

HP IT Executive Scorecard

For the Windows® operating system

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Administrator Guide

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Getting Started with General Admin

General Admin includes the administration of the following applications and functions:

- ["Login" \(on page 14\)](#): Provides login, password and tab access information.
- ["General Information" \(on page 18\)](#): Provides general back-end administration information for IT Executive Scorecard and Financial Planning and Analysis.
- ["Perform Administration Tasks for Users and Roles" \(on page 27\)](#): Provides information regarding the Admin tab's User, Role, and Resource Management functions.
- ["Perform Administration Tasks for Foundation" \(on page 54\)](#): Provides Foundation configuration information.
- ["Perform Administration Tasks for Scorecard Settings" \(on page 60\)](#): Provides IT Executive Scorecard configuration information.
- ["Perform the Maintenance of Executive Scorecard" \(on page 68\)](#): Provides IT Executive Scorecard maintenance and operation information.
- ["Create and Manage Contexts Using Context Designer and Upload Data Using the Import Wizard" \(on page 78\)](#): Provides information on Context (universe) creation and management with Context Designer.
- ["Import or Export Trees and KPIs" \(on page 98\)](#): Provides KPI tree information for Executive Scorecard.
- ["Import or Export Out-of-the-box Pages, Components, and Events" \(on page 111\)](#): Provides page, component and event import information for Executive Scorecard.
- ["Localize and Globalize Executive Scorecard" \(on page 114\)](#): Provides language and localization information for Executive Scorecard.
- ["Configure Data Warehouse Settings" \(on page 132\)](#): Provides Data Warehouse configuration information.
- ["Integrate the Data Sources" \(on page 142\)](#): Provides sample data source integration information.
- ["Perform the Back-End Maintenance of the Data Warehouse" \(on page 181\)](#): Provides information for Data Warehouse maintenance and ETL monitoring and function.
- ["Perform the Maintenance of Financial Planning and Analysis" \(on page 129\)](#): Provides Financial Planning and Analysis maintenance and operation information.

Login

You access the IT Executive Scorecard application using a supported Web browser, from any computer with a network connection (intranet or Internet) to the servers. Currently Microsoft Internet Explorer 9 is supported. It is recommended to restore your browser settings to default.

The level of access granted to a user depends on the user's permissions. For details, see ["Manage Users" \(on page 27\)](#).

You can initially access the Admin tab through the IT Executive Scorecard login page, using your administrator username and password, created during installation.

Access the login page as follows:

- **http://<full resolution host>:<port>/xs**. If you are using a non-default port you must update it in the URL. For details, see ["Web Server" \(on page 25\)](#).
- If you are using a default http port, the port can remain empty.

The Admin tab is configured by default with Lightweight Single Sign-On (LW-SSO). LW-SSO enables you to log in and automatically have access to LW HP applications, without needing to log into those applications. For details, see ["LW-SSO " \(on page 19\)](#).

Access Tabs

You access the following tabs from the main login page:

- IT Executive Scorecard Dashboard
- Finance
- Admin
- Explorer
- Studio

Note: Only users with the required permissions can view specific tabs.

When you have completed your session, it is recommended that you log out to prevent unauthorized entry.

To access the IT Executive Scorecard login page and all tabs:

1. In a Web browser, enter the **http://<server_name>.<domain_name>/XS** URL for the fully qualified machine where XS is installed.
2. Enter the login parameters (login name and password) of a user, and click **Log In**. After a successful login, the user name appears at the top right of the page of the application.
3. Close the original login window once the application has loaded.

4. Click the Admin tab to navigate the admin pages. Only users with the required permissions can view the Admin tab.

Note: To log in for the first time, use your administrator password created during installation.

User Authentication

User authentication depends on your configuration. For details, see ["Users and Authentication when working with or without SAP BusinessObjects and LDAP" \(on page 28\)](#).

Password Conventions

Passwords can be changed in the **User Details** pane of the User Management page. Click **Edit Details** to change a user's password. For details, see ["Manage Users" \(on page 27\)](#).

Note: Depending on your configuration (working with or without SAP BusinessObjects and with or without LDAP), the handling of the password can be different. For details, see ["Users and Authentication when working with or without SAP BusinessObjects and LDAP" \(on page 28\)](#).

A password must contain the following:

- At least 6 characters.
- Characters in upper and lower case.
- Must be different from username.

Note:

- Login parameters are case sensitive.
- If a password does not follow the correct conventions then the user is still created in SAP BusinessObjects Enterprise for IT Executive Scorecard or SAP BusinessObjects Enterprise for HP FPA, however the password is not valid and must be changed.

Working with Secure Sockets Layer (SSL) in a Distributed Environment

When you log in to the IT Executive Scorecard application using the **http** or **https** format in a distributed environment, the following scenarios can occur:

1. When you use the **http** format to access the Executive Scorecard application, the authentication transfers you to the Data Warehouse application. A message states that a security certificate is issued. Click the **Continue to this website** link. In the Data Warehouse page, click the Certificate Error button in the browser toolbar. In the Certificate dialog box that opens, click the **View Certificate** link. In the wizard that opens, select the **Place all certificates in the following store**, select the **Trusted Root Certification Authorities** location, and click **OK**. Once you have installed the certificate, and entered your user and password, the Data Warehouse application transfers you back to the Executive Scorecard application.

2. When you use the **http** format to access directly the Data Warehouse application, a message states that a security certificate is issued. Click the **Continue to this website** link. In the Data Warehouse page, click the Certificate Error button in the browser toolbar. In the Certificate dialog box that opens, click the **View Certificate** link. In the wizard that opens, select the **Place all certificates in the following store**, select the **Trusted Root Certification Authorities** location, and click **OK**. Once you have installed the certificate, and entered your user and password, the Data Warehouse application opens.
3. When you use the **https** format to access the Executive Scorecard application, the security certificate issue is displayed. Click the security certificate. In the Certificate dialog box that opens, click the **View Certificate** link. In the wizard that opens, select the **Place all certificates in the following store**, select the **Trusted Root Certification Authorities** location, and click **OK**. Continue running the wizard. This warning message is not displayed again. The Data Warehouse application opens in SSL mode. After performing the log in operation, you can add the Executive Scorecard certificate in the successfully launched Executive Scorecard application page, not in the application page itself. When the **Java security warning** contains the correct publisher (Hewlett-Packard Company) you should accept the **Java security warning** by marking the **Always trust content from this publisher** check box in order for this popup not to be displayed again.
4. When you use the **https** format to access directly the Data Warehouse application, a message states that a security certificate is issued. In the Certificate dialog box that opens, click the **View Certificate** link. In the wizard that opens, select the **Place all certificates in the following store**, select the **Trusted Root Certification Authorities** location, and click **OK**. This warning message is not displayed again. The Data Warehouse application opens in SSL mode. When the **Java security warning** contains the correct publisher (Hewlett-Packard Company) you should accept the **Java security warning** by marking the **Always trust content from this publisher** check box in order for this popup not to be displayed again.

Note: When you use the **https** format and you want to access SAP BusinessObjects Enterprise for IT Executive Scorecard reports, the reports are displayed using the **http** format.

Logout

To logout:

You can log out using one of the following:

- Click **Logout** (in the top right corner of the application). The session closes. To log in again, you must provide the user and password.
- Click **X** (in the top right corner of the application). The session stays alive for one hour. To log in again, you do not have to provide the user and password.

Shared Secret Key

Executive Scorecard functionality requires a connection to SAP BusinessObjects Enterprise for IT Executive Scorecard or SAP BusinessObjects Enterprise for HP FPA through a trusted authentication. In order to configure the trusted authentication policy you must define the shared secret key.

The shared secret key, created in the post-install process, is used by the client and the CMS to create the trusted authentication password. This password is used to establish trust.

Note: To change the shared secret key you must change the key in SAP BusinessObjects Enterprise for IT Executive Scorecard, run the post-install wizard and enter the new shared secret key. For details, see the *IT Executive Scorecard Installation and Configuration Guide*.

General Information

The following sections contain general information pertaining to the administration of Executive Scorecard , Financial Planning and Analysis, and the Data Warehouse.

Start Menu

During the installation, a start menu is added to the settings of the machine on which Executive Scorecard was installed.

Working with Software as a Service (Light XS): The Start menu is not supported.

To access the IT Executive Scorecard start menu that is added to each machine, select **Start > Programs > HP Executive Scorecard**.

The menu includes the following options:

HP Executive Scorecard

Launches IT Executive Scorecard.

Administration Menu

The IT Executive Scorecard Administration menu enables you to access the following options:

Sub-option	Description
Configuration Wizard	Starts the post-install Configuration Wizard .
Disable HP Executive Scorecard	Disables the Glassfish Web Server. Users cannot access IT Executive Scorecard.
Enable HP Executive Scorecard	Enables the Glassfish Web Server. Users can access IT Executive Scorecard.
License Renewal	Enables users to renew their IT Executive Scorecard license. Note: After renewing a license, you must Disable HP Executive Scorecard and then Enable HP Executive Scorecard on the Data Warehouse and Executive Scorecard component servers. It is preferable to renew the license on the Executive Scorecard machine.
Uninstall HP Executive	Uninstalls the IT Executive Scorecard on the server.

Sub-option	Description
Scorecard	IT Executive Scorecard is first uninstalled in silent mode and then the uninstall wizard appears.

Documentation Menu

The IT Executive Scorecard Documentation menu enables you to access the following options:

Sub-option	Description
HP Executive Scorecard Deployment Guide	Opens the <i>IT Executive Scorecard Installation and Configuration Guide</i> .
HP Executive Scorecard Documentation Library	Opens the HP Executive Scorecard Documentation Library Help Center in your Web browser.

LW-SSO

HP Lightweight Single Sign-On is a method of access control that enables you to navigate to other HP products that implement LW-SSO without supplying credentials again. A user can log on once and gain access to the resources of HP software systems without being prompted to log on again. The applications inside the configured group of software systems trust the authentication, and there is no need for further authentication when moving from one application to another.

Use the Identity Management Single Sign-On

Identity Management Single Sign-On (IDM-SSO) is a method of access control that enables you to navigate to other HP products without supplying credentials again. A user can log on once and gain access to the resources of HP software systems without being prompted to log on again. The applications inside the configured group of software systems trust the authentication, and there is no need for further authentication when moving from one application to another.

Working with Software as a Service (Light XS): The Identity Management Single Sign-On (IDM-SSO) feature is not supported.

Learn about Identity Management

You implement Identity Management Single Sign-On (IDM-SSO) if you want a more secure connection than that offered by LW-SSO, or if the applications configured outside of Executive Scorecard do not support LW-SSO. The IDM server is monitored by a single center Policy Server, and consists of a User Repository, a Policy Store (both could reside over the same server as the Policy Server), and a Web Server Agent installed over each of the application's web servers communicating with the Policy Server. The IDM server controls users' access to various organizational resources, protecting confidential personal and business information from unauthorized users. For details, see your IDM vendor's documentation.

Executive Scorecard requires the IDM vendor to store user information to render it available as a header on http requests.

Before configuring IDM-SSO in Executive Scorecard, make sure you see your IDM login dialog before the BSM login screen.

If you do not see it, work with your IDM administrator. If the same LDAP was defined in Executive Scorecard as used by IDM, you should be able to authenticate through both the IDM and Executive Scorecard login screens using the same credentials. If not, verify that LDAP settings in Executive Scorecard match those used by IDM. Now you are ready to configure IDM-SSO in Executive Scorecard. If you need help dumping headers in order to determine the correct IDM header to use in configuration, you can return to the Executive Scorecard login screen without closing the session and append **/DumpSession.jsp** to the login URL. Look for your user login ID in the resulting list. Before it should be the header name supplied by IDM. You can verify it using **http://<HPBSM server>/topaz/verifyIDM.jsp** in the same user session. Once it is verified as correct, you should be able to use it in the Authentication Management wizard.

Configure to use IDM-SSO

To use IDM-SSO to authenticate the users of the Executive Scorecard application, proceed as follows:

1. Make sure that IDM is linked to the user repository (LDAP) and that these users are users of SAP BusinessObjects Enterprise for IT Executive Scorecard or SAP BusinessObjects Enterprise for HP FPA.
2. Make sure that at least one user in IDM has an Admin role in Executive Scorecard for troubleshooting purposes.
3. Install the IDM SSO Agent on both the Executive Scorecard Web Server and the Data Warehouse Web Server. You do not need to install it on the SAP BusinessObjects Enterprise Web server.
4. On the IDM server, configure the security by setting the following Uniform Resource Identifiers (URIs) as protected or unprotected resources as indicated below.

- If you have single server configuration, do the following:

Resource	Protected	Unprotected
fndwar	Yes	
bsf	Yes	
uim	Yes	
engine	Yes	
studio-client	Yes	
dashboard-webapp	Yes	
fndwar/rs		Yes
bsf/rest		Yes
dw	Yes	
dw-web	Yes	
integrations	Yes	

- If you have a distributed server configuration, do the following:

Server	Resource	Protected	Unprotected
On the Executive Scorecard server	fndwar	Yes	
	bsf	Yes	
	uim	Yes	
	engine	Yes	
	studio-client	Yes	
	dashboard-webapp	Yes	
	fndwar/rs		Yes
	bsf/rest		Yes
On the Data Warehouse server	fndwar	Yes	
	bsf	Yes	
	uim	Yes	
	dw	Yes	

Server	Resource	Protected	Unprotected
	dw-web	Yes	
	integrations	Yes	
	fndwar/rs		Yes
	bsf/rest		Yes

- For Logoff use the /fndwar/logout.jsp URI on the IDM server.
- Open the Executive Scorecard application. You will need to provide your credentials twice at this stage: once in the IDM login page and once in the Executive Scorecard login page.
- In the Executive Scorecard application, click **Admin > Foundation Settings > Single Sign-On**.
- Select **ID Management Enabled**.
- Enter the name of the IDM header (the header that contains the user login name) in the **Value** field of the **ID Management Header** setting.
- Click **Save**.
- Log out of the Executive Scorecard application and of the IDM application. Log in again with the proper user and check that you need to provide your credentials only once.

Logs

IT Executive Scorecard records the procedures and actions performed by the various components in log files. The log files are usually designed to serve HP Software Support when Executive Scorecard does not perform as expected. The default severity threshold level for log files differs per log, but is generally set to either Warning or Error.

You can view log files with any text editor.

Working with Software as a Service (Light XS): Logs are not supported.

Log File Locations

The following tables list the log files created in an Executive Scorecard implementation by component.

Common Component Log Files

Description	Log Filename	Location
Records all requests processed by the server.	access.log	<Installationdirectory> \agora\webserver\logs
The server error log is the most important log file.	error.log	<Installationdirectory> \agora\webserver\logs

Description	Log Filename	Location
This is the place where Apache httpd sends diagnostic information and records any errors that it encounters when processing requests. It is the first place to look when a problem occurs with starting or operating the Web Server.		
	install.log	<Installationdirectory> \agora\webserver\logs
Contains information about communications between the Web Server and the application server (Glassfish).	jk.log	<Installationdirectory> \agora\webserver\logs
Log records of all secured requests processed by the Web Server.	ssl_request.log	<Installationdirectory> \agora\webserver\logs
Logs the post-install flow. Is useful when the post-install configuration wizard fails.	ConfigWizard.log	<Installationdirectory> \agora\confwizard\log
Logs file parsing tasks during post-install configuration wizard.	FileParser.log	<Installationdirectory> \agora\confwizard\log
Logs application loading and permission enforcement related to the application framework.	applicationfw.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Logs requests for authentication and population of user roles and permissions.	athN.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Logs user management user interface details.	auil.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Logs the usage of SAP BusinessObjects services, including issues locating the SAP BusinessObjects CMS.	bo-services.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
BTO Security Framework (BSF) server side logs authentication information about authn, LW-SSO, and user mng.	bsf.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs

Description	Log Filename	Location
Logs the usage of foundation services.	btoe-services.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Logs SAP BusinessObjects datalayer transactions such as problems with SAP BusinessObject Universes or queries.	datalayer.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Foundation core components log.	foundation.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Hibernate log .	hibernate.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
JVM general log.	jvm.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Licensing logs.	license-services.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Properties table logs.	properties.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
General GlassFish log.	server .log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Settings management logs	settings.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Logs authentication details related to IDM and LW SSO.	sso.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
User Interface mash-up logs.	uim.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
User Management actions log, including problems with communication to SAP BusinessObjects.	userMng.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
MQ Broker service log.	log.txt	<Installationdirectory> \agora\glassfish\glassfish\domains\domain1 \imq\instances\imqbroker_host1\log

Executive Scorecard Log Files

Description	Log filename	Location
Logs all the dashboard's server side logs.	dashboard.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Logs general information for	studio.log	<Installationdirectory>

Description	Log filename	Location
Executive Scorecard Studio, the client module used for tailoring Executive Scorecard.		\agora\glassfish\glassfish\domains\BTOA\logs
Logs general information about the engine, and KPIs.	engine.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs
Provides a summary of calculation cycles, and statistics about KPI engine performance.	engine_statistics.log	<Installationdirectory> \agora\glassfish\glassfish\domains\BTOA\logs

Data Warehouse Log Files

Log files can be accessed under:

- datawarehouse\logs
- C:\<Installationdirectory>\agora\glassfish\glassfish\domains\btoa\logs\server.log

All information in the Data Warehouse log files is automatically sent to the Windows Event Viewer Application log.

To access Data Warehouse log information:

1. On the Windows taskbar, click **Start > Administrative Tasks > Event Viewer**.
2. Expand **Windows Logs**, right-click **Application**, and then click **Filter Current Log**.
3. Select the relevant **Event Levels**, select the relevant **Event Sources**, and then click **OK**.

All the Data Warehouse Event Sources begin with the DWH string.

Web Server

IT Executive Scorecard uses the Apache web server for securing the application and caching static content in order to improve client performance. The web server is installed and configured in the deployment procedure and does not require any changes or maintenance.

The default ports are listed in the *IT Executive Scorecard Support Matrix*. If you use a non default port for the URL, you must enter the application using **http://<host>:<port number>/xs** or **http://<host>:<port number>/dwh**.

Note: These ports can be configured to any other ports in the deployment procedure.

Working with Software as a Service (Light XS): The Apache web server feature is not supported.

Cryptography

The encryption properties files are located in <Installationdirectory>\agora\conf. The path can be determined by setting the **crypt.conf.dir.path** system property to the relevant path. The management database credentials encrypted locally on each server. You must also store all the relevant configuration for decrypting locally.

The following encryption keys are available:

- **Encryption Key:** Single shared key for all servers shared through the database. Stored on each machine locally in the encryption properties files as part of the post-install procedure.
- **Seed Key:** Key that is generated after each post-install procedure. The main encryption key is stored in the seed key.

IT Executive Scorecard Supervisor

The HP IT Executive Scorecard Supervisor monitors whether the Executive Scorecard server processes are up and running.

The Supervisor consists of two elements:

- The management element manages (starts/stops/monitors) the Web Server, MQ Broker, and Glassfish components that are services. The Supervisor manages them in the following order:
 - a. Web Server
 - b. MQ Broker
 - c. Glassfish
- The watchdog element monitors processes. If a process is down, the Supervisor Watchdog tries to start it automatically.

The Supervisor is a service that works on Windows.

Contact [HP Software Support Online](http://www.hp.com/go/hpsoftwaresupport) web site (<http://www.hp.com/go/hpsoftwaresupport>) if the monitor cannot start the Supervisor process.

Perform Administration Tasks for Users and Roles


This section includes the following topics:

Manage Users	27
Manage Roles	39
Manage Resources	48

Manage Users

The User Management page enables you to add and edit users and groups, as well as add and edit their details.

To access:

- Select **Admin > Users and Roles > User Management** to access the User Management page
- In the User Management Page, click  to access the Assign Roles dialog box.

Learn More

Users and Groups

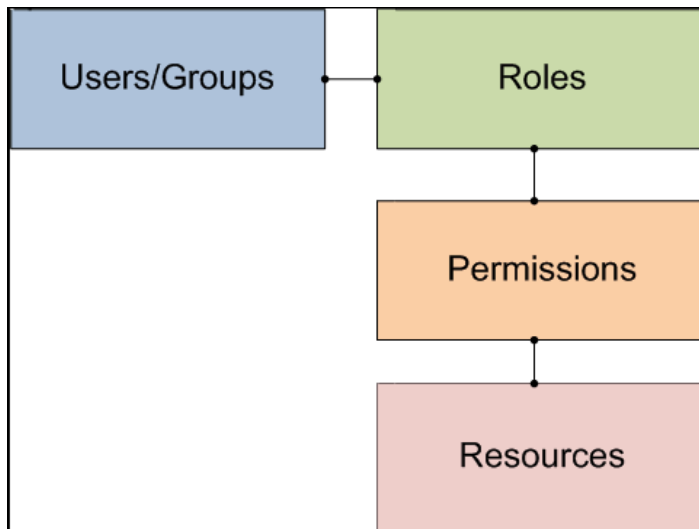
Each user has a list of roles that define their permissions. When you assign a role, that user only has access to specific portions of the program and specific resources that are relevant to their role. You can also define groups of users with the same roles or access rights. When you attach a user or group to a group, the user or group inherits all of the group's roles.

Roles and Permissions

Each role is associated with permissions. Permissions define which actions the user with a specific role can perform according to their responsibilities in the organization. For example, you can create a role that enables its users to create pages.

Diagram

The following diagram illustrates the relationship between users, groups, roles, permissions, and resources in the Admin tab.



Users and Authentication when working with or without SAP BusinessObjects and LDAP

Operation	Working without SAP BusinessObjects and without LDAP	Working with SAP BusinessObjects and without LDAP	Working with SAP BusinessObjects and with LDAP
Manage users (create, remove, update)	In Executive Scorecard, in Admin > Users and Roles .	Users are created in Executive Scorecard, in Admin > Users and Roles Users created in Executive Scorecard are automatically transferred to SAP BusinessObjects. If a user is created in SAP BusinessObjects, it does not appear in the list of users in Executive Scorecard.	Users are created in LDAP. Users created in LDAP are automatically transferred to Executive Scorecard and in SAP BusinessObjects.
Passwords	Passwords can be changed in the User Details pane of the User Management page in Executive Scorecard. Click Edit Details to change a user's password.	Passwords can be changed in the User Details pane of the User Management page in Executive Scorecard. Click Edit Details to change a user's password. Password created in	Passwords are created and stored in LDAP.

Operation	Working without SAP BusinessObjects and without LDAP	Working with SAP BusinessObjects and without LDAP	Working with SAP BusinessObjects and with LDAP
		Executive Scorecard is automatically transferred to SAP BusinessObjects for the relevant user.	
Roles, permissions, and group	In Executive Scorecard, in Admin > Users and Roles .	In Executive Scorecard, in Admin > Users and Roles .	In Executive Scorecard, in Admin > Users and Roles .

Note:

- The format of the LDAP directory must be either Microsoft Active Directory or Sun ONE Directory. It cannot be an arbitrary directory structure.
- When a user is added to LDAP, it is displayed in the Users and Groups tree after you log in to HP IT Executive Scorecard.
- When working with LDAP, you must make sure that LDAP is connected to Executive Scorecard and to SAP BusinessObjects. For details, see ["To perform the connection between LDAP, Executive Scorecard, and SAP BusinessObjects:" \(on page 31\)](#).

Note: Executive Scorecard only supports the LDAP tab with Active Directory as a server type on that tab. Active Directory authentication via the active directory tab is not supported. For details, see ["To make sure you use the LDAP Authentication Option:" \(on page 32\)](#).

Important Information

Users can be managed using either of the following, but not both:

- **Enterprise Users:** Users are created and managed in Executive Scorecard.
- **LDAP Users:** Users are created and managed on your LDAP server which is connected to Executive Scorecard.

It is recommended to define roles and resources prior to defining users. For details, see ["Manage Roles" \(on page 39\)](#).

Tasks

This section includes:

["To search for a user:" \(on page 30\)](#)

["To add a user:" \(on page 30\)](#)

["To add a new group under the root:" \(on page 30\)](#)

["To view permissions and resources for specific users:" \(on page 30\)](#)

["To assign roles to users or groups:" \(on page 30\)](#)

["To connect XS Executive Scorecard to an LDAP server:" \(on page 31\)](#)

["To perform the connection between LDAP, Executive Scorecard, and SAP BusinessObjects:" \(on page 31\)](#)


["To make sure you use the LDAP Authentication Option:" \(on page 32\)](#)

To search for a user:

1. Select **Admin > Users and Roles > User Management**.
2. In the **Search Users** tab, enter the search criteria.
3. Click **Search**. The relevant users are displayed.


To add a user:

Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.

1. Select **Admin > Users and Roles > User Management**.
2. In the **Users & Groups** tab, select the group under which you want to add a user and click **Add User** . The Add user dialog box opens.
3. Enter the relevant details.

To add a new group under the root:

Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.


1. Select **Admin > Users and Roles > User Management**.
2. In the **Users & Groups** tab, click **Add group under the root** .
3. Enter the **Group Name** and **Group Description** and click **OK**. The group is added under the root.

To view permissions and resources for specific users:

1. Select **Admin > Users and Roles > User Management**.
2. Select a user from the **Users & Groups** tab.
3. In the **Roles and Permissions** area, select a role to view the permissions and resources associated with the role.

To assign roles to users or groups:

1. Select **Admin > Users and Roles > User Management**.
2. Select a user or group from the **Users & Groups** tab.

3. In the **Roles and Permissions** area, click **Assign role** . The Assign Roles dialog box opens.
4. Select a role from the **Available Roles** list and use the arrows to move the role to the **Selected Roles** list.
5. Click **OK** to save your selections.

To connect XS Executive Scorecard to an LDAP server:

Note: The format of the LDAP directory must be either Microsoft Active Directory or Sun ONE Directory. It cannot be an arbitrary directory structure.

1. In the Management database, in the SETTINGS_MANAGEMENT table, create a new record with the following information:
 - context: **foundation**
 - name: **fnd.uum.type**
 - value: **ldap**
2. Configure the LDAP connection properties and the structure of the LDAP directory using the properties file located at <installation directory>agora\glassfish\glassfish\domains\BTOA\config\conf\external-ldap.properties.

Note: Only connection properties (such as host, port, LDAP version, user, and password) and user/group base dn can be modified.

3. If SSL is used to access LDAP, certificates must be imported.

To perform the connection between LDAP, Executive Scorecard, and SAP BusinessObjects:

If your configuration includes LDAP, Executive Scorecard, and SAP BusinessObjects you must connect:

- **LDAP and Executive Scorecard.** The connection procedure is described below.
- **LDAP and SAP BusinessObjects.** The connection procedure is explained in the documentation of these products.

Before you can manage the users using LDAP, perform the connection between LDAP and Executive Scorecard:

1. In the Management database, open the SETTINGS_MANAGEMENT table and make sure that it includes:
context=foundation, name=fnd.uum.type, value=ldap
2. Provide the location of LDAP to Executive Scorecard. In the external-ldap.properties file located at <HPXS>\agora\glassfish\glassfish\domains\BTOA\config\conf, enter information about the server where LDAP is installed (host), the user name, and the password used to access LDAP.

3. Define groups and users in LDAP. In the external-ldap.properties file located at **<HPXS>\agora\glassfish\glassfish\domains\BTOA\config\conf**, use the **groupsBase** and **userBase** keys to set the groups and users DN's.

Note:

- Only the connection properties and the user/group base DN can be modified. The structure or attribute name of entries themselves cannot be changed. In addition, the changes must follow Sun One or MS Active directory standards.
- All the regular Active directory user attributes must be present.
- All users/Groups must be created in advance in your LDAP server (by the LDAP administrator), as the Executive Scorecard access to LDAP is read-only.

4. After LDAP integration has been configured, you should be able to login to Executive Scorecard with the LDAP user. However, this user does not have roles and permissions in Executive Scorecard. To assign roles and permissions you must run the following script (it adds the admin role "manually"):
<HPXS ROOT>\agora\glassfish\glassfish\domains\BTOA\config\population\populate-admin.bat <user_name> <user_login_name> <password> where **user_name** and **user_login_name** are the same.

You should now be able to use the user (that now has Admin permissions) to assign all the required permissions to other users.

5. If SSL is used to access LDAP, you must import the relevant certificates.

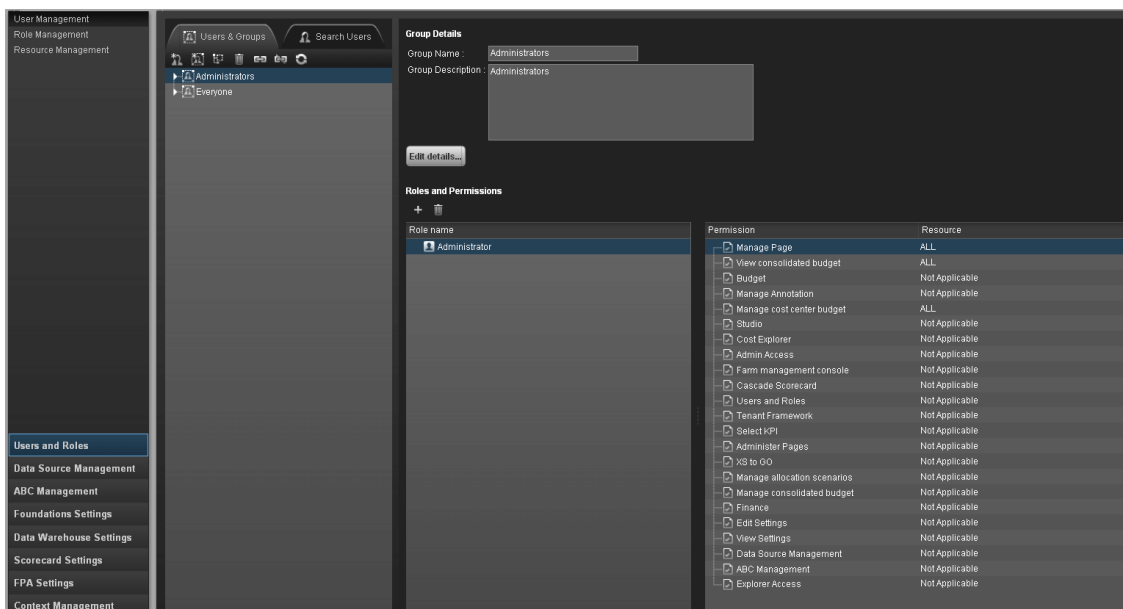
To make sure you use the LDAP Authentication Option:

1. From the Windows Start menu, click Programs > BusinessObjects XI 3.1 > BusinessObject Enterprise > BusinessObjects Enterprise Central Management Console.
2. Log in to the Central Management Console as an administrator.
3. Click **Authentication**, then click the **LDAP** tab.
4. 4. Click **Start LDAP Configuration Wizard**.
5. In the **Add LDAP Host** (hostname: port) field, type your host and port information.
6. Click **Add**.
7. Click **Next**.
8. In the LDAP Server Type drop-down list, select your LDAP server, and click **Next**. This is where you select the type of server you are using: Sun One or Active Directory.
9. In the Base LDAP Distinguished Name field, type the distinguished name, and click **Next**.
10. Type the LDAP host credentials:
 - a. **LDAP Server Administration Credentials:** Enter the name and password for a user account that has rights to administer your LDAP server.

- b. **LDAP Referral Credentials:** Enter the same name and password you entered for LDAP Server Administration Credentials.
11. In the **Maximum Referral Hops** field, type the number of referral hops to limit forwarding the credential request. If you set this field to zero, no referral hops are allowed.
12. Click **Next**.
13. From the Type of SSL authentication drop-down list, select **Basic (no SSL)** and click **Next**.
14. From the **Authentication** drop-down list, select **Basic (no SSO)** and click **Next**.
15. Select the following LDAP options:
 - a. **Create a new account for every added LDAP alias**
 - b. **Create new aliases only when the user logs on**
 - c. **New users are created as named users**
16. Click **Next**.
17. Click **Finish**.

UI Description


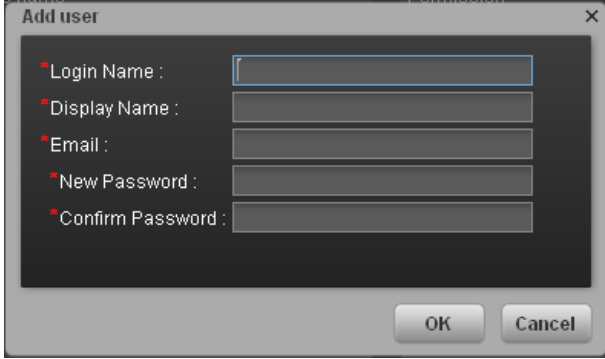


User Management Page


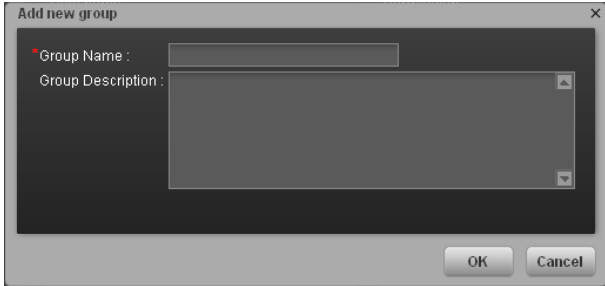



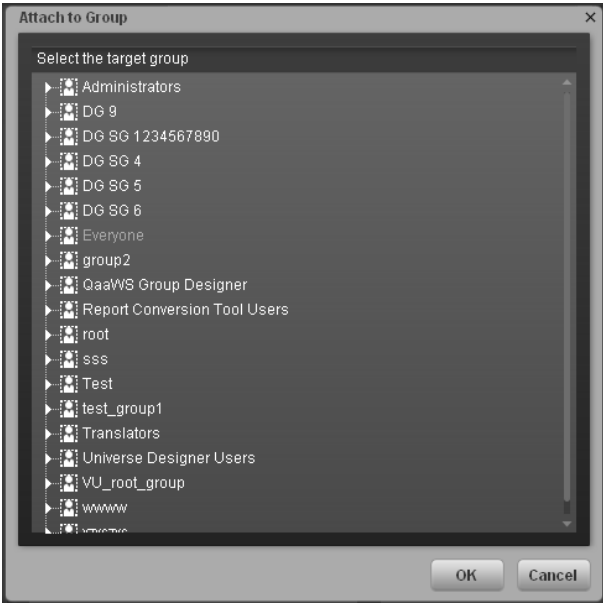


Users & Groups Tab



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Users and Groups tree	A tree containing all of the existing groups and users attached to those

UI Element	Description
	<p>groups.</p> <p>Note: To find users that are not attached to a specific group, but are under the group Everyone, use the Search Users tab. For details, see "Search Users Tab" (on page 37).</p> <p>Note: When a user is added to LDAP, it is displayed in the Users and Groups tree after you log in to HP IT Executive Scorecard. "Search Users Tab" (on page 37)</p>
	<p>Create User. Adds a new user under the selected group. The user inherits the group's roles.</p>  <p>Enter the user's Login Name, Display Name, Email, and New Password and click OK.</p> <p>Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.</p>
	<p>Create group. Creates a new group under a selected existing group. The group inherits the existing group's hierarchy.</p>  <p>Enter the Group Name and Group Description and click OK.</p>

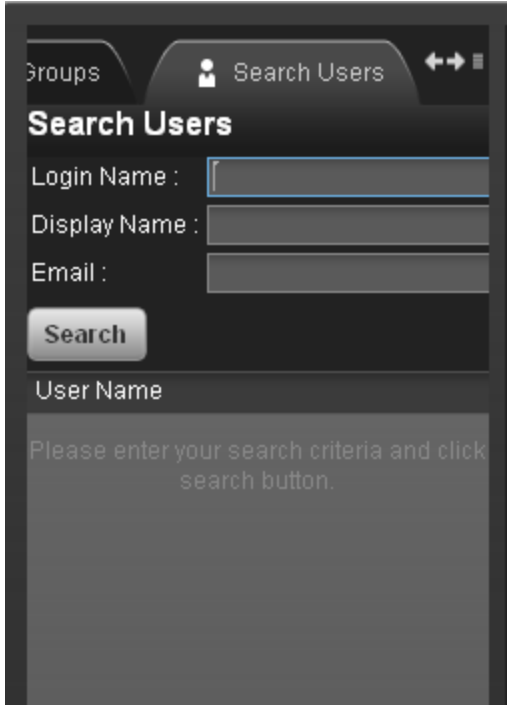
UI Element	Description
	<p>Available Groups</p> <ul style="list-style-type: none"> • Administrators. Users who can administer the system. • Everyone. All users of the system. <p>Note: The following groups are the default groups available in SAP BusinessObjects Enterprise for IT Executive Scorecard or SAP BusinessObjects Enterprise for HP FPA and exported to the Admin tab. They are not applicable to the Executive Scorecard application.</p> <ul style="list-style-type: none"> • QaaWS Group Designer • Report Conversion Group Users • Test Root • Translators • Universe Design Users <p>Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.</p>
	<p>Add group under the root. Creates a new group under the root.</p>  <p>Enter the Group Name and Group Description and click OK.</p> <p>Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.</p>
	<p>Attach to group. Attaches the selected user or group to a group. The users or groups inherit all of the group's roles.</p>

UI Element	Description
	 <p>Select the group and click OK.</p> <p>Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.</p>
	<p>Detach from group. Detaches the selected user or group from a group. When you detach a user/group from a group, they no longer have the roles that they inherited from the group.</p> <p>Note: When you detach a group from a group, it moves to the "root" of the groups and users tree.</p> <p>Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.</p>
	<p>Delete. Deletes the selected user or group. When a group is deleted, its users still exist under a system group called Everyone.</p> <p>Note: When using LDAP for user management, users and groups are read-only from Executive Scorecard. All user management must be done on the LDAP server.</p>

UI Element	Description
	Refresh. Refreshes the displayed information.
	Click to refresh the page.

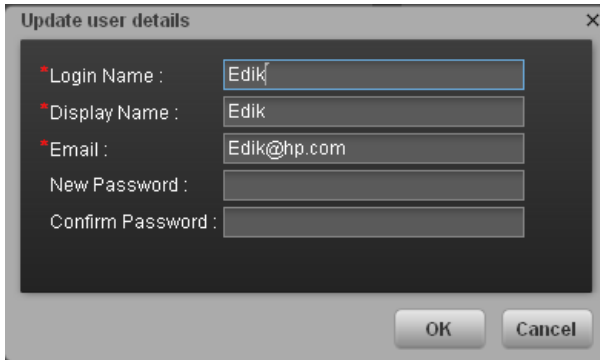


Search Users Tab

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

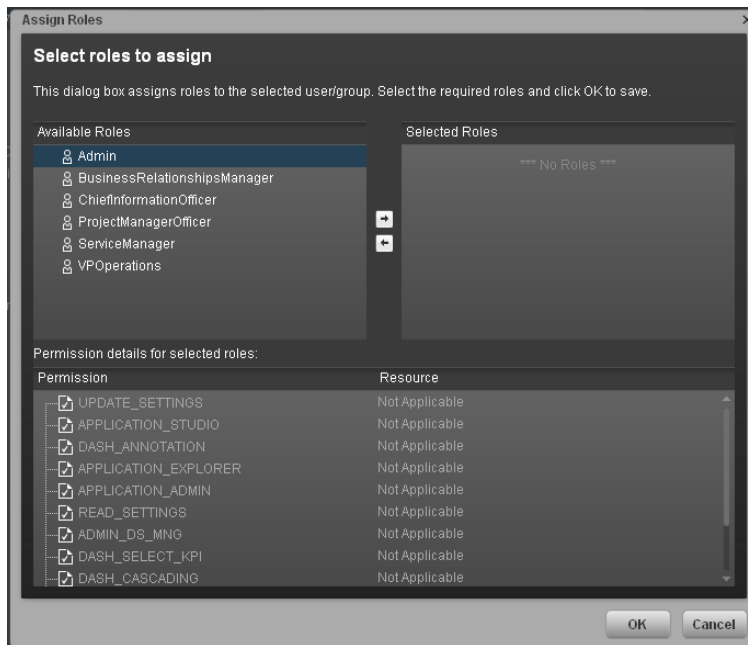
UI Element	Description
Search Users	<p>The search criteria.</p>  <p>To search for users, enter some or all of the user details: Login Name, Display Name, Email.</p>
Search	Search. Click to search for users that match the criteria entered in the Search Users tab.
User Name	A list of all users that match the search criteria.

User Details Pane


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Login Name/Group Name	The name of the selected user or group.
Display Name/Group Description	The description of the selected user or group.
Edit Details	<p>Edits the selected user or group details. Enables you to change a user password.</p> 
Roles and Permissions	The assigned roles and corresponding permissions and environments for the selected user or group.
	Assign role. Opens the Assign Roles dialog box that enables you to assign a role to the selected user or group.
	Remove role. Removes the selected role from the user or group.
Role name	The role assigned to the selected user or group.
Permission	The permission corresponding to the selected user or group.
Resource	<p>The resource attached to the permission of the selected user or group.</p> <p>N/A. Not Applicable. None of the available resources apply to this permission.</p> <p><Resource Name>. The permission is attached to a specific resource.</p> <p>All. The permission is applicable to all resources.</p> <p>For details, see "Manage Resources" (on page 48).</p>

Assign Roles Dialog Box



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	Select a role from the Available Roles list and use the arrows to move the role to the Selected Roles list.
Available and Selected Roles	Each user or group can have one or more assigned roles.
Permission details	The read-only details about the permissions and corresponding resources for the selected role.
Resource	<p>The list of resources for each permission:</p> <ul style="list-style-type: none"> • Not Applicable: Used for permissions that do not require a specific resource setting. • <Resource Name>: The permission is attached to a specific resource. • All: The permission is applicable to all resources.

Manage Roles

You can define user roles and application permissions in the Admin tab. You can also assign resources to specific permissions.

To access:

Select **Admin > Users and Roles > Role Management**.

Learn More

Roles and Permissions

Each role is associated with permissions. Permissions define which actions can be performed by the user with a specific role. For example, you can create a role that enables its users to create specific pages. In some cases, actions can be performed according to the resource attached to a permission.

Note: Users that are created in the Admin tab and require permissions to view reports pages, must be assigned those permissions in SAP BusinessObjects Enterprise for IT Executive Scorecard.

Resources

A resource is a logical group of one or more pages. Once you define resources, you attach the resources to a permission. For example, you can specify that the CIO has View permissions for CIO resources, while the Administrator has View permissions for all resources.

Pre-Defined Roles

- **Administrator.** The application administrator.
- **BUDGET_COORDINATOR.** Defines the budget configuration. Notifies the cost center managers to populate the budget line items, follow up with cost center managers for timely update of budgets, and review the input from all included cost centers. Publishes the budget to use in allocation scenarios. This role is related to Financial Planning and Analysis.
- **FINANCIAL ANALYST.** Uses published budgets in allocation scenarios. This role is related to Financial Planning and Analysis.

Pre-Defined Permissions

The following IT Executive Scorecard permissions are available in the Admin tab.

- **ABC Management.** Enables the user to monitor and manage the ETL process for Data Warehouse.
- **Admin Access.** Enables the user to access the Admin tab, but not any further pages.
- **Administer Pages.** Enables the user to view and modify (add components, delete components, and even delete) all the pages in the Dashboard. The user can also create new pages.
- **Cascade Scorecard.** Enables the user to view the small black arrow (near the Scorecard title) that indicates that the Scorecard has Cascading Scorecards. The user can click the arrow to display the Cascading Scorecards for which he has permission.
If the user does not have this permission, the small arrow is not displayed and the user does not know that Cascading Scorecards are available.
- **Data Source Management.** Enables the user to access the Data Source Management page and activate content packs. The user must have **Admin Access** to view the Admin tab.
- **Edit Settings.** Enables the user to edit the contents of the Scorecard Settings, Foundation Settings, and Data Warehouse Settings accordion tabs. The user must have **Admin Access** to view the Admin tab.

- **Explorer Access.** Enables the user to access the Explorer tab.

Note: Users with the **Explorer Access** permission should also have the **Select KPI** permission. The user then gets access to all KPIs in the Explorer page by clicking the **Explorer** button.

- **Manage Annotation.** Enables the user to edit or delete an existing annotation. If the user does not have this permission, the user can only view the annotation and the **Edit** and **Delete** buttons of the annotation are hidden.
- **Manage Page.** Enables the user to view and modify (add components, delete components, and even delete) the relevant page in the Dashboard. Note that when an additional page is needed a user with this permission must ask a user with the **Administer Pages** permission to create the new page. Once the page is created and assigned to a user, the user can add components, and modify it.
- **Select KPI.** Enables the user to view the contents of the Active KPIs area in all the components filters. The user can also move KPIs from the Active KPIs area to the Selected KPIs area. If the user does not have this permission, the user can, in all the component filters, view the contents of the Selected KPIs area, cannot modify the selection, and cannot view the contents of the Active KPIs area as the contents are grayed out.
- **Studio.** Enables the user to view the Studio tab and to modify its contents.
- **Users and Roles.** Enables the user to view the Users and Roles accordion tab. To modify the contents of the Users and Roles accordion tab, the user needs the **Edit Settings** permission. The user must have **Admin Access** to view the Admin tab.
- **View Settings.** Enables the user to view the Scorecard Settings, Foundation Settings, and Data Warehouse Settings accordion tabs.
- **View Page.** Enables the user to only view the relevant page in the Dashboard.
- **Context Management.** Enables the user to use the Context Designer feature.

The following Financial Planning and Analysis permissions are available in the Admin tab:

- **Budget.** Enables the user to access to Budget Management.
- **Finance.** Enables the user to access the Finance tab, which includes access to Allocation Management, Budget Management, and the Cost Explorer.
- **Manage allocation scenarios.** Enables the user to manage allocation scenarios and view them using the Cost Explorer.
- **Manage consolidated budget.** Enables the user to create and manage the lifecycle of consolidated budgets.
- **Manage cost center budget.** Enables the user to manage the cost center budget. This permission must be related to a specific cost center instance.
- **View consolidated budget.** Enables the user to view existing consolidated budgets.

Note:

- Users with the **Administer Pages** permission can add pages and control all pages in the system but they need the **Select KPI** permission to configure components on the page.
- Users with the **Manage Page** permission can change and delete specific pages but cannot create new pages. To create new pages users need the **Administer pages** permission.

Important Information

It is recommended to define resources prior to defining roles. For details, see ["Manage Resources" \(on page 48\)](#).

Tasks

This section includes:


["To create a role:" \(on page 42\)](#)

["To edit role details:" \(on page 42\)](#)

["To attach and manage permissions:" \(on page 42\)](#)

["To add a resource to a permission:" \(on page 42\)](#)

To create a role:


1. Select **Admin > Users and Roles > Role Management**.
2. In the Roles area, click  to create a new role.
3. Enter the name and description for the role.
4. Click **OK** to save your role.

After creating a role, follow the procedure for attaching permissions and resources.


To edit role details:

1. Select **Admin > Users and Roles > Role Management**.
2. In the Roles area, select a role.
3. In the Role Details area, click **Edit Details**.
4. Edit the role as required and click **OK**.

To attach and manage permissions:

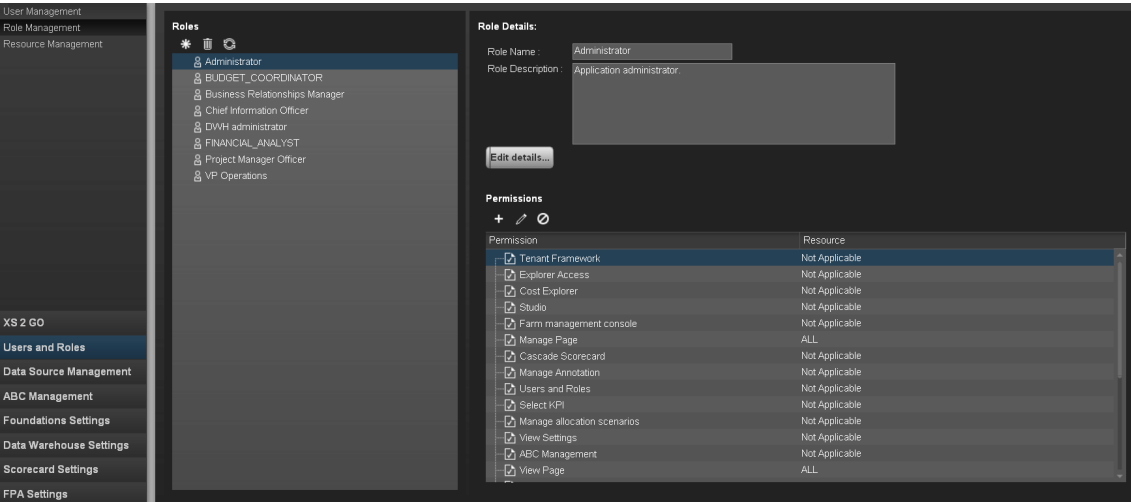
1. Select **Admin > Users and Roles > Role Management**.
2. In the Roles area, select a role.
3. In the Role Details area, click . The Assign Permission to Role wizard opens.
4. Select a permission from the list.
5. Attach a resource to the selected permission.
6. Complete the wizard procedure to save your assignments.

To add a resource to a permission:

- 1. Select **Admin > Users and Roles > Role Management**.
- 2. In the Roles area, select a role.
- 3. In the Permissions list select a permission.
- 4. Click  to open the Assign Resources to Permissions page in the Assign Permission to Role wizard.
- 5. Select a permission and use the arrows to move the required environments from the Available Resources list to the Selected Resources list.


UI Description

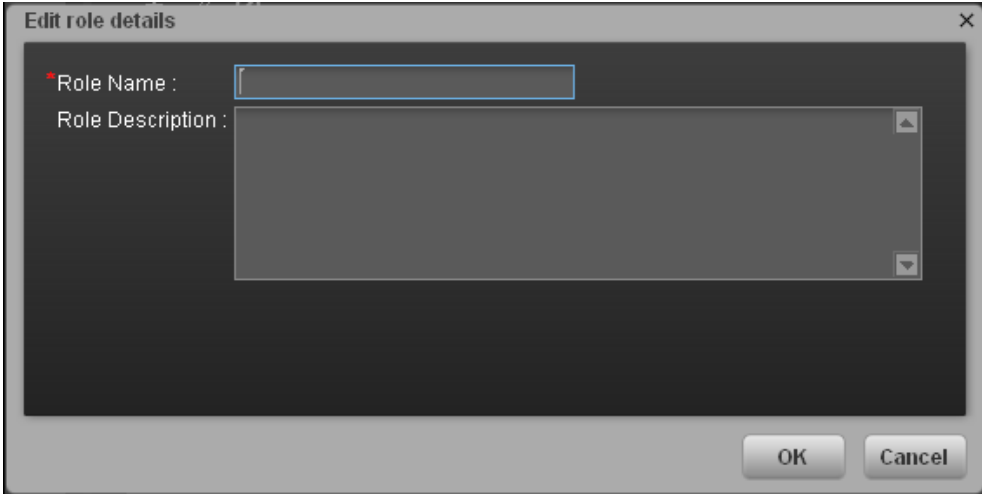




Role Management Page



Roles Pane

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

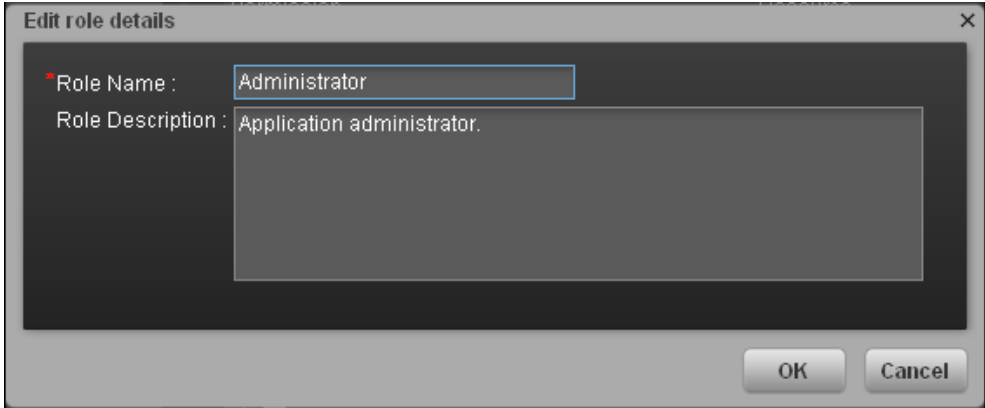




UI Element	Description
	Create Role. Creates a new role.

UI Element	Description
	 <p>Enter the Role Name and Role Description and click OK.</p>
	Delete Role. Deletes the selected role.
	<p>Click Refresh to refresh the display.</p> <p>Note: When in Executive Scorecard, when you navigate to another tab and then return to Admin > Users and Roles, the display is not automatically refreshed. To refresh the display, click  in the toolbar.</p>
<Role List>	<p>A list of roles currently defined in the Admin tab. When you select a role, the details appear in the Role Details area and Permissions list.</p> <p>For a list of pre-defined roles, see "Manage Roles" (on page 39).</p>
	Click to refresh the page.


Role Details Area

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Role Name	The name of the selected role.
Role Description	The description of the selected role.
Edit Details	Edits the selected role name and description.

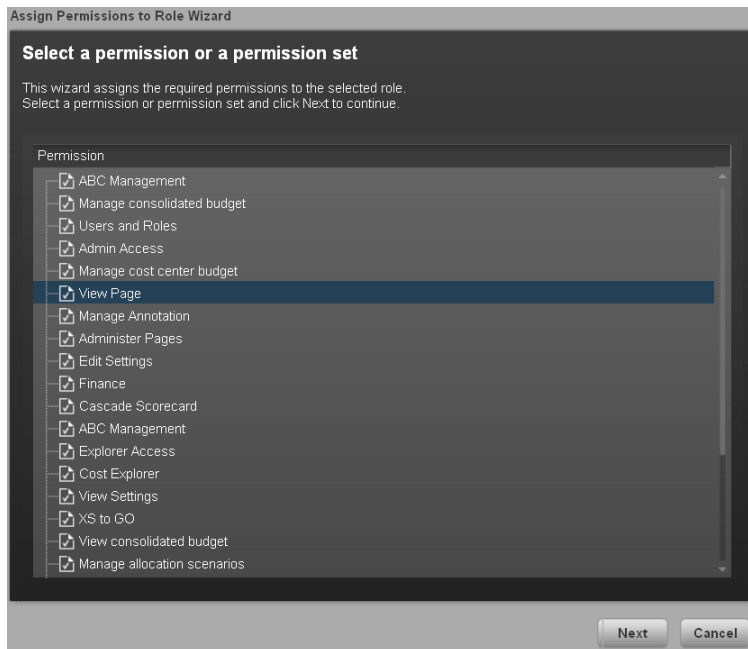
UI Element	Description
	
	Attach permission. Assigns selected permissions to roles. You select permissions using the Assign Permission to Role wizard. For user interface details, see "Assign Permission to Role Wizard" (on page 45) .
	Manage permission. Modifies the selected permission. Opens the Assign Resources to Permissions page in the Assign Permission to Role wizard. For user interface details, see "Assign Resources to Permissions Page" (on page 46) .
	Detach permission. Removes the selected permission from the role.
	Manage permission. Modifies the selected permission. Opens the Assign Resources to Permissions page in the Assign Permission to Role wizard. For user interface details, see "Assign Resources to Permissions Page" (on page 46) .
Permissions List	The list of permissions and resources for the selected role.
Permission	The permission sets and permissions attached to the selected role.
Resources	<p>The list of resources for each permission.</p> <p>Not Applicable. None of the available resources apply to this permission. For details, see "Manage Resources" (on page 48).</p> <p><Resource Name>. The permission is attached to a specific resource.</p> <p>All. The permission is applicable to all resources.</p>

Assign Permission to Role Wizard

This wizard enables you to assign permissions to the selected role, as well as assign environments to the permissions. Click  to access the wizard.

Wizard Map	<p>The Assign Permission to Role wizard contains:</p> <p>Select Permission Page > Assign Resources to Permissions Page > Confirmation Page.</p>
-------------------	---

Select Permission Page




This page may lead directly to the Confirmation page depending on whether the selected permission has resources attached.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<Permissions tree>	Select a permission from the tree. Displays the pre-defined permissions. For details, see "Manage Roles" (on page 39) .


Assign Resources to Permissions Page

This page only appears if the permissions are applicable for a resource.

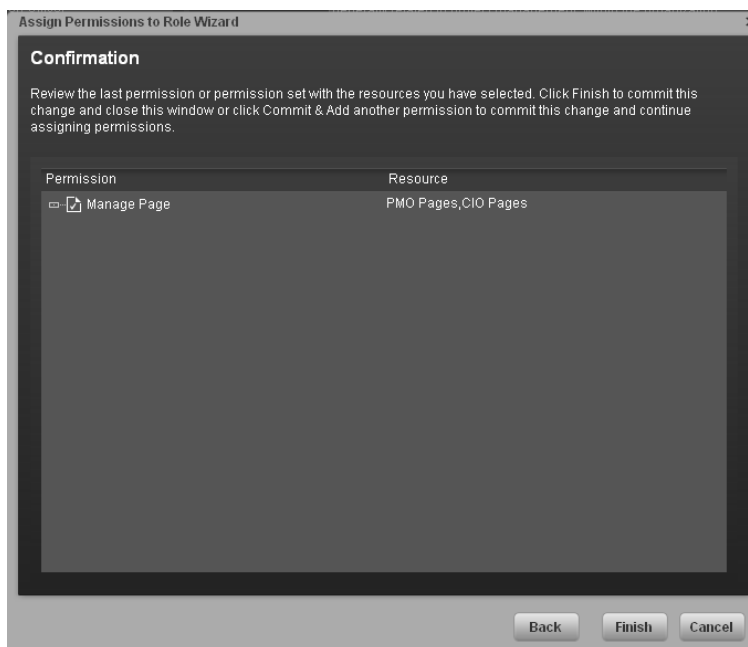
Note: Click  to access this page directly.



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Permission	A tree containing the permissions.
	Select a permission and use the arrows to move the required resources from the Available Resources list to the Selected Resources list.
Available and Selected Resources	Each permission can be applicable for specific resources, for all resources, or not applicable to a resource.

Confirmation Page



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Permission	The permissions assigned to this role.
Resource	The list of resources associated with the each permission.
Add another	Click to commit the current permission and continue in the wizard to add another permission. The "Select Permission Page" (on page 45) opens.
Finish	Click to commit the assigned permissions and finish wizard functions.
Cancel	Click to cancel the current assignment. All previous actions in the wizard are still valid.

Reference

Role Functions

Executive Scorecard and Financial Planning and Analysis roles can be assigned any permissions. Executive Scorecard and Financial Planning and Analysis roles are available with the following out-of-the-box permissions:

Role	Permissions	Module
Administrator	All Permissions	IT Executive Scorecard and Financial Planning and Analysis
BUDGET_COORDINATOR Working with Software as a Service (Light XS): This role is not available.	Budget Finance Manage Consolidated Budget Manage Cost Center Budget View Consolidated Budget	Financial Planning and Analysis
FINANCIAL ANALYST Working with Software as a Service (Light XS): This role is not available.	Budget Finance Manage Allocation Scenarios Manage Consolidated Budget Manage Cost Center Budget View Consolidated Budget	Financial Planning and Analysis

Manage Resources

The Resource Management page enables you to view resource and resource types, as well as create a resource. You can also select instances or pages that comprise a resource.

To access:

Select **Admin > Users and Roles > Resource Management**.

Learn More

Resources

A resource is a logical group of one or more pages. Once you define resources, you attach the resource to a permission.

Instances

An instance is a page that can be managed by a user according to the user's permissions.

Note: Users that are created in the Admin tab and require permissions to view reports pages must be assigned those permissions in SAP BusinessObjects Enterprise for IT Executive Scorecard.

Important Information

- Resources are the basis for user and role management. For each user or group, you assign permissions to perform specific actions on specific resources.
- Actions users can access depend on their roles and permissions.
- Instances are the available pages defined in the system.


Tasks

This section includes:


["To create a resource:" \(on page 49\)](#)

["To manage instances:" \(on page 49\)](#)

To create a resource:

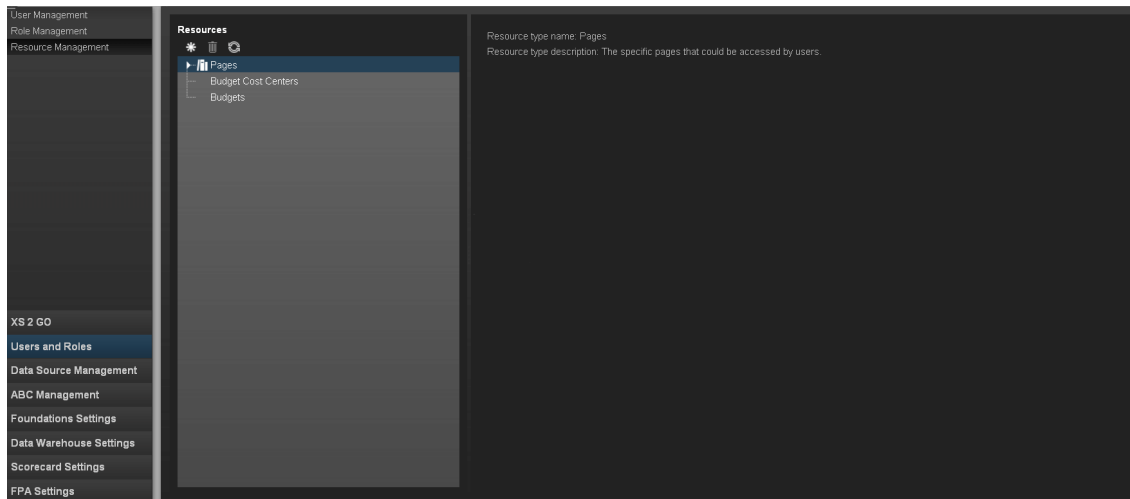
1. Select **Admin > Users and Roles > Resource Management**.
2. In the **Resources** area, click **Create resource**  to create a new resource.
3. Enter the **Resource** and **Details**.
4. Click **OK** to save your new resource.

To manage instances:

1. Select **Admin > Users and Roles > Resource Management**.
2. Select a page in the **Resources** area.
3. In the **Instances** area of the **Resource Details** pane click **Add instances**  to open the Manage Instances dialog box. Instances are the available pages defined in the system that are attached to resources.
4. Select the instance from the **Available Instances** list and use the arrows to move the instance to the **Selected Instances** list.
5. Click **OK** to save your changes.

UI Description


Resource Management Page



Resources Pane

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):



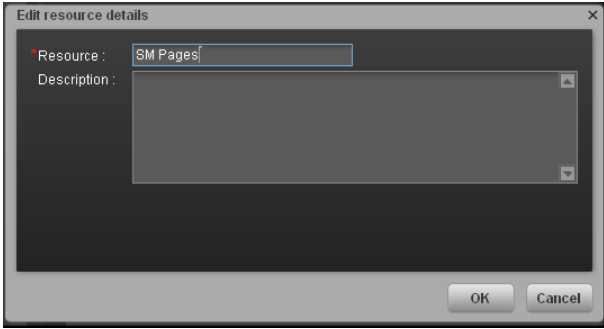
UI Element	Description
	<p>Select a resource and click Create Resource to open the Edit resource details dialog box and create a new resource of that type.</p>
	<p>Delete Resource. Deletes the selected resource.</p> <p>Note: If the resource is the only resource attached to a permission and that permission is attached to any roles, deleting the resource detaches the corresponding permissions from these roles.</p>
	<p>Refresh. Refreshes the displayed information.</p>

UI Element	Description
<Resources Tree>	Contains the resource types and the resources defined for each type.
	Click to refresh the page.

Resource Details Pane

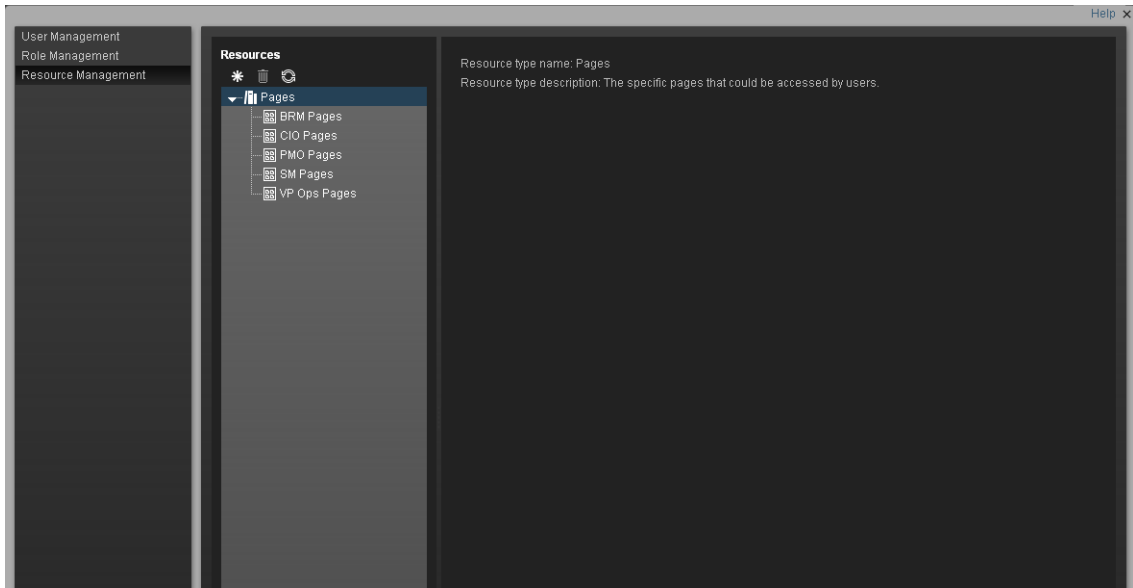
When you select a resource in the **Resources** pane, the details appear in this pane.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Add Instances. Adds pages to the selected resource. Opens the Manage Instances dialog box.</p> <p>Each resource can have one or more assigned page instances.</p> <p>In the Manage Instances dialog box, select a page instance from the Available Instances list and use the arrows to move the instance to the Selected Instances list. For details, see "Manage Instances Dialog Box" (on page 52).</p> <p>Note: These instances are the available pages defined in the system.</p>
	Remove Instances. Removes the selected instance from the resource.
Description	The description of the selected resource.
Resource	The name of the selected resource.
Edit Details	<p>Edits the selected resource name and description.</p> 
Resource Description	The description of the selected resource.
Resource Name	The name of the selected resource.
Instances	List of page instances for the selected resource.

Resource Type Details Pane

When you select a resource in the resources pane, the details appear in this pane.

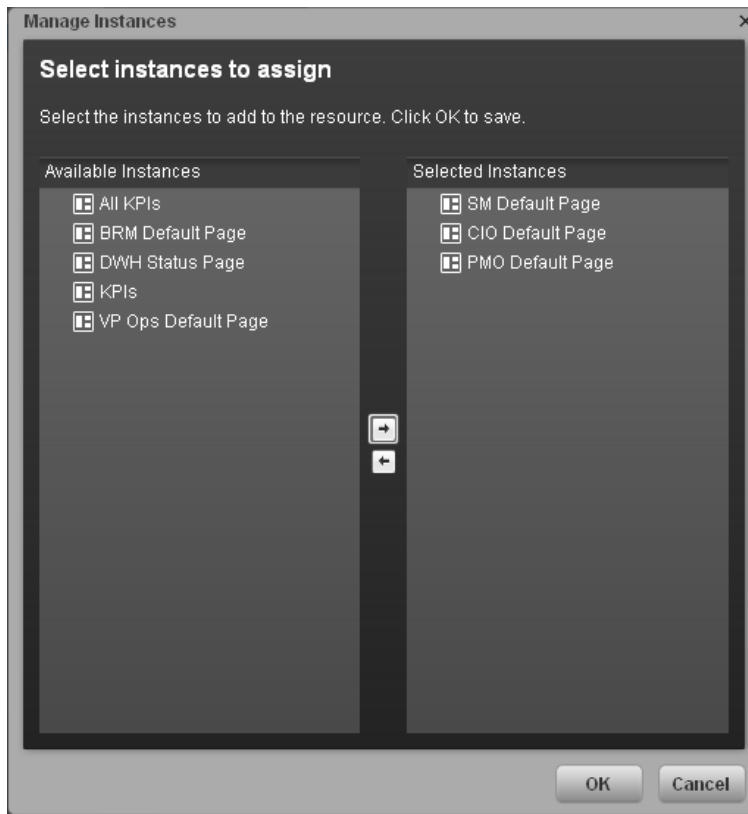


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):



UI Element	Description
Resource Type Description	The description of the selected resource type.
Resource Type	The selected resource type.

Manage Instances Dialog Box

This dialog box enables you to attach pages to a resource.



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
 	Select an instance from the Available Instances list and use the arrows to move the instance to the Selected Instances list.
Available and Selected Instances	Each resource can have one or more assigned instances.

Perform Administration Tasks for Foundation

Foundation Settings enables you to define various system settings for the administration of the product. The Foundations Settings includes the following:

- ["Configure Foundation Settings" \(on page 54\)](#). Enables you to configure virtual server settings.
- ["Configure Pages Settings" \(on page 55\)](#). Enables you to configure page settings.
- ["Configure Single Sign-On Settings" \(on page 56\)](#). Enables you to define SSO parameters.
- ["Configure Website Settings" \(on page 58\)](#). Enables you to set the ping time interval.

Configure Foundation Settings

Enables you to configure foundation settings in Executive Scorecard.

To access:

Select **Admin > Foundation Settings > Foundation**.

Tasks

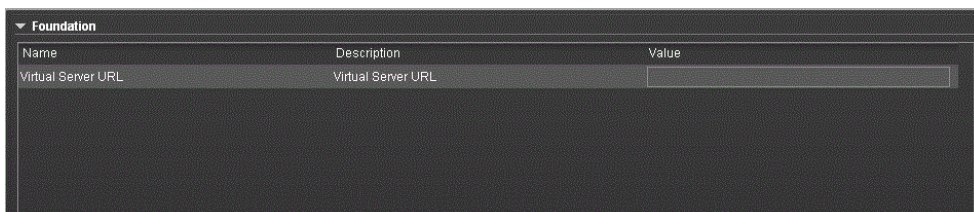
To configure the page settings:

1. Select **Admin > Foundation Settings > Foundation**.
2. Click the relevant row and enter the required setting.
3. Click **Save** to save your settings.

UI Description


Foundation Settings

This page enables you to configure the Pages settings.



Foundation Configuration Table

UI Element	Description
Name	The name of the page feature.
Description	The description of the page feature.

Value	The current page feature value. Click the relevant row and enter a value.
	Click to refresh the page.

Foundation Configuration Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Virtual Server URL	

Configure Pages Settings

Enables you to configure page settings in Executive Scorecard.

To access:

Select **Admin > Foundation Settings > Pages**.

Learn More

For more information about Executive Scorecard pages, see ["Configure a Page Layout"](#) in the *Business Analyst Guide*.

Tasks

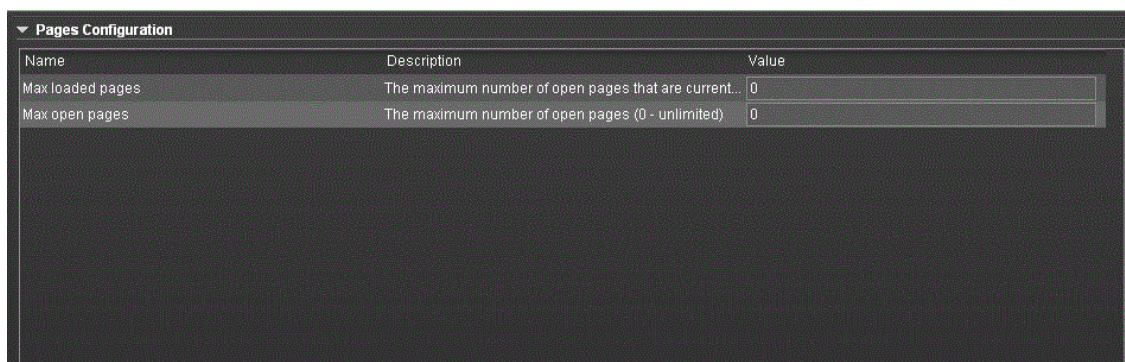
To configure the page settings:

1. Select **Admin > Foundation Settings > Pages**.
2. Click the relevant row and enter the required setting.
3. Click **Save** to save your settings.

UI Description


Pages Settings

This page enables you to configure the Pages settings.



▼ Pages Configuration		
Name	Description	Value
Max loaded pages	The maximum number of open pages that are current...	0
Max open pages	The maximum number of open pages (0 - unlimited)	0

Pages Configuration Table

UI Element	Description
Name	The name of the page feature.
Description	The description of the page feature.
Value	The current page feature value. Click the relevant row and enter a value.
	Click to refresh the page.

Pages Configuration Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Max loaded Pages	The maximum number of open pages that are currently loaded in Executive Scorecard. The options are any valid number or 0 for unlimited.
Max open pages	The maximum number of open pages in Executive Scorecard. The options are any valid number or 0 for unlimited.

Configure Single Sign-On Settings

The Single Sign-On page enables you to configure Single Sign-On (SSO) requirements.

To access:

Select **Admin > Foundation Settings > Single Sign-On**.

Learn More

HP Lightweight Single Sign-On is a method of access control that enables you to navigate to other HP products that implement LW-SSO without supplying credentials again. A user can log on once and gain access to the resources of HP software systems without being prompted to log on again. The applications inside the configured group of software systems trust the authentication, and there is no need for further authentication when moving from one application to another.

Important Information

For details on SSO and Identity Management, see ["Use the Identity Management Single Sign-On" \(on page 19\)](#).

Tasks

To add or change SSO values:

1. Select **Admin > Foundation Settings > Single Sign-On**.
2. Click the relevant field in the **Value** column and enter the value.
3. Click **Save** to save your settings.

UI Description

Single Sign-On Page

This page enables you to configure the SSO settings for login of all HP products.

Identity Management Single Sign-On


☐ Identity Management Enabled

Name	Description	Value
Identity Management Header	Name of the Identity Management header on the requ...	

Lightweight Single Sign-On

Name	Description	Value
LW-SSO Server Domain	Used for token creation (required for multi-domain su...	devlab.ad
LW-SSO Token Creation Key (initString)	Used for init of the symmetric encryption key for the to...	*****
LW-SSO Trusted Hosts - DNS Domains	Comma separated list of trusted DNS domains that al...	devlab.ad
LW-SSO Trusted Hosts - FQDN	Comma separated list of trusted hosts FQDN that allo...	
LW-SSO Trusted Hosts - IPs	Comma separated list of trusted hosts IPs (include IP...	
LW-SSO Trusted Hosts - Net Bios Names	Comma separated list of trusted hosts net bios name...	

Single Sign-On Configuration Table

UI Element	Description
Name	The name of the SSO feature.
Description	The description of the SSO feature.
Value	The current SSO feature value. Click the relevant row and enter a value.
	Click to refresh the page.

Single Sign-On Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Identity Management Enabled	Select the check box and enter the name of the IDM header (the header that contains the user login name) in the Value field of the Identity Management Header setting. For details, see "Use the Identity Management Single Sign-On" (on page 19) .
Identity Management Header	The name of the IDM header (the header that contains the user login name).
LW-SSO Server Domain	The domain used for token creation. This value is required in cases of multi domains.
LW-SSO Token Creation Key (initString)	The string used as the encryption key for token creation and validation.
LW-SSO Trusted Hosts - DNS Domains	The list of trusted DNS domains that allow multi-domain support (must be separated by commas).
LW-SSO Trusted Hosts - FQDN	The list of trusted hosts' FQDN that allow multi-domain support (must be separated by commas).
LW-SSO Trusted Hosts - IPs	The list of trusted hosts' IPs (including IPv6) that allow multi-domain support (must be separated by commas).
LW-SSO Trusted Hosts - Net Bios Names	The list of trusted hosts' net bios names that allow multi-domain support (must be separated by commas).

Configure Website Settings

The Website page enables you to configure ping time intervals for refreshing the browser automatically

To access:

Select **Admin > Foundation Settings > Website**.

Tasks

To set the ping interval:

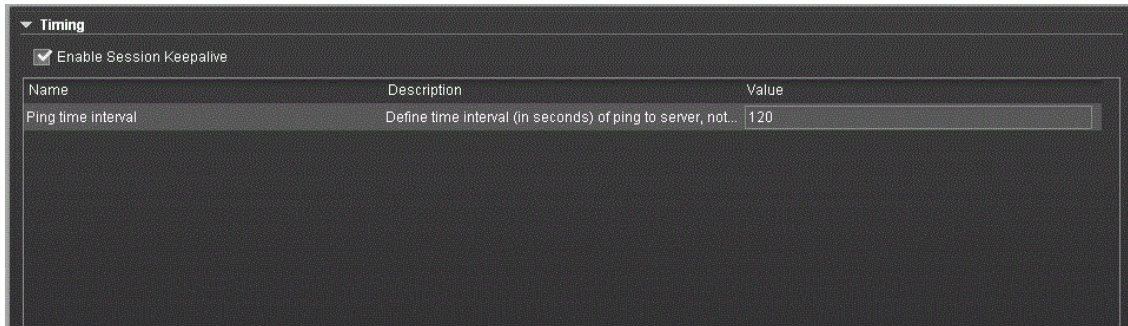
1. Select **Admin > Foundation Settings > Website**.
2. Select the check box to enable the ping feature. De-select the check box to disable the ping feature. The browser will then time out.

3. Click the **Ping time interval** row and enter the required time in seconds.
4. Click **Save** to save your settings.

UI Description

Website Page


This page enables you to configure the Website settings.



The screenshot shows a configuration window titled 'Timing'. Inside, there is a checkbox labeled 'Enable Session Keepalive' which is checked. Below this is a table with three columns: 'Name', 'Description', and 'Value'. The table contains one row with the following data:

Name	Description	Value
Ping time interval	Define time interval (in seconds) of ping to server, not...	120

Timing Table

UI Element	Description
Name	The name of the Website feature.
Description	The description of the Website feature.
Value	The current Website feature value in seconds. Click the relevant row and enter a value.
	Click to refresh the page.

Timing Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Enable Session Keepalive	Select to enable the ping feature.
Ping time interval	The amount of time between browser refresh. This ensures that the application does not time out. Note: Changes will only take effect in the next login.

Perform Administration Tasks for Scorecard Settings

The Scorecard Settings enables you to define various HP IT Executive Scorecard settings and includes the following pages:

- **"Configure Dashboard Settings" (on page 60).** Enables you to set the settings for the Dashboard, where an executive can view the progress of the required objectives.
- **"Configure Score Thresholds" (on page 61).** Enables you to set the score thresholds for the KPIs in the HP IT Executive Scorecard.
- **"Configure XS Settings" (on page 63).** Enables you to set various scorecard settings. The HP IT Executive Scorecard is a way to map and translate complex business information into something that is understandable to everyone.
- **"Configure Engine Settings" (on page 65).** Enables you to configure settings for the HP IT Executive Scorecard KPI engine, which performs discovery on data coming from Contexts (data sources).

Configure Dashboard Settings

Enables you to set the settings for the Dashboard, where an executive can view the progress of the required objectives.

To access:

Select **Admin > Scorecard Settings > Dashboard Settings**.

Learn More

For more Executive Scorecard dashboard information, see ["Prepare the Dashboard Display"](#).

Tasks

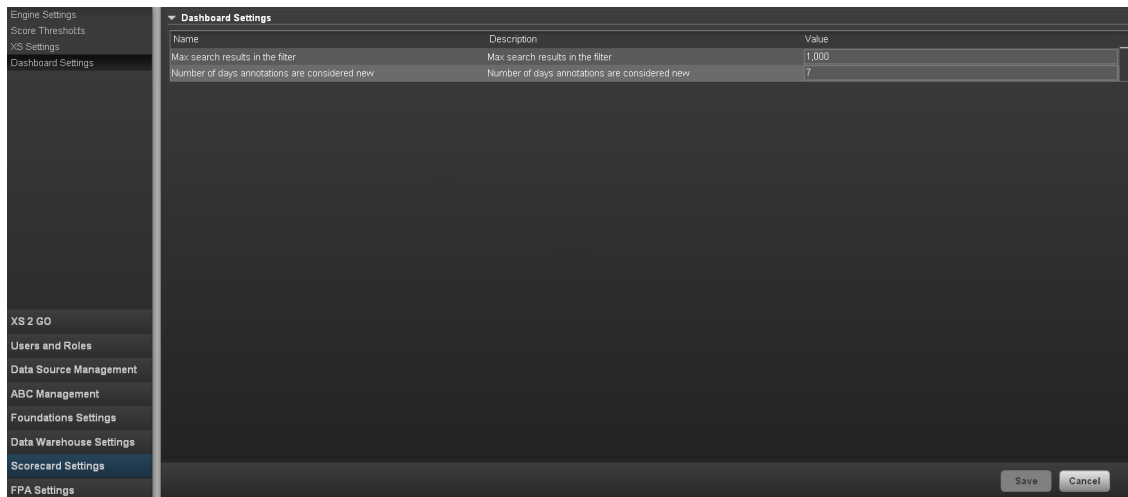
Set Dashboard Settings

1. Select **Admin > Scorecard Settings > Dashboard Settings**.
2. Click the row of the relevant setting and enter the value.
3. Click **Save** to save your settings.

UI Description


Dashboard Settings Page

This page enables you to configure specific dashboard settings.



Dashboard Settings Table

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the Dashboard feature.
Description	The description of the Dashboard feature.
Value	The current Dashboard feature value. Click the relevant row and enter a value.
	Click to refresh the page.

Dashboard Settings Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Max search results in the filter	The maximum number of search results allowed in the filter. The default value is 1000 .
Number of days annotations are considered new	The number of days annotations are considered new. The default value is 7 .

Configure Score Thresholds

Enables you to set the score thresholds for the KPIs in the HP IT Executive Scorecard.

To access:

Select **Admin > Scorecard Settings > Score Thresholds**.

Learn More

For more score threshold information, see "[Learn About KPI Formula and Filter, Threshold, Value, Trend, and Score](#)" in the *Business Analyst Guide*.

Tasks

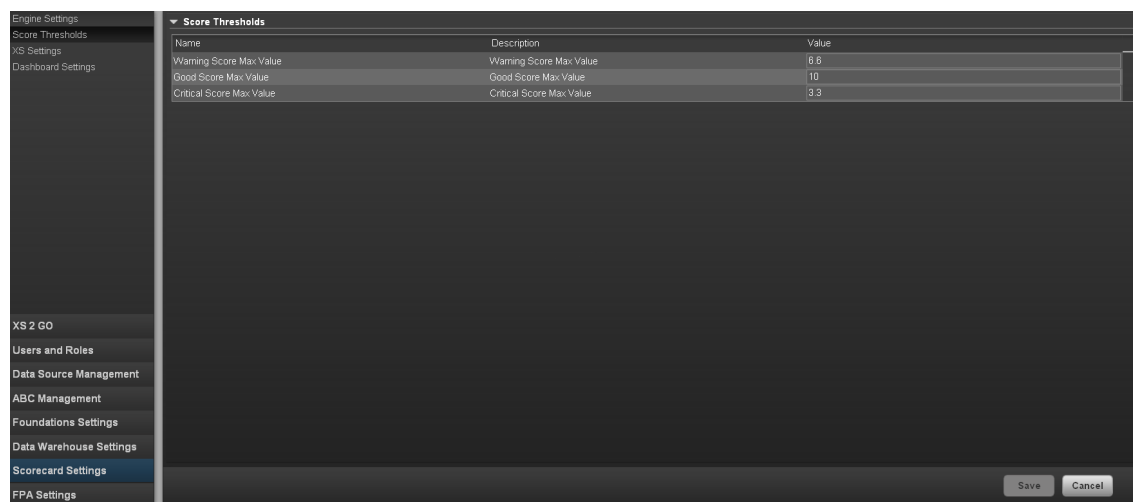
Set Score Thresholds

1. Select **Admin > Scorecard Settings > Score Thresholds**.
2. Click the row of the relevant score threshold and enter the value.
3. Click **Save** to save your settings.

UI Description


Score Thresholds Page

This page enables you to configure the score threshold settings for the KPIs in HP IT Executive Scorecard.



Score Thresholds Table

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the score setting.
Description	The description of the score threshold.
Value	The current score threshold value . Click the relevant row and enter a value.
	Click to refresh the page.

Score Threshold Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

Note: Each **Score Max Value** must be greater than 0 and less than the next one (**Error Score Max Value** < **Warning Score Max Value** < **Good Score Max Value**)

UI Element	Description
Critical Score Max Value	<p>The maximum value on the KPI scale, below which the value is scored as an error. KPIs that score values equal to or below this value, receive an error score.</p> <p>Example: If the maximum error score is 3.3, then a score on the scale from 0 - 3.3 is an error. Default: 3.3</p>
Good Score Max Value	<p>The maximum value on the KPI scale, below which the value is scored as good. KPIs that score values equal to or below this value, receive a good score.</p> <p>Example: If the maximum good score is 6.6, then a score on the scale from 6.6 - 10, is good. Default: 10</p>
Warning Score Max Value	<p>The maximum value on the KPI scale, below which the value is scored as a warning. KPIs that score values equal to or below this value, receive a warning score.</p> <p>Example: If the maximum warning score is 6.6, then a score on the scale from 3.3 - 6.6, is a warning. Default: 6.6</p>

Configure XS Settings

Enables you to set various scorecard settings. The HP IT Executive Scorecard is a way to map and translate complex business information into something that's understandable to everyone.

To access:

1. Select **Admin > Scorecard Settings > XS Settings**.

Tasks

To configure XS settings:

1. Select **Admin > Scorecard Settings > XS Settings**.
2. Click the row of the relevant setting and enter the value.
3. Click **Save** to save your settings.


UI Description

XS Settings Page

This page enables you to configure specific XS settings.

XS Settings Table

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the XS setting.
Description	The description of the XS setting.
Value	The current XS setting value. Click the relevant row and enter a value.
	Click to refresh the page.

Application Settings Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
application.settings.configuration.xs2go.max.allowed.file.size.name	The maximum number of characters allowed in the file name.

Business Context Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Default Business Context Name	The business object default context name. The default value is FinancialManagement .
Period Business Context Name	The business object period context name. The default value is Period_Universe .

Dashboard Update Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Configuration Reload rate (Minutes)	The configuration reload rate in minutes. The default value is 5 minutes.

Debug Mode Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Application Debug Mode	Select to activate the debug mode.

Studio Update Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Meta Data reload rate (Days)	The number of days after which the meta data is reloaded. The default value is 7 .
Users Info Reload Rate (Minutes)	The number of minutes after which user info is reloaded. The default value is 5 minutes.

Configure Engine Settings

Enables you to configure settings for the HP IT Executive Scorecard KPI engine, which performs discovery on data coming from contexts (data sources).

To access:

Select **Admin > Scorecard Settings > Engine Settings**.

Tasks

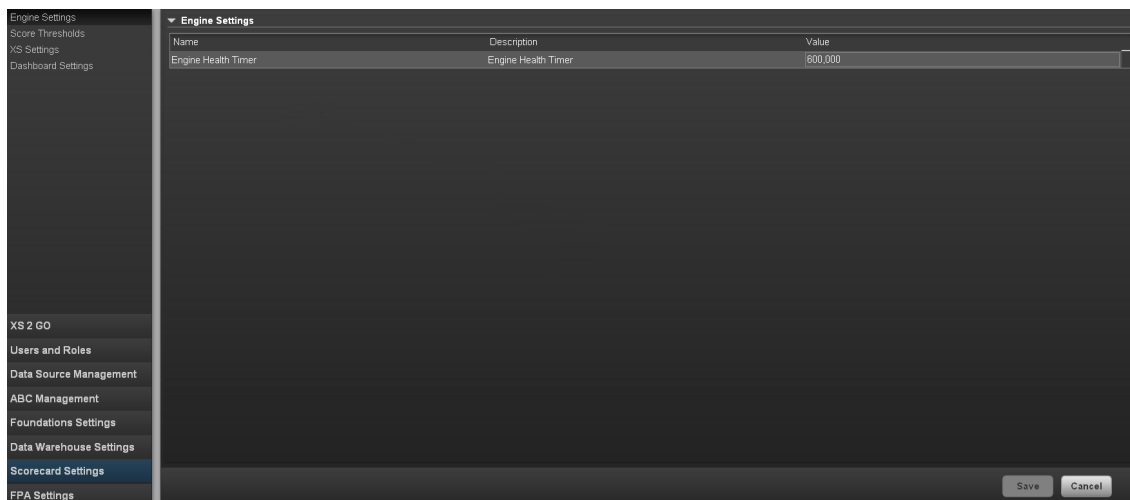
Set Engine Values:

1. Select **Admin > Scorecard Settings > Engine Settings**.
2. Click the row of the relevant engine function and enter the value in milliseconds.
3. Click **Save** to save your settings.

UI Description


Engine Settings Page

This page enables you to configure the engine settings for HP IT Executive Scorecard.



Engine Settings Table

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the engine setting.
Description	The description of the engine setting.
Value	The current engine setting value . Click the relevant row and enter a value.
	Click to refresh the page.

Engine Settings Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Engine Health Timer	The amount of time in milliseconds, after which KPI calculations are sent. The default value is 600,000, which equals 10 minutes.

Perform the Maintenance of Executive Scorecard

This section includes the following topics:

Add Additional Pages to Dashboard and Grant Permissions	68
Configure User Permissions in Dashboard	68
Modify the Maximum Number of Pages Displayed in the Dashboard	69
How to Show or Hide Debug Properties	69
The HP IT Executive Scorecard server is unusable, but the RDBMS server and its databases are intact	69

Add Additional Pages to Dashboard and Grant Permissions

Users can be granted permissions to perform the following operations on user-defined pages and components: **View page**, **Manage Page** (change and delete specific page) and **Administrate pages** (add pages and full control on all pages in the system).

To create a new page in the Dashboard , contact your administrator. The administrator should:

1. Create the relevant page in HP IT Executive Scorecard. For details, see ["Manage Users" \(on page 27\)](#).
2. Define the page Instance and Resource. For details, see ["Manage Resources" \(on page 48\)](#).
3. Give you (the Business Analyst - Dashboard Designer) the needed permissions to update the page. For details, see ["Attach Permissions"](#).
4. Give the relevant user (executive) the needed permissions to view the page. For details, see ["Attach Permissions"](#).

Configure User Permissions in Dashboard

Permissions to work with Dashboard components and pages are defined in **Admin > Users and Roles > User Management**.

The operations that can be defined for a user are dependent on the area within Dashboard, as follows:

- **Predefined Pages.** These pages are defined out-of-the-box. They have a pre-defined layout but entities are not selected. Users with the relevant permissions can select the relevant entities using the component filters. Depending on their permissions, users can change the component layout in the page and the selections in the component filters. Note that out-of-the-box pages cannot be deleted. More information about the permissions is available in ["Attach Permissions"](#).
- **User Pages and User Components.** Users can be granted permissions to perform the following operations on user-defined pages and components: **View page**, **Manage Page** (change and delete specific page) and **Administrate pages** (add pages and full control on all pages in the system).

For details, see ["Manage Users" \(on page 27\)](#).

Modify the Maximum Number of Pages Displayed in the Dashboard

The maintenance of HP IT Executive Scorecard is performed using the Admin tab.

By default, an unlimited number of pages can be open at the same time.

If you have multiple pages open, up to 5 of the most popular pages are immediately available for display when you switch to them.

The other pages are least viewed pages, meaning that are silently deactivated in the background. When you select them, it might take a few seconds until they load and display their content.

This section describes how to modify these limits. Note that if you increase these limits, performance may be impaired.

Modify the maximum number of open pages

To modify the maximum number of open pages:

1. Select **Admin > Foundation Settings > Pages**.
2. Modify the **Maximum number of open pages** entry as needed.

For details, see ["Perform Administration Tasks for Foundation" \(on page 54\)](#).

Note that if you increase the maximum number of pages, performance may be impaired.

Modify the maximum number of active pages

To modify the maximum number of active pages:

1. Select **Admin > Foundation Settings > Pages**.
2. Modify the **Maximum number of loaded pages** entry as needed.

For details, see ["Perform Administration Tasks for Foundation" \(on page 54\)](#).

How to Show or Hide Debug Properties

The maintenance of HP IT Executive Scorecard is performed using the Admin tab.

To display or hide the debug properties (ID and Type) displayed in the Configuration details tab for all templates or active nodes, select **Admin > Scorecard Settings > XS Settings > Debug Mode**, and:

- Select the **Application Debug Mode** option to display the debug information in the Configuration details tabs.
- Clear the **Application Debug Mode** option to hide the debug information in the Configuration details tabs.

The HP IT Executive Scorecard server is unusable, but the RDBMS server and its databases are intact.

Scenario: The HP IT Executive Scorecard server has become unusable, for example the hard disk has crashed. The following procedure describes how to recover the Executive scorecard server.

1. Install a new Microsoft Windows 2008 R2 server that will be used as the HP IT Executive Scorecard server.

The server must conform to the relevant hardware and software requirements described in the *IT Executive Scorecard Installation and Configuration Guide*.

2. Enter the HP IT Executive Scorecard DVD and progress in the Installer wizard. On the **Select Features** page, select **HP Executive Scorecard Components**, and continue the installation.
3. In the Configuration Wizard, connect to the existing Management database .

Once you connect to the Management database, when relevant, the values entered in the previous configuration are automatically presented on the wizard pages.

4. When you configure HP IT Executive Scorecard, connect to the existing HP IT Executive Scorecard database, and complete the Configuration Wizard using the settings you used in the initial configuration.

Back Up Executive Scorecard

It is critical that you backup your databases, configuration files, logs and configuration settings so that you can rebuild your IT Executive Scorecard solution and content in circumstances such as the following:

- When you need to recover from a total disaster recovery scenario.
- The RDBMS server failed but all HP Executive Scorecard component servers are fully functioning.
- When a database is corrupted.
- When a component server fails, but the RDBMS server and it's databases are intact.

The section includes the following topics:

- ["What to Back Up" \(on page 71\)](#)
- ["General Backup Guidelines" \(on page 72\)](#)

What to Back Up

HP recommends that you back up the following resources that may be used when one of the above scenarios occurs.

1. Microsoft SQL Server 2008 enterprise SP2 databases
 - a. Staging database
 - b. Target database
 - c. SAP BusinessObjects Data Services database
 - d. SAP BusinessObjects CMS database, and if necessary the Audit database.
 - e. Management database
 - f. Executive Scorecard database

Note: The host and database names can be found in the Management database configured in the Executive Scorecard Configuration wizard.

2. Data Warehouse Configuration files. For more information, see ["Data Warehouse Backups" \(on page 216\)](#).
3. SAP BusinessObject Enterprise configuration. This can be backed up with the BusinessObjects Enterprise XI 3.1 Import Wizard. For more information, see Chapter 7 of the BusinessObjects Enterprise XI 3.1 Import Wizard Guide at http://help.sap.com/businessobject/product_guides/boexir31/en/xi3-1_bip_importwiz_en.pdf.
4. It is highly recommended that you keep the passwords for the Staging, Target and SAP BusinessObjects Data Services databases in a safe place for usage in disaster recovery situations.

General Backup Guidelines

It is recommended that you use the following backup and restore guidelines:

- Your database administrator should back up critical data and configuration settings on a regular basis.

Database backups should consist of a weekly full database backups, and daily differential backups.

- Backups should be periodically verified by restoring a copy onto a test system.
- External source files and Data Warehouse configuration files should be backed up as required.
- Although out of scope for this document, regular backups should be taken of all source file databases.
- Start scheduled backups before running the daily ETLs.
- Use backup compression.
- Perform full backups in off-peak times.

Perform Recovery

This section is a reference for the HP IT Executive Scorecard recovery process. The recovery process for your environment may vary according to your business needs and may require customization. Verify that the following processes are consistent with your architecture and environment before you proceed with real data.

When you start the recovery process, you must have complete backups of the relevant databases, configuration files and settings that are readily available. It is possible that you will lose history data.

These following scenarios are independent from the external data sources and entities. Recovering from a scenario means that the component returns to a stable state.

For more detailed information on Data Warehouse disaster recovery, see ["Data Warehouse Recovery" \(on page 219\)](#).

This section includes the following recovery scenarios:

Recover from a Failure of a Single-Server Deployment of IT Executive Scorecard

Scenario: The Single-server installation has failed and the server needs to be recovered. The following procedure describes how to recover a single-server deployment using the existing databases.

1. Install a new Microsoft Windows 2008 R2 server that will be used for the single-server installation.

The server must conform to the relevant hardware and software requirements described in the *IT Executive Scorecard Installation and Configuration Guide*.
2. Connect to your RDBMS server, and in the Management database in the SETTINGS_MANAGEMENT table, change the value of **bo.engine.is.installed** to **False**.
3. Enter the Executive Scorecard DVD and progress in the Installer wizard. On the **Group Selection** page, select **HP Executive Scorecard - Single Server Installation**, and continue the installation.
4. When the Installer Wizard completes and you see the **Introduction** page of the Configuration Wizard, if changes were made to the core content packs, before continuing, restore **<XS Install Directory>\agora\ContentPacks** from a backup.
5. In the Configuration Wizard, connect to the existing management database, and continue in the wizard connecting to existing SAP BusinessObjects and Executive Scorecard databases.

Note: Once you connect to the Management database, the values entered in the

previous configuration are automatically presented on the wizard pages.

Note: When configuring SAP BusinessObjects Enterprise for IT Executive Scorecard, connect to the existing CMS and Audit databases (or select **Install Audit schema in the CMS database**, if that is how it was installed in the original installation).

6. When you reach the Data Warehouse section, on the **Configure Data Warehouse** page, select **Reinstall Data Warehouse**, and then click **Next**.

After the rerun process is complete, the **Configuration Status** page appears listing the installed components.

7. Restore any other required configuration files as described in **Learn About Data Warehouse Backups**, and **Files to Back Up** sections of the *Administrator Guide*.
8. When the installation finishes, import the SAP BusinessObjects Enterprise configuration backup using the Import Wizard, and restore the SAP BusinessObjects Enterprise configuration.

For more information on using the Import Wizard, see **Chapter 7 of the BusinessObjects Enterprise XI 3.1 Import Wizard Guide** at http://help.sap.com/businessobject/product_guides/boexir31/en/xi3-1_bip_importwiz_en.pdf.

Management, SAP BusinessObjects CMS/Audit, or Executive Scorecard Database is Corrupted

Scenario: A database is corrupted. The following procedure describes how to recover from a corrupt database.

1. Restore the database from your backups. Restore using the full weekly backup and the relevant differential backup.

Note: It is recommended that the RDBMS server, and database names are identical to those used in the initial installation. This information can be found in the Management database.

2. Once the database is restored, if the RDBMS server, and database names are identical to those used in the initial installation, do as follows:

On the HP IT Executive Scorecard and Data Warehouse servers, disable and then enable HP IT Executive Scorecard as follows:

- a. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard**.
- b. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard**.
- c. If the RDBMS server, or database names are not identical, and you are restoring the CMS or the Audit database, on the SAP BusinessObjects Enterprise server, reconfigure the CMS, and if necessary the Audit ODBC Data Source as follows:

1. On the SAP BusinessObjects Enterprise server, on the Windows taskbar, click **Start > Run**, and enter **c:\WINDOWS\SysWOW64\odbcad32.exe**.
2. Click the **System DSN** tab, select the relevant ODBC connection, and then click **Configure**.
3. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **SQL Server** you want to connect to, and then click **Next**.
4. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **Login ID** used to connect to the SQL Server, and then click **Next**.
5. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **default database**, click **Next**, click **Finish**, and continue to step d.
- d. If the RDBMS server, or database names are not identical, run the Configuration Wizard on the relevant component server, and enter the connection and authentication details for the relevant databases.

To run the Configuration wizard:

On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Configuration Wizard**.

Note: For more information on recovering from a Data Warehouse database corruption, see ["Data Warehouse Recovery" \(on page 219\)](#).

RDBMS Server Failure

Scenario: The RDBMS server has become unusable, for example the hard disk has crashed. The following procedure describes how to recover a failed RDBMS server.

1. Reinstall a RDBMS server with Microsoft SQL 2008 Enterprise with SP2, configured with mixed mode and using the TCP/IP protocol.
2. Restore the RDBMS server databases using the weekly full and the relevant differential backup. The IT Executive Scorecard databases are the:
 - Management database
 - CMS database
 - Audit database (if installed separately from the CMS database)
 - SAP BusinessObjects Data Services database
 - Staging database
 - Target database
 - Executive Scorecard database

Note: The SAP BusinessObjects Data Services, Staging, and the Target databases (All Data Warehouse related databases), must be restored to an RDBMS server and to databases with names that are the same as those used in the initial IT Executive Scorecard

installation.

Note: It is recommended that where possible the Management, SAP BusinessObjects Enterprise CMS, SAP BusinessObjects Enterprise Audit, and Executive Scorecard databases are restored to an RDBMS server and to database names that are the same as those used in the initial IT Executive Scorecard installation. If you restore to a different RDBMS server or a database with a different name, follow the instructions in steps 4 and 5.

3. Restore all Login users in the database instance. When you back up the Logins, make sure that each user's status is enabled and not locked.
4. Once you have restored the SAP BusinessObjects Data Services, Staging, and the Target databases, you must associate the database login names and database users by running the following scripts.

Note: If you work with custom logins defined in the Data Warehouse installation, run the scripts including the custom login. For example:

```
<staging_db>
```

```
EXEC sp_change_users_login 'Update_One', 'dwst', '<custom_login_name>'.
```

■ **For the staging database:**

- **EXEC sp_change_users_login 'Auto_Fix', 'dws', NULL, 'password'** where password is the old password for the dws login.
- **EXEC sp_change_users_login 'Auto_Fix', 'dwst', NULL, 'password'** where password is the old password for the dwst login.
- **EXEC sp_change_users_login 'Auto_Fix', 'dwmetadata', NULL, 'password'** where password is the old password for the dwmetadata login.
- **EXEC sp_change_users_login 'Auto_Fix', 'dwabc', NULL, 'password'** where password is the old password for the dwabc login.
- **EXEC sp_change_users_login 'Auto_Fix', 'xrefgen', NULL, 'password'** where password is the old password for the xrefgen login.

■ **For the target database:**

- **EXEC sp_change_users_login 'Auto_Fix', 'dwt', NULL, 'password'** where password is the old password for the dwt login.

■ **For the SAP BusinessObjects Data Services database**

- **EXEC sp_change_users_login 'Auto_Fix', 'login name', NULL, 'password'** where login name is the new login name you created when you created the SAP BusinessObjects Data Services database, and password is the password you assigned to that login name.

5. If the names of the RDBMS server and all the restored databases are the same as those configured in the initial Executive Scorecard Configuration Wizard, skip to step 7.
6. If the RDBMS server, or database names are not identical, and you are restoring the CMS or

the Audit database, on the SAP BusinessObjects Enterprise server, reconfigure the CMS and if necessary, the Audit ODBC Data Source as follows:

- a. On the SAP BusinessObjects Enterprise server, on the Windows taskbar, click **Start > Run**, and enter **c:\WINDOWS\SysWOW64\odbcad32.exe**.
 - b. Click the **System DSN** tab, select the relevant ODBC connection, and then click **Configure**.
 - c. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **SQL Server** you want to connect to, and then click **Next**.
 - d. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **Login ID** used to connect to the SQL Server, and then click **Next**.
 - e. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **default database**, click **Next**, click **Finish**, and continue to step 6.
7. If you restored to a different RDBMS server host name, or the Management, CMS, Audit, Executive Scorecard database names are different, rerun the Post_Install Configuration Wizard, and when prompted on the relevant wizard pages, connect to the new RDBMS server, and new databases and complete the wizard.

To run the Post-Install Configuration Wizard, on the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Configuration Wizard**.

8. On the Executive Scorecard and Data Warehouse servers, disable and then enable HP Executive Scorecard as follows:
- a. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard**.
 - b. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard**.

The BusinessObjects Enterprise Server is Unusable, but the RDBMS Server and its Databases are Intact

Scenario: The SAP BusinessObjects Enterprise for IT Executive Scorecard server has become unusable, for example the hard disk has crashed. The following procedure describes how to recover the SAP BusinessObjects Enterprise for IT Executive Scorecard server.

1. Install a new Microsoft Windows 2008 R2 server that will be used as the SAP BusinessObjects Enterprise server.

The server must conform to the relevant hardware and software requirements described in the *IT Executive Scorecard Installation and Configuration Guide*.

2. Connect to your RDBMS server, and in the Management database in the SETTINGS_MANAGEMENT table, change the value of **bo.engine.is.installed** to **False**.
3. Enter the Executive Scorecard DVD and progress in the Installer wizard. On the **Select Features** page, select **SAP BusinessObjects Enterprise Components**, and continue the installation.

4. In the Configuration Wizard, connect to the existing management database. Once you connect to the Management database, when relevant, the values entered in the previous configuration are automatically presented on the wizard pages.
5. When configuring SAP BusinessObjects Enterprise for IT Executive Scorecard, connect to the existing CMS and Audit databases (or select **Install Audit schema in the CMS database**, if that is how it was installed in the original installation), and complete the Configuration Wizard using the settings you used in the initial configuration.
6. When the installation finishes, import the SAP BusinessObjects Enterprise configuration backup using the Import Wizard, and restore the SAP BusinessObjects Enterprise configuration.

For more information on using the Import Wizard, see **Chapter 7 of the BusinessObjects Enterprise XI 3.1 Import Wizard Guide** at http://help.sap.com/businessobject/product/guides/boexir31/en/xi3-1_bip_importwiz_en.pdf

Manage Contexts, Templates, and KPIs

This section includes the following topics:

Create and Manage Contexts Using Context Designer and Upload Data Using the Import Wizard	78
Import or Export Trees and KPIs	98
Import or Export Out-of-the-box Pages, Components, and Events	111
Localize and Globalize Executive Scorecard	114
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Create and Manage Contexts Using Context Designer and Upload Data Using the Import Wizard

The Context Designer feature enables you to create and manage Contexts (universes). The universes can be based on your target schema tables or on .CSV files that can be uploaded to the target schema using the Context Designer.

Context Designer can be used when you want to work with the Executive Scorecard and Financial Planning and Analysis applications without using Data Warehouse and SAP BusinessObjects Enterprise. It is a direct way to upload data into the Executive Scorecard Studio using files without performing integrations to external sources or to other HP products. It can be used, to integrate third party data, testing, or for Proof of Concept (POC) sessions. It can also be used as a component of Executive Scorecard to integrate third party data.

Context Designer provides KPI results based on your real data.

Context Designer works with multiple tenants and can be used in Software as a Service.

To access:

1. In Executive Scorecard, click **Admin > Context Management**. The Context Management page opens. For details, see "[Context Designer Page](#)" (on page 85).
2. Click **Launch Context Designer**.

3. In the Context Designer page that opens:
 - To create a new context, click **Create a new context**.
 - To edit a context, click **Open an existing context**.
 - To import data into Executive Scorecard, click **Add Table**. The **Repository** area opens, and then click **Add** to open the Import Wizard.

Learn More

Out-of-the-Box Contexts

You can only add more tables and entities to an out-of-the-box Context, you cannot remove or change the original elements.

Tasks

This section includes:

["View existing out-of-the-box Contexts \(universes\)" \(on page 79\)](#)

["Create a Context and use its contents in the Studio" \(on page 81\)](#)

["Upload Tables in .CSV Format to the Tables Repository" \(on page 83\)](#)

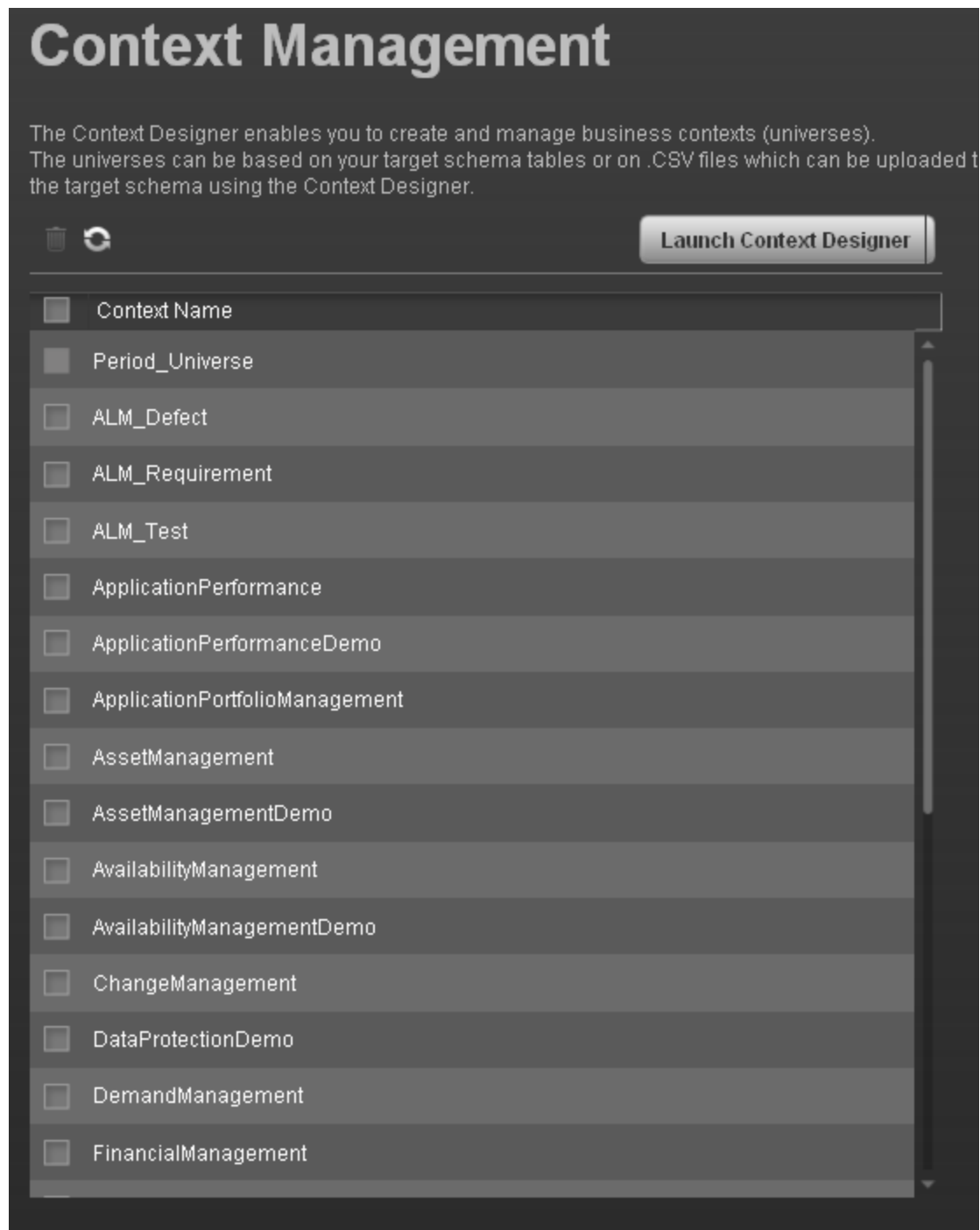
["Load the Context and verify the variables and entities" \(on page 82\)](#)

["Export Contexts" \(on page 84\)](#)

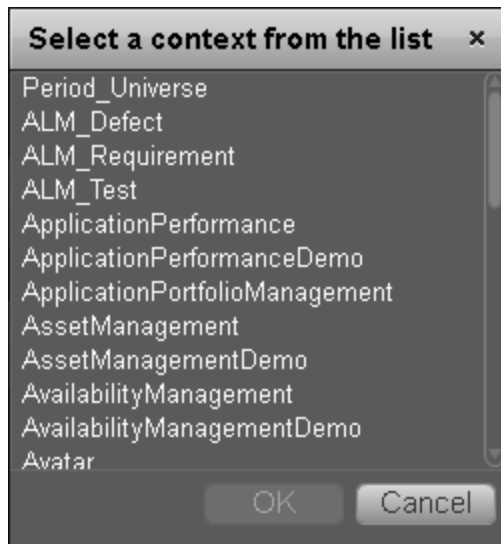
["Import Contexts" \(on page 85\)](#)

View existing out-of-the-box Contexts (universes)

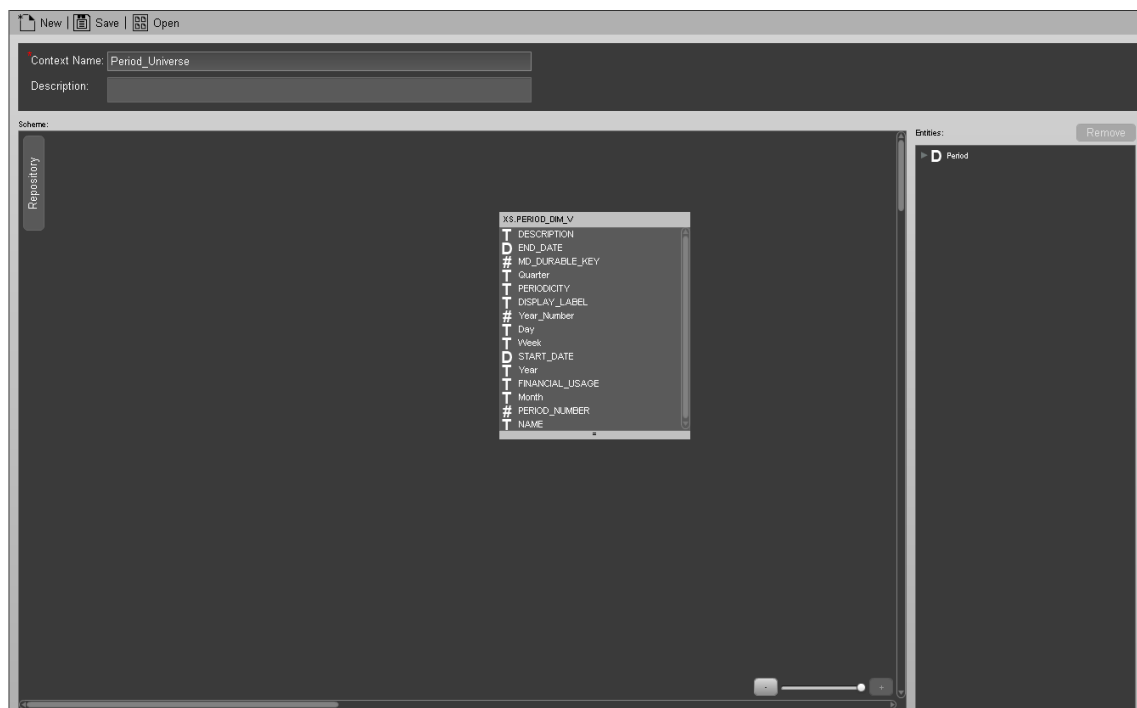
1. In Executive Scorecard, click **Admin > Context Management**. The Context Management page opens.
2. The list of out-of-the-box Contexts is displayed.



3. Click **Launch Context Designer**.
4. In the Context Designer page that opens, click **Open an existing context**.



5. Select the relevant Context,
The structure of the Context is displayed.



Create a Context and use its contents in the Studio

1. **Create a new Context**
 - a. In Executive Scorecard, click **Admin > Context Management > Data Loader**.
 - b. Click **Launch Context Designer**.
 - c. Click **New**. The Context Designer page opens.

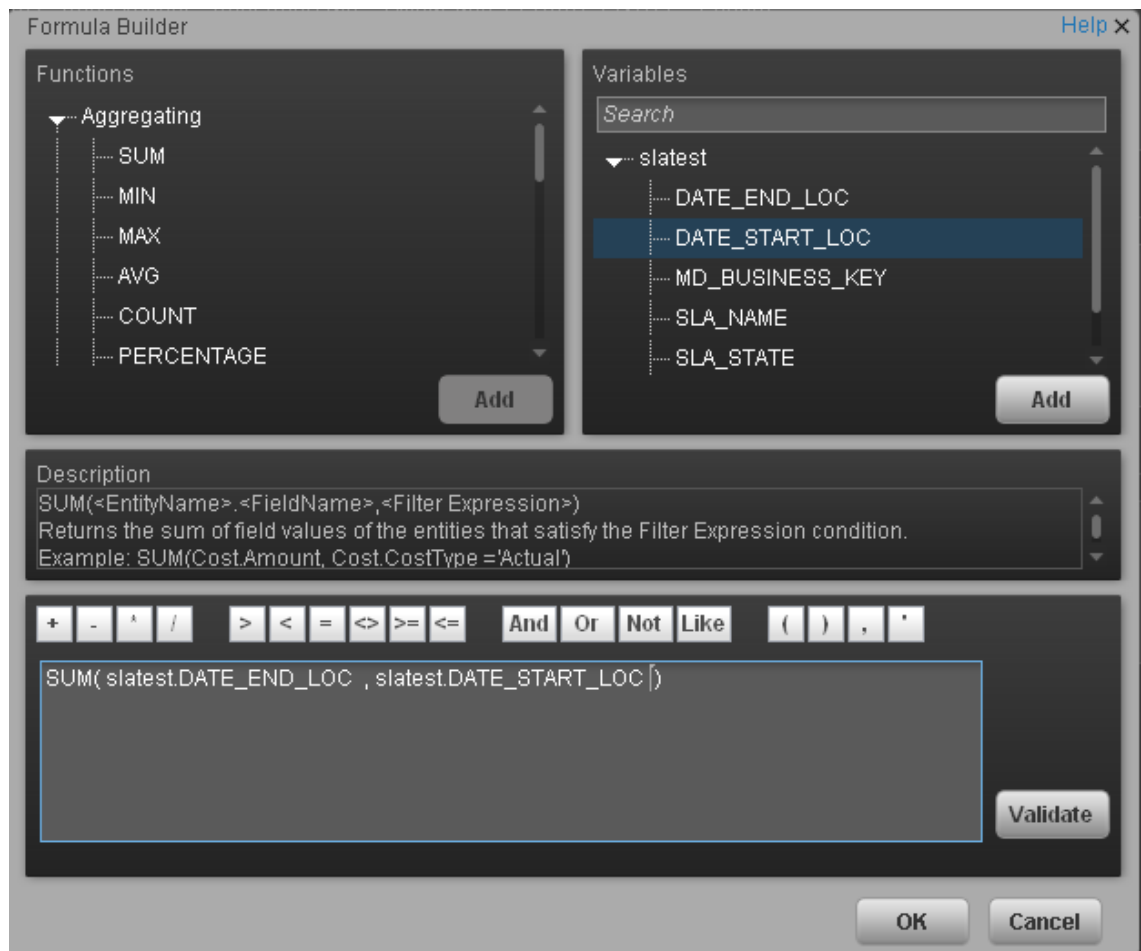
- d. Enter the name of the Context .
- e. Click **Add Table**. The **Repository** area opens. You can use:
 - Tables from the **ExternalTables** list. These tables are created from external tables in CSV format that are uploaded to Executive Scorecard. For details on how to upload a CSV table, see ["Upload Tables in .CSV Format to the Tables Repository" \(on page 83\)](#). After the table is uploaded, a corresponding table named **ext.<csv_table_name>** is listed in the **ExternalTables** list.
 - Internal tables from the **InternalTables** list.

If you are working with Enterprise Executive Scorecard, the tables listed in the InternalTables list are the Data Warehouse tables, the Period tables created during the post-install procedure, and the View table.

If you are working with Light XS, the tables listed in the InternalTables list are the Period tables created during the post-install procedure, and the View table.
- f. Drag the relevant tables from the **Repository** to the **Schema** area.
- g. Define the relationships between the tables by dragging a specific column from one table and dropping it over the relevant column in another table. A visual link is added to the graph to indicate the relationship.
- h. Drag the relevant tables from the **Schema** area to the **Entities** pane. The tables become variables and the columns become the variable entities that can be used to create KPI or Metric formulas when a KPI or Metric is assigned the Context in the Studio.
- i. Save the Context

2. Load the Context and verify the variables and entities

- a. In Executive Scorecard, click **Studio**.
- b. Activate a KPI or a Metric or clone any active KPI or Metric that does not have a KPI Breakdown or Breakdown Metric. For details, see ["Activate Scorecards, Perspectives, Objectives, Metrics, or KPIs Using Templates"](#) or ["Create Active Scorecards, Perspectives, Objectives, Metrics, or KPIs"](#) in the *Business Analyst Guide*.
- c. Click the **Calculation details** tab, and click **Select business context**. For details, see ["Configure a KPI or a Metric"](#) in the *Business Analyst Guide*.
- d. In the Business Context dialog box, change its Context to the new Context (**ext.<csv_table_name>**).
- e. You can then modify the formula that is used to calculate the KPI or Metric status by selecting the variables that correspond to the entities and fields that were defined in the Context Designer. To do that click **Open Formula Builder**.
- f. In the Formula Builder dialog box, verify that the variables correspond to the tables you selected in the Entities area in the Context Designer, and that the entities of the variables correspond to the selected columns of those tables. Click **OK** to save the KPI.



Note: In the same way, you can modify the Filter of the KPI or Metric to use the variables corresponding to the .CSV file-based Context (universe).

Upload Tables in .CSV Format to the Tables Repository

You can upload data into the Studio using .CSV files and without integration to external sources or to other HP products. It can be used to integrate third party data sources, testing, or for Proof of Concept (POC) sessions. You can, in the same way, replace the data in an existing table, or add data to an existing table when the table has been loaded using a .CSV file.

To upload data from the .CSV file into the Studio:


1. Create the .CSV file containing the data you want to use in the Studio (for example: latest.CSV).
2. In **Executive Scorecard**, click the **Admin > Context Management > Launch Context Designer**.
3. Click **Add Table**. The **Repository** area opens.
4. Click **Add** to open the Import Wizard (data loader). Follow the steps to upload the .CSV file.

For details, see ["Create and Manage Contexts Using Context Designer and Upload Data Using the Import Wizard" \(on page 78\)](#).

5. Click the **Upload data file** button.

The file is uploaded. The upload operation saves the changes you made to the .CSV file. The new table appears in the External Tables area.

Update a Context

1. In Executive Scorecard, click **Admin > Context Management > Launch Context Designer**. The Context Designer page opens. For details, see ["Context Designer Page" \(on page 85\)](#).
2. Select the relevant Context.
3. Make the relevant changes: delete or add entities, fields, tables, columns, or relationships.
4. Click  to save the Context.
5. Load the Context and verify.

Export Contexts

Each `<universe_name>.xml` file includes the relevant Context information. They are located in the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\contextlexport_<tenant_ID>` folder. If a file with this name already exists in the folder, the name is changed to `<universe_name><n>.xml`.

1. Make sure you have JDK installed.
2. Run `jconsole` in the `<XS_server>\agora\jdk\bin`.
3. In the window that opens, select the **Remote Process** option, enter `<host_name>:<port_number>` and click **Connect**.
4. After the application completes its loading, click the **MBeans** tab.
5. Click `com.hp.btoe.xs2go.jmx`.
6. Click the **ExportForTenant** button. This imports all the Context XML files that were in the load folder. The format is **ExportForTenant (p1,p2)** where **p1** is the universe name and **p2** is the tenant id.
 - If the import operation is successful, the message **Method successfully invoked** is returned, and the imported Contexts are displayed in **Admin> Context Designer > Launch Context Designer**.
 - In addition, the XML file is moved to the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\export\loaded\` folder.
 - If the import operation fails, an explanation of the failure is added in the relevant file in the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\export\errors\` folder.

Note that the message **Method successfully invoked** might be displayed in some cases in case of failure of the export operation.

Note: If information is missing from the Load directory, part of the export operation might not be performed.

Import Contexts

1. Save the Context XML files to the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\context\import\load\` folder.
2. Make sure you have JDK installed.
3. Run `jconsole` in the `<XS_server>\agora\jdk\bin`.
4. In the window that opens, select the **Remote Process** option, enter `<host_name>:<port_number>` and click **Connect**.
5. After the application completes its loading, click the **MBeans** tab.
6. Click `com.hp.btoe.xs2go.jmx`.
7. Click the **ImportForTenant** button. This imports all the Context XML files that were in the load folder.
 - If the import operation is successful, the message **Method successfully invoked** is returned, and the imported Contexts are displayed in **Admin> Context Designer > Launch Context Designer**.
 - In addition, the XML file is moved to the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\context\import\loaded\` folder.
 - If the import operation fails, an explanation of the failure is added in the relevant file in the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\context\import\errors\` folder.

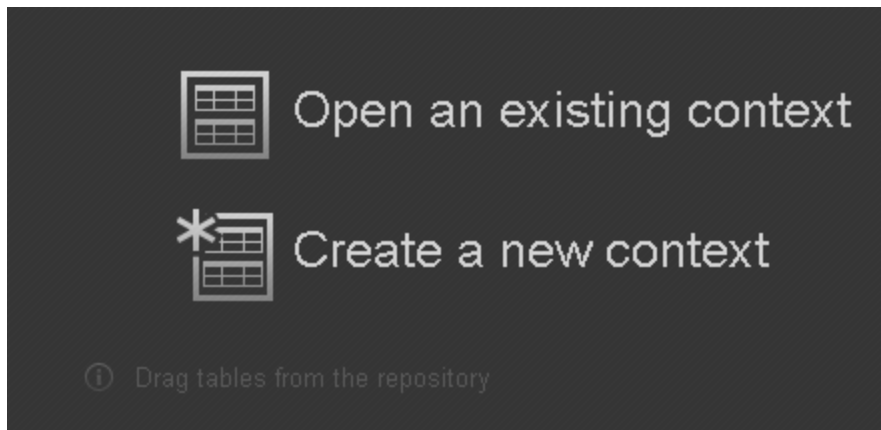
Note that the message **Method successfully invoked** might be displayed in some cases in case of failure of the import operation.

Note: If information is missing from the Load directory, part of the import operation might not be performed.


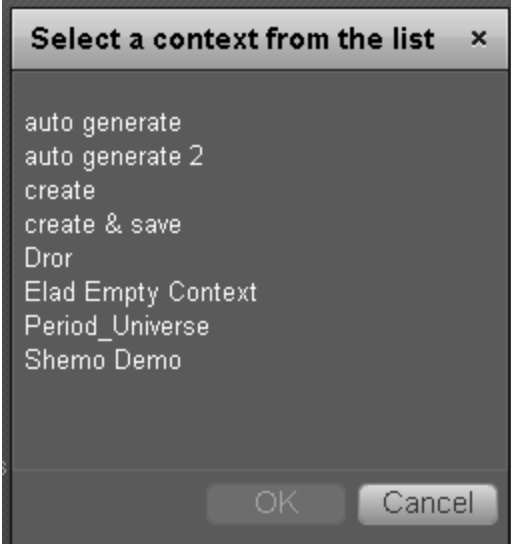

UI Description

Context Designer Page

The Context Designer page enables you to manage the Contexts that you create using the Context Designer feature.



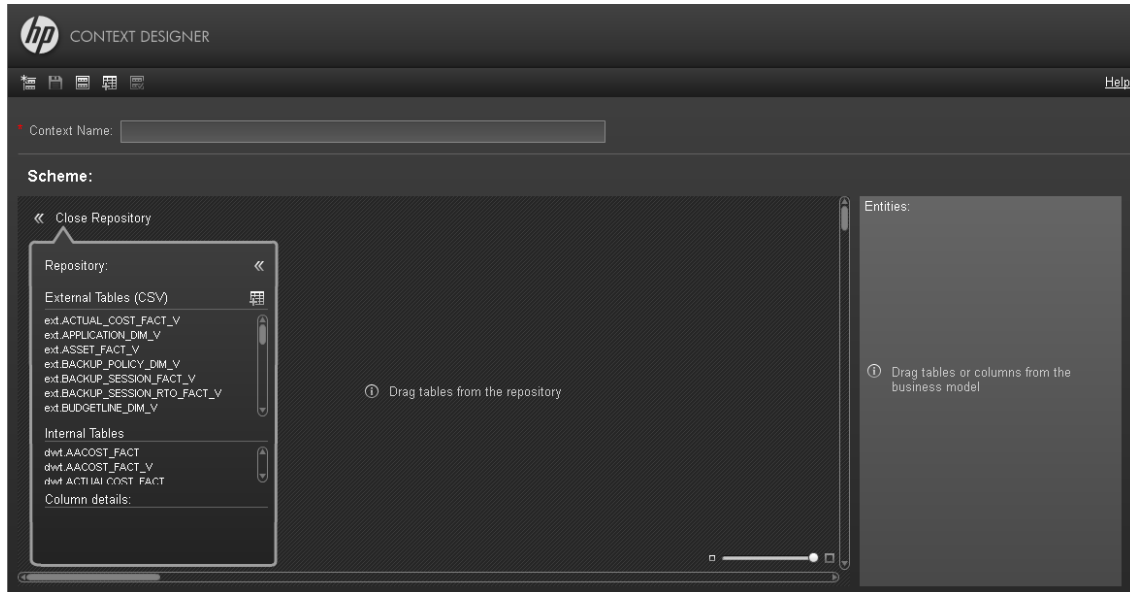
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	<p>Click to display a list of existing Contexts created in the Context Designer. Select the relevant Context and click OK.</p> 
	<p>Click to create a new Context. The Context Designer Wizard opens. For details, see below.</p>

Context Designer Wizard




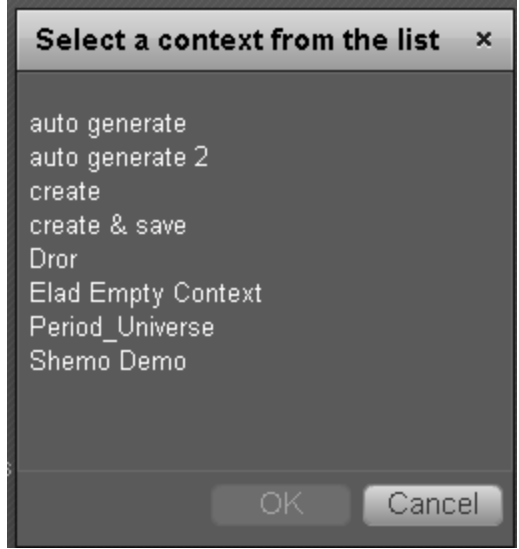
The Context Designer wizard enables you to create a Context with tables, entities, and relationships. Once you have completed the Context, save it. The Context is then added to the list of Contexts available in the Studio. The tables that compose the universe are added as variables and the table columns as variable entities. The variables and entities can be used to calculate the formulas for the KPIs that are assigned the Context. For details, see ["Configure a KPI or a Metric"](#) in the *Business Analyst Guide*.




This page enables you to configure a Context.



Context Designer Toolbar

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
	New. Click to create a new Context.
	Save. Click to save the currently opened Context.
	Open. Click to display a list of existing Contexts created in the Context Designer. Select the relevant Context and click OK . <div data-bbox="402 1312 917 1858">  </div>

	Add table. Click to add tables in CSV format to the Repository. The data loader wizard opens. For details, see "Content Loader" (on page 92) .
	Click to validate the Context. The validation checks if the name of the Context is unique, if all the tables in the Context exist in the Repository, and more. When you click the  Save button, the Context is validated. An invalid Context is not saved.

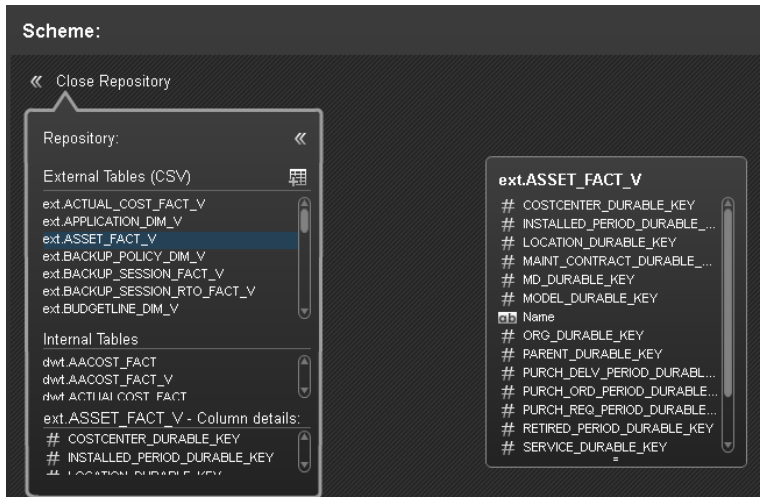
Context Area

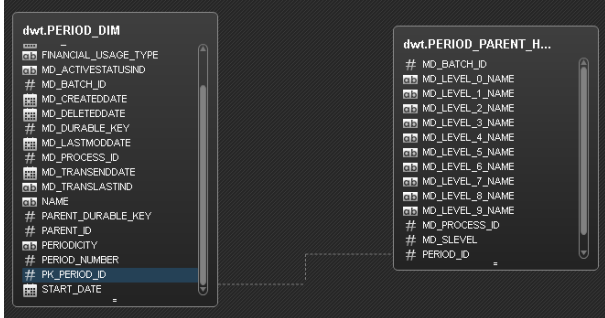

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Context name	The name of the Context. Limitation: SAP BusinessObjects Enterprise Universe names should not duplicate Context names, and all names of Universes and Contexts should be unique.

Schema Area

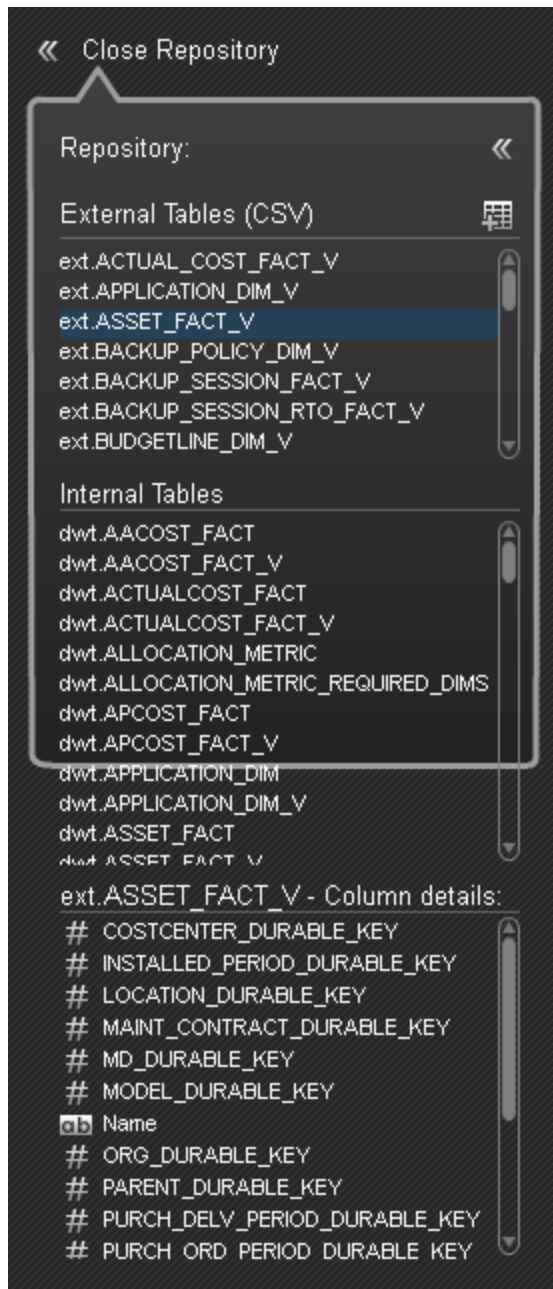
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Repository	Click the button to open the table repository. For details, see "Repository" (on page 89) .
<Drag and drop>	Select the relevant table in the Repository and drag and drop it in the Schema Area to make the table part of the universe. 






UI Element	Description
<p><Create relationships></p>	<p>Select the relevant entity in a table and drag and drop it on the relevant entity in another table to create the relationship between these two entities.</p>  <p>Note:</p> <ul style="list-style-type: none"> • Double-click a table to shrink it down to its title. Double-click a shrunk table to expand it. • To delete a relationship, click it and press the Delete key.
	<p>Use the slider to zoom in or out.</p>

Repository

The Repository area enables you to select external or internal tables to add to the Context you are building.

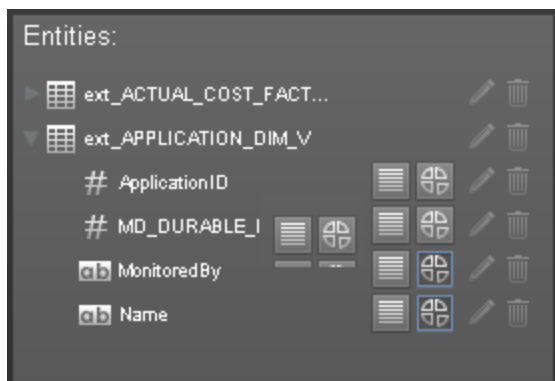


User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):






UI Element	Description
	Click to close the Repository.
External Tables (CSV)	Lists the CSV tables that were uploaded using the data loader wizard. Click the relevant table to display its column details.
	Click to add tables in CSV format to the Repository. The data loader wizard opens. For details, see "Content Loader" (on page 92) .
Internal Tables	Lists the tables. Click on the relevant table to display its entities in the Column details section.
Column Details	<p>Lists the entities (columns) of the table selected in the Internal Tables section. Each entity is preceded by an icon indicating the type of entity:</p> <ul style="list-style-type: none">  - date.  - string.  - numeric

Entities Area

You drag tables from the Schema area to the Entities area to add a variable corresponding to the table to the list of variables available to create the formula for the KPI that is assigned the Context. The table columns become the variable entities.



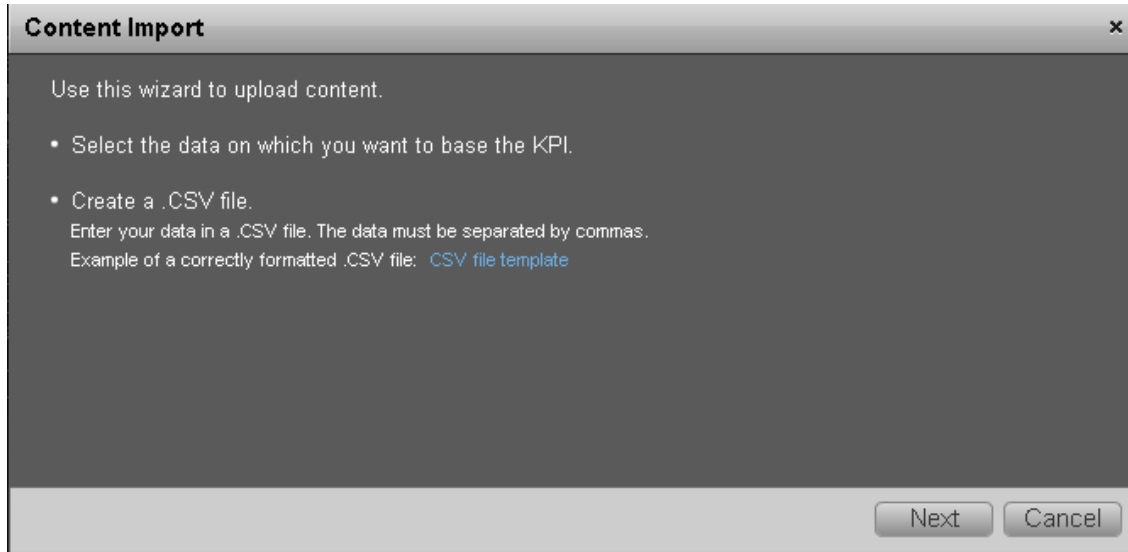
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Drag and drop>	Drag and drop a table from the middle pane to the Entities pane to add the table's entities and fields to the list of available entities and fields available to be added to a KPI formula in the Formula Builder. For details, see "Modify a KPI or Metric Formula" in the <i>Business Analyst Guide</i> .
<Table and columns>	<p>The table that you dragged from the Schema area to the Entities area is displayed followed by its columns.</p> <p>Icons indicate the format of the column.</p> <ul style="list-style-type: none">  - date.  - string.  - numeric <p>The icons to the right of the column enable you to decide to:</p> <ul style="list-style-type: none">  - Enables the auto-completion feature when using this field in a formula, in the Studio. This feature is not supported for a date field. For details, see Variables in "Modify a KPI or Metric Filter" in <i>Business Analyst Guide</i>.  - Enable the creation of a Breakdown for the KPI using this dimension, in the Studio. For details, see Variables in "Manage KPI Breakdowns" in <i>Business Analyst Guide</i>.
Remove	Click to remove the selected table or entity.

Content Loader (Import) Wizard

The wizard enables you to upload content.

Content Loader



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<p>Select the data on which you want to base the KPI.</p>	<p>You can use .CSV files as a data source. A .CSV file contains data separated by commas. Each .CSV file that is uploaded corresponds to a universe with only one entity. The name of the Context (universe) that is created is the name of the .CSV file. The names of the columns in the .CSV file (first row of the file) represent the names of the entity fields. These fields become the variables that can be used to create the formula that is used to calculate the value of the KPIs or Metrics associated with the Context.</p> <p>File Structure</p> <p>The .CSV file should have a table structure. The following is an example of a .CSV file in table format:</p> <pre>MD_BUSINESS_KEY,SLA_NAME,SLA_STATE,SLA_TYPE,DATE_START,DATE_END SLA01,SLA01,Passed,Corporate,1/1/2011 13:00:00,2/1/2011 19:00:00 SLA02,SLA02,Passed,Corporate,1/2/2011 13:00:00,2/2/2011 19:00:00 SLA03,SLA03,Passed,Corporate,1/3/2011 13:00:00,2/3/2011 19:00:00 SLA03,SLA03,Passed,Corporate,1/3/2011 13:00:00,2/3/2011 19:00:00 SLA04,SLA04,Passed,Corporate,1/4/2011 13:00:00,2/4/2011 19:00:00 SLA13,SLA13,Passed,Corporate,1/3/2011 13:00:00,2/3/2011 19:00:00 SLA14,SLA14,Passed,Corporate,1/6/2011 13:00:00,2/6/2011 19:00:00</pre> <p>Limitations</p> <ul style="list-style-type: none"> • The maximum size of the .CSV file is 20 MB. This is configurable using the Maximum Size of .CSV file (MB) setting in Admin tab > Scorecard Settings > XS Settings. • The maximum number of characters in an entity field name is 30 characters (an entity field name is the string between commas in the first row of the .CSV file). • The entity field names should follow the rules of column titles in the database (include only alphanumeric characters, and underscore (_)). • The name of the .CSV file should follow the rules of Context names (include only alphanumeric characters, and underscores (_)). <p>Tip:</p> <ul style="list-style-type: none"> • The date data obtained from the data sources is automatically reformatted internally using the YYYY.MM.dd HH:mm:ss (based on 24 hours) format. All internal calculations are performed using this format. • If you are using CSV files, you can select the date format in the <Data upload> wizard. The selected format is automatically reformatted internally using the YYYY.MM.dd HH:mm:ss (based on 24 hours) format.

UI Element

Description

- The dates displayed in the application user interface are reformatted according to the browser locale.

Create a .CSV File

Hover above **CSV file template** to display an example of a .CSV file structure that can be uploaded.

	A	B	C	D
1	Field_1_Name	Field_2_Name	Field_3_Name	Field_4_Name
2	Field_1_Value_1	Field_2_Value_1	Field_3_Value_1	Field_4_Value_1
3	Field_1_Value_2	Field_2_Value_2	Field_3_Value_2	Field_4_Value_2
4	Field_1_Value_3	Field_2_Value_3	Field_3_Value_3	Field_4_Value_3
5	Field_1_Value_4	Field_2_Value_4	Field_3_Value_4	Field_4_Value_4
6	Field_1_Value_5	Field_2_Value_5	Field_3_Value_5	Field_4_Value_5
7	Field_1_Value_6	Field_2_Value_6	Field_3_Value_6	Field_4_Value_6
8	Field_1_Value_7	Field_2_Value_7	Field_3_Value_7	Field_4_Value_7

Select Action

Select Action

External context can be uploaded to either a new table or to an existing one:

☐ Upload a new table

☒ Update an existing table

☐ Add data to an existing table
☒ Override the data in an existing table with the new data

Back

Next

Cancel

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User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Upload a new table	Select this option if you want to create a new table in the Context Designer using the information from the .CSV file.
Update an existing table	<p>Select this option if you want to update an external table that already exists in the Context Designer. When you click this option, the following options are displayed:</p> <ul style="list-style-type: none"> • Add data to an existing table. Select this option when you want to add data to an existing table. The data from the new .CSV file is added at the end of the existing table. The formats of the two .CSV files must be the same. • Override the data in an existing table with the new data. Select this option when you want to replace the data of an existing table with the data of the .CSV file you are loading. The formats of the two .CSV files must be the same.

Select File

This page is displayed when you selected the **Upload a new table** option:

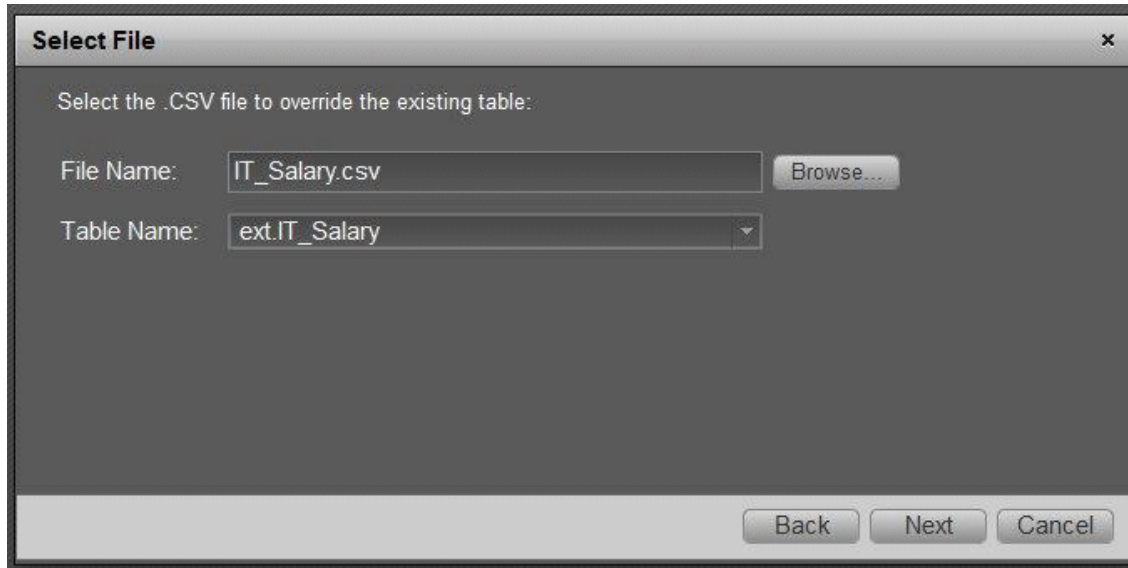
Select File [x]

Select the .CSV file to be used to create the new table

File Name:

Table Name: maximum 50 characters

This page is displayed when you selected the **Update an existing table** option:

A screenshot of a 'Select File' dialog box. The title bar says 'Select File' with a close button (X). The main area contains the text 'Select the .CSV file to override the existing table:'. Below this, there are two input fields. The first is labeled 'File Name:' and contains the text 'IT_Salary.csv'. To its right is a 'Browse...' button. The second is labeled 'Table Name:' and contains a dropdown menu with 'ext.IT_Salary' selected. At the bottom right, there are three buttons: 'Back', 'Next', and 'Cancel'.

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI	
Element	Description
File Name	Select the .CSV file you want to upload.
Table Name	If you are loading a new .CSV file, enter the name of the corresponding table. If you are adding data to an existing external table or if you are replacing the data in an existing external table, select the relevant table name.

Preview

This page displays the table created from the .CSV file.

NAME	SALARY	OGRANIZATION_NAME
Rony	45000	Helpdesk
Dror	70000	Helpdesk
Ivgeny	82000	Helpdesk
Ifat	67000	Office Supplies (North America)
Anna	45000	SAP Support (North America)
Victoria	89000	Service Manager

Select the date format used in the .CSV file dd/MM/yyyy

Back Upload Cancel

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
<table>	The .CSV file is displayed in the box in table format. If an error message is displayed (for example some of the values include spaces or unsupported characters) you can make the necessary corrections directly in the box:
Select the date format you used in the .CSV file	Select the date format you used in the .CSV file.
Upload	Click to upload the .CSV file into the Studio. For details, see "Upload Tables in .CSV Format to the Tables Repository" (on page 83) .

Import or Export Trees and KPIs

You can import existing template trees or sub-trees, active trees, active sub-trees, or orphan KPIs into the KPI Library or the Active KPIs pane.

You can export complete trees (with their Scorecards, Perspectives, Objectives, and KPIs) from the KPI Library or from the Active KPIs pane.

The import or export flows are meant to be used when moving from staging to production and not as a way to update system configuration. If you want to use the import or export flows to update the system configuration, you must delete all the nodes in the active KPIs pane, before performing the import operation.

The import and export flows are also meant to be used for localization purposes, when you want to work with other languages than English.

Learn More

About Importing or Exporting Trees

You use the import or export feature when you want to import or export out-of-the-box templates, automatically update existing templates, or import new templates, or active trees into the Executive Studio.

The import and export feature is the process used to move from staging environment to production.

The export feature collects the contents of the Active KPIs tree (Scorecards, Perspectives, Objectives, KPIs, and Orphan KPIs) or of the KPI Library trees (Scorecard, Perspective, Objective, and KPI templates, Folders, and Orphan KPIs). It converts the contents to a configuration.xml file that describes the structure of the active tree or to a <tree_name>.xml file for each tree in the KPI Library. These files include the UUID and KPI name of the KPIs included in the trees. In addition, the process creates a <kpi_name>.xml file per KPI in the system; that file describes the configuration of the KPI. The XML files are created in a specific directory on the machine. For details about the directory, see ["Template Locations" \(on page 99\)](#)

The import feature collects the content of a specific directory on the machine. The directory can include configuration.xml files, and <kpi_name>.xml files according to the same format used by the export feature or can include .xml files (the structure of these files should follow the XSD legal model; for details, see ["XML Files Used in Import and Export Operations" \(on page 103\)](#)) with other names. The import feature uses these files to upload the information in the specific area in the Active KPIs tree or in the KPI Library trees. For details about the directory, see ["Template Locations" \(on page 99\)](#).

The import and export operations work with XML files with a specific structure. Each configuration.xml file includes information about the hierarchy from the lowest node to the tree root. That information is used to add the new node is added to the relevant location in the relevant tree, or the imported node overrides the relevant node. Each <KPI_name>.xml file includes information about the KPI configuration. That information is used so that the relevant configuration and calculation details are added to the relevant KPI. For details about the XML file structure, see ["XML Files Used in Import and Export Operations" \(on page 103\)](#).

The export operation uses the KPI's UUID to identify the KPI.

In addition, you can import KPIs from Excel files. You can use this capability to import KPIs without consideration about their location in the tree. You can also create an .xml file that provides information about a tree structure and that refers to KPIs that are imported from the Excel file. The import feature uses these files to upload the information in the specific area in the Active KPIs tree or in the KPI Library trees. For details about the directory, see ["Template Locations" \(on page 99\)](#)

Note: When the server on which the Executive Studio is located starts, if the system detects files in the

<XS_server>\agora\glassfish\glassfish\domains\Config\KPI Template\ Import directory, it automatically uploads that information. This feature is used when you logon to the Executive Studio for the first time, to upload the out-of-the-box templates.

Template Locations

When working with XML files, the files are located in the following directories:

- **<XS_server>\agora\glassfish\glassfish\domains\Config\KPIConfiguration\Export or Import** for files corresponding to nodes in the Active KPI pane.
- **<XS_server>\agora\glassfish\glassfish\domains\Config\KPITemplate\ Export or Import** for files corresponding to template nodes in the KPI Library.

The Import directory includes the **Error**, **Load**, and **Loaded** directories.

Before you import a tree, the relevant XML files or the KPI Excel files must be located in the **Load** directory. After the import operation, the file is moved to:

- The **Loaded** directory if the import operation succeeds.
- The **Error** directory if the import operation fails. In this case, an error file explaining the problem is added to the Error directory.

Tasks

This section includes:

["To import a node:" \(on page 100\)](#)

["To export a node:" \(on page 102\)](#)

To import a node:

1. Before importing any entity, you must create a XML file with appropriate structure. For details, see ["About Importing or Exporting Trees" \(on page 99\)](#).
2. Save the XML file to:
 - **<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\import\load** folder for importing to the KPI Library pane.
 - **<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpiconfiguration\import\load** folder for importing to the Active KPIs pane.
3. Make sure you have JDK installed.
4. Run **jconsole** in the **<XS_server>\agora\jdk\bin**.
5. In the window that opens, select the **Remote Process** option, enter **<host_name>:<port_number>** and click **Connect**.
6. After the application completes its loading, click the **MBeans** tab.
7. Click **com.hp.btoe.studio.jmx**.
8. You can now:
 - **Import the tree structure or the Orphan KPIs to the Active KPIs pane.** Expand **KPILoader**, select the **Operations** branch, and click **importKPIs**. In the Operation invocation area, click the **importKPIs** button.

If the import operation is successful, the message **Method successfully invoked** is returned, and the imported entity is displayed in the Active KPIs pane in the Studio.

In addition, the XML file is moved to the

<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpicomfiguration\import\loaded folder.

If the import operation fails, an explanation of the failure is added in the relevant file in the

<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\import\errors folder.

Note that the message **Method successfully invoked** might be displayed in some cases in case of failure of the import operation.

- **Import KPIs from an Excel file.** Expand **KPILoader**, select the **Operations** branch, and click **importKPIsFromExcel**. In the Operation invocation area, click the **importKPIsFromExcel** button. If successful, the message **Method successfully invoked** is returned.
- **Import the template tree or Orphan KPI Templates to the KPI Library.** Expand **KPITemplateLoader**, select the **Operations** branch, and click **importKPITemplates**. In the Operation invocation area, click the **importKPITemplates** button.

If the import operation is successful, the message **Method successfully invoked** is returned, and the imported entity is displayed in the KPI Library pane in the Studio.

In addition, the XML file is moved to

<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\import\loaded folder.

If the import operation fails, an explanation of the failure is added in the relevant file in the

<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\import\errors folder.

Note that the message **Method successfully invoked** might be displayed in some cases in case of failure of the import operation.

- **Import KPITemplates From Excel.** Expand **KPITemplateLoader** and click **importKPITemplatesFromExcel**. In the Operation invocation area, click the **importKPITemplatesFromExcel** button. If the import operation is successful, the message **Method successfully invoked** is returned.

Note: If information is missing from the Load directory, part of the import operation might not be performed.

Example:

- If one or more of the KPI XML files are missing from the **<XS_server>\agora\glassfish\glassfish\domains\Config\KPITemplate\Import\Load** directory, the trees that include the missing KPIs (represented by the configuration.xml or by the <tree_name>.xml files) are not imported. In addition, the relevant error files are entered in the **<XS_**

```
server>\agora\glassfish\glassfish\domains\Config\KPITemplate\Import\Errors
directory.
```

- If one or more of the mandatory properties of a KPI (for example, the formula) are missing from the

```
<XS_
```

```
server>\agora\glassfish\glassfish\domains\Config\KPITemplate\Import\Load
directory, the KPI is not imported. In addition, the relevant error files are entered in the
```

```
<XS_
```

```
server>\agora\glassfish\glassfish\domains\Config\KPITemplate\Import\Errors
directory.
```

For details about the structure of the XML files, see ["XML Files Used in Import and Export Operations" \(on page 103\)](#).

To export a node:

1. Make sure you have JDK installed.
2. Run `jconsole` in `<XS_server>\agora\jdk\bin`.
3. In the window that opens, select the **Remote Process** option, enter `<host_name>:<port_number>` and click **Connect**.
4. After the application completes its loading, click the **MBeans** tab.
5. Click `com.hp.btoe.studio.jmx`.
6. You can now:
 - **Export active KPIs from the Active KPIs pane.** Expand **KPIExport**, select the **Operations** branch, and click **exportKPIs**. In the Operation invocation area, click the **exportKPIs** button. If the export operation is successful, the message **Method successfully invoked** is returned, and the result is XML files in the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpicconfiguration\export\` folder.
 - **Export KPITemplate from the KPI Library pane.** Expand **KPITemplateExport**, select the **Operations** branch, and click **exportKPITemplates**. In the Operation invocation area, click the **exportKPITemplates** button. If the export operation is successful, the message **Method successfully invoked** is returned, and the result is XML files in the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\export\` folder.

Reference

XML Files Used in Import and Export Operations

Import and export work with XML files. The XML files have the following structures:

Example of a KPI XML File:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<KPI tenantId="0">
  <name>% Actual vs Planned Costs</name>
  <description>The actual costs relative to the budgeted costs of
an activity.
  </description>
  <type>LEAF</type>
  <period>MONTHLY</period>
  <dimension></dimension>
  <formula>PERCENTAGE_MATH(
SUM(Cost.Amount, Cost.CostType='Actual' and PERIOD_ENTITY=Period),
SUM(Cost.Amount, Cost.CostType='Planned' and PERIOD_ENTITY=Period)
)
  </formula>

  <thresholdType type="MINIMIZE">
    <rangeFrom>0.0</rangeFrom>
    <rangeTo>4.0</rangeTo>
    <goodFrom>0.0</goodFrom>
    <goodTo>2.0</goodTo>
    <warningFrom>2.0</warningFrom>
    <warningTo>3.0</warningTo>
  </thresholdType>
  <unit>%</unit>
  <filter></filter>
  <dataSource>test</dataSource>
  <uuid>3c7a1c22-5c10-4703-a22b-4a1eac317a5c</uuid>
</KPI>
```

Where:

Tag	Explanation	Example
<name>	<p>The name of the KPI.</p> <p>Limit:</p> <ul style="list-style-type: none"> The name can be up to 265 characters or symbols. The forward slash (/) symbol is not supported. 	<name>% Actual vs Planned Costs</name>
<description>	<p>The description of the KPI</p> <p>Limit:</p> <ul style="list-style-type: none"> The name can be up to 1000 characters or symbols. The forward slash (/) symbol is not supported. 	<description> The actual costs relative to the budgeted costs of an activity.</description>
<type>	<p>This is type of the entity. It can be:</p> <ul style="list-style-type: none"> LEAF PARENT BREAKDOWN BD_PARENT <p>Note: The entry must be in uppercase.</p>	<type>LEAF</type>
<period>	The period of the	<period>MONTHLY</period>

	<p>KPI. It can be:</p> <ul style="list-style-type: none"> • WEEKLY • MONTHLY • QUARTERLY • YEARLY <p>Note: The entry must be in uppercase.</p> <p>For details, see "Configure a KPI or a Metric" in the <i>Business Analyst Guide</i>.</p>	
<p>< businessQuestions ></p>	<p>The Business motivation displayed in the Metadata area in the KPI's Configuration details tab.</p> <p>For details, see "Configure a KPI or a Metric" in the <i>Business Analyst Guide</i>.</p> <p>Limit:</p> <ul style="list-style-type: none"> • The name can be up to 1000 characters or symbols. • The forward slash (/) symbol is not supported. 	<p><businessQuestions>What are the actual cost and planned cost values? What is the percentage of actual versus planned spending? How do the actual versus planned costs measure against the thresholds? Is actual versus planned spending on target or in the minimum or maximum</businessQuestions></p>
<comments>	The comments displayed in the	<comments>My comments</comments>

	<p>Comments area in the KPI's Calculation details tab.</p> <p>For details, see "Configure a KPI or a Metric" in the <i>Business Analyst Guide</i>.</p>		
<formula>	The formula used to calculate the value of the KPI.	<formula>PERCENTAGE_MATH(SUM(Cost.Amount, Cost.CostType='Actual' and PERIOD_ENTITY=Period), 100000)</formula>	
<thresholdType type=" ">	<p>The direction of the Result threshold. It can be:</p> <ul style="list-style-type: none"> • MAXIMIZE • CENTRALIZE • MINIMIZE <p>Note: The entry must be in uppercase.</p> <p>For details, see "Configure a KPI or a Metric" in the <i>Business Analyst Guide</i>.</p>	<p><thresholdType type="MAXIMIZE"></p> <p>% and 10% (green), and a bad rate is between 10% and 100% (red).</p>	
<rangeFrom>	Lower value of the error range.	<rangeFrom>0.0</rangeFrom>	
<rangeTo>	Higher value of the error range.	<rangeTo>100.0</rangeTo>	
<goodFrom>	Lower value of the good range.	<goodFrom>90.0</goodFrom>	
<goodTo>	Higher value of the good range.	<goodTo>100.0</goodTo>	

<warningFrom>	Lower value of the warning range.	<warningFrom>80.5</warningFrom>
<warningTo>	Higher value of the warning range.	<warningTo>90.0</warningTo>
<unit>	The KPI's unit. It can be: <ul style="list-style-type: none"> • % • \$US (The entry must be in uppercase.) • Days (The entry must be init cap.) 	<unit>%</unit> <unit>\$US</unit> <unit>Days</unit>
<filter>	The formula used to calculate the KPI's value.	<filter>Budget.Name = 1</filter>
<dataSource>	The Context. The Context's entities are the basis of the calculation and provide the entities used in the formula.	<dataSource>FinancialManagement</dataSource>
<uuid>	Set UUID to identify the KPI. You can set your own UUID for the KPI. For example <uuid>This is MY KPI</uuid>	<uuid>1c9eab96-5013-412c-a428-17a1ae39317b</uuid>

Example of a Folder tree XML File:

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<tree xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:noNamespaceSchemaLocation="../../../xsd/templates/Template_
tree.xsd" name="Industry Standard" tenantId="0">
  <folder name="ITIL" description="ITIL">
    <folder name="Asset Management" description="Asset
Management">
      <template name="Average Age of Hardware Assets"/>
    </folder>
    <folder name="Change Management" description="Change
Management">
      <template name="Change Risk"/>
    </folder>
    <folder name="Financial Management" description="Financial
Management">
      <template name="% of budget deviation relative to total
budget"/>
      <template name="% Project Budget over or under"/>
      <template name="Actual vs. budgeted costs"/>
    </folder>
    <folder name="Incident Management" description="Financial
Management">
      <template name="% of escalated incidents"/>
      <template name="% incidents solved within SLA time"/>
    </folder>
    <folder name="Problem Management" description="Financial
Management">
      <template name="% of problems resolved on time"/>
    </folder>
  </folder>
  <folder name="All working KPI's" description="just a copy of
all tempaltes">
    <template name="% of Reopened Incidents"/>
    <template name="% of critical and high incidents"/>
  </folder>
</tree>
```

Example of a Scorecard tree XML File:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<tree xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:noNamespaceSchemaLocation="../../../xsd/templates/Template_
tree.xsd" name="Industry Standard" tenantId="0">
  <scorecard name="CIO Scorecard" description="Business Value">
    <perspective name="Customer" description="?">
```

```

        <objective name="Reduce incident/problem management
related customer complaints by 30% in 2011"
            rule="BEST_CHILD" period="MONTHLY">
            <template name="% of Reopened Incidents"/>
            <template name="% of escalated incidents"/>
        </objective>
        <objective name="Improve Service Delivery by 30%"
rule="BEST_CHILD" period="MONTHLY">
            <template name="% of Service Level Objectives for
Met IT Process Activities"/>
            <template name="Service request avg response
time"/>
            <template name="Service request backlog"/>
        </objective>
        <objective name="Increase Customer Satisfaction by 20%
in 2011" rule="BEST_CHILD" period="MONTHLY">
            <template name="Reported exceptions to SLA"/>
            <template name="Customer Satisfaction"/>
            <template name="Critical time outage"/>
        </objective>
    </perspective>
    <perspective name="Internal Business Process"
description="?">
        <objective name="Improve Project Delivery by increasing
throughput by 15%" rule="BEST_CHILD"
            period="MONTHLY">
            <template name="Employee Utilization Rate"/>
            <template name="% of projects on time"/>
            <template name="Deviation % of Planned Work
Hours"/>
            <template name="TTM"/>
        </objective>
    </perspective>
    <perspective name="Financial" description="?">
        <objective name="Reduce unhealthy projects budget risk
by 10% in 2011" rule="BEST_CHILD" period="MONTHLY">
            <template name="Unhealthy projects"/>
            <template name="% of Capital Exposure at Risk"/>
            <template name="Unhealthy projects budget risk"/>
        </objective>
        <objective name="Increase Employee Utilization by 3% in
1st Qtr 2011" rule="BEST_CHILD" period="MONTHLY">
            <template name="Employee Utilization Rate"/>
            <template name="FCR"/>
        </objective>
    </perspective>

```

```
<objective name="Reduce IT budget by 20% in 2011"
rule="BEST_CHILD" period="MONTHLY">
  <template name="% FTE"/>
  <template name="Service Actual to Plan"/>
  <template name="% Outages/Total SLA uptime"/>
  <template name="Business Service Cost Reduction"/>
</objective>
</perspective>
<perspective name="Learning and Growth" description="?">
  <objective name="Increase Manager skills against the
competency model by 15% in 2011 above 2010"
    rule="BEST_CHILD" period="MONTHLY">
    <template name="Percentage of managers meeting or
exceeding leadership competency model"/>
  </objective>
  <objective name="Increase Employee Satisfaction by 10%
in 2011" rule="BEST_CHILD" period="MONTHLY">
    <template name="Employee Attrition"/>
    <template name="Job Satisfaction"/>
    <template name="Employee Satisfaction"/>
  </objective>
  <objective name="Increase employee productivity by 10%"
rule="BEST_CHILD" period="MONTHLY">
    <template name="Employee Utilization Rate"/>
  </objective>
</perspective>
</scorecard>
</tree>
```

Example of a KPI Excel File:

The Excel table must include the following columns in the following order:

- ID
- KPI
- Description
- Business Questions
- Context
- Formula
- Unit Type
- Time Period
- Direction

- Range From
- Range To
- Good From
- Good To
- Warning From
- Warning To

For details about the above column contents, see ["Configure a KPI or a Metric"](#) in the *Business Analyst Guide*.

Import or Export Out-of-the-box Pages, Components, and Events

You can import existing out-of-the-box pages, components and events into the Dashboard page.

The import or export flows are meant to be used for localization purposes (when you want to work with other languages than English) or when moving from staging to production and not as a way to update system configuration.

Learn More

About Importing or Exporting OOTB Pages, Components, and Events

Out-of-the-box pages are available in the Dashboard. Pages can include components. Components in a page can be wired and can interact with each other using events. For details, about the Dashboard, see ["Prepare the Dashboard Display" \(on page 1\)](#) in the *Business Analyst Guide*.

The import and export feature is the process used to move from the staging environment to production.

The export feature collects the contents of the pages, components, and events. It converts the contents to **components.uim.xml**, **pages.uim.xml**, and **events.uim.xml** files that describes the structure and content of the pages, components, and events. These files include the UUID of the pages and components.

The export operation uses the page, component, or event UUID to identify the page, component, or event.

The import feature collects the contents of a specific directory on the machine. The directory can include **components.uim.xml**, **pages.uim.xml**, and **events.uim.xml** files according to the same format used by the export feature. The import feature uses these files to upload the information into the database.

After the import operation, the file is moved to:

- The **Loaded** directory if the import operation succeeds.
- The **Errors** directory if the import operation fails.

Note: When the server on which the Dashboard is located starts, if the system detects files in

the
<XS_server>\agora\glassfish\glassfish\domains\BTOA\uimashup\import\toload
directory, it automatically uploads that information.

Tasks

This section includes:

["To import pages, components, or events:" \(on page 112\)](#)

["To export pages, components, or events:" \(on page 114\)](#)

To import pages, components, or events:

1. Make sure you have JDK installed.
2. Run **jconsole** in the **Start** menu.
3. In the window that opens, select the **Remote Process** option, enter **<host_name>:<port_number>** and click **Connect**.
4. After the application completes its loading, click the **MBeans** tab.
5. To import all the pages, components, and events at once, expand **UIM**, select **Operations** and in the Operation invocation area, click the **loadAllData** button.
Or, you can also import pages, components and events separately as follows:

- **Import the pages.** Expand **UIM**, and select **Operations**. In the Operation invocation area, click the **loadPagesData** button.

If the import operation is successful, the message **Method successfully invoked** is returned, and the imported entities are displayed in the Page Gallery.

In addition, the XML file is moved to the

<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\
import\loaded\ folder.

If the import operation fails, an explanation of the failure is added in the relevant file in the
<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\
import\errors\ folder.

Note that the message **Method successfully invoked** might be displayed in some cases in case of failure of the import operation.

Note: If you want to import pages in another language, the existing (English) categories are not removed, so both translated and non-translated categories appear in the list of categories. To select the categories you want to delete, expand **UIM**, and select **Operations**. In the Operation invocation area, click the **displayAllCachedGalleryCategories** button to view the current categories to display a table that lists all the out-of-the-box categories. Once you know which categories you want to delete, expand **UIM**, and select **Operations**. In the Operation invocation area,

click the **deletePageCategoryByName** button and specify the relevant page category you want to delete.

- **Import the components.** Expand **UIM** and select **Operations**. In the Operation invocation area, click the **loadComponentsGallery** button. If successful, the message **Method successfully invoked** is returned, and the imported entities are displayed in the Component Gallery..

In addition, the XML file is moved to the

<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\import\loaded folder.

If the import operation fails, an explanation of the failure is added in the relevant file in the **<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\import\errors** folder.

Note that the message **Method successfully invoked** might be displayed in some cases in case of failure of the import operation.

Note: If you want to import components in another language, the existing (English) categories are not removed, so both translated and non-translated categories appear in the list of categories. To select the categories you want to delete, expand **UIM**, and select **Operations**. In the Operation invocation area, click the **displayAllCachedGalleryCategories** button to view the current categories. Once you know which categories you want to delete, expand **UIM**, and select **Operations**. In the Operation invocation area, click the **deleteComponentCategoryByName** button and specify the relevant component category you want to delete.

- **Import the events.** Expand **UIM**, and select **Operations**. In the Operation invocation area, click the **loadEvents** button.

If the import operation is successful, the message **Method successfully invoked** is returned.

In addition, the XML file is moved to

<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\import\loaded folder.

If the import operation fails, an explanation of the failure is added in the relevant file in the **<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\import\errors** folder.

Note that the message **Method successfully invoked** might be displayed in some cases in case of failure of the import operation.

Note:

- If information is missing from the Load directory, part of the import operation might not be performed.
- When a file is copied to the `<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\import\loaded\` folder during the import process, a timestamp (Milliseconds since midnight, January 1, 1970 UTC) is added to its name, for example: **Components_pt_BR_130810232011.xml**. This way, you can see which file is currently assigned to the database.

To export pages, components, or events:

1. Make sure you have JDK installed.
2. Run **jconsole** in the **Start** menu.
3. In the window that opens, select the **Remote Process** option, enter `<host_name>:<port_number>` and click **Connect**.
4. After the application completes its loading, click the **MBeans** tab.
5. You can now:
 - **Export pages.** Expand **UIM** and select **Operations**. In the Operation invocation area, click the **exportPages** button and specify the **pathToExportLocation**. If the export operation is successful, the message **Method successfully invoked** is returned, and the result is XML files in the folder you specified.
 - **Export components and events.** Expand **UIM** and select **Operations**. In the Operation invocation area, click the **exportMetaData** button and specify the **pathToExportLocation**. If the export operation is successful, the message **Method successfully invoked** is returned, and the result is XML files in the folder you specified.

Localize and Globalize Executive Scorecard

You can localize and globalize Executive Scorecard. The user interface of HP Executive Scorecard supports multiple languages.

Out-of-the-box KPI Library Pane Contents

The localized installation adds the language libraries of XML files in specific folders. You copy and then import these files to display the out-of-the-box template Scorecards, Perspectives, Objectives, Folders, and KPIs in the KPI Library in the selected language.

To localize the out-of-the box content of the KPI Library: Scorecards, Perspectives, Objectives, and KPIs, proceed as follows:

1. In the Executive Scorecard server, locate the `<XS_installation_directory>\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\import\languages\<language_code>\<country_code>` folder relevant for the language you want to use in the application. The .xml files in the folder represent both KPIs and KPI directories.

The language code and country codes are as follows:

Language	Language Code	Country Code
Brazilian Portuguese	pt	BR
French	fr	FR
Spanish	es	ES
German	de	DE
Japanese	ja	JP
English	en	US
Dutch	nl	NL
Italian	it	IT
Simplified Chinese	zh	CN
Korean	ko	KR
Russian	ru	RU

- Copy these .xml files to the **<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\kpitemplates\import\load** folder.

Tip:

If the folder contains other sets of files (for different languages), it is recommended to keep in the folder only the required set of language files and to move the other files outside the folder to prevent the loading of both set of language files and an unknown result.

- Import the out-of-the-box language files using the **KPI Loader > importKPIs()** procedure described in ["Import or Export Trees and KPIs" \(on page 98\)](#) in the *Administrator Guide*.

Out-of-the-box Dashboard Content (Pages and Components)

The localized installation adds the language libraries of XML files in specific folders. You copy and then import these files to display the out-of-the-box template pages and components in the selected language, in the Dashboard.

To localize the out-of-the box pages and components, proceed as follows:

Prerequisite

You have performed the installation and post-installation procedures or the upgrade to the current version.

Copy the libraries

- In the Executive Scorecard server, locate the **<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\ui mashup\import\languages\<language_**

`code>_<country_code>` folder relevant to the language you want to install. These .uim.xml files represent the components and the pages used in the Dashboard.

2. The language code and country codes are as follows:

3. ■ **Components_<lang>_<country_code>.uim.xml**

■ **Pages_<lang>_<country_code>.uim.xml**,

where **lang** is the language code and **country_code** is the code of the country:

Language	Language Code	Country Code
Brazilian Portuguese	pt	BR
French	fr	FR
Spanish	es	ES
German	de	DE
Japanese	ja	JP
English	en	US
Dutch	nl	NL
Italian	it	IT
Simplified Chinese	zh	CN
Korean	ko	KR
Russian	ru	RU

4. Copy these files to the

`<XS_server>\agora\glassfish\glassfish\domains\BTOA\config\uimashup\import\toload` folder.

Tip:



If the folder contains several sets of files (for different languages), it is recommended to keep in the folder only the required set of language files and to move the other files outside the folder to prevent the loading of both set of language files and an unknown result.

5. Import the out-of-the-box language files (**only for the pages and components - events are not localized**) using the relevant procedure described in ["Import or Export Out-of-the-box Pages, Components, and Events" \(on page 111\)](#) in the *Administrator Guide*.

Manage Contexts and KPIs

You can add components to a page in Dashboard to provide reports about the KPI templates currently in the KPIs Library, Contexts currently in Executive Scorecard, the structure of Contexts, the list of KPIs included in a Context, and a list of the fields with names include a specific string that are part of a Context, or that are used in a specific KPI formula.

To access:

1. In the Executive Dashboard, click the **Page Gallery**  button.
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the Web Intelligence Static Report Viewer component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For details, see "[Modify Component Categories](#)".

Tasks

This section includes:

["Change the Connection to the Target DB" \(on page 117\)](#)

["View the List of KPI Templates Currently in the KPIs Library" \(on page 117\)](#)

["View a list of the Contexts and to view a Context structure" \(on page 119\)](#)

["View a list of the KPIs of a selected Context" \(on page 120\)](#)

["Search for a field in Contexts or in KPI Formulas" \(on page 123\)](#)

["Display the trees of KPIs in the KPIs Library" \(on page 124\)](#)

Change the Connection to the Target DB

You can change the connection of a Context to a specific Target database.

To change the connection to the Target database:




1. Access glassfish using the **<XS_server_name>:10001/common/index.jsf**
 - a. In Common Tasks, select **Resources > JDBC > JDBC Connections > TargetDbConnectionPool**
 - b. Click the **Additional Properties** tab and change the URL of the Target Schema in the **URL** field using the following format: jdbc:mercury:sqlserver:<XS_server_name>:1433;databaseName=<Target_schema_name>
 - c. Change the name of the Target database in the **databaseName** field.
 - d. Click **Save**.
2. In Microsoft SQL Server Management Studio, access XS Manage DB, and open **dbo.TENANT_SCHEMA**, change the **HOST_NAME** and **DB_NAME** of the Target Database, and click **Save**.

View the List of KPI Templates Currently in the KPIs Library

You can view a list of the KPI templates and their Context that are currently in the KPIs Library pane. The Contexts can have been defined either in SAP BusinessObjects or in the Context Designer. You can also view a more detailed list of KPIs (Context, Business Question, Formula, Data Source, Thresholds, and more):

Note: If you delete a KPI in the list of KPI templates, the list of KPIs displayed in the

components reflects the deletion.

1. In the Executive Dashboard, click the **Page Gallery**  button.
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the Web Intelligence Static Report Viewer component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For details, see ["Modify Component Categories"](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button:
 - a. In the Web Intelligence Static Report Viewer Filter dialog box that opens, select:
 - i. The **KPI Templates** report to view the list of the KPI templates that are currently in the KPIs Library pane and basic information about the KPI template.

KPI Templates				
KPI Name	Description	Business Questions	Semantic Layer Name	Formula
Average Cycle Duration	time-to-market perspective.	Make sure that the agile best practices are followed.	ALM_Defect	AVG(TargetCycle.EndDate,TargetCycle.EndDate IN_PERIOD)-AVG (TargetCycle.StartDate, TargetCycle.EndDate IN_PERIOD))
Average Time to Resolve Production Defect	Production Defect is a post release defect (detected after the release end date).	Make sure our post-release defect resolution procedures are efficient.	ALM_Defect	Defect.ClosedDate IN_PERIOD)-AVG (Defect.DetectedDate,Defect.DetectedDate>Project.EndDate and Defect.ClosedDate IN_PERIOD))
Defect Resolution Time	The average time it takes to close a defect.	Make sure our defect resolution procedures are efficient.	ALM_Defect	DATE_CONVERT('ms',d, AVG(Defect.ClosedDate,Defect.ClosedDate IN_PERIOD) - AVG (Defect.DetectedDate, Defect.ClosedDate IN_PERIOD))
Detected Vs. Closed Defects Ratio	The ratio between detected defects and closed defects	The ratio is expected to decline as approaching the release date. Make sure our defect detection and closure procedures are efficient.	ALM_Defect	RATIO_MATH(COUNT(Defect, Defect.ClosedDate IN_PERIOD),COUNT (Defect, Defect.DetectedDate IN_PERIOD))
Number of Escaped Defects	discovery date is after the release).	Make sure our pre-production quality testing procedures are efficient.	ALM_Defect	Count(Defect,Defect.DetectedDate>Project.EndDate and Defect.DetectedDate IN_PERIOD)
% of Critical Defects	defects (Urgent and Very High Statuses) relative to the total number of defects.	Make sure our defect resolution procedures are efficient.	ALM_Defect	PERCENTAGE(Defect , (Defect.Severity =4-Very High' or Defect.Severity=5-Urgent) And Defect.DetectedDate IN_PERIOD,Defect.DetectedDate IN_PERIOD)
% of Rejected Defects	The number of rejected defects relative to the total number of defects opened	Make sure our defect rejection procedures are efficient.	ALM_Defect	COUNT(Defect , Defect.Status=Rejected'), COUNT(Defect , ')
% of Reopened Defects	relative to the total number of logged defects.	Make sure our defect correction procedure is efficient.	ALM_Defect	PERCENTAGE(Defect,Defect.ReopenCount=0 And (Defect.ClosedDate is Null or Defect.ClosedDate> NOW) , Defect.ClosedDate is Null or Defect.ClosedDate> NOW)
Average Time to Review Requirement	The average time spent to review and approve a requirement.	Make sure the requirement reviewing procedures are efficient.	ALM_Requirement	DATE_CONVERT('ms',d, AVG(Requirement.ReviewDate,Requirement.ReviewDate IN_PERIOD) - AVG (Requirement.CreatedDate, Requirement.ReviewDate IN_PERIOD))
% of Documented Requirements	requirements with attachments or descriptions larger than 50 words.	Make sure our requirement documentation coverage is adequate.	ALM_Requirement	PERCENTAGE(Requirement, (Requirement.DocumentationWordCount>50 Or Requirement.HasAttachmentIndicator =Y) AND Requirement.CreatedDate IN_PERIOD, Requirement.CreatedDate IN_PERIOD)
% of Requirements Traced to Tests	KPI periodicity is monthly, the cycle duration should be a month or less).	Make sure our requirement testing procedures are efficient.	ALM_Requirement	PERCENTAGE(Requirement(Requirement.CoverageStatus<=>'Not Covered' or Requirement.CoverageStatus<=>'N/A') And Cycle.StartDate IN_PERIOD, Cycle.StartDate IN_PERIOD)
% of Reviewed Requirements	planned to be reviewed during the measurement period.	Make sure that the requirement review procedures are efficient.	ALM_Requirement	PERCENTAGE(Requirement,Requirement.ReviewStatus=Reviewed' And Requirement.ReviewDate IN_PERIOD,Requirement.ReviewDate IN_PERIOD)
	of requirements. By default, the KPI is based on cycles, if the organization does not use	Do my projects fulfill their promises? Do they deliver the promised scope?		

- ii. The **KPI Template Details** report to view the list of the KPI templates that are currently in the KPIs Library pane, and details about their Context, Data Source,

Business Question, Formula, Thresholds, and more.



KPI Template Details										
KPI Name	Description	Business Questions	Semantic Layer Name	Formula	Period	Range From	Range To	Good From	Good To	Warning From
Acceptable Amount of Data Loss	Also called Recovery point objective (RPO). This KPI describes the acceptable amount of data loss measured in time. The recovery point objective is the point in time to which an organization must recover data as defined by their policies. This is generally a definition of what an organization determines is an acceptable loss in a disaster situation. The RPO allows an organization to define a window of time before a disaster during which data may be lost. The value of the data in this window can then be weighed against the cost of the additional disaster prevention or loss-prevention measures that would be necessary to close the window. Typically segmented by application type. Actual versus target values are measured (e.g., tests).	Make sure our data loss protection procedures are efficient.	DataProtection	PERCENTAGE_MATH_AVG (BackupDurationSinceLastSuccessfulBackup, PERIOD_ENTITTY=EndPeriod), AVG (BackupRpoTarget, PERIOD_ENTITTY=EndPeriod), 100)	MONTHLY	0	200	0	50	50
	The approved changes relative to the rejected changes. The approved and rejected changes are broken down by: i. Urgency, Impact, Service/Business Service, CI, CI Type, Platform. ii. Risk (side-by-side).	Make sure our change		RATIO_MATH (COUNT (Change, ChangeApprovalStatus=Denied' And PERIOD_ENTITTY=CreateTimePeriod), COUNT (Change, ChangeApprovalStatus=Approved' and PERIOD_ENTITTY=CreateTimePeriod), 100)						


b. Click **OK**.

View a list of the Contexts and to view a Context structure

You can view a list of the Contexts currently defined in the Context Designer in Executive Scorecard. The Contexts have been defined in the Context Designer. You can also display the structure of the fields and tables that are included in a selected Context:

Note: If you create your own Context in the Context Designer, the Context appears in the list of Contexts displayed by the component. For details on the Context Designer, see ["Create and Manage Contexts Using Context Designer and Upload Data Using the Import Wizard" \(on page 78\)](#).

1. In the Executive Dashboard, click the **Page Gallery**  button.
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the Web Intelligence Static Report Viewer component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For details, see ["Modify Component Categories"](#) in the *Business Analyst Guide*.
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.

4. In the component, click the **Configure Component**  button:
 - a. In the Web Intelligence Static Report Viewer Filter dialog box that opens, select:
 - i. The **Context Summary** report to view the list of the Contexts currently defined in the Context Designer in Executive Scorecard.

Context Summary

Context Name	Entity Count	Field Count	Table Count	Alias Count	Join Count
ApplicationPortfolioManagement	1	17	2		1
AvailabilityManagement	7	44	7		8

- ii. The **Context Summary Details** report to view the tables and fields that are included in the selected Context. The user running the report is prompted to select a specific Context. The prompt is optional.



Context Summary Details


Context Name	Entity Name	Field Name	Source Table Name	Alias Table Name	DB Column Name	Field Type
ApplicationPortfolio	APM_APPLICATION	ActiveProcess	XS.APM_APPLICATION_DIM_V		ACTIVE_PROCESS	STRING
ApplicationPortfolio	APM_APPLICATION	Approved_Date	XS.APM_APPLICATION_DIM_V		Approved_Date	DATE
ApplicationPortfolio	APM_APPLICATION	Availability	XS.APM_APPLICATION_FACT_V		Availability	NUMERIC
ApplicationPortfolio	APM_APPLICATION	Close_Time	XS.APM_APPLICATION_DIM_V		Close_Time	DATE
ApplicationPortfolio	APM_APPLICATION	Create_Time	XS.APM_APPLICATION_DIM_V		Create_Time	DATE
ApplicationPortfolio	APM_APPLICATION	Disposition	XS.APM_APPLICATION_FACT_V		Disposition	STRING
ApplicationPortfolio	APM_APPLICATION	ExpectedEndOfLife	XS.APM_APPLICATION_FACT_V		Expected_End_of_Life_Date	DATE
ApplicationPortfolio	APM_APPLICATION	Maintainability	XS.APM_APPLICATION_FACT_V		Maintainability	NUMERIC
ApplicationPortfolio	APM_APPLICATION	Performance	XS.APM_APPLICATION_FACT_V		Performance	NUMERIC
ApplicationPortfolio	APM_APPLICATION	PlacedInServiceDate	XS.APM_APPLICATION_FACT_V		Placed_in_Service_Date	DATE
ApplicationPortfolio	APM_APPLICATION	Priority	XS.APM_APPLICATION_DIM_V		PRIORITY	STRING
ApplicationPortfolio	APM_APPLICATION	REFERENCE_NUMBER	XS.APM_APPLICATION_DIM_V		REFERENCE_NUMBER	STRING
ApplicationPortfolio	APM_APPLICATION	Start_Date	XS.APM_APPLICATION_DIM_V		Start_Date	DATE
ApplicationPortfolio	APM_APPLICATION	Status	XS.APM_APPLICATION_DIM_V		Status	STRING
ApplicationPortfolio	APM_APPLICATION	Target_Date	XS.APM_APPLICATION_DIM_V		Target_Date	DATE
ApplicationPortfolio	APM_APPLICATION	THRESHOLDMET	XS.APM_APPLICATION_DIM_V		THRESHOLDMET	STRING
ApplicationPortfolio	APM_APPLICATION	Type	XS.APM_APPLICATION_DIM_V		Type	STRING

- b. Click **OK**.

View a list of the KPIs of a selected Context



You can view a list of the KPIs of a selected Context. The Contexts can have been defined either in SAP BusinessObjects or in the Context Designer.

1. In the Executive Dashboard, click the **Page Gallery**  button.
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the Web Intelligence Static Report Viewer component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For details, see "[Modify Component Categories](#)".
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.

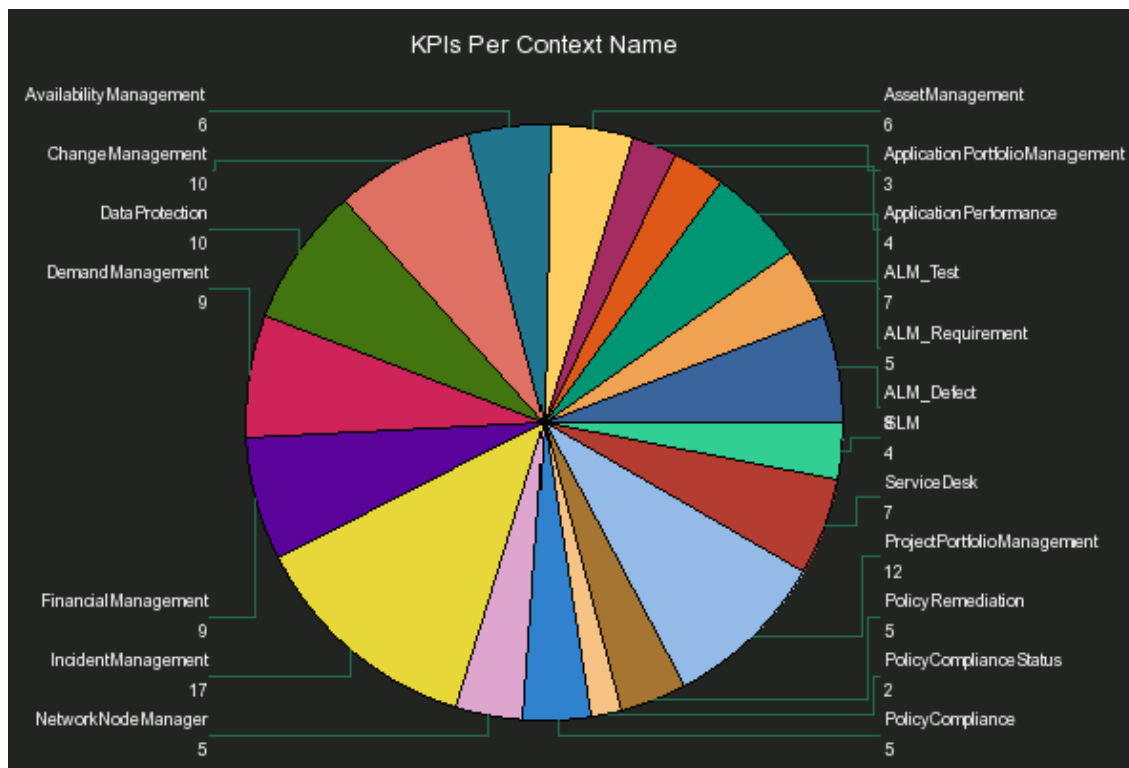
- If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button.
 5. In the Web Intelligence Static Report Viewer Filter dialog box that opens, select the **KPIs per Context** report to view the list of the KPIs of a selected Contexts currently defined in the Context Designer in Executive Scorecard. The user running the report is prompted to select a specific Context. The prompt is optional.

In table format:

Context Name	KPI Name
ALM_Defect	Average Cycle Duration
ALM_Defect	Average Time to Resolve Production Defect
ALM_Defect	Defect Resolution Time
ALM_Defect	Detected Vs. Closed Defects Ratio
ALM_Defect	Number of Escaped Defects
ALM_Defect	% of Critical Defects
ALM_Defect	% of Rejected Defects
ALM_Defect	% of Reopened Defects
ALM_Requirement	Average Time to Review Requirement
ALM_Requirement	% of Documented Requirements
ALM_Requirement	% of Requirements Traced to Tests
ALM_Requirement	% of Reviewed Requirements
ALM_Requirement	% of Tested Requirements
ALM_Test	% of Actual vs. Planned Executed Tests
ALM_Test	% of Authorized Tests
ALM_Test	% of Automated Tests
ALM_Test	% of Completed Tests
ALM_Test	% of Failed Tests
ALM_Test	% of Successful Test Runs
ALM_Test	% of Tests Resulting in Defects
ApplicationPerformance	% Monitored Applications
ApplicationPerformance	% of Affected End Users by Application Quality
ApplicationPerformance	% of Failed Business Transactions
ApplicationPerformance	% of Non-Encrypted Traffic
ApplicationPortfolioManagement	Average Availability Rating
ApplicationPortfolioManagement	Average Maintainability Rating
ApplicationPortfolioManagement	Average Performance Rating
AssetManagement	Avg Age of Hardware Assets

 Graph
  Table



In graph format:




6. Click **OK**.

Search for a field in Contexts or in KPI Formulas

You can display a list of fields whose names include the specified string and the Contexts that include these fields. The Contexts can have been defined either in SAP BusinessObjects or in the Context Designer. You can also display a list of fields whose names include the specified string and the KPIs whose formulas include these fields:

1. In the Executive Dashboard, click the **Page Gallery**  button.
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the Web Intelligence Static Report Viewer component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For details, see ["Modify Component Categories"](#).
 - If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.

4. In the component, click the **Configure Component**  button:
 - a. In the Web Intelligence Static Report Viewer Filter dialog box that opens, select:
 - i. The **Field in Context** report to display a list of fields whose names include the specified string and the Contexts that include these fields. The user running the report is prompted to select a specific Context. The prompt is optional.

Field in Context

Context Name	Entity Name	Field Name	Context Name Source Table Name	Alias Table Name	DB Column Name
ApplicationPortfolioManagement	APM_APPLICATION	PlacedInServiceDate	XS.APM_APPLICATION_FACT_V		Placed_in_Service_Date

- ii. The **Fields in KPI Name or Formula** report to view a list of fields whose names include the specified string and the KPIs whose formulas include these fields. The user running the report is prompted to select a specific Context. The prompt is optional.



Field in KPI Formula


Context Name	KPI Name	Formula
AvailabilityManagement	Mean Time between Failures of Services	DATE_CONVERT('s','h', SUM(ServiceStatus.Duration, Status.Name='ok' And PERIOD_ENTITY=Period)/ COUNT_DISTINCT(ServiceStatus.StatusStartTime, Status.Name='ok' And PERIOD_ENTITY=Period))
AvailabilityManagement	Mean Time to Repair a Service	DATE_CONVERT('s','h', SUM(ServiceStatus.Duration, Status.Name='Critical' and PERIOD_ENTITY=Period)/ COUNT_DISTINCT(ServiceStatus.StatusStartTime, Status.Name='Critical' and PERIOD_ENTITY=Period))
AvailabilityManagement	% of Available Services	PERCENTAGE_MATH(SUM(ServiceStatus.Duration, KpiName.Name='Application Availability' and Status.Name= 'ok' and PERIOD_ENTITY=Period), SUM(ServiceStatus.Duration, KpiName.Name='Application Availability' and PERIOD_ENTITY=Period),100)
AvailabilityManagement	% of Met Service Performance	PERCENTAGE_MATH(SUM(ServiceStatus.Duration, KpiName.Name='Application Performance' and Status.Name='ok' and PERIOD_ENTITY=Period), SUM(ServiceStatus.Duration, KpiName.Name='Application Performance' and PERIOD_ENTITY=Period),100)
ServiceDesk	% of Satisfied Customers	PERCENTAGE(SurveyResult.SurveyResult.Score=5 And SurveyResult.Type='Service Desk Satisfaction' And PERIOD_ENTITY =SurveyResultPeriod, SurveyResult.Type='Service Desk Satisfaction' And PERIOD_ENTITY=SurveyResultPeriod,100)

- b. Click **OK**.

Display the trees of KPIs in the KPIs Library

You can display the list of hierarchy trees of KPIs in the KPIs Library, with their Scorecards, Perspectives, Objectives, and KPIs. The KPI Contexts can have been defined either in SAP BusinessObjects or in the Context Designer.

1. In the Executive Dashboard, click the **Page Gallery**  button.
2. Click the **Components**  button.
3. In the Component Gallery page that opens, double-click the Web Intelligence Static Report Viewer component to place it in the layout area, or select the component and drag it to an area on the page, and close the Component Gallery page. For details, see ["Modify Component Categories"](#).

- If the target area is hidden by the Component Gallery dialog box, click the Component Gallery dialog box title bar and drag it to another location on your screen.
 - If you are dragging a new component to a target area that already has a component defined, drag the new component to the title bar of the target area, and not to the part of the component that is colored white.
4. In the component, click the **Configure Component**  button.
 5. In the Web Intelligence Static Report Viewer Filter dialog box that opens, select the **KPI Tree Hierarchy** report to display a list of fields whose names include the specified string and the Contexts that include these fields. The user running the report is prompted to select a specific Context. The prompt is optional.

KPI Tree Hierarchy				
Tree Name	Scorecard Name	Perspective Name	Objective Name	KPI Name
Business Scorecards	BRM	Customer	Improve Customer Satisfaction	Downtime % of SLAs
Business Scorecards	BRM	Customer	Improve Customer Satisfaction	% of Met SLAs
Business Scorecards	BRM	Customer	Improve Customer Satisfaction	% of Problems by Cause Type
Business Scorecards	BRM	Customer	Improve Customer Satisfaction	% of Satisfied Customers
Business Scorecards	BRM	Customer	Improve Customer Satisfaction	% of Service Level Objectives for Met IT Process Activities
Business Scorecards	BRM	Customer	Improve Service Delivery Performance	Avg Outage Duration
Business Scorecards	BRM	Customer	Improve Service Delivery Performance	Mean Time between Failures of Services
Business Scorecards	BRM	Customer	Improve Service Delivery Performance	Mean Time to Repair a Service
Business Scorecards	BRM	Customer	Improve Service Delivery Performance	Number of Closed Incidents
Business Scorecards	BRM	Customer	Improve Service Delivery Performance	Number of Opened Incidents
Business Scorecards	BRM	Customer	Improve Service Delivery Performance	% of Available Services
Business Scorecards	BRM	Customer	Improve Service Delivery Performance	% of Met Service Performance
Business Scorecards	BRM	Operational Excellence	Achieve Process Excellence	Incident Resolution Time
Business Scorecards	BRM	Operational Excellence	Achieve Process Excellence	Incidents Backlog Size
Business Scorecards	BRM	Operational Excellence	Achieve Process Excellence	% of Escalated Incidents
Business Scorecards	BRM	Operational Excellence	Achieve Process Excellence	% of Reopened Incidents
Business Scorecards	BRM	Operational Excellence	Achieve Process Excellence	% of SLAs Planned to be Expired
Business Scorecards	BRM	Operational Excellence	Improve Responsiveness	Avg Interaction Closure Duration
Business Scorecards	BRM	Operational Excellence	Improve Responsiveness	Incident Aging
Business Scorecards	BRM	Operational Excellence	Improve Responsiveness	% of FCR
Business Scorecards	BRM	Operational Excellence	Improve Responsiveness	% of Interactions in Backlog
Business Scorecards	CIO	Customer	Improve Customer Satisfaction	Demands Backlog
Business Scorecards	CIO	Customer	Improve Customer Satisfaction	Downtime % of SLAs
Business Scorecards	CIO	Customer	Improve Customer Satisfaction	Network Latency
Business Scorecards	CIO	Customer	Improve Customer Satisfaction	% of Affected End Users by Application Quality
Business Scorecards	CIO	Customer	Improve Customer Satisfaction	% of Applications Availability
Business Scorecards	CIO	Customer	Improve Customer Satisfaction	% of Approved Project Scope Changes
Business Scorecards	CIO	Customer	Improve Customer Satisfaction	% of Met Application Performance

6. Click **OK**.

Create Categories for the Webi Reports

In the Context Management Console (CMC) application you can manage Categories. A Category flag provides the option to assign each metric to the relevant categories. The categories are useful to classify the different Webi reports in the list of reports to be added to a component in Dashboard. For example, you can add a category per business context, ALM, Asset, and more.

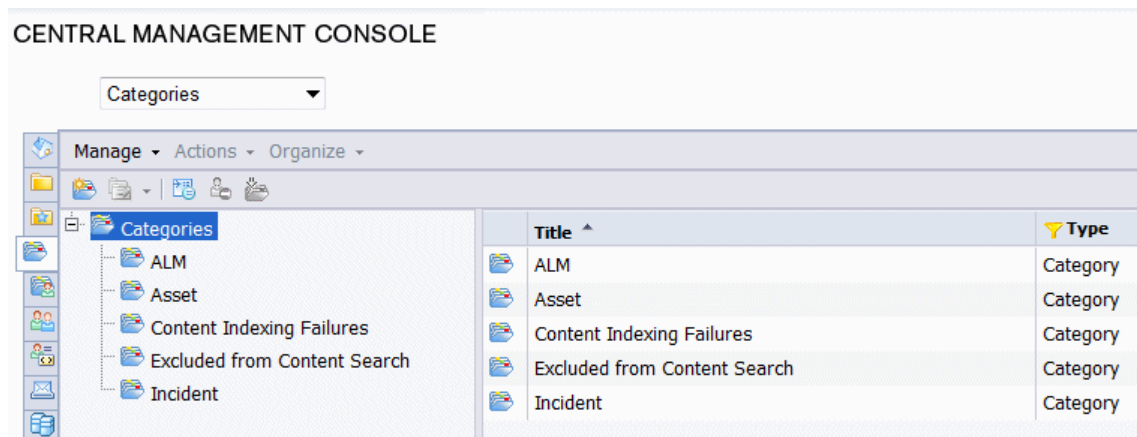
To access:

Access the CMC console.

Tasks

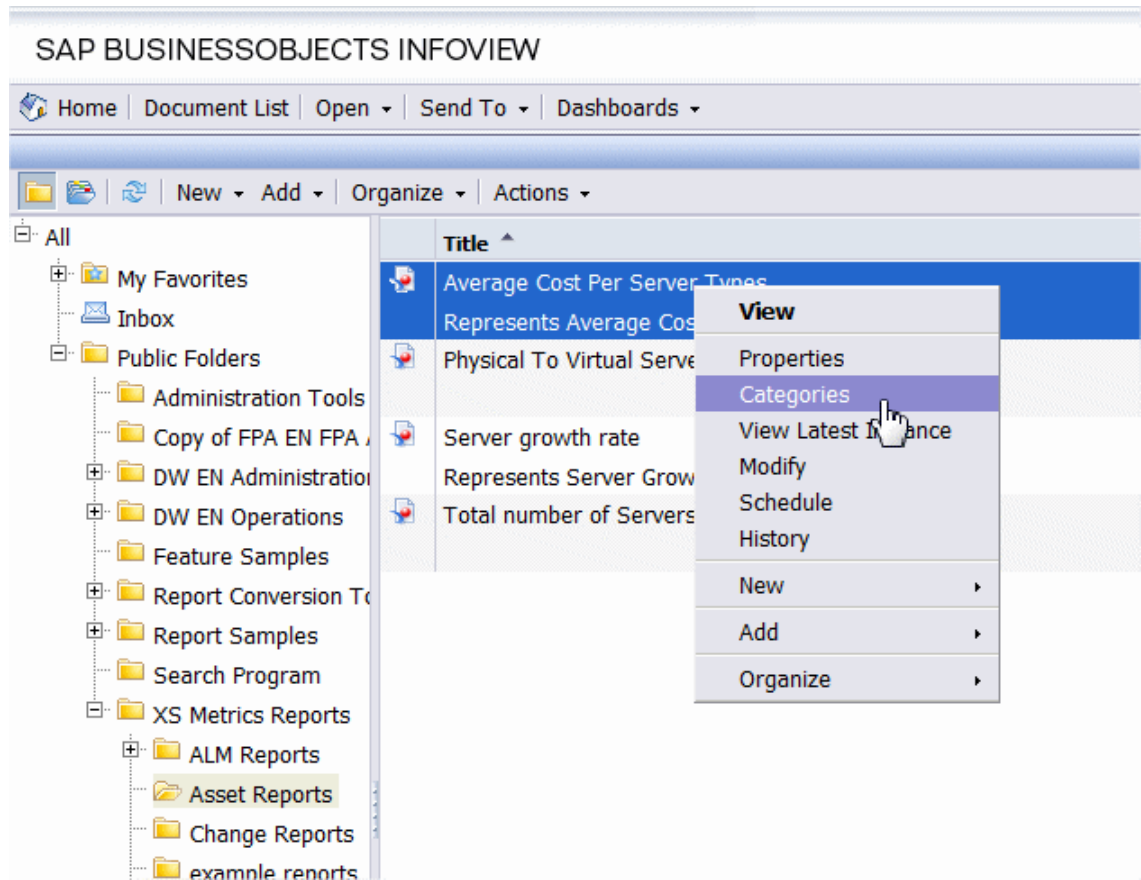
Create categories

1. Access the CMC console.
2. Create the categories:

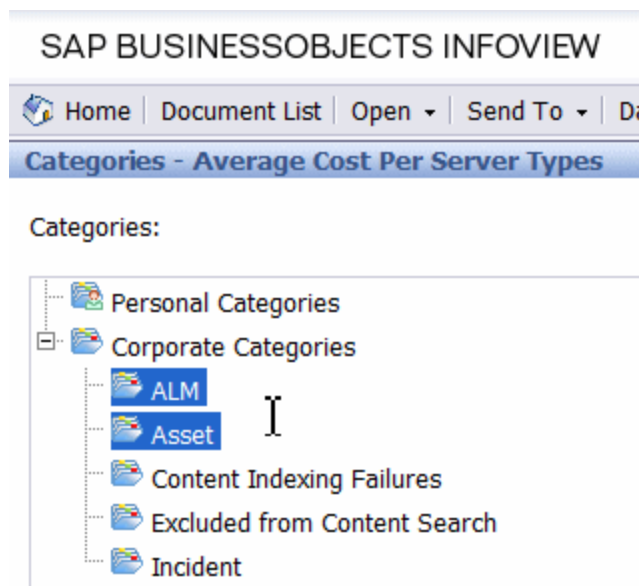


3. You can now associated metrics (reports) and categories. You can assign more than one category to a report.

- a. Right-click the relevant Webi report.

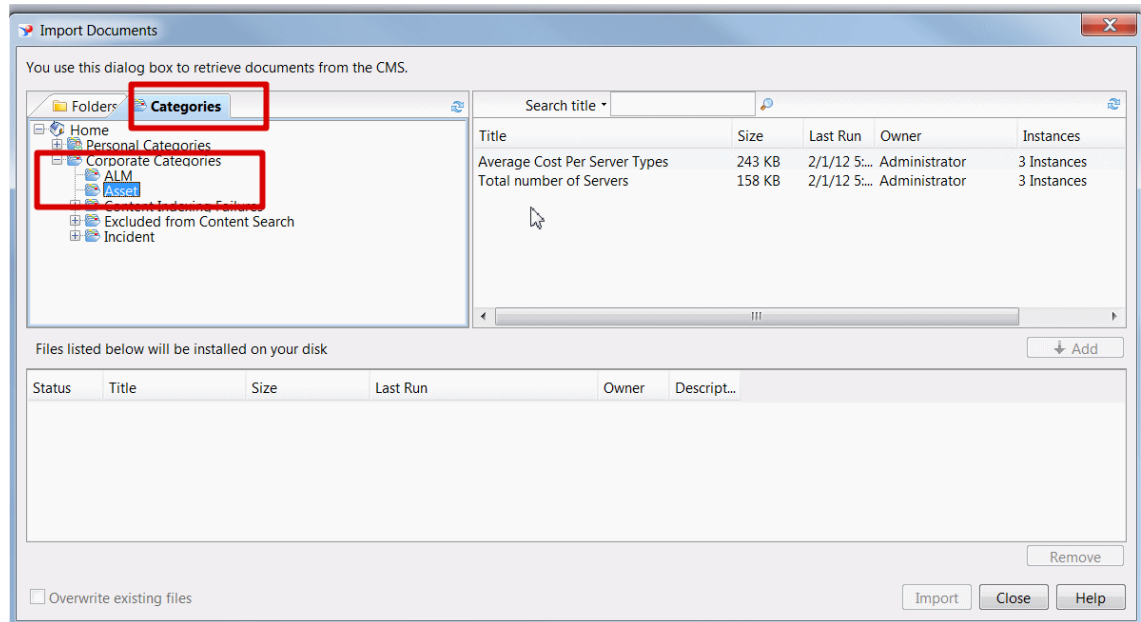


- b. Select the relevant categories for the selected report, and click **OK**



- c. Click **File> Import from CMS**.

- d. When you open the “Web Intelligence Rich Client” you can see all the Webi reports that are relevant to the specific category.



Perform the Maintenance of Financial Planning and Analysis

Enables you to configure the settings for Financial Planning and Analysis.

To access:

Select **Admin > FPA Settings**.

Tasks

["Configure FPA Settings" \(on page 129\)](#)

["Configure FPA Users, Roles, and Permissions" \(on page 129\)](#)

["Change the Currency of the FPA " \(on page 129\)](#)

Configure FPA Settings

1. Select **Admin > FPA Settings**.
2. Click the row of the relevant setting and enter the value or select the option.
3. Click **Save** to save your settings.

Configure FPA Users, Roles, and Permissions

Roles and permissions for users is managed through the Admin tab, enabling you to specify permissions for each role. Additionally, you can attach instances to a permission, so that the user can only access certain budgets or allocations. This model is based on:

- The permissions of each user, instead of relying on the user's roles. The permissions are final and cannot be modified or deleted, allowing the flexibility to grant users access to different FPA features, while assigning them to different roles.
- Budget related operations according to each user's scope (instance level permissions).

Two out-of-the-box roles are available: BUDGET_COORDINATOR and FINANCIAL_ANALYST. For details, see ["Manage Roles" \(on page 39\)](#).

Change the Currency of the FPA

The default currency for all Financial Planning and Analysis KPIs is \$.

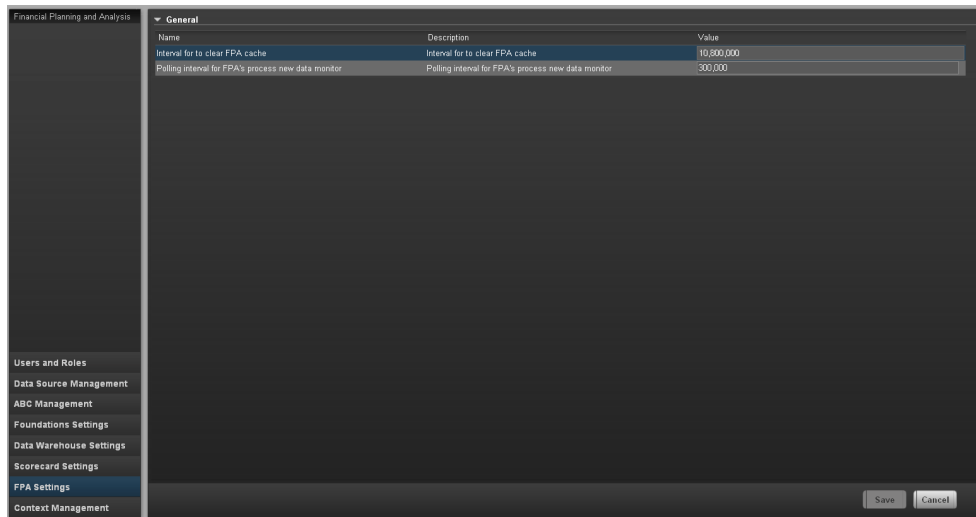
During the post-installation process, if you have changed the currency in the **Data Warehouse - Currency Configuration** page of the post-install wizard, you must change the currency in each one of the KPIs to match your selection, as follows:

1. In the application, click **Studio**.
2. In the Active KPIs pane, for each KPI under the **Financial Planning Analysis Scorecard**, and in the **Configuration details** tab, select the relevant unit in the **Unit** drop down list.
3. Click **Save**.

UI Description

FPA Settings Page

This page enables you to configure specific Financial Planning and Analysis-related settings .



FPA Settings Table

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Name	The name of the FPA setting.
Description	The description of the FPA setting.
Value	The current FPA setting value. Click the relevant row and enter a value.

General Table

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Interval to clear FPA cache	Specifies how long the system should save the objects loaded from the database during the allocation scenario calculations. Note: Do not modify this parameter.

UI Element	Description
Polling interval for FPA's process new data monitor	<p>Specifies the execution interval of the Financial Planning and Analysis procedure that checks whether new data was loaded using ETL, and recalculates allocation scenarios accordingly.</p> <p>Note: Do not modify this parameter.</p>

Configure Data Warehouse Settings

Data Warehouse Settings enables you to define settings for various parts of the data warehouse structure.

To access:

Select **Admin** > **DataWarehouse Settings**.

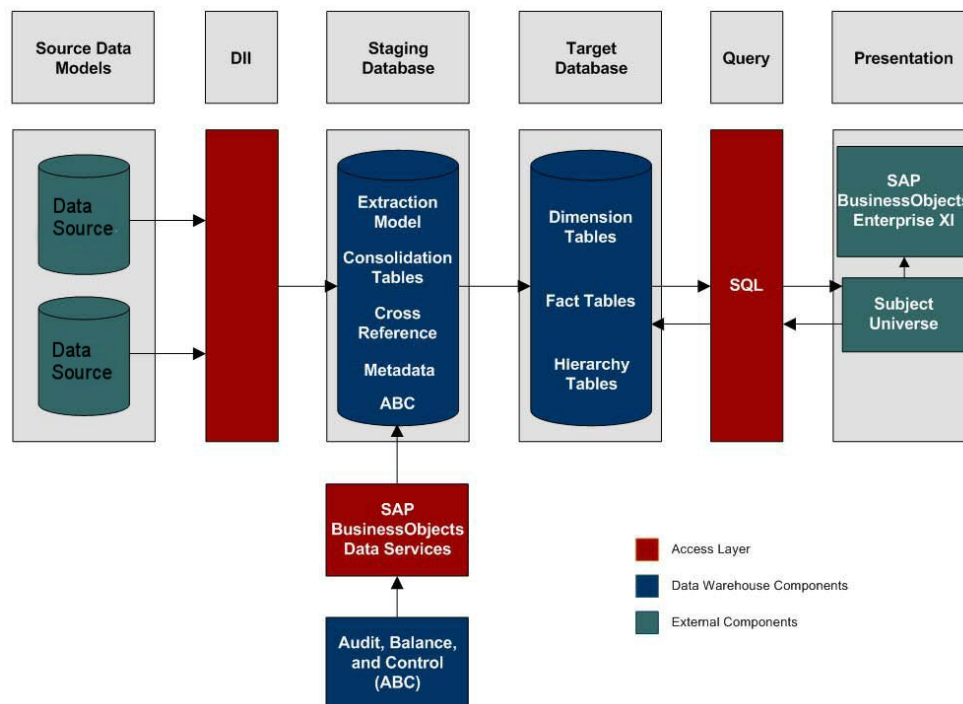
Learn More

Model

The data warehouse model is an end-to-end solution for extracting source data and consolidating disparate source data models into a consolidated data model. The data organized to reflect this model resides in target tables that become the source for Executive Scorecard.

The data warehouse relies on an external RDBMS to provide daily maintenance and backup support, SAP BusinessObjects Data Services to assist with ETL, an ABC infrastructure of utilities and processes to govern regularly scheduled ETL jobs, and internal data warehouse utilities to create the data warehouse and maintain data integrity.

The figure below shows the principal data warehouse components and how they interact. Read the following sections for more information about each component, its role, and responsibilities.



Source Data Models

Source data originates in external application repositories. Data generated by an external

application can be rich in business information, but unless you can integrate it with equally important business information generated by other applications, it is difficult to get a complete view of operational information.

The source data models describe the source and extraction format so that the data warehouse can consume this data and integrate it into a common view that you can use to populate comprehensive business intelligence reports and dashboards.



Data Integration Interface

The data integration interface (DII) is the access layer that stands between the source database models and the extraction models in the staging database. The DII uses a mapping model that transforms the source data to fit into extraction work tables. The DII can accommodate minor variations in the source model schemas from one version to another.

Note: This interface requires access to the source systems.

SAP BusinessObjects Data Services

SAP BusinessObjects Data Services is the access mechanism that performs the physical data extraction from the source repository to the staging database. Each stage of the ETL is embodied in a Data Services job, from the extraction of source data to the target database.

Audit, Balance, and Control

Audit, Balance, and Control (ABC) processes ensure that source data is not corrupted in the extraction process, and that the integrity of the extracted data is maintained as it progresses from the initial source extraction through the logical and physical transformation into target tables. SAP BusinessObjects Data Services can move the data but does not evaluate whether the final result is correct. ABC establishes checkpoints and provides feedback on each step to guarantee that each step is valid before the next step begins.

The Audit component ensures consistency during ETL processing. It measures the number of records in and the number of records out for each step and displays these runtime statistics in a collection of audit reports.

Balance verifies that data in the data warehouse matches data in the source system. For example, if the data warehouse stores project dollar amounts then the balance process verifies that the aggregate project dollars in the data warehouse matches the aggregate project dollars in the source application data.

Control governs the order of execution of ETL processes. Control makes sure that there is a proper restart and recovery when a system error occurs. Control also manages job dependencies at runtime.

ABC utilities are applications that you can invoke automatically or manually to run ETL, solve problems, and perform ETL-related tasks.

Staging Database

The staging database contains tables and snapshots that are critical to the ETL process. Metadata describes these tables. Executive Scorecard processes data in the staging database before loading it into the final target tables in the target database.

- Extraction (EXT) tables contain the initial version of source data. EXT tables are used during the stage of ETL when Executive Scorecard loads data from the extract flat files into the staging database.
- Validation failure (VALF) tables are used during the data validation process that ensures all of the data is usable. VALF tables store source data that is rejected by the ETL process due to validation failure. Data validation is part of the process to load the EXT tables.
- Identification (SSI and MSI) tables restructure the diverse source system data into a conformed structure. Executive Scorecard uses SSI and MSI tables to standardize the data and add an enterprise key.
- Consolidation (MSC) tables integrate disparate source data into a consolidated entity. The MSC tables contain the uniform structure that Executive Scorecard uses to load the data into the target tables.
- Transformation (XFR) tables are load-ready tables that match the internal structure of the target tables. Executive Scorecard uses XFR tables while preparing the data to be loaded into the target tables in the target database.
- Lookup (LOOKUP) tables store durable keys and surrogate keys. Executive Scorecard uses these tables to establish dimension-to-dimension references in dimension tables and foreign key references in fact tables.
- Snapshot (TSNP, SSNP, and CSNP) tables are the persistent storage for ETL staging data. These snapshot tables capture the changed data and support the data warehouse recovery process. The data warehouse uses TSNP tables for source extraction staging, SSNP tables for single source integration staging, and CSNP tables for multiple source consolidation staging. The final ETL stage captures the snapshot data.
- Cross Reference (XREF) tables support the data integration processes that combine records from multiple sources into a single record in the consolidation model.
- Cross Reference Generator (XREFGEN) tables support data matching and cross reference inputs for the consolidation models.
- Metadata tables contain a logical model and describe how to translate that model into the physical implementation of tables and views.

ABC tables support the ETL workflow and enable job control and sequencing. They also host audit information to ensure data quality.

Target Database

The target data models describe the format of the data that produces business intelligence analytics. The instantiated data models are dimension, fact, and hierarchy tables populated with data obtained through ETL processes.

Dimension tables contain the data model to be queried and presented by Executive Scorecard in a variety of reports and analytics.

Fact tables contain data that describes events, transactions, or other granular information.

Fact snapshots tables are fact tables that describe the state of things in a particular instance of time, and usually includes more semi-additive and non-additive facts.

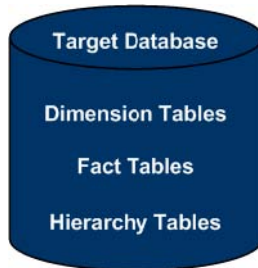
- **Semi-Additive:** Semi-additive facts are facts that can be summed up for some of the dimensions in the fact table, but not the others.
- **Non-Additive:** Non-additive facts are facts that cannot be summed up for any of the dimensions present in the fact table.

Hierarchy tables capture hierarchical relationships among levels of data.

Queries

You can use structured query language (SQL) to create a primary abstraction layer of data from the target tables and use that data to populate reports, dashboards, or resolve business questions. The SAP BusinessObjects Enterprise XI 3.1 suite of business tools simplify accessing this information and storing it in business-oriented views.





Presentation

SAP BusinessObjects Enterprise XI 3.1 uses a universe abstraction layer to organize data for presentation in out-of-box or user-designed analytics. The universe provides a business oriented view of the data that resides in the data warehouse target tables.

Important Information

Working with Software as a Service (Light XS): Data Warehouse is not supported in Light XS, so you cannot configure Data Warehouse settings.

Tasks

To define the Data Warehouse Settings:

1. Select **Admin > DataWarehouse Settings**.
2. Click the relevant field in the **Value** column and enter the value.
3. Click **Save** to save your settings.

UI Description

Data Warehouse Settings Page

This page enables you to configure the Data Warehouse settings.

Data Warehouse Table

Name	The name of the Data Warehouse field.
Description	The description of the Data Warehouse field.
Value	The current Data Warehouse field value. Click the relevant row and enter a value.

General Table

General		
Name	Description	Value
Data Warehouse Port	Data Warehouse webserver port.	443
Data Warehouse Server Name	Data Warehouse server machine's hostname or IP address.	MYDVM0346.devlab.ad
External Source File Location	The location of the external source files used by Data Warehouse.	C:\HP\SIagora\DataWarehouse\ExternalSources
First year handled by DWH dates	First year handled by DWH dates (period, timezones, DST)	2006
Last year handled by DWH dates	Last year handled by DWH dates (period, timezones, DST)	2026
Scheduler Run-Steps Interval	Interval value (in minutes) for automatic, periodic execution of ABC Ru	5
The first month of the year according to the financial company docum	Fiscal month of year	1

UI Element	Description
Data Warehouse Port	The Data Warehouse web server port. This field is read-only.
Data Warehouse Server Name	The Data Warehouse server machine hostname or IP address. This field is read-only.
External Source File Location	The directory where the external source files used by the Data Warehouse are stored.
First year handled by DWH dates	The first available year for Data Warehouse dates. This includes period, time zones or DST.
Last year handled by DWH dates	The last available year for Data Warehouse dates. This includes period, time zones or DST.
Scheduler Run-steps Interval	The interval value in minutes that you want the run_steps command to automatically execute. This is the default value for initial execution. All changes in interval should be made in the DW ABC Streams Management UI. For details, see "DW ABC Streams Management User Interface" (on page 146) .
The first month of the year according to the financial company documents	The first month of the fiscal year. This field is read-only.

SAP BusinessObjects Data Services for HP XS Table

SAP BusinessObjects Data Services for HP		
Name	Description	Value
BODS Database Administrator Username	Username to access the database with. Must have write privileges.	sa
BODS Database Administrator Password	User's password.	*****
BODS database type/product	Either Oracle, SQL Server, DB2, MySQL or Sybase ASE	MSSql (Default)
BODS Repository Server Name	Repository server-machine's hostname or IP address.	MYDPH0036.devlab.ad
Installation Directory	Absolute path to the directory in which SAP BusinessObjects Data Services are installed.	C:\Program Files (x86)\Business Objects\BusinessObjects Data Services
Management Console Password	SAP BusinessObjects Data Services for HP Management Console Password	****
Management Console URL	SAP BusinessObjects Data Services for HP Management Console URL	http://MYDVM0346.devlab.ad:28080/DataServices
Management Console Username	SAP BusinessObjects Data Services for HP Management Console Username	admin
Repository Database-Server's Port	SAP BusinessObjects Data Services for HP Repository Database-Server's Port	1433
Repository Name	SAP BusinessObjects Data Services for HP Repository Name	sanity_340_bods
Repository Password	SAP BusinessObjects Data Services for HP Repository Password	*****
Repository Username	SAP BusinessObjects Data Services for HP Repository Username	bods
Web Services Timeout	The amount of time (in seconds), the Data Warehouse will wait for SA...	180

UI Element (in alphabetical order)	Description
BODS Database Administrator Username	The username to access the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA database. Must have write permissions.

UI Element (in alphabetical order)	Description
BODS Database Administrator Password	The user's password to access the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA database.
BODS database type/product	<p>The database type: Oracle, SQL Server, DB2, MS SQL, or Sybase ASE. This field is read-only.</p> <p>Note: Currently only MS SQL is supported.</p>
BODS Repository Server Name	The SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA repository server machine's host name or IP address.
Installation Directory	The absolute path to the SAP BusinessObjects Data Services for IT Executive Scorecard and HP XS installation directory. This field is read-only.
Management Console Password	The SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA management console password.
Management Console URL	The SAP BusinessObjects Data Services for IT Executive Scorecard management console URL. This field is read-only.
Management Console Username	The SAP BusinessObjects Data Services for IT Executive Scorecard management console username.
Repository Database-Server's Port	The SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA repository database server's port. This field is read-only.
Repository Name	The SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA repository name. This field is read-only.
Repository Password	The SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA repository password.
Repository Username	The SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA repository username. This field is read-only.
Web Services Timeout	The amount of time, in seconds, that Data Warehouse waits for a SAP BusinessObjects Data Services for IT Executive Scorecard or SAP

UI Element (in alphabetical order)	Description
	BusinessObjects Data Services for HP FPA to respond to a web services request before a timeout.

Staging Database Table

Staging Database		
Name	Description	Value
ABC Database Password	User's password.	*****
ABC Database Username	ABC Database Username to access the database with. Must have write	dwabc
ABC DB login name	ABC DB login name to access the database. Might be different than th	dwabc
ABC DB login password	ABC DB login password to access the abc database.	*****
Database Password	Staging Database Password	*****
Database Server Name	Staging Database server machine's hostname or IP address.	MYDPH0096.devlab.ad
Database Server Port	Staging Database server's port.	1433
Database Username	Staging Database Username to access the database with. Must have	dws
Metadata Database Password	User's password.	*****
Metadata Database Username	Metadata Database Username to access the database with. Must have	dwmetadata
Metadata DB login name	Metadata DB login name to access the database. Might be different th	dwmetadata
Metadata DB login password	Metadata DB login password to access the metadata database.	*****
Password	Staging Database Administrator Password	*****
Staging Database Name	Staging Database MS SQL Server Database Name	sanity_340_stg
Staging DB login name	Staging DB login name to access the database. Might be different tha	dws
Staging DB login password	Staging DB login password to access the staging database.	*****
Staging Target DB Database Password	Staging Target DB Database Password	*****
Staging Target DB Database Username	Staging Target DB Database Username to access the database with.	dwst
Staging Target DB login name	Staging Target DB login name to access the database. Might be differe	dwst
Staging Target DB login password to access the staging target databa	Staging Target DB login password to access the staging target databa	*****
Time Dimension Granularity	Granularity of time (in minutes) that the time dimension is populated wi	1
Username	Username to access the database with. Must have write and schema	sa

UI Element (in alphabetical order)	Description
ABC Database Password	The ABC database password.
ABC Database Username	The ABC database username. This field is read-only.
ABC DB login name	ABC login name used to access the database.
ABC DB login password	ABC login password used to access the database.
Database Password	The staging database password.
Database Server Name	The staging database server machine hostname or IP address.
Database Server Port	The staging database server port.
Database Username	The staging database username. This field is read-only.
Metadata Database Password	The metadata database password.
Metadata Database Username	The metadata database username. This field is read-only.
Metadata DB login	Metadata login name used to access the database.

UI Element (in alphabetical order)	Description
name	
Metadata DB login password	Metadata login password used to access the database.
Password	The staging database administrator password.
Staging Database Name	The name of the staging database on the MS SQL server. This field is read-only.
Staging DB login name	Staging database login name used to access the database.
Staging DB login password	Staging database login password used to access the database.
Staging Target DB Database Password	The staging target database password.
Staging Target DB Database Username	The staging target database username. This field is read-only.
Staging Target DB login name	Staging Target database login name used to access the database.
Staging Target DB login password	Staging Target database login password used to access the database.
Time Dimension Granularity	The granularity of time, in minutes, of the time dimension. This field is read-only.
Username	The staging database administrator username. This user must have write permissions. This field is read-only.

Target Database Table

Target Database		
Name	Description	Value
Administrator Password	Target Database Administrator Password	*****
Administrator Username	Target Database Username to access the database with. Must have w...	sa
Database Password	Target Database password	*****
Database Server Port	Target Database Server Port	1433
Database Username	Target Database Username to access the database with. Must have w...	dwt
MS SQL Server Database Name	Target Database MS SQL Server Database Name	sandy_340_trg
Server Name	Target Database Server Name	MYDPH0096 devlab.ad
Target DB login name	Target DB login name to access the database. Might be different than	dwt
Target DB login password	Target DB login password to access the metadata database.	*****

UI Element (in alphabetical order)	Description
Administrator Password	The target database administrator password.

UI Element (in alphabetical order)	Description
Administrator Username	The username used to access the target database. This user must have write privileges. This field is read-only.
Database Password	The target database password.
Database Server Port	The target database server port. This field is read-only.
Database Username	The target database username. This user must have write permissions. This field is read-only.
MS SQL Server Database Name	The target database MS SQL server name. This field is read-only.
Server Name	The target database server name. This field is read-only.
Target DB login name	The login name for the target database. May be different than the fixed user and schema name.
Target DB login password	The target database login password used to access target database metadata.

Integrate the Data Sources

The Data Warehouse can connect to other products (data sources) and gather data about these products. An integration is available for each product (data source). The integration uses a connection or adapter to gather data from the data source and send the data to the Data Warehouse.

The connection from the data source to the DWH is called a content pack. Each content pack requires an adapter in order to extract the data from the specific data source. Content packs contain all the artifacts needed to connect to the relevant data source and gather data from that data source.

Learn More

To learn about Content Packs and their functionality, see ["Perform Tasks for Data Source Management" \(on page 168\)](#).

For more detailed information about each data source's integration, see ["Integrate the Data Sources"](#) in the *Content Reference Guide*.

Sample Integration Activation Using the UI

Activate the Integration (Sample)

1. **Prerequisites:** Make sure all of the required prerequisites have been met.
2. Select **Admin > Data Source Management** then click **Add data source**.
3. Select the data source type.
4. Select or enter the configuration parameters.
5. Click **Next** to proceed to the validation page.

UI Description (Sample-AM Oracle server)

Data Source Wizard Help x

AM (Asset Manager)

*Instance name :

AM Version :

Time Zone :

Data Source Type :

*Username :

*Password :

*Hostname/IP Address :

*Port :

*Sid :

Service Name :

Initial Load Period (months) :

Back Next Cancel

User interface elements are described below:

UI Element	Description
Instance name	Enter a name for the data source instance you are activating.
AM Version	Select the relevant AM version. For details, see the <i>IT Executive Scorecard Support Matrix</i> .
Time Zone	Select the time zone for the data source.
Data Source Type	AM should be configured to run on an Oracle server.
Server	Enter the Oracle server.
Username	Enter your username used for login to the AM database.
Password	Enter your password used for login to the AM database.

UI Element	Description
Hostname/IP Address	Enter the Oracle server hostname or IP address.
Port	Enter the port for database connections.
SID	Enter the unique name of the database.
Service Name	Enter the alias used when connecting.
Initial Load Period (months)	Select the number of months from which you want the initial data loaded.

Sample Integration Activation Using the Automation Tool

If you experience errors or problems with the data Source Management UI, you can activate the sources using DWH back-end tools.

Activate the Integration (Sample-AM Oracle server)

1. **Prerequisites:** Make sure all of the required prerequisites have been met.
2. Enter the product name, product version, time zone, and product type of the data source, and the configuration parameters in the datasource.xml file as follows:
 - **server:** The data source server.
 - **user:** The user required for authenticating to the data source server.
 - **password:** The password required for authenticating to the data source server.
 - **host:** The remote server on which the data source server resides.
 - **port:** The port in the data server. By default, the port number is 1521 for Oracle database and 1433 for SQL Server database.
 - **sid:** The unique name of the database.
 - **servicename:** The alias used when connecting.
 - **initial load period:** The number of months from which you want the data loaded.

Note: Each Content Pack contains a sample xml file for example: <Installation Directory>\agora\ContentPacks\SA\conf\datasources.xml.

Sample xml configuration (Advanced configuration)

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<dw:DataSourceConnections version="1.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```



```
xsi:schemaLocation="http://schemas.hp.com/bto/dwh/v1/dw_
dataSources ..\xmlSchemas\dw_dataSources.xsd"
    xmlns:dw="http://schemas.hp.com/bto/dwh/v1/dw_
dataSources">
<dw:DataSourceConnection productName="AM"
productVersion="5.2" timeZone="Asia/Shanghai"
productType="oracle">
    <dw:GenericProperty propertyName="server"
propertyValue="" propertyType="string"/>
    <dw:GenericProperty propertyName="user"
propertyValue="" propertyType="string"/>
    <dw:GenericProperty propertyName="password"
propertyValue="" propertyType="password"/>
    <dw:GenericProperty propertyName="port"
propertyValue="1521" propertyType="string"/>
    <dw:GenericProperty propertyName="sid"
propertyValue="" propertyType="string"/>
    <dw:GenericProperty propertyName="servicename"
propertyValue="" propertyType="string"/>
    <dw:GenericProperty
propertyName="dwh.etl.initialloadmonths" propertyValue="6"
propertyType="string"/>
</dw:DataSourceConnection>
</dw:DataSourceConnections>
```

Note: In order to verify that the connection details added in the datasources.xml file are correct, it is recommended to test the connection to the data source before running the configuration. For details, see ["The Automation Tool" \(on page 250\)](#).

3. Register Instance:

To add an additional data source instance enter: **dw_cp_register.bat -addInstance -name <CP_NAME>**

The Data Warehouse then looks for the CP in the Content Packs Folder. The instance ID is displayed in the output. "Instance ID: XX has been added to Content Pack: <CP_NAME>"

It is also added to the CONTENT_PACK table.

4. Configuration:

For first time activation, enter the following: **dw_ds_automation.bat -task ConfigureInitial -cp <content pack name> -instance <INSTANCE_ID> -xmlFilePath** [Path to datasources.xml file].

For all subsequent activations, enter the following: **dw_ds_automation.bat -task Configure -cp <content pack name> -instance <INSTANCE_ID> -xmlFilePath** [Path to datasources.xml file].

Note: After you have configured `dw_ds_automation.bat -task ConfigureInitial` or `dw_ds_automation.bat -task Configure`, delete the value in the `propertyValue` field of the password from the `dataSources.xml` file, as follows:

```
<dw:GenericProperty propertyName="password" propertyValue=""  
propertyType="password" />
```

For details, see ["The Automation Tool" \(on page 250\)](#).

5. Deployment:

Enter the following: `dw_ds_automation.bat -task Deploy -cp <content pack name> -instance <INSTANCE_ID>`. The content pack is initialized.

6. Activate the data source:

Enter the following: `dw_ds_automation.bat -task Activate -cp <content pack name> -instance <INSTANCE_ID>`.

DW ABC Streams Management User Interface

The DW ABC Streams Management UI enables you to perform the essential tasks related to ETL and stream functionality. The DW ABC Streams Management UI displays the state of active streams, and enables you to schedule and control stream activity. It also allows you to view the historical data and the archived stream definitions. All ETL management and functionality is accessed and performed through this UI.

To access:

Select Admin > ABC Management.

Learn More

ETL

The Extract, Transform, and Load (ETL) process is an end-to-end transfer of external source data through several staging layers and into the target layer of the data warehouse. The source data can reside in a single database or multiple databases. The data warehouse uses the ETL process to extract, consolidate, and transform the source data into a meaningful target model that populates relevant business analytics.

The ETL process comprises eight primary stages. The stages of this process depend on metadata and the nature of the sources.

The ETL is monitored and managed through the DW ABC Streams Management User Interface.

ETL Stream Management and Monitoring

The Audit Balance and Control Management user interface performs all of the back-end configuration and supports full ABC functionality in the ETL. The UI enables you to view the active stream and all of the nodes containing the stream steps. This allows you to pinpoint exactly which steps have failed when the stream has been stopped. You can also view the history of the stream as well as inactive streams.

Stream

A stream represents the definition of what should run in the ETL, for example, Upstream. It is a set of a flow of ETL steps. The DW ABC Streams Management UI displays any stream that is defined, along with the historical data and archived stream information for that stream.

Batch

A batch is a particular run-time instance of the stream. There is a new batch ID for each run of the batch. Each time you load a batch, you are creating a run-time instance of the current stream definition.

Step

Any type of execution that you want to run in the ETL. The step is defined in a stream.

Node

A group of steps that run in parallel and are independent of each other. A node is meant to simplify the display of the stream and to indicate whether a stream is blocked. The node indicates whether the batch can progress to the next node. If one step has failed, even if all other steps in the node are successful, the execution of the ETL will not progress to the next node.

The ABC Streams Management UI provides visibility and management of:

- Multiple streams
- Stream progress
- Stream execution history
- Archiving
- Batch scheduling

Audit, Balance, and Control

Audit, Balance, and Control (ABC) is a set of functions based on data warehousing best practices. Although SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA manages the ETL workflow, ABC ensures work flow integrity. It controls the overall ETL execution, provides error handling, and collects job progress statistics. ABC's ETL streams and functions can be viewed and managed through the DW ABC Streams Management User Interface, as well as the CLI. Other ABC features are:

- Job stream management
- Command line administration tools
- Generated ABC operational system reports
- Generated ABC historical system reports

For report details, see ["ABC Operational Reports " \(on page 181\)](#) and [" Data Model Reports" \(on page 197\)](#).

Tasks

This section includes:

["To view active streams:" \(on page 148\)](#)

["To verify or schedule the run_steps command:" \(on page 148\)](#)

["To view stream attributes:" \(on page 148\)](#)

["To schedule a batch job:" \(on page 148\)](#)

["To load or resume a batch job:" \(on page 149\)](#)

["To suspend a stream:" \(on page 149\)](#)

["To abort a stream:" \(on page 149\)](#)

["To view node information:" \(on page 149\)](#)

["To view step attributes:" \(on page 149\)](#)

["To refresh stream data:" \(on page 149\)](#)

["To view historical data:" \(on page 149\)](#)

["To view archived data:" \(on page 149\)](#)

["To automatically retry steps:" \(on page 150\)](#)

["To manually retry steps:" \(on page 150\)](#)


To view active streams:

1. Select **Admin > ABC Management**.
2. In the DW ABC Streams Management UI page the stream information is displayed.

To verify or schedule the run_steps command:

Run_steps is automatically scheduled after deployment in the post-install. It schedules steps for each defined stream. The run_steps Scheduler dialog box enables you to verify or change the settings. The ABC Web Services server automatically creates a schedule for each active stream (Upstream). Run_steps executes every five minutes, or whatever interval you have set in the DWH settings for the value run_steps scheduler interval. For details see ["Configure Data Warehouse Settings" \(on page 132\)](#).


Note: If you add a new stream definition, you must manually define a run_steps schedule.

1. Select **Admin > ABC Management** and click  in the Stream Information area.
2. The Stream Scheduler dialog box opens.
3. Select the **Run-Steps Scheduler** tab.
4. Click **Add New** to create a new schedule for a specific stream.
5. Click **Save**.
6. Click **Delete** to delete a displayed schedule. You can then add a new one to replace it.


To view stream attributes:

1. Select **Admin > ABC Management** and click **More Info** in the Stream Information area.
2. The Stream Attributes dialog box opens, displaying the various read-only stream details.

To schedule a batch job:


1. Select **Admin > ABC Management** and click  in the Stream Information area.
2. The Stream Scheduler dialog box opens.
3. Select the **Load -Batch Scheduler** tab.
4. Select the relevant **Schedule Type** and times and click **Save**.

To load or resume a batch job:

1. Select **Admin > ABC Management**.
2. When there is no running batch (stream state is **None**) or the running batch is in a suspended state (stream state is **Suspended**), click  to load or resume a batch.


To suspend a stream:

When the stream is running and the state is Active, you can suspend the stream to allow no action to happen.

- Select **Admin > ABC Management** and click  in the Stream Information area.

To abort a stream:

When you abort, the batch cannot be run again, when you load, it will start a new batch.

- Select **Admin > ABC Management** and click  in the Stream Information area.

To view node information:

1. Select **Admin > ABC Management** and click a node in the Stream Information area.
2. The Node Step list opens with the step information displayed.

To view step attributes:

1. Select **Admin > ABC Management** and click **More Info** in a specific node.
2. The Step Attributes dialog box opens, displaying the various read-only step details.

To refresh stream data:

- Select **Admin > ABC Management** and click  in the Stream Information area.

To view historical data:

The most recent batch history of the stream is displayed first. You can navigate through the pages of the various batches. You can view up to five batches at a time.

1. Select **Admin > ABC Management** and click Historical Data in the Stream Information area.
2. The Historical Data page opens.
3. Select **Next** to view the other batches in the stream's history. All fields are read only.

To view archived data:

You can view previous stream definitions and the historical data for each. The historical data is the batch history for that particular definition. When you add a data source it changes the stream definition. The new definition has no historical data, you can only view the archived stream and see

the historical data of the previous definitions. All fields are read only.

1. Select **Admin > ABC Management** and click **Archived Streams** in the Stream Information area.
2. The Archived Stream Definition page opens.





To automatically retry steps:

There is an automatic retry for attempting to fix step errors. A step that has an error it will not necessarily remain and can resolve itself.

There is a configurable automatic retry mechanism which is set by default to four times. For details on changing the amount of automatic retries, see ["Change the Number of Retries for a Failed ETL Step" \(on page 254\)](#).

To manually retry steps:

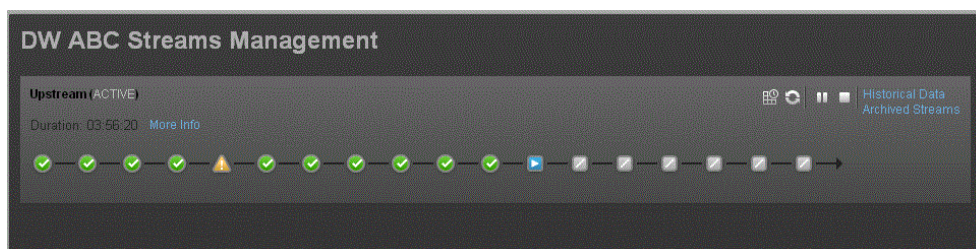
The retry image appears when there has been a failure on a step.

1. Select **Admin > ABC Management** and click an error node in the Stream Information area.
2. The Node Step list opens with the step information displayed.
3. If all of the retries have been exhausted, and the Retry icon  appears.
4. Click  in the Stream Information area to suspend the stream.
5. Fix the problem, and manually retry by clicking .
6. Once the error is resolved, click  to resume the stream.

UI Description











DW ABC Streams Management User Interface Page



You can view and manage ETL stream functions and run-time information through the DW ABC Streams Management UI. The active stream and details are displayed as well as the node and step details.



<Stream Display>

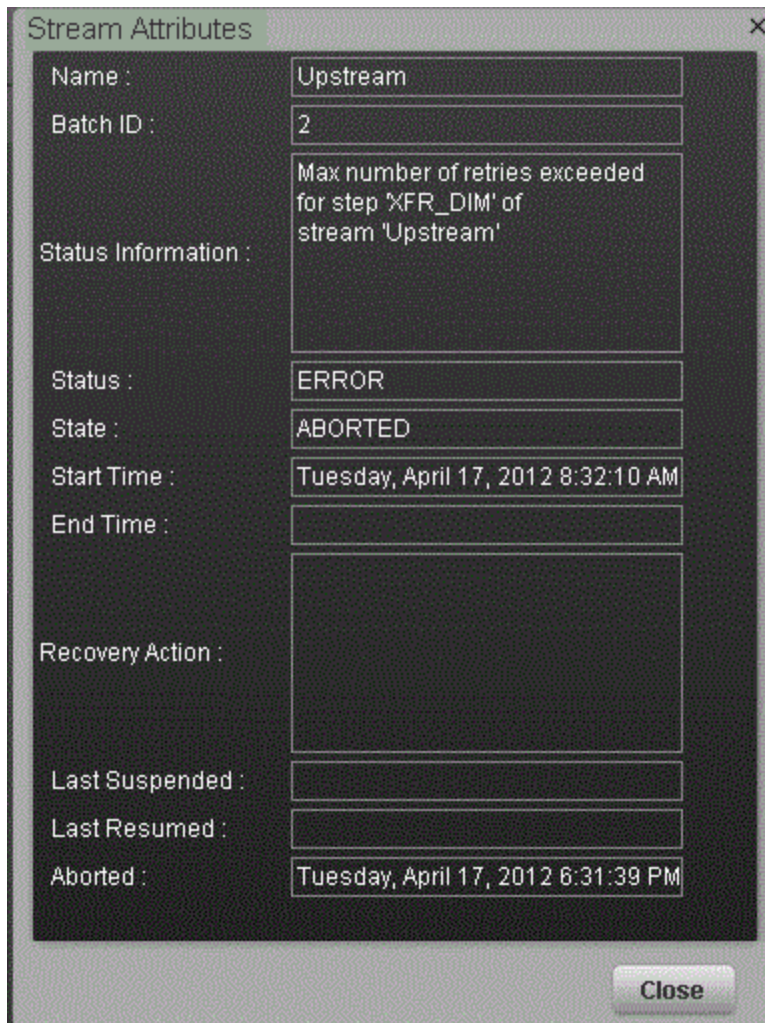
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
<Stream Information>	Displays the following stream details: <ul style="list-style-type: none"> Stream Name Status: Active or Suspended or None Duration Date
	Refreshes the stream information. There is an automatic refresh of the stream information every two minutes.
More Info	Opens the Stream Details dialog box. For details, see "Stream Attributes Dialog Box" (on page 152)
	Load Batch/Resume. Starts or resumes the running of the specific batch of ETL stream.
	Opens the Stream Scheduler dialog box. Enables you to schedule the load batch and run_steps commands. For details, see "Stream Scheduler Dialog Box" (on page 156) .
	Suspend Stream. Temporarily suspends the stream.
	Abort Stream. Stops the stream that is running.
<Node Display>	<p>Displays the nodes representing the groups of steps within one level of execution of an ETL run, the steps that can run in parallel. A node is a collection of steps that all run in parallel. The icon for each node represents the worst status of all of the steps in the node.</p> <p> Indicates that the particular step or all steps in the node have finished successfully in the execution.</p> <p> Indicates that a step or a step in the node is currently running</p> <p> Indicates an error in one of the steps. The step is automatically retried four times by default.</p> <p>Click the Error node to display the Node Step List in order to retry steps. Click  to retry the step.</p> <p> Indicates a warning in one of the steps.</p> <p>Click a node to open the Node Step list.</p>

UI Element	Description
	<div><div>Level 4</div><div><div> PPM_SSI</div><div> NA_EXT_INSTANCE_1</div></div><div><div>More Info</div><div>More Info</div></div></div> <p>Note: If there is an error in any of the steps, then all steps in the execution of the stream are stopped. In order to move to the next node, the error must be resolved.</p> <p>Click More Info to display the Step Details dialog box pertaining to the particular step. For details, see "Step Attributes Dialog Box" (on page 154).</p>
Historical Data	<p>Opens the Historical Data page where you can view stream history, including the active stream.</p> <p>For details, see "Historical Data Page" (on page 158)</p>
Archived Streams	<p>Opens the Archive Data page where you can view streams that were previously active with a different definition. for details, see "Archived Streams Page" (on page 160).</p>

Stream Attributes Dialog Box

This dialog box enables you to view the attributes of the displayed stream.



The image shows a 'Stream Attributes' dialog box with a close button (X) in the top right corner. The dialog contains several fields for stream configuration and status. The 'Name' field is 'Upstream'. The 'Batch ID' field is '2'. The 'Status Information' field contains the text: 'Max number of retries exceeded for step 'XFR_DIM' of stream 'Upstream''. The 'Status' field is 'ERROR'. The 'State' field is 'ABORTED'. The 'Start Time' field is 'Tuesday, April 17, 2012 8:32:10 AM'. The 'End Time' field is empty. The 'Recovery Action' field is empty. The 'Last Suspended' field is empty. The 'Last Resumed' field is empty. The 'Aborted' field is 'Tuesday, April 17, 2012 6:31:39 PM'. A 'Close' button is located at the bottom right of the dialog.

Name :	Upstream
Batch ID :	2
Status Information :	Max number of retries exceeded for step 'XFR_DIM' of stream 'Upstream'
Status :	ERROR
State :	ABORTED
Start Time :	Tuesday, April 17, 2012 8:32:10 AM
End Time :	
Recovery Action :	
Last Suspended :	
Last Resumed :	
Aborted :	Tuesday, April 17, 2012 6:31:39 PM

Close

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

All fields are read-only.

UI Element	Description
Name	Stream name.
Batch ID	The ID of the specific batch job of the stream.
Status Information	Provides details about the status of the stream.
Status	Displays the status of the batch: <ul style="list-style-type: none">• OK• Warning• Error

UI Element	Description
State	Displays the state of the batch: <ul style="list-style-type: none">• Active• Suspended• Finished• Aborted
Start Time	The date and time of the start of the batch job.
End Time	The date and time of the end of the stream batch job.
Recovery Action	Displays any information about recovery actions if the stream was suspended or stopped.
Last Suspended	The date and time the stream was suspended.
Last Resumed	The date and time the stream was resumed.
Aborted	The date and time the stream was aborted.

Step Attributes Dialog Box

This dialog box enables you to view the attributes of the displayed step.

Step Attributes

Name :

MS_CON

Process ID :

10

Batch ID :

1

Status Information :

WFs statuses: success: 60, error: 0 || Audit metrics: success: 60, warning: 0, error: 0.

Status :

SUCCESS

State :

FINISHED

Start Time :

2012-04-18 09:59:30

End Time :

2012-04-18 10:00:34

Job Name :

MS_CON_JB

Retry Sequence :

0

Recovery Action :

Schedule Time :

2012-04-18 09:51:22

WS Call Time :

2012-04-18 09:59:06

Status	Name	Status Inform	Start Time	End Time
SUCCESS	TEST_PLH...		2012-04-18 09:59:34.09	2012-04-18 10:00:33.68
SUCCESS	TIME_TO_M...		2012-04-18 09:59:34.09	2012-04-18 10:00:33.683
SUCCESS	TESTINSTA...		2012-04-18 09:59:34.09	2012-04-18 10:00:32.973
SUCCESS	EMPLOYME...		2012-04-18 09:59:34.12	2012-04-18 10:00:34.03
SUCCESS	SERVICES...		2012-04-18 09:59:34.217	2012-04-18 10:00:33.91

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

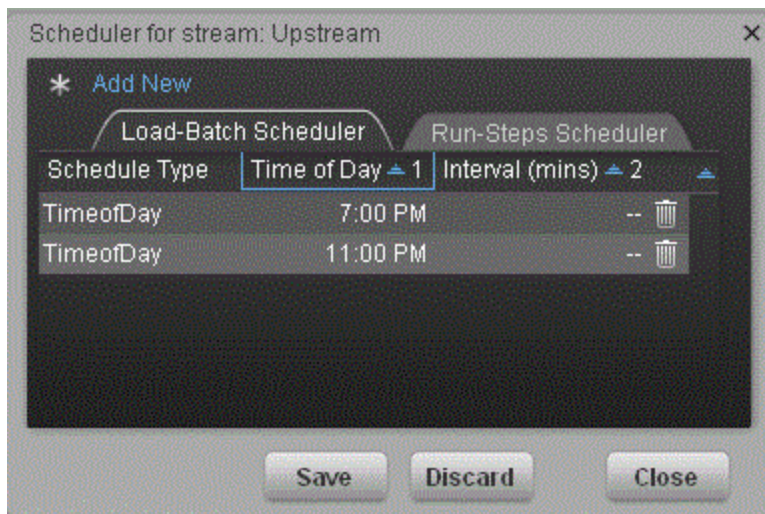
All fields are read-only.

UI Element	Description
Name	Step name.
Process ID	The ID of the specific run of the step.
Batch ID	The ID of the specific batch job of the stream.
Status Information	Provides details about the status of the step.
Status	Displays the status of the step: <ul style="list-style-type: none">• NA• SUCCESS• WARNING• ERROR• MAX_EXECUTION_TIME_EXCEEDED
State	Displays the state of the step: <ul style="list-style-type: none">• WAITING• RUNNING• STARTING• FINISHED
Start Time	The date and time of the start of the run.
End Time	The date and time of the end of the run.
Job Name	The BODS job name.
Retry Sequence	The number of automatic retries.
Recovery Action	Displays any information about recovery actions if the step failed.
Schedule Time	The date and time the batch was loaded.
WS Call Time	The date and time that ABC makes the call to execute. Indicates if there is a problem in the execution.
Step Details	BODS Jobs: The workflows for the BODS jobs associated with each step. Other executables: Sub-processes of the step.


Stream Scheduler Dialog Box

This dialog box enables you to schedule a specific batch job and schedule a `run_steps` command.

Load Batch Scheduler Tab



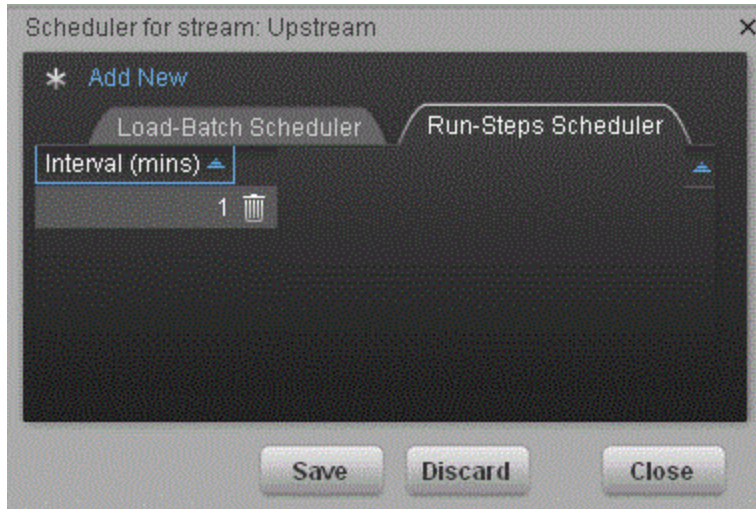
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Schedule Type	Select either: <ul style="list-style-type: none"> Interval: Timeframe in minutes. Time of day: Time according to 24 hour clock. Enter the required schedule time in the relevant row.
	Delete. Deletes the adjacent schedule time.
Add New	Creates a new schedule. The new schedule is displayed in blue. When the schedule is saved to the server, the schedule is displayed in black.
Save	Saves all changes to the server.
Discard	Discards all changes without saving them to the server.
Close	Closes the Load Batch Scheduler dialog box.

Note: Click the down arrow in each column to filter your scheduling information.

Run_Steps Scheduler Tab

This sets the frequency that the ABC Management runs all of the executables for the stream. This includes steps that are loaded as well as the batches created.



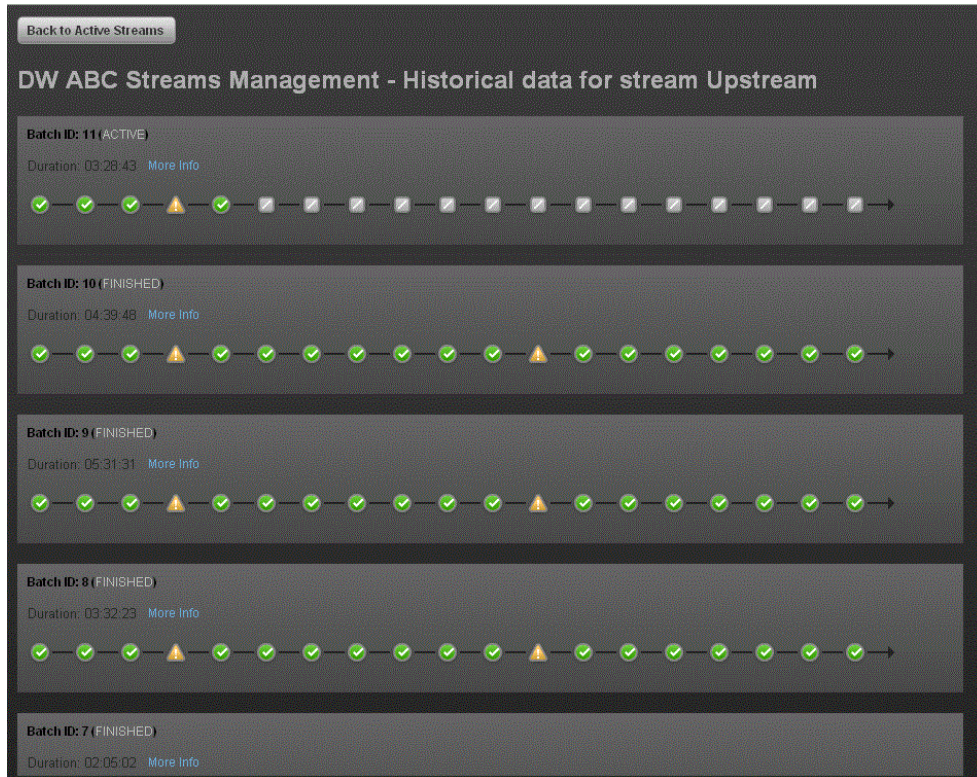
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Interval (mins)	Enter the interval at which you want to schedule the run_steps command. Note: The default run_steps interval is initially set at 5 minutes in the Data Warehouse Settings page of the Admin tab, but it is recommended to only make changes to the run_steps interval in this scheduler.
Add New	Enables you to add a new schedule for the run_steps command.
Save	Saves all changes to the server.
Discard	Discards all changes without saving them to the server.
Close	Closes the run-steps Scheduler dialog box.

Note: Click the down arrow in each column to filter your scheduling information.


Historical Data Page

You can view a stream's job history on the Historical Data page..



<Stream Display>

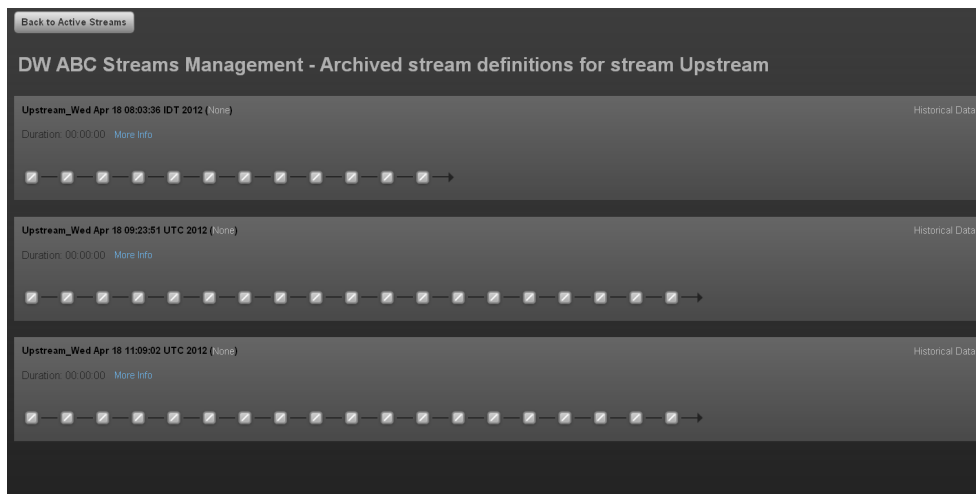
User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Back to Active Streams	Opens the DW ABC Streams Management UI main page.
<Stream Information>	Displays the following stream details: <ul style="list-style-type: none"> Batch ID Number Status: Active, Suspended or Aborted Duration Date
More Info	Opens the Stream Details dialog box. For details, see "Stream Attributes Dialog Box" (on page 152) .
<Node Display>	Displays the nodes representing the groups of steps within the execution of an ETL run. A node is a collection of steps that all run in parallel. <p> Indicates that all steps are running in the execution.</p>

UI Element	Description
	<p>✖ Indicates an error in one of the steps. The step is automatically retried four times by default.</p> <p>⚠ Indicates a warning in one of the steps.</p> <p>Click a node to open the Node Step list.</p> <div> <p>Level 4</p> <div> <div>✔ PPM_SSI</div> <div>More Info</div> </div> <div> <div>✔ NA_EXT_INSTANCE_1</div> <div>More Info</div> </div> </div>
Previous	Navigates to the previous job history data for the stream.
Next	Navigates to the next job history data for the stream.
<<	Navigates to the earliest job history data for the stream.

Archived Streams Page

This page enables you to view stream definitions that have been changed and archived..



User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

All fields are read-only.

UI Element	Description
Back to Active Streams	Opens the DW ABC Streams Management UI main page.
<Stream Information>	Displays the following stream details: <ul style="list-style-type: none">• Stream Name• Status: Active or Suspended• Duration• Date
More Info	Opens the Stream Details dialog box. For details, see "Stream Attributes Dialog Box" (on page 152) .
Historical Data	Opens the Historical Data Page where you can view the archived stream history. For details, see "Historical Data Page" (on page 158) .
Back to Active Streams	Opens the DW ABC Streams Management UI main page.
<Node Display>	Displays the nodes representing the groups of steps within the execution of an ETL run. A node is a collection of steps that all run in parallel.

Troubleshooting

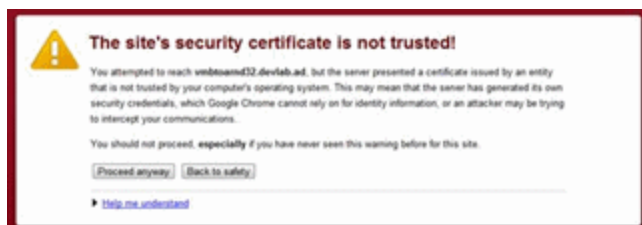
The DW ABC Streams Management UI enables you to troubleshoot various stream errors and warnings by accessing stream and step details.

Problem accessing DWH application in Chrome browser when installed in distribution mode (XS and DWH on different servers):

Cause

Certificate issues that can be solved by configuring trusted certificates on your browsers.

View Details



Solution

To fix the certificate:

1. Open Internet Explorer.
2. Enter the XS URL (https).
3. In the Security Certificate warning, click **Continue to this website**. A certificate error is displayed to the right of the address bar.
4. Click **Certificate Error**.
5. Click **View Certificate**. A certificate dialog box opens.
6. Click **Install Certificate**. The Certificate Import wizard opens.
7. Click **Next**.
8. Select **Place certificates in the following store** and click **Browse**.
9. In the Select Certificate Store dialog box select **Trusted Root Certification Authorities** and click **OK**.
10. A warning message opens, click **Yes** to install the certificate. You can now enter the XS application in Chrome without a certificate error message.

When accessing ABC Management or Data Source Management UI, an Error 510 (Insecure Response) is displayed.

This occurs because the UI pages require access to the DWH application.



GENERAL max time reached for all steps in a job:

View Details

In the DW ABC Streams Management UI check the active stream that is running.

In the ABC- Batch Details Report click **Step Id**, in order to view the ABC Job Details Report and the specific error.

Solution

1. Select **Admin > ABC Management**.
2. When there is no running batch (stream state is **None**) or the running batch is in a suspended state (stream state is **Suspended**), click  to load or resume a batch.
3. Check the active stream for errors.
4. Select the error in the stream. The Node Step list opens with the step information displayed.
5. Click **More Info** to get Step Attributes details for diagnosing the problem.
6. Retry the step if necessary by clicking .

Back-end Solution


1. Try to re-run the job.
2. Open the SAP BusinessObjects Data Services for IT Executive Scorecard management console, and select the **Monitor** tab to track the progress of the job.

ETL stream not running:

Cause

- ETL started running and then failed.
- ETL schedule was incorrectly configured.

Solution

1. Select **Admin > ABC Management**.
2. When there is no active stream, click **Historical Data** to view the stream history.
3. If there is no batch scheduled, click  to schedule. For details, see ["Stream Scheduler Dialog Box" \(on page 156\)](#).
4. If there was a batch scheduled, click **More Info** in the stream information area to troubleshoot further.

Back-end Solution

Event viewer: dw_abc.log

1. Make sure all previous streams have finished by checking the ABC Operational Status report.
2. Review the status of the last batch. See the **Last Batch Status** area of the report.


If you want to abort the stream using the command line, see ["ABC Command Reference" \(on page 234\)](#).

ETL step failure:

Cause

- Previous streams have not completed.
- A step has failed within the stream.

Solution

1. Select **Admin > ABC Management**.
2. Select the error in the stream. The Node Step list opens with the step information displayed.
3. Click **More Info** to get Step Attributes details for diagnosing the problem.
4. Retry the step if necessary by clicking .

Back-end Solution

Check the ABC Operational Status report, as follows.

1. Review the status of the last batch. See the **Last Batch Status** area of the report.
2. Locate the step that has failed. See the **Jobs With Problems for ETL Batch ID** area of the report.
3. Click on the link in the **Proc ID** column for detailed information in the report about the error.

Period attribute is invalid or unknown:

Cause

Configuration error.

View Details

In the Period table there is an invalid period value.

Solution

Change the Data Warehouse period dimensions. For procedure details, see "[Change the Data Warehouse Period Dimensions](#) " (on page 215).

DWH reports cannot be accessed:

Cause

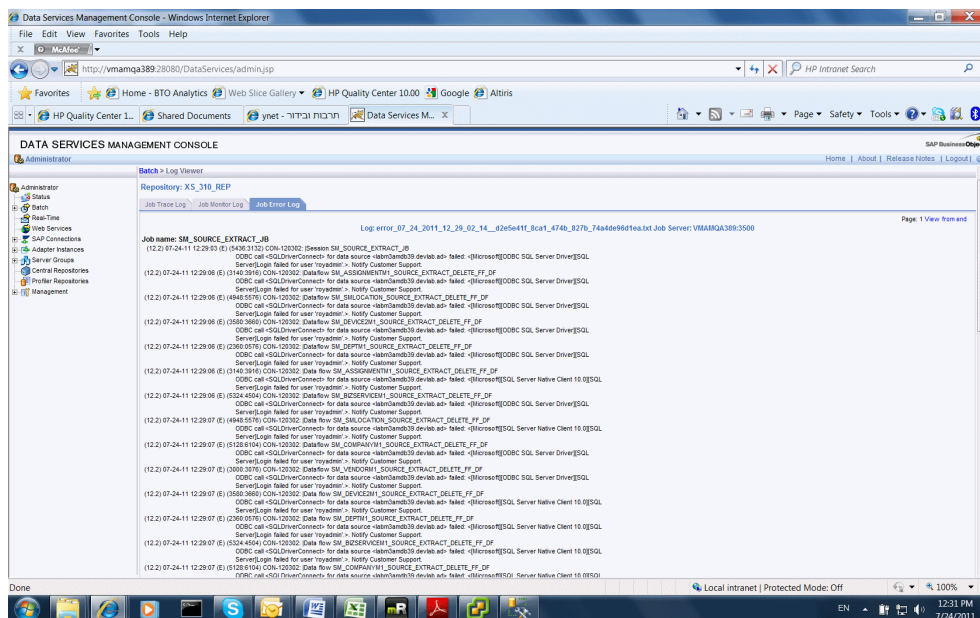
Problem with the SAP BusinessObjects Enterprise for IT Executive Scorecard server. You need to validate that the SAP BusinessObjects Enterprise for IT Executive Scorecard server is running and that it is configured properly.

Solution

In the SAP BusinessObjects InfoView, select **Public Folders** and the specific report type you want to access.

SOURCE_EXTRACT_JOB to source failure or no connection:

Data Warehouse - ABC Job Process Control									
This report displays operational information pertaining to Job Process ID: 22									
Operational Job Process Information for the process id: 22									
Stream Step Id	Job Stream Id	State	Status	Duration	Start Time	End Time	Schedule Time	Owner	Status Info
SM_SOURCE_EXTRACT	Upstream	FINISHED	ERROR	5 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:21 PM	7/24/2011 12:23:11 PM	SCHEDULER	Wf's statuses: success: 0, error: 18 Audit metrics: success: 0, warning: 0, error: 0.
Workflow/Data Flow Details									
WF/DF Detail Name	Status	Status Info	Duration	Start Time	End Time	WF/DF Detail ID			
SM_ASSIGNMENTM1_SOURCE_EXTRACT_DELETE_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	2 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:18 PM	10			
SM_ASSIGNMENTM1_SOURCE_EXTRACT_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	3 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:19 PM	9			
SM_BZSERVICEM1_SOURCE_EXTRACT_DELETE_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	1 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:17 PM	6			
SM_BZSERVICEM1_SOURCE_EXTRACT_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	4 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:20 PM	5			
SM_COMPANYM1_SOURCE_EXTRACT_DELETE_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	2 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:18 PM	13			
SM_COMPANYM1_SOURCE_EXTRACT_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	4 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:20 PM	15			
SM_CONTACTSM1_SOURCE_EXTRACT_DELETE_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	2 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:18 PM	19			
SM_CONTACTSM1_SOURCE_EXTRACT_FF_WF	ERROR	Error: [120302] ODBC call <SQLDriverConnect> for data source <abm3amd33 devlab.as> failed: <[Microsoft][SQL Server Native Client 10.0][SQL Server]Login failed for user 'royadmin'>. Notify Customer Support.	5 s	7/24/2011 12:25:16 PM	7/24/2011 12:25:21 PM	18			
© 2011 Hewlett-Packard Development Company, L.P.									



View Details

In the DW ABC Streams Management UI check the active stream for errors.

In the ABC- Batch Details Report click **Step Id**, in order to view the ABC Job Details Report and the specific error. Alternatively, open the SAP BusinessObjects Data Services for IT Executive Scorecard management console, and select the **Error** and **Trace** tabs of the failed job for more information.

JOB_STREAM_STEP_DETAIL_RT table –process failed under JOB using MD_BATCH_ID AND MD_PROCESS_ID.

Error message:

```
com.hp.dwh.adapters.fbi.common.exception.ExtractorException:
com.microsoft.sqlserver.jdbc.SQLServerException:
Invalid column name '<column_name>' - MSSQL
ORA-00904 : "<column_name> invalid identifier - ORACLE
Error Code: 1054. Unknown column
'<column_name>' in 'field list' - MYSQL
```

Solution

1. Select **Admin > ABC Management**.
2. Select the error in the stream. The Node Step list opens with the step information displayed.
3. Click **More Info** to view Source_Extract_Job login details for diagnosing the problem.
4. Run the command on the source model xml update file directory:
<Installation Directory>\agora\DataWarehouse\bin\
dw_importdefs.bat –topdir <SOURCE MODEL XML FILE DIR> to update the DWH metadata.

For example, C:\<Installation Directory>\agora\ContentPacks\SM\dataModel\dataIntegration\source\SM\9.2\oracle\SM_INCIDENTSM1_SRC.xml

5. Click  to run the ETL.

Solution

Enter the correct configuration parameters in the relevant data source activation page. For details, see the *Content Reference Guide*.

An ETL step is "running" too long:

Cause

Various step errors.

Internal SAP BusinessObjects Data Services for IT Executive Scorecard error.

View Details

1. Select **Admin > ABC Management**.
2. Select the relevant step in the stream. The Node Step list opens with the step information displayed.
3. Click **More Info** to get Step Attributes details for diagnosing the problem.

Solution

If the job is not proceeding, abort the stream as follows:

1. Locate the process ID and the job name: access the ABC-Batch Details Report, click **Control Details** in the left-hand tree, and view the **Process ID** and job name (**Stream Step Id**) in the **Associated Job Processes** section.
2. Run `<datawarehouse\bin folder> set DW_PROCESS_ID=<process_ID>` where you replace process ID with the process ID number from step 1.
3. Run `<datawarehouse\bin folder> dw_abc_job_launcher.bat -<jobname XXXX> -stop` where you replace XXXX with the job name from step 1.
4. Run `<datawarehouse\bin folder> dw_abc_set_status.bat -error`
5. Launch the job again.

ETL continues to run for more than 20 minutes:

Cause

The Data Warehouse stream is stuck.

Solution

Indicates the Hardware requirements were not completed in the installation of DWH. Complete the following requirements:

- RAM : 8GB
- FreeDisk Space : 8GB

- Processor : Dual core

ETL workflows fail with error message like Unclosed quotation mark after the character string:

Cause

Unprintable characters in string fields may cause ETL Workflow to fail

View Details

Open the SAP BusinessObjects Data Service Management Console, input the job name, you can find detailed error message

Solution

1. Login to the source product database
2. Run SQL to remove or update questionable string fields.
3. Abort the previous ABC stream
4. Re-run the ETL workflow by calling the relevant ABC command.
5. Re-run ETL.

Source Extract job failure: “SQLServerException: invalid object name” error in the Step Attributes dialog box.

Cause

A user that does not have the correct permissions for schema mapping to the source tables.

Solution

The system administrator must assign the user the correct permissions and schema mapping. This is relevant for all RDBMS type data sources.

For details, see ["Manage Users" \(on page 27\)](#).

Perform Tasks for Data Source Management

Data Source Management enables you to manage the integration of data into the data warehouse through the activation of data sources. The available data source content packs are registered in the deployment process and can then be activated in the Data Source Management page.

To Access: Select **Admin > Data Source Management** then click **Add data source**.

Learn More

Learn about Content Packs

A Content pack is a set of files which defines the execution of an ETL along with all its parameters. The Data Warehouse can connect to other products (data sources) and gather data about these products. An integration is available for each product (data source). The integration uses a connection or adapter to gather data from the data source and send the data to the Data Warehouse.

The connection from the data source to the DWH is called an integration content pack (iCP). Each content pack requires an adapter in order to extract the data from the specific data source. Content packs contain all the artifacts needed to connect to the relevant data source and gather data from that data source. Content packs include:

- The definition of the data model used for the connection.
- The type of data gathered from the data source.
- The ETL definitions.
- The definition files.
- The configuration files.
- The scripts that help build and define the Data Warehouse.

The mapping between the raw data from the data source and the target database in the Data Warehouse is included in the ETL. The Executive Scorecard runs the KPI engine that reads the data from the target database, creates the relevant KPIs from that data, calculates the value, and status of the KPI and displays the relevant information in the Dashboard.

You must run the Data Source Management wizard to configure and activate the content packs, depending on the products you want to integrate with.

The out-of-box content packs are:

- CORE content pack. This is the central content pack that is automatically installed during the post-installation process. It takes consolidated data to the target schema. It includes all the dimensions, and entities of the Data Warehouse. It also provides the organization of definitions and hierarchies. All the other integrations depend on the CORE content pack.
- PPM

- AM
- SM
- BSM
- UCMDB
- ALM
- SA
- NA
- DP
- NNM
- OO

The universe is the result of a semantic layer of metadata that creates a business oriented view of the data. The universe contains a schema of the tables that make up the dimension and measurement objects. The universe is an interface between the data warehouse and the analytics that display the data.

Learn About File Based Integration

File Based Integration (FBI) enables you to extract data from a specific data source according to a set of instructions. It consists of a plug-able extractor framework for each data source. The extractor gathers data according to the specific instructions it receives, placing it into a relevant txt file. Each supported data source has a corresponding extractor (or multiple extractors) capable of extracting data out of it according to specified instructions. All available Content Packs, except for BSM, UCMDB, and ALM, use FBI .

Extraction Mechanism

An instruction is a set of parameters kept in the dwabc.INSTRUCTION table in the staging database. The parameters are set by the BODS workflow during the Source Extract.

Extraction Methodology

The extraction is done using Enterprise JavaBeans (EJBs) running on the application container of the Data Warehouse. The EJBs use various technologies (for example, JDBC, Web Services, Remote EJB objects, data files, and other kinds of http requests) to extract the data from the data source.

ETL Source Extract

The first stage of the ETL is the Source Extract. In this phase, the BODS workflow inserts an instruction to the INSTRUCTION table and then invokes a batch file with the instruction ID as a parameter. The batch file calls a JAVA program which performs an http request that activates the relevant extractor. Using the instruction ID, the extractor fetches the relevant parameters from the INSTRUCTION table.

External adapters running inside the BODS tomcat JVM, extract the data from the data source into BODS data stores. In all Content Packs that integrate using FBI, data is extracted using a new framework which runs on a separate JVM from the data source into txt files with well defined

standard structure. FBI runs the source extract in a JVM outside BODS. Additionally, when running outside of BODS, it is not required to comply to BODS interfaces.

FBI Verification Extractor

FBI also supplies an extractor within the FBI framework that can verify and validate a flat file you have.

To utilize the extractor:

1. Place the Flat File (FF) in a specific folder with a specific name in the RESULT_FILE_NAME column in the Instruction table. The name and folder are defined by the ETL developer.
2. The delimiters in FF should be the same as the ones defined in the delimiters columns (FIELD_DELIMITER and ROW_DELIMITER). The FF must contain the list of fields in the first line with all the relevant delimiters.
3. Make sure the order and the name of the fields in the FF are the same as the ones defined in the SourceModelMetadata.

To activate the extractor:

1. Define the productType attribute in the datasource.xml as file (productType="file").
2. You can also override the defined extractor by adding a new entry into the connection detail (in the datasource.xml), as follows: `<dw:GenericProperty propertyName="overrideextractor" propertyValue="file" propertyType="string"/>`

FBI Properties

In data source activation, each source that is extracted with FBI must have the following properties configured.

Navigate to: **<installation directory>\DataWarehouse\conf\fbfbi.properties**

If multiple extractors are running simultaneously, you may need to configure the following:

fbfbi.max.number.of.threads =5

If you experience problems with languages that do not work with UTF 16 you can change the following:

fbfbi.flat.file.encoding =UTF-16

Content Packs that use FBI Extractors

- AM
- SM
- PPM
- SA
- DP
- NNM
- APM (divided into uCMDB, BSM KPI dashboard, GDE)

- SQL (Used by AM, SM, NA, OO Content Packs)
- Oracle (Used by PPM, AM, SM, NA, OO Content Packs)
- MySQL (Used by NA, OO Content Packs)

Troubleshooting Logs

- <agora>\glassfish\glassfish\domains\BTOA\logs\fbi.log: This log describes all of the current activity of the file based framework as well as the activity of the extractors themselves.
- <installation directory>\agora\DataWarehouse\log\dw_fbi_client.log: This log describes the activity of calling the FBI url from a batch file (which is invoked by a BODS workflow during the ETL source extract).

Learn About Multiple Integration Content Pack Instances

Multiple Integration Content Packs (M-iCP) provide multiple instances of the same data source or product type. This allows for data source configuration per instance, as opposed to a single activation for the data source. Each instance has its own version and product type. The M-iCP source extraction is based on the FBI extractor technology, and consolidation is enabled between instances.

Not all data source types support multiple instances. BSM, UCMDB, ALM, and SA only support one instance each.

You can add an instance using the Data Source Management page or using the Automation tool. For back-end tool details, see ["The Automation Tool" \(on page 250\)](#).

Tasks

This section includes:

["Add and activate a new data source instance:" \(on page 171\)](#)

["Activate an existing data source instance:" \(on page 172\)](#)

["Deactivate a data source instance:" \(on page 172\)](#)

["View data source configuration settings" \(on page 172\)](#)

["Edit data source settings and test the connection:" \(on page 172\)](#)

["Add a new data source to the integration mechanism" \(on page 172\)](#)

["Configure admin tasks using the command line" \(on page 172\)](#)

Add and activate a new data source instance:

The process of integrating a data source into the Data Warehouse is done through activation of the source instance.

1. Select **Admin > Data Source Management**.
2. Click the **Add data source** to open the Data source wizard. The Add Data Source page opens.
3. Select the data source type and click **Next**.


The relevant data source page opens.

4. Enter and select the configuration parameters.
5. Complete the wizard.

The data source instance is activated.


Note: If the first time activation of a data source instance fails, the instance is displayed in the source list with an **Error** status. You can then activate the data source by clicking **Edit Settings** and completing the configuration and activation.

Activate an existing data source instance:

1. Select **Admin > Data Source Management**.
2. Click  next to the specific source and the source is activated.

Deactivate a data source instance:


You can deactivate the source and stop the integration process, in order to change configuration details.

1. Select **Admin > Data Source Management**.
2. Click  and the deactivation warning opens.
3. Click **OK**.

View data source configuration settings

1. Select **Admin > Data Source Management**.
2. Click **View Settings** and the relevant data source page opens.

Edit data source settings and test the connection:

1. Select **Admin > Data Source Management**.
2. If necessary, deactivate the data source by clicking .
3. Click **Edit Settings** and edit the configuration parameters.
4. Click **Next** to validate your changes and test the connection to the data source.

Add a new data source to the integration mechanism

For details, see ["Add Additional Data Sources" \(on page 214\)](#).

Configure admin tasks using the command line

For details, see ["Data Warehouse Command Reference" \(on page 234\)](#)

UI Description

Data Source Management Page













The Data Source Management page enables you to select from a list of Integration Content Packs recognized by the data warehouse. Additionally, it enables you to activate the integration of the data

sources, as well as deactivate and make configuration changes.



Data Sources

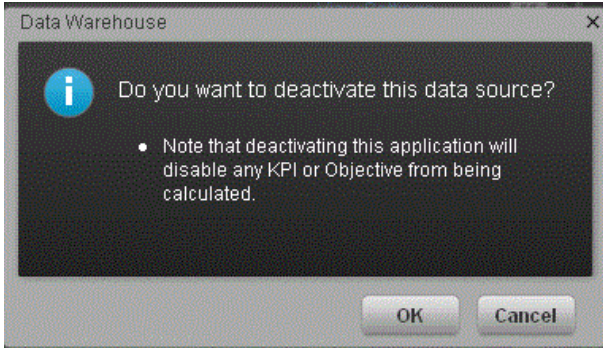
Select the data sources you want to activate or deactivate. By activating a source you start streaming data from the source, into the target model.

[Add data source](#)

Name	Product		
ALM (Activated)	ALM	View Settings	
new PPM instance (Activated)	PPM	View Settings	
AM (Activated)	AM	View Settings	
BSM (Activated)	BSM	View Settings	
DP (Activated)	DP	View Settings	
NA (Activated)	NA	View Settings	
NNM (Activated)	NNM	View Settings	
PPM (Activated)	PPM	View Settings	
SA (Activated)	SA	View Settings	
SM (Activated)	SM	View Settings	
UCMDB (Activated)	UCMDB	View Settings	
AM_2 (Activated)	AM	View Settings	

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets):

UI Element	Description
Add data source	Click to open the Data Source wizard. For details, see "Data Source Wizard" (on page 175) .
<Data Sources>	<p>A list of sources, by Name (instance name) and Product (data source product), that have been added to the data warehouse. The current status of the data source is displayed next to the instance name:</p> <ul style="list-style-type: none"> Activated Deactivated Error Initializing: Data source is currently being activated. Relevant only for first time activation.
View Settings	<p>Available when the data source has been activated. Displays the read-only configuration of all connection parameters.</p> <p>Note: All connection settings are run-time related. You must deactivate the connection to the data source in order to change the settings.</p>
Edit Settings	<p>Available when the data source has been deactivated. Displays the configuration of all connection parameters and enables you to test the connection to the data source. The parameters can be edited.</p> <p>Note: If the first time activation of a data source instance fails, the instance is displayed in the source list with an Error status. You can then activate the data source by clicking Edit Settings and completing the configuration and activation.</p>
	<p>Activates the relevant data source.</p> <p>Note:</p> <ul style="list-style-type: none"> Once the content pack is activated, the ETL is ready to run. For details on how to monitor and manage the ETL, see "DW ABC Streams Management User Interface" (on page 146). Do not activate a content pack while ETL is running.
	Deactivates the relevant data source.

UI Element	Description
	 <p>Note: Do not deactivate a content pack while ETL is running.</p>

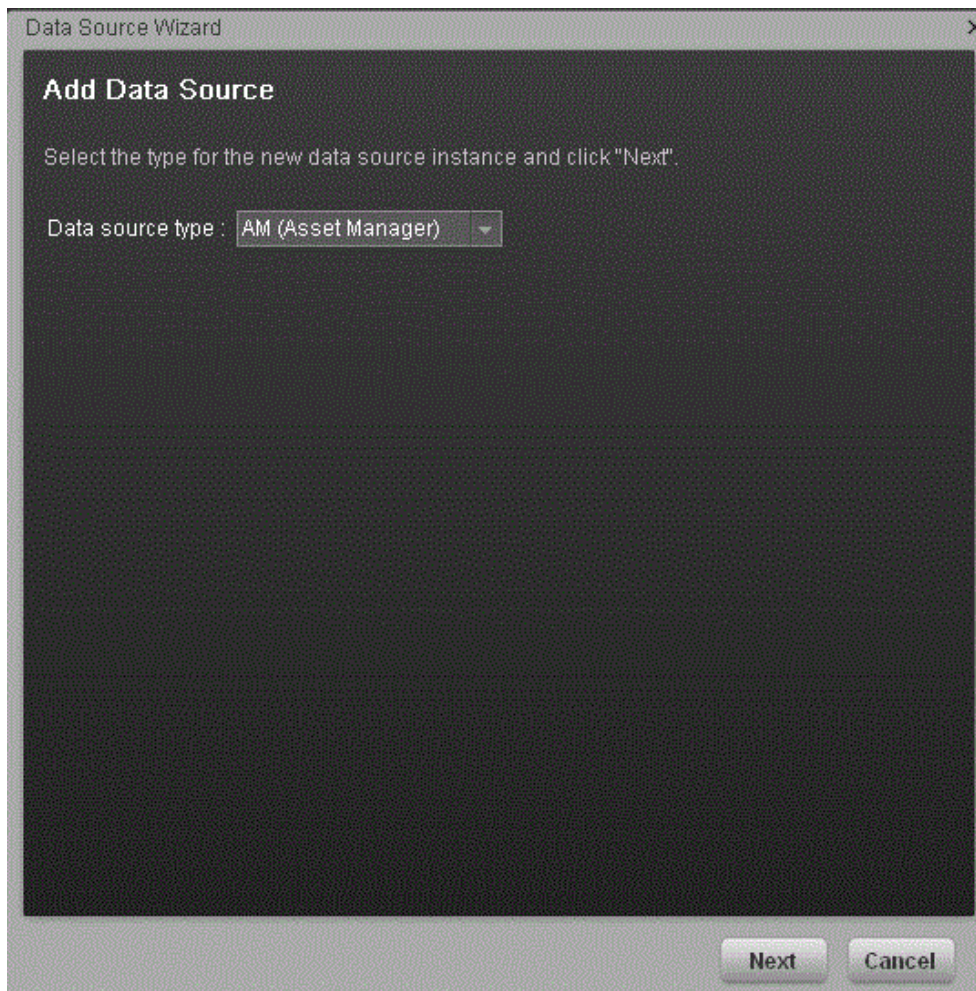
Data Source Wizard

The Data Source wizard enables you to add and activate a selected data source instance.

To access	<p>Select Admin > Data Source Management and then click Add data source.</p> <p>Select the data source type to activate the integration processes.</p>
Important Information	<p>Some data sources do not support multiple i-CP and only support one instance. Therefore, if you have already activated a BSM, UCMDB, ALM, or SA data source, they are no longer displayed in the list.</p> <p>The UI elements of the wizard differ according to the selected data source, as follows.</p> <ul style="list-style-type: none"> • AM • BSM • PPM • SM • UCMDB • ALM • SA • NA • DP • NNM • OO • Additional Sources: Additional data sources can be added . For details see "Add Additional Data Sources" (on page 214).

	<p>For configuration parameter details, see "Integrate the Data Sources" in the <i>Content Reference Guide</i>.</p> <p>For each source, enter the relevant information and click Next to proceed to the validation page.</p> <p>Note: If the activation process is taking more than one hour, you can change the status of the CP in the CONTENT_PACK table to "ERROR" and then activate the CP again.</p>
Wizard Map	<p>The Data Source wizard contains:</p> <p>Add Data Source Page > Configuration Parameters Page > Validation Page</p>

Add Data Source Page



Data Source Wizard

Add Data Source

Select the type for the new data source instance and click "Next".

Data source type : AM (Asset Manager)

Next Cancel

Click **Next** to move to the next page of the wizard..

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

UI Element	Description
Data source type	Select the data source type you want to activate.

Validation Page

This validation page displays activation status information pertaining to the selected data source.



A message displays the data source status information.

Click **Finish** to complete the wizard activation process.

Troubleshooting

Problem accessing DWH application in Chrome browser when installed in distribution mode (XS and DWH on different servers):

Problem accessing DWH application in Chrome browser when installed in distribution mode (XS and DWH on different servers):

Cause	View Details	Solution
Certificate issues that can be solved by configuring trusted certificates on your browsers.		To fix the certificate: <ol style="list-style-type: none"> 1. Open Internet Explorer. 2. Enter the XS URL (https).

Cause	View Details	Solution
		<ol style="list-style-type: none">3. In the Security Certificate warning, click Continue to this website. A certificate error is displayed to the right of the address bar.4. Click Certificate Error.5. Click View Certificate. A certificate dialog box opens.6. Click Install Certificate. The Certificate Import wizard opens.7. Click Next.8. Select Place certificates in the following store and click Browse.9. In the Select Certificate Store dialog box select Trusted Root Certification Authorities and click OK.10. A warning message opens, click Yes to install the certificate. You can now enter the XS application in Chrome without a certificate error message. <p>When accessing ABC Management or Data Source Management UI, an Error 510 (Insecure Response) is displayed.</p>

Cause	View Details	Solution
		<p>This occurs because the UI pages require access to the DWH application.</p> <p>In order to resolve this issue, add the DWH server certificate by performing the above procedure for the DWH server URL.</p> <p>After adding the DWH server certificate, you can access the ABC Management or Data Source Management UI (in Chrome) without any errors.</p>

Data source activation fails:

Cause	View Details	Solution
<ul style="list-style-type: none"> General or database connection error. Initialization Errors: <ul style="list-style-type: none"> Load metadata failed Generate schemas failed Generate data stores failed ETL import failed Stream assembler failed 	<ul style="list-style-type: none"> server.log: look for "com.hp.btoa.dwh.datasources.management.automation.exceptions.ContentPackInitializeException". Event Viewer for detailed information 	<p>General Errors:</p> <ul style="list-style-type: none"> Check dwmetadata, dwst and dws logins. Modify connection details in DWH settings if needed. <p>Initialization Errors:</p> <p>Contact HP Software Support.</p>

Data source activation or deactivation fails:

Cause	View Details	Solution
Connection is closed	server.log	<p>On the Executive Scorecard and Data Warehouse servers, do as follows:</p> <ol style="list-style-type: none"> 1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard. 2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard. <p>Refresh the screen and retry the activation.</p>

No data from a specific source:

Cause	View Details	Solution
Source may not be activated.	Check the Data Source Management UI list of sources to see if it is activated.	<ol style="list-style-type: none"> 1. Click Edit Settings and edit the configuration parameters. 2. Click Next to validate your changes and test the connection.

Perform the Back-End Maintenance of the Data Warehouse

You can monitor and the ETL and other functions of the Data Warehouse using the back-end tools. This section includes the following topics:

["Clean Up the Staging and Target Databases" \(on page 181\)](#)

["ABC Operational Reports " \(on page 181\)](#)

[" Data Model Reports" \(on page 197\)](#)

["Additional Maintenance" \(on page 208\)](#)

["Data Warehouse Naming Conventions" \(on page 228\)](#)

["Data Warehouse Command Reference" \(on page 234\)](#)

["Advanced Data Warehouse Administration" \(on page 252\)](#)

Clean Up the Staging and Target Databases

You clean up the databases when you want to run the initial load anew.

The tables that are cleaned are:

- All the data in the **dwt** tables in the target database.
- All the data in the **dws**, **dwst**, and **xrefgen** schemas in the staging database.

Note:

- The clean up tool cleans all data.
- The clean up tool cannot be activated during an ETL run.
- There is no possibility of rollback after the clean up.

To clean up the staging and target databases:

1. Backup the staging and target databases (so they are synchronized at the time of the backup) using the tools of the relevant database servers.
2. Clean up the databases using the **dw_clean_data** tool. For details, see ["DWH Command Reference" \(on page 241\)](#)

ABC Operational Reports

ABC operational reports report different aspects of ABC governance of ETL job streams. The objectives of these reports are to display:

- ETL stream definitions, such as catalogs, stream, and stream step information.
- Operational information about ETL batch jobs and processes.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Operational reports include:

["Audit Reports" \(on page 182\)](#)

["Control Reports" \(on page 186\)](#)

Audit Reports

ABC Audit reports display ETL audit measure and metric information. You can define the length of time included in the audit history by specifying the number of days in the **Batch run history** field. The typical user is the data warehouse administrator or an HP Support engineer. Run the reports after multiple ETL runs produce historical results.

The following Audit reports are available:

["ABC Reports - Consolidation Tables Activity " \(on page 183\)](#)

["ABC Reports - Source Extraction Tables Activity " \(on page 184\)](#)

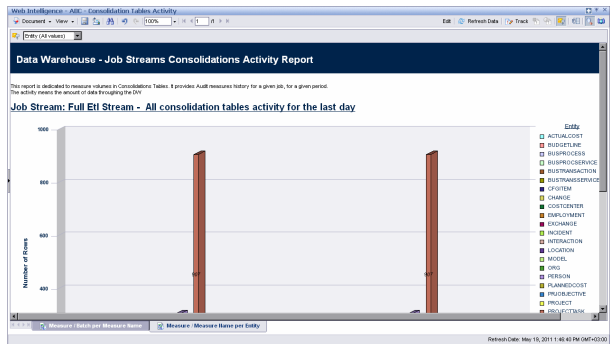
["ABC Reports - Dimension Tables Activity " \(on page 186\)](#)

ABC Reports - Consolidation Tables Activity

The Job Streams Consolidations Activity report displays volume information ETL consolidation.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Operations > Audit Reports > ABC - Consolidation Tables Activity .
Important information	In the Prompts dialog box, select or enter the number of days of history to appear in the report in the Batch run history field. The default value is 1 day. Click Run Query .

Report Parameters

UI Element	Description
Measure / Batch per Measure Name tab	Displays a bar chart view of the number of input rows and output rows for each affected consolidation table by batch ID and start time over the specified duration. 
Measure / Measure Name per Entity tab	Measures job stream activity for the amount of days selected. 

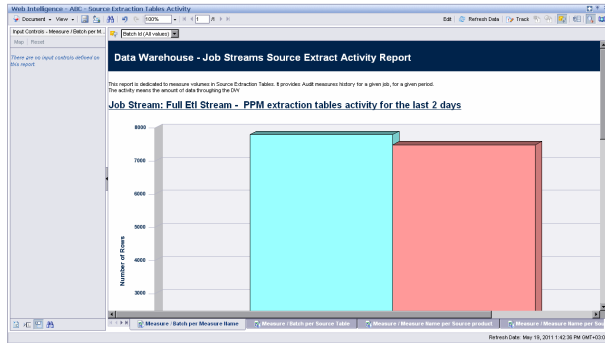
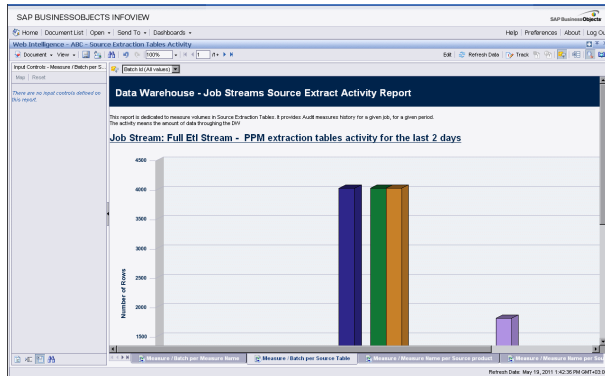
You can navigate between the tabs and select a view of the data by entity if you click the drop-down list box at the top of the report and select **All values**, or a single entity.

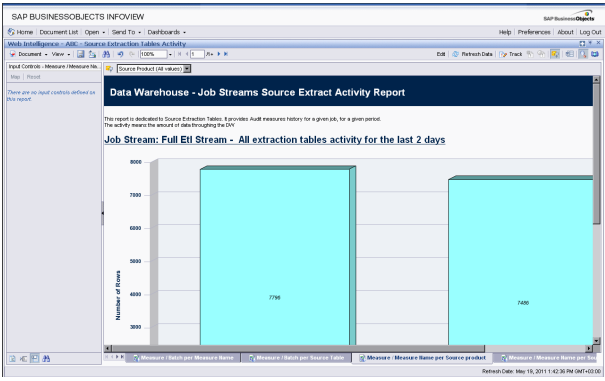
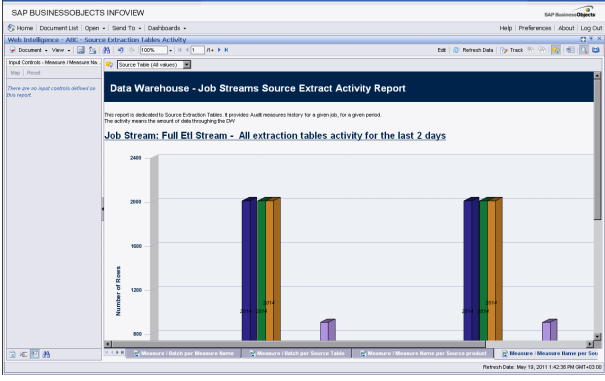
ABC Reports - Source Extraction Tables Activity

This report shows the ETL activity on the source data tables.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Operations > Audit Reports > ABC - Source Extraction Tables Activity .
Important information	<p>In the Prompts dialog box, select or enter the number of days of history to appear in the report in the Batch run history field. The default value is 2 days.</p> <p>Click Run Query.</p>

Report Parameters

UI Element	Description
Measure / Batch per Measure Name tab	<p>Displays a bar chart view of the measures processed from source tables over the specified duration.</p> 
Measure / Batch per Source Table tab	<p>Displays a bar chart view of the number of data rows in source tables processed over the specified duration.</p> 
Measure / Measure Name per Source Product tab	<p>Displays a bar chart view of the extraction activity by source over the specified duration.</p>

UI Element	Description
	
Measure / Measure Name per Source Table tab	<p>Displays a bar chart view of the extraction activity by source over the specified duration.</p> 


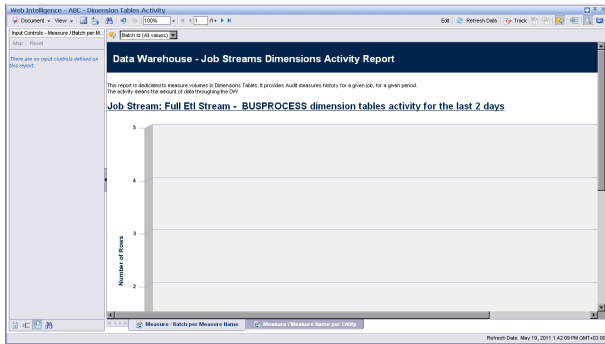
You can navigate between the tabs and select a view of the data by the number of sources. Click the drop-down list box at the top of the report and select **All values**, or a specific number of sources.

ABC Reports - Dimension Tables Activity

This report measures the volume of data processed by the data warehouse.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Operations > Audit Reports > ABC - Dimension Tables Activity .
Important information	In the Prompts dialog box, select or enter the number of days of history to appear in the report in the Batch run history field. The default value is 2 days. Click Run Query .

Report Parameters

UI Element	Description
Measure / Batch per Measure Name tab	Displays a bar chart view of the number of rows processed for each dimension table by batch ID and start time over the specified duration. 
Measure / Measure Name per Entity tab	Displays a bar chart view of the number of rows processed by entity over the specified duration. 

You can navigate between the tabs and select a view of the data by the number of sources or the entity. Click the drop-down list box at the top of the report and select **All values**, or a specific entity.

Control Reports

Control reports describe historic or operational aspects of the data warehouse. Historic reports contain status information gathered over time for analysis and performance improvements.

Operational reports contain snapshot information about current jobs and other data warehouse activity. You can edit, save, or export the following ABC Control reports.

Note: If the ABC database runs on a different system than SAP Business Objects Data Services, and these two systems run in different timezones, you may see a discrepancy in the Duration column on the Control reports. For example, if you check a Control report while a step is processing, the report might show that the step has been processing for several hours even though the step has actually been running for only minutes. Once the step terminates, however, the duration becomes accurate.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

The following Control reports are available:

["ABC - Operational Status Report" \(on page 188\)](#)

["ABC - Operational Status History Report" \(on page 190\)](#)

["ABC - Operational Duration History Report" \(on page 192\)](#)

["ABC - Model Definitions Report" \(on page 193\)](#)

["ABC - Job Details Report" \(on page 194\)](#)

["ABC - Batch Details Report" \(on page 196\)](#)

ABC - Operational Status Report

The ABC Operational Status report displays the runtime information about the out-of-box Upstream.xml file, which contains all the job stream steps for a complete ETL run.

To access	In the DWH Status page, click the Select page arrow and select DWH Status Page > ABC-Op. Status .
Important information	This is one of three reports displayed in the DWH main page.

Job Stream Status Tab

Displays the performance of ABC job streams and process, as follows:

Data Warehouse - ABC Job Stream Status

This report provides a quick overview on how ABC Job Streams and processes are performing.
For a given ABC Job Stream definition, only the last run of this stream is displayed.

Last Batch Status							
Batch ID	Status	State	Batch Start Time	Batch End Time	Duration	Progression	Job ID
2	WARNING	FINISHED	5/3/2011 11:42:52 AM	5/3/2011 2:04:10 PM	2 h 21 m 18 s	100 %	Job ID
3	WARNING	FINISHED	5/3/2011 2:27:52 PM	5/3/2011 2:49:09 PM	21 m 17 s	100 %	
6	WARNING	FINISHED	5/3/2011 3:55:42 PM	5/3/2011 4:18:10 PM	22 m 28 s	105 %	
7	WARNING	FINISHED	5/3/2011 5:51:57 PM	5/3/2011 6:21:09 PM	29 m 12 s	100 %	

Jobs with problems for ETL Batch ID 2							
Job Name	Proc ID	Process Start Time	Process End Time	Duration	Status	Retry Seq/Max	Status Details
BSM_EXT	66	5/3/2011 11:47:55 AM	5/3/2011 11:49:34 AM	1 m 39 s	ERROR	1 / 4	VF's statuses: success: 2, warning: 0, error: 0.
	72	5/3/2011 11:50:25 AM	5/3/2011 11:52:02 AM	1 m 37 s	ERROR	2 / 4	VF's statuses: success: 2, warning: 0, error: 0.

Refresh Date: May 4, 2011 10:27:59 AM GMT+03:00

UI Element	Description
Last Batch Status	The status details of the last batch run.
Batch ID	Click the Batch ID value in the first column. A dialog box opens, enabling you to access the ABC Batch Control report. For details, see "ABC - Batch Details Report" (on page 196) .
Jobs With Problems for ETL Batch ID	The job details for each specific batch listed in the Batch ID column.

Job Stream Progress Tab

Displays the runtime status of each job stream step , as follows:

Data Warehouse - ABC Job Stream Progress Report

This report provides real time progress status on ABC Jobs for a given ABC job stream.
The progression bars provides Work Flows execution progression for a given ABC Job.
The cells content format is: <Job Name> <Process Duration> s <Number of Retries>/<Job Max Number of retries>

Job Stream: Full Etl Stream - Batch ID: 2

	1	2	3	4
1	SYS_READY (11 s)			
2	ENTERPRISE_CONF (37 s)	EXTERNAL_FILE (1 m 39 s)	DW_SNP (9 s)	DW_PRIORITY (40 s)
3	XREF_GENERATOR (33 s)	BSM_EXT (2 m 13 s)	5/4	
4	ENTERPRISE_XREF (14 s)	BSM_SSI (6 m 0 s)		
5	BSM_SSI_XREF (11 s)			
6	BSM_MSI (1 m 21 s)			
7	BSM_BACKFILL_CTRL (2 s)			
8	BSM_BACKFILL (5 s)			
9	MS_CON (1 m 38 s)			
10	XFR_DIM (1 m 10 s)			
11	XFR_FACT (16 s)			
12	DW (1 m 54 s)			

Job Stream Status Job Stream Progress

Refresh Date: May 4, 2011 10:27:59 AM GMT+03:00

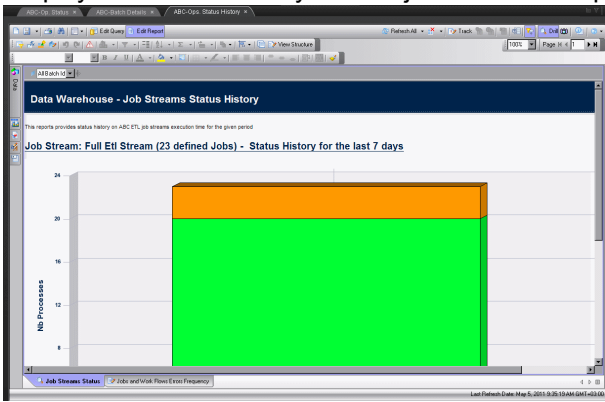
UI Element	Description
<Job Name> (<Process Durations>)	<p>The job name and the length of the job in seconds.</p> <p>Click any ETL job name to display the ETL Job Process Audit report, which shows all audit measures and metrics associated with that Process ID.</p> <p>For details, see "ABC - Job Details Report" (on page 194).</p>

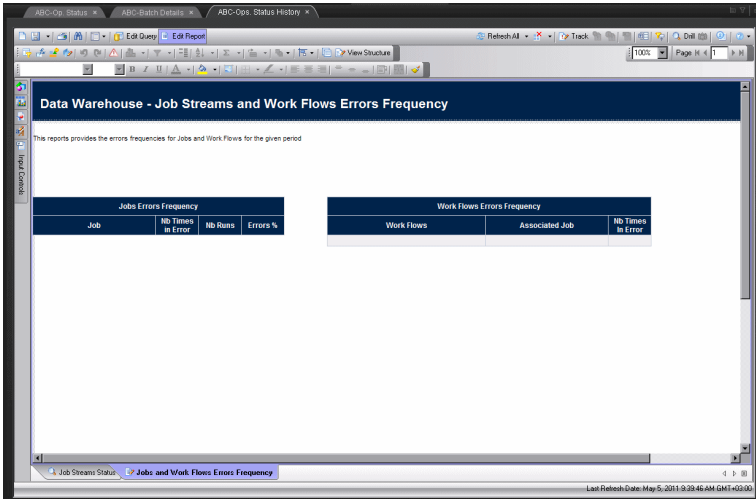
ABC - Operational Status History Report

This report displays a batch run history for ABC ETL job streams during a specified period. The report shows run-time duration, status, and error frequency.

To access	<p>In the DWH Status page, click the Select page arrow and select DWH Status Page>ABC-Ops. Status History.</p> <p>In the Prompts dialog box, enter the number of days for the batch history.</p> <p>Click Run Query.</p>
Important information	<p>This is one of three reports displayed in the DWH main page.</p> <p>Status Values:</p> <ul style="list-style-type: none"> • Success (Green): The number of jobs with no error condition or inconsistency detected. • Warning (Orange): The number of jobs where a minor error condition exists, although there are no data inconsistencies or corruption detected, and, there is no loss of data. • Error (Red): The number of jobs with a critical error status. • Max Time Exceeded (Pink): Number of jobs that exceed max execution time. • Remaining: Number of jobs that are waiting to be started.

Report Parameters

UI Element	Description
Job Stream Status History tab	<p>Displays the status history of ABC job streams and process.</p> 
Job and Work flows Errors Frequency tab	<p>Displays the job and workflow errors frequency, (in descending order). The reports lists only jobs and workflows that produce error conditions.</p>

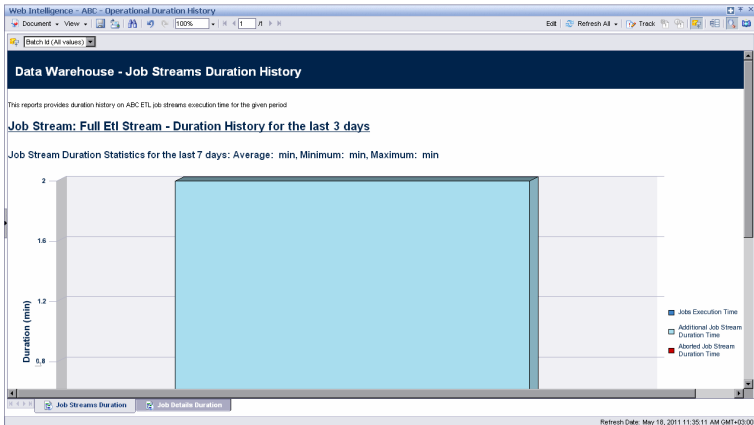
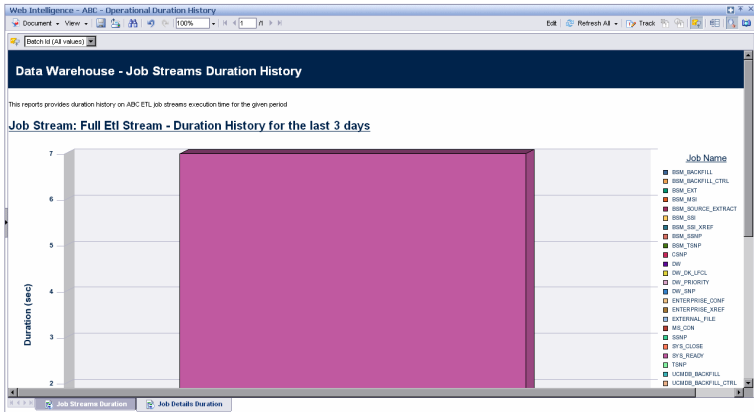
UI Element	Description
	 <p>The screenshot displays a web-based report titled "Data Warehouse - Job Streams and Work Flows Errors Frequency". The interface includes a top navigation bar with tabs for "ABC-Op. Status", "ABC-Batch Details", and "ABC-Op. Status History". Below the navigation bar, there are links for "Refresh All", "Track", "Full (8)", and "View Structure". The main content area features two tables: "Jobs Errors Frequency" and "Work Flows Errors Frequency". The "Jobs Errors Frequency" table has columns for "Job", "Nb Times In Error", "Nb Runs", and "Errors %". The "Work Flows Errors Frequency" table has columns for "Work Flows", "Associated Job", and "Nb Times In Error". The report also includes a sidebar with "Input Details" and a footer with "Job Streams Status" and "Jobs and Work Flows Errors Frequency". The last refresh date is noted as May 5, 2011 9:29:46 AM GMT+02:00.</p>

ABC - Operational Duration History Report

This report describes the duration history of job stream batches during a specified period.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Operations > Control Reports > ABC - Operational Duration History .
Important information	<p>In the Prompts dialog box, enter the relevant X and Y values in the following fields:</p> <p>Batch run history for last X days (Enter X):</p> <p>Batch Statistics for last Y days (Enter Y):</p> <p>Click Run Query.</p>

Report Parameters

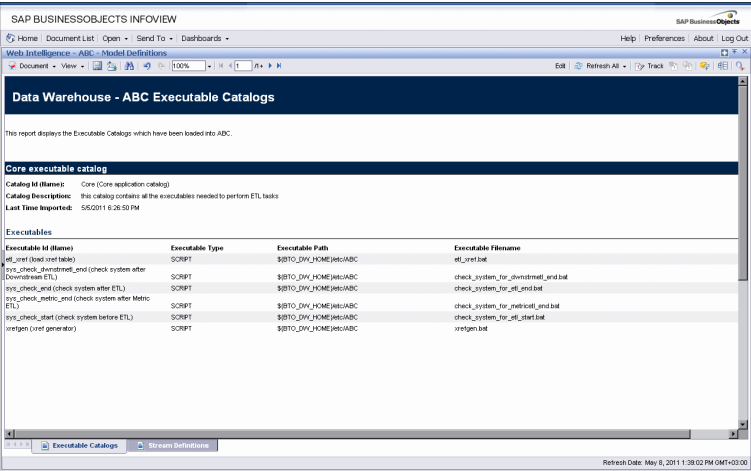
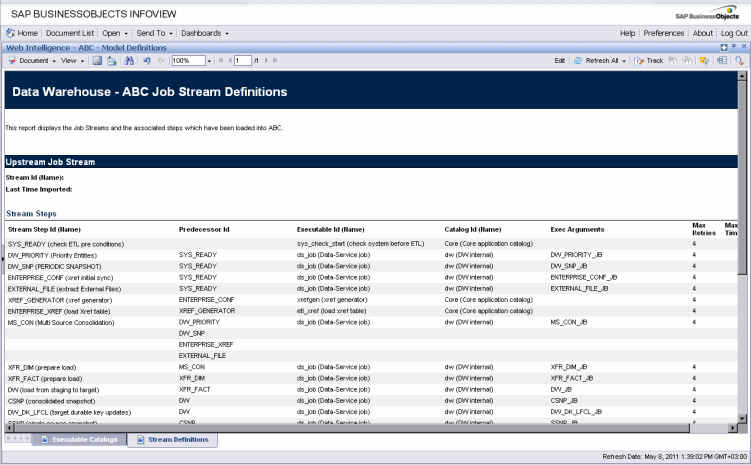
UI Element	Description
<p>Job Streams Duration tab</p>	<p>Displays historical job stream information. The aborted job streams are red.</p> 
<p>Job Details Duration tab</p>	<p>Displays the amount of time consumed by individual jobs within the job stream.</p> 

ABC - Model Definitions Report

The ABC Model Definitions report displays the executable catalogs to be processed by ABC.


To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Operations > Control Reports > ABC - Model Definitions .
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Report Parameters

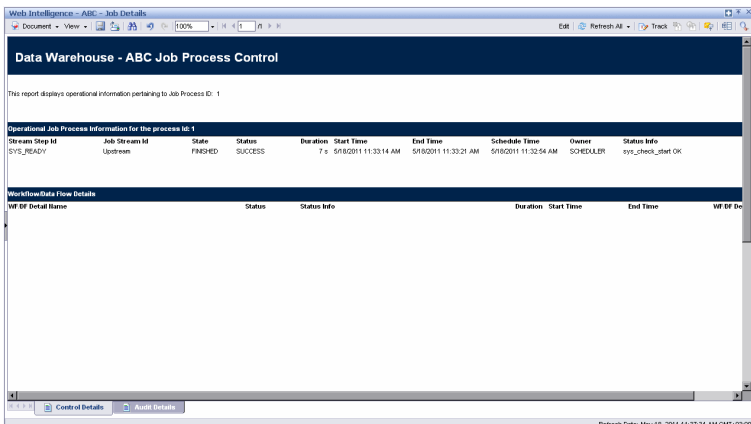
UI Element	Description
Executable Catalogs tab	<p>Displays the executable catalogs that have been loaded into ABC.</p> 
Stream Definitions tab	<p>Displays the Job Streams and the associated steps that have been loaded into ABC.</p> 

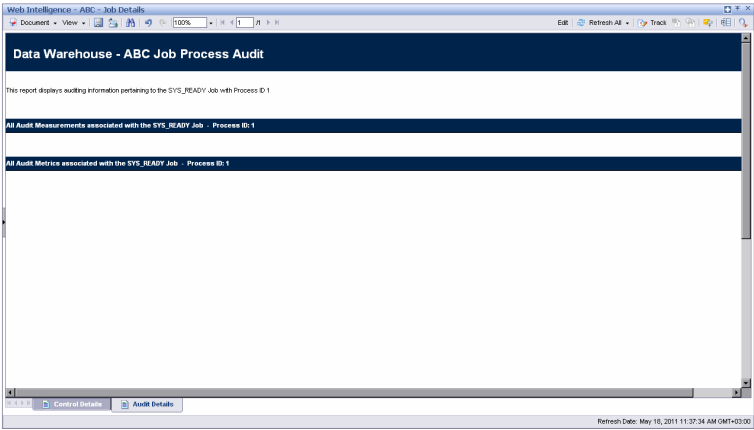
ABC - Job Details Report

The ABC Job Details report displays operation information, such as the Stream Step ID and workflow information.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Operations > Control Reports > ABC - Job Details .
Important information	<p>In the Prompts dialog box, select one or more Process Ids from the left list box or enter a Process Id value and click  Search. Click the Right arrow to move it into the Enter the Process ID list.</p> <p>Click Run Query.</p> <p>You can also view this report by clicking the link in the "ABC - Batch Details Report" (on page 196) or the "ABC - Operational Status Report" (on page 188).</p> <p>Working with Software as a Service (SaaS) Light XS: This feature is not supported.</p>


Report Parameters

UI Element	Description
Control Details tab	<p>Displays operational information related to job process IDs.</p> 
Audit Details tab	Displays audit information related to specific jobs.

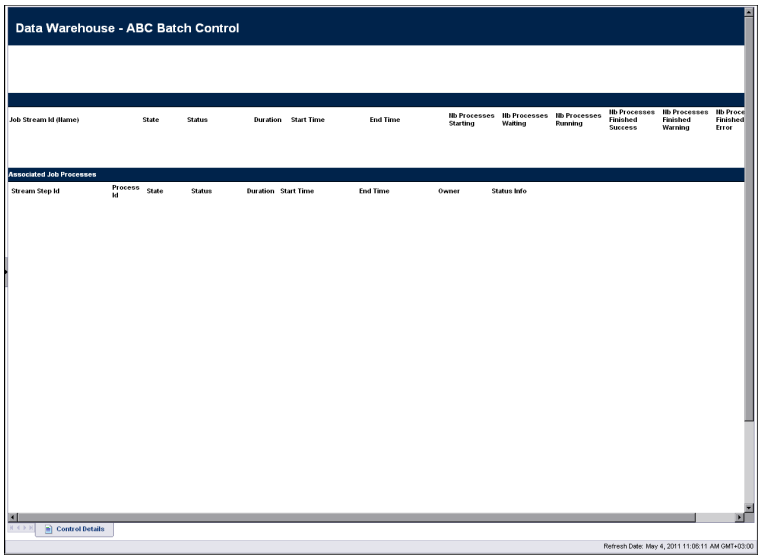
UI Element	Description
	<div></div> <p>For details, see "ABC - Batch Details Report" (on page 196).</p>

ABC - Batch Details Report

This report displays control information for a batch job. It reports the defined Upstream and allocation metric (for FPA) job streams.

To access	In the DWH Status page, click the Select page arrow and select DWH Status Page>ABC-Batch Details .
Important information	<p>In the Prompts dialog box, select one or more Batch Ids from the left list box or enter an Batch Id value and click  Search. Click the Right arrow to move it into the Select Batch Id list.</p> <p>Click Run Query.</p> <p>This is one of three reports displayed in the DWH main page.</p>

Report Parameters

UI Element	Description
ABC Batch Control tab	<p>Displays the various batch jobs.</p> 
Process ID	<p>Click a value and the ABC Job Process Audit opens to display all audit measures and metrics associated with that Process ID.</p> <p>For details, see "ABC - Job Details Report" (on page 194).</p>

Data Model Reports

DWH Data Model reports provide:

- An overview of the current status of the DWH configuration.
- Detailed model definition descriptions.
- Generated schema descriptions.

The typical user of the Data Model reports is the DWH administrator, developer, or anyone interested in gathering information about the current state of the data warehouse.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

The following Data Model reports are available:

["Data Model Overview" \(on page 197\)](#)

["Extraction Model Details " \(on page 199\)](#)

["Consolidation Model Details " \(on page 200\)](#)

["Dimension Model Details " \(on page 201\)](#)

["Fact Model Report " \(on page 202\)](#)

["Source Model Details " \(on page 203\)](#)

["Aggregation Model Details " \(on page 204\)](#)

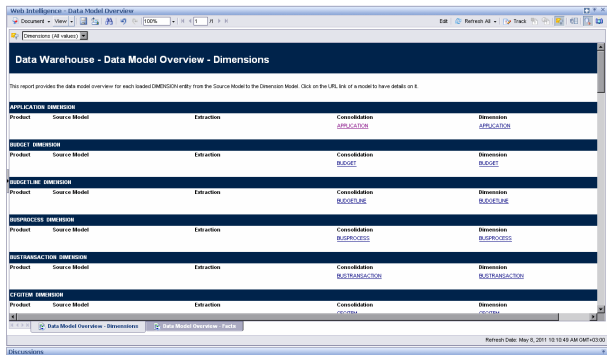
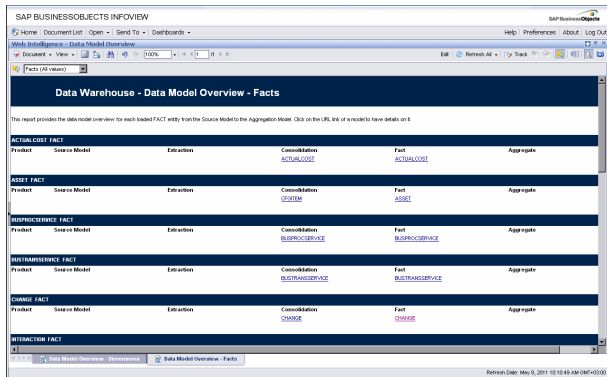
["Platform Physical Schemas " \(on page 205\)](#)

Data Model Overview

This query produces a complete view of extraction path for every fact and dimension entity. Run this report after you deploy a new application. It is the entry point for all data model reports. The links in the report enable you to link to reports that provide more detail.


To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Data Model Overview .
Important information	Select the relevant tab.

Report Parameters

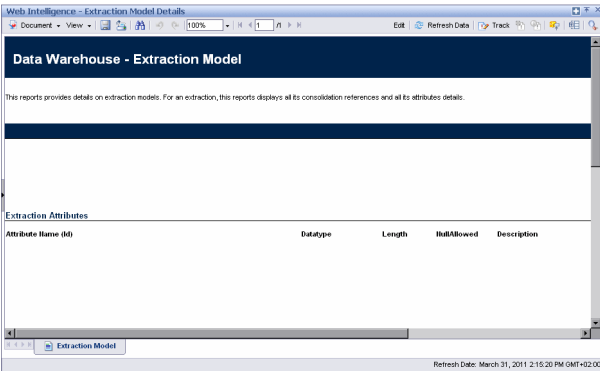
UI Element	Description
Data Model Overview - Dimensions tab	<p>Displays the dimension data model for the specific entities when extracted from multiple sources and consolidated into a target dimension.</p> 
Data Model Overview - Facts tab	<p>Displays the data model overview for each loaded FACT entity from the Source Model to the Aggregation Model.</p> 

Extraction Model Details

The report shows the extraction model for a selected extraction model.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Extraction Model Details .
Important information	<p>In the Prompts dialog box, select one or more Extraction Ids from the left list box or enter an Extraction Id value and click  Search. Click the Right arrow to move it into the Select Extraction Model list.</p> <p>Click Run Query.</p>


Report Parameters

UI Element	Description
Extraction Model tab	<p>Displays details on extraction models.</p> 

Consolidation Model Details

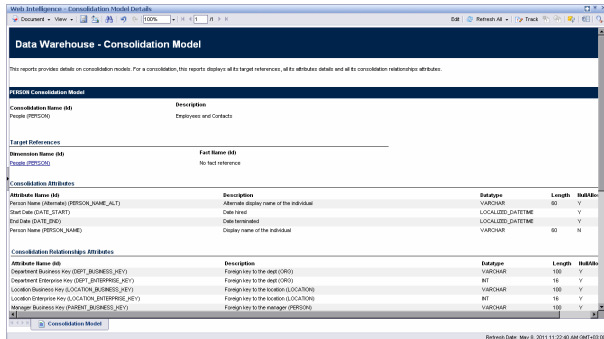
This report provides details on consolidation models.

Consolidation Model Details shows the final attributes for the selected entity, including the data type, length, and whether null values are permitted.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Consolidation Model Details .
Important information	<p>In the Prompts dialog box, select one or more Consolidation Ids from the left list box or enter a Consolidation Id value and click  Search. Click the Right arrow to move it into the Select Consolidation Model list. For example, select PERSON.</p> <p>Click Run Query.</p>


Report Parameters

User interface elements are described below (when relevant, unlabeled elements are shown in angle brackets>):

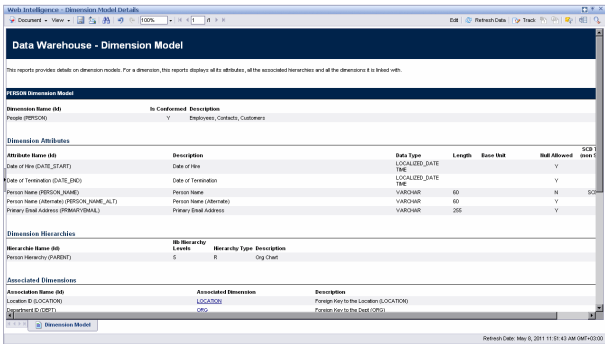
UI Element	Description
Consolidation Model tab	<p>Displays all its target references, attributes details, and consolidation relationship attributes.</p>  <p>The screenshot shows the 'Data Warehouse - Consolidation Model' report. It includes sections for 'Entity Consolidation Model', 'Target References', 'Consolidation Attributes', and 'Consolidation Relationships Attributes'. The 'Consolidation Attributes' section lists attributes like 'PERSON_NAME', 'DEPT_NAME', 'LOCATION', and 'MANAGER' with their data types, lengths, and nullability. The 'Consolidation Relationships Attributes' section lists relationships like 'DEPARTMENT_TO_PERSON', 'LOCATION_TO_PERSON', and 'MANAGER_TO_PERSON' with their descriptions and foreign key details.</p>

Dimension Model Details

When you select a dimension, the Dimension Model Details report displays the dimension attributes, hierarchies, and associated dimensions.


To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Dimension Model Details .
Important information	In the Prompts dialog box, select one or more Dimension Ids from the left list box or enter an Dimension Id value and click  Search . Click the Right arrow to move it into the Select Dimension Model list. For example, select PERSON . Click Run Query .

Report Parameters

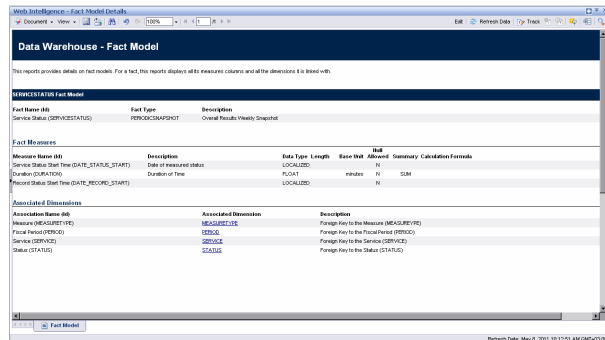
UI Element	Description
Data Model Overview - Dimensions tab	<p>Provides details on dimension models. Displays all its attributes, associated hierarchies, and all of the dimensions it is linked with..</p>  <p>The screenshot displays the 'Data Warehouse - Dimension Model' report. It includes a table for 'Dimension Attributes' with columns for Attribute Name, Description, Data Type, Length, Base Unit, and Null Allowed. It also shows 'Dimension Hierarchies' and 'Associated Dimensions'.</p>

Fact Model Report

The report shows the details for a selected fact model.


To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Fact Model Details .
Important information	<p>In the Prompts dialog box, select one or more Fact Ids from the left list box or enter an Fact Id value and click  Search. Click the Right arrow to move it into the Select Fact Model list. For example, select SERVICESTATUS.</p> <p>Click Run Query.</p>

Report Parameters

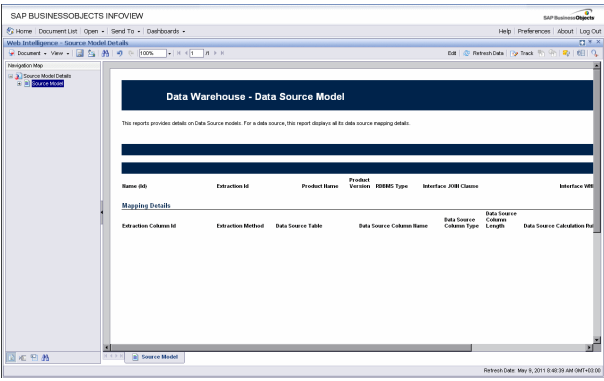
UI Element	Description
Fact Model	<p>Displays fact measures and the dimensions they are linked to.</p>  <p>The screenshot displays the 'Data Warehouse - Fact Model' report. It includes a table for 'Fact Measures' with columns: Measure Name, Description, Data Type, Length, Base Unit, Abbrev, Summary, and Calculation Formula. The measures listed are 'Service Status Start Time (DATE_STATUS_START)', 'Duration (DURATION)', and 'Record Status Start Time (DATE_RECORD_START)'. Below this is a table for 'Associated Dimensions' with columns: Associated Name, Description, and Foreign Key. The dimensions listed are 'Measure (MEASURETYPE)', 'Period (PERIOD)', 'Service (SERVICE)', and 'Status (STATUS)'.</p>

Source Model Details

This report provides details on Data Source models as well as Data Source mapping details.


To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Source Model Details .
Important information	In the Prompts dialog box, select one or more Source Model Ids from the left list box or enter an Source Model Id value and click  Search . Click the Right arrow to move it into the Select Source Model list. Click Run Query .

Report Parameters

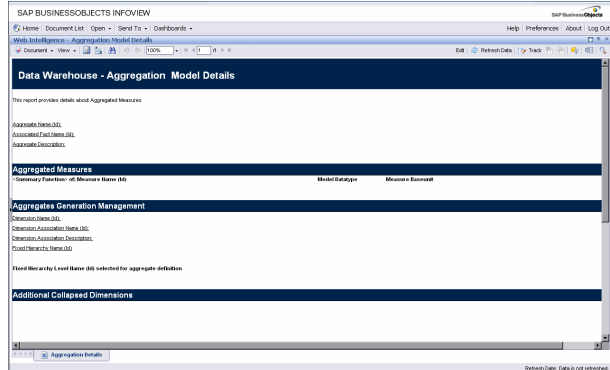
UI Element	Description
Source Model tab	Displays the data source model details. 

Aggregation Model Details

This report shows aggregation model details in a summary format that is organized by aggregate details.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Aggregation Model Details
Important information	In the Prompts dialog box, select one or more Aggregate Ids from the left list box or enter an Aggregate Id value and click  Search . Click the Right arrow to move it into the Select Aggregation Model list. Click Run Query .

Report Parameters

UI Element	Description
Aggregation Details tab	Displays details about aggregated measures. 

Platform Physical Schemas

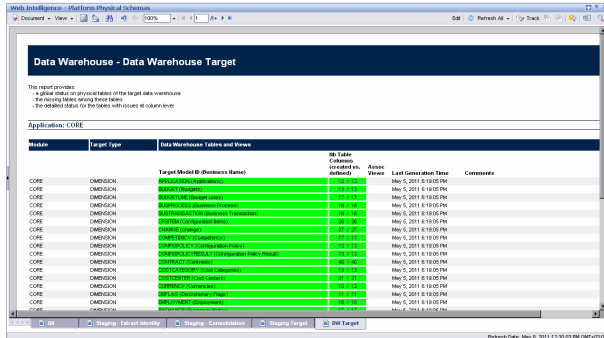
This report enables you to diagnose whether the ETL staging or target models are aligned with the metadata. The Platform Physical Schemas report has five information tabs:

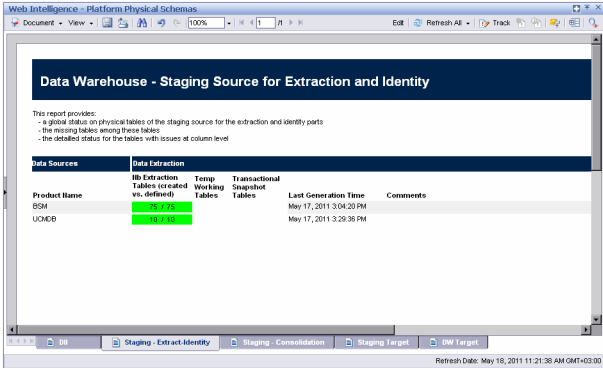
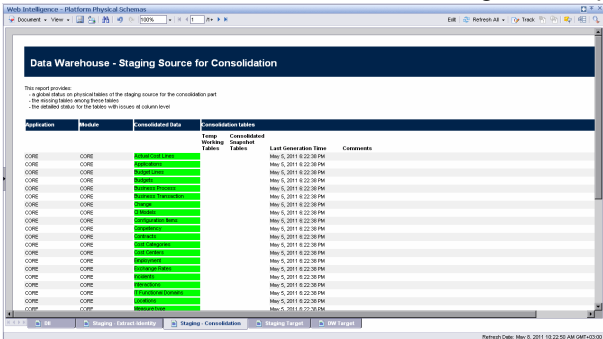
- **Data Integration Interface (DII).** Shows connection information for the data sources and status of the generated views.
- **Staging Source - Extract Identity.** For each data source, shows the status of the extraction process, including the number of extraction tables created and defined.
- **Staging Source - Consolidation.** Shows the status of the consolidation tables by application.
- **Staging Target.** Shows the status of the data warehouse target staging tables organized by application.
- **DW Target.** Shows the status of the target data warehouse tables and views.

Red and green color cues help you locate problems and issues quickly. Run this report after you deploy a new application. An HP Support engineer can diagnose the platform state after a model customization.

To access	In the SAP BusinessObjects InfoView, select Public Folders > DW EN Administration > Data Model Reports > Platform Physical Schemas .
Important information	This report may take some time to load.

Report Parameters

UI Element	Description
DII tab	<p>This report displays:</p> <ul style="list-style-type: none"> • Global status of the SQL script generation process for DII database views. • Detailed information about any error condition that might have been detected during the generation process.  <p>Note: This tab is not relevant for non database data sources, for example, BSM and uCMDB.</p>

UI Element	Description
Staging Extract Identity- tab	<p>Displays the number of extraction tables created and defined for each data source and whether table errors occurred during the ETL process.</p> 
Staging - Consolidation tab	<p>This report displays:</p> <ul style="list-style-type: none"> Global status on physical tables of the staging source for the consolidation part. The missing tables among these. The number of extraction tables created and defined for each data source and whether table errors occurred during the ETL process. 

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Additional Maintenance

This section includes the following topics:

["Time Zone Configuration" \(on page 208\)](#)

["Tracing and Logging" \(on page 211\)](#)

["Add Additional Data Sources" \(on page 214\)](#)

["Change the Configuration Definition" \(on page 214\)](#)

["Data Warehouse Server Failure" \(on page 221\)](#)

["Data Warehouse Backups" \(on page 216\)](#)

["Data Warehouse Recovery" \(on page 219\)](#)

Time Zone Configuration

The data warehouse contains data extracted from external sources. The original data sources can be repositories in disparate locations. It is important that the data warehouse maintain accurate date and time stamps that normalize the differences between the source time zones and the current time of the data warehouse location. These differences include both Coordinated Universal Time (UTC) offset and daylight savings time (DST) variations.

The data warehouse foundation has transparent internal functions that convert a source time zone value to a UTC value, and convert the UTC value to the data warehouse local time zone during the ETL process.

To access:

At a Windows command prompt, switch to the **<Installation directory>\Agora\Data Warehouse\bin** directory.

Learn More

Data Warehouse DST Time Zone Information

The administrator must make sure that time zone information is current on the server hosting the Data Warehouse. Although the definition of time zones and DST rules are fairly static, changes can occur, for example, when moving the DST conversion date on a country-wide basis.

You can synchronize these changes to the Olson Timezone Database by obtaining and running the Java TZUpdater Tool that is available on the Sun Developer Network (SDN). For more information, visit the [Java SE Timezone Updater Tool](#) home page.

Change the Data Warehouse Period Dimensions

This procedure should be followed when expanding the Data Warehouse First and Last Year period dimension range.

It is highly recommended that once you enter First and Last Year period dimensions in the Executive Scorecard Configuration wizard, any future changes should take the following into account:

1. The First Year period dimension should only be changed downwards, thereby including the current First Year period dimension. For example if the First Year dimension is currently set to 2005, any change should be a year lower than 2005. Entering a year higher than 2005 can cause some data inconsistencies.
2. The Last Year period dimension should only be changed upwards, thereby including the current Last Year period dimension. For example if the First year dimension is currently set to 2025, any change should be a year higher than 2025. Entering a year lower than 2025 can cause some data inconsistencies.

Time Zone Update

The dw_tz_update_dst utility updates the Data Warehouse DST time zone information.

Tasks

To update the Data Warehouse DST time zone.

1. Download and run the TZUpdater tool.
2. To update Data Warehouse Server tables, run the dw_tz_update_dst as described in ["Time Zone Configuration" \(on page 208\)](#).

To change data source Time Zone settings:

1. In the Executive Scorecard application, click **Admin > Data Source Management**, and for the relevant Content Pack, click **Activate** to open the relevant activation page.

Note: If the content pack is already activated, you must deactivate, and then reactivate the content pack .

2. Change the Time Zone for the relevant data source, and click **Next**.

The TimeZoneInfo table which is part of the Staging database is automatically updated.

Note: There is a discrepancy in the status time display between ETL runs when BSM has a different time zone than the BSM server.

To change Data Warehouse period dimensions:

1. In the Executive Scorecard application, click **Admin > Data Warehouse Settings** , under **General**, make the required changes in the **First year handled by DWH dates** and **Last Year handled by DWH dates** settings, and click **Save**.
2. From a command prompt, navigate to
<Installation Directory\Agora\DataWarehouse\Bin
Run **dw_period_dim_generator**.

Run the dw_tz_update_dst utility as follows:

1. At a Windows command prompt, switch to the <Installation directory>\Agora\Data Warehouse\bin directory.
2. Run this command:
dw_tz_update_dst
 - a. Load or update the time zone information for a data source and the data warehouse.
 - b. Run this utility whenever you deploy new source data or when you manually change the time zone.
 - c. Time zone is expressed in GMT format: GMT +\-nn:nn.

Syntax

```
dw_tz_update_dst.bat
                    [-help]
                    [-verbose]
```

Options

Option	Required?	Description
-help	N	Display command syntax.
-verbose	N	Produce more detailed output.

Return codes:

- 0 – Success
- 1 – Success with warnings
- >1 – Errors

Example

dw_tz_update_dst -verbose

- a. Load or update the time zone information for a data source and the data warehouse.
- b. Run this utility whenever you deploy new source data or when you manually change the time zone.
- c. Time zone is expressed in GMT format: GMT +\-nn:nn.

Troubleshooting Date Conversion

If time zone conversion errors occur, verify that none of the following apply:

- The ETL process uses special dates like 01/01/1900 00:00:01. All dates prior to 1900 are ignored for conversion purposes.
- If you do not update DST information, the ETL attempts date calculation for unmanaged years. The conversion function creates an exception that is caught by the containing workflow, and propagated to the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA job by ABC. The exception appears in the ABC reports. It is an error that locks batch execution.

- For global time zones that convert to DST, the return to standard time occurs at 2 AM. Clocks reset backwards one hour to 1 AM. When a data change occurs between 1 AM – 2 AM while you are still on DST, the time stamp is the same as a data change that occurs between 1 AM – 2 AM after the clock resets back to standard time (ST).

You can have two data events with the same time stamp, but one occurs before the clock turns back and one occurs after the clock turns back. Source data repositories may not clearly specify whether the data event occurred pre- or post-DST conversion. This issue occurs only during that one overlapping hour from 1 AM – 2 AM during the year. When a data event occurs within this window, the data warehouse time zone management feature assigns the time stamp after the conversion to standard time.

Tip: It is recommended that administrators suspend ETL processing during this interval to avoid conflicts.

Tracing and Logging

This section describes the Data Warehouse logging and tracing mechanism. Data warehouse scripts have different types of output log files:

One log file for each data warehouse batch utility, using the Java application Log4J.

One log file for each SQL command.

Learn More

The Java Logging Mechanism

The data warehouse generates one log file for each batch utility, and stores it in the following directories:

<installation directory>\agora\DataWarehouse\logs and

<installation directory>\agora\glassfish\glassfish\domains\BTOA\logs

For example:

- **dw_initdb.log**
- **dw_generateschemas.log**

The logging mechanism allows each new block of log information to be appended to the existing log until it reaches the maximum size of 1 MB. At that point, new logging information is stored in a backup file. There can be a maximum of five log files for a single script. You can change the log file name, size, and maximum number of backup files.

SQL Command Logging Mechanism

All the SQL commands that are executed at the direction of the data warehouse software are redirected to simple log file. You can view the log file to trace the execution of all SQL commands. All log files are in the following directory:

<installation directory>\agora\Datawarehouse\conf

- **mssql_TablesAndSeqsResult.log**
- **mssql_create_dw_schema_LastRun.log**

The prefix of the log file name is the RDBMS type: mssql. The suffix of the log file name is `_LastRun`. This suffix indicates that the file contains the last run output of the SQL command.

To simplify interpreting SQL errors, the data warehouse applications parse the SQL server log files to report the most critical SQL error to the user. For more information, you can review the entire log file. Because the data warehouse appends log information in a history format in certain log files, you can review prior errors. Other log files retain only the history of the most recent execution. These files always have the `_LastRun` suffix. For example:

- **mssql_check_db_options_LastRun.log**
- **mssql_create_dw_schema_date_time_dim_LastRun.log**

These history log files contain the date and time the SQL command runs, the date and time it completes, and the returned status of the SQL command. For example:

```
-----
Start of command: sqlcmd -S localhost -d BTODW -U dwmetadata -P **** -i
"C:\...\foundation\etc\sql\mssql\create_dw_staging_resources.sql" -o
"C:\...\foundation\log\mssql_create_dw_staging_resources_LastRun.log"
At: Wed Jul 02 13:35:59 PDT 2009
-----
1:
2: ***** Creating staging resources *****
-----
End of command: sqlcmd -S localhost -d BTODW -U dwmetadata -P **** -i
"C:\...\foundation\etc\sql\mssql\create_dw_staging_resources.sql" -o
"C:\...\foundation\log\mssql_create_dw_staging_resources_LastRun.log"
At: Wed Jul 02 13:35:59 PDT 2009
Returned code is: 0
```

SAP BusinessObjects Enterprise for IT Executive Scorecard or SAP BusinessObjects Enterprise for HP FPA Logs

SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA produces many run-time logs. You can locate these logs in the relevant directory

structure:

C:\<installation directory>\BO\bods\BusinessObjects Data Services\log

The **log** folder has sub-directories to further organize the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA logs.

Data Warehouse Log Files

You can access the Data Warehouse Log files in:

- **datawarehouse\logs**
- **C:\<Installation directory>\agora\glassfish\glassfish\domains\btoa\logs\server.log**

All information in the Data Warehouse log files is automatically sent to the Windows Event Viewer Application log.

Tasks

To configure the Logs:

For data warehouse utilities, you can customize logging behavior by editing a related log configuration file with this naming convention: **xxx-log4j.xml**. For example, `importdefs-log4j.xml`. The log configuration files are in this directory:

<installation directory>\agora\DataWarehouse\conf

Open the related **xxx-log4j.xml** file with a text editor to choose the trace levels and to change other parameter values. If you make changes, save the file before you close it.

For ABC utilities, (abc-xxxx) there is a single log configuration file: `abc-log4j.xml`. The values that you specify in this file apply to all log files generated by any ABC utility.

Trace Levels

You can choose one of the following trace levels to control the amount of information stored in the logs:

- **trace**
- **debug**
- **info**
- **warn**
- **error**
- **fatal**

The default value is **info**. You can experiment with different levels to see how much information that you want to display or suppress.

To access Data Warehouse log information:

1. On the Windows taskbar, click **Start > Administrative Tools > Event Viewer**.
2. Expand Windows Logs, right-click **Application**, and then click **Filter Current Log**.
3. Select the relevant Event Levels, select the relevant **Event Sources**, and then click **OK**.

Note: All the Data Warehouse Event Sources begin with DWH.

Sample Log Information

The following examples show the type of information you can find in these log files. The first example shows that a fatal error has occurred.

```
2008-07-02 13:33:10,652 INFO [com.hp.bto.dw.sqlbatch.SqlBatch] -
Checking database options...
2008-07-02 13:33:10,949 FATAL
[com.hp.bto.dw.dbcreate.DbCreateCommandLine] - Problem during DB
options check:
An error that can be corrected by the user has been found. Check the
log file to correct the problem.
```

```
Check the error log file
'C:\...\foundation\log\mssql_check_db_options_LastRun.log', line
number 2
008-07-02 13:33:10,949 FATAL
[com.hp.bto.dw.dbcreate.DbCreateCommandLine] - Exit code: 6
```

The second example shows successful execution.

```
2008-07-02 13:36:27,136 INFO
[com.hp.bto.dw.dbmetadatatool.DbMetadatatool]
Creating Date and Time stored procedures and populating the dimension
tables...
2008-07-02 13:36:30,511 INFO
[com.hp.bto.dw.common.dblogparser.LogParserStatus] - Command
successfully executed.
```

It is possible to change the format of the reported information by changing the corresponding configuration files.

Add Additional Data Sources

You can add additional Content Packs to the data warehouse that can then be activated or deactivated.

To add additional data sources:

1. Copy the Content Pack file into the CP directory: **<Installation Directory>\agora\Content Packs**.
2. Run the following batch file: **dw_cp_register.bat -name <new CP>**. The name entered must match the Content Pack file name.
3. Activate the data source using the Data Source Management page. For details, see "[Perform Tasks for Data Source Management](#)" (on page 168).



Important Information

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Change the Configuration Definition

You can change data source configuration information only after you deactivate and then re-activate the specific data source.

Change the data source configuration:

1. Select **Admin > Data Source Management**.
2. If necessary, deactivate the data source by clicking .
3. Click **Edit Settings** and edit the configuration parameters.
4. Click **Next** to validate your changes.
5. Click  next to the specific source and the source is activated.

For details, see ["Perform Tasks for Data Source Management" \(on page 168\)](#).

Important Information

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Change the Data Warehouse Period Dimensions

This procedure should be followed when expanding the Data Warehouse First and Last Year period dimension range.

It is highly recommended that once you enter First and Last Year period dimensions in the Executive Scorecard Configuration wizard, any future changes should take the following into account:

1. The First Year period dimension should only be changed downwards, thereby including the current First Year period dimension. For example if the First Year dimension is currently set to 2005, any change should be a year lower than 2005. Entering a year higher than 2005 can cause some data inconsistencies.
2. The Last Year period dimension should only be changed upwards, thereby including the current Last Year period dimension. For example if the First year dimension is currently set to 2025, any change should be a year higher than 2025. Entering a year lower than 2025 can cause some data inconsistencies.

To change Data Warehouse period dimensions:

1. In the Executive Scorecard application, click **Admin > Data Warehouse Settings**, under **General**, make the required changes in the **First year handled by DWH dates** and **Last Year handled by DWH dates** settings, and click **Save**.
2. From a command prompt, navigate to
<Installation Directory\Agora\DataWarehouse\Bin
Run **dw_period_dim_generator**.

Data Warehouse Server Failure

Scenario: The Data Warehouse server has become unusable, for example the hard disk has crashed. The following procedure describes how to recover a Data Warehouse server.

1. Install a new Data Warehouse server running Microsoft Windows 2008 R2.
The server must conform to the relevant hardware and software requirements described in the *IT Executive Scorecard Installation and Configuration Guide*.
2. When the DWH server is installed on the same machine as the SAP BusinessObjects or in a typical environment installation recovery, do the following before starting the installation process of the DWH server:
 - a. In the MNG database, in the **dbo.SETTINGS_MANAGEMENT** table, modify the **bo.engine.is.installed** parameter from **true** to **false**. You can then start the re-installation of the DWH server.
 - b. Re-import the BIAR files to the server with the regular BIAR import procedure.

3. Enter the Executive Scorecard DVD and progress in the Installer wizard. On the **Select Features** page, select **HP Data Warehouse Components**, and continue the installation.
4. When the Installer Wizard completes and you see the Introduction page of the Configuration Wizard, if changes were made to the core content packs, before continuing, restore **<Installation Directory>\agora\ContentPacks** from a backup.
5. Start configuring the Configuration Wizard, and connect to the management database. When you reach the Data Warehouse section, on the **Configure Data Warehouse** page, select **Reinstall Data Warehouse**, and then click **Next**.

After the rerun process is complete, the **Configuration Status** page appears listing the installed components.
6. Restore any other required configuration files as described in "[Data Warehouse Backups](#)" (on page 216),
7. Restore the Repository database (BODS database). For details, see "[RDBMS Server Failure](#)" (on page 219).

Note: After a recovery procedure has been performed, you must copy the ABC directory under **<Installation Directory>\agora\datawarehouse\etc** to the new server, otherwise the ETL will fail.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Data Warehouse Backups

It is critical that you backup Data Warehouse so that you can rebuild your Data Warehouse infrastructure and content in disaster scenarios such as the following:

- In a total disaster recovery scenario
- The RDBMS server failed but all Executive Scorecard component servers are fully functioning.
- When the Data Warehouse server failed, but the RDBMS server and its databases are intact.
- When a Data Warehouse database is corrupt.
- When an ETL is deleted.
- When an ETL job fails.

This section includes the following topics:

- "[What to Back Up](#)" (on page 216)
- "[General Backup Guidelines](#)" (on page 217)
- "[Files to Back Up](#)" (on page 218)

What to Back Up

It is strongly recommended that you back up the following resources that may be used if one of the above scenarios occurs.

1. Microsoft SQL Server 2008 enterprise SP2 databases
 - a. Target database
 - b. SAP BusinessObjects Data Services database
 - c. SAP BusinessObjects CMS database, and if necessary the Audit database.
 - d. Management database
 - e. Executive Scorecard database

Note: The host and database names can be found in the Management database configured in the Executive Scorecard Configuration wizard.

2. Staging database
3. It is highly recommended that you keep the passwords for the Staging, Target and SAP BusinessObjects Data Services database login users in a safe place for usage in disaster recovery situations.
4. External source files that can be found in the external source file location configured in the Executive Scorecard Configuration wizard.
 - a. If the default external source file location was configured in the wizard, the Content Pack flat files created during the ETL process can be found in:
<Installation Directory>\agora\DataWarehouse\ExternalSources\<Content pack name>

For example: The BSM content pack flat file would therefore located in the following directory:
<Installation Directory>\agora\DataWarehouse\ExternalSources\BSM

5. Data Warehouse Configuration files.

General Backup Guidelines

It is recommended that you use the following backup and restore guidelines:

- A best practice for data warehouse administrators is to back up critical data on a regular basis.
- Database backups should consist of a weekly full database backups, and daily differential backups.
- Backups should be periodically verified by restoring a copy onto a test system.
- External source files and Data Warehouse configuration files should be backed up as required.
- Although out of scope for this document, regular backups should be taken of all source databases.
- Start scheduled backups before running the daily ETLs.
- Use backup compression.
- Perform full backups in off-peak times.

Maintain the External Source Directory

In the <ExternalSource> directory , there are folders that contain extracted data from each data source.

This data is infinitely accumulated and is never cleaned by the Data Warehouse. You are required to periodically backup and remove old files from those folders in order to free disk space if available disk space is low on the Data Warehouse platform machine.

Reference

Files to Back Up

The contents of the following directories and their sub-directories should be included in the backup schedules:

Directory Name	Backup Frequency	Description of files
<Installation Directory>\Agora\DataWarehouse\<ExternalSourceslocation>	Daily	.xls, and the ETL flat files
<Installation Directory>\Agora\DataWarehouse\Conf	When configuration changes are made	Configuration files
<Installation Directory>\Agora\DataWarehouse\etc	After the installation, and when configuration changes are made. Note: When you recover from a Data Warehouse server failure, it is important that this directory and it's sub-directories are restored.	Configuration files
<Installation Directory>\Agora\DataWarehouse\log	Daily	Log files
<Installation Directory>\Agora\ContentPacks	Before activating or deactivating a content pack in the Executive Scorecard Admin application, or when changes are made to content packs	Content pack configuration files
<Installation Directory>\Agora\DataWarehouse\etc\ABC		

Data Warehouse Recovery

This section is a reference for the data warehouse recovery process. The recovery process for your environment may vary according to your business needs and may require customization. Verify that the following processes are consistent with your architecture and environment before you proceed with real data.

When you start the recovery process, you must have complete backups of the databases and configuration files that are readily available. It is possible that you will lose historical data.

These following scenarios are independent from the external data sources and entities. Recovering from a scenario means that the data warehouse returns to a stable state.

This section includes the following recovery scenarios:

["RDBMS Server Failure" \(on page 219\)](#)

["Data Warehouse Server Failure" \(on page 221\)](#)

["Management, SAP BusinessObjects CMS/Audit, or Executive Scorecard Database is Corrupted" \(on page 222\)](#)

["A Failed ETL job, or Invalid Data in the Target Database" \(on page 223\)](#)

["Deleted ETL Workflow" \(on page 224\)](#)

["Restore the BODS Repository" \(on page 225\)](#)

RDBMS Server Failure

Scenario: The RDBMS server has become unusable, for example the hard disk has crashed. The following procedure describes how to recover a failed RDBMS server.

1. Reinstall a RDBMS server with Microsoft SQL 2008 Enterprise with SP2, configured with mixed mode and using the TCP/IP protocol.
2. Restore the RDBMS server databases using the weekly full and the relevant differential backup. The IT Executive Scorecard databases are the:
 - Management database
 - CMS database
 - Audit database (if installed separately from the CMS database)
 - SAP BusinessObjects Data Services database
 - Staging database
 - Target database
 - Executive Scorecard database

Note: The SAP BusinessObjects Data Services, Staging, and the Target databases (All Data Warehouse related databases), must be restored to an RDBMS server and to databases with names that are the same as those used in the initial IT Executive Scorecard

installation.

Note: It is recommended that where possible the Management, SAP BusinessObjects Enterprise CMS, SAP BusinessObjects Enterprise Audit, and Executive Scorecard databases are restored to an RDBMS server and to database names that are the same as those used in the initial IT Executive Scorecard installation. If you restore to a different RDBMS server or a database with a different name, follow the instructions in steps 4 and 5.

3. Restore all Login users in the database instance. When you back up the Logins, make sure that each user's status is enabled and not locked.
4. Once you have restored the SAP BusinessObjects Data Services, Staging, and the Target databases, you must associate the database login names and database users by running the following scripts.

Note: If you work with custom logins defined in the Data Warehouse installation, run the scripts including the custom login. For example:

```
<staging_db>
```

```
EXEC sp_change_users_login 'Update_One', 'dwst', '<custom_login_name>'.
```

■ **For the staging database:**

- **EXEC sp_change_users_login 'Auto_Fix', 'dws', NULL, 'password'** where password is the old password for the dws login.
- **EXEC sp_change_users_login 'Auto_Fix', 'dwst', NULL, 'password'** where password is the old password for the dwst login.
- **EXEC sp_change_users_login 'Auto_Fix', 'dwmetadata', NULL, 'password'** where password is the old password for the dwmetadata login.
- **EXEC sp_change_users_login 'Auto_Fix', 'dwabc', NULL, 'password'** where password is the old password for the dwabc login.
- **EXEC sp_change_users_login 'Auto_Fix', 'xrefgen', NULL, 'password'** where password is the old password for the xrefgen login.

■ **For the target database:**

- **EXEC sp_change_users_login 'Auto_Fix', 'dwt', NULL, 'password'** where password is the old password for the dwt login.

■ **For the SAP BusinessObjects Data Services database**

- **EXEC sp_change_users_login 'Auto_Fix', 'login name', NULL, 'password'** where login name is the new login name you created when you created the SAP BusinessObjects Data Services database, and password is the password you assigned to that login name.

5. If the names of the RDBMS server and all the restored databases are the same as those configured in the initial Executive Scorecard Configuration Wizard, skip to step 7.
6. If the RDBMS server, or database names are not identical, and you are restoring the CMS or

the Audit database, on the SAP BusinessObjects Enterprise server, reconfigure the CMS and if necessary, the Audit ODBC Data Source as follows:

- a. On the SAP BusinessObjects Enterprise server, on the Windows taskbar, click **Start > Run**, and enter **c:\WINDOWS\SysWOW64\odbcad32.exe**.
 - b. Click the **System DSN** tab, select the relevant ODBC connection, and then click **Configure**.
 - c. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **SQL Server** you want to connect to, and then click **Next**.
 - d. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **Login ID** used to connect to the SQL Server, and then click **Next**.
 - e. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **default database**, click **Next**, click **Finish**, and continue to step 6.
7. If you restored to a different RDBMS server host name, or the Management, CMS, Audit, Executive Scorecard database names are different, rerun the Post_Install Configuration Wizard, and when prompted on the relevant wizard pages, connect to the new RDBMS server, and new databases and complete the wizard.

To run the Post-Install Configuration Wizard, on the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Configuration Wizard**.

8. On the Executive Scorecard and Data Warehouse servers, disable and then enable HP Executive Scorecard as follows:
- a. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard**.
 - b. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard**.

Data Warehouse Server Failure

Scenario: The Data Warehouse server has become unusable, for example the hard disk has crashed. The following procedure describes how to recover a Data Warehouse server.

1. Install a new Data Warehouse server running Microsoft Windows 2008 R2.

The server must conform to the relevant hardware and software requirements described in the *IT Executive Scorecard Installation and Configuration Guide*.
2. When the DWH server is installed on the same machine as the SAP BusinessObjects or in a typical environment installation recovery, do the following before starting the installation process of the DWH server:
 - a. In the MNG database, in the **dbo.SETTINGS_MANAGEMENT** table, modify the **bo.engine.is.installed** parameter from **true** to **false**. You can then start the re-installation of the DWH server.
 - b. Re-import the BIAR files to the server with the regular BIAR import procedure.
3. Enter the Executive Scorecard DVD and progress in the Installer wizard. On the **Select Features** page, select **HP Data Warehouse Components**, and continue the installation.

4. When the Installer Wizard completes and you see the Introduction page of the Configuration Wizard, if changes were made to the core content packs, before continuing, restore **<Installation Directory>\agora\ContentPacks** from a backup.
5. Start configuring the Configuration Wizard, and connect to the management database. When you reach the Data Warehouse section, on the **Configure Data Warehouse** page, select **Reinstall Data Warehouse**, and then click **Next**.

After the rerun process is complete, the **Configuration Status** page appears listing the installed components.
6. Restore any other required configuration files as described in "[Data Warehouse Backups](#)" (on page 216),
7. Restore the Repository database (BODS database). For details, see "[RDBMS Server Failure](#)" (on page 219).

Note: After a recovery procedure has been performed, you must copy the ABC directory under **<Installation Directory>\agora\datawarehouse\etc** to the new server, otherwise the ETL will fail.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Management, SAP BusinessObjects CMS/Audit, or Executive Scorecard Database is Corrupted

Scenario: A database is corrupted. The following procedure describes how to recover from a corrupt database.

1. Restore the database from your backups. Restore using the full weekly backup and the relevant differential backup.

Note: It is recommended that the RDBMS server, and database names are identical to those used in the initial installation. This information can be found in the Management database.

2. Once the database is restored, if the RDBMS server, and database names are identical to those used in the initial installation, do as follows:

On the HP IT Executive Scorecard and Data Warehouse servers, disable and then enable HP IT Executive Scorecard as follows:

- a. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard**.
- b. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard**.
- c. If the RDBMS server, or database names are not identical, and you are restoring the CMS or the Audit database, on the SAP BusinessObjects Enterprise server, reconfigure the CMS, and if necessary the Audit ODBC Data Source as follows:

1. On the SAP BusinessObjects Enterprise server, on the Windows taskbar, click **Start > Run**, and enter **c:\WINDOWS\SysWOW64\odbcad32.exe**.
2. Click the **System DSN** tab, select the relevant ODBC connection, and then click **Configure**.
3. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **SQL Server** you want to connect to, and then click **Next**.
4. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **Login ID** used to connect to the SQL Server, and then click **Next**.
5. If required, on the **Microsoft SQL Server DSN Configuration** dialog box, change the **default database**, click **Next**, click **Finish**, and continue to step d.
- d. If the RDBMS server, or database names are not identical, run the Configuration Wizard on the relevant component server, and enter the connection and authentication details for the relevant databases.

To run the Configuration wizard:

On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Configuration Wizard**.

Note: For more information on recovering from a Data Warehouse database corruption, see ["Data Warehouse Recovery" \(on page 219\)](#).

A Failed ETL job, or Invalid Data in the Target Database

Scenario: When the ETL job produces an intermediate warning or non-critical error, the job completes successfully but the target data appears to be incorrect.

It is assumed that:

1. There is a backup of the last steady state of the Data Warehouse available.
2. The source data is correct or has been corrected.
3. It is acceptable to lose the history between the last steady state backup and the current date.

The following procedure describes how to recover from a failed ETL job, or invalid data in the Target Database.

1. Restore the Staging and Target databases from backups taken at the same time. (Where an ETL process was not run between backing up the Target and Staging databases.) Restore using the full weekly backup and the relevant differential backup.

Note: The RDBMS server, database and login names must be identical to those used in the initial installation. This information can be found in the Management database. If you cannot remember the passwords for the Staging, Target and SAP BusinessObjects Data Services databases, in the Executive Scorecard application, click **Admin > Data Warehouse Settings**. On the settings page, type in new user passwords and then ensure that the RDBMS login names are assigned the same password.

2. Once you have restored the relevant databases, create logins, and associate the database users and logins by running the following scripts on the Data Warehouse server.
 - **For the staging database:**
 - **EXEC sp_change_users_login 'Auto_Fix', 'dws', NULL, 'password'** where password is the old password for the dws login.
 - **EXEC sp_change_users_login 'Auto_Fix', 'dwst', NULL, 'password'** where password is the old password for the dwst login.
 - **EXEC sp_change_users_login 'Auto_Fix', 'dwmetadata', NULL, 'password'** where password is the old password for the dwmetadata login.
 - **EXEC sp_change_users_login 'Auto_Fix', 'dwabc', NULL, 'password'** where password is the old password for the dwabc login.
 - **EXEC sp_change_users_login 'Auto_Fix', 'xrefgen', NULL, 'password'** where password is the old password for the xrefgen login.
 - **For the target database:**
 - **EXEC sp_change_users_login 'Auto_Fix', 'dwt', NULL, 'password'** where password is the old password for the dwt login.
 - **EXEC sp_change_users_login 'Auto_Fix', 'dwmetadata', NULL, 'password'** where password is the old password for the dwmetadata login.
 - **For the SAP BusinessObjects Data Services database:**
 - **EXEC sp_change_users_login 'Auto_Fix', 'login name', NULL, 'password'** where login name is the new login name you created when you created the SAP BusinessObjects Data Services database, and password is the password you assigned to that login name.
3. In the Executive Scorecard application, click **Admin > Data Source Management**, and confirm that the relevant data sources are Activated.
4. On the Data Warehouse server open a Windows command prompt.
5. Switch to the following directory:
<Installation Directory>\Agora\DataWarehouse\Bin
6. For Upstream ETL run the following command:
dw_abc_load_batch -streamId Upstream
7. Run the following command:
dw_abc_run_steps.bat -streamId Upstream -register -every 2

Deleted ETL Workflow

Scenario: An ETL workflow has been deleted.

1. Restore the HP Executive Scorecard SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA database on the RDBMS server using the weekly full and the relevant differential backup.

Note: The RDBMS server, database and login names must be identical to those used in the initial installation for the Data Warehouse recovery to succeed. This information can be found in the Executive Scorecard application, under **Admin > Data Warehouse Settings**.

2. Once you have restored the SAP BusinessObjects Data Services database, create logins, and associate the database users and logins by running the following scripts on the RDBMS server.

For the SAP BusinessObjects Data Services database

EXEC sp_change_users_login 'Auto_Fix', 'login name', NULL, 'password' where login name is the new login name you created when you created the SAP BusinessObjects Data Services database, and password is the password you assigned to that login name.

3. On the Executive Scorecard and Data Warehouse servers, disable and then enable HP Executive Scorecard as follows:
 - a. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard**.
 - b. On the Windows taskbar, click **Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard**.
4. For more information on re-installing the SAP BusinessObjects for HP XS and Executive Scorecard components, see the Executive Scorecard General Admin Guide.

Restore the BODS Repository

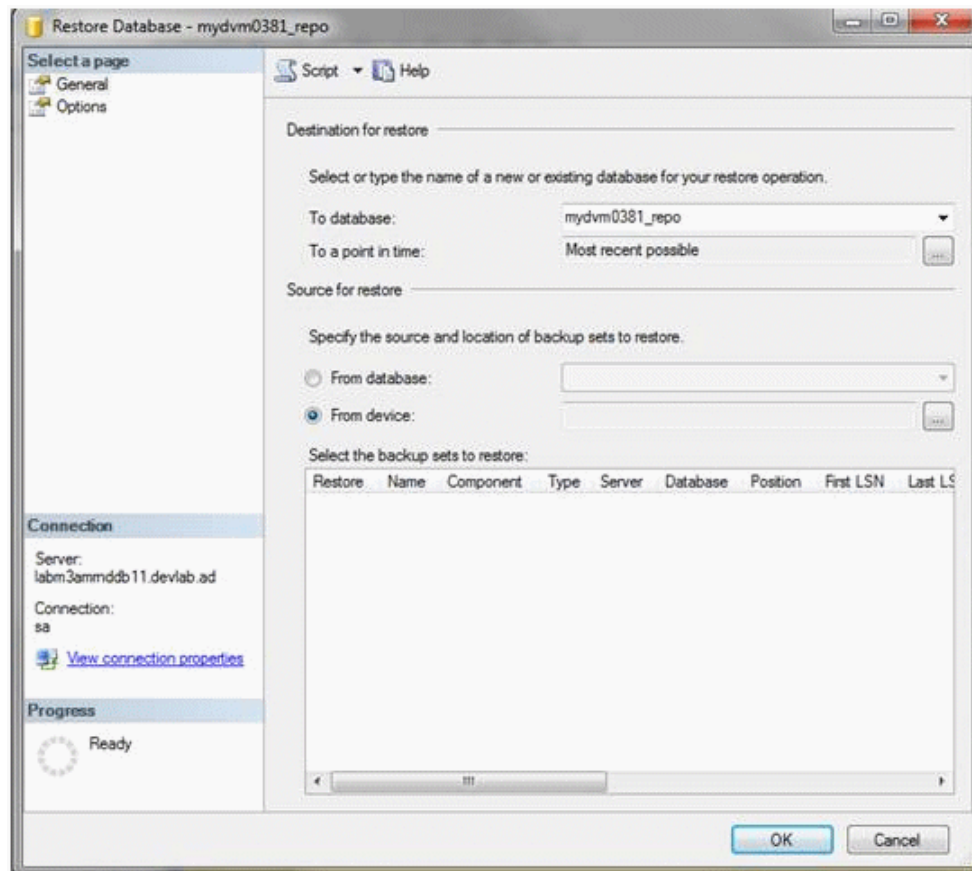
The Configuration wizard recovery scenario creates a new BODS repository which overrides all of the existing BODS data, such as, jobs, workflows, data stores and customer customized workflows.

In order to restore the repository to the original data contained in it, you must create a backup of the BODS database before running the recovery procedure. Restoring the BODS database should be performed at the end of Recovery procedure after the configuration wizard has completed.

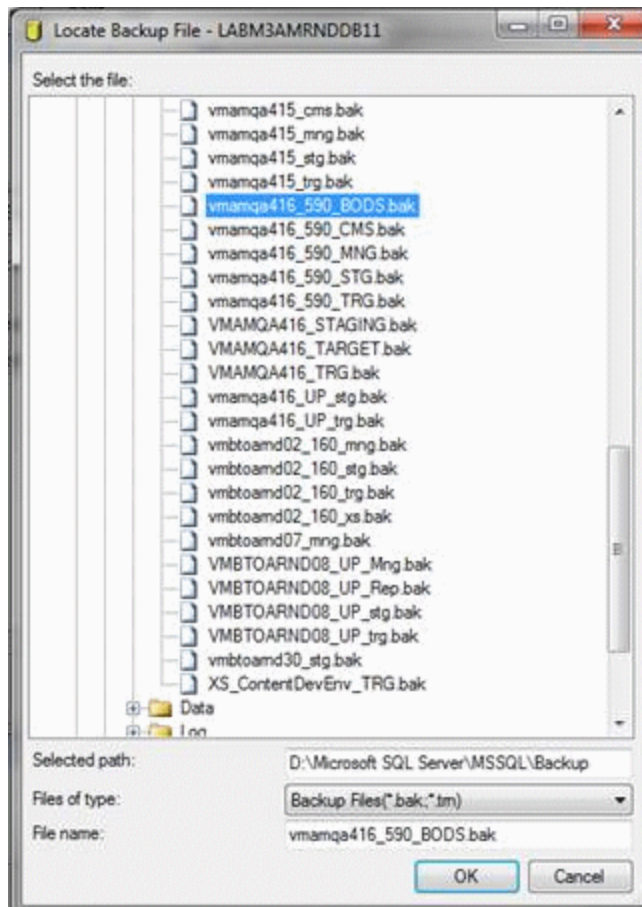
For details, see ["Data Warehouse Server Failure" \(on page 221\)](#).

To restore the database through the SQL SERVER management studio:

1. From the Object Explorer, right-click the database instance then select **Tasks > Restore > Database**.
2. The Restore Database wizard opens.



3. Select the relevant database instance for the restore operation.



4. Select **From device** if the backup is on the file system and browse to select the relevant file that contains your backup.
5. Click **OK** and complete the wizard.

Data Warehouse Naming Conventions

The following describes table and field naming conventions.

Type	_Value	Description
Table Name Suffixes	_DIM	Dimension or bridge table.
	_FACT	Fact table.
	_MS	Monthly snapshot table that shows the last known value for the data at the end of a month.
	_HIER	Hierarchy table.
	_AGG	Aggregate roll up table.
Field Name Prefixes	MD_	Metadata.
	SRC_	Used for all fields that exist just for data warehouse internal processes. Source. Used for all field drawn from the source for ETL purposes only (not pushed to the target).
	PK_	Primary key.
	FLAG_	A binary field: Y/N.
	DATE_	A date type.
	DURATION_	A measure representing a length of time.
	COUNT_	A measure representing a raw count.
	AVG_	A measure representing an average roll up.
	MAX_	A measure representing a maximum roll up.
	MIN_	A measure representing a minimum roll up.
	PCT_	A measure representing a percentage.
Field Name Suffixes	_ID	A surrogate key field that is primary or foreign.
	_BASE	A financial amount, currency, or exchange rate in the default currency of the data warehouse.
	_UTC	A date expressed in the UTC time zone. For dates: a date expressed in the default display time zone for the data warehouse. For money: a financial amount, currency, or exchange rate in the original currency of the source data.
	_LOC	A date expressed in the local time zone.

Target and Staging Databases Naming Conventions

The first character of the Target and Staging databases name must begin with an alpha character.
The init_db utility fails if you use database names that begin with numbers.

SAP BusinessObjects Data Services Naming Conventions

This section describes the naming conventions used by tables that are part of the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA ETL process.

This section includes the following topics:

- ["Datastore " \(on page 229\)](#)
- ["Datastore Alias " \(on page 230\)](#)
- ["Project" \(on page 230\)](#)
- ["Job Names" \(on page 230\)](#)
- ["Workflows" \(on page 231\)](#)
- ["Dataflows" \(on page 231\)](#)
- ["Variables - Global - Local Variables - Parameters" \(on page 231\)](#)
- ["Custom Functions" \(on page 232\)](#)
- ["Data Warehouse Naming Conventions" \(on page 228\)](#)
- ["Try/Catch" \(on page 232\)](#)
- ["Conditionals" \(on page 233\)](#)
- ["Flat File Targets" \(on page 233\)](#)

Datastore

Description	Naming Convention and Examples
Connection to database with source application views	<p>Datastore names have a prefix with the datastore name and a suffix of _DS.</p> <p>Format:</p> <p><SOURCE APP>_DS</p> <p>Examples:</p> <ul style="list-style-type: none">• AMVIEW_DS• PPMVIEW_DS• SMVIEW_DS
Connection to transactional entity staging database	SRCSTAGING_DS

Connection to target entity staging database	DWSTAGING_DS
Connection to data warehouse database	DW_DS

Datastore Alias

Description	Naming Convention and Examples
Name of Datastore for the specific source in SAP BusinessObjects Data Services for IT Executive Scorecard	<p>Alias names have a prefix with the source application name and a suffix of _ALIAS.</p> <p>Format:</p> <p><SOURCE APP>_ALIAS</p> <p>Examples:</p> <p>AMVIEW_ALIAS</p>
Alias user for transactional entity staging database	SRCSTAGING_ALIAS
Alias user for target entity staging database	DWSTAGING_ALIAS
Alias user for data warehouse database	DW_ALIAS

Project

Description	Naming Convention and Examples
Allows you to group jobs that have dependent schedule or belong to the same application	<p>Project names have a prefix with the source application name or purpose of the project and a suffix of _PJ.</p> <p>Format:</p> <p><DESCRIPTION>_PJ</p> <p>Examples:</p> <p>FPA_PJ</p>

Job Names

Description	Naming Convention and Examples
SAP BusinessObjects Data Services for IT Executive Scorecard job which is a group of objects that you can schedule and execute together	<p>Job names have a prefix with the name of the source application. An internal segment can describe the job purpose. There is a suffix of _JB.</p>

	<p>Format:</p> <p><SOURCE APP>_<PURPOSE>_JB or <PURPOSE>_JB</p> <p>Examples:</p> <ul style="list-style-type: none"> • AM_SOURCE_EXTRACT_JB • DW_JB
--	--

Workflows

Description	Naming Convention and Examples
Defines a decision making process to execute a dataflow	<p>Workflow names have a prefix with the source or target name. A SUB-CATEGORY segment describes the ETL phase. There is suffix of _WF.</p> <p>Format:</p> <p><SRC NAME/TARGET NAME>_<SUB-CATEGORY>_WF</p> <p>Examples:</p> <ul style="list-style-type: none"> • AM_AMRIGHTSUSESCOUNT_EXT_WF • AM_MSI_CONTAINER_WF

Dataflows

Description	Naming Convention and Examples
Data flows extract, transform and load data	<p>Dataflow names have a prefix with the source or target name. A SUB-CATEGORY segment describes the ETL phase. There is a suffix of _DF.</p> <p>Format:</p> <p><SRC NAME/TARGET NAME><SUB_CATEGORY>_<ACTION>_DF</p> <p>Examples:</p> <p>AM_AMRIGHTSUSESCOUNT_EXT_DF</p> <p>AM_SWAUDITDETAIL_MSI_DF</p>

Variables - Global - Local Variables - Parameters

Description	Naming Convention and Examples
Variables defined in a job Variables defined in a job/workflow Parameters in a workflow/ dataflow	<p>Variable names have a dollar sign (\$) and prefix to identify the type of variable (G for global, L for local, or P for parameter). The suffix identifies the purpose or identifying parameter name.</p>

	<p>Format:</p> <p>\$G_<PURPOSE> or \$L_<PURPOSE> or \$P_<PURPOSE></p> <p>Examples:</p> <ul style="list-style-type: none"> • \$G_BATCH_ID • \$L_STARTDATE • \$P_STATUS
--	--

Custom Functions

Description	Naming Convention and Examples
Script functions in Data Integrator scripting language	<p>Custom function names have a prefix that describes the purpose of the function.</p> <p>The suffix is _FN.</p> <p>Format:</p> <p><PURPOSE>_FN</p> <p>Example:</p> <p>STARTJB_FN</p>

Scripts

Description	Naming Convention and Examples
Scripts created in jobs or work flows. Description can refer to function the script is performing or the name of the table the script is loading	<p>Script names have a prefix that describes the data source or target name.</p> <p>A SUB-CATEGORY segment describes the ETL phase. The suffix is _SC.</p> <p>Format:</p> <p><SRC NAME/TARGET NAME> or <SUB_CATEGORY>_SC.</p> <p>Example:</p> <p>: AM_ AMRIGHTSUSESCOUNT_ EXT_FAIL_SC</p>

Try/Catch

Description	Naming Convention and Examples
-------------	--------------------------------

Specify alternative workflows if errors occur while executing a job	<p>Try/catch names have a prefix that describes the data source or target name.</p> <p>A SUB-CATEGORY segment describes the ETL phase. The suffix is _TRY or _CATCH.</p> <p>Format:</p> <p><SRC NAME/TARGET NAME><SUB_CATEGORY>_TRY or <SRC NAME/TARGET NAME><SUB_CATEGORY>_CATCH</p> <p>Examples:</p> <ul style="list-style-type: none"> AM_AMRIGHTSUSESCOUNT_EXT_TRY AM_AMRIGHTSUSESCOUNT_EXT_CATCH
---	---

Conditionals

Description	Naming Convention and Examples
Conditionals are single-use objects used to implement if-then-else logic in a work flow	<p>Conditional names have a prefix that describes the data source or target name.</p> <p>A SUB-CATEGORY segment describes the ETL phase. The suffix is _COND.</p> <p>Format:</p> <p><SRC NAME/TARGET NAME><SUB_CATEGORY>_COND</p> <p>Example:</p> <p>AM_AMRIGHTSUSESCOUNT_EXT_COND</p>

Flat File Targets

Description	Naming Convention and Examples
Flat file extracts of source view	<p>Flat file target names have a prefix that describes the datastore name. Segments describe the source table name, batch ID, and A SUB-CATEGORY segment describes the ETL phase. The suffix is .txt.</p> <p>Format:</p> <p><DATASTORENAME (without _DS)>_<SOURCETABLENAME_BATCHID>_<SUB-CATEGORY>.txt</p> <p>Example:</p> <p>AMVIEW_AMRIGHTSUSESCOUNT_' \$G_Batch_ID '_EXTRACT_FF.TXT AMVIEW_AMRIGHTSUSESCOUNT_' \$G_Batch_ID '_EXTRACT_DELETE_FF.TXT</p>

Data Warehouse Command Reference

This section is a syntax reference for the out-of-box scripts that are available to ETL designers and developers.

The data warehouse contains out-of-box .xml files in this directory:

<DWH_home_directory>\DataWarehouse\conf

The table in the Command Summary section lists the out-of-box scripts that you can use to accomplish command line tasks. These scripts produce specific results. Changing them may produce unpredictable results when they run. For details, see ["DWH Command Reference" \(on page 241\)](#).

This section includes the following topics:

["ABC Command Reference" \(on page 234\)](#)

["DWH Command Reference" \(on page 241\)](#)

["The Automation Tool" \(on page 250\)](#)

ABC Command Reference

This section describes all of the out-of-box ABC command files that are available to administer the ABC functions. The table in the Command Summary section lists the out-of-box files that you can use to accomplish ABC tasks.

Although SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA runs the jobs that extract, transform, and load data, ABC manages the actual launch, execution, and sequencing of the steps in these jobs. If you run jobs using SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA only, there can be conflicts, sequence errors, and data corruption, and run-time statistics can be lost.

The data warehouse provides the out-of-box file (upstream.xml) that contains the required job steps. The primary ABC tasks are to launch ETL batch jobs at regularly scheduled intervals and ensure that the individual job steps run as soon as they are ready. In addition, the ABC Audit and Control reports enable you to view information pertaining to the utilities.

Syntax Conventions

Command options in square brackets ([]) are optional.

Italicized lowercase expressions are variable values.

If a command option argument is a text string that contains blank spaces, you must enclose it in quotation marks. Otherwise, the text before the blank space is considered the entire argument and the remaining text becomes an undefined option.

Command Summary

The following command script files are available in this directory:

<Installation Directory>\agora\DataWarehouse\bin

Name	Purpose	Primary User
"dw_abc_batch_control" (on page 235)	Start and stop batch job streams.	Administrator
"dw_abc_load_batch" (on page 236)	Load a batch job stream or register it as a scheduled task.	Administrator
"dw_abc_run_steps" (on page 238)	Run job stream steps (the ABC engine) or register it as a scheduled task.	Administrator
"dw_abc_retry_step" (on page 239)	Restart a job stream step.	Administrator
"dw_abc_job_launcher" (on page 240)	Start or stop job steps within a job stream.	Administrator or ETL developer
"dw_abc_set_status" (on page 240)	Capture the status of job stream steps that are implemented as batch scripts.	Administrator or ETL developer

dw_abc_batch_control

Use this script to start and stop batch job streams. The dw_abc_batch_control utility enables you to:

- Suspend an active batch job stream
- Resume a suspended batch job stream
- Abort a running batch job stream

User

Administrator

Syntax

DWH_Admin

```
dw_abc_batch_control (-abort | -resume | -suspend)
                    (streamID <streamid> | -all)
                    [-help]
```

Options

Option	Required?	Description
--------	-----------	-------------

Choose one of the following options:		
-commandName all	No	Complete the named command action on all loaded job streams.
-abort	No	Terminate -all or a specific streamID where the streamID value is the catalog parameter value for dwid="xxxx".
-abortAndKillJobs	No	Abort the specified stream and kill all currently running SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA jobs (if any currently running).
-resume	No	Re-start -all or a specific streamID where the streamID value is the catalog parameter value for dwid="xxxx".
-suspend	No	Temporarily stop -all or a specific streamID where the streamID value is the catalog parameter value for dwid="xxxx"
Choose one of the following options:		
• -streamId <i>streamId</i>	No	The streamID value is the catalog parameter value for dwid="xxxx" found in the xml file that describes the stream: <Installation Directory>\agora\Content Packs\Core\ABC\upstream.xml
• -all	No	All streams currently executing.
-help	No	Display command syntax

Examples

- **dw_abc_batch_control -suspend -streamid Stream1**
- **dw_abc_batch_control -resume -all**

dw_abc_load_batch

Use this script to load a batch job stream or register it as a scheduled task.

The **dw_abc_load_batch** utility is responsible for starting an ABC ETL track. You can run this utility manually at the command line, or scheduled it to run at scheduled intervals.

Batch job streams can run concurrently if each job stream is independent of other job streams; however, if two concurrent batch jobs invoke the same job stream, they cannot run successfully. If the **dw_abc_load_batch** utility successfully loads a batch job, as long as that batch job is running, any attempt to load a second instance of the same batch job will fail. Running the out-of-box upstream.xml job stream in overlapping batches produces errors.

The **dw_abc_load_batch** utility initializes the ABC stream and prepares the stream steps for execution.

The **dw_run_steps** utility looks for these steps that are ready and starts each one individually. The batch job manages the details of extracting entities from source databases.

All the job steps in the batch job reference the same batch ID. The initial state of the batch is Active. The initial state of all of the pending processes (job steps) is Waiting.

User

Administrator

Syntax

```
dw_abc_load_batch -streamId <string>
[-register (-every <string> |-starttime <string>)]
        [-unregister]
        [-list]
        [-help]
```

Options

Option	Required?	Description
Choose one of the following options:		
-list	No	List tasks scheduled to run.
-list _streamId <streamId>	Yes	Identify the stream ID value that is specified in the stream file parameter dwid="xxxx".
-register	No	Create a scheduled task to run dw_abc_load_batch at regular intervals.
-unregister _streamId <streamId>	No	Unregister all the events for the specified streamId stream.
-starttime <i>hh:mm</i>	No	Start the task to load the batch where the value for hh is 00–24 and the value for mm is 00–59.
-streamid <i>stream_id</i>	Yes	Identify the stream ID value that is specified in the stream file parameter dwid="xxxx".
-help	No	Display command syntax.

Examples

- **dw_abc_load_batch -streamId streamId**
- **dw_abc_load_batch -streamId streamId -register -every 720**
- **dw_abc_load_batch -streamId streamId -register -starttime 22:30**
- **dw_abc_load_batch -unregister -streamId streamId**
- **dw_abc_load_batch -list -streamId streamId**
- **dw_abc_load_batch -unregister**
- **dw_abc_load_batch -list**

dw_abc_run_steps

Use this script to run job stream steps or register the action as a scheduled task.

The command verifies the successful execution of each step before a dependent step begins. It also compiles a list of parallel and sequential execution steps that are ready to run, then launches each step that is ready for execution.

The command:

- Determines which steps are ready to run and starts them.
- Creates processes for each step in a batch job stream.
- Reports execution state for each process, then updates a final execution status for the batch.
- Sets a status of Max_Execution_Time_Exceeded if a step exceeds its maximum execution time.
- If Max_Execution_Time_Exceeded occurs, stops job step execution.
- Finds all steps that are blocking the execution of a job stream and reports them.
- Retries any step that terminates with an error and has not exceeded the specified maximum number of retries.

You can specify a maximum number of retries when an error occurs, and a maximum execution time for each step in the job stream definition file. Because they are optional parameters, they have default values of no retries and unlimited execution time. For details see ["Change the Number of Retries for a Failed ETL Step" \(on page 254\)](#).

User

Administrator

Syntax

```
dw_abc_run_steps [-streamId <string>]
                [-every <interval>]
                [-register]
                [-unregister]
                [-list]
```

[-help]

Options

Option	Required?	Description
-every <i>nnn</i>	No	Start the batch load task every <i>nnn</i> minutes.
-list	No	Display a list of the registered events for all the stream ids.
-list <i>_streamId</i> <i><streamId></i>	No	Display a list of the registered events for the specified <i>streamId</i> .
-register	No	Create a scheduled task to run dw_abc_run_steps at regular intervals.
-unregister <i>_streamId</i> <i><streamId></i>	No	Unregister all the events for the specified <i>streamId</i> stream.
-streamId <i>stream_id</i>	No	Stream ID value for the step to restart.
-help	No	Display command syntax for this command.

Examples:

- To run all possible steps with a ready status:
dw_abc_run_steps -streamId Upstream
- To create a scheduled task that executes the **dw_abc_run_steps** command every 60 minutes:
dw_abc_run_steps -register -every 60 -streamId Upstream
- To remove a scheduled task that starts the **dw_abc_run_steps**:
dw_abc_run_steps -unregister -streamId Upstream
- To list a scheduled task that starts the **dw_abc_run_steps**:
dw_abc_run_steps -list -streamId Upstream
- To remove all scheduled tasks that starts the **dw_abc_run_steps**:
dw_abc_run_steps -unregister
- To list all scheduled tasks that starts the **dw_abc_run_steps**:
dw_abc_run_steps -list

dw_abc_retry_step

Use this script to restart a job stream step.

The **dw_abc_retry_step** utility re-starts a job step. When you specify a maximum number of retries, the ABC engine blocks the job stream when that number is exceeded.

User

Administrator

Syntax

```
dw_abc_load_batch -streamId <string>
```

```
-stepId <string>  
[-help]
```

Options

Option	Required?	Description
-stepId <i>step_id</i>	Y	Step ID value for the step to restart.
-streamId <i>stream_id</i>	Y	Stream ID value for the step to restart.
-help	N	Display command syntax.

Example

```
dw_abc_retry_step -streamId Upstream -stepId step_id
```

dw_abc_job_launcher

Use this script to start or stop specific SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA jobs.

User

Administrator or ETL developer

Syntax

```
dw_abc_job_launcher -jobname <string>  
[-stop]  
[-help]
```

Options

Option	Required?	Description
-jobname <i>job_name</i>	Y	Name of the job that you want to run.
-stop <i>job_name</i>	N	Stop job execution.
-help	N	Display command syntax.

If you omit the -process option, you must set an environment variable %DW_PROCESS_ID% that contains the value of the process ID.

Example

- **dw_abc_job_launcher -jobname DW_JB**
- **dw_abc_job_launcher -stop -jobname DW_JB**

dw_abc_set_status

Use this script to set the status of job stream steps that are implemented as batch scripts.

User

Administrator or ETL developer

Syntax

```
dw_abc_set_status (-error | -final | running | -success | -warning)
                  [-info <string>]
                  [-help]
```

Options

Option	Required?	Description
Choose one of the following status parameters:		
• -error	N	If an error occurs, update the data warehouse with the error status.
• -final	N	If an error occurs, update the data warehouse with the most severe status.
• -running	N	If an error occurs, update the data warehouse with the run status.
• -success	N	If successful, update the data warehouse with the success status.
• -warning	N	If a warning status occurs, update the data warehouse with the warning status.
-help	N	Display command syntax.

The -info "message_text" is optional free text that you can display.

This script requires the DW_PROCESS_ID environment variable to be set with the value of the process ID before you run this script.

Example

```
dw_abc_set_status -error -info "Job failed"
```

DWH Command Reference

The following command script files are available in this directory:

```
<DWH_home_directory>\DataWarehouse\bin
```

Data Warehouse Script Files

Name	Purpose	Primary User
"dw_bods_xml_import" (on page 243)	Import ETL from XML files to the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA repository.	Administrator
"dw_clean_data" (on page 244)	Clean data from staging and target databases to imitate initial load. For details, see "Clean Up the Staging and Target Databases" (on page 181) .	Administrator
"dw_ds_gen" (on page 244)	Generate the metadata repository.	ETL developer
"dw_ds_import" (on page 245)	Import source files into the metadata repository	ETL developer
"dw_etl_export" (on page 245)	Export the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA jobs, workflows, and other ETL components.	ETL developer
"dw_etl_import" (on page 245)	Import the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA jobs, workflows, and other ETL components.	ETL developer
"dw_etl_update_containers" (on page 246)	Build an ETL workflow container.	ETL developer

"dw_foundation_setup" (on page 247)	Build the data warehouse foundation	Installer
"dw_generateschemas" (on page 247)	Generate schemas and tables.	ETL developer
"dw_initdb" (on page 248)	Initialize the data warehouse database schema	Administrator
"dw_tz_update_dst" (on page 249)	Update time zone information	Administrator
dw_ds_automation.bat	Data Source Configuration using the Automation Tool. For details, see "The Automation Tool" (on page 250) .	Administrator

dw_bods_xml_import

Use this script to import ETL from XML files to the SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA repository.

The input XML files are located in the indicated directory, or its subdirectories.

User

Administrator

Syntax

```
dw_bods_xml_import [-help] [-fromfile "<xmlfile>" | -fromdir "<directory>"]
```

Options

Option	Required?	Description
-fromdir <fromdir>	N	The directory, in the data source repository, that contains the ETL XML files to import .
-fromfile <fromfile>	N	The XML file, in the data source repository, from which the ETL is imported .
-help	N	Display command syntax.

Examples

```
dw_ds_gen -datastore all -outputdir c:\datastores dw_ds_gen -datastore PPM -outputdir c:\datastores\PPM
```

dw_clean_data

Use this script to clean data from the staging and target databases to imitate an initial load..

User

Administrator

Syntax

```
dw_clean_data [-help]
```

Options

Option	Required?	Description
-help	N	Display command syntax.

Examples

```
dw_clean_data.bat
```

dw_ds_gen

Use this script to generate one or more datastores. SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA imports these datastores to enable SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA jobs to connect to the database.

User

ETL developer

Syntax

```
dw_ds_gen -datastore <dws|dwst|dwt|dwabc|PPM|AM|SM|all>  
          -outputdir <directory>  
          [-verbose]  
          [-help]
```

Options

Option	Required?	Description
-datastore	Y	Generate the specified data source (dws, dwst, dwt, dwabc, PPM or AM). Specify all to generate all sources.
-outputdir <i>directory_name</i>	Y	Path and name of the target directory where the data source files are to be generated.
-verbose	N	Produce more detailed output.
-help	N	Display command syntax.

Examples

```
dw_ds_gen -datastore all -outputdir c:\datastores dw_ds_gen -datastore PPM -outputdir  
c:\datastores\PPM
```

dw_ds_import

Use this script to import source files from a named directory into the metadata repository. For example, to import a collection of files into the datastore directory.

User

ETL developer

Syntax

```
dw_ds_import -inputdir directory  
[-help]
```

Options

Option	Required?	Description
-inputdir <i>directory_name</i>	Y	Path and name of the directory where the data source files are to be imported.
-help	N	Display command syntax.

Example

```
dw_ds_import -inputdir "c:\datastore\Source Files"
```

dw_etl_export

Use this script to export Data Services jobs, workflows, data flows, and functions to a zip file.

User

ETL developer

Syntax

```
dw_etl_export -zip <zipfile>  
[-help]
```

Options

Option	Required?	Description
-zip <i>zip_file_name</i>	Y	Export to the specified archive file.
-help	N	Display command syntax.

Example

```
dw_etl_export -zip c:\etlFiles.zip
```

dw_etl_import

Use this script to import Data Services jobs, workflows, data flows, and functions to a zip file.

User

ETL developer

Syntax

```
dw_etl_import [-atl <atlFile>]
               -topdir <directory>
               [-zip <zipfile>]
               [-help]
```

Options

Option	Required?	Description
-atl <i>atl_file_name</i>	N	Import the specified .atl file.
-topdir <i>directory_name</i>	Y	Import all .atl files under a specified directory and subdirectory.
-zip <i>zip_file_name</i>	N	Import the contents of the archive file.
-help	N	Display command syntax.

Examples

```
dw_etl_import -topdir c:\etlFiles
```

```
dw_etl_import -topdir "c:\ETL Files"
```

```
dw_etl_import -zip c:\etlFiles.zip
```

```
dw_etl_import -atl c:\functions.atl
```

dw_etl_update_containers

This script loads .atl files during the installation process.

User

ETL developer

Syntax

```
dw_etl_update_containers -topdir <directory>
                        [-verbose]
                        [-help]
```

Options

Option	Required?	Description
-topdir <i>directory_name</i>	Y	Name of the directory that contains all application-specific .atl files.
-verbose	N	Produce more detailed output.
-help	N	Display command syntax.

Return codes

0 – Success
1 – Success with warnings
>1 – Errors

Examples

```
dw_etl_update_containers -topdir "c:\My Application"
```

```
dw_etl_update_containers -topdir c:\MyApplication
```

dw_foundation_setup

Use this script to call the scripts that initialize the data warehouse, or load the metadata for data source connections into the database.

Syntax

```
dw_foundation_setup [-args <taskArguments>]  
                    -taskName <taskName>  
                    [-verbose]  
                    [-help]
```

Options

Option	Required?	Description
-args <i>task_argument</i>	N	Name of the task argument.
-taskName <i>task_name</i>	Y	Name of the requested task.
-verbose	N	Produce more detailed output.
-help	N	Display command syntax.

You can see the individual tasks and associated arguments called by `dw_foundation_setup` if you open this file with a text or xml editor:

<DWH_home_directory>\DataWarehouse\etc\xml\dw_foundation_setup.xml

Return codes

0 – Success
1 – Success with warnings
>1 – Errors

dw_generateschemas

Use this script to generate schemas and tables.

Syntax

```
dw_generateschemas [-aggregates]  
                   [-application <application>|all]  
                   [-autoloadingmode true|false]  
                   [-interface]  
                   [-noninteractive]
```

```
[-product <product>|all]
[-staging]
[-target]
[-verbose]
[-help]
```

Options

Option	Required?	Description
-aggregates	N	Generate or update the aggregation tables.
-application <i>application_name</i> all	N	Load the named application or load all applications. All is the default if you are in non-interactive mode.
-autoloadingmode	N	Specify true or false. True is the default value.
-interface	N	Generate the SQL script files to create the interface.
-noninteractive	N	Run this script without prompting for user input. Use all default values.
-product <i>product_name</i> all	N	Load the specified product. All is the default value.
-staging	N	Generate or update the staging tables.
-target	N	Generate or update the target tables.
-verbose	N	Produce more detailed output.
-help	N	Display command syntax.

Interfaces will always be written to a file, whether autoloadingmode is on or not. Each interface for a Data Source Connection is written to a separate file. If you do not specify a specific phase, all phases execute.

Example

```
dw_generateschemas -application myApp -autoloadingmode true -target
```

dw_initdb

Use this script to initialize data warehouse foundation database schemas.

Syntax

```
dw_init.bat [-confdir <directory>]
            [-schema <schemaname>]
            -sqldir <directory>
            [-help]
```

Options

Option	Required?	Description
-confdir <i>directory</i>	N	Name of the directory that contains the .properties file for the designated schemaname .
-schema <i>schemaname</i>	N	Name of the schema, such as dwmetadata , dws , dwst , or dwt .
-sqldir <i>directory</i>	Y	Name of the directory that contains the schema and .properties file.
-help	N	Display command syntax.

Examples

```
dw_init.bat -sqldir c:\myDbDirectory
```

```
dw_init.bat -sqldir c:\myDbDirectory -schema dwmetadata -confdir "c:\my Config Directory"
```

dw_tz_update_dst

Load or update the time zone information for a data source and the data warehouse.

Run this utility whenever you deploy new source data or when you manually change the time zone.

Time zone is expressed in GMT format: GMT +\-nn:nn.

Syntax

```
dw_tz_update_dst.bat  
                [-help]  
                [-verbose]
```

Options

Option	Required?	Description
-help	N	Display command syntax.
-verbose	N	Produce more detailed output.

Return codes:

0 – Success

1 – Success with warnings

>1 – Errors

Example

```
dw_tz_update_dst -verbose
```

The Automation Tool

The automation tool is built and designed to simplify the different tasks of Data Source Management.

It contains Data Source Management back-end tools that simplify the usage, add some necessary validations, and set the different statuses. The tool is used by the Data Source Management user interface but also provides a command line interface so it can be used outside the application server.

The following Command Line Interface (CLI) is available for Data Source Management functionality outside the UI. The command script files are found in this directory:

<DWH_home_directory>\DataWarehouse\bin

TestConnection

Usage: dw_ds_automation.bat -task TestConnection -cp xxx -xmlFilePath [Path to datasources.xml file]

Description: Test the connection to the data source. Should be used before running the configuration task in order to validate correct connection details.

Register Instance

Usage: dw_cp_register.bat -addInstance -name <CP_NAME>

Description:

- Use to add an additional instance of the data source.
- The Data Warehouse then looks for the CP in the Content Packs Folder.
- The instance ID is displayed in the output. "Instance ID: XX has been added to Content Pack: <CP_NAME>"
- It is also added to the CONTENT_PACK table.

ConfigureInitial

Usage: dw_ds_automation.bat -task ConfigureInitial -cp <content pack name>-instance <INSTANCE_ID>-xmlFilePath [Path to datasources.xml file]

Description:

- Configure the CP connection settings before the CP has been initialized.
- Use prior to CP initialization (Deploy).

Note: To successfully run this command, the ALM password must be encrypted before saving it in the Staging database.

Configure

Usage: dw_ds_automation.bat -task Configure -cp <content pack name>-instance <INSTANCE_ID>-xmlFilePath [Path to datasources.xml file]

Description: Configure the CP connection settings and regenerate the datastore of the product. Can be used only after the CP has been successfully initialized.

Note: If any the following sources HP Application Lifecycle Management, HP Business Service Management, or HP Universal Configuration Management Database are configured via a back-end too, the relevant URL listed below should be run before the ETL is run:

- **HP Application Lifecycle Management:**
<http://localhost:10002/dw/integrations/generic/reset/ALM>
- **HP Business Service Management:**
<http://localhost:10002/dw/integrations/bsm/reset/connection>
- **HP Universal Configuration Management Database:**
<http://localhost:10002/dw/integrations/ucmdb/ucmdb/reset/connection>

Deploy

Usage: dw_ds_automation.bat -task Deploy -cp <content pack name>-instance <INSTANCE_ID>

Description: Initialize the CP and set the CP status as **Initialized**.

Activate

Usage: dw_ds_automation.bat -task Activate -cp <content pack name>-instance <INSTANCE_ID>

Description: Activate the CP using the stream Assembler and set the CP status as **Activated**. Activating the CP causes its ABC stream to be merged with the Main (Core) CP stream. Activated CP stream steps will be executed during the execution of the Main (Core) ABC Stream.

Deactivate

Usage: dw_ds_automation.bat -task DeActivate -cp <content pack name>-instance <INSTANCE_ID>

Description: Deactivate the CP using the stream assembler and set the CP status as **Non-Activated**. Deactivate performs the opposite action from Activate. Deactivate subtracts the deactivated CP ABC Steps from the Main ABC Stream Steps.

AutoActivate

Usage: dw_ds_automation.bat -task AutoActivate

Description: Deploy and activate all CPs with "autostart" flag according to the order set by "autostartpriority" in the manifest used by the post- install tool. The manifest found in cp_manifest.properties, is a list of attributes located in the root folder of the Content Pack.

Advanced Data Warehouse Administration

This section describes some of the advanced commands for DWH processes. DWH also provides a set of reports that provide the administrator with awareness and insight into the DWH processes.

This section includes the following topics:

- ["Advanced Utilities" \(on page 252\)](#)
- ["Validate Catalog and Stream Definitions" \(on page 254\)](#)
- ["Change the Number of Retries for a Failed ETL Step" \(on page 254\)](#)
- ["Change Data Warehouse Passwords" \(on page 255\)](#)
- ["Improve Performance" \(on page 257\)](#)
- ["Check the Runtime Status of Batch Jobs" \(on page 257\)](#)
- ["Resolve an ETL Error" \(on page 257\)](#)
- ["Monitor and Tune the Data Warehouse" \(on page 258\)](#)
- ["Purge Validation Tables" \(on page 258\)](#)
- ["Upgrade Content Packs" \(on page 258\)](#)
- ["Consolidate Entities using the XREF Mechanism" \(on page 259\)](#)
- ["SA Password Change" \(on page 260\)](#)

Advanced Utilities

The Data Warehouse enables you to run advanced ABC utilities.

dw_abc_job_launcher

Use this script to start or stop specific SAP BusinessObjects Data Services for IT Executive Scorecard or SAP BusinessObjects Data Services for HP FPA jobs.

User

Administrator or ETL developer

Syntax

```
dw_abc_job_launcher -jobname <string>
                    [-stop]
                    [-help]
```

Options

Option	Required?	Description
--------	-----------	-------------

-jobname <i>job_name</i>	Y	Name of the job that you want to run.
-stop <i>job_name</i>	N	Stop job execution.
-help	N	Display command syntax.

If you omit the -process option, you must set an environment variable %DW_PROCESS_ID% that contains the value of the process ID.

Example

- `dw_abc_job_launcher -jobname DW_JB`
- `dw_abc_job_launcher -stop -jobname DW_JB`

dw_abc_set_status

Use this script to set the status of job stream steps that are implemented as batch scripts.

User

Administrator or ETL developer

Syntax

```
dw_abc_set_status (-error | -final | running | -success | -warning)
                  [-info <string>]
                  [-help]
```

Options

Option	Required?	Description
Choose one of the following status parameters:		
-error	N	If an error occurs, update the data warehouse with the error status.
-final	N	If an error occurs, update the data warehouse with the most severe status.
-running	N	If an error occurs, update the data warehouse with the run status.
-success	N	If successful, update the data warehouse with the success status.
-warning	N	If a warning status occurs, update the data warehouse with the warning status.
-help	N	Display command syntax.

The -info "message_text" is optional free text that you can display.

This script requires the DW_PROCESS_ID environment variable to be set with the value of the process ID before you run this script.

Example

```
dw_abc_set_status -error -info "Job failed"
```

Validate Catalog and Stream Definitions

ABC utilities automatically validate xml syntax and perform more sophisticated validation, such as loop detection in a job stream and valid catalog references to the job stream (dwid=Upstream).

If an error occurs, you can view the DW ABC Streams Management UI for stream information. For details, see ["DW ABC Streams Management User Interface" \(on page 146\)](#).

Additionally you can review the ABC Operational Status report to see where the process failed. For details, see ["ABC - Operational Status Report" \(on page 188\)](#)

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Change the Number of Retries for a Failed ETL Step

The job stream batch file has a job stream step for each required task in the end-to-end ETL process and for each data source. Each job stream step has a parameter value that specifies the number of retries allowable before the job step terminates with an error. You can manually edit this value to increase or decrease the number of retries.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

To change the number of retries:

1. Navigate to the installation directory structure to locate the following file:
<Installation Directory>\agora\contentpacks\\${CP}\ABC\\${stream name}.xml,
(depending on the \${CP})
2. Save a backup copy of the file before you proceed.
3. Open upstream.xml with a text editor. There is a sequential list of job stream steps that manage the entire ETL process.

```
<ns1:JobStreamSteps>
<ns1:JobStreamStep dwid="SYS_READY" businessname="check ETL pre
conditions" ... maxretries="4"/>
<ns1:JobStreamStep dwid="EXTERNAL_FILE" businessname="extract
External
Files" ... maxretries="4"/>
```

```
<ns1:JobStreamStep dwid="PPM_SOURCE_EXTRACT" businessname="extract
PPM
to FF"... " maxretries="4"/>
<ns1:JobStreamStep dwid="AM_SOURCE_EXTRACT" businessname="extract
AM to
FF" ... maxretries="4"/>
<ns1:JobStreamStep dwid="ENTERPRISE_XREF" businessname="load Xref
table" ... maxretries="4"/>
<ns1:JobStreamStep dwid="PPM_EXT" businessname="load PPM FF" ...
maxretries="4"/>
<ns1:JobStreamStep dwid="AM_EXT" businessname="load AM FF" ...
maxretries="4"/>
<ns1:JobStreamStep dwid="PPM_SSI" businessname="PPM Single Source
Identity" ... maxretries="4"/>
```

4. Locate the job stream step that you want to modify and change **maxretries="4"** to **maxretries="nn"** where **nn** is the number of retries before the job step terminates.
5. Save and close the file.
6. In order to activate the new ABC definitions, you must activate the changed CP ABC definitions.
 - a. If the ABC definitions were modified in the CORE content pack, any change to the content packs state would update the change.
 - b. If the ABC definitions were modified in any of the Integration Content packs, you must re-activate the content pack to import the new definitions.
7. Open the Data Source Management user interface, and re-activate the modified CP of which definitions you modified. For details, see ["Perform Tasks for Data Source Management" \(on page 168\)](#).

Change Data Warehouse Passwords

The installation and configuration process gathers all data warehouse and SAP BusinessObjects passwords, encrypts them, and stores them in the Data Warehouse platform settings management.

In order for the ETL to successfully run after you have changed a password, you must change the Database Password and the Database Login Password in DWH Settings UI. For details, see ["Configure Data Warehouse Settings" \(on page 132\)](#).

To change a password:

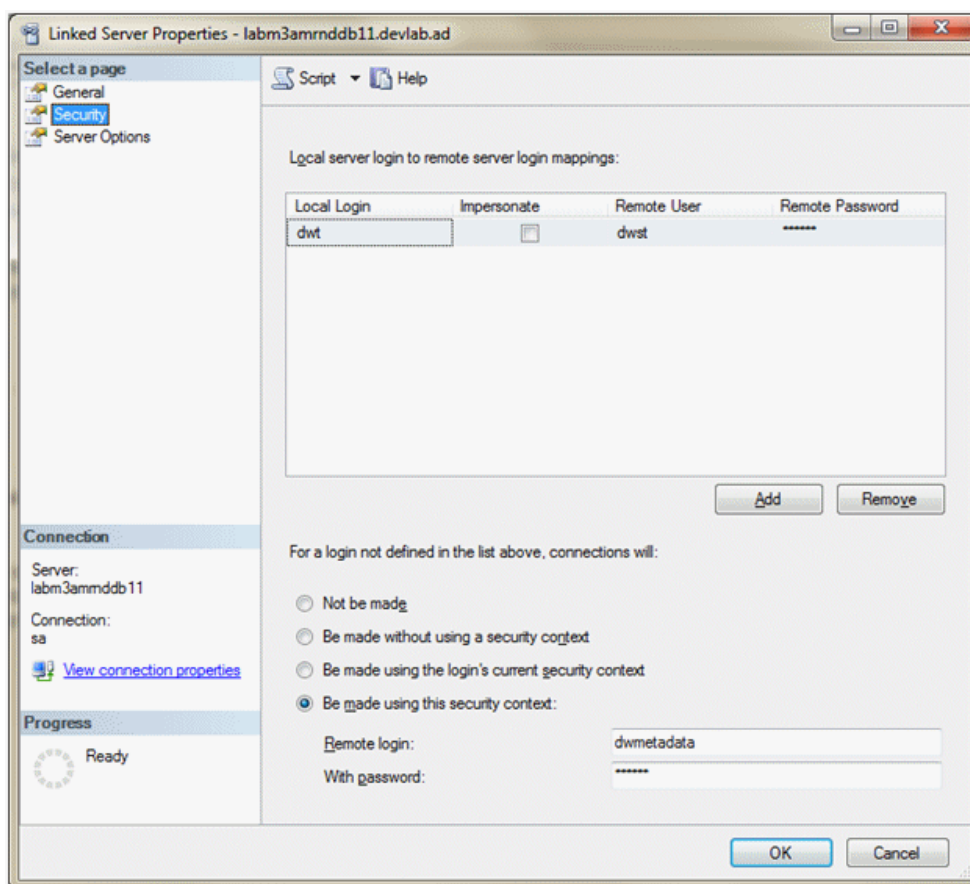
1. Stop any ETLs that are running, or abort a job stream if it is running.
2. On the RDBMS server, change the password for a specific Login Name.
3. Click **Admin > Data Warehouse Settings**, and update the relevant Login with the new password from step 2.

Note: Changing the password in the Data Warehouse Settings user interface does not

modify the password in the database servers. It is preferable to rely on the user performing the password update manually.

4. The Data Warehouse creates a database link which then uses the Data Warehouse and SAP BusinessObjects Enterprise for IT Executive Scorecard passwords. The Linked Server is created in the following situations:
5. a. The staging and target databases are installed on different servers.
- b. The populated database server name in the post-install is different than the database host name on the system server for server id_0.

In these situations, if you reset DWH user passwords (for dwabc, dwmetadata, dws, dwst, or, dwt), go to **Linked Servers** in the Microsoft SQL Server Management Studio, and change the relevant passwords in the **Security** tab of the **Linked Server Properties**, as follows.



6. When you change the passwords in the Data Warehouse Settings user interface as well as the database server you must run the following:
 - <DWH root dir>\bin\dw_ds_gen.bat -outputdir \tmp\datastores -datastore all
 - <DWH root dir>\bin\dw_ds_import -inputdir \tmp\datastores
7. Reload the batch using **dw_abc_load_batch.bat**.
8. Run ETL.

9. Note that a reboot is recommended after passwords change.

Note: It is recommended to avoid using localhost as the server database name.

Improve Performance

Normal procedures require database administrators to set up aggregation, indices, and partitions that can enhance performance.

Enhancing and tuning overall database performance also improve the data warehouse performance.

Because the end-to-end ETL process involves accessing remote source databases and network connections, you may want to evaluate where performance degradation occurs and apply tuning strategies to these external connections.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Check the Runtime Status of Batch Jobs

You can check the status of batch jobs and step status using the DW ABC Streams Management UI.

Additionally, the data warehouse produces operational and administrative reports that contain information about job status and other critical data warehouse activities.

When you view the ABC Operational Status report, you can see the global status and state of each ETL job stream and a snapshot of the runtime status of each job stream step.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

For details, see ["DW ABC Streams Management User Interface" \(on page 146\)](#)

To view reports, see ABC - Operational Status in ["Control Reports" \(on page 186\)"Control Reports" \(on page 186\)](#).

Resolve an ETL Error

ETL jobs contain stream steps that you can restart. Using the DW ABC Streams Management UI, you can view relevant step information.

If the stream step is ready for processing, the next scheduled execution of `abc_run_steps.bat` will restart the stream step automatically.

If there is another impediment, such as source database or connection issues, you must resolve that issue before the step can complete successfully.

In the DW ABC Streams Management UI you can view step status, manually retry steps, as well as schedule `run_steps` command.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

For details on viewing errors and step information, see ["DW ABC Streams Management User Interface" \(on page 146\)](#).

For back-end details, see ["ABC Command Reference" \(on page 234\)](#).

Monitor and Tune the Data Warehouse

The overall health of the data warehouse depends on the administrative skill of the RDBMS administrator.

The Microsoft SQL Server 2008 database administrator uses standard operating procedures for daily database operations.

The data warehouse is governed by these same processes and procedures.

For monitoring and tuning details, see the Microsoft SQL Server 2008 documentation.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Purge Validation Tables

There is no automated process to purge these tables on a regular schedule.

Because organizations require audit and validation information to be retained for varying amounts of time, you should verify what the appropriate retention period is in your organization.

Working with Software as a Service (SaaS) Light XS: This feature is not supported..

Use the following SQL script to delete all records in each of the validation tables that are older than the defined retention period.

```
CREATE OR REPLACE PROCEDURE sp_del_valf_info AS
--declare variables
BEGIN
--Delete All Required records in selection
DELETE FROM *.VALF
WHERE --trunc(Date) < '09-FEB-06'
);
COMMIT;
END sp_del_valf_info >;
```

Upgrade Content Packs

In a case where you have a newer Content Pack folder that contains updates or fixes for the OOTB CP you can perform the following.

To upgrade Content Packs: `dw_ds_automation.bat -task Upgrade -cp [cp name] -newContentPackPath [path of the new cp]`

The following steps are automatically included in the upgrade tool:

1. Deactivate all Integration Content Packs that are activated. It is recommended to stop ETL running and cancel all scheduling.
2. Zip the original Content Pack directory.
3. Copy the Content Pack to a new folder and run the upgrade command for that path.

This overwrites the existing Content Pack folder.

4. Activate the Core Content Pack as well as the remaining Content Packs.
5. Update the content_pack table according to the new manifest, cp_manifest.properties, a list of attributes located in the root folder of the Content Pack being upgraded.

For activation and deactivation details, see ["Perform Tasks for Data Source Management" \(on page 168\)](#).

Note the following usage limitations:

- ETL Stream should not be in a running mode - all streams must be aborted.
- The new CP folder must be a valid CP folder.
- CP should not be in **Installed** state, Integration Content Packs should be activated at least once before upgrade.
- If Core is being upgraded, it must be in the **Activated** state.

Note: In order to avoid upgrade failure, do not change the executables in the ABC catalog.

Consolidate Entities using the XREF Mechanism

The consolidation process for data sources enables you to take information from the various sources and consolidate it into a single entity. Information from two or three sources is incorporated in the data warehouse in order to create a new entity. The XREF mechanism enables you to give priorities to a specific source when the same entity is extracted from different sources. Additionally you can give priority to instances of the same source.

Set Consolidation Priorities

Working with Software as a Service (SaaS) Light XS: This feature is not supported.

You can change the specific consolidation priority at the entity level using an Excel spreadsheet. Each source has an Excel which contains a list of the entities that can be consolidated, which you can prioritize according to number, starting with 1. If you do not want an entity from a particular source to be consolidated, enter a priority of -1.

To change the entity priority:

1. Using Windows Explorer, navigate to **C:\<Installation Directory>\agora\ContentPacks\<name of CP>\ETL\flatfiles**. For XREF consolidation following deployment, navigate to **C:\<Installation**

Directory>\agora\DataWarehouse\ExternalSources.

- Open the specific consolidation file, for example: CONSOLIDATION_PRIORITIES_PPM.

	B2			
	A	B	C	D
1	DW_ID	PRIORITY		
2	ACTUALCOST	2		
3	EXCHANGE	2		
4	LOCATION	2		
5	ORG	2		
6	PERSON	2		
7	PLANNEDCOST	2		
8	PROJECT	2		
9				
10				
11				

- Enter the priority you want to assign to each entity (**DW_ID**).
- Save and close the file.

Note:

- Consolidation priorities for multiple instances of the same data source are given according to the order of deployment.
- If in the same instance several records have the same priority qualifier, there is consolidation between those entities (the process does not fail), and the latest priority is utilized.

To cancel consolidation of a specific entity:

- In the database, open [dwmetadata].[ConsolidationPriorities].
- Change the priority number to -1 for the specific entity.
- Save the changes.

Note: It is not permitted to manually change the -1 priority for OOTB entities that cannot be consolidated.

SA Password Change

The procedure for changing this password is complex, therefore it is recommended not to be done often.

To change the SA password

On BOE server:

1. Change the password in BOE ODBC connection to the new password and restart the BOE.
2. Perform the following only if you created your own universes and you are using your own connections (not one of the following: XS_APP_JDBC, XS_DWH_JDBC, ita_admin, ita_operations).
 - a. Import all of your universes into the BOE designer.
 - b. In the Tools menu, select **Connections**.
 - c. Change the SA password for all of your connections.
 - d. Save and export the Universes.
 - e. Make sure that Period_Universe appears under the XS_Studio folder.

On the DWH server:

1. Stop running Executive Scorecard.
2. Copy the run_postinstall.bat file from **\HPXS\installation\HPXS903\backup\agora\confwizard** to **\HPXS\agora\confwizard** and execute this file.
3. In the MNG DB page of the wizard, change the password for the SA user.
4. Before the final wizard step, select **Skip Data Warehouse configuration** and continue completing the post-install wizard.
5. Open the Data Warehouse UI, using the following url: **http://<DWH Server name (FQDN)/dwh**
6. Log in to the application using the same credentials you used to login to the XS application.
7. Navigate to **Admin > Data Warehouse Settings** and change the passwords for all SA users.
8. Restart the DWH server.
9. If you used the SA user as a BODS user (not recommended configuration), perform the following from the CMD dir **<HPXS\agora\DataWarehouse\bin>**:
 - a. dw_ds_import.bat -inputdir \tmp\datastores
 - b. dw_etl_update_containers.bat -topdir \tmp\datastores -upgrade
10. If you are not sure which user was used for BODS repository configurations, navigate to **Admin > Data Warehouse Settings** and check the **Repository Username** parameter in the SAP BusinessObjects Data Services for HP FPA area.

On the XS server:

1. Stop running Executive Scorecard.
2. Remove **biar XS_SP2.biar** from **\HPXS\agora\confwizard\conf\scripts** and renamed **XS_SP3.biar** to **XS_SP2.biar**.
3. Remove **dwh_target_sp2_views** from **\HPXS\agora\confwizard\conf\scripts\database\mssql** and rename **dwh_target_sp3_views** to **dwh_target_sp2_views**.
4. Copy the run_postinstall.bat file from

\HPXS\installation\HPXS903\backup\agora\confwizard to **\HPXS\agora\confwizard** and execute this file.

5. In the ManagementDatabase page of the wizard, change the password for the SA user.
6. In the Result Database page of the wizard, change the password for the SA user.

Make sure that you always connect to the existing DB when running configurations.

Troubleshooting

Cannot log in to Executive Scorecard:

Cause	View Details	Solution
Problem with Glassfish Web application server, or with the HP Analytic Web service.		<p>On the Executive Scorecard and Data Warehouse servers, do as follows:</p> <ol style="list-style-type: none">1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard.2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard.

In the Executive Scorecard application, you receive a 404 - File not Found error:

Cause	View Details	Solution
Problem with Glassfish Web application server, or with the HP Analytic Web service.		<p>On the Executive Scorecard and Data Warehouse servers, do as follows:</p> <ol style="list-style-type: none">1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard.2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard.

In the Executive Scorecard application, you receive a Service Temporarily Unavailable message:

Cause	View Details	Solution
Problem with Glassfish Web application server.		On the Executive Scorecard and Data Warehouse servers, do as follows:

Cause	View Details	Solution
		<ol style="list-style-type: none"> 1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard. 2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard.

The Executive Scorecard UI is working very slowly:

Cause	View Details	Solution
There might be an issue with the HP Analytic Web server.		<p>On the Executive Scorecard and Data Warehouse servers, do as follows:</p> <ol style="list-style-type: none"> 1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard. 2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard.

A KPI calculation starts successfully but you receive a `SharedUIException` error message. You may also see a JMS connection refused in the server log:

Cause	View Details	Solution
A problem with the HP Analytic MQ Broker service.	server.log	<p>On the Executive Scorecard and Data Warehouse servers, do as follows:</p> <ol style="list-style-type: none"> 1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard. 2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard.

You try to save an Admin tab setting, and you receive a `Shared.UIException` error message:

Cause	View Details	Solution
A problem with the HP Analytic MQ Broker service.		On the Executive Scorecard and Data Warehouse servers, do as follows:

Cause	View Details	Solution
		<ol style="list-style-type: none"> 1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard. 2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard.

In the Executive Scorecard application, BusinessObject reports are inaccessible, and you receive the Invalid Session. Please close your browser and log in again message:

Cause	View Details	Solution
The Tomcat process on an Non-IT Executive Scorecard version of SAP BusinessObjects Enterprise is inactive.		Restart Tomcat on the SAP BusinessObjects Enterprise server.

You receive an HTTP 403 error when opening the Studio, Explorer or Admin tabs of Executive scorecard, or you receive an incorrect credentials message when logging in to Executive Scorecard:

Note: You may also see a **Clear exception** message in the bsf log, or a **Clear** message in the log.

Cause	View Details	Solution
An issue with your connection to the RDBMS.		On the Executive Scorecard and Data Warehouse servers, do as follows: 1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard . 2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard .

You receive an incorrect credentials message when logging on to the HP IT Executive Scorecard application, or you receive an HTTP 403 error when opening the Studio in the HP IT Executive Scorecard application.

Note: You may also see a **Clear exception** message in the bsf log, or a **SocketTimeoutException : Read timed out message** in the server log.

Cause	View details	Solution
A communications failure to the SAP BusinessObjects server.	server.log	Ensure that the connection to the SAP BusinessObjects server is functioning.

You receive various connection failure messages in an existing HP IT Executive Scorecard session:

Cause	View Details	Solution
An issue with your connection to the RDBMS.		On the Executive Scorecard and Data Warehouse servers, do as follows: 1. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Disable HP Executive Scorecard . 2. On the Windows taskbar click Start > All Programs > HP Executive Scorecard > Administration > Enable HP Executive Scorecard .

Results are not updated when you calculate or recalculate a KPI:

Cause	View Details	Solution
The Web Intelligence service has stopped functioning correctly.	engine.log	<p>On the Executive Scorecard server, do as follows:</p> <ol style="list-style-type: none">1. Open the engine log.2. Look for a record that contains INFO - Finish Tracking. status: ERROR followed by INFO - Calculation process for <Context>: <Context> has been finished with ERROR.3. If you find the above records: <p>On the SAP BusinessObjects component server, stop and then start the Web Intelligence Service.</p>

Fully Qualified Domain:

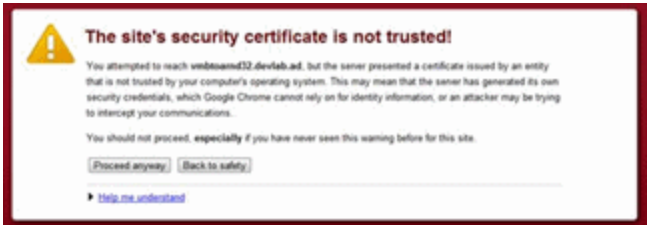
Cause	View Details	Solution
FQDN is required for installation. In POC servers, the server may not be part of a domain.		<p>Open the C:\Windows\System32\drivers\etc\hosts file and add a line as follows:</p> <p><SERVER_IP> <SERVER_NAME>.<CUSTOMER_NAME>.com</p> <p>Try to resolve the machine name by using the ping -a command in CMD to verify that you are getting the FQDN defined above.</p>

Studio crashes after exporting universes from SAP BusinessObjects Enterprise or SAP BusinessObjects Enterprise universes are not displayed in the Studio:

Cause	View Details	Solution
Studio crashes after exporting universes from BO or BO universes are not displayed in the Studio		<p>Load Meta Data:</p> <ol style="list-style-type: none">1. Login to SAP BusinessObjects Enterprise Central Management Server (CMC).2. On the server where SAP BusinessObjects Enterprise is installed (you have a typical installation it is the server where Executive Scorecard is installed), open the SAP BusinessObjects Enterprise management console using the following address: http://<server-name>:8080/CmcApp/

Cause	View Details	Solution
		<ol style="list-style-type: none"> Go to the servers in the Organize list. Click Service Categories > Web intelligence. Right-click the WebIntelligenceProcessingServer server and check if the value of the Maximum Documents per User parameter is 10. If it isn't reduce it to 10. Click Save & Close. Restart the Web Intelligence services. Wait a few minutes and run the "Load meta data" JMX. Run Jconsole from: C:\HPXS\lagora\jdk\bin\jconsole.exe. The New Connection screen opens. Select the Remote Process radio button. Enter localhost:10008 and click Connect. Select the MBeans tab. Expand com.hp.btoe.studio.jmx > MetaDataLoader, select LoadMetaData and click the loadMetaData() button in the right pane. Wait a few minutes until the message Load Meta Data successfully finished is issued. Login to Executive Scorecard and check the universes in XS studio.

Problem accessing XS application in Chrome browser when installed in distribution mode (XS and DWH on different servers):

Cause	View Details	Solution
Certificate issues that can be solved by configuring trusted certificates on your browsers.		<p>To fix the certificate:</p> <ol style="list-style-type: none"> Open Internet Explorer. Enter the XS URL (https). In the Security Certificate warning, click Continue to this website. A certificate error is displayed to

Cause	View Details	Solution
		<p>the right of the address bar.</p> <ol style="list-style-type: none">4. Click Certificate Error.5. Click View Certificate. A certificate dialog box opens.6. Click Install Certificate. The Certificate Import wizard opens.7. Click Next.8. Select Place certificates in the following store and click Browse.9. In the Select Certificate Store dialog box select Trusted Root Certification Authorities and click OK.10. A warning message opens, click Yes to install the certificate. You can now enter the XS application in Chrome without a certificate error message. <p>When accessing ABC Management or Data Source Management UI, an Error 510 (Insecure Response) is displayed.</p> <p>This occurs because the UI pages require access to the DWH application.</p> <p>In order to resolve this issue, add the DWH server</p>

Cause	View Details	Solution
		<p>certificate by performing the same process for the DWH server URL.</p> <p>After adding the DWH server certificate, you can access the ABC Management or Data Source Management UI (in Chrome) without any errors.</p>

