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Installation Guide for SAP Strategy Management 10.1

THE BEST RUN SAP

Content

1 Document History

The following table provides an overview of important changes made in this document:

Date	Revision
October 31, 2018	• Updated references to Microsoft Internet Explorer from version 9 to 11. • Removed content about deploying and undeploying the POASBC component, as this is no longer necessary. • Removed the topic "Troubleshooting an Incorrect Deployment" from the section *Installation*. • Added the Java system property `EnableEAMobile` to the table in topic Configuring the Application Properties [page 44]. • Updated the URLs for the SAP Help Portal and the Support Center throughout the guide.
November 23, 2015	Minor change to the topic Creating a Strategy Group for Users and System Groups [page 51].
November 9, 2015	• Modified the topic Application Component Requirements [page 11] for using HANA as the system database. • In the topic Creating a Link ID for Certain Implementations [page 30], added references to HANA. In the topic Setting Up Client Access to the SAP NetWeaver System Database [page 64], added information about HANA.
July, 17 2015	Added the topic Setting Up a Model Connection for BI Connector Administrator (BICA) [page 57] in the section "Post-Installation Steps for the Applications".

Date	Revision
January 1, 2015	• Added that software component POASBC-BUINW is necessary only for versions of SAP Strategy Management earlier than 10.1 SP6 in the topic About This Document [page 7], in the Process section in Installation [page 18], in the note in the topic "Deploying the POASBC Component", and in the topic "Troubleshooting an Incorrect Deployment". • Changed "NW 730 SP1 Java" to "NW 730 SP1 Java or higher" throughout the document. • Added SSM_ReadOnlyScorecardLibrary to the table in Actions for Roles [page 42]. • Added DisableExcelDownloadEA to the tables in Configuring the Application Properties [page 44] and Strategy Management Java System Properties in SAP NetWeaver [page 80].
October 23, 2014	• In the topic Setting Up Client Access to the SAP NetWeaver System Database [page 64], added information about using Sybase ASE as the system database and a note about running Application server on a Linux/UNIX server. • In the section "Requirements for Application Server Installed on a Microsoft Windows Server" within the topic Application Server Requirements [page 12], added information about setting the system locale of the Windows server to the language that will be used for dimension and measure names in your Application Server model.
June 5, 2014	Removed a reference to SAP BusinessObjects 4.0 in the topic Application Component Requirements [page 11].
December 20, 2013	Modified the topic Application Component Requirements [page 11] to include Sybase ASE requirements when using it and the Entry and Approval application or the Model Designer application; modified the topic Creating a Link ID for Certain Implementations [page 30] to include Sybase ASE.
October 1, 2013	Initial version

2 Introduction

2.1 Introduction

SAP Strategy Management is a comprehensive operational performance management software framework. Use it to create strategic goals, cascade them throughout the organization, and develop and execute strategic initiatives required to achieve the goals, and monitor goals as needed. You can track and manage key performance indicators to measure the organization's performance toward achieving its goals.

The strategy management application includes tabs for strategy and planning; initiative management and prioritization; and scorecards. You can also create reports, dashboards, and briefing books.

2.2 About This Document

Use

This guide contains steps for system administrators and technical consultants to plan, prepare, and install the following strategy management components.

- **Application Server**, which stores the quantitative data for the scorecard, dashboard, and reports. Application Server is a highly scalable, time-intelligent multidimensional OLAP engine. Application Server typically operates in a multidimensional mode (MOLAP), but can also operate in a Relational OLAP (ROLAP) or Hybrid OLAP (HOLAP) mode as needed to satisfy the data requirements of the system.
- **Interactive Publisher** is a Java-based component that provides connection pool, caching, and load balancing management for the Application Server component. These services are provided for the strategy management application business logic. The basic flow of the application is based on a model-view-controller architecture common to most standard Web applications.
- **Software Component Archive (SCA)** contains the database/dictionary for the SAP NetWeaver System database. It also contains the Web-based strategy management applications and is deployed on SAP NetWeaver.
  The `SCA` is made up of `SDAs` and one of these is a `strategymanagementdic SDA`, which contains all the `CPMS_ tables` and table definitions. They have no data in them until you import `bootstrap.zip` or `import.zip`. The `SDA` contains middle tier logic required by the applications.

Constraints

This guide does not state the supported versions of databases, operating systems, and platforms. For this information, see the *Product Availability Matrix (PAM)* at http://support.sap.com/pam.

This guide does not explain how to do the following:

- Install or configure Excel Add-In. For information about this installation and configuration, see the *Installation Guide for SAP Strategy Management Excel Add-In* .
- Configure the strategy management application to use the External Data Loader. For information, see the *External Data Loader User's Guide*.
- Configure the strategy management application to use Model Designer. For information, see the *Model Designer User's Guide*.

These guides are on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

2.3 Before You Start

2.3.1 Introduction

Before you start, you should review the following information:

- SAP Notes for the Installation [page 8]
- Information Available on the SAP Help Portal [page 8]
- Naming Conventions [page 9]

2.3.2 SAP Notes for the Installation

You must read the following SAP Notes before you start the installation. These SAP Notes contain the most recent information on the installation, as well as corrections to the installation documentation.

Make sure that you have the up-to-date version of each SAP Note, which you can find on SAP Service Marketplace at http://service.sap.com/notes.

SAP Note Number	Title
1905391	Central Note: SAP Strategy Management 10.1
1911198	Release Restrictions Note: SAP Strategy Management 10.1

2.3.3 Information Available on the SAP Help Portal

Information about the following areas is available on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

Description	Title
Steps to implement the strategy management applications and configure the integrated systems	*Configuration Guide*
Steps for users to configure their browsers to run the strategy management application. Performed after the system has been configured on the server.	*Startup Requirements* topic in the SAP application help
Steps for the Excel Add-In installation	*Installation Guide for Excel Client Add-In*
Steps to configure and use External Data Loader	*External Data Loader User's Guide*
Interactive Publisher operations Application Component operations	*Interactive Publisher and Application Components Administrator's Guide*
Application Server operations	*Application Server Administrator's Guide*
Steps to upgrade SAP Strategy Management to the latest version	• *Server Upgrade Guide - Upgrading within the 10.1 Series* • *Server Upgrade Guide - Upgrading from the 10 Series to 10.1* • *Server Upgrade Guide - Upgrading from the 7.5 Series to 10.1*
Master Guide	*Master Guide*
Security	*Security Guide*

2.3.4 Naming Conventions

In this documentation, the following naming conventions apply:

Variables	Description
`<nw_server>:<port>`	Server name or IP address and port where SAP NetWeaver is installed and strategy management application components are deployed

3 Planning

The strategy management installation has some considerations about where to install certain components and which components to install first.

Part of the installation occurs on server machines and part occurs on client machines.

Prerequisites

The following installations must occur before installing the strategy management components:

- SAP NetWeaver installation, which requires SAP Solution Manager
- Other SAP systems
  For information, see Application Component Requirements [page 11].

For information about how these SAP systems are integrated with the strategy management application, see the *Master Guide for SAP Strategy Management* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

System Landscape Considerations

When planning the strategy management installation, you must follow certain guidelines for choosing the servers on which to install the server components. For information, see the *Master Guide for SAP Strategy Management* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT. Then choose *System Landscape*.

Do the following:

1. Determine the software components and supporting platform versions that are needed to run the application.
2. Identify roles and their activities that are assigned to application users.

The application can be installed on SAP NetWeaver AS Java 7.30 SP01 min. You can decide which capabilities you want to configure.

4 Preparation

4.1 System Requirements

4.1.1 Introduction

For information about supported servers and platforms and versions, see the Product Availability Matrix (PAM) at http://support.sap.com/pam. Search on *Strategy Management*.

Contact your strategy management representative for specific machine size, disk space, and memory requirements.

4.1.2 Application Component Requirements

The Application Components consist of a deployed Software Component Archive (SCA) on SAP NetWeaver.

To run Applications Components as a deployed SCA file, you need the following SAP systems installed:

- SAP NetWeaver AS Java is installed and running on a Windows or Linux/UNIX server supported by SAP Strategy Management.
  SAP NetWeaver is used to configure the properties of Application Components; it contains traces and logs for Application Components and serves as a Web server. It is also be used to maintain users.
  As part of the SAP NetWeaver installation, SAP Scheduler is installed. SAP Scheduler is used for scheduling alert notifications in the administration application and for viewing schedule task details and excluding a task from execution.
  The SAP NetWeaver AS Java installation requires an SAP Solution Manager key. For more information, see http://support.sap.com/solutionmanager.
- If you want to look at the tables in the SAP NetWeaver System database where strategy management application data is stored, you need a tool for client access to the system database. For example, if you want to look at the tables in a MaxDB database, you need MaxDB Database Studio installed on your client with access to the SAP NetWeaver server.
- If you are using the Entry and Approval application or the Model Designer application, or you are integrating SAP Business Planning and Consolidation data into the application, one of the following is required:
  - If using MaxDB as the system database to store strategy management application data, the 32-bit ODBC drivers for MaxDB are installed on the Windows server where Application server is installed.
    If using MaxDB on a 64–bit system, then you must install the MaxDB Application Runtime Package to obtain the required 32–bit ODBC drivers. The 32-bit ODBC drivers are not included in version 7.7 and higher of the 64-bit MaxDB installs. To obtain the required 32-bit ODBC drivers, download and install the "MAXDB Application Runtime Package" following the instructions in SAP Note 1575053.
  - If you are using SQL Server as your system database, the 32-bit ODBC drivers for SQL Server are installed on the Windows server where Application server is installed.

- If you are using Oracle as your system database, the 32-bit client software for Oracle is installed on the Windows server where Application server is installed.
  For notes related to installation of Oracle with strategy management, see SAP Note 1386130.
- If you are using IBM DB2 as your system database, the 32-bit client software for IBM DB2 is installed on the Windows server where Application server is installed.
- If using Sybase ASE as the system database to store strategy management application data, the 32–bit ODBC drivers for Sybase ASE are installed on the Windows server where Application server is installed. To obtain the required drivers, download the Sybase ASE 15.7 Refresh PC-Client from the Service Marketplace and install the ASE ODBC Driver.
- If using HANA as the system database to store strategy management application data, the 32-bit ODBC drivers for HANA are installed on the Windows server where Application server is installed.

For information about how these SAP systems and other optional SAP systems are integrated with the strategy management application, see the *Master Guide for SAP Strategy Management* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

4.1.3 Application Server Requirements

Application Server is a 32–bit Windows application.

Requirements for Application Server Installed on a Microsoft Windows Server

To install and run Application Server on a Microsoft Windows server, you need the following:

- One or more Gigabytes of disk space depending on the size and number of dimensional models
- A network card supported by your Microsoft Windows server
- TCP/IP protocol transport installed
- A supported Microsoft Windows server. For more information, see the *Product Availability Matrix* at http://support.sap.com/pam. Search on *Strategy Management*. In the Strategy Management PAM, choose *Operating Systems*, and then choose *Application Server*.
- Oracle, SQL Server, or IBM DB2 Universal Database Workgroup database service. One of these database systems is required if reading in data from a relational database management system. If you are reading in data from text files, no database systems are required.
- The system locale of the Windows server (Language for non-Unicode programs) should be set to the language that will be used for dimension and measure names in your Application Server model. If this does not match, Cube Builder and Entry and Approval may not function properly. The system locale is defined in the *Region and Language* option of Control Panel.

Requirements for Application Server Installed on a Linux/UNIX Server

To install and run Application Server on Linux/UNIX, you need the following:

- One or more Gigabytes of disk space depending on the size and number of dimensional models
- A supported Linux/UNIX servers. For more information, see the Product Availability Matrix at http://support.sap.com/pam. Search on *Strategy Management*. In the Strategy Management PAM, choose *Operating Systems*, and then choose *Application Server*.
- Oracle, SQL Server, or IBM DB2 Universal Database Workgroup database service. One of these database systems is required if reading in data from a relational database management system. If you are reading in data from text files, no database systems are required.

> **i** Note
>
> If you are connecting to Oracle from the Access LSLink subsystem of Application Server, you must have the Oracle client software installed on your machine. Contact your Oracle system administrator for details.

Requirements for Application Server Installed on a Microsoft Windows Client

To install and run Application Server on a Microsoft Windows client, you need a supported version of Microsoft Windows. For more information, see the *Product Availability Matrix* at http://support.sap.com/pam. Search on *Strategy Management*. In the Strategy Management PAM, choose *Operating Systems*, and then choose *Administrator Application*.

4.1.4 Additional Application Requirements

If you deploy the strategy management Software Component Archive (SCA) on a UNIX/Linux server, you must install the SAP Supporting Files on a Windows system to obtain additional files required by the strategy management application. These files must be copied from the Windows system to the UNIX/Linux server to complete the configuration.

If you deploy on a Windows server, you must install the SAP Supporting Files on a Windows server to obtain files required to complete the configuration.

Additional application requirements include the following:

- Microsoft Internet Explorer version 11 series
- Web connectivity to an intranet or the Internet
- If running on a Windows server, the OS drive must be running NTFS. To verify, right-click the *My Computer* icon and choose *Manage* to display the *Computer Management* window. Expand the *Storage* folder, and then click *Disk Management*. Your OS drive should show NTFS as its File System. If it is running FAT security, then you need to reformat that drive so that it is running NTFS.

4.2 Obtaining the Strategy Management Installations and Application Help Files

You must access the appropriate SAP Note for the release to learn how to download the installation files and application help files.

For information about obtaining the download for SAP Strategy Management 10.1, see SAP Notes for the Installation [page 8].

For information about obtaining the download for further support packages for a release, see the SAP Note for that support package.

4.3 Installed File Systems and Services

During the installation, you can accept the default destination directory or replace it with your own directory name instead.

Supporting Files

Supporting files are installed on a Windows system. You should know the Microsoft Windows environment you are working with and the target directory to install the supporting files. The recommended default directory is `\Program Files (x86)\SAP Strategy Management\InternetPub`.

This list shows the directories put down on the Microsoft Windows server during an installation of supporting files:

- `\Program Files (x86)\SAP Strategy Management\InternetPub\cache`
  This directory is initially empty.
- `\Program Files (x86)\SAP Strategy Management\InternetPub\conf`
  This directory contains `bootstrap.zip` and `import.zip`.
- `\Program Files (x86)\SAP Strategy Management\InternetPub\log`
  This directory is initially empty.
- `\Program Files (x86)\SAP Strategy Management\InternetPub\ODBOPprovider`
  This directory contains ODBO DLLs for use when integrating data from another SAP system with the strategy management application.

Application Server on a Microsoft Windows client or server

If you are installing Application Server on a Microsoft Windows server, you should know the Microsoft Windows environment you are working with and the target directory to install the Application Server components. The recommended default directory is `\Program Files (x86)\SAP Strategy Management \ApplicationServer`.

This list shows the directories put down on the Microsoft Windows server or Microsoft Windows client machine during an Application Server Microsoft Windows installation:

- `\Program Files (x86)\SAP Strategy Management\ApplicationServer\data`
- `\Program Files (x86)\SAP Strategy Management\ApplicationServer\data\NON-UTF8`
- `\Program Files (x86)\SAP Strategy Management\ApplicationServer\home`
- `\Program Files (x86)\SAP Strategy Management\InternetPub\procs`

Service: SAP SM Listener

Status: Started

Application Server on a Linux/UNIX server

If you are installing Application Server on a Linux/UNIX server, you should know the Linux/UNIX environment you are working with and the target directory to install the Application Server components.

The recommended default directory referenced in this documentation is `/opt/sap/sm`.

The system creates a directory structure in the installation location where you extract the .SAR file and run the installation script. The following shows the directories created for Linux/UNIX:

- `|---lss/procs/`
- `|---lss/procs/ora_procs`
- `|---lss/procs/db2_procs`
- `|---lss/workfile/`

Service: SAP SM Listener daemon

Status: Not Started

5 Installation

5.1 Introduction

This section describes typical or default directory names in the examples and steps. You can use your own directory names instead.

Prerequisites

You have downloaded the SAP Strategy Management software components as described in the central SAP note for this release.

You have downloaded and extracted the application help files as described in the central SAP note for for this release.

For more information, see SAP Notes for the Installation [page 8].

Process

1. Deploy the Software Component Archive where SAP NetWeaver is located.
   Who should read: Required steps for all implementations.
   For information, see Deploying the Software Component Archive [page 17]
2. Install Application Server on a Microsoft Windows server or Linux/UNIX server.
   Who should read: Required steps for all implementations.
   For more information, see .
3. Install Application Server on a Microsoft Windows client.
   Who should read: Required step if you installed Application Server on a Linux/UNIX server. This step is optional if you installed Application Server on a Windows server.
   For information about whether you should install Application Server on a Windows client, see the Master Guide for SAP Strategy Management on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT. Then choose *System Landscape*.

5.2 Deploying the Software Component Archive

Use

Use the Software Upload Manager (SUM) tool to deploy the SCA. JSPM is part of every SAP NetWeaver installation with usage types based on AS Java.

Prerequisites

You have installed NW 730 SP1 Java or higher.

Procedure

1. Deploy the Strategy Management Software Component Archive (`SCA`) file, which you downloaded to the SAP NetWeaver server.
2. Restart SAP NetWeaver.

5.3 Installing Application Server and Supporting Files

5.3.1 Introduction

You can install Application Server software on a Microsoft Windows server or on a Linux/UNIX server. If you are installing on a Linux/UNIX server, you must also install Application Server on a Microsoft Windows client.

You must also install certain supporting files at the same time you install Application Server. For sites installing on a Windows server, you install the supporting files when you install Application Server on the Windows server. For sites installing on a Linux/UNIX server, you install the supporting files when you install Application Server on the Windows client.

5.3.2 Installing Application Server on a Microsoft Windows Server

Use

You can install Application Server on a Microsoft Windows server and install the required supporting files at the same time. The supporting files required for the strategy management application are `bootstrap.zip` and `import.zip`.

Prerequisites

You are logged into the Microsoft Windows server with a user and password that has administrative privileges on the server.

Procedure

1. From the installation location, run the `xSSMSrv<sp>_<patch>-<smp-id>.exe` file.
2. In the first screen, click *Next*.
3. In the next screen, select *Strategy Management Server Components* and click *Next*.
4. In the path screen, click *Next* to accept the default path. To browse for a different location, click *Browse*. The default path is `C:\Program Files (x86)\SAP Strategy Management`.
   For information about supported Windows servers, see the *Product Availability Matrix* (PAM) http://support.sap.com/pam. In the Strategy Management PAM, choose *Operating Systems*, and then choose *Application Server*.
5. In the final screen, click *Done*.
6. Copy either the `import.zip` file or the `bootstrap.zip` file from the `\SAP Strategy Management \InternetPub\conf` directory to the `\server0\temp\SSM\import` directory on the SAP NetWeaver server. In a default installation, the full path is `\usr\sap\SID\J00\j2ee\cluster\server0\temp\SSM \import`.
7. If you installed Application Server on a Windows server 2008 R2 system, modify the security settings of the `\data` and `\home` directories to allow *Users* full control.
8. If your NetWeaver system database is something other than Max DB, copy the procedures from the corresponding `<sysdb>_procs` directory to the `procs` directory. See the topic “Copying Files From the \Procs Directory” in the *Server Upgrade Guide - Upgrading from the 10 Series to 10.1* for details.

> **i Note**
>
> To cancel the installation, click *Cancel* in any wizard screen.

The *SAP SM Listener* service is started by default. This service listens for WINSOCK TCP/IP Application Server client connections. The service validates the user's rights to log on to the server and start the data communication process.

5.3.3 Installing Application Server on a Linux/UNIX Server

Use

You can install Application Server on a Linux/UNIX server. The client machines running Application Server use WINSOCK support for client/server communications to Linux/UNIX servers.

After you install Application Server on a UNIX/Linux server, you must install Application Server and supporting files on a Windows client. For more information, see Installing Application Server and Supporting Files [page 17].

Prerequisites

You are logged in as root on the Linux/UNIX server.

You have downloaded the `SAPCAR` archive file and the `<sarfilename>.SAR` file from SAP Service Marketplace.

Procedure

1. Create a directory to install Application Server.
2. From the location where you downloaded the .SAR file, use the following commands to transfer the .SAR file to the desired installation directory. Case is significant on UNIX so you need to match the exact case of the filename.
   `cp <sarfilename>.SAR /<installdir>`
   If reading the installation location from a Microsoft Windows client, use FTP to transfer the .SAR to the `/<installdir>` directory on your Linux/UNIX machine. Be sure to transfer the file as a binary file.
3. Extract the file using the following command. Make sure you enter the exact case of the filename.
   `SAPCAR -xvf <sarfilename>.SAR`
4. Enter the following command to perform the installation.
   `sh install.sh`
5. Answer all the prompts about your Linux/UNIX environment to set up any environment variables required by Application Server.
6. At the prompt to choose the target environment, enter the number that represents your platform of Linux or UNIX.
7. If your NetWeaver system database is something other than Max DB, copy the procedures from the corresponding `<sysdb>_procs` directory to the `procs` directory. See the topic “Copying Files From the \Procs Directory” in the *Server Upgrade Guide - Upgrading from the 10 Series to 10.1* for details.

> **i Note**
>
> At any time while you are answering the prompts, you can type **Q** to quit and cancel the installation.

The system creates a directory structure under the `/<installdir>` directory. For the complete directory structure, see Installed File Systems and Services [page 14].

5.3.4 Installing Application Server on a Microsoft Windows Client

Use

You can install Application Server on a Windows client. If you install Application Server on a Linux/UNIX server, you must also install Application Server and supporting files on a Windows client machine for the following reasons:

- You use the Windows client machine to connect to the back end.
  For information about supported Windows clients, see the *Product Availability Matrix* (PAM) at http://support.sap.com/pam. In the Strategy Management PAM, choose *Operating Systems*, and then choose *Administrator Application*.
- If you read in data from a relational database system, you use Application Server on the Windows client to create a Link ID and copy it to the Linux/UNIX server. (Application Server on Linux/UNIX has no interface to create a Link ID.)
- You need to install the supporting files that are required for the strategy management application. The `bootstrap.zip` and `import.zip` supporting files are provided in the Application Server Windows installation.

For more information about the system landscape, see the Master Guide on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT. Then choose *System Landscape*.

Prerequisites

You have installed Application Server on a Windows server or Linux/UNIX server.

Procedure

1. Copy the file `xSSMSrv<sp>_<patch>-<smp-id>.exe` from the download location on the Microsoft Windows server to the Microsoft Windows client.
2. From the installation location, run the `xSSMSrv<sp>_<patch>-<smp-id>.exe` file.
3. In the first screen, click *Next*.
4. In the next screen, select *Strategy Management Server Components* and click *Next*.
5. In the path screen, click *Next* to accept the default path of `C:\Program Files (x86)\SAP Strategy Management`. Or, click *Browse* to browse for a location. Then click *Next*.
6. In the final screen, click *Done*.
7. (For Linux/UNIX installations) Move the `import.zip` file or `bootstrap.zip` file from the `\SAP Strategy Management\InternetPub\conf` directory on the server where you installed the supporting files to the `\server0\temp\SSM\import` directory on the SAP NetWeaver server. In a default installation, the full path is `\usr\sap\<SID>\J00\j2ee\cluster\server0\temp\SSM\import`.

> **Note**
>
> Move `import.zip` if you want the demo/sample data to be available. Otherwise, move `bootstrap.zip` instead.

8. If you installed Application Server on a Windows server 2008 R2 system, modify the security settings of the `/data` and `/home` directories to allow *Users* full control.

6 Configuration Roadmap

After you install the strategy management components, you must do the following:

1. Perform post-Installation steps for Application Server.
   Who should read: Required steps for all sites.
   For information, see Post-Installation Steps for Application Server [page 23].
2. Add users to SAP NetWeaver UME, identify their permissions in the user management system, and create roles that define their permissions and accessibility in the applications. You also set application properties in SAP NetWeaver to configure the applications.
   For information, see Setting Up Users, Roles, and Application Properties [page 38].
3. Perform post-installation steps for the strategy management application.
   Who should read: Required steps for all sites.
   For information, see Post-Installation Steps for the Applications [page 53].
4. Certain implementations must set up client access to the SAP NetWeaver System database.
   Who should read: Required steps for sites using Entry and Approval or Model Designer. These steps are also required if you want to look at the strategy management tables in the SAP NetWeaver System database. These steps are also required if you are integrating SAP Planning and Consolidation data into the strategy management application.
   For information, see Setting Up Client Access to the SAP NetWeaver System Database [page 64].
5. (Optional) Customize your application and Application Server configurations as needed.
   Who should read: Optional steps for sites to change certain aspects of the applications.
   For information, see Custom Configurations [page 66].
6. (Optional) Configure the application to run in other languages as needed.
   Who should read: Optional steps for sites to change the application language.
   For information, see Configuring the System for Other Languages [page 71].
7. Configure the users' machines.
   Who should read: Required steps for application users. Any user wishing to access the administration application, the Entry and Approval application, or the strategy management application must follow the steps in the application help on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT. Choose *Startup Requirements*.
   For information, see Configurations for Application Users [page 76].

The strategy management applications are integrated with the following systems:

To configure and implement any of the following integrated systems, see the *Configuration Guide for SAP Strategy Management*:

- SAP NetWeaver BW Connector
- SAP Analysis, edition for OLAP
- SAP Crystal Reports
- Webl
- SAP Crystal Dashboard Design
- SAP Planning and Consolidation

The *Configuration Guide for SAP Strategy Management* also contains information about troubleshooting any Application Server startup issues and explains how to begin your strategy management implementation. For more information, see the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

7 Post-Installation Steps for Application Server

7.1 Introduction

This section covers all the post-installation steps you need to perform to start running Application Server.

7.2 Specifying a Port

The TCP/IP port number is a unique number associated with each service type in a TCP/IP network. When you install Application Server, it is configured to use a default port number of 8325. If no other service uses port 8325, you do not need to change the port number. Skip the rest of this section and go to the next section about configuring Application Server.

If port 8325 is used for another service type, you have to change the client and server port numbers to the same free port number between 1024 and 5000. Edit the following line in the `/etc/services` file to change the port number:

```
lsserver 8325/tcp LSSERVER #Pilot Application Server Client
```

> **i** Note
>
> If you are installing Application Server on a Microsoft Windows client and you cannot use the default value, you must edit the `lsserver.ini` file to specify the port.
>
> For more information, see the SAP Library application help on the SAP Help Portal at http://help.sap.com/bosm101. Choose *Startup Requirements* > *Configuring Application Server on a Windows Client*.

7.3 Starting Application Server on a UNIX Server

7.3.1 Introduction

This section covers all the post-installation steps you need to perform to start running Application Server on Linux/UNIX. The information in this section is intended for an initial setup. To learn more fully about system administration, see the *Administrator's Guide for SAP Strategy Management Application Server*.

7.3.2 Starting Listener Daemon for the First Time

Use

Follow these steps to start the Application Server TCP/IP Listener daemon, called `lsstld`. This program is a Linux/UNIX daemon, a process that runs continually without being connected to a terminal. In this case, `lsstld` is listening for Application Server TCP/IP connections on the specific port number (the default is 8325).

Once you are sure that the software is installed correctly, you can add the commands to your system's startup files so that the Application Server listener starts up automatically whenever the system is restarted. For information, see the *Application Server Administrator's Guide* available on the SAP Hel Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

Prerequisites

Application Server is installed on the Linux/UNIX server.

Procedure

1. Log on as root. You must log on as root because the listener process establishes sessions on behalf of the Linux/UNIX user accounts.
2. Go to the directory where the Application Server components are installed. For example:
   ```
   cd /<installdir>
   ```
3. Run the shell script to start the Listener:
   ```
   sh tldgo
   ```

> **i Note**
>
> If Application Server detects that the Pluggable Authentification Module (PAM) is installed, then `lsstld` uses PAM by default for shadow password authentication and MD5 encryption on all Linux/UNIX boxes. `lsstld` uses the `passwd` PAM service for authentication.
>
> If you want to ignore PAM, you can edit the `tldgo` shell script, which exists in the `lss` directory, and specify the `NOPAM` keyword as shown below:
>
> `/<path>/lss/lsstld NOPAM &`
>
> Use the `NOPAM` keyword if you get a PAM authentication failure message so that you can turn off PAM authentication.
>
> For more information, see the Security Guide on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

Result

When `lsstld` has initialized, it creates a log file called `LSSTLD.LOG` in the current directory, and displays the following messages:

```
**********************************************************************
lsstld: daemon initialization started at Wed May 31 08:59:15 2011
lsstld: daemon initialization completed at Wed May 31 08:59:15 2011
**********************************************************************
```

7.3.3 Starting (Executing) Application Server in a Native UNIX Session

Use

Before beginning client/server testing, you should ensure that the product functions correctly in native mode.

Prerequisites

The Application Server Listener daemon is started.

Procedure

Run either the `runlss.csh` or `runlss.ksh` scripts from within a telnet session to make sure the product functions as expected. In a telnet session, type:

```
csh ./runlss.csh
```

7.3.4 Starting Application Server on a Microsoft Windows Server

Use

You must verify that your connections and processes are running properly.

Prerequisites

Application Server is installed on a Microsoft Windows server.

Procedure

1. On the Microsoft Windows server, choose *Start* on your Microsoft Windows Desktop, and then choose ▶ *Program* ▶ *SAP BusinessObjects* ▶ *Strategy Management* ▶ *Application Server Administrator* ◀. A *Logon* dialog box appears.
2. In the *User name* text box, type the following user name, which is created at installation:
   admin
3. Do not enter any values in the *Password* and *Server* boxes. The admin user does not have a password. The server is a local configuration so you do not need to specify a server here. Click *OK*.
4. If you encounter the following error message twice, it indicates that the Microsoft Windows machine does not have a component of a Microsoft redistributable (`MSFlxgrd.ocx`).
   `An unsupported operation was attempted`
   Do one of the following if you encounter this error message:
   - Disable the *DataView* tab on the Application Server system. Assuming you have started the Application Server Administrator as described above, click *OK* on the initial error messages. From the ▶ *View* ▶ *Options* ◀ dialog, select the *DataView* tab on the far right. Deselect the option *Show DataView at startup*. The next time you start the Application Server Administrator, the *DataView* tab is unavailable.
   - Download the Microsoft Flex Grid Control by entering this link in a browser. When prompted, save the file locally.
     http://activex.microsoft.com/controls/vb6/MSFLXGRD.CAB
     Extract the files from the CAB and install it with the following command.
     RunDll32 advpack.dll,LaunchINFSection <full path>\msflxgrd.inf,DefaultInstall

Result

The Application Server program window is displayed.

7.4 Starting Application Server on a Microsoft Windows Client

Use

You can start Application Server on a Microsoft Windows client to run client/server with another instance of Application Server installed on a Windows server or Linux/UNIX server.

For Linux/UNIX implementations, there is no facility for creating link IDs on Linux/UNIX. Instead, you must use Application Server on the Microsoft Windows client machine to create the required entries in lsdal.ini and move that file to Linux/UNIX.

Prerequisites

Application Server is installed on a Linux/UNIX server or Microsoft Windows server, and on a Microsoft Windows client machine.

You have completed the configuration of Application Server on the server system.

Procedure

1. Open the `Lsserver.ini` file in a text editor. It is located in the Microsoft Windows directory.
2. Change the `[localhost]` to the name or the IP of the system you are connecting to.
3. For the `username=pipadmin` entry, type the name of a user who has logon access to the system.
4. Leave the `password=?` entry empty or type a question mark (**`?`**). You are prompted for the password when you try to connect. The contents of the file should look as follows:
```
[<your system name or IP>]
tcp_protocol=winsock
username=<your user name>
password=?
PROTOCOL=TCP
SERVICE=PILOT
CURSOR=LSSCMPTR
```
5. Verify that the Application Server Administrator software has been correctly installed on the Microsoft Windows client machine. Choose *Start* > *Program* > *SAP BusinessObjects* > *Strategy Management* > *Application Server Administrator*. A *Logon* dialog box appears.
6. In the *User name* text box, type the following user name, which is created at installation:
`admin`
7. Do not enter any values in the *Password* box because this Application Server user has no password by default.
8. From the *Server* dropdown list, select the name you specified for `[localhost]`. Click *OK*.
9. When prompted, enter the password for the system user you added to the `lsserver.ini` file.

> **i Note**
>
> Later, you can create a remote server connection that stores your password in encrypted format in `lsserver.ini` rather than display a prompt for your password every time. To learn about this, see the online Help in the Application Server Administrator program.

7.5 Link ID Creation

7.5.1 Introduction

If you intend to do any of the following, you need to create a Link ID to define a connection between Application Server and a database system:

- Read data from a relational database management system (RDBMS) into an Application Server dimensional model. If you intend to read data into Application Server from text files, you can skip this section.
- Using Entry and Approval, Model Designer, SAP Planning and Consolidation, or the SAP Risk Management interface. For information about creating a Link ID to use for these systems, see Creating a Link ID for Certain Implementations [page 30].
- Use SAP NetWeaver BW Connector. For information about creating a Link ID to use for SAP NetWeaver BW Connector, see the *Configuration Guide* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT. Choose *Creating a Link ID for SAP NetWeaver BW Connector*.

Link IDs provide access to databases in a Microsoft Windows environment through Open Database Connectivity (ODBC). ODBC drivers are available from Microsoft and various third-party vendors. Consult these vendors for purchase, system requirements, installation, and configuration information.

You create Link IDs in the Application Server Administrator program, which runs on Microsoft Windows.

For information about creating a Link ID when Application Server is installed and running on a Microsoft Windows server, see Creating a Link ID when Application Server is installed on a Microsoft Windows Server [page 28].

If Application Server is installed and running on a Linux/UNIX server, you must install Application Server on a Windows client, create a Link ID on the Windows client, and then copy the Link ID to the Linux/UNIX server. For information, see Starting Application Server on a Microsoft Windows Client [page 26] and Creating a Link ID for Linux/UNIX [page 29].

7.5.2 Creating a Link ID for Application Server on a Windows Server

Use

The information in this section is intended for an initial setup. To learn more fully about system administration, see the *Administrator's Guide for SAP Strategy Management Application Server* on the SAP Help Portal at http://help.sap.com/bosm101.

Procedure

1. Start the Application Server program on the Microsoft Windows server.
2. Choose *File* > *New* > *Link ID* to display the *Create Link ID* dialog box.
3. Select the appropriate database type and click *OK*.
4. Type a name for the link ID and click *Test*. If you are prompted for more information, specify the necessary information.
   If the client software needed to connect to your database is installed on your Microsoft Windows system, you should see the message `Connection successful`. If the client connectivity software for the database is not installed, you can create and save the Link ID without testing it.
5. Click *OK* when you are finished.

7.5.3 Creating a Link ID for Linux/UNIX

Use

You create link IDs in Application Server on the Microsoft Windows client machine to create the required entries in `lsdal.ini` and move that file to Linux/UNIX.

Prerequisites

You have installed Application Server on a Microsoft Windows client machine.

You have already set environment variables for Oracle or DB2.

Procedure

1. On the Microsoft Windows client machine where you installed Application Server, start the Application Server program.
   For information, see Starting Application Server on a Microsoft Windows Client [page 26].
2. Choose *File* > *New* > *Link ID*. The *Create New Link ID* dialog box appears.
3. Select the appropriate database type and click *OK*.
4. Type a name for the Link ID and click *Test*. If you are prompted for more information, specify the necessary information.
5. Click *OK* when you are finished. If the client software necessary to connect to your database is installed on your Microsoft Windows system, you should see the message `Connection successful`. If the client connectivity software for the database is not installed, you can create and save the Link ID without testing it.

6. Transfer the `lsdal.ini` file from the Microsoft Windows client directory to the UNIX server directory where you installed Application Server. Ensure the file name `lsdal.ini` is in lower case on the Linux/UNIX system.

> **i Note**
>
> If you are creating an Oracle link ID and the Oracle database resides on the same Linux/UNIX system as Application Server, you can leave the `Server` parameter blank. You only need to supply a `Server` parameter if Oracle does not reside on the same system as Application Server. The `Library:` parameter is not used for Linux/UNIX. You do not need to change this value. See the online Help for additional information.

7.5.4 Creating a Link ID for Certain Implementations

Use

In Application Server Administrator, you must create a special Link ID if you use Entry and Approval or Model Designer, or you integrate SAP Business Planning and Consolidation data in the application. You use the same Link ID for any of these connections.

Prerequisites

You have Application Server installed in one of these configurations:

- Application Server is installed on a Windows server
- Application Server is installed on a Linux/UNIX server with a client copy of Application Server installed on a Windows machine

The software required for client access to the SAP NetWeaver System database is installed and configured on the server where Application Server is installed. For information, see Setting Up Client Access to the SAP NetWeaver System Database [page 64].

In the steps below, when the term **Microsoft Windows machine** is used, it means either Microsoft Windows server or Microsoft Windows client, depending on your implementation noted above.

If your SAP NetWeaver System database is either MaxDB, SQL Server, Sybase ASE, or HANA, you must create an ODBC System DSN to connect to using your Link ID.

An ODBC connection is not required for Oracle or IBM DB2 because Application Server has internal connections to these databases through Oracle (OCI) and DB2 (CLI). If you are using Oracle or IBM DB2, you can skip this step.

> **i Note**
>
> If Application Server is installed on a 64-bit Microsoft Windows server, you must create the System DSN with the 32-bit version of the ODBC Administrator located in the `\Windows\SysWoW64` folder. Details on this are available in the Microsoft Knowledge Base article 942976.

Procedure

1. On the Microsoft Windows machine where Application Server is installed, run the ODBC Administrator.
2. Click the *System DSN* tab and click *Add* to create a connection to your MaxDB, SQL Server, Sybase ASE, or HANA database.
   Note the following information:
   - For MaxDB, use the *MaxDB (Unicode)* driver. On some systems this may be listed as *SQLSTUDIOODBC*.
   - For SQL Server, the SQL Server authentication method must be specified in the DSN. The specified user needs to match the schema/owner of the `CPMS_` tables you want to access in the SAP NetWeaver System database.
   - For Sybase ASE, the Login ID must be the owner of the CPMS_ tables. On the Connection page you must check the *Encrypt Password* option.
3. Start the Application Server Administrator program on the Microsoft Windows machine.
4. Choose *File* > *New* > *Link ID* to display the *Create Link ID* dialog box.
5. Do one of the following:
   - If you are using the ODBC drivers for MaxDB, SQL Server, Sybase ASE, or HANA, select the ODBC System Data Source Name you created above as your database type and click *OK*.
   - If you are using the Oracle OCI connection, select *Oracle (OCI)* as the database type.
   - If you are connecting to DB2, use the *DB2 (CLI)* entry to create your Link ID.
6. In the *Link ID Properties* dialog box, type the name **`ssm_cb_ea`**.
   If you are using the Oracle (OCI) or DB2 (CLI) connections, specify the additional information needed to connect to the database server. The username and password must be the owner of the `CPMS_` tables.
7. Click *Test*.
   If you are using an ODBC connection you are prompted for more information. Specify the username and password for the owner of the `CPMS_` tables.
8. Click *OK* when you are finished.
   If the client software needed to connect to your database is installed properly on your Microsoft Windows system, you should see the message `Connection successful`.
   If the connection is unsuccessful, verify the values entered for the connection and define the Link ID again. If the client connectivity software for the database is not installed, you can create and save the Link ID without testing it.
9. If you intend to run Application Server on Linux/UNIX, transfer the *lsdal.ini* file from the Microsoft Windows client directory to the UNIX server directory where you installed Application Server. Ensure the file name *lsdal.ini* is in lower case on the Linux/UNIX system.

For information about creating a Link ID, see *Application Server Help* > *Application Server* > *Working with Link IDs* in the online Help in the Application Server Administrator.

> **i Note**
>
> If running Application Server on IBM AIX and using DB2 as the System database, you need to modify `runlss.ksh` and `lsstpc.sh` to include the line `/db2/db2qd1/sqllib/db2profile` to make the Link ID valid.
>
> For more information, see Adding Environment Variables to Application Server Scripts-DB2 [page 32].

7.6 Environment Variable Setting

7.6.1 Introduction

This section explains how to set environment variables in various environments.

You set environment variables in the following Application Server shell scripts:

- `lsstcp.sh` — the SAP SM Listener Daemon (lsstld) runs `lsstcp.sh` to launch Application Server on Linux/UNIX in a client/server configuration.
- One of the following:
  - `runlss.ksh` — The administrator of Application Server runs this script to launch Application Server on Linux/UNIX natively and issue Application Server commands from a telnet window.
    You maintain this script if running in a korn shell. It is good practice to maintain this script exactly the way you maintain `lsstcp.sh`.
  - `runlss.csh` — The administrator of Application Server runs this script to launch Application Server on Linux/UNIX natively and issue Application Server commands from a telnet window.
    You maintain this script if running in a C shell. It is good practice to maintain this script exactly the way you maintain `lsstcp.sh`.

7.6.2 Adding Environment Variables to Application Server Scripts-DB2

Use

You set up the DB2 environment in the `lsstcp.sh` Application Server script and either `runlss.csh` or `runlss.ksh`.

Procedure

1. Open the `lsstcp.sh` script in an editor and do the following:
   Find the lines:
   ```
   LSLINKINI=$LSSHOME/
   export LSLINKINI
   ```
   After the line above, add the following line, where `INSTHOME` is the home directory of the DB2 instance:
   ```
   . INSTHOME/sqllib/db2profile
   ```
2. Do one of the following depending on whether you are running Application Server natively in a korn shell or C shell:
   - If you are maintaining `runlss.ksh` to run Application Server natively in a korn shell, open the `runlss.ksh` script.
     Find the lines:
     ```
     LSLINKINI=$LSSHOME/
     ```

```
export LSLINKINI
```
After the line above, add the following line, where `INSTHOME` is the home directory of the DB2 instance:
```
. INSTHOME/sqllib/db2profile
```

- If you are maintaining `runlss.csh` to run Application Server natively in a C shell, open the `runlss.csh` script.
  Find the line:
  ```
  setenv LSLINKINI $LSSHOME/
  ```
  After the line above, add the following line, where `INSTHOME` is the home directory of the DB2 instance:
  ```
  source INSTHOME/sqllib/db2cshrc
  ```

7.6.3 Adding Environment Variables to Application Server Scripts-Oracle

Use

Application Server identifies all Oracle libraries installed on the machine without any source code incompatibilities. If Application Server is on a machine with Oracle 10g or 11i (and the required environment variables are set correctly), Application Server uses the right Oracle library.

Complete the following instructions to include the `ORACLE_HOME` and `ORACLE_SID` variables in the Application Server scripts `runlss.csh` or `runlss.ksh`, and `lsstcp.sh`. You must do this before you use Link to create Link IDs. These environment variables are required by Oracle.

> **i Note**
>
> The environment variable `ORACLE_SID` is required only if you are connecting locally, without the Server parameter specified.

Procedure

1. Open the `lsstcp.sh` script.
2. Find the lines:
   ```
   LSLINKINI=$LSSHOME/
   export LSLINKINI
   ```
3. After the line above, add the following lines, where `/usr/oracle` is the location of your `ORACLE_HOME` and `ORCL` is your `ORACLE_SID`:
   ```
   ORACLE_HOME=/usr/oracle
   ORACLE_SID=ORCL
   export ORACLE_HOME ORACLE_SID
   ```
4. In addition, you must include the path to the Oracle shared libraries. See the next few sections to carry out the steps related to your platform and Oracle version.
5. If you are running in a Linux/UNIX Korn shell environment, make the appropriate changes to the `runlss.ksh` script. If you are running in a Linux/UNIX C shell environment, make the appropriate changes to `runlss.csh` script.

7.6.4 Environment Variables for Oracle Shared Libraries

7.6.4.1 Introduction

Application Server dynamically links to the Oracle client shared libraries installed on your system. To do this, the environment variable for the shared library path must include the Oracle lib directory. If it is not already part of the path, then the Application Server startup scripts need to add it.

> **i** Note
>
> On 64-bit machines Oracle supplies two different lib directories:
>
> - `$ORACLE_HOME/lib`, which is 64-bit
> - `$ORACLE_HOME/lib32`, which is 32-bit
>
> The strategy management application requires the library files in the 32-bit directory $ORACLE_HOME/lib32 on Linux.
>
> The strategy management application requires the library files in the 64-bit directory `$ORACLE_HOME/lib` on AIX, Solaris, and HPUX.

If you are running Application Server on a Linux/UNIX server, the Application Server user must have appropriate access to the `$ORACLE_HOME` directories. It is highly recommended to grant read and execute access to the directory structure under `$ORACLE_HOME` to ensure that there are no problems with Application Server connections to Oracle. You can run the `$ORACLE_HOME/install/changePerm.sh` script to ensure that the account used for client/server connections has the appropriate access privileges to the Oracle client software. This script establishes Read access to most of the directories in `$ORACLE_HOME`.

7.6.4.2 Verifying that the Oracle Shared Library was Created During the Oracle Installation

Use

If running AIX, Solaris, or HPUX, the required 64–bit Oracle shared library is found in `$ORACLE_HOME/lib`. If running Linux, the required 32–bit Oracle shared library is found in `$ORACLE_HOME/lib32`.

The Oracle shared library is created at Oracle install time. In some cases, the shared library may not have been installed.

Procedure

1. Check to see if `$ORACLE_HOME/lib` or `$ORACLE_HOME/lib32` (depending on whether you are running AIX/Solaris/HPUX or Linux respectively) contains `libclntsh.<ext>`, where `<ext>` is one of the following:
   - `.so` (on Linux)
   - `.so` (on Solaris)
   - `.sl` (on HP_UX)
   - `.a` (on AIX)
2. If it does not contain one of the above, then run the `$ORACLE_HOME/genclntsh` shell script first to create the `libclntsh.ext` library. Oracle recommends running `genclntsh` after operating system upgrades.

7.6.4.3 Setting the Environment Variables for Oracle Shared Libraries

Use

You set the environment variables on the various Linux/UNIX platforms.

Prerequisites

`$ORACLE_HOME` is already set up.

Procedure

Setting Environment Variables for Linux

1. Add the following information to the `lsstcp.sh` and `runlss.ksh` script.
   ```
   LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib32
   export LD_LIBRARY_PATH
   ```
2. If running a C-shell environment, add the following information to the `runlss.csh` script.
   ```
   setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:$ORACLE_HOME/lib32
   ```

Setting Environment Variables for Solaris

1. Add the following information to the `lsstcp.sh` and `runlss.ksh` script.
   ```
   LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib
   export LD_LIBRARY_PATH
   ```
2. If running a C-shell environment, add the following information to the `runlss.csh` script.
   ```
   setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:$ORACLE_HOME/lib
   ```

Setting Environment Variables for HP-UX (PA RISC)

1. Add the following information to the `lsstcp.sh` and `runlss.ksh` script.
   ```
   SHLIB_PATH=$SHLIB_PATH:$ORACLE_HOME/lib
   export SHLIB_PATH
   ```
2. If running a C-shell environment, add the following information to the `runlss.csh` script.
   ```
   setenv SHLIB_PATH $SHLIB_PATH:$ORACLE_HOME/lib
   ```

Setting Environment Variables for HP-UX Itanium)

1. Add the following information to the `lsstcp.sh` and `runlss.ksh` script.
   ```
   LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$ORACLE_HOME/lib
   export LD_LIBRARY_PATH
   ```
2. If running a C-shell environment, add the following information to the `runlss.csh` script.
   ```
   setenv LD_LIBRARY_PATH $LD_LIBRARY_PATH:$ORACLE_HOME/lib
   ```

Setting Environment Variables for AIX

1. Add the following information to the `lsstcp.sh` and `runlss.ksh` script.
   ```
   LIBPATH=$LIBPATH:$ORACLE_HOME/lib
   export LIBPATH
   ```
2. If running a C-shell environment, add the following information to the `runlss.csh` script.
   ```
   setenv LIBPATH $LIBPATH:$ORACLE_HOME/lib
   ```
   The Oracle client shared library is in the archive `libclntsh.a` file on AIX. The name of the shared object is not the same name across all Oracle versions. In order for Application Server to use a consistent name, you must extract the archive `libclntsh.a` in the `$ORACLE_HOME/lib` directory and rename it to `libclntsh.so`.
3. Change directories by using a **cd** to the `$ORACLE_HOME/lib` directory.
4. Determine the name of the object by issuing the command:
   ```
   ar -t libclntsh.a
   ```
5. Extract the archive with the command:
   ```
   ar -x libclntsh.a
   ```
6. Rename the object with the following command where `<objname>` is the file name returned in step 2.
   ```
   mv <objname> libclntsh.so
   ```

7.7 Downloading the Microsoft Windows Help Program

Use

The Application Server installation on Windows provides an Application Server Help file that runs with the Microsoft Windows Help program `winhlp32.exe`. The Windows Help program is installed with earlier versions of Windows, but is not installed with Windows server 2008 R2 or Windows 7.

If you install Application Server on a Windows server 2008 R2 or Windows 7 client, and you want to run the Application Server Help file, you need to download the Microsoft Windows Help program from the Microsoft Download site.

Procedure

1. Access the Microsoft Download site in a browser window.
2. Download the appropriate version of `winhlp32.exe` based on the particular version of Windows you are running.
3. Install the file to the `\Windows` directory on the machine where you installed Application Server.

7.8 Exiting Application Server

1. Choose *File* > *Exit Application Server*. Or, double-click the icon at the top-left corner of the application window.
2. If you have the editor open and you have made changes that you have not yet saved, Application Server prompts you to save the changes.
3. (Optional) If *Confirm before exiting Application Server* is selected in the *View* > *Options* dialog box, Application Server prompts you to save your Work database. Do one of the following:
   - Click *Yes* to save your Work database and exit.
   - Click *No* to exit without saving the Work database.

     If *Confirm before exiting Application Server* is not selected in the *View* > *Options* dialog, your Work database is saved when you end your session.
     However, by adding the line `EXITCLEAR=Yes` to the *[Windows]* section of `LSSERVER.INI`, you can specify that you want the Work database to be deleted.

> **i Note**
>
> You can also exit from Application Server using the `EXIT` or `EXIT CLEAR` command in the *Input* window.

7.9 Ongoing Application Server Tasks for Strategy Management

The following topics need to be considered when periodically loading new data into your dimensional model or making dimension or measures changes in a model:

- Updating the latest date for which there is data in the dimensional model by updating the `LASTDATE` document.
- Maintaining correct user status after a dimensional model update or Security procedure update by clearing Work database files.
- Effects of dimensional model changes on existing reports.

For information, see the *Required Manual Periodic Tasks to Maintain the Application* section in the *Application Server Administrator's Guide* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

8 Setting Up Users, Roles, and Application Properties

8.1 Introduction

You make users known to SAP Strategy Management by adding them to SAP NetWeaver UME, and then adding them to roles with special strategy management actions in SAP NetWeaver Administrator.

You also make users known to certain administrative functions in the application by creating a *strategy* group in UME and identifying the *strategy* group in a strategy management Java System Property.

Process

1. Add the user designated as the strategy management administrator (for example, pipadmin) as an administrator in SAP NetWeaver UME.
   Who should read: Required steps for all installations.
   For information, see Adding the Strategy Management Administrator to SAP NetWeaver UME [page 38].
2. Add strategy management users to SAP NetWeaver UME.
   Who should read: Required steps for all installations.
   For information, see Adding Strategy Management Users to SAP NetWeaver UME [page 40].
3. Create roles for the users and assign permissions. Add users to special reserved roles for the application.
   Who should read: Required steps for all installations.
   For information, see Users and Roles [page 41],
4. Configure strategy management properties on the SAP NetWeaver server.
   Who should read: Required steps for all installations.
   Configuring the Application Properties [page 44].
5. Create a group called `strategy` in SAP NetWeaver UME and add all strategy management users and administrators to the group.
   Who should read: Required steps for all installations.
   For information, see Creating a Strategy Group for Users and System Groups [page 51].

8.2 Adding the Strategy Management Administrator to SAP NetWeaver UME

Use

The strategy management application requires a special user as the strategy management administrator. The strategy management administrator has access to the *Administration* section of the administration application.

Throughout the strategy management documentation, we use the term *strategy management administrator*. When the strategy management administrator is called by a name, we use the term *pipadmin*. You can create this user with any name you prefer.

You must add the strategy management administrator as an administrator in SAP NetWeaver UME in the *Administrator* group to be able to view and manage all strategy management scheduled jobs. (The Scheduler uses SAP NetWeaver UME for administrative purposes.)

Prerequisites

You are an administrator of SAP NetWeaver.

Procedure

1. Start the SAP NetWeaver Administrator.
2. Log in as administrator with the global password you provided when you installed SAP NetWeaver.
3. Choose *Configuration* > *Identity Management*.
4. Click *Create User* and create the user.
5. Click the *General Information* tab and enter the appropriate information. Type the name **`pipadmin`**.
6. Click the *Assigned Groups* tab. In *Available Groups*, keep *Search Criteria* blank, and click *Go*.
7. From the search result list, select *Administrator*, and click *Add*.

Result

An upcoming step in the post-installation configuration process involves adding the strategy management administrator to the list of administrators in the administration application. At that point, the strategy management administrator is fully added to the strategy management application.

More Information

For information about adding users in SAP NetWeaver UME, see the SAP Library application help for SAP NetWeaver on the SAP Help Portal at http://help.sap.com. Choose *Identity Management*.

8.3 Adding Strategy Management Users to SAP NetWeaver UME

Use

You must add the strategy management users to SAP NetWeaver UME. Use this system to add your own users and groups, and also map users and groups from third-party authentication systems such as LDAP, SAP BusinessObjects, SAP, and Windows NT.

Prerequisites

SAP NetWeaver Administrator is installed and configured.

You are the administrator of SAP NetWeaver Administrator.

To authenticate SAP BusinessObjects users, you have configured SAP NetWeaver AS Java for SAML2 and other SSO mechanisms. For more information, see SAP Library at http://help.sap.com. Choose *SAP NetWeaver* > *SAP NetWeaver 7.3*. Then choose *System Administration* > *Security Guide*. Select *SAP NetWeaver Security Guide* > *User Administration and Authentication* > *User Authentication and Single Sign-On*. In this topic, click the *User Authentication and Single Sign-On* link.

For more information about integrating SAP BusinessObjects into Single Sign-On environments, see SAP Library at http://help.sap.com/epm. Choose *SAP BusinessObjects* and then choose *All Products*. Filter on *SAP BusinessObjects Business Intelligence platform*. Then choose the *SAP BusinessObjects Enterprise Administrator's Guide*. In the guide, see SAML2 information at *Authentication* > *Enterprise Authentication* > *Configuring Trusted Authentication for the web application* > *Using Trusted Authentication for SAML single sign-on*.

Features

Add all the standard users and system groups, LDAP users and LDAP system groups, and SAP BusinessObjects users and system groups to SAP NetWeaver UME.

For information about adding users to the user management system, see the SAP Library for SAP NetWeaver Administrator at http://help.sap.com.

8.4 Users and Roles

8.4.1 Introduction

A role is a named set of system users and system groups with certain reporting and administrative permissions. Roles define each user's experience in the applications in terms of permissions, views, and accessibility. You assign permissions and accessibility to a role by adding special actions to the roles in SAP NetWeaver. For example, you can add the *SSM_ViewInitiatives* and *SSM_CreateInitiative* actions to a role to allow the users in the role to access the *Initiatives* tab and create initiatives.

When starting the application, the system evaluates each user based on their role. If you do not allow a role to use a certain feature of the application, that particular section is unavailable for the users in that role. For example, if a role is not given the permission to create initiatives, the *Add Initiative* link is unavailable in the *Initiatives* tab for the members of that role. If a role is not given access to the *Home* tab, that particular tab is not displayed for the users in that role.

You can set the following limitations on a role:

- You can specify the strategy management application tabs available to the users in the role.
- You can specify the administration application functions and strategy management application functions available to the users in the role.
- You can specify which SAP NetWeaver UME users have this role.
- You can specify the contexts available to a role using *Context Management* > *Manage Contexts* in the administration application.
- You must add all strategy management users to special reserved roles.

All the users in a role share the same functionality and access to the application. If you want an individual user to have a unique view, you must create a role with that user as the only member. A user can be a member of multiple roles.

You might need to create multiple roles that all have the same actions, where only the users vary. This is prevalent in scorecard hierarchies where different users access different contexts, but they all have the same set of permissions and accessibility. For example, you might have a Northeast context and a Southwest context, and the users of the contexts all have the ability to create scorecards, initiatives, and comments. Since you do not want Southwest users accessing the Northeast context and vice versa, you need to create two separate roles with the same actions to account for the different users.

Every strategy management user must be added to at least one role, even the strategy management administrator.

Process

Create roles, and add users and actions that designate permissions and accessibility.

For more information, see Actions for Roles [page 42] and Creating a Role. [page 43]

When you assign users to roles, keep in mind the model connections and contexts they are accessing. For example, say you assign user 1, user 2, and user 3 to a model connection. Then you assign user 1 to a role and

you assign the role to a context that relies on that model connection. Only user 1 can access the context even though user 2 and user 3 can access the model connection.

8.4.2 Actions for Roles

When creating a role, you can add any of the following actions to give application permissions to the role. For more information about creating a role and adding actions to the role, see Creating a Role [page 43].

Actions for Gaining Permissions	Description
SSM_CreateBriefingBook	Allows the users in the role to create briefing books. This role must also have the *SSM_ViewBriefingBooks* action to provide access to the *Briefing Book* tab.
SSM_CreateComment	Allows the users in the role to create comments and replies in the tabs that are available to them. This action displays a link to add comments in the tabs. When viewing comments, this action also provides functionality to add replies to comments. This role must also have at least one *SSM_View*`<tab>` action.
SSM_CreateContext	Allows the users in the role to create contexts using *Context Management* > *Manage Contexts* in the administration application.
SSM_CreateDashboard	Allows the users in the role to create dashboards. This role must also have the *SSM_ViewDashboard* action to provide access to the *Dashboard* tab.
SSM_CreateInitiative	Allows the users in the role to create initiatives by enabling the *Add Initiative* link in the *Initiatives* tab. This role must also have the *SSM_ViewInitiatives* action to provide access to the *Initiatives* tab.
SSM_CreatePcInitiative	Allows the users in the role to create a initiatives sourced from PC. This role must also have the *SSM_ViewInitiatives* action to provide access to the *Initiatives* tab.
SSM_CreateReport	Allows the users in the role to create reports. This role must also have the *SSM_ViewReport* action to provide access to the *Report* tab.
SSM_CreateScorecard	Allows the users in the role to create perspectives and objectives and scorecards using the *Library* and *Context Management* > *Manage Scorecards* in the administration application. This role should also have the *SSM_ViewScorecard* action to provide access to the *Scorecard* tab.

Actions for Gaining Permissions	Description
SSM_CreateStrategy	Allows the users in the role to create goal diagrams, a cause and effect diagram, and themes or pathways using *Context Management* > *Manage Strategies* in the administration application. This role should also have the *SSM_ViewStrategy* action to provide access to the *Strategy* tab.
SSM_HideDimensionFilter	Disables the Scorecard dimension filter for the users in the role.
SSM_ReadOnlyScorecardLibrary	Disables the ability of an SM Administrator to modify the Library components.

When creating a role, you can add any of the following actions to provide access to tabs. When you provide access to a tab, keep in mind the permissions you have set. For example, if you allow a role to create initiatives, you must give the role access to the *Initiatives* tab.

Actions for Accessing Tabs	Description
SSM_ViewBriefingBook	Allows users to access the *BriefingBook* tab.
SSM_ViewDashboard	Allows users to access the *Dashboard* tab.
SSM_ViewHome	Allows users to access the *Home* tab.
SSM_ViewInitiatives	Allows users to access the *Initiatives* tab.
SSM_ViewReport	Allows users to access the *Report* tab.
SSM_ViewScorecard	Allows users to access the *Scorecard* tab.
SSM_ViewStrategy	Allows users to access the *Strategy* tab.

8.4.3 Creating a Role

Use

You create roles in the Identity Management system in SAP NetWeaver Administrator to connect certain users with certain views and permissions in the applications.

All strategy management roles must have at least one strategy management action assigned.

Prerequisites

You have added users to SAP NetWeaver UME. For information, see the Adding Strategy Management Users to SAP NetWeaver UME [page 40].

Procedure

1. Start SAP NetWeaver.
2. Log on as administrator with the global password you provided when you installed NetWeaver.
3. Click *Configuration* > *Identity Management*.
4. From the *Search Criteria* dropdown, select *Role*.
5. Click *Create Role*.
6. Make sure the *General Information* tab is selected. In the *Unique Name* text box and *Description*, enter a name and description for the role.
   You cannot use special characters in the name, including the following: (/) forward slash, (\) back slash, (<) less than, (>) greater than, (') single quote, (") double quote, (,) comma, (:), and (;) semicolon. You can use underscores (_).
   The name is added to the *Roles* lists in the application. By default, a new role has no users assigned to it, no available tabs, and no permissions.
7. Click the *Assigned Groups* tab, then select the data source where groups are stored and click *Go*. The list of groups is retrieved. Select a group and click *Add*. The group is added to role.
8. Click the *Assigned Users*, then select the data source where users are stored and click *Go*. The list of users is retrieved. Select a user and click *Add*. The user is added to role.
   If a user is assigned to a group that is added to the role, you do not need to add the user as an individual.
9. Click the *Assigned Actions* tab. In the *Get* text box, enter `SSM_*` and click *Go*. All the strategy management permissions appear.
   Select one or more actions as appropriate and click *Add*.
   For information about all actions, see Actions for Roles [page 42].
10. Save your changes.
11. In turn, create a role for each unique set of permissions you want to define for users. A user can belong to any number of groups.

8.5 Configuring the Application Properties

Use

You configure certain properties in SAP NetWeaver to specify how you want the strategy management application to run.

Prerequisites

You are an administrator of SAP NetWeaver.

Procedure

1. Start the SAP NetWeaver Administrator.
2. Log on as administrator with the global password you provided when you installed SAP NetWeaver.
3. Select *Configuration*.
4. Click the *Infrastructure* tab.
5. Select *Java System Properties*.
6. In the *Templates* section, select the template that corresponds to your strategy management installation.
7. Click the *Applications* tab in the *Details* section.
8. In the *Name* column, type **`strategy`** and press `Enter` to list the strategy applications.
9. Select the name *xapps~cpm~sm~strategymanagement*.
10. In the *Extended DetailsName* section, click inside the text box and type the property you want to modify. Enter the following values as appropriate for your site:

Java System Property	Description	Value
`template.strategy`	Maps the strategy management virtual directory `/strategy` to a physical directory.	The default value is `<drive>:\Program Files (x86)\SAP Strategy Management\InternetPub`. If you installed the supporting files in the default location, you can keep the default value. If you installed the supporting files in a directory other than the default directory, you need to modify the value of `template.strategy` to reflect the location of the `\InternetPub` directory.

Java System Property	Description	Value
`PWDatabase`	Strategy management application definitions are stored in the SAP NetWeaver System Database. `Pwdatabase` specifies the storage collection within the system database in which to store application data. When you start the strategy management application, a *Launch* page appears and allows the user to select the database if there are more than one for selection. If some users start the applications directly without the *Launch* page, the value of `PWDatabase` specifies the storage collection to use.	If all users use the *Launch* page, you do not need to set a value for this Java System Property. If some users start the applications directly without the *Launch* page, you need to modify this Java System Property to specify the storage collection to use. The `pw` storage collection contains your scorecard data. The `pwsample` storage collection contains sample data.
`HelpLocation`	Specifies the location of the Application Help files for strategy management. The SAP NetWeaver Library must be already installed before you install the strategy management Application Help on the same server. Links to *SAP NetWeaver* Application Help and *SAP Getting Started* Application Help only work when implemented on a server with the complete SAP NetWeaver help system. For information about downloading the strategy management Application Help, see the Central Note for the latest release. By default, the `HelpLocation` is set to the location of the SAP Library.	Enter the location of the Application Help files in the format: `<NW_server>/<path>/helpdata`

Java System Property	Description	Value
`HomeTabExtFileTypes`	Specifies the file types the strategy management administrator can include as external content in *Administration* > *Configure Home Tab* in the administration application. If the strategy management administrator attempts to upload a file whose file type is not one of these values, an information message appears.	By default, `HomeTabExtFileTypes` is set to include a list of file types that can always be displayed correctly in Internet Explorer. The default values are `SWF`, `PNG`, `GIF`, `JPG`, and `PDF` file types. You can remove any file type to make it unavailable for upload by the strategy management administrator. Adding other file types may produce unpredictable results. Internet Explorer handles the display of Microsoft Office `DOC` and `XLS` files based on each user's Windows settings. The only way to ensure proper behavior when a user attempts to display external content from a Microsoft Office file is for the user to edit that particular file type and specify that only the *Browse in the same window* option is selected for the *Open* action.
`acceptlanguage`	Specifies the language to use for the user interface text that can be customized by the strategy management administrator. This user interface text includes scorecard hierarchy levels, initiative types, and standard scorecard attributes such as Lead/Lag and Qualitative/Quantitative. This setting takes effect when you create a new database or upgrade a database that was exported from 7.5.	Specify the two-letter value to be used to set the initial value for the application properties which can be customized by the administrator in the application. The default setting is *en* for English.

Java System Property	Description	Value
`AuditLogComments`	Controls whether the strategy management administrator can enter a comment when adding, modifying, or renaming entries in these Administration application screens: ○ *Manage Models* ○ *Set Defaults* ○ *Update User Responsibilities* ○ *Delete Obsolete Items* When running the *Auditor* tool at `http://<nw_server>:<port>/strategy/tools`, comments appear next to the activity. For information about the *Auditor*, see the *Application Server Administrator's Guide* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.	When set to *Yes*, this property prompts the strategy management administrator to enter a comment when adding, modifying, or renaming entries in the administration application. If this property is set to *No*, the strategy management administrator is not prompted to add comments and no comments appear in the log. The default setting is *Yes*.
`DisableExcelDownloadEA`	Controls the availability of the Excel data entry format.	When set to *Yes*, the Excel data entry format becomes unavailable. Only HTML-based data entry will be available.
`EntryApprovalRole`	Allows you to customize the name of the *SSM_Entry_And_Approval* role if you want to use a name other than *SSM_Entry_And_Approval*.	Enter a new name for the *SSM_Entry_And_Approval* role. When creating the role in SAP NetWeaver Administrator and adding users to it, make sure you name the role using the value you enter for this Java System Property. The default value is *SSM_Entry_And_Approval*. If yo want to use the default value, create a role called *SSM_Entry_And_Approval*. For information about creating the role, see Adding Entry and Approval Users to an Entry and Approval Role [page 59].
`EnableEAMobile`	Enables Entry and Approval functionality when using an iPad.	Valid values are *Yes* and *No*. The default setting is *Yes*.

Java System Property	Description	Value
`EAValueAuditFlag`	Displays a *Details* button in the Approval Log to enable detailed logging in the Entry and Approval Log. When users click the *Details* button and display the Approval Log, they see the full audit trail of the selected measure set. The log captures detailed user interactions, including time stamps for approval, rejection and uploading of measures. They see a detailed log about every data value entered in the Entry and Approval Data Entry screen or Excel spreadsheet for the current time period. For example, if a data value is rejected by the approver, the previous value is also captured.	To enable detailed logging and display a *Details* button in the Approval Log, set this value to *YES*.
`EnableLegacyReports`	Displays a link on the Launch page to use the *Reports* and *Dashboards* tabs from the 7.5 version of the application.	To hide the link for running legacy reports and dashboards, keep the default value of *No*. To display legacy reports as a link on the *Launch* page, specify a value of *Yes*.

Java System Property	Description	Value

`mail.smtp.host`	First of three parameters used to implement e-mail notifications.
	
	E-Mail notifications are e-mail messages that are sent to users at certain times to inform them about changes that have occurred in initiatives, milestones, submilestones, objectives, KPIs, and measure sets.
	
	Once you set up mail connectivity with `mail.smtp.host`, `mail.from`, and `mail.domain`, users can control whether they want to receive e-mail notifications in the *Subscribe* dialog box of the *Inbox* section in the *Home* tab.
		Specify a mail server that can relay mail internally. Use your company's name in place of `<mycompany>`. Here are some sample values, where `<mycompany>` is the name of your company:
		
		`smtp.<mycompany>.com`
		
		`internet.<mycompany>.com`
		
		`mail.<mycompany>.com`
		
		i Note
		If you have problems with e-mail notifications, make sure the mail server allows relaying. If you have blocked mail relaying for security reasons, you must allow it at least on the SAP NetWeaver server where strategy management application components are deployed.

`mail.from`	Second of three parameters used to implement e-mail notifications	Specify an e-mail alias. For example, `sm@<mycompany>.com`. If you did not set up an `sm@<mycompany>.com` e-mail alias, then modify the property to specify the e-mail address of the user who sends notifications. (Optional) Work with your IT department to set up an e-mail alias for the strategy management application called `sm@<mycompany>.com`, or whatever name is appropriate.
`mail.domain`	Third of three parameters used to implement e-mail notifications	Specify your company's name. Use the following format for the value: `<mycompany>.com`
`pd4ml.fontconfigpath`	Specifies the location of the `fontconfig.<OS>.properties` file, which contains a mapping of TrueType Font names and font files.	Enter the location of the file in the format `java:/<Install-Directory>/fontconfig.<OS>.properties`

Java System Property	Description	Value
`Pd4ml.fontdir`	Specifies the location of the font directory to use when the application generates a `PDF` file. `PDF` file generation occurs when a user prints views, reviews printed views, or exports briefing books to PDFs.	By default, the value is `file:c:/Windows/Fonts`, which is the default location for fonts on a Microsoft Windows server. If you installed your fonts to a non-default location, or if you are running a different type of Windows server, you must change this value to the appropriate location of the fonts on that server.
`StrategyGroup`	Specify a valid SAP NetWeaver UME group name that contains the users and system groups who you want to appear in these user lists: ○ *Administration* > *Manage Models* in the administration application ○ Entry and approval user lists. This is only populated if there is no Entry and Approval role created. For more information, see Adding Entry and Approval Users to an Entry and Approval Role [page 59] **i Note** Screens associated with a context display lists of users that have been defined in the roles for the context.	By default, this value is set to `strategy`. When you eventually create the `strategy` group in UME, and add the users and groups, make sure you specify the exact name for this value. For information, see Creating a Strategy Group for Users and System Groups [page 51]

11. When you return to the *Extended Details* section, save your changes. section, click inside the

8.6 Creating a Strategy Group for Users and System Groups

Use

To populate a list of strategy management users in certain screens of the administration application and Entry and Approval application, you must create a *strategy* group in SAP NetWeaver UME and add strategy management users and system groups to the *strategy* group.

The users in the *strategy* group populate user lists in the following areas of the applications:

- *Administration* > *Manage Models* in the administration application
- Entry and approval user lists. This is only populated if there is no *Entry and Approval* role created. For more information, see Adding Entry and Approval Users to an Entry and Approval Role [page 59]

> **i Note**
>
> Screens associated with a context display lists of users that have been defined in the roles for the context.

Prerequisites

You are the administrator of SAP NetWeaver.

You added all strategy management users, including the strategy management administrator, to SAP NetWeaver UME. For information, see Adding Strategy Management Users to SAP NetWeaver UME. [page 40]

Procedure

1. Create a group in SAP NetWeaver UME. The name of the group must match the value you provided in the `StrategyGroup` Java System Property.
   If you kept the default value of *strategy* for the `StrategyGroup` Java System Property, then create a group called *strategy*.
   If you specified a different value, for example,`StrategyUsers`, for the `StrategyGroup` Java System Property, then you must create a group called `StrategyUsers`, using the same case.
   For the purpose of this discussion, we use the term *strategy* group in this documentation.
   If you are adding users from LDAP in UME, the group name may be the Unique Name (or Unique ID). This determination depends on the value of `GroupUniqueKey`.
   For information, see Configuring the Application Properties [page 44].
2. Add the strategy management administrator to the `strategy` group.
3. Add the appropriate strategy management users to the `strategy` group.

9 Post-Installation Steps for the Applications

9.1 Introduction

You must configure the applications before you can use the system. This section covers all the post-installation steps for Interactive Publisher and Application Components.

9.2 Loading Bootstrap Data

Use

You use the Transporter utility to import the `import.zip` or `bootstrap.zip` file. These are supporting files installed as supporting files during the installation of Application Server on a Windows client or server machine.

Prerequisites

- You are a strategy management administrator.
- If running Application Server on a Windows server, you installed the supporting files when you installed Application Server on a Windows server. If running Application Server on Linux/UNIX server, you installed the supporting files when you installed Application Server on a Windows client.
- After you installed the supporting files, you moved the `import.zip` or `bootstrap.zip` files from the `C:\Program Files (x86)\SAP Strategy Management\InternetPub\conf` directory to the `\server0\temp\SSM\import` directory on the SAP NetWeaver server. In a default installation, the full path is `\usr\sap\<SID>\J00\j2ee\cluster\server0\temp\SSM\import`.

Procedure

1. In a Web browser, enter this URL to open the *Tools* utility:
   `http://<nw_server>:<port>/strategy/tools`
2. Click *Transporter*.
3. In the *Choose a database transport file* section, from the dropdown list, select the file you moved to the `\import` directory, which is either `import.zip` or `bootstrap.zip`.
4. Click *Import into Database*.

9.3 Starting the Administration Application

Use

You start the administration application to work with the administrative functions of the strategy management application.

Prerequisites

You are the strategy management administrator.

Procedure

1. Open a browser window and type the following to start the administration application:
   `http://<nw_server>:<port>/strategy`
2. Depending on the authentication set up at your site, you may be prompted to log on. If you are prompted, log on with your strategy management administrator username and password.
3. In the *Launch* page, you see the links to applications that your role can access. Click the appropriate link for the administration application.

9.4 Adding the Strategy Management Administrator as a System Default

Use

You must set certain system defaults to specify the strategy management administrator as the administrator of the application.

Prerequisites

You are running the administration application as the strategy management administrator.

Procedure

1. Choose *Administration* > *Set Defaults*.
2. In the *SM Administrator(s)* text box, enter **pipadmin** or whatever name you are using to represent the administrator of strategy management.
3. Save your changes.

9.5 Setting Up Model Connections

9.5.1 Introduction

The topics in this section describe how to set up a model connection and then how to set up a model connection for BI Connector Administrator.

9.5.2 Setting Up a Model Connection

Use

This section contains required steps for all installations. Follow the steps in this section to create your first model connection. Model connections connect Web authentication users to Application Server users to a model and ultimately to a scorecard context.

For information about creating model connections, see the application help for SAP Strategy Management on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT. Choose *Administration* > *Administration* > *Model Connection Development*.

Prerequisites

- The Application Server dimensional model is created. For information, see the *SAP Strategy Management Application Server Help* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT. If you do not have a model created, you can use the sample model provided with the Application Server installation.
- The Application Server dimensional model in the strategy management application does not contain text variables.
- The machine where the administration application is installed has access rights to the port where Application Server is installed. If you can telnet `<hostname> 8325` from a DOS window, then you have the appropriate access rights.

Procedure

1. Start the administration application. For information, see Starting the Administration Application [page 54].
2. Choose *Administration* > *Manage Models*.
3. Select *New* in the *Model Connections* list. The *Model Connection* text box appears in the *Connection Settings* section.
4. In the *Model Connection* text box, type a model connection name. Specify only alphanumeric characters (a-z, 0-9) up to a maximum size of 64 characters. You must not use special characters in the name. Then click *OK*.
5. In the *PAS System Name* text box, type the name of the server where Application Server is located. If Interactive Publisher is installed on a different server than SAP NetWeaver, then enter the IP address for Application Server.
6. In the *PAS System Logon* text box, type the authentication name of a user on the Application Server system. On Windows, this user must be a member of the administrators group. On Linux/UNIX, this user must have permission to run the scripts and programs in the Application Server installation directory.
7. In the *Password* text box, type the password for the Web authentication user.
8. In the *PAS Model* text box, type the name of the Application Server dimensional model to use for this model connection.
9. In the *PAS User* text box, type the Application Server user who has access to the Application Server model who you want to add to this model connection.

   > **i Note**
   >
   > Make sure the Application Server user is a user of the dimensional model you are adding to the model connection definition.

   > **i Note**
   >
   > If you are running Application Server on a Linux/UNIX server, the UNIX or Linux user specified in the *PAS User* text box must have appropriate access to the `$ORACLE_HOME` directories, particularly `$ORACLE_HOME/lib32`. It is highly recommended to grant read and execute access to the directory structure under `$ORACLE_HOME` to ensure that there are no problems with Application Server connections to Oracle. You can run the `$ORACLE_HOME/install/changePerm.sh` script to ensure that the account used for client/server connections has the appropriate access privileges to the Oracle client software. This script establishes Read access to most of the directories in `$ORACLE_HOME`.
10. In the *Password* text box, type the password for the Application Server user. If the user is Guest, you do not need to specify a password.
11. In the *Port* text box, type the communications port for the UNIX or Windows server machine running Application Server. The default is `8325`.
12. In the *INI file* text box, type the name of the Application Server initialization file to use. The default filename created at installation is `lsserver.ini`.
13. In the *Service* text box, type the service parameter specified in the `lsserver.ini` file. The default service name is `PILOT`.
14. In the *Min Instances* text box, type the number of copies of Application Server to start up with this model connection. The default setting is `0`, which means that no copies start until the first URL query is submitted.

15. In the *Max Instances* text box, type the maximum number of copies of Application Server to allow for this model connection. The default setting is `5`. You can set up to 255 instances.

> **i Note**
>
> You must specify a number of Application Server instances that is equal to or lower than the number defined for the Application Server user. For example, if the Application Server user is allowed 5 instances, enter a number up to 5.
>
> To find out the maximum number of instances available to an Application Server user, issue the `SUPERVISOR SHOW USERS` command in Application Server. To change the number of instances available to an Application Server user, issue the `SUPERVISOR CHANGE USER` command with the `MAXLOGIN` keyword. See the *Application Server Administrator's Guide* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.

16. Click *Test Connection*. You see messages that the Application Server connection is made, you are logged in, and the `USE` database is found. Click *OK* to close the message box.
17. Click *Save*.
18. At the confirmation message, click *OK*.
19. In the *Groups and Users* section, *Everyone* is the default selection. This means that all users are added to the model connection by default. Since you have not populated the user lists yet, only the user designated as the strategy management administrator is a user at this time.

9.5.3 Setting Up a Model Connection for BI Connector Administrator (BICA)

Use

If you plan to use BI Connector Administrator (BICA) to populate a model from BW, you must create a special model connection for the application. The BICA application requires a model connection named `BICDEFAULT`, which is used to connect to Application Server and create the PAS/BI models. This is a single connection used by the application itself. When you create models using BICA, it will create the individual connections used by these models.

> **i Note**
>
> For security reasons, the individual model connections created by BICA are incomplete. The password fields must be updated before it can be used.

See SAP Note 2131423 for additional information about the BICA application.

Prerequisites

- You are the administrator of Strategy Management.

- You have created a link ID in Application Server to connect to the BW system. For information about creating a link ID for SAP NetWeaver BW Connector, see the SAP Strategy Management Configuration Help.

Procedure

Follow the steps in the previous topic *Setting Up a Model Connection* to create the model connection. The requirements for this BI Connector Administrator connection are the following:

1. In the *Model Connection* text box, enter the name **BICDEFAULT**.
2. For the *PAS Model* use **INITIAL** or **JUICE**.
3. In the *PAS User* text box, enter the name **CBADMIN**.

9.6 Setting Up the Entry and Approval Application

9.6.1 Setup

Use

To use the Entry and Approval application, you must perform some initial configuration steps.

Prerequisites

If running Application Server on IBM AIX and using DB2 as the System database, you have modified `runlss.ksh` and `lsstpc.sh` to include the line `. INSTHOME/sqllib/db2profile`.

For more information, see Adding Environment Variables to Application Server Scripts-DB2 [page 32].

Process

1. Set up client access to the SAP NetWeaver System Database if you have not already done so.
   For information, see Setting Up Client Access to the SAP NetWeaver System Database [page 64].
2. Create the special *ssm_cb_ea* Link ID for Entry and Approval if you have not already done so.
   For information, see Creating a Link ID for Certain Implementations [page 30].
3. Add all Entry and Approval users to a special role called `Entry and Approval`.
   For information, see Adding Entry and Approval Users to an Entry and Approval Role [page 59].
4. In the administration application, create a model connection for every model you want to use in the Entry and Approval application.

For information, see Setting Up a Model Connection for Entry and Approval Installations [page 60].

9.6.2 Adding Entry and Approval Users to an Entry and Approval Role

Use

You add Entry and Approval users to an *SSM_Entry_And_Approval* role to allow the users to appear in the user selection lists in the Entry and Approval application. If you do not create this special role, then the user lists show all strategy management users that exist in the *strategy* group in UME.

For information about the *strategy* group, see Creating a Strategy Group for Users and System Groups [page 51]

Prerequisites

You are the administrator of SAP NetWeaver.

Procedure

1. Start SAP NetWeaver.
2. Log on as administrator with the global password you provided when you installed NetWeaver.
3. Click *Configuration* > *Security* > *Identity Management*.
4. From the *Search Criteria* dropdown, select *Role*.
5. Click *Create Role*.
6. Make sure the *General Information* tab is selected. In the *Unique Name* text box, enter **`SSM_Entry_And_Approval`**. This name is case sensitive and must be entered in this exact form.

   > **i Note**
   >
   > The `EntryandApprovalRole` Java System Property allows you to customize the name of the *SSM_Entry_And_Approval* role. By default, the value for `EntryandApprovalRole` is *SSM_Entry_And_Approval*. If you are using the default value, enter **`SSM_Entry_And_Approval`** as specified here.
   >
   > If you changed the value of the `EntryandApprovalRole` Java System Property, then enter the new value for `EntryandApprovalRole` in the *Unique Name* text box instead of **`SSM_Entry_And_Approval`**. For information about modifying the `EntryandApprovalRole` value so you can create a role with a custom name, see Configuring the Application Properties [page 44].

7. In the *Description* text box, enter a description for the role.
   The name is added to the *Roles* lists in the application. By default, a new role has no users assigned to it, no available tabs, and no permissions.

8. Add permissions and tabs to this role. For information, see Actions for Roles [page 42].
9. Save your changes.

9.6.3 Setting Up a Model Connection for the Entry and Approval Application

Use

You must create a special model connection for every model that you want to use in the Entry and Approval application.

The Entry and Approval application requires a model connection to Application Server that can read dimension member and measure names without restrictions. This step ensures that the Entry and Approval connection has access to all the information that is required. Users are connected to the model with the correct privileges and receive the full set of meta data. The model connection associated with the *MMADMIN* user has limited access to Interactive Publisher functions and features, which ensures a secure environment.

Prerequisites

- The Application Server dimensional model is created. For information, see the *Application Help for SAP Strategy Management* on the SAP Help Portal at https://help.sap.com/viewer/p/SAP_STRATEGY_MANAGEMENT.
- The Application Server dimensional model does not contain text variables.
- The measures in the model have either monthly, quarterly, or yearly data. Entry and Approval does not support measures with any other periodicity.
- The machine where the administration application is installed has access rights to the port where Application Server is installed. If you can telnet `<hostname> 8325` from a DOS window, then you have the appropriate access rights.
- You are the administrator of strategy management.
- You have set up client access to the SAP NetWeaver System database and created the *ssm_cb_ea* link ID in Application Server. For information, see Setting Up Client Access to the SAP NetWeaver System Database [page 64] and Creating a Link ID for Certain Implementations [page 30].

Procedure

1. Start the administration application. Depending on the authentication set up at your site, you may be prompted to log on. If you are prompted, log on as the strategy management administrator. For more information, see Starting the Administration Application [page 54].
2. Choose *Administration* > *Manage Models*.
3. Select *New* in the *Model Connections* list. The *Model Connection* text box appears in the *Connection Settings* section.

4. In the *Model Connection* text box, type a model connection name. You can specify any name for the model connection name. It does not need to match the dimensional model name. Specify only alphanumeric characters (a-z, 0-9) up to a maximum size of 64 characters. You must not use special characters in the name. Then click *OK*.
5. In the *Web Server Name* text box, type the name of the server where Application Server is located. If Interactive Publisher is installed on a different server than SAP NetWeaver , then enter the IP address for Application Server.
6. In the *Web Server User* text box, type the authentication name of a user on the Application Server system. On Windows, this user must be a member of the administrators group. On Linux/UNIX, this user must have permission to run the scripts and programs in the Application Server installation directory.
7. In the *Password* text box, type the password for the Web authentication user.
8. In the *PAS Model* text box, type the name of the Application Server dimensional model to use for Entry and Approval.
9. In the *PAS User* text box, type **`MMADMIN`**. `MMADMIN` is a user that exists by default in `MASTERDB`. This user has special privileges to authorize dimensional models to be used for Entry and Approval.

> **i Note**
>
> This model connection must have only one client/server connection.

10. In the *Password* text box, do not type any password.
11. In the *Port* text box, type the communications port for the UNIX or Windows server machine running Application Server. The default is `8325`.
12. In the *INI file* text box, type the name of the Application Server initialization file to use. The default filename created at installation is `lsserver.ini`.
13. In the *Service* text box, type the service parameter specified in the `lsserver.ini` file. The default service name is `PILOT`.
14. In the *Min Instances* text box, type the number of copies of Application Server to start up with this model connection. The default setting is `0`, which means that no copies start until the first URL query is submitted.
15. In the *Max Instances* text box, type the maximum number of copies of Application Server to allow for this model connection. The default setting is `5`. You can set up to 255 instances.

> **i Note**
>
> You must specify a number of Application Server instances that is equal to or lower than the number defined for the Application Server user. For example, if the Application Server user is allowed 5 instances, enter a number up to 5. See the `SUPERVISOR SHOW USERS` command and `SUPERVISOR CHANGE USER MAXLOGIN` command for information about changing logins. For information, see the Application Server online Help in the Application Server Administrator program.

16. For *Groups and Users*, keep the default setting of allowing all users (*Everyone*) to use this model connection. Everyone who uses Entry and Approval must have access to the model. This is a limited-access model connection that gives users the ability to read measures and dimensions in the dimensional model.

> **i Note**
>
> Only one Application Server user can be assigned the *Everyone* setting for a model connection. If you try to create a second Application Server user with the *Everyone* setting, you receive a message telling you to pick specific users or groups.

17. Click *Test Connection*. You see messages that the Application Server connection is made, you are logged in, and the `USE` database is found. Click *OK* to close the message box.
18. Click *Save*.
19. At the confirmation message, click *OK*.
20. Repeat these steps for any other dimensional model you want to use in Entry and Approval. You must create separate model connections for scorecards and reports.

9.7 Testing Your Connections and Displaying Version Information

Use

These steps are required for all installations.

Procedure

1. Start the *Tools* utility by issuing this URL in the *Address* box of a Web browser:
   `http://<nw_server>:<port>/strategy/tools`
2. Click *PAS Query*.
3. From the *Context* dropdown list, select the model connection to work with.
4. The *Address* box shows `context=<name>&` based on your selection in the *Context* dropdown list. In the *Address* box, type the following parameter directly after `context=<name>&`:
   `result=version`

9.8 Specifying the Fonts to Use in PDFs on Linux/UNIX

Use

If you are running SAP Strategy Management on a Linux/Unix platform, and you print reports, email reports, and use Briefing Books, you may notice font issues in the generated `PDF`s. This occurs because fonts can be stored on a Linux/UNIX server in varying places and the strategy management application requires the exact location of the fonts to run properly.

Follow these steps to find the system fonts you want to use on the Linux/UNIX system and make those fonts available to the strategy management application.

Prerequisites

You are running SAP Strategy Management on a Linux/Unix platform and you are familiar with Java and UNIX.

Procedure

1. Find the fonts on the Linux/Unix server that you want to use by running the following font resolution routine. This Java program, which you run in a terminal window, identifies the fonts that are installed on the system and that are visible to Java. The results are saved in an Excel .CSV file. Run the program using:
   `Java GetAllFonts > allfont.<OS>.csv`
2. Access the strategy management properties in SAP NetWeaver and modify the following Java System Properties.
   `pd4ml.fontconfigpath = java:/<Install-Directory>/fontconfig.<OS>.properties`
   `pd4ml.fontdir = file:/<FontDirectory>/fonts`

   > **i Note**
   >
   > The application uses the following Java Properties files to locate and load TrueType font files:
   >
   > - The `fontconfig.<OS>.properties` file specifies the location of the `fontseeker.<OS>.properties` file. It also contains a mapping of TrueType Font names and font files. The full path of the font file is determined by the `pd4ml.fontdir` Java System Property and the file name defined in the `fontconfig.<OS>.properties` file. The location of this properties file is defined by the `pd4ml.fontconfigpath` Java System Property.
   > - The `fontseeker.<OS>.properties` file contains a mapping of the strategy management internal font names and TrueType font names. For the AIX server, the default font properties files assumes you use font files that are shipped with Java 5, and Java 5 is installed under `/usr/java`.

   For information about these Java System Properties and setting strategy management Java System Properties, see Configuring the Application Properties [page 44].
3. If the new font configuration does not take effect, restart SAP NetWeaver.

9.9 Distributing Client Software

The strategy management download file includes a client installation file, which you must distribute to the users who need to install the software on their machines.

You must distribute the `xSSMWea<sp>_<patch>-<smp-id>.exe` installation file to Excel Add-In users so they can install the client software by following the steps in the *Client Installation Guide for SAP Strategy Management Excel Add-In* on the SAP Help Portal at http://help.sap.com/bosm101.

To allow users to install Application Server on a client machine, you must distribute the Application Server installation file. It is the same file used to install Application Server on a Windows server. For information about who should install Application Server on a client machine, see the Installing Application Server on a Microsoft Windows Client [page 20].

10 Setting Up Client Access to the SAP NetWeaver System Database

If you want to look at the strategy management tables in the system database, you need a tool for client access to the database server. For example, if you want to look at the tables in a MaxDB database, you need MaxDB Database Studio installed on your client with access to the SAP NetWeaver server.

If you are using Entry and Approval or Model Designer, one of the following is required:

- If using IBM DB2 as the system database to store strategy management application data, the 32-bit client software for DB2 is installed on the Windows server where Application Server is installed. The software must be configured to access the DB2 installation on the SAP NetWeaver system.
  You must copy the files that reside in the following directory and paste them up one level into the `\procs` directory, replacing the MaxDB version of the same files:
  `<install-dir>\SAP Strategy Management\InternetPub\procs\db2_procs`
- If using MaxDB as the system database to store strategy management application data, the 32–bit ODBC drivers for MaxDB are installed on the Windows server where Application Server is installed.
  If using MaxDB on a 64–bit system, then you must install the MaxDB Application Runtime Package to obtain the required 32–bit ODBC drivers. The 32-bit ODBC drivers are not included in version 7.7 and higher of the 64-bit MaxDB installs. To obtain the required 32-bit ODBC drivers, download and install the MAXDB Application Runtime Package following the instructions in SAP Note 1575053.

  > **i Note**
  >
  > If you are running MaxDB on a 64–bit system, you might receive an error message when you run the 32-bit ODBC Administrator to configure the ODBC connection. You can ignore the message because the ODBC DSN is created correctly anyway. The error is likely caused by a missing `CTRL3D32.DLL` file that is not installed by default on the system. Not all 64–bit systems have this error because there are many software packages that install that file.

- If using SQL Server as the system database, the 32–bit ODBC drivers for SQL Server are installed on the Windows server where Application Server is installed.
  You must copy the files that reside in the following directory and paste them up one level into the `\procs` directory, replacing the MaxDB version of the same files:
  `<install-dir>\SAP Strategy Management\InternetPub\procs\sqlsrvr_procs`
- If using Oracle as your system database, the 32–bit client software for Oracle is installed on the Windows server where Application server is installed. A Local Net Service is defined for the server on which the Oracle SAP NetWeaver System database is installed.
  You must copy the files that reside in the following directory and paste them up one level into the `\procs` directory, replacing the MaxDB version of the same files:
  `<install-dir>\SAP Strategy Management\InternetPub\procs\oracle_procs`
- If using Sybase ASE as the system database, the 32–bit ODBC drivers for Sybase ASE are installed on the Windows server where Application Server is installed.
  You must copy the files that reside in the following directory and paste them up one level into the `\procs` directory, replacing the MaxDB version of the same files:
  `<install-dir>\SAP Strategy Management\InternetPub\procs\sybase_procs`

- If using HANA as the system database, the 32–bit ODBC drivers for HANA are installed on the Windows server where Application Server is installed.
  You must copy the files that reside in the following directory and paste them up one level into the `\procs` directory, replacing the MaxDB version of the same files:
  `<install-dir>SAP Strategy Management\InternetPub\procs\hana_procs`

> **i Note**
>
> If you are running Application server on a Linux/UNIX server, the procedure files and database directories are located in `/<install-dir>/procs`.

For information about configuring and using Model Designer, see the *Model Designer User's Guide* on the SAP Help Portal at http://help.sap.com/bosm101.

For information about configuring the system to use Entry and Approval, see Setting Up Entry and Approval [page 58].

For information about configuring the system to integrate SAP Planning and Consolidation data into the strategy management application, see *Configuring the Application to Access Planning and Consolidation Data* in the *Configuration Help for SAP Strategy Management* on the SAP Help Portal at http://help.sap.com/bosm101.

11 Custom Configurations

11.1 Introduction

This section describes custom configurations for Interactive Publisher, Application Server, and the strategy management applications. Review all topics to decide which ones may apply to you.

11.2 Modifying Scorecard Images

Use

You can modify the following images used in the application:

- Status indicators
  These files are named `<color>.gif`.
- Index value gauge when using five status indicators
  These files are named `gauge<color>.png`.
- Index value gauge when using three status indicators
  These files are named `gauge3_<color>.jpg`.
- Trend indicators
  These files are named `trend_<direction>.gif`.
- Initiative indicators
  These files are named `<color>_ux.png`.

Procedure

1. Locate the image files in the following directory:
   `<nw-install-directory>:\usr\sap\<SAP-ID>\J0<instance-ID>\j2ee\cluster\apps\sap.com\xapps~cpm~sm~client~ear\servlet_jsp\strategy\root\files`
2. Modify the files using an image editor and save them to the same directory with the same filename.

11.3 Customizing Application Strings

Use

If your company requires you to use specific terminology that is different from the terminology used in the application, you can change the system text.

Prerequisites

You are a strategy management administrator.

Procedure

1. Start the *Tools* utility by issuing this URL in the Address box of a Web browser:
   `http://<nw_server>:<port>/strategy/tools`
2. Click *UI Strings Administrator*.
3. From the *Application Names* dropdown list, select the tab whose strings you want to change.
4. From the *Language* dropdown list, select the language of your user interface.
5. In the *Search* box, type the string you want to change. All instances of that string appear in the *String* list.
6. Edit each instance of the string as appropriate.
7. Save your changes.

11.4 Adding Another Storage Collection to the System Database

Use

The application installation provides two storage collections in the SAP NetWeaver System database for storing performance management information. `Pwsample` contains sample scorecard information that you can access after installation to explore a sample scorecard. `Pw` initially contains no scorecard data; you use `pw` to start implementing your scorecards.

If your site acts as an application service provider and you must support multiple customers with separate data, you need to add and maintain another storage collection in the SAP NetWeaver System database.

Prerequisites

You are a strategy management administrator.

Procedure

1. Start the *Tools* utility by issuing this URL in the *Address* box of a Web browser:
   `http://<nw_server>:<port>/strategy/tools`
2. Click *Add a New Database*.
3. In the *New DB Name* text box, type the name of the storage collection you want to add and click *Insert*.

> **i** Note
>
> You also use the *Add a New Database* tool to rename or delete databases.

Whenever users start the applications using `http://<nw_server>:<port>/strategy`, the *Launch* page appears with links to start applications with particular scorecard storage collections with which they have access. If there are links to applications without any references to various storage collections, it means the user has access to only one storage collection.

If you bypass the *Launch* page by using direct links to the applications, then you must set the *PwDatabase* Java System Property in the strategy management area of SAP NetWeaver to specify the default database to use. For more information, see Configuring the Application Properties [page 44].

11.5 Application Limits

11.5.1 Introduction

This section details the maximum settings for modifying the application.

11.5.2 Administration Application Maximums

This table shows maximum values allowed in the administration application:

Item	Maximum Number Allowed
# Contexts	500
# Roles	100

Item	Maximum Number Allowed
# Perspectives, Objectives, KPIs, Indexed KPIs	Unlimited
# Perspectives, Objectives, KPIs, Indexed KPIs per Context	Unlimited
# Users per model connection	500
# Themes or Pathways	Up to 12 themes. Minimum of three pathways. Maximum of six pathways.
# Users in one role	1,000
# Model connections	500
# Total users in the *strategy* group in the user management system	10,000

11.5.3 Strategy Management Application Maximums

This table shows the strategy management application maximum values:

Item	Maximum Number Allowed
# Initiatives per context	1,000
# Comments per context	10,000
# Milestones per initiative	50
# Submilestones per milestone	50

11.5.4 Dimensional Model Maximums

This table shows the dimensional model maximum values:

Database	Maximum
# Dimensions that measures are dimensioned by in a view	You cannot have more than 22 unique dimensions that the measures in the view are dimensioned by.
# Dimensions per model	32

Database	Maximum
# Dimension members per dimension	500,000
# Levels per dimension	256
# Hierarchies per dimension	256
# Attributes/dimensions in dimensional model	50
# Attribute dimension members	100,000
# Bytes in a dimension member label	128
# Bytes in a measure label	128
# Cases in a security procedure	100
# Characters in a text variable cell	20 (Excel Add-In)
# Measures in a dimensional model	10,000
# KPIs per dimensional model	400 standard and indexed KPIs combined
Report width	255 columns and up to 32,000 bytes per row
Report length	64,000 rows in conjunction with 100 columns
# dimensions per measure	12, plus Time

12 Configuring the System for Other Languages

12.1 Introduction

This section discusses issues regarding configuring Application Server for languages other than English.

12.2 Applying Regional Settings for the Thousands and Decimal Separators

Use

When Application Server is installed on a Windows server, it detects the language setting on the Windows server and uses the Regional Settings from the Windows Control Panel on the server to define the language, character set, decimal separator, thousands separators, and number of decimal places.

When Application Server is installed on a UNIX/Linux server, it uses the system locale settings set with the `LANG` and `LC_` environment variables on the UNIX/Linux server to define the decimal separator, thousands separator, and number of decimal places. When you use the Application Server Administrator on a Windows client to connect client/server to Application Server running on UNIX/Linux, it uses character sets from the Windows client environment.

You can ensure that Application Server is correctly configured for your region by issuing the following commands for every model.

Procedure

To configure all existing measures in the model to use the regional settings, issue the following commands:

```
USE <model name> EXCLUSIVE

SET VARIABLE * COMMA LOCALE

SET VARIABLE * POINT LOCALE

SET VARIABLE * DECIMALS LOCALE
```

> **Note**
>
> The `COMMA LOCALE` keyword uses the thousand separator specified by the regional settings. The `POINT LOCALE` keyword uses the decimal point specified by the regional settings. The `DECIMALS LOCALE` keyword uses the number of decimal places specified by the regional settings.

To configure particular existing measures in the model to use the regional settings, issue the following commands:

```
SET VARIABLE <variable> COMMA LOCALE

SET VARIABLE <variable> POINT LOCALE

SET VARIABLE <variable> DECIMALS LOCALE
```

To specify that all new measures are created using standard defaults, issue the following commands:

```
USE <model name> EXCLUSIVE

SET DEFAULT COMMA LOCALE

SET DEFAULT POINT LOCALE

SET DEFAULT DECIMALS LOCALE
```

> **Note**
>
> The `SET DEFAULT` command does not affect any existing measures that have been changed by the `SET VARIABLE` command. This command does affect existing measures that were not previously included in the `SET VARIABLE` command.

To verify that your regional settings and character set are correct, issue the following command:

```
EXHIBIT CHARSET
```

For information about these commands, see the Application Server Help on the SAP Help Portal at http://help.sap.com/bosm101.

12.3 Setting Date and Currency Formats

Use

The Regional Settings in the Windows Control Panel have no effect on Application Server date formatting or currency formatting. You must use Application Server commands to set the appropriate formats for the region.

Prerequisites

You have not created the model yet.

Procedure

1. To set the format for dates in Application Server, issue the command, where **<format>** is a combination of the values **DMY** (day, month, year):
   ```
   SET DATE <format>
   ```
   The default format is **YMD**.
2. To set the currency symbol for all measures, issue the following command, where **<format>** is a string up to four characters:
   ```
   SET DEFAULT CURRENCY '<format>'
   ```
   To set the currency symbol for a specific measure, issue the command, where **<variable>** is the name of the variable:
   ```
   SET VARIABLE <variable> CURRENCY '<format>'
   ```

For information, see the *Application Server Help* on the SAP Help Portal at http://help.sap.com/bosm101.

12.4 Installing East Asian Fonts

Use

If you are running the strategy management application in an East Asian language but not necessarily an East Asian operating system, make sure the Asian fonts are installed on all server machines running strategy management components and the client machine.

Procedure

To install East Asian fonts, go to *Control Panel* > *Regional and Language Options* > *Languages*. Click *Install files for East Asian languages*.

12.5 Setting Month Name Abbreviations to Non-English Text

Use

If you are running the strategy management application in a non-English language, the application displays month name abbreviations in English when displaying charts, dashboard panels, and some report headings. The month name abbreviations are read from the Application Server message database.

You must follow the steps in this section to set the month name abbreviations to the appropriate language.

Procedure

1. Confirm that no one is connected to Application Server.
2. Do one of the following, depending on your platform:
   - On Microsoft Windows, stop the *SAP SM Listener*. Display the *Task Manager* and make sure there are no `lsstcp.exe` processes.
   - On Unix/Linux, run the `tldstop` script to stop the listener daemon. Issue the following command and make sure there are no active connections:
     ```
     ps -eaf grep lsstcp
     ```
3. Start an Application Server session, and log on as admin or another user with supervisor privileges.
4. Run one of the procedures put down by the downloaded files. Enter the command:
   ```
   job 'setup_cal_<xx>.pro'
   ```
   `<xx>` is the 2-letter designation for the desired language. For example, enter **de** for German or **es** for Spanish.
   Case is significant on Unix/Linux so the procedure names must be entered in lower case.
5. Do one of the following, depending on your platform:
   - On Microsoft Windows, restart the *SAP SM Listener*.
   - On Unix/Linux, run the `tldgo` script to restart the SAP SM Listener.

12.6 How to Support More than One Language

1. Complete the steps in Setting Month Name Abbreviations to Non-English Text [page 73]. For example, to set the month names to Spanish, issue the command:
   ```
   job 'setup_cal_es.pro'
   ```
2. Copy `TBDB.eng` to `TBDB.<xx>` for the language you want to use, where `<xx>` is the two-letter abbreviation for the language. `TBDB.eng` is located in the `<installation dir>\SAP Strategy Management \ApplicationServer\data` directory.
3. Make a copy of `lsserver.ini` for the additional language. For example, for the Spanish language copy `lsserver.ini` to `lsserver-es.ini`.
4. In the new .INI file, modify the `TBDB=` filename reference from `TBDB.eng` to the new version.
5. Repeat steps 1 through 4 for each language that you want to support in your environment.
6. When you have created one TBDB file for each language you wish to support, reset the month names in the English TBDB by issuing the command:
   ```
   job 'setup_cal_en.pro'
   ```
7. Create a unique Application Server user for each language that you want to support. For example, to create a user for the clients who need to display month names in Spanish, create the user GUESTES by issuing the command:
   ```
   supervisor create user guestes work wkguestes use juice usage read
   ```
8. Start the Administrator and click *Administration* > *Manage Models*.
9. Select a model connection and create an Application Server connection for each new language.
   - For the *PAS User* field, specify the name of the user created in step 7.
   - Change the *INI File* field for the Application Server connection to refer to the appropriate `lsserver-<xx>.ini` file created in step 3.

- In the *Groups and users* section of the screen, select *Users*. Add the names of the users who need to connect to the system with that language.

If you had an original Application Server Connection with a *Groups and users* setting of *Everyone* and the INI file setting of `lsserver.ini`, update this entry to *Users* and include the names of the users who need to view the dates in English.

10. Repeat step 9 for all model connections.

13 Configurations for Application Users

Before anyone can work in the administration application or the strategy management application, each user must perform some administrative tasks on their client machines.

All strategy management administrators and users must review the client requirements and set up their client machines with the minimal settings to run the applications.

For more information, see the SAP Library application help for SAP Strategy Management on the SAP Help Portal at http://help.sap.com/bosm101. Choose *Startup Requirements* > *Required Software and Settings*.

14 Uninstalling Strategy Management

14.1 Introduction

This section describes how to uninstall the strategy management components with no plans to reinstall a newer version. This section also describes how to uninstall directly after an installation, with plans to reinstall to a different drive or directory.

If you are uninstalling to upgrade to a newer version of strategy management, see the *Upgrade Guide* on the SAP Help Portal at http://help.sap.com/bosm101.

1. Stop services.
2. Uninstall the strategy management components.
3. Undeploy the strategy management Software Component Archive and the POASBC `SCA`.
4. Clean up the files.

14.2 Stopping Services

1. If Application Server is installed on a Microsoft Windows server, go to the *Services* program in *Administrative Tools* and stop the *SAP SM Listener*.
2. If Application Server is installed on a UNIX/Linux server, log on as root and stop the Application Server TCP/IP Listener daemon by running the following:
   ```
   tldstop
   ```

14.3 Uninstalling the Supporting Files and Application Server

Uninstalling the Supporting Files and Application Server on Microsoft Windows servers

1. On the Microsoft Windows server, make sure that you are logged in with a user and password that has administrative privileges on the server.
2. From the installation location, run the `xSSMSrv<sp>_<patch>-<smp-id>.exe` file.
3. In the first screen, click *Next*.
4. In the next screen, do one of the following:
   - To uninstall Application Server and the supporting files if they are both installed on the same system, deselect *Strategy Management Server Components*.

- To uninstall just the supporting files, deselect *SM Supporting Files*.
- To uninstall just Application Server, deselect *SM Application Server*.

5. Click *Next*.
6. In the final screen, click *Done*.
7. Do one of the following:
   - If you do not plan to reinstall Application Server, go to `\Windows` directory and delete the `lsserver.ini` file.
   - If you plan to reinstall Application Server on the same drive, you do not need to delete the `lsserver.ini` file.
   - If you plan to reinstall Application Server on a different drive, either delete `lsserver.ini` after installing, or else reinstall Application Server and then modify `lsserver.ini` to refer to the correct drive and directory location of Application Server.
   - If you plan to reinstall Application Server on a different drive and you are running Windows 2008 R2 system, you need to search for all instances of `lsserver.ini` and `lsdal.ini` and delete them (including the files in the `\Users` directory).

Uninstalling Application Server on a Linux/UNIX server

The Uninstall program attempts to remove or reverse all changes made to the system by the Setup program. Depending on your OS settings, you may be required to reboot the system after uninstalling.

1. Use **`rm`** to remove all files except `MASTERDB`, databases, and scripts.
2. Clean up processes and remove files at the operating system level. In the `/etc/services` file, delete the following line, where `nnnn` is a number such as 2001 or 8325. That number varies depending on the version of the strategy management software you have installed:
   ```
   lsserver nnnn/tcp lsserver # Application Server Client
   ```

14.4 Undeploying the Software Component Archive

Undeploy the software component archive for strategy management using the tool you typically use to deploy and undeploy archives in SAP NetWeaver.

For information about undeploying using SAP NetWeaver Developer Studio, see the topic *Undeploying Archives* in the *SAP NetWeaver Composition Environment Library Developer's Guide* on the Help Portal.

To undeploy strategy management using telnet to the SAP NetWeaver Application server, do the following:

1. Open a DOS window and log onto the server using **`telnet<servername><telnet_port>`**. The telnet port is typically `50008`.
2. Undeploy the strategy management components:
   ```
   undeploy vendor=sap.com name=xapps~cpm~sm~strategymanagement
   undeploy vendor=sap.com name=xapps~cpm~sm~strategymanagementaction
   undeploy vendor=sap.com name=xapps~cpm~sm~strategymanagementdic
   undeploy vendor=sap.com name=xapps~cpm~sm~client~ear
   undeploy vendor=sap.com name=xapps~cpm~sm~ctc
   ```

> **i** Note
>
> It is not necessary to restart SAP NetWeaver after an undeploy.

14.5 Cleaning Up Directories

Use

The *Uninstall* program does not remove several files. If you want to uninstall the components without upgrading to a new version, you should manually delete these files.

Procedure

1. In Microsoft Windows explorer, go to the `\Windows` directory and delete `Lsserver.ini`, `lsdal.ini`, and `lsdal.cnf`.
2. In Microsoft Windows Explorer, go to `\Program files` and delete the entire `\SAP Strategy Management` directory.
3. Delete any files that were created outside of the `<drive>:\Program Files (x86)\SAP Strategy Management` directory structure. These might be dimensional models.
4. Delete files currently in use by other programs.
5. Directories that were created by the installation program that contain user-created files.

15 Strategy Management Java System Properties in SAP NetWeaver

The following Java System Properties are used in SAP NetWeaver for the strategy management application. The Java System Properties appear in the following guides on the SAP Help Portal.

Java System Property	Guide
`acceptlanguage`	*SAP Strategy Management Installation Guide*
`AuditLogComments`	*SAP Strategy Management Installation Guide*
`AuthType`	*SAP Strategy Management Excel Add-In Installation Guide*
`dataload.group.defaultPermissions`	*User's Guide for SAP Strategy Management External Data Loader*
`DirectoryServiceType`	*SAP Strategy Management Excel Add-In Installation Guide*
`DisableExcelDownloadEA`	*SAP Strategy Management Installation Guide*
`EAValueAuditFlag`	*SAP Strategy Management Installation Guide*
`EnableLegacyReports`	*SAP Strategy Management Installation Guide*
`EntryandApprovalRole`	*SAP Strategy Management Installation Guide*
`external.consulting.appgroup.name`	*User's Guide for SAP Strategy Management External Data Loader*
`external.consulting.appgroup.tabs`	*User's Guide for SAP Strategy Management External Data Loader*
`external.csv.flag`	*User's Guide for SAP Strategy Management External Data Loader*
`external.pm.appgroup.name`	*User's Guide for SAP Strategy Management External Data Loader*
`external.pm.appgroup.tabs`	*User's Guide for SAP Strategy Management External Data Loader*
`FIMLinkID`	*SAP Financial Information Management 10.0: Supplement for SAP Strategy Management 10.0*
`FIMurl`	*SAP Financial Information Management 10.0: Supplement for SAP Strategy Management 10.0*

Java System Property	Guide
`Graphic.Source`	*SAP Strategy Management Installation Guide*
`GRCFlag`	*SAP Strategy Management Configuration Guide*
`GRCSystemURL`	*SAP Strategy Management Configuration Guide*
`HelpLocation`	*SAP Strategy Management Installation Guide*
`HomeTabExtFileTypes`	*SAP Strategy Management Installation Guide*
`Mail.domain`	*SAP Strategy Management Installation Guide*
`Mail.from`	*SAP Strategy Management Installation Guide*
`Mail.smpt.host`	*SAP Strategy Management Installation Guide*
`odbo.timeprovider`	*SAP Strategy Management Configuration Guide*
`pd4ml.fontconfigpath`	*SAP Strategy Management Installation Guide*
`pd4ml.fontdir`	*SAP Strategy Management Installation Guide*
`Pip.Type`	*SAP Strategy Management Installation Guide*
`PWDatabase`	*SAP Strategy Management Installation Guide*
`sem.appgroup.name`	*Migration Guide for SEM to SAP Strategy Management*
`sem.appgroup.tabs`	*Migration Guide for SEM to SAP Strategy Management*
`sem.dbname`	*Migration Guide for SEM to SAP Strategy Management*
`StrategyGroup`	*SAP Strategy Management Installation Guide*
`template.strategy`	*SAP Strategy Management Installation Guide*

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