Oracle Financial Services Balance Sheet Planning

Installation and Configuration Guide

Version 8.0.0.0.0

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FINANCIAL SERVICES

DOCUMENT CONTROL

Version Number	Revision Date	Changes Done
1.0	September 2017	Updated Post Installation Configuration

Executive Summary

This document includes the necessary instructions to install the Oracle Financial Services Balance Sheet Planning 8.0.0.0.0 application. You can find the latest copy of this document in OTN Documentation Library.

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1 Preface

This document provides step-by-step instructions to install the OFS BSP v.8.0.0.0.0 Release.

1.1 About this Guide

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.

1.2 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.

2   Configuring the Environmental Variables

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.cat

- 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:$EPM_ORACLE_HOME/common/ODBC-64/Merant/7.1/lib:$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/7.1/odbc.ini

- ODBCINST=$EPM_ORACLE_HOME/common/ODBC-64/Merant/7.1/odbcinst.ini

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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.

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3   Prerequisites

- Hyperion 11.1.2.4

- Need to have two Database users / schemas. One schema to be used while Data Source creation on Hyperion Planning and other one to be used while doing BSP Initialization as per below section Initializing Balance Sheet Planning.

For AIX operating system, execute the slibclean command by root user permission.

NOTE: For BSP 8.0, you need to turn on the "Compatibility Mode" on Internet Explorer 11.

4 Installing BSP 8.0.0.0.0 on Hyperion 11.1.2.4

After installing Hyperion 11.1.2.4, need to do the BSP 8.0.0.0.0 installation. 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:** The 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 Installing BSP Application

Use the folowing procedure to install the BSP application:

1. Download the installer for BSP. Stop all the EPM services.

2. Copy the downloaded installer to any preferred location on Hyperion Planning server and provide necessary (write and execute) privileges.

   a. Ensure that the logged in unix user has "write" privileges on the Hyperion Planning folder structure.

   b. Check if the following environment variables have been set properly before invocation:

      ```
      JAVA_HOME , ORACLE_HOME , EPM_ORACLE_HOME
      ```

   c. Installer supports both GUI and Silent invocations.

      Go to the installer folder through command line and execute any of the below command as per choice.

      For Silent Mode invocation, execute the below command:

      ```
      ./setup.sh SILENT
      ```

      For GUI Mode invocation, execute the below command through Xmanager, Hummingbird or Cygwin etc, which supports the GUI invocation:
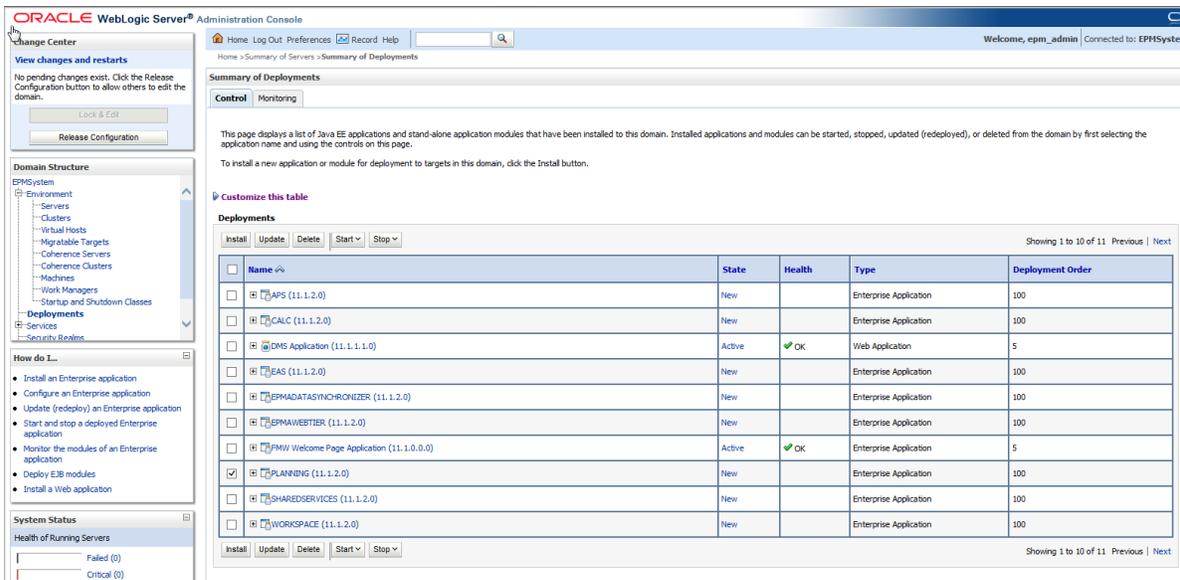   ```
      ./setup.sh GUI
      ```

3. Provide the required value against the prompted options and proceed.

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If the prompt – 'Overwrite Existing file?' appears, click 'Yes' / 'Yes to All' to proceed.

4. Upon completions of the above task as per step 3, execute `bsp_webdeploy.sh` from path *$EPM_ORACLE_HOME/bsp*.

5. Provide execute permission and remove CTRL+M characters. Then, execute `finalize_bsp_install.sh` from the path *$EPM_ORACLE_HOME/bsp*.

6. Deploy `HyperionPlanning.ear` found under *$EPM_ORACLE_HOME/bsp/ear_to_deploy* to the Planning server.

    a. Login to WebLogic Server. Click **Deployments**.

b. Select Planning and click **Delete**.



c. Click **Yes** to continue.



d. Click **Install**.

e.   Provide the path of .ear file and click **Next**.



f.   Select "Install this deployment as an application" and click **Next**.

g.  Click **Next**.



h.  Click **Next**.

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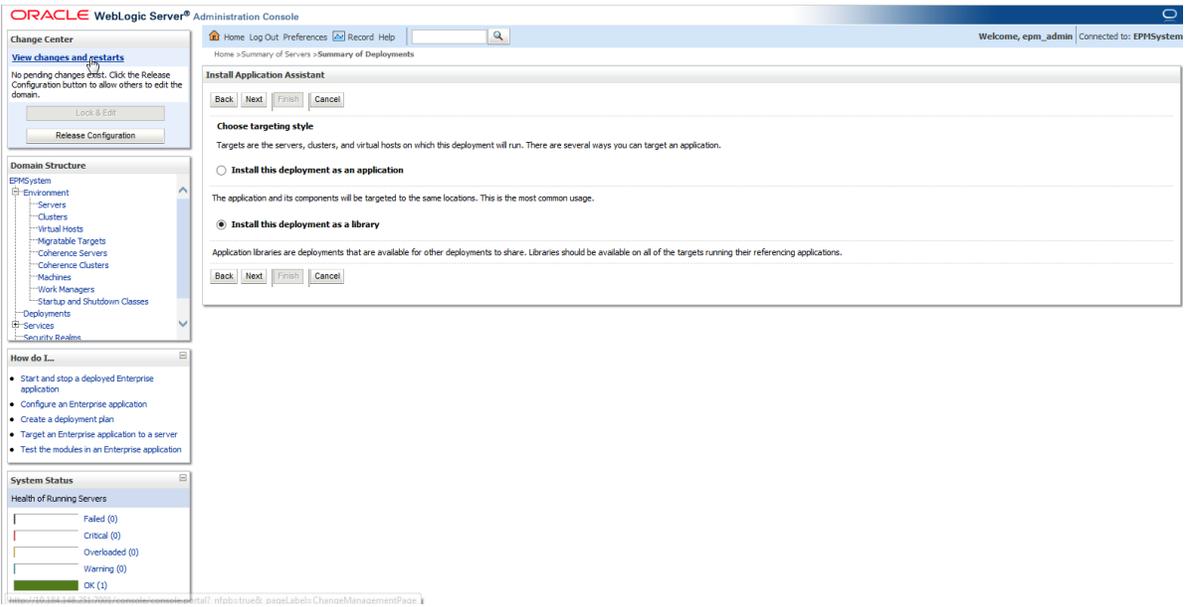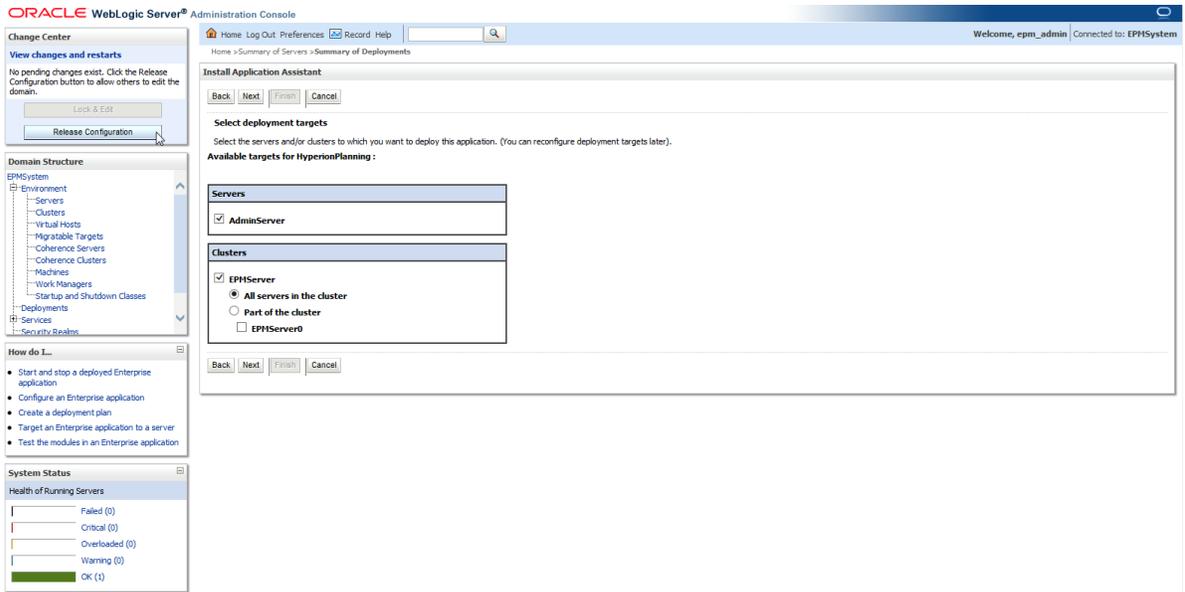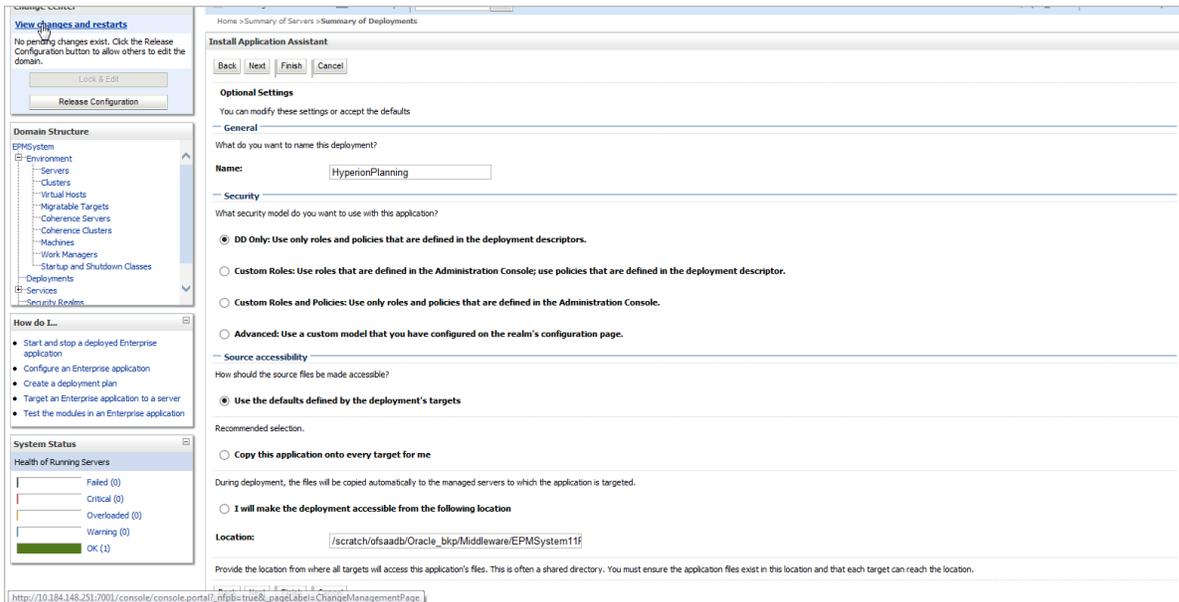
i. Click **Finish**.
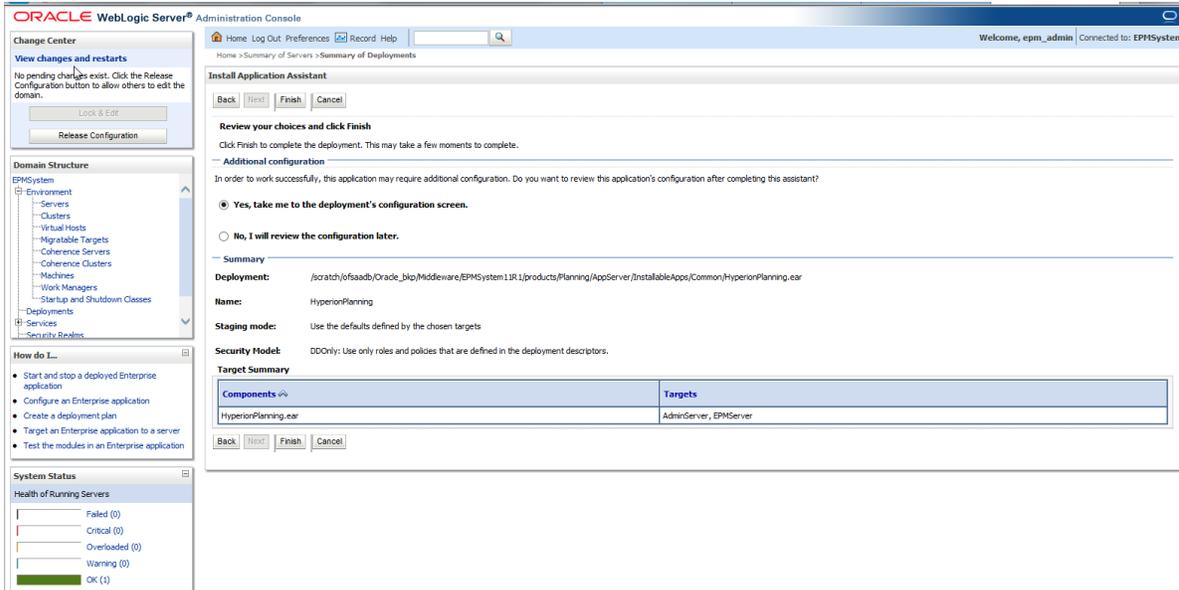


j. Click **Deployment**.
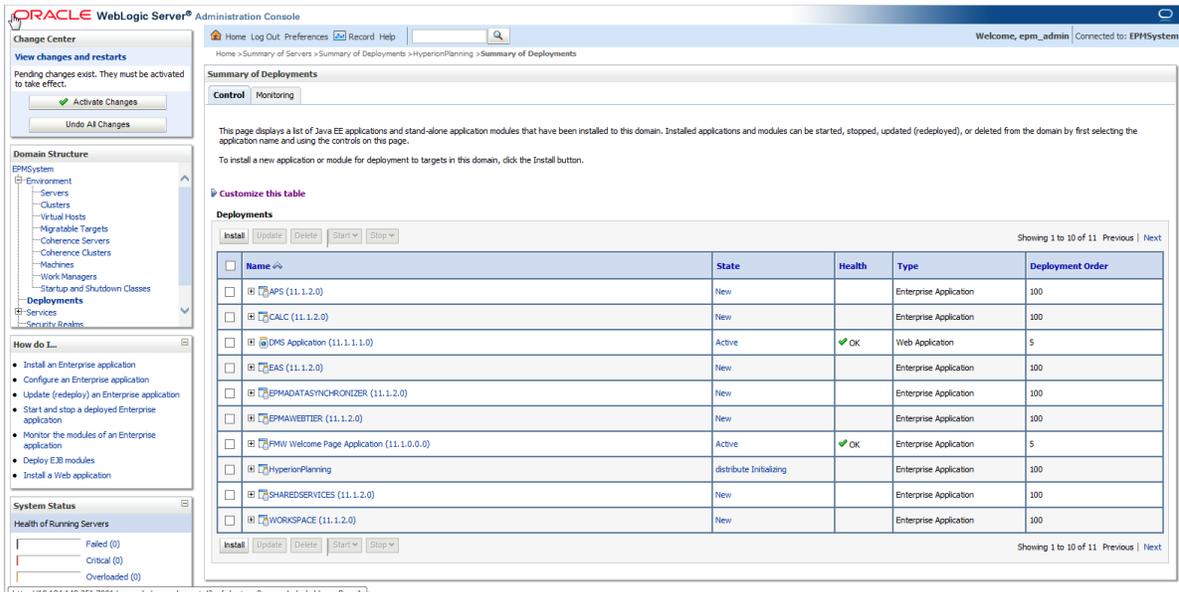
The logs will be registered in log file. You can check log files under **Diagnostics**.

For more information, refer to Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide.

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**NOTE:** Redeployment is being done to include the latest BSP UI changes those are in form .jsp , .js, .css files.

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7. If you are installing BSP 8.0 (Hyperion 11.1.2.4) on Solaris, then you need to additionally download the patch 10037983 from https://support.oracle.com/ and follow the instructions mentioned in Readme of patch 10037983.

8. Start all the EPM services those are being stopped as in step 1.

9. Login to workspace URL http://hostname:19000/workspace/index.jsp to create a Data Source and application for Balance Sheet Planning as per below mentioned in section 5.2 through the available options "Manage Data Source" and "Manage Applications" respectively under Navigate > Administer > Planning Administration .

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**NOTE:** Here, 19000 is the default port on default Installation settings.

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## 4.2    Creating Hyperion Planning Application

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.<br><br>If start year falls in a century between:<br><br>▪ 2000-2100 – Then start year will be 2000<br><br>▪ 2100-2200 – Then start year will be 2100 and so on.<br><br>**Note**:  Here, Start year should be any centennial year such as, 2000, 2100, and so on. BSP recommends using 2000 as the Start year. |
| Number of Fiscal Years | Any numeric value greater than 5.<br><br>**Note**: The value provided against "Number of Fiscal Years" plus "No Year" members will be created under "Years" dimensions. |
| "All Years" parent | No |
| Will your application support multiple currencies? | No |
| **Create 5 Plan Types** as given in the next column: | Plan Type 1: BSP<br><br>Plan Type 2: Rates<br><br>Plan Type 3: Core<br><br>Plan Type 4: WORKFORCE [WRKFORCE]<br><br>Plan Type 5: CAPEX<br><br>**Note**: You should create all five Plan Types even if you are not planning to use Workforce and/or Capex in your implementation. |

After the above steps refresh the Applications list through Navigate > Applications > Refresh.

After doing refresh, we need to access the newly created application. This can be done through Navigate > Applications > Planning > <Created Application Name>.

Change the Date format in 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.

## 4.3    Creating 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

  ▪ Ensure that the length of the password you use for creating the Oracle database
  user is below 18-characters.

  ▪ 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 5.2
> Hyperion Planning Application Creation).

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

```
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   Creating 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/7.1/odbc.ini.

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- Add a new ODBC Data Source entry pointing to the Oracle-schema into which BSP was initialized, in section 5.3 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.

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5   Initializing Balance Sheet Planning

Use the folowing procedure to initialize Balance Sheet Planning application:

1. Access the Hyperion Planning using Navigate->Applications->Planning-><Application Name>.

2. Go to Administration☐Application-->Properties.

3. In the Properties window Add new row.

   ▪ Properly Name = APPTYPE Property Value = BSP

4. Go to Administration > Application > Create Database.

5. Restart the Planning Sever.

6. Go to Administration > Application > Manage Application.

   ▪ Chose the Application Name.

   ▪ Proceed for BSP Initialization for the selected application through Actions > Initialization > Initialize BSP.

7. Specify the folllowing parameters:

   ▪ Server: Database Server Name/IP Address

   ▪ Port: Database port

   ▪ Database: Database SID

   ▪ Net Service Name

   ▪ User: Username

   ▪ Password: Password for Database schema

   ▪ Model

   ▪ APS Server: <IPAdress>

   ▪ Languages

Special character Dot (.) is not allowed in Net Service Name field. Below is a sample screenshot:

Fields displayed with an asterisk (*) are mandatory.

Financial Services Data Model

Database Platform	Oracle	APS Server *	ofss2221285:13080
Server *	ofss221285.in.oracle.com	Languages	English
Port *	1521		
Database *	ORCL		
Net Service Name *	ORCL		
User *	FSDM_BSP8		
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

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".

- Error: ORA-02275: such a referential constraint already exists in the table. Add constraint FK_FSI_DB_INFO foreign key (SIGNAGE) references FSI_SIGNAGE_CD (SIGNAGE)'

- Error:ORA-02291: integrity constraint (BSP_PS4_126_C1CST1.FK_FSI_ID_TYPE_MLS_2) violated - parent key not found

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> **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.

8. Select "Finish"

9. 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.

10. Specify values for the parameters as mentioned under "annexure" section and click **Save**.

11. Edit the file *$EPM_ORACLE_HOME/products/Planning/bin/*`bsp_user_profile.sh` file to specify the path for `ORACLE_HOME` variable.

Note that *$MIDDLEWARE_HOME/user_projects/epmsystem1* is the default Planning Instance path on default installation.

In case of change, refer to the relevant path and modify this path against environment variable `"EPM_ORACLE_INSTANCE"` and occurrence of "`epmsystem1`" in

$EPM_ORACLE_HOME/products/Planning/bin/`bsp_user_profile.sh`,
$EPM_ORACLE_HOME/bsp/`BSP_RunOnPlanning.sh`,
$EPM_ORACLE_HOME/bsp/`BSP_RunOnEssbase.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.

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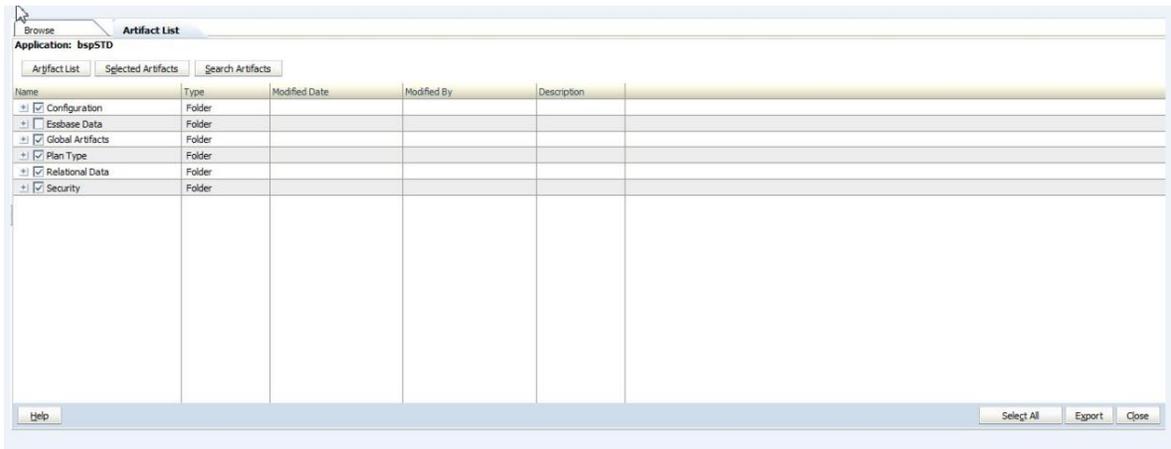
4. Here the Administrator defines a LCM Directory Name which has to be provided in Configuration Custom UI in the BSP Application.

5. Once the LCM export is completed, a folder will be created with the given name in shared services.

6. This folder 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.

6 Creating an Integrated set up for Hyperion/BSP and OFSAAI

6.1 Pre-requisites

1. Execute the below SQL on the OFSAA configuration-schema – replace $ATOMIC_USER with the name of the OFSAA information-domain schema user.

   ```
   Grant select on SETUPINFO to $ATOMIC_USER;
   ```

2. On OFSAAI, applications have been installed and configured.

3. Installation of BSP has to be completed and BSP has been successfully initialized on Hyperion 11.1.2.4 release. Note down the initialization mode, that is standard or custom1 or custom2.

> **NOTE:** Once you have configured/mapped the created BSP application to an OFSAA atomic schema in an integrated setup as per below mentioned step 3 under section Integrating BSP with OFSAAI, then the seeded BSP schema is no longer used by the application.

6.2 Integrating BSP with OFSAAI

Use the following procedure to integrate BSP with OFSAAI:

1. Take the BSP ERWIN Model (BSP_Datamodel.erwin from path *$EPM_ORACLE_HOME/products/Planning/config/bspsql/*`BSP_Datamodel.erwin`) and perform the following customizations in ERWIN, as applicable

   a. Merge this model with the ERWIN model of other applications installed on OFSAAI.

   b. If CUSTOM1 option was selected in Pre-requisite step #3, modify to merged model to add a column called CUSTOM1 in the following super-type objects:

      - BSP_LEAF_COLUMNS

      - LEDGER_LEAF_COLUMNS

> **NOTE:** While adding the column, set the UDPs to the same values as that of the STRATEGY_ID column.

   c. If CUSTOM2 option was selected in Pre-requisite step #3, modify to merged model to add two columns called CUSTOM1 and CUSTOM2 in the following super-type objects:

      - BSP_LEAF_COLUMNS

      - LEDGER_LEAF_COLUMNS

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> **NOTE:** While adding the columns, set the UDPs to the same values as that of the STRATEGY_ID column.

- ▪ Perform an incremental model-upload of this model in OFSAAI, into the required information domain.

2. Execute one of the below mentioned .sql script against OFSAA Atomic Schema from path *$EPM_ORACLE_HOME/products/Planning/config/bspsql* as per opted data model type in Pre-requisite step #3.

   Ignore the following errors:

   ORA-01430: column being added already exists in table

   ORA-00955: name is already used by an existing object

   ORA-02260: table can have only one primary key

   ORA-00903: invalid table name

   ORA-00001: unique constraint (ALMCUST80ATM.PK_REV_TABLE_CLASS_ASSIGNMENT)

   ORA-02303: cannot drop or replace a type with type or table dependents

   ORA-02275: such a referential constraint already exists in the table

   ORA-00911: invalid character

   ORA-00942: table or view does not exist for tables LS_LOAD_TABLE_GTT_V and STG_GL_DATA_V

   a. execbspdm_std_integrate_to_ofsaai.sql - if BSP initialization is STANDARD

   b. execbspdm_custom1_integrate_to_ofsaai.sql - if BSP initialization is CUSTOM 1

   c. execbspdm_custom2_integrate_to_ofsaai.sql - if BSP initialization is CUSTOM 2

> **NOTE:** These scripts will prompt you for the configuration schema name. Specify the name of the configuration-schema followed by a "dot"; for example: CONFIGUSER. Also, enter the infodom name.

   Press "Enter" key without giving any value for any prompts other than configuration schema and Infodom name.

3. Login to Planning, launch the BSP Configuration UI and change the database username/password/Tablespace values to that of the OFSAA's atomic schema. Click Save and confirm that the settings have been saved successfully.

4. If setup has any other EPM applications, then edit the `config.xml` under path: *$MIDDLEWARE_HOME/user_projects/epmsystem1/Planning/planning1*, epmsystem1 is the default Planning Instance path on default installation.

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Examples:

<PARAM DESCRIPTION="Compatible Applications Count" FLAG="N"

ID="COMPATIBLE_APPSCOUNT">0</PARAM>

Description: here assumes BSP application is standalone

<PARAM DESCRIPTION="Compatible Applications Count" FLAG="N"

ID="COMPATIBLE_APPSCOUNT">1</PARAM>

<PARAM DESCRIPTION="Compatible Applications" FLAG="N"

ID="COMPATIBLE_APP1">ALM</PARAM>

<PARAM DESCRIPTION="Compatible Applications Count" FLAG="N"

ID="COMPATIBLE_APPSCOUNT">2</PARAM>

<PARAM DESCRIPTION="Compatible Applications" FLAG="N"

ID="COMPATIBLE_APP1">ALM</PARAM>

<PARAM DESCRIPTION="Compatible Applications" FLAG="N"

ID="COMPATIBLE_APP2">PFT</PARAM>

5. If any OFSAA application (such as, ALM, PFT, FTP etc.) has been installed after BSP installation, then execute `bsp_update_forexistingapps.sql` script under path *"$EPM_ORACLE_HOME/products/Planning/config/bspsql/insert"* on Planning server against OFSAA atomic schema."

6. In OFSAA, create a new segment called BSP and map this segment to the required OFSAA users. This folder will be the container for sharing rules/assumptions between ALM/FTP and BSP.

7. If the default-product dimension in OFSAA is PRODUCT_ID, execute the script `bsp_preference_product_id.sql` from path *$EPM_ORACLE_HOME/products/Planning/config/bspsql/insert* in the atomic schema.

8. The sliced model upload of BSP will introduce one or more additional leaf dimensions into the data model. To reflect these additional dimensions in the respective applications, perform the following steps

   a. **For OFS ALM**: On the OFSAA Atomic schema, drop all tables with the name RES_DTL_XXXXX / CONS_DTL_XXXX – re-execute the relevant ALM Processes to regenerate the tables.

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b. **For OFS PFT**: In the OFSAA Information Domain, open and resave all the OFS-PFT allocation rules so that the new leaf-dimensions are referenced properly

9. Edit *$EPM_ORACLE_HOME/products/Planning/bin/*`bsp_user_profile.sh` to specify the correct path for ORACLE_HOME.

10. Modify the entry made earlier in `odbc.ini` & point it to the OFSAA Atomic Schema. The `odbc.ini` file is usually found under *$EPM_ORACLE_HOME/common/ODBC-64/Merant/7.1/* folder.

11. Restart all the Hyperion services.

6.3   Limitations

1. The Time Buckets cannot be shared across OFSAAI and BSP applications. The user has to create the required Time buckets to be used for BSP through BSP UI and the user should not EDIT / modify these newly defined time buckets through OFSAAI UI.

2. The defined Forecast rates cannot be shared across in ALM and BSP, because of hybrid nature of forecast rates sys id generated in BSP.

3. The currencies created through BSP UI cannot be edited through OFSAAI UIs and vice versa.

4. BSP does not support Breakage Charges as adjustment type.

The Adjustment Rule definitions created through OFSAAI UIs, having Adjustment Method as Formula Based Rate and Assignment date as Origination Date only will be viewable / editable in BSP.

7 Setting up Distributed Environment

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 the following:

- 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.

- Steps mentioned below should be repeated after every:

  1. Initialization/re-initialization of Hyperion Planning generic application(s) created for Balance Sheet Planning using "Administration > Application > Manage Application".

  2. 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/7.1/*`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. Give execute permissions to "BSP_RunOnPlanning.sh" that is present at *$EPM_ORACLE_HOME/bsp* 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.

5. Copy "`BSP_RunOnEssbase.sh`" and "bsp.tar.gz" from *$EPM_ORACLE_HOME/bsp* to *$EPM_ORACLE_HOME* in ESSBASE Server, to where ESSBASE is installed.

6. Give execute permissions to "`BSP_RunOnEssbase.sh`" and run the script without passing any parameters.

7. On the ESSBASE server, modify `bsp_user_profile.sh` present under *$EPM_ORACLE_HOME/products/planning/bin* folder and set the `ORACLE_HOME` as appropriate.

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> **NOTE:** *$MIDDLEWARE_HOME/user_projects/epmsystem1* is the default Planning Instance path on default installation.

Incase of change, refer to the relevant path and modify the path against environment variable "EPM_ORACLE_INSTANCE" and occurrence of "epmsystem1" in the following:

- *$EPM_ORACLE_HOME/products/Planning/bin/*bsp_user_profile.sh,
- *$EPM_ORACLE_HOME/bsp/*BSP_RunOnPlanning.sh,
- *$EPM_ORACLE_HOME/bsp/*BSP_RunOnEssbase.sh.

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8 Language Pack Installation and Configuration

8.1 Installation

Download the Balance Sheet Planning Version 8.0.0.0.0 language pack OPatch released against the bug 10037983 and apply it by following the steps mentioned in Readme.txt.

> **NOTE:** Changing of "Name" of any language conversion dimension member is not supported as it will impact the business logic. You may, however, change Aliases. Aliases can be changed in Planning, using the menu option : Administration > Manage > Dimensions.

8.2 Configuration

1. Verify that the environment variable LANG is set to the required language. This language will be used during initialization of Balance Sheet Planning application.

2. Create an application in Hyperion Planning using Manage Application option.

3. Add an application property, APPTYPE with value BSP.

4. Go to option Administration > Manage > Alias Tables.

5. Add an alias table for the respective language as per the below table:

| German	German
Spanish	Spanish
French (Canada)	French (Canada)
French	French
Italian	Italian
Japanese	Japanese
Korean	Korean
Portuguese	Portuguese
Russian	Russian
Chinese-Simplified	Chinese-Simplified
Chinese-Traditional	Chinese-Traditional
English	Default

6. Once the alias table is created, go to the option, Administration > Application > Settings and select "Current Application Defaults" tab.

7. In Alias Setting, select the newly created alias table and save.

8. Now, trigger the Create Database option for the new application created. Note: All other steps for BSP application initialization will remain the same.
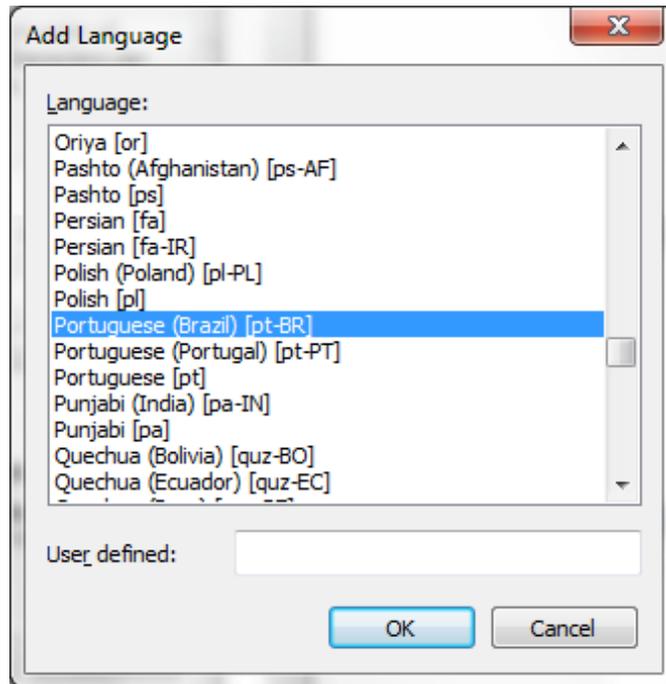
8.3 User Browser Settings

Follow these steps to enable the settings in Browser (Internet Explorer):

1. Navigate to **Tools > Internet Options**.

2. Under the **General** tab, click **Languages** to display the Language Preference window.
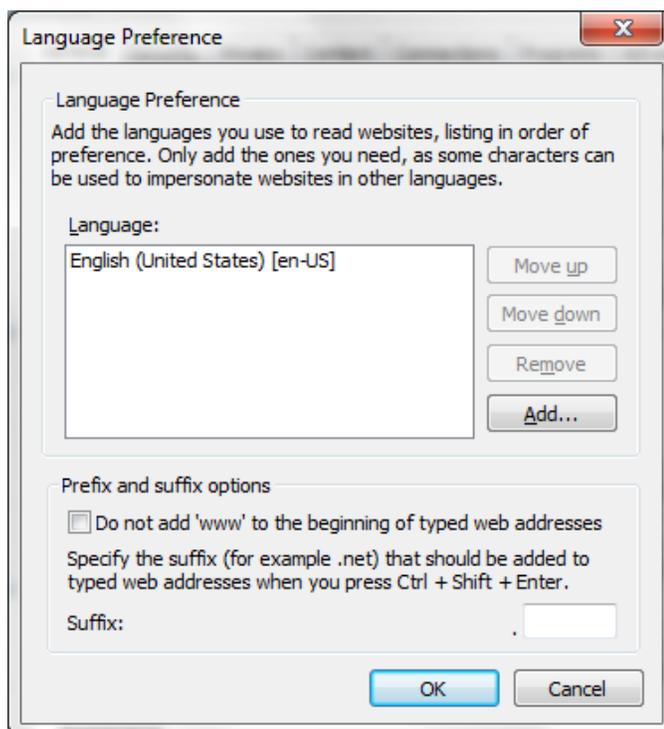
3. Click **Add** to display the Add Language window.

4. Select the installed Language Pack from the list. You can press and hold **Ctrl** key for multiple selections. Click **OK**.

5. In the Language Preference window, select the language and click **Move up** to make it the first language in the order of preference.

6. Click **OK** in the Language Preference window and again click **OK** in Internet Options window to save the settings and exit.

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9   Annexure

9.1   List of Parameters

| Sr. No.	Parameter Name	Description
1	PASSWORD	Database Password
2	USERNAME	Database User
3	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.
4	SERVERNAME	Essbase Server Name
5	ESSUSER	Essbase User Name
6	ESSPWD	Essbase Password
7	LCMDIRPATH	LCM Directory path
8	LCMDirName	LCM Directory Name **Note**: You can use underscore ("_") in LCM Directory Name, but hyphen ("-") is not allowed.
9	FirstYr	First Year
10	EndYr	End Year
11	CurrMonth	Current Month
12	StartPeriod	Start Period (By Default set to Jan)
13	EndPeriod	End Period (By Default set to Dec)
14	TABLESPACE	DB Table Space

9.2   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.

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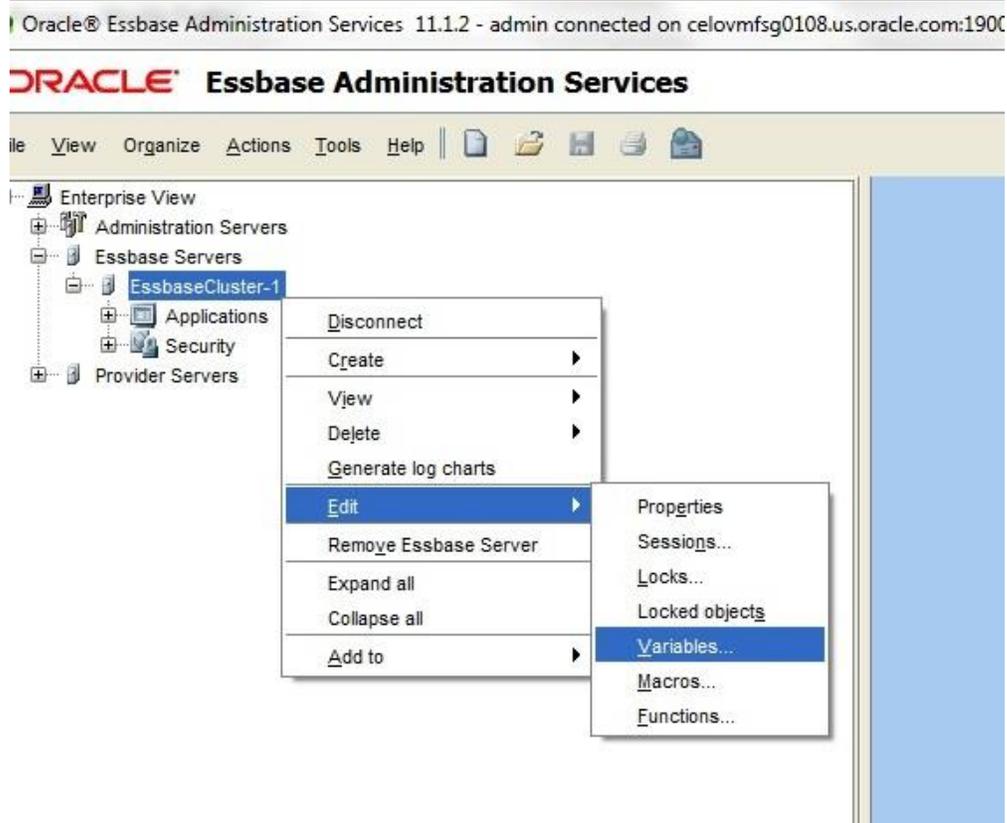
6. The Substitution Variables window will open. Go to the variable you are looking for and double-click on the value.

7. Enter the value and click on Set.

Substitution Variables [EssbaseCluster-1]

Application	Database	Variable	Value
Click here to add			
BSPAPP1	(all dbs)	CubeName	BSP
BSPAPP1	(all dbs)	CurrMonth	Apr
BSPAPP1	(all dbs)	DATASOURCE	BSPAPP1
BSPAPP1	(all dbs)	DSNNAME	BSP
BSPAPP1	(all dbs)	EndPeriod	Dec
BSPAPP1	(all dbs)	EndYr	FY15
BSPAPP1	(all dbs)	FirstYr	FY13
BSPAPP1	(all dbs)	FourthYr	
BSPAPP1	(all dbs)	LCMDirName	Metadata_Sync
BSPAPP1	(all dbs)	PrevYr	
BSPAPP1	(all dbs)	SecondYr	FY14
BSPAPP1	(all dbs)	StartPeriod	Apr
BSPAPP1	(all dbs)	ThirdYr	
BSPAPP1	BSP	TP_UA_PID_CB	
BSPAPP1	BSP	TP_UA_PID_NB	
BSPAPP1	BSP	TP_UA_VC_CB	
BSPAPP1	BSP	TP_UA_VC_NB	
BSPAPP1	BSP	ThisYear	FY01
BSPAPP1	BSP	VW_RES_DTL_NB	vw_res_dtl_new_buss

Set   Copy   Delete

Refresh   Help   Close

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

NOTE: Logout and Login are not required.

9.3   Examples of config.xml and tnsnames.ora

9.3.1   config.xml

```
<PARAM  DESCRIPTION="Database  service  name:Port  Number/SID"  FLAG="N"
ID="SID">ORCL</PARAM>
```

```
<PARAM DESCRIPTION="Net Service Name" FLAG="N" ID="TNS">ORCL</PARAM>
```

For example:

```
<PARAM DESCRIPTION="myhost.oracle.com:1521/ORCL" FLAG="N"
ID="SID">ORCL</PARAM>
```

9.3.2   tnsnames.ora

```
ORCL =

 DESCRIPTION =

 (ADDRESS_LIST =

 (ADDRESS = (PROTOCOL = TCP)(HOST = myhost.oracle.com)(PORT = 1521))
```

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```
)

(CONNECT_DATA =

(SID = ORCL)

(SERVER = DEDICATED)

)

)
```

> **NOTE:** You should access the Configuration UI and enter the details in this UI manually and Save. Also, verify these details with respect to odbc.ini file. The $EPM_ORACLE_HOME/bsp/BSP_RunOnPlanning.sh and $EPM_ORACLE_HOME/bsp/BSP_RunOnEssbase.sh scripts must be also be run after making these updates in a distributed environment. For more information, refer to the BSP 8 User Guide.

9.3.3 List of Log files

- `bsplog.log`: This is being written BSP initialization and all Assumption Forms UI related log statements.

- `BSPCalculation_UnpricedAcc_udf.log`: This is being written with while user is executing new Business and Current Business.

- `Config_FileCall.log`: This is being written with statements related to Database access and import rule data load activities during various BSP business rule executions.

- `Data_Export.log`: This is being written with statements related to exported data during various BSP business rule executions.

- `DBProcsFuncs_PAttrs_Call.log`: This is being written with statements for executed database procedures and functions during BSP business rule executions.

- `Metadata_Sync.log`: This is being written with statements for Metadata Synchronization activities invoked through BSP business rules.

In Single tier setup:

- BSP generates all log files under path $EPM_ORACLE_HOME/logs/bsplog.

- BSP generates all Cash flow engine related log files as part of Cash Flow Edit run , New business and Current business execution under path $EPM_ORACLE_HOME/logs/bsplog/log/FusionApps.

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In Distributed setup:

On Planning Server:

- BSP generates BSP Initialization process and all Assumption Forms UI related log statements in $EPM_ORACLE_HOME/logs/bsplog/bsplog.log.

- BSP generates all Cash Flow Edit runs log statements under path $EPM_ORACLE_HOME/logs/bsplog/log/FusionApps.

On Essbase Server:

- BSP generates all Business Rule execution related log files under path $EPM_ORACLE_HOME/logs/bsplog.

- BSP generates all Cash flow engine related log files as part of New business and Current business execution under path $EPM_ORACLE_HOME/logs/bsplog/log/FusionApps.

Following tables capture the intermediate stages on database side:

- `fsi_bsp_process_log`: This is a BSP specific table to capture intermediate state, success and failure message of individual procedure / function executions through BSP business rules.

- `fsi_process_errors`: This is a OFSAAI table which maintains the various information related to Cash flow engine invocations through New business, Current Business, Cash flow edit process runs.

- `fsi_message_log`: This is a OFSAAI table which maintains the various information related to hierarchy members' registration process.

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