ORACLE® ENTERPRISE PERFORMANCE MANAGEMENT SMART SPACE

RELEASE 9.3.1

INSTALLATION GUIDE FOR UNIX

ORACLE® | Hyperion

Smart Space Installation Guide for UNIX, 9.3.1

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Pre-Installation Tasks and Information

About Smart Space

Oracle® Enterprise Performance Management Smart Space is a personalized information delivery solution that uses desktop gadgets to deliver Business Intelligence and Enterprise Performance Management to all users. It combines Microsoft Windows and Oracle's Hyperion® Reporting and Analysis – System 9 to provide these features:

- **Always-on BI**—After users logon to Windows, information transparently flows from Oracle's Hyperion® Workspace to desktop gadgets.

- **User assembled applications**—Smart Space presents subsets of Workspace functionality in the form of gadgets that users can customize based on their business needs.

- **Instant collaboration**—Users can work dynamically with peers and easily share information. Shared decision-making is supported by an auditable instant messaging service that securely operates behind the firewall. Conversations can be saved and associated with individual decisions, enabling faster and more effective decision management.

- For more information on Smart Space, see http://www.oracle.com/technology/products/bi/epm/smart-space/index.html.

Smart Space Components

Smart Space components integrate with Oracle's Hyperion® Workspace, Oracle's Hyperion® Shared Services, and Reporting and Analysis.
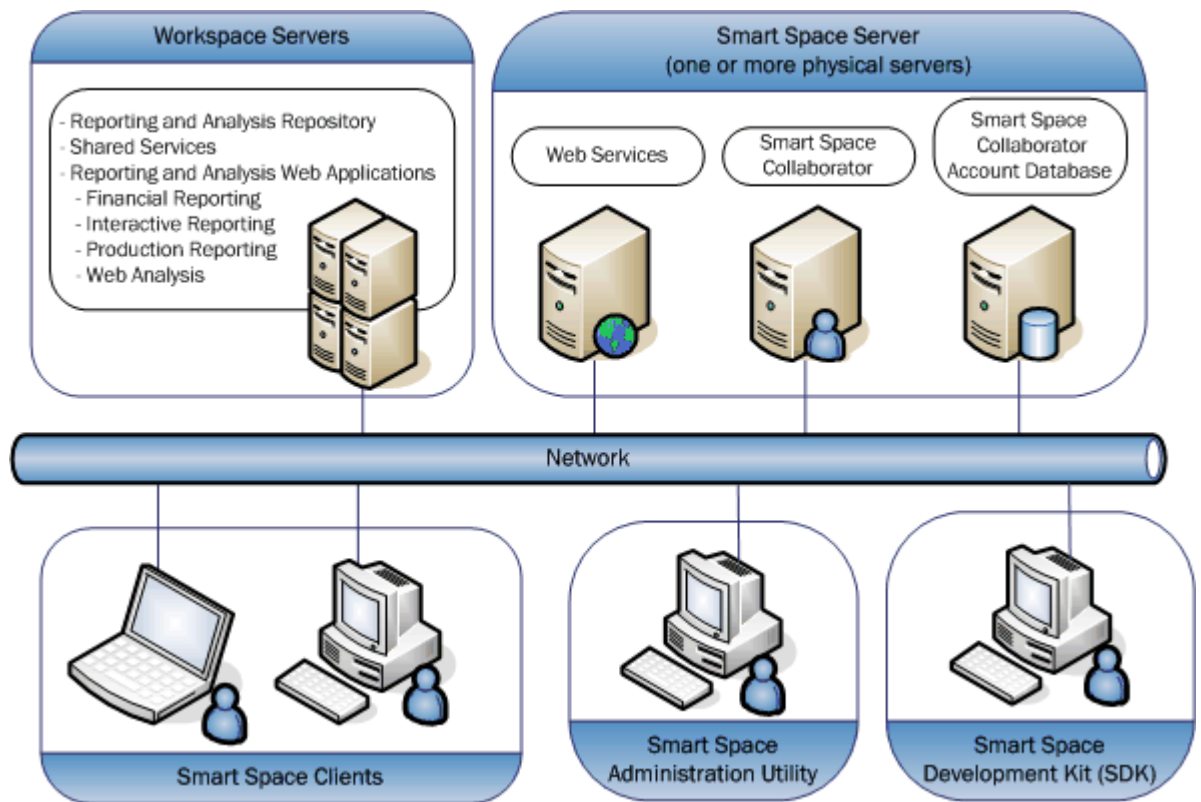
Smart Space Server

Smart Space server components provide services that communicate between Reporting and Analysis and the client tier:

- **Web services**—For Web services, Oracle® Enterprise Performance Management Smart Space Collaborator services, and administration services.

  Smart Space requires that Smart Space server components and the application server run on the same computer.

  Note:

  Oracle provides Apache Tomcat on the installation media but does not maintain the Apache Tomcat Application Server software.

- **Smart Space Collaborator**—For enabling instant collaboration.

- **Smart Space Collaborator Account Database**—For storing Smart Space Collaborator accounts.

Smart Space Client

Smart Space client software runs on user's computers and enables gadgets, instant collaboration, and access to the Reporting and Analysis repository. See *Smart Space User's Guide*.

Smart Space Administration Utility

The Administration Utility securely signs and publishes the Smart Space client and Smart Space gadgets to a Smart Space Server. See "Installing the Administration Utility" on page 34.

Smart Space Development Kit

The Smart Space development kit (SDK) enables you to build your own gadgets to access the Smart Space framework and back-end applications. See *Smart Space Developer's Guide*.

Smart Space Documentation

All Smart Space documentation is accessible from these locations:

- Information Map, which is available from the Smart Space Help menu and the Start menu.

   Tip:

   The URL is `http://server:port/SmartSpace/Start.html`, substitute your server and port in `server:port`.

- Oracle's E-Delivery Web site (http://edelivery.oracle.com/).
- Online help, available within the application.

Preparing to Install

Prerequisites

Smart Space relies on Shared Services for authentication. These products must be installed:

- **Reporting and Analysis Release 9.3.1** with one or more of these modules:
  - Oracle's Hyperion® Financial Reporting – System 9
  - Oracle's Hyperion® Interactive Reporting – System 9
  - Oracle's Hyperion® SQR® Production Reporting – System 9
  - Oracle's Hyperion® Web Analysis – System 9
- **Shared Services Release 9.3.1** with provisioned users.

See the *Hyperion Installation Start Here* for system requirements for these products; see also the *Hyperion Reporting and Analysis – System 9 Installation Guides* and the *Hyperion Shared Services Installation Guide*.

Smart Space Server Requirements

Server OS/Processor

Operation System	Platform	Processor
HP-UX: • HP-UX 11.31 • HP-UX 11.23 • HP-UX 11.11 **Note:** Release 9.3.1 is the last release to support HP-UX 11.11 RISC.	64–bit	Itanium 2
IBM AIX: • AIX 5.3 ML3 • AIX 5.2 ML7	32-bit[*]	PowerPC
Red Hat Linux: • Red Hat Linux AS 4.0 Update 2 with glibc-2.3.4-2.13 or later • Red Hat Linux EL 4.0 • Oracle Enterprise Linux (OEL)	32-bit	x86
Solaris: • Solaris 10 • Solaris 9	32-bit	SPARC

[*]If running Reporting and Analysis on a UNIX platform, do not use Oracle's Hyperion® Financial Management – System 9 as a data source.

Server Disk Space and RAM

Disk space and RAM requirements:

- 1 GB RAM
- 1 GB disk space

Smart Space Collaborator Account Database

You must use one of these relational databases for the Smart Space Collaborator Account Database:

Database
IBM DB2:   • IBM DB2 9.1   • IBM DB2 8.2
Microsoft SQL Server:

Database

- Microsoft SQL Server 2005 SP1[*]
- Microsoft SQL Server 2000 SP3a

Oracle[†]

- Oracle 10*g* Release 2 (10.2.0.2)
- Oracle 10*g* (10.1.0.5)
- Oracle 9*i* (9.2.0.5)

[*]By default, SQL Server 2005 disables TCP/IP connections to the database. Ensure that the TCP/IP connections are enabled.

[†]For all supported versions of Oracle: 1) Includes support for Real Application Cluster (RAC) and ASM. Includes support for SE, SE1, and EE. The Oracle OLE provider and Oracle database server must be the same version.

Java Application Servers

Supported Java Application Servers

- Apache Tomcat 5.0.28[*]

- BEA WebLogic 9.1[†]
- BEA WebLogic 8.1.6[‡]

- IBM WebSphere 6.1.0.5
- IBM WebSphere 6.0.2.11[d]

- Oracle 10*g* Release 3 (10.1.3.1.0)
- Oracle 10*g* Release 2 (10.1.2.0.2)

[*]Apache Tomcat is automatically installed on all platforms. For deployments that require high availability or failover, Oracle recommends using a commercially supported Java application server that supports high availability and failover.

[†]WebLogic Express is supported for each supported version of WebLogic.

[‡]Release 9.3.1 is the last release to support BEA WebLogic 8.1.6.

[d]WebSphere Express and Premium are supported for each supported version of WebSphere.

Smart Space Client Requirements

For installation steps, see *Smart Space User's Guide*.

Client OS/Processor

Operation System	Platform	Processor
One of these operating systems: - Microsoft Windows Vista (all editions above Home with UAC enabled) - Microsoft Windows XP Professional	32-bit	x86

Client Disk Space and RAM

Disk space and RAM requirements:

- 512 MB RAM
- 200 MB disk space

Client Required Third-Party Software

Disk space and RAM requirements:

- Microsoft .NET Framework 2.0
- Web browser for client installation: Microsoft Internet Explorer 6.0 or later

Smart Space Administration Utility Requirements

For installation steps, see "Installing the Administration Utility" on page 34.

Administration Utility OS/Processor

Operation System	Platform	Processor
- Microsoft Windows Vista (all editions above Home with UAC enabled) - Microsoft Windows XP Professional	32-bit	x86

Administration Utility Disk Space and RAM

Disk space and RAM requirements:

- 512 MB RAM (100 MB is needed to run the Administration Utility process)
- 200 MB disk space

Administration Utility Required Third-Party Software

- Microsoft .NET Framework 2.0

Smart Space SDK Requirements

For installation steps, see *Smart Space Developer's Guide*.

SDK OS/Processor

Operation System	Platform	Processor
● Microsoft Windows Vista (all editions above Home with UAC enabled) ● Microsoft Windows XP Professional	32-bit	x86

SDK Disk Space and RAM

Disk space and RAM requirements:

- 256 MB RAM
- 100 MB disk space

SDK Required Third-Party Software

- Microsoft® Visual Studio® 2005 any edition

    Note:

    You also need Microsoft® .NET 2.0 which is installed with Visual Studio 2005.

- Administrative privileges

Installation Checklist

This table lists tasks to install Smart Space. Check each task as you complete it.

Table 1   Smart Space Server Installation Checklist

✔	Tasks	
	1. Server	Install prerequisite software; see "Prerequisites" on page 7.
	2. Server	Meet hardware and software requirements, see "Smart Space Server Requirements" on page 8.
	3. Server	Install the Smart Space server software; see "Running the Smart Space Server Installation Wizard" on page 16.
	4. Server	Configure the Smart Space server software; see Chapter 3, "Configuring Smart Space Server".
	5. Server	Start the Smart Space services; see "Starting the Smart Space Services" on page 29.
	6. Administration Utility	Install the Administration Utility; see "Installing the Administration Utility" on page 34.

✔		Tasks
	7. Administration Utility	Configure the Administration Utility; see "Configuring and Connecting" on page 37.
	8. Administration Utility	Use the Administration Utility to securely sign and publish Smart Space client and gadgets to the Smart Space server, see "Publishing the Smart Space Framework and Gadgets " on page 39.

	9. Client	Use this URL to install Smart Space client software on users' desktops:
		
		`http://server:port/`
		`SmartSpace/`
		`SmartSpace.application.`
		
		Where *server:port* represents your server and port; see the *Oracle EPM Smart Space User's Guide.*

Optional: Smart Space SDK Installation	10. Development	Optionally install the Smart Space SDK to create custom gadgets. See the *Oracle EPM Smart Space Developer's Guide*.

This table lists URLs and files setup during the Smart Space server installation and configuration.

Table 2   Component Installation Information

Component	Location, URL or Service Name

Smart Space Collaborator Configuration Files	`$HOME/Hyperion/SmartSpace/ReleaseNumber/`
	`Collaborator/conf.`
	
	Tip: `wildfire.xml` contains database connection settings and the CSS plugin.

Smart Space Collaborator Administration Console	`http://host:port/login.jsp.`
Administration Utility installation	`http://host:port/SmartSpace/Installations/` `AdminUtility/Setup.msi.`
Information Map	`http://server:port/SmartSpace/Start.html`

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Installing Smart Space Server Software

What Happens During Installation of Smart Space

During installation, the Smart Space server installation program performs these operations:

- Creates directories and subdirectories under the location specified during installation.

  For a list of the Smart Space directories created during installation, see "Files Installed in the Smart Space Directory" on page 14.

- Installs common components to `<HYPERION_HOME>/common`. For information about HYPERION_HOME and a list of directories "Installation to Hyperion Home" on page 14.

  After HYPERION_HOME is defined, you can run a migration utility to change its location. Hyperion Home Migration Utility is provided with the Shared Services installation. See the *Hyperion Shared Services Installation Guide*.

- For a *typical* Smart Space server, these components are installed:

  - Smart Space server

  - Smart Space Collaborator

  - Web Services

    - Authentication Service

    - Analytics Service

    - Reporting and Analysis Services

  - Smart Space application

  - Smart Space information map and documentation

● For a *custom* Smart Space server, the components you select are installed.

Note:

You must install and configure a relational database for Smart Space Collaborator.

Files Installed in the Smart Space Directory

Smart Space files are installed within the Smart Space directory, by default, `$HOME/Hyperion/SmartSpace/`*`ReleaseNumber`*:

File or Directory	Contents
`Collaborator`	Server components; Smart Space Collaborator settings, files, and binaries.
`Docs`	Documentation files in language directories. See "Smart Space Documentation" on page 7.
`Resources`	Files used by the installation program.
`Uninstall`	Files for removing Smart Space. See "Removing Smart Space Server" on page 31.
`WebServices`	Files for Web services.
`Gadgets.xml`	Configuration file.

Installation to Hyperion Home

When multiple Oracle products are installed on one computer, common internal and third-party components are installed to a central location called *Hyperion Home.* The Hyperion Home value is stored in `.hyperion.<hostname>` in the `home` directory.

Note:

To ensure that all installers have the permissions required to modify the *HYPERION_HOME* location, Oracle recommends that all Oracle or Hyperion applications be installed under one HYPERION user account.

Hyperion Home Location

The default location for Hyperion Home is `$HOME/Hyperion`. When you install, the installer searches for the `HYPERION_HOME` environment variable on the computer to which you are installing.

If the Hyperion Home location was defined during an earlier product installation, the installation uses the previously defined location. The location cannot be changed through the installer.

If the current installation is the first Oracle | Hyperion product installation on the computer, you can specify the location during installation.

Note:

If the HYPERION_HOME directory is mounted on an NFS so that one HYPERION_HOME location is visible across multiple computers, Shared Services can be installed to only one computer. If you try to install Shared Services to an additional computer, the previous installation is detected.

Files Installed in the HYPERION_HOME Directory

Various files are installed in the HYPERION_HOME/common directory by a default installation of Smart Space. Some common components, and, thus, some files and directories are optional and may not be installed.

Table 3   Common-Component Folders Created in the Common Directory

Directory	Contents
appServers	Application server files.
config	Oracle's Hyperion® Configuration Utility™ files.
CSS	Files to support external authentication.
HyperionLookAndFeel	Installer user interface files.
JakartaCommons	Common development library files.
JDBC	JDBC files.
JRE	Java Runtime Environment files.
loggers	Files for external authentication logging.
SharedServices	Supporting files for Shared Services.
utilities	Utilities to change the location of Hyperion Home and to export, import, or validate provisioning data.
XML	Common XML components.

License Compliance

Oracle does not require Oracle's Hyperion® License Server™ (or standalone license files).

To ensure compliance with your license agreement, Oracle recommends that you implement an auditing process. In addition, during product configuration with Hyperion Configuration Utility, activate only the features that you purchased. See "Hyperion License Compliance" in the *Hyperion Installation Start Here*.

Setting up the Database

Set up a relational database and test connectivity before installing Smart Space server. The database is used to store Smart Space Collaborator user account information.

➤ To setup the database:

1 **Set up the database.**

2 **Set up access between the Smart Space server and the database.**

3 **If the database is installed, perform a full backup.**

Downloading the Installers

Use this procedure to download the Smart Space server installation software from the Oracle E-Delivery Web site.

➤ To get the Smart Space installer:

1 **Download the Smart Space installer from Oracle's E-Delivery Web site.**

2 **Extract these files from the ZIP file.**

- media.inf
- setupAixPlatform.bin
- setupHP11Platform.bin
- setupHPIA64Platform.bin
- setupLinuxPlatform.bin
- setupSolarisPlatform.bin
- setupWin32Platform.exe
- suite.jar

3 **Continue with "Running the Smart Space Server Installation Wizard" on page 16.**

Running the Smart Space Server Installation Wizard

Smart Space requires that Smart Space server and the application server run on the same computer.

➤ To install Smart Space server software:

1 **Verify that all preparation tasks are complete and system requirements are met.**

   See "Preparing to Install " on page 7 and the *Hyperion Installation Start Here*.

2 **Ensure you have the Smart Space server installation software from the Oracle E-Delivery Web site. See "Downloading the Installers" on page 16.**

3 Set the X display:

a. If using a remote X server, enable connectivity from the computer where the install is being run, or from all hosts; for example:

```
$ xhost +
```

b. On the server where you install Smart Space, set the DISPLAY environment variable. For example, using a Bourne compatible shell, activate bash:then do these steps:

```
$ DISPLAY=<hostname>:<display number>
$ export DISPLAY
```

4 Navigate to the directory where you downloaded the Smart Space server installation software and execute this command:

```
./setup<OS>Platform.bin
```

Note:

If you do not have X display use this command `./setup<OS>Platform.bin –console`

5 Select a language for the installation wizard to use.

6 Select the country where you are installing the software, and click **Next**.

7 Read the agreement, select **I Agree,** and click **Next**.

8 Specify the Hyperion Home directory, and click **Next**.

If you install Smart Space server software on the computer where other Oracle products reside, use the established Hyperion Home; otherwise use the default or enter a new value.

9 Enter an installation directory or accept the default, and click **Next**.

10 Select **Typical** or **Custom**, and click **Next**.

Tip:

The typical and custom options install all components by default. To install a subset of components, click Custom and deselect one or more check boxes.

11 Review the installation summary, and click **Next**.

12 Wait for the installation to complete, read the summary information, and click **Next**.

13 To run the configuration utility, proceed to "Hyperion Configuration Utility" on page 19.

Tip:

The Hyperion Configuration Utility does not launch automatically.

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Configuring Smart Space Server

Hyperion Configuration Utility

Hyperion Configuration Utility is a tool that installs with Oracle's Hyperion products. You must use it to set up and reconfigure products. Configuration tasks:

● **Product option activation**—Select the product features that you are authorized to use.

● **Shared Services registration**—Use Shared Services to provision and share users among Oracle product applications.

● **Relational database configuration**—Store and retrieve application data.

● **Application server deployment**—Deploy the application automatically or partially to an application server.

● **Shared Services deregistration**—Deregister products from Shared Services before the products are upgraded or removed.

For information about the order of configuration tasks, acceptable characters, and resolving configuration issues, see

● "Task Sequence " on page 19.

● "Acceptable Characters " on page 20.

● "Troubleshooting " on page 20.

Task Sequence

Oracle recommends that you configure Shared Services and Reporting and Analysis separately, performing each configuration task for each product.

Acceptable Characters

During configuration, enter only alphanumeric characters, dashes (-), dots (.) , underscores (_), and tildes (~) .

Note:

Tildes are supported only on Microsoft Windows.

Troubleshooting

Terminating configuration for one product does not stop the configuration of other products. All configuration warnings and errors are logged as follows:

UNIX — `$HYPERION_HOME/logs/config`

If you encounter errors, perform these tasks:

- Configure products individually.

- See the *Hyperion Installation and Configuration Troubleshooting Guide* for information about configuration checks, debugging using logs, troubleshooting methodology, and solutions to common configuration issues.

Configuration Settings

Use this table to list the prerequisite component settings you need to configure Smart Space server. These components must be setup before you run the configuration.

Table 4   Prerequisite Component Settings

Component	Settings
Shared Services: ● Server name ● Port (default 58080) ● Administrator user name and password	
GSM (from Reporting and Analysis content provider) ● Server name ● Port (default 6800)	
Smart Space Collaborator account database: **Note:** This is the relational database that stores user account information. ● Server name ● Port ● Database name	

Component	Settings
● Administrator user name and password	
Hyperion Home directory **Note:** If you install Smart Space server software on a computer where other Oracle products reside, use the established Hyperion Home; otherwise accept the default or enter a new value.	

This table lists default database and Oracle product ports.

Table 5 Default Database and Oracle Product Ports

Component	Default Port
Shared Services	58080
Reporting and Analysis	6800
Oracle Database	1521
Microsoft SQL Server Database	1433
IBM DB2	50000

This table lists the Smart Space server default port numbers. You can use these defaults when you configure.

Table 6 Smart Space Server Default Port Numbers

Component	Default Port
Smart Space Collaborator Client	5222
Smart Space Collaborator Admin Console	17086
Smart Space Collaborator Secure Admin Console	17096
Application server deployment	17080
Application server secure port	17090

Use this table to record the settings you define in the configuration process:

Table 7 Smart Space Server Settings Created while Configuring

Component	Settings
Smart Space Collaborator ● Host name ● Client port (default 5222) ● Admin Console port (default 17086) ● Secure Admin Console port (default 17096) ● Administrator user name and password	

Component	Settings
Smart Space server software: ● Hyperion Home directory ● Installation directory	
● Application server deployment port (default 17080) ● Application server secure port (default 17090)	

Configuring Smart Space

To configure or reconfigure products, run Hyperion Configuration Utility on the computer that hosts Smart Space. Refer to the information you recorded in Table 4, "Prerequisite Component Settings," on page 20.

➤ To configure Smart Space:

1 Launch Hyperion Configuration Utility as follows:

- Using one method:

  ○ If you are using a graphical configuration interface, change to `<HYPERION_HOME>/common/config` and type `./ configtool.sh`.

  ○ If you are using the console, change to `<HYPERION_HOME>/common/config,` and type `./configtool.sh —console`.

2 Select the language in which to configure and click **Next**.

3 From the Welcome screen click **Next**.

4 Click **Oracle EPM Smart Space,** select one or more items and click **Next**:

- Deploy to Application Server

- **Optional**: Register with Shared Services

  Note:

  Shared Services registration enables users to install Smart Space from within Workspace. If you do not want to provide this ability to users, do not register with Shared Services.

- Configure Database.

  Note:

  Sets up the Smart Space Collaborator database which stores user accounts.

5 Enter Shared Services information:

- **Server Name**—Name of the computer where the Shared Services server is installed.

- **Port**—Default (58080) or custom Shared Services server port number.
- **User**—User name of the Shared Services Administrator.
- **Password**—Password of the Shared Services Administrator.

Note:

Shared Services is used for user authentication.

- **SSL**—Select to use Secure Sockets Layer for encryption.

In order for the Smart Space web application server to connect to an SSL-protected Shared Services server, the SSL certificate authority key must be added to the appropriate JVM keystore. See your application server documentation and the *Hyperion Product SSL Configuration Guide*.

6 Enter the Web services information, and click **Next**:

- **GSM Host**—Name of the server where Reporting and Analysis is installed.
- **GSM Port**—Default (6800) or custom GSM port number.
- **Smart Space Collaborator Host**—Name of server where you want to install Smart Space Collaborator. Typically this is on the same computer where the install is being performed.
- **Smart Space Collaborator Client Port**—Default (5222) or custom port number.

Tip:

Do not use Analytic Provider Services URL and Use Analytic Provider Services. These are reserved for the future.

7 Enter the Smart Space Collaborator information, and click **Next**:

- **Host**—Name of the Smart Space server.
- **Admin Console Port**—Default (17086) or custom port number.
- **Secure Admin Console Port**—Default (17096) or custom port number.
- **Smart Space Collaborator Client Port**—Default (5222) or custom port number.
- **User Name**— New Smart Space Collaborator user.
- **Password** and **Confirm Password**—Password for the new Smart Space Collaborator user.

8 Select a database to use as the Smart Space Collaborator Account database and click **Next**.

9 Enter these database configuration details and click **Next**:

- **Server**—Name of the computer or server hosting the Smart Space Collaborator account database.
- **Port**—Server port number on which the database listens. Default ports are:
  - 1521 for Oracle.

❍ 1433 for Microsoft SQL Server.

❍ 50000 for IBM DB2.

● **Database (or SID for Oracle)**—Database name or the Oracle system identification (database instance). Do not use restricted characters.

● **Username**—Name of the database owner.

● **Password**—Password of the database owner.

● **Data Tablespace (Oracle)**—Name of an existing tablespace used to create tables.

The data tablespace is the logical portion of the database used to allocate storage for table data.

● **Index Tablespace (Oracle)**—Name of an existing tablespace used to create database indexes.

The index tablespace is the logical portion of the database used to allocate storage for index data.

10 Start the application server.

Note:

If you deploy Apache Tomcat automatically, it is installed and started and the Smart Space server software is deployed.

11 Select a Smart Space application server and deployment type, and click **Next**.

Table 8   Application Server Deployment Type

Selection	Task
Application server and deployment type	a. Select the application server, then an option: ● Automatic— Hyperion Configuration Utility deploys all files to the application server, resulting in no or minimal post-deployment tasks: ❍ See Automatically Deploying to the Application Server . Special considerations: ❑ WebLogic: If disk space is inadequate, specify another location for the `.war` file and redeploy. ❑ WebSphere: If disk space is inadequate, Hyperion Configuration Utility places `java.io.tempdir` in `<HYPERION_HOME>/temp`. After deployment, the `temp` directory is deleted. ● Manual— The `.war` file is placed in this directory, enabling you to manually deploy after configuration. See Manually Deploying to the Web Application Server for manual deploy instructions. *ProductHome>/<AppServer>*`/InstallableApps/ common.` WebLogic 8.1.x — *<ProductHome>/<AppServer>*`/ InstallableApps`

Selection	Task
	Tip: For simplicity, Oracle recommends that you use the same application server and domain or profile.

12 Review the configuration tasks, and click **Next**.

Configuration time depends on the products and tasks you selected. Progress is recorded in `<HYPERION_HOME>\logs\config\configtool.log`.

13 When configuration finishes, the status of each task is displayed; click **Next**.

If configuration is successful, perform any required post-configuration tasks and start Smart Space.

If errors display, see the *Hyperion Installation and Configuration Troubleshooting Guide* for information about resolving configuration issues.

14 Select **No** and click **Next**.

15 Click **Finish**.

Automatically Deploying to the Application Server

You can deploy multiple products to one application server, in a single profile (WebSphere) or domain (WebLogic 9.1.x). The application server must be installed on the same computer as the products.

For simplicity, Oracle recommends that you use the same application server and domain or profile.

Caution!

If you deploy to IBM WebSphere, do not install and configure Smart Space: as root. The root user can grant write permission of the appropriate files and directories to a non-root user. The non-root user can then create the profile. The root user can create a group for users who are authorized to create profiles, or the root user can give individual users the authority to create profiles. See this URL for more information `http://publib.boulder.ibm.com/infocenter/wasinfo/v6r0/index.jsp?topic=/com.ibm.websphere.base.doc/info/aes/ae/tpro_nonrootpro.html`.

Table 9   Deployment

Field	Description
Location	Path to the application server installation directory: ● WebSphere Base: `/opt/WebSphere/AppServer`. ● WebSphere Express:

Field	Description

	`/opt/IBM/WebSphere/Express51/AppServer.`
	
	● WebLogic 8.1.*x*:
	
	`/opt/bea/weblogic81.`
	
	● WebLogic 9.1.*x*:
	
	`/opt/bea/weblogic91.`

Deploy as a service	A default that registers the Web application as a Windows service listed in Windows Control Panel. See "Startup Dependencies" in the *Hyperion Installation Start Here*.
Profile (WebSphere)	Name of the profile where you access the application.
Domain (WebLogic)	Default name of the domain where you access the application. For WebLogic 9.1.*x*, all applications deploy to the same domain. To change the domain name, see "What Happens During Automatic Deployment " on page 26.
BEA Home (WebLogic)	Path to the BEA Home directory (for example, `/opt/`).
Username and Password (WebLogic)	WebLogic administrator user name and password. **Note:** If such a user does not exist, the information that you enter creates a user.
Component	Products being deployed.
Server Name	Name of the server where you access the product.
Port	The default port. **Note:** To change the default port, enter a unique port number that does not exceed 1025, thus avoiding conflicts with third-party port assignments. See "Ports" in the *Hyperion Installation Start Here*.

What Happens During Automatic Deployment

WebSphere and WebLogic 9.1.*x*

Hyperion Configuration Utility deploys all applications to the same WebSphere profile or WebLogic domain. The profile or domain is created when the first application is deployed. Each application runs in a separate JVM.

Hyperion Configuration Utility deploys applications to:

`HYPERION_HOME/deployments/<AppServNameAndVersion>.`

Under this directory, the `bin` directory contains start and stop scripts for all deployed applications. For Smart Space, the directory includes a `setCustomParamSmartSpace.cmd` file or a shell script where JAVA_OPTIONS can be changed when start scripts are used.

To change the default profile or domain directory, modify the deployment directory parameter in the `weblogic.properties` or `websphere.properties` in:

```
HYPERION_HOME/common/config/resources/<AppServName>/resources.
```

Note:

It is not recommended to change other parameters in this file.

WebLogic 8.1.*x*

Deploying to one domain for WebLogic 8.1.*x* is not supported. For WebLogic 8.1.*x*, Oracle's Hyperion® Configuration Utility™ deploys applications to:

```
PRODUCT_HOME/AppServer/InstalledApps/<AppServName>/<Version>.
```

Manually Deploying to the Web Application Server

This summarizes the generic deployment instructions for the Smart Space Web application server. The detailed steps will be different based on the Web application server, used to host the Smart Space Web application, such as WebLogic, WebSphere, or Oracle Application Server (OAS). Refer to your vendor's documentation for deployment details.

Note:

Ensure that you selected manual deployment for your Web application server, see . Two war files are installed at `SMARTSPACE_HOME\WebServices`: `SmartSpace.war` and `SmartSpaceWebServices.war`.

➤ To manually deploy Smart Space to an application server:

1 **Deploy** `SmartSpace.war` **with the context root** `/SmartSpace`.

2 **Deploy** `SmartSpaceWebServices.war` **with the context root** `/SmartSpaceWebServices`.

3 **Configure the Smart Space Web Application JVM process with these Java system properties:**

- `-Dsmartspace.home=SMARTSPACE_HOME`

- `-Dhyperion.home=HYPERION_HOME`

4 **Set the Start Heap and Max Heap for the Smart Space Web App JVM process to 256 MB and 512 MB, respectively.**

5 **Start the Smart Space Web Application and test it using these URLs:**

- `http://sspace_server:17080/SmartSpace`. This displays the information map.

- `http://sspace_server:17080/SmartSpaceWebServices/services/AdministrationWebService`. This displays the AXIS service page.

Notes:

- SMARTSPACE_HOME refers to the Smart Space installation home directory, such as `-Dsmartspace.home=/export/home/sspace/Hyperion/SmartSpace/9.3`. Update this path as needed.

- HYPERION_HOME refers to the Hyperion home directory, such as `/export/home/sspace/Hyperion`.

- Unlike Oracle's Hyperion® Reporting and Analysis – System 9 the Smart Space Web application does not have to be deployed behind a Web server. It can be, but is not required.

- The default Web application port for Smart Space is 17080 for the automatic deployment. You can use a different port if you choose.

- The configuration utility collects information about Smart Space port (default 17080) and writes it to configuration files on the Smart Space server. Be sure to use the same port you selected during the manual deployment. If you choose a different port, you must update the configuration files or rerun the configuration utility and change the port.

- Deploying the Smart Space framework and gadgets will often produce an Out of Memory error for the default Web application server `jvm start` and `max heap` settings. Increase them to 256 MB and 512 MB respectively. Then deploy the framework and gadgets using the Administration Utility.

Performing Postconfiguration Tasks

Verifying Startup Dependencies

Before starting Smart Space, verify that Shared Services server is running; see the *Hyperion Shared Services Installation Guide*.

Verifying and Installing JDBC Drivers

If you are using IBM DB2 you must manually install the correct JDBC driver. The Smart Space installer installs the correct JDBC drivers for SQL Server and Oracle.

IBM DB2 JDBC Drivers

Check for the JDBC 1.2 compliant driver, db2java.zip (1293KB), located in the `%DB2PATH%\java2` directory. If needed, download the driver to the lib/ directory of your Smart Space Collaborator installation.

Update `Hyperion_Home\SmartSpace\9.3\Collaborator\conf\wildfire.xml` with:

- driver: COM.ibm.db2.jdbc.app.DB2Driver
- serverURL: jdbc:db2:[DB NAME] for example, Collaborator

If you are using a remote database use the following values for `wildfire.xml`:

- driver: COM.ibm.db2.jdbc.net.DB2Driver

- serverURL: jdbc:db2:[DB NAME] for example, Collaborator

Optional: Verify the SQL Server JDBC Drivers

The free TDS JDBC driver, is installed with Smart Space. These values are setup in `Hyperion_Home\SmartSpace\9.3\Collaborator\conf\wildfire.xml`:

- driver: `net.sourceforge.jtds.jdbc.Driver`
- serverURL: `jdbc:jtds:sqlserver://` `host:port:database/ ;appName=Collaborator`

Optional: Verify the Oracle JDBC Drivers

The `ojdbc14.jar` driver is installed with Smart Space. These values are set up in `Hyperion_Home\SmartSpace\9.3\Collaborator\conf\wildfire.xml`:

- driver: `oracle.jdbc.driver.OracleDriver`
- serverURL: `jdbc:oracle:thin:@host:port:database`

Optional: Manually Creating Database Tables

The first time the Smart SpaceSmart Space Collaborator runs, a database script automatically runs and creates tables. If you want to setup the database manually, and bypass the database script, see one of these sections:

-
-
-

Starting the Smart Space Services

After you configure you need to start the Smart Space Services.

➤ To verify and start the Smart Space services:

1 Use these steps to start the services:

a. To start Web Services, change to the `HYPERION_HOME/deployments/Tomcat5/bin` in the deployments directory and enter `./startSmartSpace.sh`.

b. To start Smart Space Collaborator, change to the `$HOME/Hyperion/SmartSpace/` `ReleaseNumber/Collaborator/bin` folder and enter `./wf.sh start`.

Tip:

The *first* time you run these services on UNIX, you need to start Smart Space Collaborator, stop it and then restart it. Perform these steps:

i.   Wait for a few moments.

ii. Enter `./wf.sh stop`

iii. Enter `./wf.sh start.`

<table>
<tr><td>4</td><td># Uninstalling Smart Space Server Software</td></tr>
</table>

In This Chapter

Removing Smart Space Server

➤ To remove Smart Space server components:

1 **From the Smart Space server, stop the Smart Space services, do these steps:**

   a. To stop Web services, change to the `HYPERION_HOME/deployments/Tomcat5/bin` in the deployments directory and enter `./stopSmartSpace.sh`.

   b. To stop Smart Space Collaborator, change to the `$HOME/Hyperion/SmartSpace/`_ReleaseNumber_`/Collaborator/bin` folder and enter `./wf.sh stop`.

2 **Navigate to** `uninstall.bin` **and start it.**

3 **Choose a language.**

4 **From the Welcome screen, click Next.**

5 **Select the components.**

6 **Review the summary of components to remove and click Next.**

7 **Click Finish.**

5 Installing and Uninstalling the Administration Utility

In This Chapter

The Administration Utility securely signs and publishes Smart Space gadgets and framework to create a URL that users employ to install the Smart Space client software. For more information on Smart Space, see http://www.oracle.com/technology/products/bi/epm/smart-space/index.html.

Note:

You can install the Administration Utility on any Windows computer that connects to the Smart Space services using HTTP or HTTPS; however, .NET 2.0 must be installed on the computer where you run the Administration Utility.

You can also use the Administration Utility to update the Smart Space services or to add a provider or repository.

What Happens During Installation of the Administration Utility

The Administration Utility installation program performs these operations:

- Creates directories and subdirectories under the location specified during installation.

  The Administration Utility folder is installed by default to, `C:\Program Files\Oracle EPM\Oracle EPM Smart Space Administration Utility`

Administration Utility File or Folder	Contents
Smart Space Administration Utility	Files and folders for installing and configuring the Administration Utility
FrameWork	The Smart Space framework file.
Gadgets	The Smart Space gadgets files.

Administration Utility File or Folder	Contents
`users.conf` **Note:** `users.conf` is located on the Smart Space server in the `/Security` directory.	By default this contains the Shared Services user and provider you used to configure the Smart Space server. Update this file and add users to enable them to logon to the Administration Utility. See "Enabling User Access" on page 39. **Note:** Only the users in this file can logon to the Administration Utility.

● Adds shortcuts to the Start menu and desktop.

Installing the Administration Utility

➤ To install the Administration Utility:

1 Click this installation URL `http://`*`server:port`*`/SmartSpace/Installations/ AdminUtility/Setup.msi`, **substitute your server and port into** *`server:port`*.

2 Click **Run** to download and start the installation.

3 Review the publisher to ensure it is valid and click **Run**.

4 From the Welcome screen, click **Next**.

5 Enter an installation folder name or accept the default, specify the users and click **Next**.

6 Click **Next** to start the installation.

Wait for the installation to complete.

7 Click **Close** to exit.

What's Next

You must configure the Administration Utility, see "Configuring and Connecting" on page 37.

Uninstalling the Administration Utility

Caution!

Exit Smart Space Administration Utility before you uninstall.

➤ To uninstall the Administration Utility:

1 Select **Start > Settings > Control Panel**.

2 Double-click **Add or Remove Programs**.

3 Select **Oracle EPM Smart Space Administration Utility** and click **Remove**.

6

Using the Administration Utility

Configuring and Connecting

The first time you use the Administration Utility you need to configure it to point to the Smart Space server. You also need to logon.

➤ Configuring the Administrator Utility:

1 **Ensure that .NET 2.0 and the Administrative Utility are installed on the same computer.**

The Smart Space services must be running on the Smart Space server.

2 **From Windows, to verify that the services are running :**

a. From the Smart Space server, select **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Services**.

b. Ensure that these services are running:

- Oracle EPM Smart Space Web Services. The file is `HySSWebService.exe`.

- Oracle EPM Smart Space Collaborator. The file is wildfire-service.

c. If a service is not running, start it:

i. Select **Start** > **Programs** > **Oracle EPM Smart Space** > **Start Web Services**.

ii. Select **Start** > **Programs** > **Oracle EPM Smart Space** > **Start Collaborator**.

3 **From UNIX, verify that the services are running:**

a. To check Oracle EPM Smart Space Web Services, browse to `http://host:port/SmartSpace/` or use the listen port (default 17080).

b. To check Oracle EPM Smart Space Collaborator services, use the listen port (default 5222) or from the folder `Collaborator/bin/wf.sh` use the status option. For example:

```
Hyperion_Home/SmartSpace/9.3/Collaborator/bin/.wf.sh start
The daemon is running.
```

c. If a service is not running, start it:

    i. To start Web services, navigate to `HYPERION_HOME/deployments/Tomcat5/bin` in the deployments directory and enter `./startSmartSpace.sh`.

    ii. To start Smart Space Collaborator, navigate to `HYPERION_HOME/SmartSpace/ReleaseNumber/Collaborator/bin` folder and enter `./wf.sh`.

    The *first* time you run these services on UNIX, you need to start Smart Space Collaborator, stop it and then restart it. Perform these steps:

      1. Wait for a few moments.

      2. Enter `./wf.sh stop`

      3. Enter `./wf.sh start`

4 Select **Start > Programs > Oracle EPM Smart Space > Smart Space Administration Utility**.

5 Click **Settings**.

6 Enter the Smart Space server and port (default 17080), and click **Test Connection**.

> **Note:**
>
> If the connection fails, check the services and your computer, return to .

7 Select a certificate:

- To use your own certificate:

  a. Click **Select from Store**.

  b. Select your certificate and click **OK**.

  > **Tip:**
  >
  > Use the Certificates snap-in from Microsoft Management Console to install your company certificate.

- To use a test certificate (only for testing and development environments):

  a. Click **Select from File**, and browse to `C:\Program Files\Oracle EPM Smart Space Administration Utility`.

  b. Select `TestCertificate.pfx`, and click **Open**.

  c. For the password, enter `Test`, and click **OK**.

  > **Note:**
  >
  > Passwords are case-sensitive.

  d. Click **OK**.

8   Click **Connect** and enter the shared services user name and password entered during the configuration process.

9   **Optional**: Set to retain your user name and password and auto-connect when the Administration Utility starts.

Enabling User Access

By default, `users.conf` contains the Shared Services user name and provider used to configure the Smart Space server. From the server, update this file and add users to enable them to logon to the Administration Utility.

Note:

You must restart the Administration Utility after you update `users.conf`.

Caution!

The user names entered in `users.conf` are case sensitive. The case must match the user name and provider in the Shared Services server.

➤   To update `users.conf`:

1   To find the case sensitive user's name and provider in the Shared Services server:

   a.   Logon to the Shared Services server with administrative privileges.

   b.   From **Provisioning** click the provider node. This is the provider name.

   c.   From the users column, find the user name.

2   From the Smart Space server, edit the `HYPERION_HOME/9.3/Security/users.conf` file and add username@provider. Following is an entry for the user name `JaneDoe` on the provider `Server1`

```
JaneDoe@LdapProvider1
```

Publishing the Smart Space Framework and Gadgets

Use the Administration Utility to:

* Securely sign and publish the Smart Space framework and the gadgets to the Smart Space server. This sets up the Smart Space client installation URL.

* Publish a custom gadget to an existing Smart Space server. You must develop and build the custom gadget first with the Smart Space Development Kit.

➤ To sign and publish:

1 The Smart Space services must be running on the Smart Space server. To verify that the services are running:

a. If you are using Windows, see .

b. If you are using UNIX, see .

2

3 Select **Start > Programs > Oracle EPM Smart Space > Smart Space Administration Utility**.

> **Note:**
>
> If you are running the Administration Utility for the first time, perform .

4 If you are not logged on, click **Connect** and logon.

5 If you do not have a certificate selected, click **Settings** and perform an action:

- To use your own certificate:

    a. Click **Select from Store**.

    b. Select your certificate, and click **OK**.

    > **Tip:**
    >
    > Use the Certificates snap-in from Microsoft Management Console to install your company certificate.

- To use a test certificate (only for testing and development environments):

    a. Click **Select from File**, and browse to `C:\Program Files\Oracle EPM\Oracle EPM Smart Space Administration Utility`.

    b. Select `TestCertificate.pfx`, and click **Open**.

    c. For the password, enter `Test`, and click **OK**.

    > **Note:**
    >
    > Passwords are case-sensitive.

    d. Click **OK**.

6 Select **Sign & Publish**, and perform these actions:

a. Click **Add**, browse to `C:\Program Files\Oracle EPM Smart Space Administration Utility\Framework`, select `SmartSpace.SmartSpaceFramework`, and click **Open**.

b. Click **Add**, browse to `C:\Program Files\Oracle EPM Smart Space Administration Utility\Gadgets`, select all gadget files with the extension `.SmartSpaceGadget`, and click **Open**.

7 For each entry, from **Action**, perform one of the following actions:

If the Administration Utility experiences server time-outs when connecting to the Smart Space server, or if you cannot directly access the Smart Space server (there is no Internet connection), you can sign the gadgets and framework locally and then copy and publish the files to the server.

- To sign and publish the framework and gadgets on the server:
  a. Select **Publish** (the default setting).
  b. Click **Apply**.

  These items are created on the Smart Space server:

  ❍ The signed and published framework is created in `HYPERION_HOME\SmartSpace\9.3\ClickOnce\Active\ClickOnceFramework\SmartSpace`.

  ❍ The signed and published gadgets are created in `HYPERION_HOME\SmartSpace\9.3\ClickOnce\Active\ClickOnceGadget\`*GadgetName*.

  Tip:

  Where *GadgetName* is the actual gadget, such as KeyContacts or Favorites.

  ❍ To sign the framework and gadgets locally and then publish them manually:
  a. Select **Local Sign**.
  b. Click **Apply**.
  c. Follow the procedure described in "Manually Publishing the Smart Space Framework and Gadgets " on page 42.

8 **Optional:** To set *published* gadgets to automatically install on users' desktops, click **Recommended**.

9 **Optional:** To copy the installation URL to your clipboard, right-click an item, and select **Copy Framework launch URL to clipboard**.

10 **Distribute the Smart Space client installation URL:** `http://`*server:port*`/SmartSpace/SmartSpace.application` **substitute your server and port in** *server:port*.

Note:

Alternatively distribute the information map which has a link to install the Smart Space client and ensures that the client is using the correct browser. `http://`*server:port*`/SmartSpace/Start.html` substitute your server and port in *server:port*.

11 **Optional:** Click **Download** to copy a gadget off the server or to create a local back-up of the gadget.

Note:

You can also download a gadget and then re-publish it with a different certificate.

Manually Publishing the Smart Space Framework and Gadgets

If the Administration Utility experiences server time-outs when connecting to the Smart Space server, or if you cannot directly access the Smart Space server (no Internet connection), you can sign the gadgets and framework using the Administration Utility and then manually copy the files to the server.

Note:

Check your application server documentation for information on increasing timeout settings.

Follow these instructions for each gadget that you signed locally.

➤ To manually publish gadgets:

1 After locally signing a gadget (see step 7 on page 40), navigate to `C:\Program Files\Oracle EPM Smart Space Administration Utility\Gadgets`.

2 Create a `\gadgetname` folder for each gadget, where `gadgetname` is the name of the `.SmartSpaceGadget` file. For example, create the `SmartBook` folder for `SmartBook.SmartSpaceGadget`.

3 Copy each `gadgetname.SmartSpaceGadget` file to its respective gadget folder.

Tip:

For example, copy `SmartBook.SmartSpaceGadget` to `\SmartBook`.

4 Rename `gadgetname.SmartSpaceGadget` to `gadgetname.zip`.

5 Open `gadgetname.zip` and extract the contents to its respective gadget folder.

Tip:

For example, extract the contents of `SmartBook.zip` to `\SmartBook`.

6 Rename

`gadgetname.zip` to `gadgetname`.ClickOnceGadget.

7 To copy the files to the Smart Space server perform these steps:

   a. Copy gadgetname.ClickOnceGadget to `Hyperion_HOME \SmartSpace\9.3 \ClickOnce\ClickOnceInstallations\ClickOnceGadget\gadgetname\9.3. 1.x.`

   b. Copy the `\gadgetname` folder to the Smart Space server at `Hyperion_HOME \SmartSpace\9.3\ClickOnce\Active\ClickOnceGadget`.

➤ To manually publish the framework:

1 After signing the framework (see step 7 on page 40), navigate to `C:\Program Files\Oracle EPM Smart Space Administration Utility\Framework`.

2   Create the subfolder `SmartSpace`.

3   Copy `SmartSpace.SmartSpaceFramework` **to the subfolder** `SmartSpace`.

4   Rename `SmartSpace.SmartSpaceFramework` **to** `SmartSpace.zip`.

5   Open `SmartSpace.zip`, **and extract its contents into the subfolder** `SmartSpace`.

6   Rename `SmartSpace.zip` **to** `SmartSpace.ClickOnceFramework`.

7   To copy the framework to the Smart Space server perform these steps:

   a.   Copy `SmartSpace.ClickOnceFramework` to the Smart Space server at
        `Hyperion_HOME\SmartSpace\9.3\ClickOnce\ClickOnceInstallations`
        `\ClickOnceFramework\SmartSpace\9.3.1.x`.

   b.   Copy the `\SmartSpace` folder to the Smart Space server at `Hyperion_HOME`
        `\SmartSpace\9.3\ClickOnce\Active\ClickOnceFramework`.

8   Return to .

Using the Collaborator

Use Smart Space Collaborator Administration Console to activate advanced features such as logging, viewing logged-on users, and conversations. See the Smart Space Collaborator Administration Console online help.

➤ To use Smart Space Collaborator Administration Console

1   Enter a URL in this form:

`http://host:port/login.jsp`.

Where *host:port* are the server and port where Smart Space Collaborator is installed. The default port is 17086.

2   Logon using the Smart Space Collaborator user name and password defined during installation.

Users are added to the Smart Space Collaborator database the first time they logon to Smart Space. Users are authenticated using Oracle's Hyperion® Shared Services.

A

Optional: Manually Setting Up Databases

The first time the Smart Space Collaborator runs, a database script automatically runs and creates tables. If you want to setup the database manually, and bypass the database script, do one of these procedures:

- "Setting up Microsoft SQL Server Databases" on page 45.
- "Setting up DB2 Databases" on page 46.
- "Setting Up Oracle Databases" on page 46.

Setting up Microsoft SQL Server Databases

➤ To set up Microsoft SQL Server databases:

1 **If no database exists, use Enterprise Manager to create one.**

   You may want to name the database *Collaborator*.

2 **If no user can access the database, create a user.**

3 **After installing the Oracle® Enterprise Performance Management Smart Space server components, proceed to the Smart Space Collaborator setup tool and use the appropriate JDBC settings when prompted.**

➤ To manually build the tables

1 **Open Query Analyzer, and connect to the server.**

2 **Select the database you want to use for Smart Space Collaborator.**

3 **Open** `wildfire_sqlserver.sql`.

4 **Press F5 to run the script.**

   The script creates the necessary tables.

Setting up DB2 Databases

Setup Instructions

You have to create a new database (for example, Collaborator) or use an existing one. Connect to the database using any valid user name allowed to create tables and indexes. Keep in mind that DB2 UDB applies the user name as the table schema. Use the same user when you configure Collaborator with the administration interface. Commands are as follows:

```
DB2 CREATE DB Collaborator ALIAS Collaborator
DB2 CONNECT TO Collaborator USER [DBUSER] USING [DBPASSWORD]
(or you can use the Command Center GUI)
```

Start the DB2 command window (in Windows), or the user's shell in UNIX and import the schema in the resources/database directory of the installation with:

```
db2 -tvf wildfire_db2.sql
```

Or, use the DB2 Command Center and run the script through the "Replication Sources" folder in the Database tree. The database is now setup.

Setting Up Oracle Databases

➤ To set up Oracle databases:

1 **Create a user (for example, *Collaborator*) to own the Smart Space Collaborator database tables.**

This is optional, but doing so permits your tables to exist in their own tablespace.

The first time the Oracle® Enterprise Performance Management Smart Space Collaborator runs, a database script automatically runs and creates tables. If you want to build the tables manually, perform this step:

2 **Import the schema from the resources/database directory of the installation using sqlplus (or your favorite Oracle tool such as Toad).**

For sqlplus: copy `wildfire_oracle.sql` to the directory where sqlplus is installed (for example, `/Oracle/Ora81/bin/`). Log in to sqlplus and execute the command: `@ wildfire_oracle` to import the schema file.

Your database is now setup.

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