Oracle® Integrated Operational Planning, Fusion Edition

Installation Guide

RELEASE 11.1.2.1
# Contents

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**Access to Oracle Support**

System Requirements

The minimum hardware and software prerequisites for installing Oracle Integrated Operational Planning, Fusion Edition are provided below.

Server Configuration

<table>
<thead>
<tr>
<th>Server Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardware Configuration</strong></td>
<td>A dedicated server with the following configuration:</td>
</tr>
<tr>
<td></td>
<td>• Pentium IV processor 1.6 GHz or faster</td>
</tr>
<tr>
<td></td>
<td>• 2 GB RAM or more</td>
</tr>
<tr>
<td></td>
<td>• 60 GB hard disk space or more</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: 80 GB hard disk space is recommended to accommodate growth and backup requirements.</td>
</tr>
<tr>
<td><strong>Oracle Hyperion Enterprise Performance Management System Software</strong></td>
<td>The following EPM System products must be installed and running:</td>
</tr>
<tr>
<td></td>
<td>• Oracle's Hyperion® Foundation Services</td>
</tr>
<tr>
<td></td>
<td>• Oracle WebLogic Server</td>
</tr>
<tr>
<td></td>
<td>• Oracle's Hyperion® Shared Services</td>
</tr>
<tr>
<td></td>
<td>For EPM System product installation instructions, see the Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide.</td>
</tr>
<tr>
<td><strong>Operating System</strong></td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td>• Windows 2003 Server with the latest patches, Windows 2008 Server Release 1</td>
</tr>
<tr>
<td></td>
<td>• Oracle Enterprise Linux 5 without data collection features.</td>
</tr>
<tr>
<td><strong>Database Software</strong></td>
<td>Oracle 10.2.0.4 or 11.1.0.7</td>
</tr>
</tbody>
</table>
### Server Component

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collection</td>
<td>Microsoft Excel 2003 SP 1 or later</td>
</tr>
<tr>
<td>Web Browser</td>
<td>Microsoft Internet Explorer 7 or 8 with the latest patches</td>
</tr>
</tbody>
</table>
| Application Server | Oracle WebLogic Server 11gR1 (10.3.2)  
**Note:** When you install Foundation Services, you install Oracle WebLogic server 11gR1 (10.3.2). You need not reinstall. |
| Web Server         | Oracle HTTP Server 11gR1 (32-bit and 64-bit)—Installed as part of Foundation Services  
Microsoft Internet Information Server (IIS) 6.0+  
Microsoft Internet Information Server (IIS) 7.0+  
You must install IIS. (Foundation Services does not install IIS.) |

### Client Configuration

#### Table 2  Client Components and Descriptions

<table>
<thead>
<tr>
<th>Client Component</th>
<th>Description</th>
</tr>
</thead>
</table>
| Operating System | One of the following:  
- Microsoft Windows 7  
- Microsoft Windows XP SP 2 |
| Microsoft Excel  | One of the following:  
- Microsoft Excel 2003 SP 1 or later  
- Microsoft Excel 2007 |
| Web Browser      | Microsoft Internet Explorer 7 or 8  
**Note:** You must install the latest Microsoft Internet Explorer patches. |
| Third Party Software | Adobe SVG Viewer |
| User Privileges  | Logged-in user on Windows client machine should have at least power user privileges |

### Downloading the Integrated Operational Planning Installation Files

1. To download the installation files:
   - Log on to the [Oracle® E-Delivery](http://edelivery.oracle.com/) site and accept the Terms and Conditions.
   - Select the [Oracle Enterprise Performance Management System page](http://edin.remeas.com/). Select a platform; for example: Microsoft Windows 32-bit and click Go.
3 Select the appropriate Integrated Operational Planning Media Pack and click **Continue**:  
- Oracle Enterprise Performance Management (11.1.2.1) Media Pack for Microsoft Windows (32-bit)  
- Oracle Enterprise Performance Management (11.1.1.3.0) Media Pack for Microsoft Windows (32-bit)  

4 Download the Integrated Operational Planning ZIP file on the server where you install Integrated Operational Planning and Oracle Integrated Margin Planning, Fusion Edition. Unzip to the appropriate Integrated Operational Planning folder on the server; for example: c:\oracle_iop.  

**Note:** Install Integrated Operational Planning on the same server as Foundation Services.
Before installing and configuring the Integrated Operational Planning server:

- Ensure that your server meets the minimum hardware and software prerequisites. See “System Requirements” on page 7.
- Ensure that WebLogic Admin Server and Foundation Services server are running.
- Install Integrated Operational Planning on the same server as Foundation Services.

## Installing Integrated Operational Planning on a Server

1. To download and unzip the Integrated Operational Planning installation ZIP file, see “Downloading the Integrated Operational Planning Installation Files” on page 8.

2. At the command prompt enter:

   **Windows:**
   
   ```plaintext
   SET MW_ORACLE_HOME=C:\Oracle\Middleware
   SET EPM_ORACLE_INSTANCE=C:\Oracle\Middleware\user_projects\epmsystem1
   ```

   where `C:\Oracle\Middleware` is the installation directory for EPM System
   
   and `C:\Oracle\Middleware\user_projects\epmsystem1` is the path for the EPM System instance created during Foundation Services installation.
**Linux:**

At login shell prompt enter:

```bash
export MW_ORACLE_HOME=/home/epmuser/Oracle/Middleware
export EPM_ORACLE_INSTANCE=/home/epmuser/Oracle/Middleware/user_projects/epmsystem1
```

where `/home/epmuser/Oracle/Middleware` is the installation directory for EPM System and `/home/epmuser/Oracle/Middleware/user_projects/epmsystem1` is the path for the EPM System instance created during Foundation Services installation.

### 3 Set Integrated Operational Planning properties:

a. Using a text editor, open:

```
INSTALL_ROOT\custom\config\site.properties
```

where `INSTALL_ROOT` is the Integrated Operational Planning installation directory; for example, .

Windows:

```
c:\oracle_iop
```

Linux:

```
HOME/oracle_iop
```

**Note:** If you do not have a `site.properties` file, you must create one. Copy an existing `site.properties` file from `INSTALL_ROOT/samples/sample/config`.

b. In `site.properties`, add or modify the following parameter values to correspond with your database configuration.

**Oracle**

```plaintext
Database.Type=Oracle
Database.IOP.datasource.DriverClassName=oracle.jdbc.OracleDriver
Database.IOP.datasource.URL=jdbc:oracle:thin:@${Server.Hostname}:1521:orcl
Database.IOP.datasource.User=DB_USERNAME
Database.IOP.datasource.Password=DB_PASSWORD
Database.IOP.datasource.Properties=
```

where:

`DB_USERNAME` is the name of the user who has database access and

`DB_PASSWORD` is the password for the database user

**Note:** If you do not have a `site.properties` file, you must create one. You can copy a `site.properties` file from `INSTALL_ROOT/samples/sample/config`.

c. Set the host name:

```
Server.Hostname=myhost.domain.com
```
where `myhost.domain.com` is your machine name with a fully qualified domain name.

d. Set the server port:

```
Server.Weblogic.TargetServer.Port=xxxx
```

where `xxxx` is an unused TCP port on the server. The default is 27080.

e. Set the EPM System domain name:

```
Server.Weblogic.DomainName=EPMSys
```

where `EPMSys` is the domain created during EPM System installation. The default domain name is `EPMSys`.

f. Set the WebLogic Admin User name:

```
Server.Weblogic.AdminUser=epm_admin
```

where `epm_admin` is the user you assign during EPM System installation.

g. Set the WebLogic Admin User password:

```
Server.Weblogic.AdminPassword=PASSWORD
```

where `PASSWORD` is the password for the WebLogic Admin User.

h. Set the security key:

```
Security.SecureKey=arbitrary_key
```

where `arbitrary_key` is a word used as a key to encrypt all the passwords. The security key can be any combination of numbers, letters, and special characters.

**Note:** IOP is a keyword. Do not use it as the security key. You must also save the site.properties before encrypting the db_password and password.

i. Encrypt hard-coded database and WebLogic Admin passwords:

i. In `INSTALL_ROOT/bin`, type `encrypt PASSWORD` where `PASSWORD` is your database password.

ii. Copy and paste the encrypted password from the encrypt tool to the `DB_PASSWORD` and `Server.Weblogic.AdminPassword` settings in your properties file.

j. Save the changes to `site.properties`.

4 In the same command prompt window, change to the `bin` directory in the Integrated Operational Planning installation directory, reset the Integrated Operational Planning database, and start the server.

Enter the following commands:

- `cd INSTALL_ROOT/bin`
  where `INSTALL_ROOT` is the Integrated Operational Planning installation directory.

- `isreset`
  Enter a license key code when prompted.

- `createiopinstance`
Provision Integrated Operational Planning Administrator and Integrated Operational Planning Provisioning Manager roles for the Integrated Operational Planning instance to the Admin user through Oracle’s Hyperion® Shared Services Console.


b. Log in as the administrator.

c. Expand User Directories and Native Directory.

d. Select Users and click Search.

e. Right-click the Admin user and select Provision.

f. Expand the Integrated Operational Planning application group.

g. Expand the Integrated Operational Planning instance created.

h. Highlight IOP Administrator and Provisioning Manager.

i. Click the right arrow between the windows to select the roles.

j. Click Save, and then click OK.

Start the Integrated Operational Planning server by entering the following command:

Windows:

EPM_ORACLE_INSTANCE\bin\startIOPServer_iopinstance1.bat

Linux:

EPM_ORACLE_INSTANCE/bin/startIOPServer_iopinstance1.sh

After the server starts, open a second command prompt window and set the same system environment variables that you set earlier. (See step 2 on page 11.)

If you created a batch command file containing the necessary command line, run the batch command in the second window.

In the second command prompt window, navigate to the bin directory in the Integrated Operational Planning installation directory, and run initializesystem to load data into the Integrated Operational Planning database.

Enter the following commands in the second window:

- cd INSTALL_ROOT/bin

  where INSTALL_ROOT is the Integrated Operational Planning installation directory

- initializesystem -u IOP_ADMIN_USER –p IOP_ADMIN_PASSWORD

  where

  IOP_ADMIN_USER is a Shared Services user with the Integrated Operational Planning Administrator provision and

  IOP_ADMIN_PASSWORD is the password of IOP_ADMIN_USER.

The Integrated Operational Planning server is now running in the first command prompt window. This window must remain open for the server to run. The server is ready to accept
requests from client machines, and you can log in to the applications from your web browser by connecting to the following URL:

http://myhost.domain.com:port/interlace

where myhost and port represent the settings for Server.HTTP.Host and Server.HTTP.Port, which you changed earlier.

## Installing Integrated Operational Planning in a Distributed Environment

- To install the EPM System server and the Integrated Operational Planning server on different machines:

1. Install Foundation Services on the EPM System machine and configure.
2. Install Foundation Services on the Integrated Operational Planning machine (where Integrated Operational Planning will be installed) to the same directory path and name. Do not configure.
3. Copy EPM_O Instance/user_projects/empsystem1 on the EPM machine to the same directory on the IOP machine.
4. Start WebLogic Server server on the EPM System machine by running following command:
   - Windows:
     
     \textit{MIDDLEWARE\_ORACLE\_HOME/user_projects/domains/EPMSystem/bin/startWebLogic.cmd}
   - Linux:
     
     \textit{MIDDLEWARE\_ORACLE\_HOME/user_projects/domains/EPMSystem/bin/startWebLogic.sh}
5. Start Foundation Services server on the EPM System machine by running the following command:
   - Windows:
     
     \textit{EPM\_ORACLE\_INSTANCE/bin/startFoundationServices.bat}
   - Linux:
     
     \textit{EPM\_ORACLE\_INSTANCE/bin/startFoundationServices.sh}
   - Modify property settings as shown in step 3 on page 12.
   - Point to the correct WebLogic URL:
     
     \textit{Server.Weblogic.AdminServer.URL=t3://foundation_server:weblogic\_admin\_port}
   - Point to the correct WebLogic domain name:
     
     \textit{Server.Weblogic.DomainName=EPMSystem}
7. Copy the Integrated Operational Planning installation directory from the Integrated Operational Planning machine to the same directory path and name on the EPM System machine.
8. In the command prompt window, change to the bin directory in the Integrated Operational Planning installation directory, reset the Integrated Operational Planning database, and start the server.

Enter the following commands:
Install the EPM System database to the EPM System installation directory:

9 Copy the following directories from the EPM System machine to the same directory on the Integrated Operational Planning machine:

- `/MW_ORACLE_HOME/user_projects/domains/EPMSystem/bin`
- `/MW_ORACLE_HOME/user_projects/domains/EPMSystem/config`
- `/EPM_ORACLE_INSTANCE/config`

10 Copy `/EPM_ORACLE_INSTANCE/iop/INSTANCE_NAME` from the Integrated Operational Planning server to the EPM System machine.

This must be done before running Integrated Operational Planning.

11 Copy the Integrated Operational Planning installation directory from the Integrated Operational Planning machine to the same directory path and name on the EPM System machine.

12 Set Oracle HTTP Server settings on the EPM System machine as shown in “Enabling Oracle HTTP Server as a Proxy” on page 19.

13 Start the Integrated Operational Planning server by entering the following command on the Integrated Operational Planning machine:

   Windows:
   ```
   EPM_ORACLE_INSTANCE/bin\startIOPServer_iopinstance1.bat
   ```

   Linux:
   ```
   EPM_ORACLE_INSTANCE/bin/startIOPServer_iopinstance1.sh
   ```

14 After the server starts, open a second command prompt window and set the same system environment variables that you set earlier on the Integrated Operational Planning machine. (See step 2 on page 11)

   If you created a batch command file containing the necessary command line, run the batch command in the second window.

15 In the second command prompt window, navigate to the `bin` directory in the Integrated Operational Planning installation directory, and run `initializesystem` to load data into the Integrated Operational Planning database.

Enter the following commands:

- cd `INSTALL_ROOT/bin`

  where `INSTALL_ROOT` is the Integrated Operational Planning installation directory.

- `initializesystem -u IOP_ADMIN_USER -p IOP_ADMIN_PASSWORD`

  where

  `IOP_ADMIN_USER` is a Shared Services user with the Integrated Operational Planning Administrator provision and
**IOP_ADMIN PASSWORD** is the password of **IOP_ADMIN_USER**.

The Integrated Operational Planning server is now running in the first command prompt window. This window must remain open for the server to run. The server is ready to accept requests from client machines, and you can log in to the applications from your web browser by connecting to the following URL:

http://MYHOST.domain.com:PORT/interlace

where **MYHOST** and **PORT** represent the host name and port number for the server.

**Installing Integrated Operational Planning as an NT Service**

1. **Open a DOS command prompt window and set system environment variables:**
   - SET MW_ORACLE_HOME=c:\Oracle\Middleware
   - SET EPM_ORACLE_INSTANCE=C:\Oracle\Middleware\user_projects\epmsystem1
   - where C:\Oracle\Middleware is the installation directory for EPM System.
   - If you created a batch file containing this command, run the batch command to set the environment variables.

2. **In the same command prompt window, change to the**
   - \bin\deploymentScripts\installServiceScripts
   - and enter the following commands:
     - **Windows:**
       - cd EPM_ORACLE_INSTANCE/bin/deploymentScripts/installServiceScripts
       - EPM_ORACLE_INSTANCE/bin/deploymentScripts/installServiceIOPServer_iopinstance1.bat
     - **Linux:**
       - cd EPM_ORACLE_INSTANCE/bin/deploymentScripts/installServiceScripts
       - EPM_ORACLE_INSTANCE/bin/deploymentScripts/installServiceIOPServer_iopinstance1.sh

3. **Start/stop the server using one of these methods:**
   - ● net start/stop SERVICE_NAME
   - ● Through services control

4. **To uninstall Integrated Operational Planning as an NT Service:**
   - Open a DOS command prompt window and set system environment variables:
     - SET MW_ORACLE_HOME=MIDDLEWARE_HOME
     - SET EPM_ORACLE_INSTANCE=MIDDLEWARE_HOME/user_projects/epmsystem1
where MIDDLEWARE_HOME is the installation directory for EPM System.

If you created a batch file containing this command, run the batch command to set the environment variables.

2 In the same command prompt window, change to
   /bin/deploymentScripts/installServiceScripts

   and enter the following commands:

   Windows:
   cd EPM_ORACLE_INSTANCE\bin\deploymentScripts\installServiceScripts
   EPM_ORACLE_INSTANCE\bin\deploymentScripts\installServiceScripts
   \uninstallServiceIOPServer_iopinstance1.bat

   Linux:
   cd EPM_ORACLE_INSTANCE/bin/deploymentScripts/installServiceScripts
   EPM_ORACLE_INSTANCE/bin/deploymentScripts/installServiceScripts/
   uninstallServiceIOPServer_iopinstance1.sh

Installing Multiple Instances of Integrated Operational Planning on the Same Server

To install multiple instances of Integrated Operational Planning on the same server:

1 Install IOP in two different folders. For example:
   a. For iopinstance1: INSTALL_ROOT1.../iop_install
   b. For iopinstance2: INSTALL_ROOT2.../imp_install

2 For iopinstance1, use the default properties in site.properties.

3 For iopinstance2:
   a. In
      INSTALL_ROOT2/custom/config/site.properties
      add or modify the parameter values to correspond with your server configuration. For example:

      System.InstanceName=iopinstance2
      Server.ContextRoot=interlace2
      Server.ApplicationName=OracleIOP2
      Server.Weblogic.TargetServer.Port=29080
      Server.Weblogic.TargetServer.SSLPort=29443
      
      # Oracle (database property should be different for both the instances.)

      Database.IOP_datasource.DriverClassName=oracle.jdbc.OracleDriver
      Database.IOP_datasource.URL=jdbc:oracle:thin:@${Server.Hostname}:1521:orcl
      Database.IOP_datasource.User=db_username
      Database.IOP_datasource.Password=db_password
      Database.IOP_datasource.Properties=
4 For iopinstance1:
   a. Switch to ${INSTALL_ROOT1}/custom.
   b. Run setenv.bat.
   c. Run createiopinstance.
   d. Run isreset.
5 For iopinstance2:
   a. Switch to ${INSTALL_ROOT2}/custom.
   b. Run setenv.bat.
   c. Run createiopinstance.
   d. Run isreset.
6 There are two directories under Middleware:
   
   
   ${MIDDLEWARE_HOME}/user_projects/domains/EPMSystem/servers/IOPServer_instance1
   
   and
   
   ${MIDDLEWARE_HOME}/user_projects/domains/EPMSystem/servers/IOPServer_instance2
7 Switch to ${EPM_ORACLE_INSTANCE}/bin and start both servers.
8 Similarly, there are two start scripts under bin:
   
   
   ${MIDDLEWARE_HOME}/user_projects/epmsystem1/bin/startIOPServer_iopinstance1.bat
   
   and
   
   ${MIDDLEWARE_HOME}/user_projects/epmsystem1/bin/startIOPServer_iopinstance2.bat
9 Run bootstrap in both instances.

Enabling Oracle HTTP Server as a Proxy

➢ To enable Oracle HTTP Server as a proxy to Integrated Operational Planning:
1 Stop the Integrated Operational Planning server:
   
   Windows:
   
   ${EPM_ORACLE_INSTANCE}/bin/stopIOPServer_iopinstance1.bat
   
   Linux:
   
   ${EPM_ORACLE_INSTANCE}/bin/stopIOPServer_iopinstance1.sh
2 Add the following lines to
   
   ${EPM_ORACLE_INSTANCE}/httpConfig/ohs/config/OHS/ohs_component/
   
   mod_wl_ohs.conf:
   
   RedirectMatch 301 ^/interlace$ /interlace/
   
   <LocationMatch ^/interlace/>
SetHandler weblogic-handler
WeblogicCluster iop_server:port
WLIOTimeoutSecs 10000000000000000
WLSSocketTimeoutSecs 10000000000000000
</LocationMatch>

where *iop_server* is the fully qualified domain name of the Integrated Operational Planning server,

and *port* is the value set in `Server.Weblogic.TargetServer.Port`. The default value is 27080.

3  To add static files to the Oracle HTTP Server:
   a. On the Oracle HTTP Server machine, unzip `interlace_static.zip` to `EPM_ORACLE_HOME/common/epmstatic/interlace`.
   b. Update `EPM_ORACLE_INSTANCE/httpConfig/ohs/config/OHS/ohs_component/httpd.conf` to include the following line before the line that includes `mod_wl_ohs.conf`:

```
RewriteRule ^/interlace/static/(.*) /epmstatic/interlace/$1 [PT]
```

   For example:

```
RewriteEngine On
RewriteRule ^/workspace/static/(.*) /epmstatic/wspace/$1 [PT]
RewriteRule ^/interlace/static/(.*) /epmstatic/interlace/$1 [PT]
```

   # Include the configuration files needed for mod_weblogic
   include "${ORACLE_INSTANCE}/config/${COMPONENT_TYPE}/${COMPONENT_NAME}/mod_wl_ohs.conf"

where the value of `RewriteRule` matches the value of the property called `Server.LogicalWebAddress.ContextRoot`. See `Server Settings`.

   In the above example, `Server.LogicalWebAddress.ContextRoot` is set to `/workspace/` or `/interlace/`.

   **Note:** The static files can be shared for all instances of Integrated Operational Planning in the domain.

4  Restart Oracle HTTP Server, either through the NT service or using this command:

   Windows:

   `EPM_ORACLE_INSTANCE/bin/stop|startOHS.bat`

   Linux:

   `EPM_ORACLE_INSTANCE/bin/stop|startOHS.sh`

5  Add the following line to `custom/config/site.properties`:

   `Server.LogicalWebAddress.Port=19000`

   Set the port to the Oracle HTTP Server port used for all other EPM System products. The default value is 19000.
6 Rerun INSTALL_ROOT/bin/createiopinstance.

7 Start the Integrated Operational Planning server.
   Windows:
   
   EPM_ORACLE_INSTANCE/bin/startIOPServer_iopinstance1.bat
   
   Linux:
   
   EPM_ORACLE_INSTANCE/bin/startIOPServer_iopinstance1.sh

8 Access the Integrated Operational Planning server through the Oracle HTTP Server proxy using the following URL:

   http://myhost.domain.com:port/interlace
   
   where port refers to the setting in Server.LogicalWebAddress.Port.

---

Enabling Microsoft Internet Information Services (IIS) 7 as a Proxy

To enable Microsoft Internet Information Services 7 (IIS) as a proxy:

1 Copy the iisproxy.dll file from the following WebLogic installation directory:

   WL_HOME/server/plugin/win/32 or WL_HOME/server/plugin/win/64
   or
   WL_HOME/server/plugin/win/x64

   where WL_HOME is the top-level directory for the WebLogic Platform and Server and contains the WebLogic Server installation files into a convenient directory that is accessible to IIS. This directory must also contain the iisproxy.ini file.

   Example:
   
mkdir C:\wlplugin
   
   32-bit platform
   Copy WL_HOME/server/plugin/win/32 to C:\wlplugin
   
   64-bit platform
   Copy WL_HOME/server/plugin/win/64 to C:\wlplugin
   
   x64 platform
   Copy WL_HOME/server/plugin/win/x64 to C:\wlplugin

2 Set the user permissions for iisproxy.dll to include the name of the user running IIS:

   a. Right-click iisproxy.dll and select Permissions
   b. Add the user name of the person running IIS.
   c. Give Read and Execute, and Read permissions for the iisproxy.dll to IIS_IUSRS user.
3 Place iisforward.dll in the same directory as iisproxy.dll and add the iisforward.dll file as a filter service in IIS.

4 Set the user permissions for the iisforward.dll file to include the name of the user who will be running IIS:
   a. Right-click iisproxy.dll and select Permissions.
   b. Add the user name of the person running IIS.
   c. Give Read and Execute, and Read permissions for the iisforward.dll to IIS_IUSRS user.

5 Create iisproxy.ini in the folder where iisproxy.dll is copied and set the following parameters in iisproxy.ini:

   WlForwardPath=/interlace
   WebLogicCluster=iop_server:port
   DynamicServerList=OFF

   Save the above parameters in c:\wlplugin\iisproxy.ini.

6 Create a Web site in IIS manager:
   a. Open IIS Manager and in the Connections pane and expand the existing connection.
   b. In the Connections pane, right-click the Sites node, and then click Add Web Site.
   c. In Add Web Site, in Web site name, enter a name for your Web site.
   d. In Physical, enter the physical path of the Web site's folder, or click the browse button (…) to navigate the file system to find the folder.
   e. The default value in the IP address box is All Unassigned. If you must specify a static IP address for the Web site, enter the IP address in the IP address box.
   f. In Port, enter a port number.
   g. Clear Start Web site immediately.
   h. Click OK.

7 Configure proxying by path:
   a. Open IIS Manager in the Connections pane, and expand the existing connection.
   b. In the Connections pane, expand the Sites node, and select site name that was created in step 6 on page 22.
   c. In the Home page, double-click Handler Mappings.
   d. In the Actions pane, click Add Script Map...
   e. In the Request path, enter * . *
   f. In the Executable, enter the physical path of the iisproxy.dll or click the browse button (…) to navigate the file system to find the path of iisproxy.dll.
   g. In Name, enter a friendly name for the script map.
   h. Click OK.
   i. Click Yes in the dialog box.
j. In the Connections pane, select the site name.

k. On the Home page, double-click ISAPI Filters.

l. In Filter of the Add ISAPI Filter, type a name for the ISAPI filter.

m. In Executable, enter the physical path of the iisforward.dll, or click the browse button (...) to navigate the file system to find the path of iisforward.dll.

n. Click OK.

8 Start the proxy connection:
   a. Open IIS Manager, and in the Connections pane, expand the existing connection.
   b. In the Connections pane, expand the Sites node, and select site name that was created in step 6 on page 22.
   c. In Actions, click Start.

Enabling Microsoft Internet Information Services (IIS) 6 as a Proxy

To enable Microsoft Internet Information Services 7 (IIS) as a proxy:

1 Copy the iisproxy.dll file from the following WebLogic installation directory:

   WL_HOME/server/plugin/win/32 or WL_HOME/server/plugin/win/64

   or

   WL_HOME/server/plugin/win/x64

   where WL_HOME is the top-level directory for the WebLogic Platform and Server and contains the WebLogic Server installation files into a convenient directory that is accessible to IIS. This directory must also contain iisproxy.ini.

   Example:

   mkdir C:\wlplugin

   32-bit platform
   Copy WL_HOME/server/plugin/win/32 to C:\wlplugin

   64-bit platform
   Copy WL_HOME/server/plugin/win/64 to C:\wlplugin

   x64 platform
   Copy WL_HOME/server/plugin/win/x64 to C:\wlplugin

2 Set the user permissions for iisproxy.dll to include the name of the user running IIS:
   a. Right-click iisproxy.dll and select Permissions.
   b. Add the user name of the person running IIS.
   c. Give Read and Execute, and Read permissions iisproxy.dll to IIS_IWAM user.
3 Place iisforward.dll in the same directory as iisproxy.dll and add iisforward.dll as a filter service in IIS.

4 Set the user permissions for the iisforward.dll file to include the name of the user who will be running IIS:
   a. Right-click iisproxy.dll and select Permissions.
   b. Add the user name of the person running IIS.
   c. Give Read & Execute, and Read permissions for the iisforward.dll to IIS_IUSRS user.

5 Create iisproxy.ini in the folder where iisproxy.dll is copied and set the following parameters in iisproxy.ini:
   - WlForwardPath=/interlace
   - WebLogicCluster=iop_server:port
   - DynamicServerList=OFF

   Save the above parameters in c:\wlplugin\iisproxy.ini.

6 Create a Web site in IIS manager:
   a. Open IIS Manager, expand the computer name, and right-click the Web Sites folder.
   b. Point to New, and click Web Site.
   c. In the Web Site Creation Wizard, click Next.
   d. In Description, enter the name of your site, and then click Next.
   e. Enter or click the IP address (default: All Unassigned), TCP port, and host header (for example, www.mysite.com) for your site, and then click Next.
   f. In Path, enter or browse to the directory that contains, or will contain, the site content, and then click Next.
   g. Select Read and Execute for the Web site access permissions you want to assign to your users, and then click Next.
   h. Clear Start Web site immediately.
   i. Click Finish.

7 Configure proxying by path:
   a. Open IIS Manager and expand the computer name.
   b. Expand the Web Sites directory, right-click the designated Web site, and select Properties.
   c. In the Properties panel, select the Home Directory tab, and click Configuration in the Applications Settings section.
   d. On the Mappings tab, click Add to add file types and configure them to be proxied to WebLogic Server.
   e. In the Add dialog box, browse to find iisproxy.dll.
   f. Set the Extension to the type of file that you want to proxy to WebLogic Server - .wlforward.
Configuring a Connection Pool and Data Source in WebLogic

By default, createiopinstance creates a connection pool for the IOP server to communicate to the database that users create and configure in site.properties. To connect to additional databases used in data sources or other scripts, configure a connection pool as described in this section.

To configure a connection pool and data source in WebLogic:

1 Start WebLogic Admin Server Console:
   a. To start WebLogic Admin Server, run the following command:
      - Windows: 
        
        \EPM\ORACLE_HOME/\..\user_projects\domains\EPMSистем\bin\startWebLogic.cmd
      - Linux:
        
        \EPM\ORACLE_HOME/\..\user_projects\domains\EPMSистем\bin\startWebLogic.sh

   or select Start, then All Programs, then Oracle WebLogic, then User Projects, then EPMSистем, and then Start Admin Server for WebLogic Server Domain.
Log on to WebLogic Admin Server Console at http://serverName:7001/console.

2. At the WebLogic Admin Server home page, click the Data Sources hyperlink.
   The Summary of JDBC Data Sources window is displayed with a table of existing data sources.

3. In Change Center, click Lock and Edit.

4. Under the data source table, click New. Select Generic Data Source.
   The Create a new JDBC Data Source window is displayed.

5. In Name, use the default name or change to a name of your preference.

6. In JNDI Name, enter jdbc/JDBCDataSource-1.

   Note: You must use jdbc/jndiname because you are searching the entire available data source on jdbc/search criteria.

7. Select a Database Type.

8. Click Next.
   The JDBC Data Source Properties window is displayed.

9. Select a Database Driver.

10. Click Next.
   The Transaction Options window is displayed.


12. Click Next.
   The Connection Properties window is displayed.

13. Enter the following values:
   - **Database Name**: Database Name
   - **Host Name**: Database Server Name
   - **Port**: 1521
   - **Database User Name**: dbusername
   - **Password**: dbPassword
   - **Confirm Password**: dbPassword

14. Click Next.
   The Test Database Connection window is displayed.

15. Click Test Configuration. The “Connection test succeeded” message appears (in green) at the top of the screen.

16. Click Next.
   The Select Targets window is displayed.

17. Select IOPServer_iopinstance1 from clusters and then click Finish.
The Summary of JDBC Data Sources window is displayed with a new entry in the Data Sources table.

18 In **Change Center**, (top left portion of the window), click **Activate Changes**.

19 To access the data sources settings, click **Lock & Edit** for the selected data source from the **Summary of JDBC Data Sources** table, and then select the **Configuration** tab.

### Installing Sample Model

The following section describes the steps to install the provided sample model.

**To install Integrated Operational Planning sample model:**

1 **In Services**, verify that the following are running:
   - Foundation Services
   - Shared Services
   - Oracle database
   - WebLogic Admin Server

2 Back up your existing custom folder (if it exists) and give it a new name; for example: `custom_old`.

3 Create a directory `INSTALL_ROOT/custom` where `INSTALL_ROOT` is the Integrated Operational Planning installation directory.

4 Copy
   ```
   INSTALL_ROOT/samples/sample/*
   to
   INSTALL_ROOT/custom
   ```

5 Initialize the system by completing the steps to setup the properties file. See step 3 on page 12 in “Installing Integrated Operational Planning on a Server” on page 11.

6 Use
   ```
   setenv.bat for Windows, or setenv.sh for Linux, under INSTALL_ROOT/custom to modify the directories as appropriate for your environment.
   ```

7 **In the second DOS command prompt**, complete the following:
   a. In the Integrated Operational Planning installation directory, navigate to the custom folder.
   b. Run `setenv.bat` to set the environment.
      • Run `INSTALL_ROOT/bin/runant` to prepare the system for the sample models.

8 Start WebLogic Admin Server. Wait for the console to show the following message:
   ```
   <Sep 10, 2010 9:30:54 AM PDT> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to RUNNING>
   <Sep 10, 2010 9:30:54 AM PDT> <Notice> <WebLogicServer> <BEA-000360> <Server started in RUNNING mode>
   ```
Run the command `createiopinstance` to deploy the sample model in the WebLogic Admin Server.

Create four users: dpotts, kreed, jstark, and vpfinance, in Shared Services and provision them with IOP User role.

Open a command prompt window and set environment variables and run the following command:

```
cd INSTALL_ROOT/install/bin
isreset
```

Start Integrated Operational Planning server. The command is under

```
EPM_ORACLE_INSTANCE/bin/startIOPServer_iopinstance1.bat(sh)
```

Wait for the console to show the following message:

```
<Sep 10, 2010 1:45:07 PM PDT> <Notice> <WebLogicServer> <BEA-000365> <Server state changed to RUNNING>
<Sep 10, 2010 1:45:07 PM PDT> <Notice> <WebLogicServer> <BEA-000360> <Server started in RUNNING mode>
```

Open another command prompt window and set environment variables. Then run the following command:

```
cd INSTALL_ROOT/custom/bin
bootstrap-sample -u IOP_ADMIN_USER -p IOP_ADMIN_PASSWORD
```

where

- `IOP_ADMIN_USER` is any Shared Services user with the Integrated Operational Planning Administrator provision and
- `IOP_ADMIN_PASSWORD` is the password of `IOP_ADMIN_USER`.

The Integrated Operational Planning server is now ready to accept requests from client computers. Log in to the application from your Web browser by connecting to the following URL:

```
http://MYHOST.domain.com:PORT/interlace
```

where `MYHOST` and `PORT` represent the host name and port number for the server.

### Bill of Materials

The sample model has a Bill of Materials (BOM) dimension.

BOM is a list of the raw materials, subassemblies, intermediate assemblies, subcomponents, components, parts and the quantities of each needed to manufacture an end item (final product).

BOMs are hierarchical in nature, with the top level representing the finished product, which may be a subassembly or a completed item. BOMs that describe the subassemblies are referred to as modular BOMs. An example of this is the BOM that is used in the automotive industry to list all the components in an assembly line. The structure of the automotive BOM is System, Line, Tool, Unit, and Detail.

BOM has three measures:

- Unit cost = Unit Cost \[\text{previous(FiscalCalendar)}\]
- Aggregated Cost Per Unit = "Unit Cost" + "Aggregated Children Material Cost"
Aggregated Children Material Cost = "Aggregated Children Material Cost"
+source("Aggregated Cost Per Unit") * lookup("BOM_STRUCTURE_RS",
property("BomDim", "name"), sourceSparseMember("BomDim"), "SCALEFACTOR")
In This Chapter

Starting Integrated Operational Planning ............................................................ 31
Stopping Integrated Operational Planning ......................................................... 32

These instructions assume that the Integrated Operational Planning server is currently running in a DOS command prompt window.

You may need to stop and restart the Integrated Operational Planning server in the following circumstances:

- To reload worksheet templates after making changes to a worksheet template XML file
- To reload XML definition files after restructuring dimensions

**Note:** Integrated Operational Planning comes with an unsigned license key, which allows you to start using the application. You will be prompted for an unsigned Active-X control when connected to the server.

### Starting Integrated Operational Planning

To start the Integrated Operational Planning server:

1. **Windows:**

   Open a DOS command prompt window and set environment variables:

   ```
   SET MW_ORACLE_HOME=C:/Oracle/Middleware
   SET EPM_ORACLE_INSTANCE=C:/Oracle/Middleware/user_projects/epmsystem1
   ```

   where `C:/Oracle/Middleware` is the installation directory for EPM System.

   If you created a batch file containing this command, run the batch command to set the environment variables.

   **Linux:**
At login shell prompt set environment variables as follows:

**Note:** If a login shell is currently open with environment variables already set, skip to Step 2.

```
export MW_ORACLE_HOME=/home/epmuser/Oracle/Middleware
export EPM_ORACLE_INSTANCE=/home/epmuser/Oracle/Middleware/user_projects/epmsystem1
```

where `/home/epmuser/Oracle/Middleware` is the installation directory for EPM System.

If you created a batch file containing this command, run the batch command to set the environment variables.

2 **In the same command prompt window, enter the following command:**

Windows:

```
EPM_ORACLE_INSTANCE/bin/startIOPServer_iopinstance1.bat
```

Linux:

```
EPM_ORACLE_INSTANCE/bin/startIOPServer_iopinstance1.sh
```

The Integrated Operational Planning server is now running in the command prompt window. This window must remain open for the server to run.

## Stopping Integrated Operational Planning

➤ To stop the Integrated Operational Planning server:

1 **Windows:**

Open a second DOS command prompt window and set environment variables as follows:

```
SET MW_ORACLE_HOME=C:/Oracle/Middleware
SET EPM_ORACLE_INSTANCE=C:/Oracle/Middleware/user_projects/epmsystem1
```

where `C:/Oracle/Middleware` is the installation directory for EPM System.

If you created a batch file containing this command, run the batch command to set the environment variables.

**Linux:**

At login shell prompt set environment variables as follows:
**Note:** If a login shell is currently open with environment variables already set, skip to Step 2.

```bash
export MW_ORACLE_HOME=/home/epmuser/Oracle/Middleware
export EPM_ORACLE_INSTANCE=/home/epmuser/Oracle/Middleware/user_projects/epmsystem1
```

where `/home/epmuser/Oracle/Middleware` is the installation directory for EPM System.

If you created a batch file containing this command, run the batch command to set the environment variables.

2. **In the same command prompt window, enter the following command:**

   **Windows:**
   
   ```
   EPM_ORACLE_INSTANCE/bin/stopIOPServer_iopinstance1.bat
   ```

   **Linux:**
   
   ```
   EPM_ORACLE_INSTANCE/bin/stopIOPServer_iopinstance1.sh
   ```

   The Integrated Operational Planning server stops and the command prompt returns to the first command prompt window. After the server stops, you can close the second window.
Using Essbase as a Data Source in Integrated Operational Planning

In This Chapter

- Writing Report Scripts .......................................................... 36
- Handling Ancestor Names in MDX Queries .................................... 36

The following sections briefly describe how to use Oracle Essbase as a data source in Integrated Operational Planning by using Essbase report scripts. For more information on Essbase report scripts, see the Oracle Essbase Database Administrator’s Guide.

To use Essbase in Integrated Operational Planning:

1. Connect to an Essbase instance by opening the Oracle Integrated Operational Planning Connection dialog box and entering the following information:
   - Name—Identifies the connection
   - Description—Connection description
   - Host—Machine name
   - Application Name—Essbase application name
   - Database Name—Name of the database for the Essbase application
   - Username—Used for authentication
   - Password—Used for authentication

2. Open Integrated Operational Planning.

3. In the Administration Workbench, go to the Model tab.

4. From the Object Browser View menu, select Data Sources.

5. Click Actions and select Add.
   A Data Source Wizard is displayed.

6. On the Properties page, set the Type to Essbase and select an Essbase Connection.

7. On the Configuration page, select a Query Type (Report Script or MDX) and define the Query to send to Essbase.

   See “Writing Report Scripts” on page 36 and “Handling Ancestor Names in MDX Queries” on page 36.
Integrated Operational Planning internally flattens the results returned from Essbase and displays the results under Data Source Preview.

8 On the Fields page, review data field details.

Administrators can change data field names; however, the data type is determined internally and cannot be changed.

9 Click Save.

Writing Report Scripts

Essbase report scripts consist of formatting elements and member selection commands. When writing report scripts:

- The following snippet must appear at the beginning of the script:
  ```
  {SUPFEED}{BLOCKHEADERS}{TABDELIMIT}<SINGLECOLUMN
  {SUPCOMMAS}{SUPBRACKETS}{ROWREPEAT}{DECIMAL VARIABLE}
  {NOINDENTGEN}{SUPMISSINGROWS}
  
  {SUPMISSINGROWS} can be omitted if you need rows with missing values in the result set.
  ```

- Follow formatting control commands by member selection commands; for example:
  ```
  <Page (Product, Caffeinated, Ounces)
  <Column (Year, Measures)
  <ROW (Scenario, Market, Population)
  "Jan" "Feb" "Mar" <Child "100"
  <IDescendant "Population"
  <IDescendant "Market" "Actual" "Sales" "COGS"
  ```

- Use `SYM` or `ASYM` commands to control member selection along columns.

- The Page axis definition should have all real dimensions from Essbase, which are not part of the Column or Row definitions.

Handling Ancestor Names in MDX Queries

If the Ancestor_Names dimension property is part of the result set returned from MDX query execution in Oracle Essbase, Integrated Operational Planning automatically generates columns in addition to the one needed to populate the property itself.

One additional column, `dimensionname_Parent`, is populated with the member name of the parent of the current member. The parent column is generated to model row-source driven dependency dimensions.
These properties can be set in site.properties or MACHINE_NAME.properties; however, Oracle recommends that you create a new properties file named after your hostname with a properties extension as in MACHINE_NAME.properties. For example, for the machine named iop1, name the properties file iop1.properties. Place the properties file in the custom \config directory.

The following sections list all of the properties.

## Server Settings

### Table 3   Server Settings and Descriptions

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server.Hostname=myhost.domain.com</td>
<td>myhost.domain.com is your machine name with a fully qualified domain name</td>
</tr>
<tr>
<td>Server.Weblogic.TargetServer.MaxMemory</td>
<td>Maximum memory setting for WebLogic Server. The default is 1024m.</td>
</tr>
<tr>
<td>Server.Weblogic.TargetServer.MinMemory</td>
<td>Minimum memory setting for WebLogic Server. The default is 512m.</td>
</tr>
<tr>
<td>Server.Weblogic.TargetServer.MaxPermSize</td>
<td>Maximum permissible size settings for Oracle WebLogic Server. The default is 192m.</td>
</tr>
<tr>
<td>Server.Weblogic.TargetServer.Port</td>
<td>HTTP port for the physical web application. The default is 27080.</td>
</tr>
<tr>
<td>Server.Weblogic.DomainName</td>
<td>EPM System domain name. The default is EPMSystem</td>
</tr>
<tr>
<td>System.InstanceName</td>
<td>System instance name. The default is iopinstance1.</td>
</tr>
</tbody>
</table>
### Server Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server.LogicalWebAddress.Hostname</td>
<td>Hostname of the logical web application. The default is the value of the WebLogic host.</td>
</tr>
<tr>
<td>Server.LogicalWebAddress.Port</td>
<td>Port of the logical web application. The default is the value of the WebLogic port.</td>
</tr>
<tr>
<td>Server.LogicalWebAddress.SSLPort</td>
<td>SSL port of the logical web application. The default is the value of the WebLogic SSL port.</td>
</tr>
<tr>
<td>Server.LogicalWebAddress.ContextRoot</td>
<td>Context root for the logical web application. The default is the system context root.</td>
</tr>
<tr>
<td>Server.Weblogic.TargetServer.SSLPort</td>
<td>SSL port for the Physical Web application. The default is 27443.</td>
</tr>
</tbody>
</table>

### Database Settings

**Table 4  Database Server Settings and Descriptions**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database.Type</td>
<td>Database type (either Oracle or SQLServer)</td>
</tr>
<tr>
<td>Database.IOP_datasource.DriverClassName</td>
<td>Database JDBC driver to use:</td>
</tr>
<tr>
<td></td>
<td>- Oracle: oracle.jdbc.OracleDriver</td>
</tr>
<tr>
<td></td>
<td>- SQLServer: weblogic.jdbc.sqlserver.SQLServerDriver</td>
</tr>
<tr>
<td>Database.IOP_datasource.URL</td>
<td>Connection string for the Integrated Operational Planning server to connect to the database server</td>
</tr>
<tr>
<td>Database.IOP_datasource.User= db_username</td>
<td>db_username is the name of the user who has access to the database</td>
</tr>
<tr>
<td>Database.IOP_datasource.Password = db_password</td>
<td>db_password is the password of the user who has access to the database</td>
</tr>
</tbody>
</table>

### Security Settings

**Table 5  Security Settings and Descriptions**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security.SecureKey=arbitrary_key</td>
<td>arbitrary_key is a word used as a key to encrypt all the passwords. It can be any combination of numbers, letters, and special characters.</td>
</tr>
<tr>
<td>Security.Keystore.File=custom jks file with appropriate certification</td>
<td>A key database file that contains both public keys and private keys. Public keys are stored as signer certificates, and private keys are stored in the personal certificates.</td>
</tr>
<tr>
<td>Setting</td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Security.SSLSocketFactory.Enabled=true</td>
<td>Uses custom SSL sockets when running outbound SSL connections, which allows custom behavior and security checks. Defaults to true. If false, you must configure the java.net.security settings as appropriate with the underlying application server.</td>
</tr>
<tr>
<td>Security.SSLSocketFactory.AllowUntrustedServers=true</td>
<td>Allows outbound SSL connections to servers using an unverified SSL certificate</td>
</tr>
<tr>
<td>Security.SSLSocketFactory.AllowUntrustedClients</td>
<td>Allows inbound SSL connections to servers using an unverified SSL certificate</td>
</tr>
<tr>
<td>Security.HostnameVerifier.Enabled=true</td>
<td>Enable/disable the host name verifier for outbound https connections</td>
</tr>
</tbody>
</table>

### Mail Settings

Table 6  Mail Settings and Descriptions

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail.Enabled</td>
<td>Enable/disable outgoing mail capability (true</td>
</tr>
<tr>
<td>Mail.DefaultUser</td>
<td>Default account used for outgoing and incoming e-mail (both secure and nonsecure)</td>
</tr>
<tr>
<td>Mail.DefaultPassword</td>
<td>User password</td>
</tr>
<tr>
<td>Mail.DefaultHost</td>
<td>Mail hostname</td>
</tr>
<tr>
<td>Mail.DefaultDomain</td>
<td>Domain name for the mail server</td>
</tr>
<tr>
<td>Mail.DefaultSubjectPrefix</td>
<td>Prefixes the subject of outgoing e-mail</td>
</tr>
<tr>
<td>Mail.IOP_mailsession.Transport.Protocol</td>
<td>Outgoing mail protocol (SMTP and SMTPS)</td>
</tr>
<tr>
<td>Mail.IOP_mailsession.Transport.Host=${Mail.DefaultHost}</td>
<td>Takes the value from Mail.DefaultHost, or you can override the setting with a different SMTP hostname</td>
</tr>
<tr>
<td>Mail.IOP_mailsession.Transport.User=${Mail.DefaultUser}</td>
<td>Takes the value from Mail.DefaultHost, or you can override</td>
</tr>
<tr>
<td>Mail.IOP_mailsession.Transport.Password=${Mail.DefaultPassword}</td>
<td>Takes the value from Mail.DefaultHost, or you can override</td>
</tr>
<tr>
<td>Mail.IOP_mailsession.Transport.Port</td>
<td>Port used for Transport protocol</td>
</tr>
<tr>
<td>Mail.IOP_mailsession.Properties= mail.smtp.connectiontimeout=5000;mail.smtp.auth=true</td>
<td>false;mail.smtp.ssl.checkserveridentity=true</td>
</tr>
<tr>
<td>Mail.IOP_mailsession.Store.Protocol</td>
<td>Incoming mail protocol (POP3, POP3S, IMAP, or IMAPS)</td>
</tr>
<tr>
<td>Mail.Reader.Enabled</td>
<td>Enables or disables the mail reader</td>
</tr>
<tr>
<td>Mail.Reader.Folder=INBOX</td>
<td>Reads value from INBOX or sets to a folder name</td>
</tr>
</tbody>
</table>
### Spreadsheet Settings

**Table 7  Spreadsheet Settings and Descriptions**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>excel&lt;contextmenu.editMembers.enabled</td>
<td>Enables or disables editing in the Excel context menu</td>
</tr>
<tr>
<td>error.dir=${interface.home}/errors</td>
<td>Logs the errors in an errors directory</td>
</tr>
<tr>
<td>spreadsheet.display.options.max.formula.length=120</td>
<td>Maximum characters to show a formula in a cell comment</td>
</tr>
<tr>
<td>spreadsheet.max.rows=10000</td>
<td>Maximum rows that a zoom or search can display</td>
</tr>
<tr>
<td>spreadsheet.max.columns=256</td>
<td>Maximum columns that a zoom or search can display</td>
</tr>
<tr>
<td>grid.max.exceptions=50</td>
<td>Maximum rows to show introduced exceptions on scenario impact window</td>
</tr>
<tr>
<td>grid.max.exceptions.fixed=50</td>
<td>Maximum rows to show fixed exceptions on scenario impact window</td>
</tr>
<tr>
<td>grid.max.data.changes=50</td>
<td>Maximum rows on data change displays on impact window</td>
</tr>
</tbody>
</table>

### Logs and Directory Path Settings

**Table 8  Logs and Directory Path Settings and Descriptions**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>file.upload.maxSize=1048576</td>
<td>Maximum size for each uploaded file</td>
</tr>
<tr>
<td>loader.definition.directories= ${interface.home}/custom/loader,${interface.home}/interface/loader,${interface.home}/internal/interface/loader,${interface.home}/manufacturing/loader,${interface.home}/marginplanning/loader</td>
<td>Loader directories</td>
</tr>
<tr>
<td>loader.schema.directory=${interface.home}/etc/xsd/loader</td>
<td>Loader schema directory</td>
</tr>
</tbody>
</table>
### Memory Settings

**Table 9  Memory Settings and Descriptions**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
</table>
| Cache.BlockHeaderCache.Size=2000             | Sets the cache size for the number of blocks and headers. Make the header size and data the cache size the same.  
The block size depends on the number of measures and the number of time members.  
Given a set JVM size, assuming 30 measures and 100 time members:  
- 1 GB, use size of 2000  
- 2 GB, use size of 4000  
- 4 GB, use size of 8000 |
| Cache.BlocksInSession.Size                   | The number of blocks in user sessions. The default is 1000.                  |
| Cache.RowSourceDimensionMemberCache.Size     | The default is 2000, but set it to equal the size of the rowsource driven by the dimension size (BOM dimension). For example, set the size to the number of members in that dimension. If there is more than one rowsource-driven dimension, set it to the maximum value among those dimension sizes. |

### Client Settings

**Table 10  Client Settings and Descriptions**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>compare.scenarios.maxCount=5</td>
<td>Maximum limit for scenarios comparison</td>
</tr>
<tr>
<td>merge.scenarios.maxCount=5</td>
<td>Maximum limit for scenarios merging</td>
</tr>
<tr>
<td>navigation.forecast.enabled=true</td>
<td>Show/do not show Statistical Forecasts(true</td>
</tr>
<tr>
<td>Setting</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>navigation.forecast.overrides.</td>
<td>Enable/disable overriding Statistical forecast rules</td>
</tr>
<tr>
<td>enabled=true</td>
<td></td>
</tr>
<tr>
<td>navigation.forecast.rules.</td>
<td>Enable/Disable statistical forecast rules</td>
</tr>
<tr>
<td>enabled=true</td>
<td></td>
</tr>
<tr>
<td>navigation.scriptExecution.</td>
<td>Show/do not show script templates (true</td>
</tr>
<tr>
<td>enabled=true</td>
<td></td>
</tr>
<tr>
<td>SystemRS.show=false</td>
<td>Show/do not show system row sources in the Administrator Workbench, on the</td>
</tr>
<tr>
<td></td>
<td>Model tab user interface (true</td>
</tr>
</tbody>
</table>
To migrate data from Integrated Operational Planning 11.1.2.0 to Integrated Operational Planning 11.1.2.1:

1. To create a custom and export folder in `INSTALL_ROOT_11.1.2.0`, on the 11.1.2.0 server, run:
   - Windows:
     `INSTALL_ROOT_11.1.2.0\bin\preparemigration.bat`
   - Linux:
     `INSTALL_ROOT_11.1.2.0/bin/preparemigration.sh`

2. Create a new directory `INSTALL_ROOT/custom` and copy the contents of `INSTALL_ROOT/samples/sample/*` to `INSTALL_ROOT/custom`.

3. To create the migration scripts in `INSTALL_ROOT/custom/bin`, use the sample migration scripts in `INSTALL_ROOT/samples/sample/bin` directory from 11.1.2.1 as a reference to update your scripts.

4. If `importmodel_iop_export.isa` does not exist in `INSTALL_ROOT/custom/bin`, perform the following:
   a. In Release 11.1.2.1, locate the following file from Release 11.1.2.1 model:
      `importmodel_export.isa`.
   b. Create a backup, and then rename it to:
      `importmodel_iop_export.isa`.

5. Copy the contents of `INSTALL_ROOT/export` from your Release 11.1.2.0 directory to your 11.1.2.1 directory.

6. Copy the contents of `INSTALL_ROOT/custom` from your Release 11.1.2.0 directory to your 11.1.2.1 directory with the exception of the following files:
   
   `INSTALL_ROOT/custom/bin`  
   `custom/build.xml`  
   `custom/model/acis.xml` (Copy `security_filters.xml`)

7. Copy the `*_export.isa` files from Release 11.1.2.0:
   
   `INSTALL_ROOT/custom/bin`
to Release 11.1.2.1:

`INSTALL_ROOT/custom/bin`

8  Start WebLogic Admin Server.

9  Start Shared Services.

10 Manually add users from Release 11.1.2.0 to Shared Services 11.1.2.1.

11 Run `createIOPinstance`, `isreset`, and start the Integrated Operational Planning server.

12 Run `migrate`:

   Windows:
   ```
   migrate.bat -u IOP_ADMIN_USER -p IOP_ADMIN_PASSWORD
   ```

   Linux:
   ```
   migrate.sh -u IOP_ADMIN_USER -p IOP_ADMIN_PASSWORD
   ```

   where `IOP_ADMIN_USER` is a Shared Services user with the Integrated Operational Planning administrator provision and `IOP_ADMIN_PASSWORD` is the password of `IOP_ADMIN_USER`.

13 Log on to the application from your Web browser by connecting to the following URL:

   ```
   http://MYHOST.domain.com:PORT/interlace
   ```

   where `MYHOST` and `PORT` represent the host name and port number for the server.
To migrate data from Integrated Operational Planning 4.0.x to Integrated Operational Planning 11.1.2.1:

1. To create a custom and export folder in INSTALL_ROOT_4.0.x on the 4.0.x server, run:
   
   Windows:
   
   INSTALL_ROOT_4.0.x\bin\preparemigration.bat

   Linux:
   
   INSTALL_ROOT_4.0.x/bin/preparemigration.sh

2. Create a new directory INSTALL_ROOT/custom and copy the contents of INSTALL_ROOT/samples/sample/* to INSTALL_ROOT/custom.

3. To create the migration scripts in INSTALL_ROOT/custom/bin, use the sample migration scripts in INSTALL_ROOT/samples/sample/bin directory from 11.1.2.1 as a reference to update your scripts.

4. If importmodel_iop_export.isa does not exist in
   
   INSTALL_ROOT/custom/bin,

   perform the following:

   a. In Release 11.1.2.1, locate the following file from Release 11.1.2.1 model:
      
      importmodel_export.isa.

   b. Create a backup, and then rename it to:
      
      importmodel_iop_export.isa.

5. Copy the contents of INSTALL_ROOT/export from your Release 4.0.x directory to your 11.1.2.1 directory.

6. Copy the contents of INSTALL_ROOT/custom from your Release 4.0.x directory to your 11.1.2.1 directory with the exception of the following files:
   
   INSTALL_ROOT/custom/bin
   custom/build.xml
   custom/model/acis.xml (Copy security_filters.xml)
   custom/data/model-data.xls

7. Copy the *_export.isa files from Release 4.0.x:
   
   INSTALL_ROOT/custom/bin
to Release 11.1.2.1:

```
INSTALL_ROOT/custom/bin
```

8 To convert the exported Release 4.0.x XML files compatible with the 11.1.2.1 XML files for the migration, at the command prompt in `INSTALL_ROOT_11.1.2.1`, run:

**Windows:**

Run `setenv.bat` and then Run `converter.bat`

**Linux:**

Run `setenv.sh` and then Run `converter.sh`

9 Start WebLogic Admin Server.

10 Start Shared Services.

11 Manually add users from Release 4.0.x to Shared Services 11.1.2.1.

12 Run `createIOPinstance`, `isreset`, and start the Integrated Operational Planning server.

13 Run `migrate`:

**Windows:**

`migrate.bat -u IOP_ADMIN_USER -p IOP_ADMIN_PASSWORD`

**Linux:**

`migrate.sh -u IOP_ADMIN_USER -p IOP_ADMIN_PASSWORD`

where `IOP_ADMIN_USER` is a Shared Services user with the Integrated Operational Planning administrator provision and `IOP_ADMIN_PASSWORD` is the password of `IOP_ADMIN_USER`.

14 Log on to the application from your Web browser by connecting to the following URL:

```
http://MYHOST.domain.com:PORT/interlace
```

where `MYHOST` and `PORT` represent the host name and port number for the server.
Overview

Integrated Operational Planning, with EPM System Release 11.1.2.1, does not integrate with Oracle Business Intelligence Enterprise Edition 10.1.3.4.1. You must install Oracle BI EE with EPM System 11.1.1.3 and Integrated Operational Planning with EPM System 11.1.2.1 as shown in figure 1:
**Prerequisites**

Install and configure the following software:

- Oracle Internet Directory (OID) server on any one of the machines
- EPM System 11.1.2.1 on a separate machine
- Integrated Operational Planning with EPM System 11.1.2.1
- EPM System 11.1.1.3 on a separate machine from EPM System 11.1.2.1
- Oracle BI EE 10.1.3.4 on a machine where EPM System 11.1.1.3 is installed, or on a separate machine

**Configuring User-Defined Directories**

**Note:** Take the following steps for both EPM System releases.

- To configure user defined directories:
  1. Ensure that the following software is running:
     - EPM System and Foundation Services
1. Oracle Internet Directory server


3. Select the Administrator tab, and then select the Configure User Directories tab.

4. Click **New**. Select **Lightweight Directory Access Protocol (LDAP)** and click **Next**.

5. In the Server Information window, enter the parameters for OID:
   - **Directory Server**: Oracle Internet Directory
   - **Name**: UDOID
   - **Host Name**: HOST_NAME
   - **Port**: 389
   - **SSL Enabled**: Clear check box
   - **Base DN**: dc=OID_HIERARCHY_NAME, dc=com
   - **ID Attribute**: orclguid (default)
   - **Maximum Size**: 0
   - **Trusted**: Select
   - **Anonymous Bind**: Clear check box
   - **User DN**: cn=orcladmin, cn=users, dc=OID_HIERARCHY_NAME, dc=com
   - **Password**: PASSWORD

6. Click **Next**.

7. In the User Configuration window, enter the OID user ID as uid=USERID, and then click **Auto Configure**.

8. Verify that the values are populated correctly:
   - **User RDN**: cn=Users
   - **Login Attribute**: uid
   - **First Name Attribute**: FIRST_NAME
   - **Last Name Attribute**: LAST_NAME
   - **Email Attribute**: mail
   - **Object Class**: groupOfUniqueNames?uniquememberorclGroup

9. Click **Next**.

10. In the Group Configuration window, enter the unique identifier for a group; for example: cn=OCS_PORTAL_USERS, and then click **Auto Configure** to detect the group configuration.

11. Verify that the values are populated correctly:
   - **Group RDN**: cn=groups
   - **Name Attribute**: cn
   - **Object Class**: blank

12. Click **Save**. The following message is displayed, “Directory Name has been successfully configured”. 
13 Click OK.
14 Click Save, and then click OK.
15 Restart Foundation Services.
16 Log on to Shared Services Console at: http://HOSTNAME:28080/interop.
17 Verify that the added directory and OID users are listed.
18 Complete the User Defined Directories configuration on both EPM System releases.
19 Provision the users in Shared Services 11.1.2.1 for Oracle Integrated Operational Planning, Fusion Edition roles.

Registering Oracle BI EE with EPM System 11.1.2.1

To register Oracle BI EE with EPM System 11.1.2.1:

1 Ensure: EPM System 11.1.2.1 is installed and Foundation Services is running.
2 Update the Oracle's Hyperion Shared Services Registry 11.1.2 with information for Oracle BI EE and Oracle Business Intelligence Publisher. To simplify making updates to the Shared Services Registry, review and edit the biee.xml and bip.xml templates located at EPM_ORACLE_HOME/common/config/11.1.2.1/resources/bi
3 Create a directory, MIDDLEWARE_HOME/user_projects/epmsystem1/temp, and move the edited templates to this location.
4 Find the yourhostname string in both the files (biee.xml, bip.xml) and replace yourhostname with the computer name where Oracle BI EE is installed.
5 For each file that you edited, run the following command:
   Windows:
   epmsys_registry.bat createcomponenthierarchy ../temp/TEMPLATE_NAME
   Linux:
   epmsys_registry.sh createcomponenthierarchy ../temp/TEMPLATE_NAME
6 Run Oracle's Hyperion Enterprise Performance Management System Configurator and select the Foundation Services Configure Web Server task.
7 Restart Foundation Services Web application and the Web server.

Integrating BI Publisher Release 10.1.3.4.1 with Shared Services 11.1.1.3

To integrate BI Publisher Release 10.1.3.4.1 with Shared Services 11.1.1.3:

1 Ensure that the following are running:
2 Ensure that the Oracle Enterprise Performance Management Workspace, Fusion Edition Registry Properties file is accessible by BI Publisher.

BI Publisher uses the Registry properties file (reg.properties) that is created in the EPM_ORACLE_HOME directory to derive values for registration with EPM Workspace. This file must be on the same computer as the BI Publisher server application.

3 Perform one of the following steps:

- If you installed EPM Workspace on the same computer as BI Publisher, install EPM System Configurator reg.properties in the following location:
  
  EPM_ORACLE_HOME\common\config\9.5.0.0\reg.properties

- If you did not install EPM Workspace and BI Publisher on the same computer, copy reg.properties from the EPM Workspace machine to the BI Publisher machine, as follows:

  a. Create the required directory structure on the computer where BI Publisher is installed. The directory structure must mimic the structure of the Hyperion home directory where reg.properties is located. The directory structure must be:

     HYPERION_HOME\common\config\9.5.0.0\

     C:\Programs\Oracle\Hyperion\common\config\9.5.0.0\

  b. Copy reg.properties to the 9.5.0.0 directory.

     C:\Programs\Oracle\Hyperion\common\config\9.5.0.0\reg.properties\

  c. Update the hosts file located on the computer where you installed BI Publisher with the host name and IP address of the Shared Services server:

     - Windows:

       SYSTEM_ROOT\system32\drivers\...\hosts

     - Linux and UNIX:

       .../hosts

  d. Create a BI Publisher Local Superuser. For details, see “Defining a Local Superuser” on page 52.
Defining a Local Superuser

BI Publisher allows you to define an administration Superuser. Using the Superuser credentials, you can directly access the BI Publisher server administrative functions without logging in through the defined security model. Set up this Superuser to ensure access to all administrative functions in case of problems with the current security setup.

To define a local superuser:

1. Select the Admin tab.
2. In Security Center, select Security Configuration.
3. Under Local Superuser, select the box and enter the credentials for the Superuser.

See “Defining a Local Superuser” in the Oracle Business Intelligence Publisher Administrator’s and Developer’s Guide.

Configuring BI Publisher with EPM Workspace

To configure BI Publisher with EPM Workspace:

1. Register BI Publisher with Shared Services Registry:
   a. Log in to BI Publisher with Administrator rights.
   b. Navigate to the BI Publisher Administration page by selecting the Administrator tab.
   c. In Integration, click the EPM Workspace and Shared Services link to launch the configuration page.
   d. In Database Connection for EPM Workspace, enter the Hyperion home location where reg.properties is located. (You must enter only the location of the Hyperion Home, not the full path to the reg.properties file.)

      For example: C:\Programs\Oracle\Hyperion

      The reg.properties file must be located on the same computer as the BI Publisher server application. See the “Prerequisites for Integration with EPM Workspace” section in the Oracle Business Intelligence Publisher Administrator’s and Developer’s Guide.

   e. Click Load Properties. Doing so populates the following text boxes based on the values of reg.properties that you pointed to in step 1.d:

      • JDBC Connection String
      • Database Username
      • Database Driver Class

   f. The text boxes in the EPM Workspace Registration region are defaulted from the servlet context. To run BI Publisher in both SSL and non-SSL modes, update these text boxes; or, if you are using a load balancer, enter the server information for the load balancer:

      • BI Publisher Port
BI Publisher SSL Port
BI Publisher URL
BI Publisher SSL URL
EPM Workspace Application Server Type: Oracle Application Server 10g

In the Shared Services Registry Shared Services box, enter the following text boxes that describe the Shared Services installation:

- **Shared Services Server:** Name of the computer where the Shared Services server is installed.
- **Shared Services Port:** Shared Services server port number on which the database listens.
- **Shared Services Administrator User name and password:** The name of the database user.

**Caution!** You must provision the Shared Services Administrator that you specify here with the BI Publisher Administrator role. Perform this step as part of Provision Users in the EPM Workspace procedure. See “Provision Users in EPM Workspace” in the Oracle Business Intelligence Publisher Administrator's and Developer’s Guide.

- **Select Use Hyperion CSS Security Model upon registration.**

Doing so automatically changes BI Publisher’s security model to the Hyperion Common Shared Services security model upon restart. The change also is reflected on the BI Publisher Security Configuration page. Integration with EPM Workspace requires using the Hyperion Common Shared Services security model.

**Caution!** Before making changes that affect security, ensure that you have set up a BI Publisher Local Superuser to ensure access to BI Publisher regardless of your selected security configuration. See “Defining a Local Superuser” on page 52.

**Note:** If you do not select the check box here, you can manually change the security model from the BI Publisher Security Configuration page after successfully registering and restarting the BI Publisher server application. If you did not complete the registration, the Hyperion Common Shared Services selection will not be available from the BI Publisher Security Configuration page. Performing this step manually requires an additional restart of the BI Publisher server to make the changes to the Security Configuration page effective.

2 **Click Register.**

3 **Restart the BI Publisher server application.**
Configure the EPM Workspace Web Server

To configure the Web server using the EPM System Configurator:

1. Launch the EPM System Configurator.
2. Go to the Select the products to configure, then select Foundation Services, then select EPM Workspace, and then select Web Server Configuration.
3. Click Next.
4. Enter the following text boxes:
   - BI Publisher
   - Host
   - Port
   - Context root
5. Select the box for the BI Publisher row and the boxes for all products that you need to configure with the Web server.
6. Click Next.

Provision BI Publisher Users in EPM Workspace

To provision BI Publisher users in EPM Workspace:

2. In the logon window, enter the same Administrator user name and password that you entered in the BI Publisher Admin page for the Shared Services Registry.
3. Locate the Shared Services node on which BI Publisher is registered.
4. Navigate to User Directories then Native Directory, and then Groups.
5. Query for the Group to which you want to grant BI Publisher roles; or create a group (In the tree, right-click Groups).
7. From the right-click menu, select Provision.
8. From the Available Roles list, expand the heading for BI Publisher, then BI Publisher Enterprise, to see the list of available BI Publisher roles.
9. Move the desired roles from the Available Roles list to the Selected Roles list.
10. Click Save. A Provision Summary confirms your changes.
12. Enable Hyperion Common Shared Services security in BI Publisher.
Configuring BI Presentation Services with EPM Workspace

Register Oracle BI Presentation Services Components with Shared Services

➤ Register Oracle BI Presentation Services Components with the Shared Services Registry:

1 Log in to Oracle BI EE.
2 Select Settings, and then Administration.
3 Click Manage EPM Workspace Connection.
4 Enter or edit the following data:

- **Oracle BI Presentation Services Host**: Host machine for the current instance of Oracle Business Intelligence. You can specify the host name of another Oracle Business Intelligence instance that you want to integrate with EPM Workspace.

- **Port**: Non-Secure Sockets Layer port number for this instance of Oracle Business Intelligence.

- **In SSL Port**: Secure Sockets Layer port number for Oracle Business Intelligence.
   To use the Secure Sockets Layer port rather than the non-Secure Sockets Layer port, select Enable SSL beside the SSL port number.

- **Context Path**: The virtual path that follows the host name in the URL for Oracle Business Intelligence. For example, if the URL is the following: http://myserver.com/analytics, then the Context Path is analytics.

Select **Application Server Type**.

- **Description**: Connection description. This description is not displayed elsewhere in Oracle Business Intelligence or in EPM Workspace.

- **Registry Properties File**: Select one of the following values to indicate which Registry Properties file to use:
  - Installed Hyperion Home: If the computer on which this instance of Oracle Business Intelligence is installed also contains an EPM Workspace installation, then the HYPERION_HOME environment variable is already defined. The Registry Properties file for that Hyperion instance will be used (default setting).
  - Generate File: The following text boxes are displayed:
    - JDBC URL: Enter the URL to connect to the Shared Services Registry database. If you are copying the JDBC URL from an existing Registry Properties file, then ensure that you remove the “\” character in the string. The “\” character is used to escape certain special characters.
    - JDBC Driver: Enter the driver to connect to the Shared Services Registry database.
- User name: Enter the user name to connect to the Shared Services Registry database.
- Password: Enter the password to connect to the Shared Services Registry database.

For more information on these parameters, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

- **Copy File:** When you select to copy an existing Registry Properties file, the **Source File Path** text box is displayed. Enter the absolute path of the file that you want to copy. The Registry Properties file is named `reg.properties`. If you copy or generate `reg.properties`, it is located in the following directory: `OracleBIData/web/hyperion/common/config/9.5.0.0`.

At any time in the process before you click **Register**, click **Finished** to cancel the registration process and return to the previous page.

5. Click **Register** to begin the registration process, which might take several minutes. You will see status messages and error messages displayed above the Register.

6. Log out of both Oracle Business Intelligence and EPM Workspace and back in to ensure that all changes have taken effect.

---

**Specifying the External Login for Single Sign-On with EPM Workspace**

Add the following xml Auth node inside `<ServerInstance>` node of `E:\OracleBI\web\config\instanceconfig.xml`:

```xml
<Auth>
  <ExternalLogon enabled="true" logonPageAllowed="true">
    <ParamList>
      <Param name="UID" source="url" nameInSource="sso_token"/>
      <Param name="PWD" source="constant" value="obips.hss.ssotoken"/>
    </ParamList>
  </ExternalLogon>
</Auth>
```

---

**Configuring JavaHost to Enable the Hyperion Common Security System Authenticator**

- To configure JavaHost for authentication:

1. On the computer on which Oracle BI Presentation Services is installed, open `config.xml` for editing from the following directory: `OracleBI\web\javahost\config`

2. Uncomment the `<OBISAuthenticatorProxy>` element.

3. Modify the values for the following elements:
   - `cssURL`: The URL of the Common Security System (CSS) configuration file.
Specifying the Hyperion_Home Environment Variable

If you set the `useCSSURL` attribute to `no` when you configure JavaHost, then specify the `HYPERION_HOME` environment variable for JavaHost.

1. Specify the environment variable as described in these steps:

   1. On the machine on which JavaHost is installed, create the `hss\common\config\9.5.0.0` directory in the JavaHost configuration directory.
   2. Copy the `reg.properties` file to the new directory.
   3. Create the `hss\common\config\9.5.0.0\resources\registry` directory in the JavaHost configuration directory.
   4. Copy the `RegistryLogger.properties` file from the EPM Workspace installation to the new directory.
   5. Modify the `HYPERION_HOME` environment variable to have a value of `JAVAHOST_CONFIGURATION_DIRECTORY\hss>`

   - On a Windows system, set this variable by adding XML code such as the following to the `instanceconfig.xml` file:
     
     ```xml
     <JavaHost>
     <JVMOptions>-DHYPERION_HOME=C:/OracleBI/web/javahost/config/hss</JVMOptions>
     </JavaHost>
     ```

   - On a UNIX system, set the variable using the `OracleBI/web/javahost/bin/run.sh` script, as shown in the following example:

     ```bash
     JAVAOPTIONS="-Xms128M -Xmx256M -Djava.awt.headless=true -Djava.util.logging.config.file=${SawJavaHostDir}/config/logconfig.txt -DHYPERION_HOME=${SawJavaHostDir}/config/hss"
     ```
Configuring the Oracle BI EE Repository to Use a Custom Authenticator

In the Oracle BI EE Administrator Tool, open the appropriate Oracle BI EE repository and complete the following steps to add a custom authenticator to it:

1. From the Manage menu, select Security.
2. Right-click and select New Custom Authenticator.
3. Click Browse to specify the following value for the Authenticator plug-in file:
   OracleBI\web\bin\sawobisauthenticatorproxy3r.dll
4. Set Name to a descriptive value for this authenticator and accept the default values for Cache persistence time and Number of cache entries.
5. Complete the following steps to configure the authentication initialization blocks for this authenticator:
   a. From the Manage menu, select Variables.
   b. In Variable Manager, right-click and select New Initialization Block.
   c. In the Session Variable Initialization Block dialog box, name the block Hyperion.
   d. In the Session Variable Initialization Block dialog box, click Edit Data Source and select the custom authenticator that you created in step 1 on page 58 to step 4 on page 58.
   e. In the Session Variable Initialization Block Data Source dialog box, click Edit Data Target.
   f. In the Session Variable Initialization Block Variable Target dialog box, create three new session variables with the following names, all in uppercase letters: USER, GROUP, and DISPLAYNAME.
   g. Click OK until all dialog boxes are closed.
   h. Save your changes to the repository file.
6. If the Oracle BI EE server and Java host are running on the same computer, then you have finished configuring the repository. If they are running on different computers, then perform the following steps:
   a. On the computer on which the Oracle BI EE server is running, open the following file for editing, or create it:
      OracleBIData\web\config\instanceconfig.xml
   b. Add the following elements to the file:
      <WebConfig>
      <ServerInstance>
      <JavaHostProxy address="host-name"/>
      </ServerInstance>
      <WebConfig>
   c. Save the changes and close the file.

To verify the Web server configuration, restart the Web server and the Web Application server that is running BI Presentation Services. Enter a URL in the following form into a new browser window:

http://WEBSERVER_HOST_NAME:WEBSERVER_PORT_NUMBER/analytics

Note: If you do not see the login page, return to the previous step and make corrections.

To provision Shared Services users in Oracle BI EE Presentation Services:

a. Administrators can create groups in Oracle BI Presentation Services and assign users to these groups. Such groups can be granted access to various components, such as Oracle BI Interactive Dashboards.

b. To provision Shared Services users in these groups, create corresponding groups in Shared Services. For example, if Oracle BI Presentation Services has a group called “Sales,” create the same group “Sales” in Shared Services and add the users to this group. The Shared Services users now belong to the “Sales” group in Oracle BI Presentation Services.

c. Similarly for provisioning users as Administrators in Oracle BI Presentation Services, create the Presentation Services Administrators group in Shared Services and add Oracle's Hyperion® Shared Services users to this group.

Creating Oracle BI EE Repository with Integrated Operational Planning

To create Oracle BI EE Repository with Integrated Operational Planning:

1 Start the Interface server.

2 Ensure that the following services are started:
   - Oracle BI EE Java Host
   - Oracle BI EE Presentation
   - Oracle BI EE Server
   - OC4J server

3 Open Oracle BI EE Administration Tool

4 Click File, then New, and then enter the name of the repository file. This file will contain repository details.

5 Enter the following details:
   - Provider Type: Analysis Services 2000
   - User name: admin
   - Password: welcome1
Click OK, select any cube as a source, and then click Import. Select Forecast cube. Currently the tool does not allow multiple hierarchies in Dimension. In this case, the fiscal dimension has multiple hierarchies. Delete the Fiscal Quarter hierarchy from the Physical section.

Drag the Forecast file hierarchy on to the Business Model & Mapping and Presentation window.

Click Save, and then click OK. The Consistency Manager window is displayed. Close it.

Open NQSConfig.INI under OBIEE_INSTALLED_PATH/server/config and add

```
Star = REPOSITORY_NAME.rpd, DEFAULT;
```

See step 4 on page 59.

Open Welcome to Oracle BI EE.

The Oracle BI EE window is displayed.

Click Oracle BI Interactive Dashboards.

The Oracle BI EE Login page is displayed.

Log on with Administrator rights. Leave the password blank and click Login.

On the right corner of the window, click Answers.

In Subject, click Forecast#1.

OLAP objects are listed on the left.

Click the Criteria tab.

**Connecting Oracle BI EE Analytics and BI Publisher from Integrated Operational Planning**

The following links are shown on the home page:

- Oracle Business Intelligence Enterprise Edition Analytics Console
- Oracle Business Intelligence Publisher Console

**Enabling Report Schema (Oracle BI EE) by Default**

To enable Report Schema (Oracle BI EE) by Default:

1. Add the below content to personal_config.properties/site.properties

````
# Report database information
Database.IOP_report_datasource.Name=IOP_report_${System.InstanceName}_datasource
Database.IOP_report_datasource.DriverClassName=${Database.IOP_datasource.DriverClassName}
Database.IOP_report_datasource.URL=${Database.IOP_datasource.URL}
Database.IOP_report_datasource.User=interlacerpt
Database.IOP_report_datasource.Password=password
Database.IOP_report_datasource.Properties=${Database.IOP_datasource.Properties}
```
Database.IOP_report_datasource.TestTable=${Database.IOP_datasource.TestTable}

ReportSchema.Enabled=true
ReportSchema.ViewPrefix=REP

2 Create the database user with credential interlacerept/ password as specified in personal_config.properties.

3 Run the isreset command.

4 Do one of the following:
   - Run bootstrap.bat for Windows, or bootstrap.bat for Linux, to populate report schema.
   - To drop and repopulate the report schema, execute generatereportschema.bat for Windows or generatereportschema.sh for Linux.