeFi/FormsDesigner/EntryfromETL.jsp"
TARGET="_blank"          TOOLTIP_TEXT="Forms        Designer"
FGCOLOR="#000000"                  FONT_FACE="Arial,Helvetica"
FONT_STYLE="normal"                         FONT_SIZE="12"
BGIMAGE="images/rev_menu_level3.gif"
CLOSE_ON_LOGOUT="true"              ALLOWS_DUPLICATE="false"
FUNCTION_LIST="DEFQADM">

    <PARAMETERS>

        <PARAM NAME="userid" VALUE="%{userid}"/>

        <PARAM NAME="dsn" VALUE="%{dsn}"/>

        <PARAM NAME="mode" VALUE="2"/>

        <PARAM NAME="ISFIC" VALUE="Y"/>

    </PARAMETERS>

</MENUITEM>
```

b) **SANDBOX_ENTITY_TEMPLATE.xml**   present   under *$FIC_APP_HOME/common/FICServer/conf* location on the APP tier should be modified as given below:

1. **Add the following tag**:

```
<SANDBOXTIMEHIERARCHY ENTITY="" ATTRIBUTE=""/>
```

After:

```
<SANDBOXENTITY/>
```

c) **Web.xml** present under *$FIC_WEB_HOME/webroot/WEB-INF* on WEB tier should be modified as mentioned below:

1. Add the given attribute **metadata-complete="true"** in the following tag:

```
<web-app          id="WebApp_ID"          version="2.5"
xmlns="http://java.sun.com/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd" >
```

Example:

```
<web-app            id="WebApp_ID"           version="2.5"
xmlns="http://java.sun.com/xml/ns/javaee"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
metadata-complete="true" >
```

d) **excludeURLList.cfg** file present under *$FIC_WEB_HOME/webroot/conf* location on WEB tier should be modified as follows:

1. **Add the entry**:

```
/formulaID/
```

After:

```
/oraclecubes/
```

e) Below tags needs to be updated in **DynamicServices.xml** present under *$FIC_WEB_HOME/webroot/conf* on WEB tier and *$FIC_HOME/conf* on APP tier.

1. **Add the following entry**:

```
<PARAMETER                      NAME="REMOVE_QUOTE_LOCALES"
VALUE="en_US~fr_FR~it_IT"   DESCRIPTION="The   Locales   for
which  single  quote  has  to  be  removed  should  be  specified
here delimited by ~ ." />
```

After:

```
<PARAMETER       NAME="CACHE_MAX_OBJECTS"       VALUE="25"
DESCRIPTION="The maximum number of objects that the cache
holds." />
```

1.3.2 Dimension Configuration: Alphanumeric and Numeric Codes

OFSAAI supports both numeric and alphanumeric dimensions. Both dimension types require a numeric member code. An alphanumeric dimension will additionally store an alphanumeric member code. A numeric dimension can optionally store an alphanumeric code as well, but it will be equivalent to the numeric code value.

After the OFSAAI installation, you may need to run SQL updates on the REV_DIMENSIONS_B table. This table stores the required dimension metadata including dimension member data type and the member column names for dimension member tables, where the numeric and alphanumeric codes are stored. Specifically in REV_DIMENSIONS_B:

- The column MEMBER_DATA_TYPE_CODE with value 'NUMBER' identifies a dimension as numeric and value 'VARCHAR2' identifies a dimension as alphanumeric.

▪ MEMBER_CODE_COLUMN specifies the member table column which holds the alphanumeric member code. This is optional for numeric dimensions, where alphanumeric and numeric member codes would be equivalent.

▪ MEMBER_COL specifies the numeric member code column.

NOTE: Any change done in REV_DIMENSIONS_B table requires web server restart since, the dimension definitions data in cache memory has to be refreshed.

A new installation by default will have the seeded key dimensions configured as numeric, although those dimension member tables include a column for alphanumeric member codes. You can configure any of these dimensions as alphanumeric. For more information refer to Configure Alphanumeric Dimensions.

You might also need to run some SQL updates for numeric dimensions. For more information refer to Configure Numeric Dimensions.

1.3.2.1 Configure Alphanumeric Dimensions

To configure an editable dimension as alphanumeric and to remove the optional code attribute from prior releases you have to back up the affected dimension tables (like REV_DIMENSIONS_B, REV_DIM_ATTRIBUTES_B, REV_DIM_ATTRIBUTES_TL, and DIM_<DIMENSION>_ATTR) and perform the following steps on each applicable dimension.

1. Set the member type as alphanumeric (VARCHAR2) in REV_DIMENSIONS_B, and identify the member table's alphanumeric code column name if it is not populated already.

```
Update REV_DIMENSIONS_B SET

Member_Data_Type_Code = 'VARCHAR2' [, Member_Code_Column =
'{Alphanumeric Column Name}'] Where Dimension_ID = {Dimension
ID}
```

Example:

```
Update REV_DIMENSIONS_B SET

Member_Data_Type_Code = 'VARCHAR2', Member_Code_Column =
'TP_PRODUCT_CODE' Where Dimension_ID = 5;
```

NOTE: In OFSAAI 7.3, the seeded key dimensions have already populated MEMBER_CODE_COLUMN.

2. If there is an associated code attribute which is present from OFSAAI release 7.3.0 for capturing the alphanumeric member code, remove it manually as follows:

If the attribute currently contains values:

- Update the alphanumeric codes from the attribute table to the Member Code Column of the member table.

  I.e. Execute the **Update_Dimension_Code** procedure using steps detailed in the Data Model Utilities Guide. For example: Either run **fn_updateDimensionCode** from SQL Plus or use a Batch to run TRANSFORM DATA with the **Update_Dimension_Code** procedure for your Dimension ID.

- Remove the attribute values from the dimension attribute table (DIM_<DIMENSION>_ATTR).

  For example, if you are updating the Common Chart of Accounts Dimension, where Attribute Name is 'COMMON COA CODE', Member_B_Table_Name is 'DIM_COMMON_COA_B', and Attribute Table Name is 'DIM_COMMON_COA_ATTR', execute the following statement:

  ```
  Delete from DIM_COMMON_COA_ATTR where Attribute_ID =
  (Select Attribute_ID from REV_DIM_ATTRIBUTES_TL where
  Attribute_Name = 'COMMON COA CODE' and dimension_id =
  (select dimension_id from REV_DIMENSIONS_B where
  member_b_table_name = 'DIM_COMMON_COA_B'));
  ```

- Remove the attribute definition from REV_DIM_ATTRIBUTES_B & REV_DIM_ATTRIBUTES_TL tables. This is necessary to prevent the Dimension Member UI from showing the code as an optional attribute, since it already displays the alphanumeric and numeric codes based on the member table.

- Delete alphanumeric attribute metadata from ATTRIBUTE_B table.

  Example:

  ```
  Delete from REV_DIM_ATTRIBUTES_B where Attribute_ID = (Select
  Attribute_ID from REV_DIM_ATTRIBUTES_TL where Attribute_Name
  = 'COMMON COA CODE' and dimension_id = (select dimension_id
  from REV_DIMENSIONS_B where member_b_table_name =
  'DIM_COMMON_COA_B'));
  ```

- Delete alphanumeric attribute metadata from ATTRIBUTE_TL table.

  Example:

  ```
  Delete from REV_DIM_ATTRIBUTES_TL where Attribute_ID =
  (Select Attribute_ID from REV_DIM_ATTRIBUTES_TL where
  Attribute_Name = 'COMMON COA CODE' and dimension_id = (select
  dimension_id from REV_DIMENSIONS_B where member_b_table_name
  = 'DIM_COMMON_COA_B'));
  ```

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3. In case any rows in the Dimension member table contain a null alphanumeric code even after running the **fn_updateDimensionCode** procedure, you need to manually run an SQL update as illustrated in the example below:

    ```
    Update    DIM_GENERAL_LEDGER_B   set   GL_Account_Code   =
    GL_Account_ID Where GL_Account_Code is null;

    Commit;
    ```

4. Save your changes using `Commit;`

1.3.2.2 Configure Numeric Dimensions

If REV_DIMENSIONS_B.Member_Code_Column is populated for a dimension, any UI which displays an alphanumeric code will look in the specified column for the member's alphanumeric code. If REV_DIMENSIONS_B.Member_Code_Column is null, the UI will assume no alphanumeric code column exists in the member table and will display the alphanumeric code with the same value as the numeric code. Therefore, for numeric dimensions, you may want to update the metadata.

There are two options available to configure Numeric dimension.

*   [Option 1: When the dimension does not have <DIM>_CODE column in <DIM>_B table](#)

*   [Option 2: When the dimension have <DIM>_CODE column in <DIM>_B table](#)

NOTE: By default, there may not be configuration changes required in Rev_Dimensions_B for Numeric dimension, since the REV_DIMENSIONS_B.MEMBER_CODE_COLUMN column would have value either <Dim>_Code or null depending on the availability of <Dim>_Code column.

Option 1: When the dimension does not have <DIM>_CODE column in <DIM>_B table. In this case, the alphanumeric and numeric code value are stored in the same <DIM>_ID column.

*   Back up the table REV_DIMENSIONS_B, if you have not done it already.

*   Clear the Member Code Column entries for applicable dimensions.

    Example:

*   For specific numeric dimensions:

    ```
    Update  REV_DIMENSIONS_B  Set  Member_Code_Column  =  null  Where
    Dimension_ID in([values]);

    Commit;
    ```

*   For all editable numeric dimensions:

```
Update  REV_DIMENSIONS_B  Set  Member_Code_Column  =  null  Where
Member_Data_Type_Code = 'NUMBER' and DIMENSION_EDITABLE_FLAG =
'Y';

Commit;
```

NOTE: If the dimension have <Dim>_Code column and Option 1 is used (i.e. the REV_DIMENSIONS_B.MEMBER_CODE_COLUMN is set to null), this will cause the dimension loaders and seeded T2T extracts to fail.

Option 2: When the dimension have <DIM>_CODE column in <DIM>_B table. In this case, the alphanumeric and numeric code value are stored seperately in <DIM>_CODE and <DIM>_ID column (though both the values are same).

- Back up the table REV_DIMENSIONS_B, if you have not done it already.

- Populate the Member Code Column entries for applicable dimensions.

    Example:

    - For specific numeric dimensions:

    ```
    Update  REV_DIMENSIONS_B  Set  Member_Code_Column  =  <dim>_code
    Where Dimension_ID in([values]);

    Commit;
    ```

    - For all editable numeric dimensions:

    ```
    Update  REV_DIMENSIONS_B  Set  Member_Code_Column  =  <dim>_code
    Where     Member_Data_Type_Code     =     'NUMBER'     and
    DIMENSION_EDITABLE_FLAG = 'Y';

    Commit;
    ```

For upgrades from 7.3 release, if data already exists for numeric dimension members, copy the numeric code values to the alphanumeric code column.

Example:

- For the General Ledger Account dimension:

```
Update DIM_GENERAL_LEDGER_B set GL_Account_Code = GL_Account_ID;

Commit;
```

1.3.2.3   Configure Alphanumeric Code in Simple Dimension Tables

For some editable seeded and user-defined simple dimensions, the alphanumeric code column currently might not be present in the data model. To add this column to a user-defined simple dimension table, you can use Model Upload. You will also need to update the

REV_DIMENSIONS_B table as indicated in <u>Dimension Configuration</u> section, to configure alphanumeric properties.

NOTE: You should not modify the structure of any seeded simple dimensions.

1.3.2.4   Create Index on Code Column

You need to create a unique index on the alphanumeric code column if such an index is not present already. Also while creating, you need to ensure that this index uniqueness should be case insensitive.

Example:

```
Create   unique   index   IDX1_DIM_PRODUCTS_B   on   DIM_PRODUCTS_B
Upper(PRODUCT_CODE)

Commit;
```

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1.4   OFSAAI Application Deployment

Generate **EAR/WAR** file and redeploy the application on to the web server. For more information, refer *Post Installation Configuration* section in <u>OFSAAI 7.3 Installation and Configuration Guide</u>.

NOTE: Ensure to clear the application cache as per the below instructions. This is applicable to all Web Servers (WebSphere, WebLogic, and Tomcat) and OS combination.

To clear the application cache, delete the files from the below location. Navigate to the following path depending on the WebServer configured:

- **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>/qaelce/jsp_servlet

- **Websphere**:   <Websphere   installation   directory>/AppServer/profiles/<Profile name>/temp/<Node name>/server1/<Application name>/<.war file name>

1.5   Starting Infrastructure Services

Once the IR has been applied successfully and the post-installation steps are completed, all the OFSAAI services must be restarted. For more information, refer to *Start Infrastructure* section in <u>OFSAAI 7.3 Installation and Configuration Guide</u>.

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OFSAAI
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