Oracle Financial Services Price Creation and Discovery Application Pack

Installation and Configuration Guide

Release 8.0.7.4.2

Jan 2020

F21078-01

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Oracle Financial Services Price Creation and Discovery Application Pack

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Document Control

Version Number	Revision Date	Change Log
1.0	29-July-2019	First draft
1.1	25-Sept-2020	Included prerequisite for installation and added Appendix: SQL Scripts for dropping the materialized views.

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1 Introduction

This document provides step-by-step instructions to install the Oracle Financial Services Price Creation and Discovery Application Pack (OFS PCD Application Pack) Maintenance Release (ML) 8.0.7.2.0. This ML release of OFS PCD can be installed on a setup with OFS PCD Pack 8.0.7.0.0.

OFS PCD Application Pack 8.0.7.2.0 ML includes all the bug fixes and minor enhancement done since the previous General Availability (GA) release, it is 8.0.7.0.0.

1.1 Abbreviations

Abbreviation	Meaning
AIX	Advanced Interactive eXecutive
BDP	Big Data Processing
DBA	Database Administrator
DDL	Data Definition Language
DEFQ	Data Entry Forms and Queries
DML	Data Manipulation Language
EAR	Enterprise Archive
EJB	Enterprise JaveBeans
ERM	Enterprise Resource Management
FTP	File Transfer Protocol
GUI	Graphical User Interface
HDFS	Hadoop Distributed File System
HTTPS	Hypertext Transfer Protocol Secure
J2C	J2EE Connector
J2EE	Java 2 Enterprise Edition
JDBC	Java Database Connectivity
JDK	Jave Development Kit
JNDI	Java Naming and Directory Interface
JRE	Java Runtime Environment
JVM	Java Virtual Machine
LDAP	Lightweight Directory Access Control
LHS	Left Hand Side
MFA	Milti-Factor Authentication
MOS	My Oracle Support
OBIEE	Oracle Business Intelligence Enterprise Edition
OFSAAI	Oracle Financial Services Analytical Application Infrastructure
OHC	Oracle Help Center

Abbreviation	Meaning
OLAP	On-Line Analytical Processing
OLH	Oracle Loader on Hadoop
ORAAH	Oracle R Advanced Analytics for Hadoop
OS	Operating System
RAM	Random Access Memory
RDBMS	Relational Database Management System
SFTP	Secure File Transfer Protocol
SID	System Identifier
SSL	Secure Sockets Layer
TDE	Transparent Data Encryption
TNS	Transparent Netwrok Substrate
URL	Uniform Resource Locator
VM	Virtual Machine
WAR	Web Archive
XML	Extensible Markup Language

1.2 Related Documents

This section identifes additional documents related to OFS PCD Application Pack 8.0.7.2.0. You can access Oracle documentation online from the Documentation Library (OHC).

- Oracle Financial Services Price Creation and Discovery User Guide 8.0.7.0.0
- Oracle Financial Services Analytical Applications Technology Matrix

2 Installing OFS PCD Application Pack 8.0.7.2.0 Maintenance Release

> **NOTE** You should have OFS PCD Application Pack version 8.0.7.0.0 as the minimum patch level in order to install 8.0.7.2.0 Maintenance Release.

2.1 Prerequisite

Drop the following materialized views from the ATOMIC schema:

- FSI_PRICING_SNAPSHOT_JSON
- FSI_MY_DEAL_CLOSURE_JSON
- FSI_MY_NOTIFICATIONS_JSON
- FSI_MY_OPEN_DEALS_JSON
- FSI_NET_INCOME_PRIOR_JSON
- FSI_TOP_FIVE_CUSTOMERS_JSON
- FSI_TOP_FIVE_PRODUCTS_JSON
- FSI_RELATIONSHIP_DEPTH_JSON
- FSI_TOP_FIVE_RM_JSON
- FSI_APPROVALS_OVERDUE_JSON
- FSI_AGING_DEALS_JSON
- FSI_MY_PERFORMANCE_JSON

For more details about dropping the materialized views, see Appendix A: SQL Scripts to Drop the Materialized Views.

2.2 Applying OFS PCD Application Pack 8.0.7.2.0 Maintenance Release

To download, extract, install, and configure this maintenance release:

1. Log into https://support.oracle.com and search for OFS PCD Maintenance Level **29999437** under the **Patches & Updates** tab.
2. Download the OFS PCD Pack Maintenance Level Release v8.0.7.2.0 archive file and copy it to your OFSAA server in Binary mode.

> **NOTE** There are different archives files for different operating systems such as AIX, Solaris, and Oracle Linux.

3. Shutdown all OFSAAI services. For more information, see Start/Stop Infrastructure Services section in the Oracle Financial Services Price Creation and Discovery Application Pack Installation Guide 8.0.7.0.0.
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 prior to version 2.15. The application of the 33663417 Mandatory Patch fixes the issue.
>
> For details, see the My Oracle Support Doc ID 2827801.1.

5. Log into the OFSAA server with the user credentials that were used to install OFS PFT.
6. Give EXECUTE permission to the file using the following command:

   ```
   chmod 755 OFS_PCD_8.0.7.2.0_<OS>.zip
   ```

7. Extract the contents of the OFS PCD Application Pack 8.0.7.2.0 in the Download Directory installer archive file using the following command:

   ```
   unzip –a OFS_PCD_8.0.7.2.0_<OS>.zip
   ```

> **NOTE** The above "-a" option is mandatory to unzip the archive file. For example:
> For AIX operating system
> `unzip -a OFS_PCD_8.0.7.2.0_AIX.zip`

   Modify `params.conf` file present in the `OFS_PCD_PACK/OFS_PCD/conf` and update the parameter `UPLOAD_MODEL=0`.
8. Give EXECUTE permission to the installer file. Navigate to: `OFS_PCD_PACK` and execute the following commands:

   ```
   chmod 755 OFSAAIUpdate.sh
   ```

9. Trigger the installation by executing the following command:

   ```
   ./OFSAAIUpdate.sh
   ```

10. Verify if the maintenance level release is applied successfully by checking the log files generated in the installation folder as mentioned below:
    - `OFS_PCD_PACK/logs/OFSAAIUpdate.log` for Infrastructure installation log file.
    - `OFS_PCD_PACK/OFS_PCD/logs/OFS_PCD_patch_installation.log` for OFS PCD Application Pack installation log file.

    You can ignore the following errors in the log files:
    - ORA-00001

    If there are any other errors, contact Oracle Support.
11. After successful installation, follow these steps:
    a. Download the mandatory one-off patch 30170141 from http://support.oracle.com/. Extract and apply the patch.

> **NOTE** In an application-on-application/pack-on-pack installation scenario (to install another application/pack after an application/pack has been installed), reapply the patch post installation of the 8.0.7.2.0 version. However, before you reapply, delete the record for patch number 30170141 in the **infodom_patches** and **patchapply_details** tables.

b. Clear the application cache. Navigate to the following paths 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>/<auto generated folder>/jsp_servlet
- **WebSpehere**: <Websphere installation directory>/AppServer/profiles/<Profile name>/temp/<Node name>/server1/<Application name>/<.war file name>

c. Delete the existing EAR/WAR file available in the folder `$FIC_HOME/ficweb`.

d. Generate the application EAR/WAR file and redeploy the application onto your configured web application server. For more information on generating and deploying EAR / WAR file, see the *Post Installation Configuration* section in the Oracle Financial Services Price Creation and Discovery Application Pack Installation Guide 8.0.7.0.0.

12. After successful installation of the release, restart all OFSAAI services. For more information, see the *Start/ Stop Infrastructure Services* section in the Oracle Financial Services Price Creation and Discovery Application Pack Installation Guide 8.0.7.0.0.

3 Appendix A: SQL Scripts to Drop the Materialized Views

Use the following SQL script to kill the running jobs and drop the materialized views:

```
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_PRICING_SNAPSHOT_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_PRICING_SNAPSHOT_JSON';
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_MY_DEAL_CLOSURE_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_MY_DEAL_CLOSURE_JSON';
```

```
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_MY_NOTIFICATIONS_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW fsi_my_notifications_json';
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_MY_OPEN_DEALS_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_MY_OPEN_DEALS_JSON';
```

```
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_NET_INCOME_PRIOR_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW fsi_net_income_prior_json';
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_TOP_FIVE_CUSTOMERS_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_TOP_FIVE_CUSTOMERS_JSON';
```

```
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_TOP_FIVE_PRODUCTS_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_TOP_FIVE_PRODUCTS_JSON';
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_RELATIONSHIP_DEPTH_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_RELATIONSHIP_DEPTH_JSON';
```

```
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_TOP_FIVE_RM_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_TOP_FIVE_RM_JSON';
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_APPROVALS_OVERDUE_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW fsi_approvals_overdue_json';
```

```
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_AGING_DEALS_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW fsi_aging_deals_json';
exception when others then
null;
end;
/
declare
v_job_id number(20);
begin
select job into v_job_id from user_jobs where broken ='N' and what like
'%FSI_MY_PERFORMANCE_JSON%';
dbms_job.broken(v_job_id,TRUE);
commit;
exception when others then
null;
end;
/
declare
begin
execute immediate '
drop MATERIALIZED VIEW FSI_MY_PERFORMANCE_JSON';
```

```
exception when others then
null;
end;
/
```

4 Appendix B: FTP Enhancement

4.1 Create a Custom Dimensoin for Product

Custom Product Dimension creation is a customized step which has to be done from the AMHM screen on FTP Setup.Once custom dimension is created, update the AMHMConfig.properties with the dimension id in the Members & Hierarchy Reverse population headings with Y as follows:

```
# Attribute Default Date Format - DB_DATE_FORMAT:MM/DD/YYYY


# Members Revese population - VALUE- Y/N
MEMBER_REVERSE_POP-OFSPFTINFO-0=Y
MEMBER_REVERSE_POP-OFSPFTINFO-1=Y
MEMBER_REVERSE_POP-OFSPFTINFO-2=Y
MEMBER_REVERSE_POP-OFSPFTINFO-3=Y
MEMBER_REVERSE_POP-OFSPFTINFO-4=Y
MEMBER_REVERSE_POP-OFSPFTINFO-5=Y
MEMBER_REVERSE_POP-OFSPFTINFO-6770=Y


#Hierarchy Reverse population - VALUE- Y/N
HIERARCHY_REVERSE_POP-OFSPFTINFO-0=Y
HIERARCHY_REVERSE_POP-OFSPFTINFO-1=Y
HIERARCHY_REVERSE_POP-OFSPFTINFO-2=Y
HIERARCHY_REVERSE_POP-OFSPFTINFO-3=Y
HIERARCHY_REVERSE_POP-OFSPFTINFO-4=Y
HIERARCHY_REVERSE_POP-OFSPFTINFO-5=Y
HIERARCHY_REVERSE_POP-OFSPFTINFO-6770=Y
```

Here, 6770 is the dimension_id for Custom Dimension

1. Restart the services.
2. Log in to the application and navigate to AMHM screen.
3. Navigate to Members screen, and select Custom Product dimension.
4. Resave all the members from the listing screen.
5. Navigate to the Hierarchy screen, and then select Custom Product Dimension.
6. Resave all the hierarchies from the screen.

> **NOTE** If FTP Setup is hosted on different server, then the Custom Product dimension must be created on the PCD setup as well with same dimension_id.

4.2 Configure FTP Setup with Custom Product Dimension

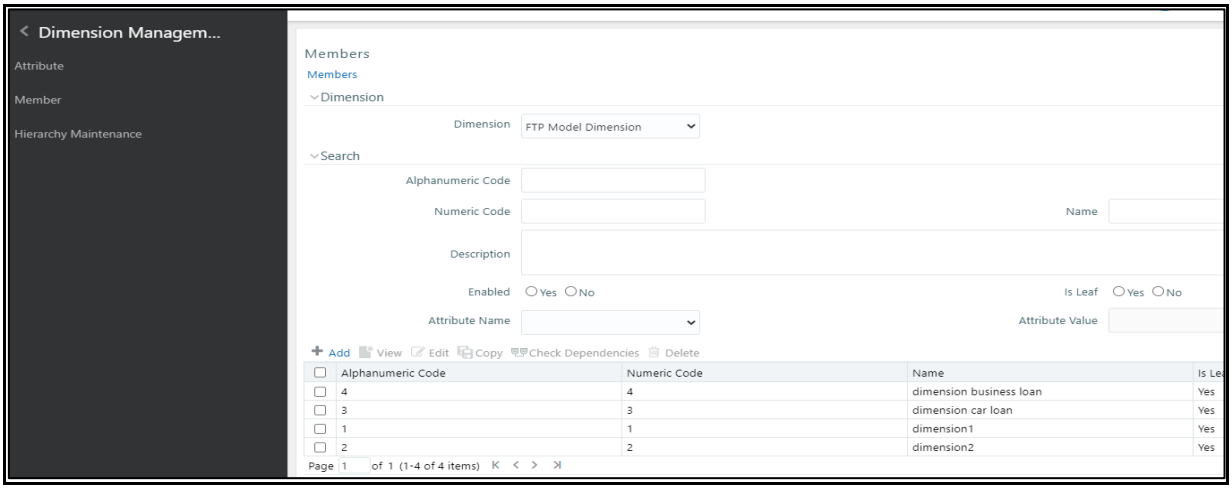
To configure FTP Setup woth Custom Product Dimention, follow these steps:

1. Update the Product Dimension & Product Hierarchy in the Application Preference screen with respect to the newly created Custom Product Dimension.
2. Configure Transfer Pricing Rule and Adjustment Rule & Standard Process with the newly created custom product dimension.

4.3 Configure FTP Model Dimension from PCD

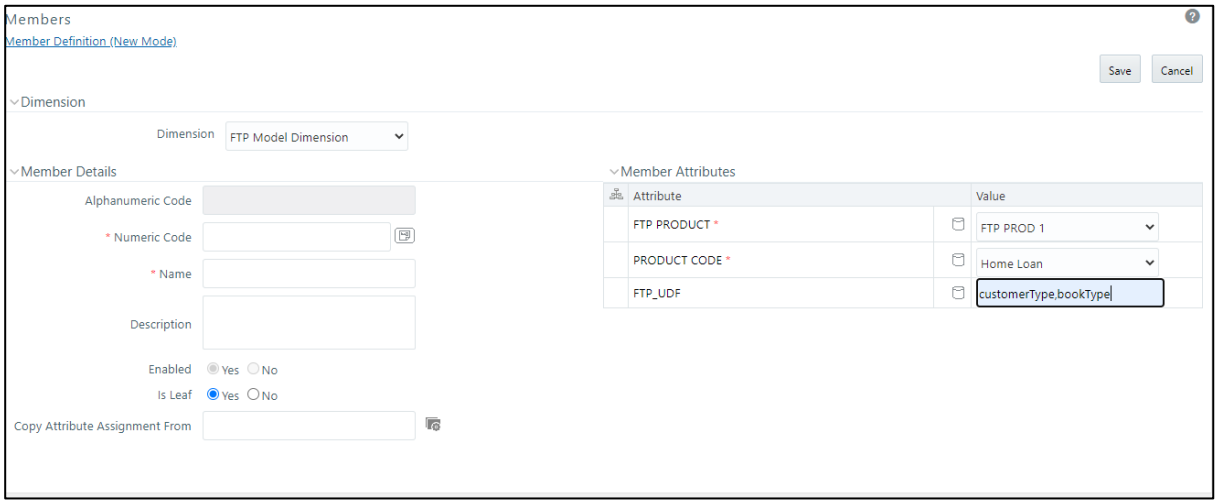
To configure the FTP Model Dimension from PCD, follow these steps:

1. Navigate to the Member screen & configure FTP Model dimension.

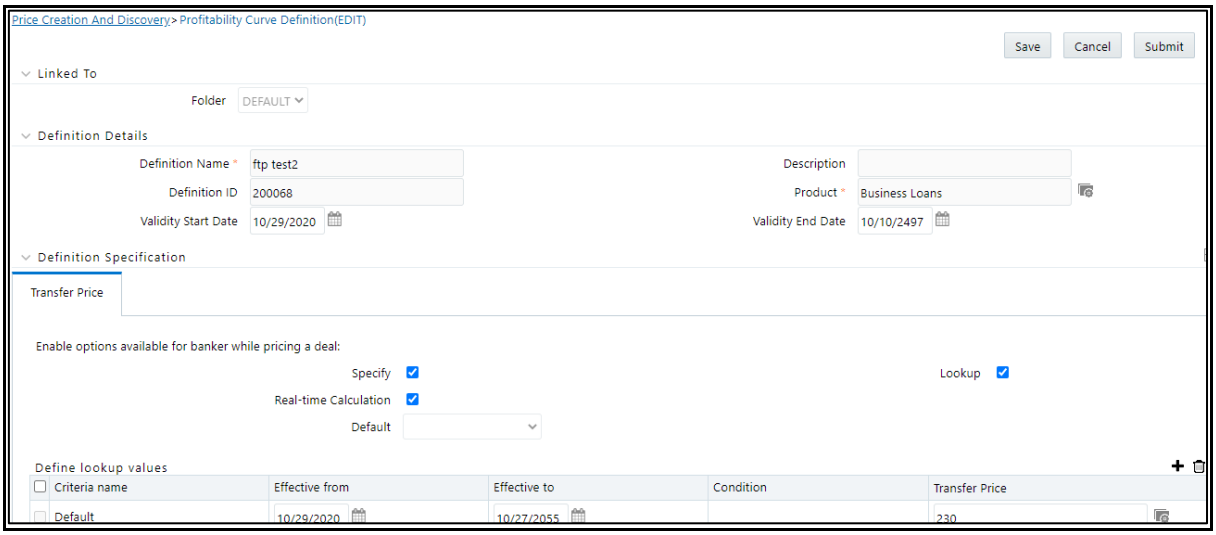


2. Click Add and enter the all values.

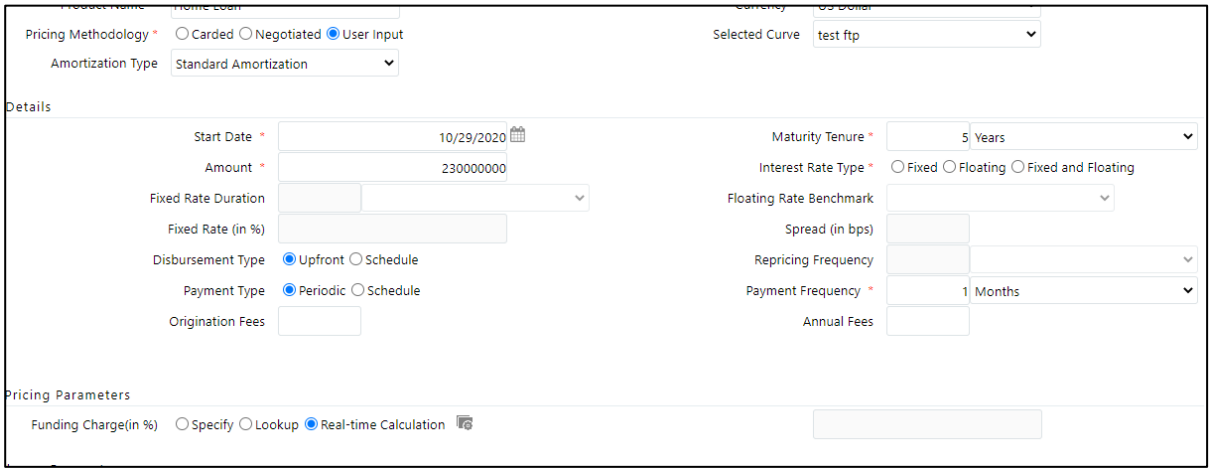
> **NOTE** The FTP_UDF columns must be configured in the ofsaaws.properties file as follows:
>
> columns_mapping=customerType~CUSTOMER_TYPE;bookType~BOOK_TYPE
>
> Here, you can provide any logical name for the FTP_UDF. But, you must map each FTP_UDF to the physical column in the fsi_pm_generated_instrmts table.
>
> Additional columns will not be processed if they are not configured in the ofsaaws.properties file.



3. Create a Profitability curve with Transfer Price driver as Real Time Calculation enabled. Submit and approve the Curve.

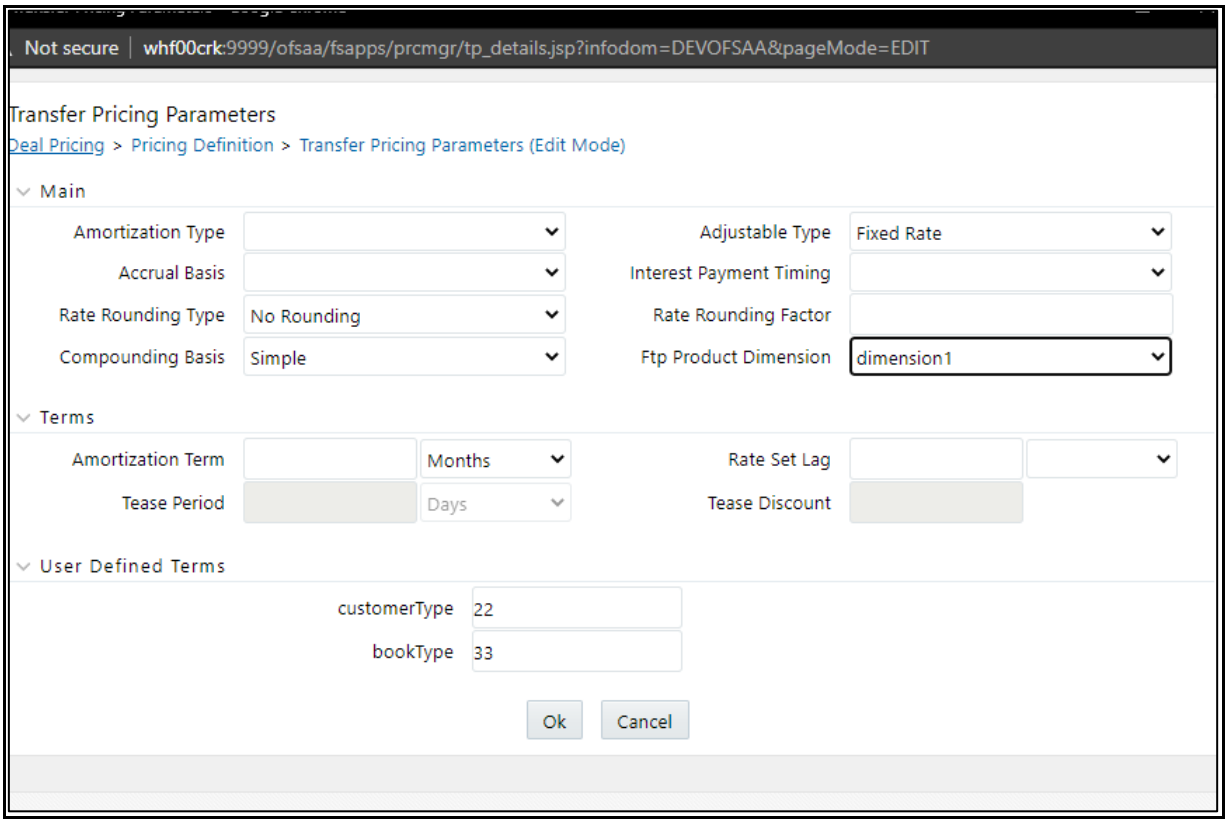


4. Create a New deal from Deal Pricing screen for the same product for which Profitability Curve with Real Time option for Transfer Price driver is created.



5. The TP screen has FTP Product Dimension dropdown. The entries entered in the member screen according to the product will be visible in the dropdown.

   On selecting the dropdown, User defined term Section gets enabled with the UDF's given in the member screen.



After pricing is done, FTP client is invoked and can verify the Transfer Pricing Charge values getting populated as follows:

- select * from fsi_pcd_tp_pricing_responses;
- select specified_value from fsi_m_pricing_drivers_details where input_mode=0 and repline_cd=0;
- select funding_charge from fsi_m_pricing_prod_details;

NOTE The following entry to seeded with the FTP Model Dimension information. If you modify the FTP Model Dimension ID or name, this entry must be updated to the respective Dimension ID.

select * from setup_master where v_component_value = '6778'