

Product Configuration Guide
Oracle Financial Services Balance Sheet Planning
Version 8.0.0.0.0
January 2015



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1. About this Manual

This manual provides the required information that Balance Sheet Planning Application administrator needs to setup the application. The document contains steps to create Hyperion Planning Application with BSP specific parameters, Creating Essbase Database, steps for creating Balance Sheet Planning relational data model and other required configurations.

2. Audience

This Manual is meant for use by the Oracle Financial Services Analytical Applications Infrastructure System Administrator or Hyperion System Administrator. It provides step-by-step instructions necessary for configuring the Oracle Financial Services Balance Sheet Planning v8.0.0.0.0 Product.

3. Environmental variables configuration

Set the following environmental variables in the profile for the UNIX user where Hyperion Planning has been installed, if not already set:

- EPM_ORACLE_HOME
- MIDDLEWARE_HOME
- HYPERION_HOME – Same as EPM_ORACLE_HOME
- ORACLE_HOME - Oracle Client Home
- JAVA_HOME
- ARBORPATH=\$EPM_ORACLE_HOME/products/Essbase/EssbaseServer
- ESSBASEPATH=\$EPM_ORACLE_HOME/products/Essbase/EssbaseServer
- NLSPATH=\$EPM_ORACLE_HOME/products/Planning/bin/nls/msg/en_US/ofsmsg.cat: \$EPM_ORACLE_HOME/products/Planning/bin/nls/msg/C/ofsmsg.catt
- INIPATH=\$EPM_ORACLE_HOME/products/Planning/config
- FIC_HOME=\$EPM_ORACLE_HOME
- FIC_DB_HOME=\$EPM_ORACLE_HOME/logs/bsplog
- PATH=\$JAVA_HOME/bin: \$ARBORPATH/bin: \$EPM_ORACLE_HOME/products/Planning/bin: \$EPM_ORACLE_HOME/products/Planning/config: \$EPM_ORACLE_HOME/products/Planning/lib: \$ORACLE_HOME/bin: \$PATH: \$HOME/bin
- LD_LIBRARY_PATH=\$ORACLE_HOME/lib: \$ORACLE_HOME/rdbms/public: \$EPM_ORACLE_HOME/common/ODBC-64/Merant/7.0/lib: \$EPM_ORACLE_HOME/products/Planning/lib: \$ARBORPATH/bin
- LD_LIBRARY_PATH_64=\$LD_LIBRARY_PATH: \$LD_LIBRARY_PATH_64
- ODBCINI=\$EPM_ORACLE_HOME/common/ODBC-64/Merant/7.0/odbc.ini
- ODBCINST=\$EPM_ORACLE_HOME/common/ODBC-64/Merant/7.0/odbcinst.ini

Note: You need to make the changes into the .profile file of the UNIX account where Planning and ESSBASE are installed. Oracle client is required on the servers where Hyperion ESSBASE and Planning are installed. BSP uses the Oracle drivers.

Modify BSP_RunOnEssbase.sh file for variable EPM_ORACLE_HOME.

4. Prerequisites

- Hyperion 11.1.2.3
- Hyperion Patch Set Update: 11.1.2.3.500

5. Installation of BSP 8.0.0.0.0 on Hyperion 11.1.2.3.500

After installing Hyperion 11.1.2.3.500, apply patch 19578149 for BSP 8.0.0.0.0 installation. Installing Hyperion will only deploy the BSP files. BSP needs to be subsequently "initialized" in order to access it.

If CAPEX and/or WORKFORCE applications are required, initialize CAPEX and/or WORKFORCE before BSP initialization.

Note: For Hyperion 11.1.2.3.500, sequence of initialization to be CAPEX and/or WORKSPACE and/or BSP.

Furthermore, after initializing the CAPEX and/or WORKFORCE modules with BSP, you need to perform the following activities.

- Go to Manage->Dimension->Account and Entity Dimensions
- Edit "No Entity" and "No Account" members and select the option "BSP", "Rates" and "Core" Plan types. Perform a database refresh.

4.1 Hyperion Planning Application Creation

Note: Setup Classic Planning Application for Balance Sheet Planning as described in Oracle Hyperion Planning, Fusion Edition Administrator's Guide.

Select the value of following options in Create Application Wizard as specified below:

Application Type: Generic

First Fiscal Year -> Start Year: Set the value as per below illustration

If start year falls in a century between:

1900-2000 – Then start year will be 1980

2000-2100 – Then start year will be 2000

2100-2200 – Then start year will be 2100 and so on.

Note: Here, Start year should be any centennial year such as, 2000, 2100, and so on. BSP recommends to use 2000 as the Start year.

Create 5 Plan Types as given below:

Plan Type 1: BSP

Plan Type 2: Rates

Plan Type 3: Core

Plan Type 4: WORKFORCE [WRKFORCE]

Plan Type 5: CAPEX

NOTE: You should create all five Plan Types even if you are not planning to use Workforce and/or CapEx in your implementation.

Change the Date format in File -> Preferences→Display Options to MM-DD-YYYY

Note: While creating the Hyperion Planning Application, you can use any Application Name. BSP does not place any restriction on the Application naming convention. It is recommended to not use any special characters, like &, *, ", "'", %, and so on.

4.2 Create Essbase Database

- Log in to Balance Sheet Planning Application using the administrator username and password
- Go to Administration->Application->Create Database screen and selection options specified in the screen and create database.

4.3 Create Balance Sheet Planning Relational Data Model

- Create a tablespace with the user define name. The same table space name should be used in user "Configuration" UI for the variable

TABLESPACE.

Note: Here, this tablespace refers to Oracle TABLESPACE and all the output tables of Cash Flow Engine will be created in this TABLESPACE.

- Create Oracle database user for Balance Sheet Planning Relational Data Model in the tablespace as created in previous step. This database user should have 'create' privileges on tablespace it belongs to
 - This database user is different than Hyperion configuration database users and application data source.

Note: BSP requires a distinct schema that is different from the schema created for creation of an application in Hyperion Planning (which is created in section **4.1 Hyperion Planning Application Creation**).

- Assign the following specific privileges to the user created for Balance Sheet Planning. These privileges are

```
GRANT MGMT_USER TO <DBUSERNAME>;
GRANT SELECT_CATALOG_ROLE TO <DBUSERNAME>;
GRANT CREATE PROCEDURE TO <DBUSERNAME>;
GRANT CREATE SEQUENCE TO <DBUSERNAME>;
GRANT CREATE SESSION TO <DBUSERNAME>;
GRANT CREATE SYNONYM TO <DBUSERNAME>;
GRANT CREATE TABLE TO <DBUSERNAME>;
GRANT CREATE TRIGGER TO <DBUSERNAME>;
GRANT CREATE TYPE TO <DBUSERNAME>;
GRANT CREATE VIEW TO <DBUSERNAME>;
```

4.4 Create Data Source DSN to Database

Note: BSP requires only one Data Source, this data-source will point to the Oracle schema where the BSP application will be initialized.

- Open \$HYPERION_HOME/common/ODBC-64/Merant/7.0/odbc.ini.

- Add a new ODBC Data Source entry pointing to the Oracle-schema into which BSP was initialized, in section 4.3 Create Balance Sheet Planning Relational Model. This name should later be specified in the BSP's configuration UI (available in Planning under Administrator Activities - > Master Maintenance -> Assumption Forms -> Configuration), as mentioned in Section 5 below.
- The entry should contain information required to connect to the schema created for BSP objects.
- Verify Host Name, Logon ID, Password, Port Number, and SID contain the information required to connect to the schema.

6. Initializing Balance Sheet Planning

- Login into Hyperion Planning
- Go to Administration→Application-->Properties
- In the Properties window Add new row
 - Property Name = APPTYPE Property Value = BSP
 - Restart the Planning Sever
- Go to Administration→Initialization->Balance Sheet Planning.
- Specify the below parameters:
 - Server: Database Server Name/IP Address
 - Port: Database port
 - Database: Database SID
 - User: Username
 - Password: Password for Database schema
 - APS Server: <IPAdress>

Below is a sample screenshot:

Fields displayed with an asterisk (*) are mandatory.

Financial Services Data Model			
Database Platform	Oracle	APS Server *	10.184.148.109:13080
Server *	10.184.148.109	Languages	English
Port *	1521		
Database *	QABSPDB		
User *	BSP_PE MOCKSTD1		
Password *	●●●●●●●●●●		
Model	Standard ▾		

The Model option (in above sample screenshot) allows you to choose the number of custom dimensions that you need for initialization of BSP. This drop-down list has following options:

- Standard – No additional custom dimensions
- Custom 1 - One additional custom dimension
- Custom 2 - Two additional custom dimensions

Note: The following errors generated to the bsplog.log during Initialize BSP step may be ignored:

- Error:ORA-00001: unique constraint (PLANBSP.PK_FSI_M_LOOKUP_B) violated.
- Error:ORA-00001: unique constraint (PLANBSP.PK_FSI_M_LOOKUP_MASTER) violated.

- Error:ORA-00001: unique constraint (PLANBSP.PK_FSI_M_LOOKUP_TL) violated.
- Error:ORA-00955: name is already used by an existing object.
Error:ORA-01418: specified index does not exist.
- Error:ORA-01430: column being added already exists in table.
- Error:ORA-02260: table can have only one primary key.
- Error:ORA-00911: invalid character
- Error:ORA-12899: value too large for column.
"PLANBSP"."FSI_APPLICATIONS"."VERSION" (actual: 11, maximum: 10)
- Error:ORA-00942: table or view does not exist for table
"FSI_DIM_ACCOUNT_SETUP_DETAILS".

Note: In case you are planning for an integrated installation of BSP with OFSAA applications, you should first initialize BSP as a standalone installation and then point BSP to the OFSAA instance.

- Select "Finish"
- After successful initialization, click the "Configure" button to launch the "Configuration UI".

Note: The config.xml file gets updated automatically as the part of configuration process.

- Specify values for the parameters as mentioned under "annexure" section and click "save".
- Edit the file
\$EPM_ORACLE_HOME/products/Planning/bin/bsp_user_profile.sh file to specify the path for ORACLE_HOME variable.

Perform following steps after initializing BSP:

1) Modify config.xml under path

\$MIDDLEWARE_HOME/user_projects/epmsystem1/Planning/planning1 to add below mentioned tag for each BSP Initialized application with correct data for Net service name as in tnsnames.ora file against param ID named as "TNS". <PARAM ID="TNS" DESCRIPTION="Net Service Name" FLAG="N">XXXXXXXXX</PARAM>

Note: Net service name should not have any dots (".") symbol.

For Example to add the new tag for param ID named as "TNS" as below,

```
<APPLICATION NAME="BSPAPP1" OWNER="" MODIFIEDBY="">
  <PARAMS>
  <PARAM ID="SERVICEPROVIDER" DESCRIPTION="APS server "
  FLAG="N">XXXXXXXXXXXXX</PARAM>
  <PARAM ID="DBSERVERNAME" DESCRIPTION="Database server name"
  FLAG="N">XXXXXXXXXXXXX</PARAM>
  <PARAM ID="SID" DESCRIPTION="Database service name/SID"
  FLAG="N">XXXXXXXXXXXXX</PARAM>
  <PARAM ID="USERNAME" DESCRIPTION="Database User Name"
  FLAG="N">XXXXXXXXXXXXX</PARAM>
  <PARAM ID="PASSWORD" DESCRIPTION="Database Password"
  FLAG="E">XXXXXXXXXXXXX</PARAM>
  <PARAM ID="MODELTYPE" DESCRIPTION="Selected Data Model"
  FLAG="N">XXXXXXXXXXXXX</PARAM>
```

```

        <PARAM ID="DSNNAME" DESCRIPTION="DSN Name"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="LCMDIRPATH" DESCRIPTION="LCM Directory path"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="LCMDIRNAME" DESCRIPTION="LCM Directory Name"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="SERVERNAME" DESCRIPTION="Essbase Server Name"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="ESSUSER" DESCRIPTION="Essbase Uesr Name"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="ESSPWD" DESCRIPTION="Essbase Password"
FLAG="E">XXXXXXXXXXXX</PARAM>
        <PARAM ID="FirstYr" DESCRIPTION="First Year"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="EndYr" DESCRIPTION="End Year"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="CurrMonth" DESCRIPTION="Current Month"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="StartPeriod" DESCRIPTION="Start Period"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="EndPeriod" DESCRIPTION="End Period"
FLAG="N">XXXXXXXXXXXX</PARAM>
        <PARAM ID="VERSION" DESCRIPTION="VERSION"
FLAG="N">8.0</PARAM> <PARAM ID="TNS" DESCRIPTION="Net Service
Name" FLAG="N">XXXXXXXX</PARAM>
    </PARAMS>
</APPLICATION>

```

2) Note \$MIDDLEWARE_HOME/user_projects/epmsystem1 is the default Planning Instance path on default installation.

Incase of change, refer the relevant path and modify this path against environment variable "EPM_ORACLE_INSTANCE" in

\$EPM_ORACLE_HOME/products/Planning/bin/bsp_user_profile.sh ,

\$EPM_ORACLE_HOME/products/Planning/bin/BSP_RunOnPlanning.sh,

\$EPM_ORACLE_HOME/products/Planning/bin/BSP_RunOnPlanning.sh.

5.1 Set Evaluation Order

Go to Administration->Dimensions->Evaluation Order tab.

- For BSP Plan type:
 - Set Chart of Account, Attribute Value and then Account Dimension.
- For Rates Plan type:
 - Set Rate Element then Mix Breakout Dimension

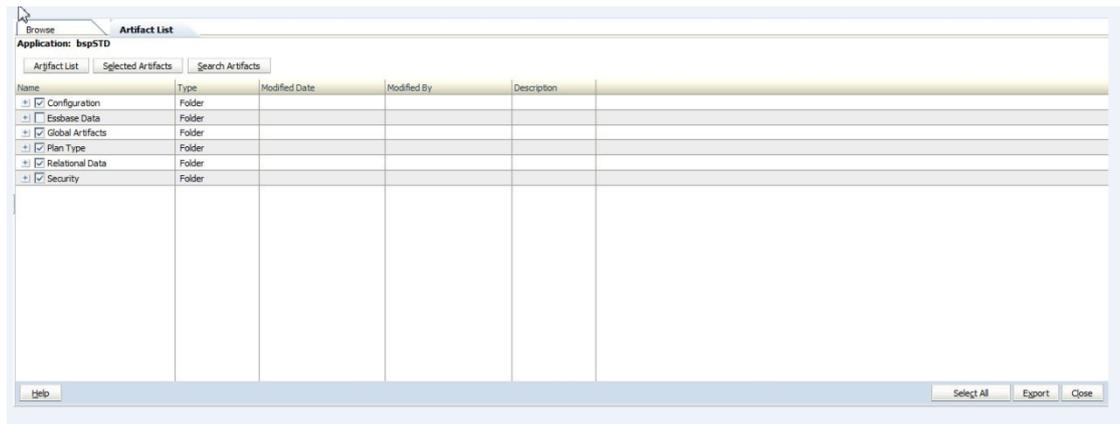
5.2 Steps to Enable Validation Rules

Follow the below steps to enable the validation rules:

- 1) Go to Manage data form open the Loan Fees form and click on column A the Loan_Fees_VR Validation rule is enable open this rule and select the Chart of Account dimension against attribute of source type in last condition. Then click ok and save the form.
- 2) Go to Manage data form open the Loan Fees Annual form and click on Grid the Loan_Fees_VR, Loan_Fees_VR1, Validation rules are enable open these rules and select the Chart of Account dimension against attribute of source type in last condition. Then click ok and save the form.
- 3) Go to Manage data form open the Deposit Service Charge form and click on Grid the Dep_Svc_Chg_VR, Validation rules are enable open this rule and select the Chart of Account dimension against attribute of source type in last condition. Then click ok and save the form.
- 4) Go to Manage data form open the Deposit Service Charge Annual form and click on Grid the Dpst_Svc_Chg_Annl_VR, Loan_Fees_VR1, Validation rules are enable open these rules and select the Chart of Account dimension against attribute of source type in last condition. Then click ok and save the form.
- 5) Go to Manage data form open the Synchronization for Balance Accounts form and click on Row1 the Syn_Assets_VR, Syn_Liabty_VR, Validation rules are enable open these rules and select the Chart of Account dimension against attribute of source type in last condition. Then click ok and save the form

5.3 LCM export and Preparation for Metadata Synchronization.

- 1) Post the Loading of Metadata in to BSP Planning Application, the administrator should export the Application Metadata to File System in Shared Services.
- 2) Administrator has to login into Shared Services and Select the BSP Planning Application.
- 3) In the Artifact Summary Page at the right Bottom, click **Select All**. Exclude **Essbase Data** check-box and click Export.



- 4) Here the Administrator defines a LCM Directory Name which has to be provided in Configuration Custom UI in the BSP Application
- 5) Once the LCM export is completed, a .zip file will be created with the given name in shared services.
- 6) This .zip file will be located in the import_export path of the Hyperion Instance chosen during Installation.

5.4 Metadata Synchronization

- 1) After completing the Preparation for Metadata Sync, Login to the BSP application, Select Administrator Activities folder in the left pane.
- 2) Select Master Maintenance form and then Right Click on the menu appeared as large square box.
- 3) From the right click menu Select Metadata Synchronization and choose the type needed by the Administrator Purpose.

8. Distributed Environment Setup

Perform the below steps when Hyperion Planning is installed in a distributed manner, that is, the Hyperion components Planning and ESSBASE are installed on separate servers.

Note:

- Hyperion ESSBASE should not be installed on Windows
- Hyperion ESSBASE and Hyperion Shared Services must be installed on the same UNIX Server
- The OS/Version of the server where Planning is installed must be the same as the OS/Version of the server where ESSBASE is installed.
- EPM Oracle instance name (default instance name: epmsystem1 and instance path: \$MIDDLEWARE_HOME/user_projects/epmsystem1) should be same in Hyperion Planning and Essbase servers.
- Steps mentioned below should be repeated after every
 - I. Initialization/re-initialization of Hyperion Planning generic application(s) created for Balance Sheet Planning using "Administration→Initialization→Balance Sheet Planning".
 - II. Update of Configuration settings for Balance Sheet Planning using "Master Maintenance→Assumption Forms→Configuration".

Perform the following steps, in the given sequence

- 1) Ensure that tnsnames.ora on the ESSBASE Server is configured with the same name as on the Planning server, to connect to the database specified during initialization of BSP.
- 2) Copy the **\$EPM_ORACLE_HOME/common/ODBC-64/Merant/7.0/odbc.ini** from the Planning server to the corresponding folder on ESSBASE Server, and update the odbc.ini for driver path for the BSP-specific entry.
- 3) Save the Configuration Parameters in Planning; while saving the configuration, make sure that LCMDIRPATH is the LCM export path as on the ESSBASE server.
- 4) Replace "epmsystem1" with EPM oracle instance name in "BSP_RunOnPlanning.sh" and "BSP_RunOnEssbase.sh" files, that are present at **\$EPM_ORACLE_HOME/products/Planning/bin**, if you are not using default EPM Oracle instance name.
- 5) Give execute permissions to "BSP_RunOnPlanning.sh" that is present at **\$EPM_ORACLE_HOME/products/Planning/bin** location on the Planning server and run the script without passing any parameters. The script will create a gzip archive "bsp.tar.gz" in the same folder.
- 6) Copy "BSP_RunOnEssbase.sh" and "bsp.tar.gz" from **\$EPM_ORACLE_HOME/products/Planning/bin** to **\$EPM_ORACLE_HOME** in ESSBASE Server, to where ESSBASE is installed.
- 7) Give execute permissions to "BSP_RunOnEssbase.sh" and run the script without passing any parameters.
- 8) On the ESSBASE server, modify bsp_user_profile.sh present under **\$EPM_ORACLE_HOME/products/planning/bin**, and set the ORACLE_HOME as appropriate.

9. Annexure

List of Parameters

Sl. No.	Parameter Name	Description
1	PASSWORD	Database Password
2	USERNAME	Database User
3	DSNNAME <input type="text" value="DSNNAME"/>	DSN Name (value should be the system DSN name configured for ODBC) Note: You should use the same DSN name which is created using section 4.4 . <input type="text" value="DSN Name"/>
4	SERVERNAME <input type="text" value="SERVERNAME"/>	Essbase Server Name
5	ESSUSER	Essbase User Name <input type="text" value="Essbase User Na"/>
6	ESSPWD <input type="text" value="ESSPWD"/>	Essbase Password
7	LCMDIRPATH <input type="text" value="LCMDIRPATH"/>	LCM Directory path
8	LCMDirName <input type="text" value="LCMDIRNAME"/>	LCM Directory Name Note: You can use underscore ("_") in LCM Directory Name, but hyphen ("-") is not allowed. <input type="text" value="LCM Directory Na"/>
9	FirstYr <input type="text" value="FirstYr"/>	First Year
10	EndYr	End Year
11	CurrMonth <input type="text" value="CurrMonth"/>	Current Month
12	StartPeriod	Start Period (By Default set to Jan)
13	EndPeriod <input type="text" value="EndPeriod"/>	End Period (By Default set to Dec) <input type="text" value="End Period"/>

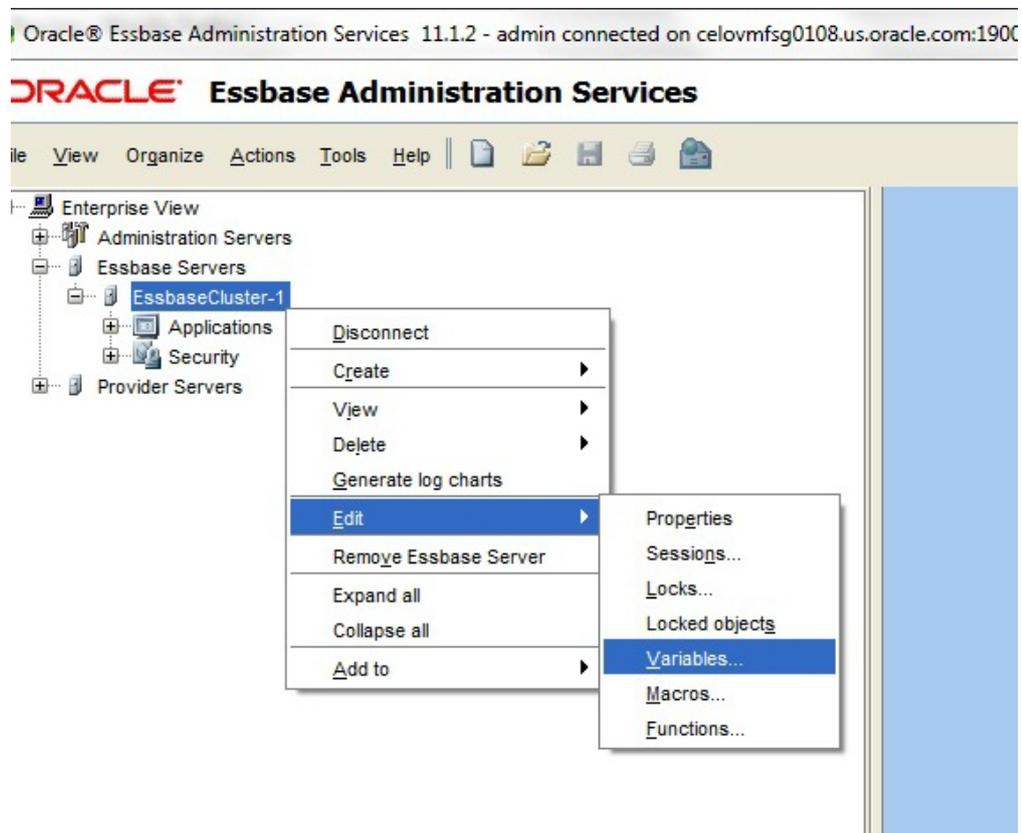
SI. No.	Parameter Name	Description
	StartPeriod	
14	TABLESPACE	DB Table Space Table Space

Setting of Substitution Variable

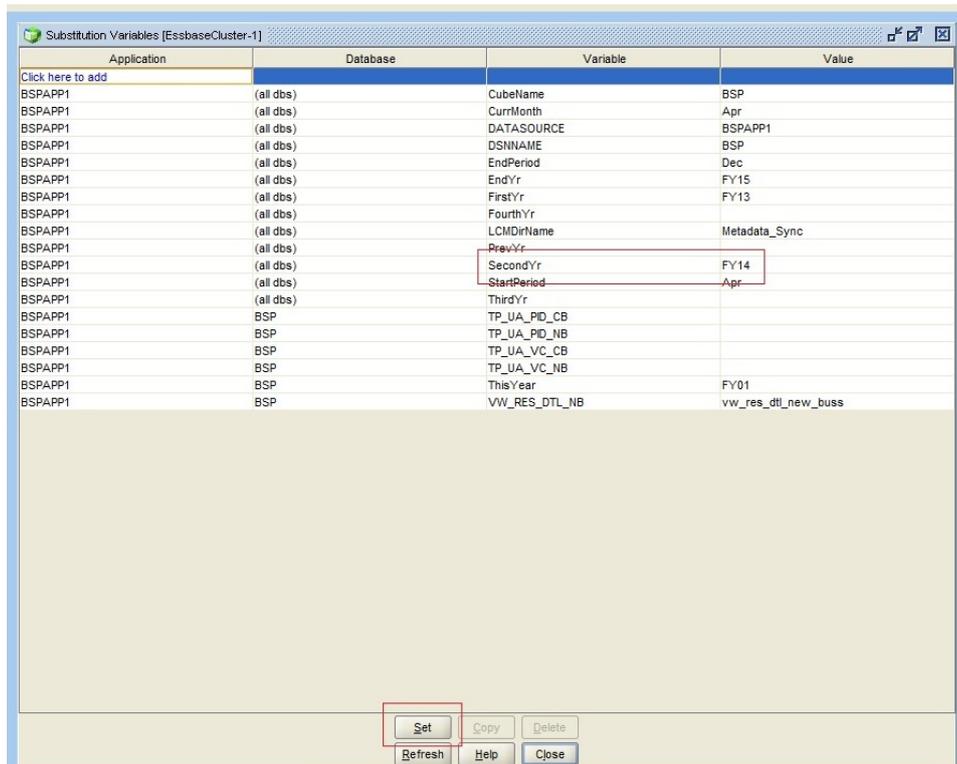
Note: If you are attempting to open a Form in BSP and following error appears: "A substitution variable required for this calculation is undefined. Variable: *SecondYr*", then set the **SecondYr** variable in Essbase Administration Services.

SecondYr is a substitution variable. Any other variable can also be appeared in the above error message. Follow the below steps to configure the variable:

1. Log in to EAS Console: <http://<hostname>:19000/easconsole>
2. Click on "Launch"
3. The Essbase Administration Services console will open.
4. Expand Enterprise View -> Essbase Servers.
5. Right-click on your server -> Edit -> Variables.



6. The Substitution Variables window will open. Go to the variable you are looking for and double-click on the value
7. Enter the value and click on Set.



8. Go back to BSP, and reload the Form.

Note: Logout and Login are not required.



Installation Manual

January 2015

Oracle Financial Services Balance Sheet Planning v8.0.0.0.0 Product

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