

Oracle® Fusion Middleware

Quick Installation Guide for Oracle SOA Suite

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This guide describes how to install Oracle SOA Suite.

The following topics are covered:

- [Section 1, "Installation Overview"](#)
- [Section 2, "System Requirements and Certification"](#)
- [Section 3, "Pre-Installation Tasks"](#)
- [Section 4, "Installing Oracle SOA Suite"](#)
- [Section 5, "Configuring Oracle BAM"](#)
- [Section 6, "Configuring Oracle SOA Suite"](#)
- [Section 7, "Post-Installation Tasks"](#)
- [Section 8, "Installing Oracle SOA Suite Design-Time Components"](#)
- [Section 9, "Deinstalling Oracle SOA Suite"](#)
- [Section 10, "Additional Resources"](#)
- [Section 11, "Documentation Accessibility"](#)

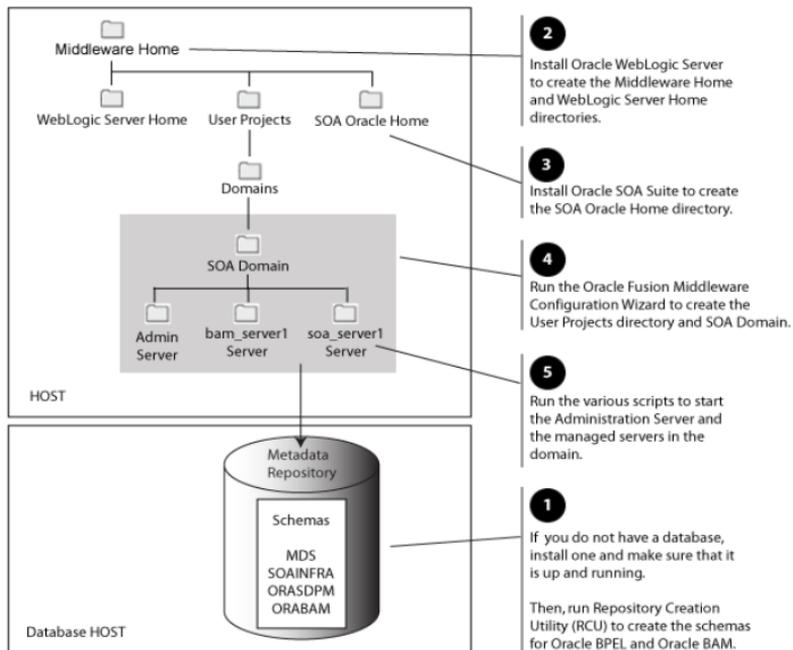
1 Installation Overview

This guide contains instructions for installing and configuring Oracle SOA Suite on a single host. The following will be installed on your system:

- Oracle SOA Suite with Oracle Business Process Execution Language (BPEL) Process Manager (PM), Mediator, Rules, B2B, and Human Workflow
- Oracle Business Activity Monitoring (BAM)

[Figure 1](#) illustrates the topology that will be created on your system at the conclusion of this procedure. It also describes the order in which you need to perform certain tasks:

Figure 1 Installation Topology and Order of Tasks



2 System Requirements and Certification

The information in this section is current at the time of publication. For the most current information, refer to:

- Oracle Fusion Middleware System Requirements, Prerequisites, and Specifications, available on Oracle Technology Network (OTN):

http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm

This document contains information related to hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches.

- Oracle Fusion Middleware Certification

http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

This document contains information related to supported installation types, platforms, operating systems, databases, JDKs, and third-party products.

2.1 Memory Requirements

[Table 1](#) lists the minimum memory requirements.

Table 1 *Minimum Memory Requirements*

Operating System	Minimum Physical Memory	Minimum Available Memory
Linux	2 GB	1 GB
UNIX	2 GB	1 GB
Windows	2 GB	1 GB

2.2 Installer Startup Requirements

When the installer is started, the requirements listed in [Table 2](#) are checked. You will be notified if any of these requirements are not met:

Table 2 Installer Startup Requirements

Category	Minimum or Accepted Value
Platform	UNIX: <ul style="list-style-type: none">■ Solaris 9, Solaris 10■ HP-UX 11i (11.23), HP-UX 11i (11.31)■ Oracle Enterprise Linux 4, Oracle Enterprise Linux 5, Red Hat Linux 4, Red Hat Linux 5, SUSE 10■ IBM AIX 5.3, IBM AIX 6.1 Windows: <ul style="list-style-type: none">■ Windows XP SP2 (Win32 platforms only), Windows 2003, Windows 2008, Windows Vista
Temp Space	At least 150MB
Swap Space	At least 512MB
Monitor	At least 256 colors

3 Pre-Installation Tasks

Before installing Oracle SOA Suite products, you must first check for the following:

- [Install Oracle Database](#)

- Create Schemas for Oracle SOA Suite and Oracle BAM
- Install Oracle WebLogic Server and Create the Middleware Home
- Install and Configure Java Access Bridge (Windows Only)
- Enable Unicode Support
- Installing on DHCP Hosts
- Installing on a Non-Networked Computer
- Installing on a Multihomed Computer

3.1 Install Oracle Database

Installation of Oracle SOA Suite requires the availability of an Oracle database. This database must be up and running, and does not have to be on the same system where you are installing the products. The database must also be compatible with Repository Creation Utility (RCU), which is used to create the schemas necessary for Oracle SOA Suite and Oracle BAM.

For the latest information about supported databases, visit the Oracle Fusion Middleware Certification document at following URL:

http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

At the time of publication, the databases requirements for RCU are listed in [Table 3](#):

Table 3 RCU Database Requirements

Category	Minimum or Accepted Value
Version	Oracle Database 10g (10.2.0.4 or later for non-XE database) using the AL32UTF8 character set. Oracle Database 11g (11.1.0.7 or later for non-XE database).
Shared Pool Size	147456 KB
SGA Maximum Size	147456 KB
Block Size	8 KB

RCU is available only on Linux and Windows platforms. Either the Linux RCU or Windows RCU may be used to create schemas on any supported database platform.

3.2 Create Schemas for Oracle SOA Suite and Oracle BAM

Oracle SOA Suite and Oracle BAM require that certain schemas exist in the database prior to installation. You must run Repository Creation Utility (RCU) to create the schemas in the database. Follow these instructions to do so:

1. Insert the RCU CD-ROM and start RCU from the `rcuHome/bin` (on UNIX) or `rcuHome\bin` (on Windows) directory:

On UNIX:

```
./rcu
```

On Windows:

```
rcu.bat
```

You can also download a `.zip` file containing RCU from Oracle Technology Network (OTN):

<http://www.oracle.com/technology/>

Note: On Windows systems, make sure that you do not unzip the RCU .zip file to a directory name containing spaces.

After downloading the .zip file, extract the contents to a directory of your choice, and run RCU from the *RCU_HOME/bin* (on UNIX) or *RCU_HOME\bin* (on Windows) directory with the commands shown above, where *RCU_HOME* is the folder where RCU was unzipped, or the drive or mount point of the CD-ROM.

2. Welcome Screen

Click **Next**.

3. Create Repository Screen

Select **Create**.

Click **Next**.

4. Database Connection Details Screen

Provide the following credentials to connect to your Oracle database:

- **Host Name:** Specify the name of the machine on which your database resides in the format *host.domain.com*. For Oracle RAC databases, specify the Virtual IP name or one of the node names as the host name.
- **Port:** Specify the database listener port number. The default port number for Oracle databases is 1521.
- **Database Name:** Specify the service name for the database. Typically, the service name is the same as the global database name.

If you are unsure what the service name for your database is, you can obtain it from the `SERVICE_NAMES` parameter in the database's initialization parameter file. If the initialization parameter file does not contain the `SERVICE_NAMES` parameter, then the service name is the same as the global database name, which is specified in the `DB_NAME` and `DB_DOMAIN` parameters.

For Oracle RAC databases, specify the service name of one of the nodes in this field. For example:
`sales.mydomain.com`.

- Username: Specify the name of a user with DBA or SYSDBA privileges. The default user name with SYSDBA privileges is `SYS`.
- Password: Specify the password for your database user.
- Role: Select the database user's role from the drop-down list. The `SYS` user requires the SYSDBA role.

Click **Next**. A "Checking Prerequisites" screen will appear. If there are errors, some details about the error will be displayed on the Database Connection Details Screen. Fix the error messages and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

5. Select Components Screen

Near the top of the screen, select **Create a New Prefix**. If you are the only user of the database instance, you may use the default prefix `DEV`. If you are sharing the database instance with other Oracle Fusion Middleware users, refer to *Oracle Fusion Middleware Repository Creation Utility User's Guide* for more information about prefixes.

[Table 4](#) lists the required schemas for Oracle SOA Suite and Oracle BAM:

Table 4 Required Schemas for Oracle SOA Suite Products

Component	Required Schemas
Oracle SOA Suite	<i>prefix_MDS</i> (Metadata Services) <i>prefix_SOAINFRA</i> (SOA Infrastructure) <i>prefix_ORASDPM</i> (User Messaging)
Oracle BAM	<i>prefix_MDS</i> (Metadata Services) <i>prefix_ORABAM</i> (Business Activity Monitoring) <i>prefix_ORASDPM</i> (User Messaging)

Select the necessary schemas for the product(s) you want to install.

Note: You must remember or make a note of these schema names and the prefix value from this screen; you will need them later when you are configuring your products. You will need to provide the schema name in the format *prefix_schemaname*. For example, if you used the default prefix `DEV`, you will supply the following schema name for the MDS schema:

`DEV_MDS`

Click **Next**. A "Checking Prerequisites" screen will appear. If there are errors, some details about the error will be displayed on the Select Components Screen. Fix the error messages and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

6. Schema Passwords Screen

Near the top of the screen, select **Use same password for all schemas**.

In the Password field, enter your password. Enter your password again in the Confirm Password field.

Note: You must remember or make a note of the schema passwords from this screen; you will need them later when you are configuring your products.

Click **Next**.

7. Map Tablespaces Screen

Click **Next**. A "Creating Tablespaces" screen will appear. If there are errors, some details about the error will be displayed on the Map Tablespaces Screen. Fix the error messages and click **Next** again.

After the tablespaces are created with no errors, click **OK** to dismiss the screen.

8. Summary Screen

Click **Create**. A "CREATE" screen will appear. If there are errors, some details about the error will be displayed on the Summary Screen. Fix the error messages and click **Next** again.

After the schemas are created with no errors, click **OK** to dismiss the screen.

9. Completion Summary Screen

Click **Close**.

For more information about Repository Creation Utility, refer to *Oracle Fusion Middleware Repository Creation Utility User's Guide*.

3.3 Install Oracle WebLogic Server and Create the Middleware Home

Oracle SOA Suite requires an Oracle WebLogic Server on your system. If you do not already have one, follow the instructions in this section to install Oracle WebLogic Server.

1. Insert the Oracle WebLogic Server CD-ROM or download the installer from the following URL:

http://www.oracle.com/technology/software/products/ias/htdocs/wls_main.html

You are looking for the following executable files:

- `wls1031_linux32.bin` (for 32-bit Linux systems)
- `wls1031_win32.exe` (for 32-bit Windows systems)
- `wls1031_generic.jar` (for all 64-bit platforms)

The 32-bit executable files are bundled with the appropriate JDK version. If you use the 64-bit installer, you will need to invoke the installer with a supported JDK for your platform.

This JDK must be installed on your system before you install Oracle WebLogic Server. Refer to the Oracle Fusion Middleware certification document for a list of supported JDKs for your platform:

http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

2. Run your installer file directly from the CD-ROM, or copy the file to your local system and run it locally.

- Examples on a 32-bit system:

On Linux:

```
./wls1031_linux32.bin
```

On Windows:

```
wls1031_win32.exe
```

- Examples on a 64-bit system:

On UNIX:

```
JAVA_HOME/bin/java -jar wls1031_generic.jar
```

or

```
JAVA_HOME/bin/java -d64 -jar wls1031_generic.jar
```

On Windows:

```
JAVA_HOME\bin\java -jar wls1031_generic.jar
```

Some notes for running the installer:

- Before running the installer, set the `DISPLAY` environment variable on your system.
- Replace `JAVA_HOME` with the installation location of the supported JDK you installed for your platform.
- If you are installing a 64-bit Oracle WebLogic Server on a 64-bit platform, use the `-d64` flag when using 32/64-bit hybrid JDK's (such as the HP JDK for HP-UX and SUN JDK for Solaris SPARC).

Execute `JAVA_HOME/bin/java -version` (or `JAVA_HOME/bin/java -d64 -version` on 32/64-bit hybrid JDKs) to ensure that your `JAVA_HOME` refers to a 64-bit JDK.

3. Welcome Screen

Click **Next**.

4. Choose Middleware Home Directory Screen

Select **Create a new Middleware Home**.

Specify the desired location of your new Middleware Home directory. If this directory already exists on your system, it must be an empty directory. If this directory does not already exist, then it will be created for you.

Note: You must remember or make a note this location; you will be asked for it later when you are installing Oracle SOA Suite.

For more information about the Middleware Home directory, refer to "Middleware Home and WebLogic Home Directories" in *Oracle Fusion Middleware Installation Planning Guide*.

Click **Next**.

5. Register for Security Updates Screen

Select whether or not you want to receive the latest product and security updates. If you choose not to receive anything, you will be asked to verify your selection before continuing.

Click **Next**.

6. Choose Install Type Screen

Select **Typical**.

Click **Next**.

7. Choose Product Installation Directories Screen

Specify the desired location for your WebLogic Server Home directory.

For more information about the WebLogic Home directory, refer to "Middleware Home and WebLogic Home Directories" in *Oracle Fusion Middleware Installation Planning Guide*.

Click **Next**.

8. Choose Shortcut Location (Windows only)

If you are installing on a Windows system, you will be asked to specify a location where you would like Windows to create a shortcut to Oracle products.

Click **Next**.

9. Installation Summary Screen

Click **Next**.

10. Installation Progress Screen

No action is required on this screen; the installer will automatically advance to the next screen when installation is complete.

11. Installation Complete Screen

De-select **Run Quickstart**.

Click **Done**.

For more information about installing WebLogic Server, refer to *Oracle WebLogic Server Installation Guide*.

3.4 Install and Configure Java Access Bridge (Windows Only)

If you are installing on a Windows machine, you have the option of installing and configuring Java Access Bridge for Section 508 Accessibility. This is only necessary if you require Section 508 Accessibility features:

1. Download Java Access Bridge from the following URL:

<http://java.sun.com/javase/technologies/accessibility/accessbridge/>

2. Install Java Access Bridge.
3. Copy the `access-bridge.jar` and `jaccess-1_4.jar` from your installation location to the `jre\lib\ext` directory.
4. Copy the `WindowsAccessBridge.dll`, `JavaAccessBridge.dll`, and `JAWTAccessBridge.dll` files from your installation location to the `jre\bin` directory.
5. Copy the `accessibility.properties` file to the `jre\lib` directory.

For more information about Java Access Bridge, refer to "Install and Configure Java Access Bridge (Windows Only)" in *Oracle Fusion Middleware Administrator's Guide*.

3.5 Enable Unicode Support

Your operating system configuration can influence the behavior of characters supported by Oracle SOA Suite.

On a UNIX operating system, it is highly recommended that you enable Unicode support by setting the `LANG` and `LC_ALL` environment variables to a locale with the UTF-8 character set. This enables the operating system to process any character in Unicode. SOA technologies are based on Unicode.

If the operating system is configured to use a non-UTF-8 encoding, SOA components may function in an unexpected way. For example, a non-ASCII file name can make the file inaccessible and cause an error. Oracle does not support problems caused by operating system constraints.

3.6 Installing on DHCP Hosts

If you are installing Oracle SOA Suite on a DHCP host, you must follow the configuration steps in this section for your platform.

3.6.1 For UNIX Platforms On UNIX systems, configure the host to resolve host names to the loopback IP address by modifying the `/etc/hosts` file to contain the following entries:

```
127.0.0.1 hostname.domainname hostname
127.0.0.1 localhost.localdomain localhost
```

After doing so, check that the hostname resolves to the loopback IP address by entering the following command:

```
/bin/ping hostname.domainname
```

3.6.2 For Windows x86 Platforms On Windows systems, install a loopback adapter on the DHCP server (see [Section 3.6.3](#),

"Installing a Loopback Adapter (Windows Only)"). This assigns a local IP address to your computer.

After installing the adapter, add a line to the %SYSTEMROOT%\system32\drivers\etc\hosts file with the following format, immediately after the localhost line:

```
IP_address    hostname.domainname    hostname
```

Replace *IP_address* with the local IP address of the loopback adapter.

3.6.3 Installing a Loopback Adapter (Windows Only)

To install a loopback adapter on Windows 2003 or Windows XP:

1. Open the Windows Control Panel.
Windows 2003: Select **Start > Control Panel > Add Hardware**.
Windows XP: Select **Start > Control Panel**, then double-click **Add Hardware**.
2. In the "Welcome" window, click **Next**.
3. In the "Is the hardware connected?" window, select **Yes, I have already connected the hardware**, then click **Next**.

4. In the "The following hardware is already installed on your computer" window, in the list of installed hardware, select **Add a new hardware device**, then click **Next**.
5. In the "The wizard can help you install other hardware" window, select **Install the hardware that I manually select from a list**, then click **Next**.
6. In the "From the list of hardware types, select the type of hardware you are installing" window, select **Network adapters**, then click **Next**.
7. In the "Select Network Adapter" window, make the following selections:
 - Manufacturer: Microsoft
 - Network Adapter: Microsoft Loopback Adapter
8. Click **Next**.
9. In the "The wizard is ready to install your hardware" window, click **Next**.
10. In the "Completing the Add Hardware Wizard" window, click **Finish**.
11. If you are using Windows 2003, restart your computer.

12. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections Control Panel.
13. Right-click the connection that was just created. This is usually named "Local Area Connection 2". Choose **Properties**.
14. On the "General" tab, select **Internet Protocol (TCP/IP)**, then click **Properties**.
15. In the "Properties" dialog box, click **Use the following IP address** and do the following:
 - a. IP Address: Enter a non-routable IP for the loopback adapter. Oracle recommends the following non-routable addresses:

192.168.x.x (x is any value between 1 and 255)
10.10.10.10
 - b. Subnet mask: Enter 255.255.255.0.
 - c. Record the values you entered, which you will need later in this procedure.
 - d. Leave all other fields empty.
 - e. Click **OK**.

16. In the "Local Area Connection 2 Properties" dialog, click **OK**.
17. Close Network Connections.
18. Restart the computer.

3.6.4 Removing a Loopback Adapter (Windows Only)

To remove a loopback adapter on Windows 2003 or Windows XP:

1. Start the System Control panel.

Windows 2003: Select **Start > Control Panel > System**.

Windows XP: Select **Start > Control Panel**, then double-click **System**.

2. In the "Hardware" tab, click **Device Manager**.
3. In the "Device Manager" window, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.
4. Right-click **Microsoft Loopback Adapter** and select **Uninstall**.
5. Click **OK**.

3.7 Installing on a Non-Networked Computer

You can install Oracle SOA Suite on a non-networked computer, such as a laptop. Because a non-networked computer has no

access to other computers, you have to install all the components that you need on the computer.

In addition, you must follow the instructions in [Section 3.6, "Installing on DHCP Hosts"](#) to install a loopback adapter and modify the `hosts` file on your system.

3.8 Installing on a Multihomed Computer

You can install Oracle SOA Suite on a multihomed computer. A multihomed computer is associated with multiple IP addresses. This is typically achieved by having multiple network cards on the computer. Each IP address is associated with a hostname; additionally, you can set up aliases for each hostname.

The installer picks up the fully qualified domain name from the first entry in `/etc/hosts` (on UNIX) or `%SYSTEMROOT%\system32\drivers\etc\hosts` (on Windows) file. So if your file looks like the following:

```
127.0.0.1 localhost.localdomain localhost
10.222.333.444 myhost1.mycompany.com myhost1
20.222.333.444 devhost2.mycompany.com devhost2
```

`myhost1.mycompany.com` would be picked for configuration.

For specific network configuration of a system component, refer to the individual component's configuration documentation.

4 Installing Oracle SOA Suite

When you run the installer, the Oracle SOA Suite run-time components (Oracle SOA Suite and Oracle BAM) are both installed onto your system by default. You can choose to configure one or both of these products by running the Configuration Wizard after you complete the installation.

Note: Make sure you are not logged in to the WebLogic Server Administration Console before you install Oracle SOA Suite.

See [Section 8, "Installing Oracle SOA Suite Design-Time Components"](#) for information about installing Oracle JDeveloper and installing the Oracle SOA Suite extensions in Oracle JDeveloper. These extensions provide the functionality and online documentation for designing SOA composite applications.

4.1 Starting the Installer

The installer requires the location of a Java Runtime Environment (JRE) on your system. When you installed Oracle WebLogic Server (Section 3.3, "Install Oracle WebLogic Server and Create the Middleware Home"), a JRE was installed on your system. You can use this location (the location of the `jre` directory) to start the installer. The default location for the JRE is `MW_HOME/jdk160_11` (on UNIX systems) or `MW_HOME\jdk160_11` (on Windows systems), where `MW_HOME` is the Middleware Home directory.

On 64-bit platforms, the JRE location is the `JAVA_HOME` you used to install Oracle WebLogic Server. Refer to Section 3.3, "Install Oracle WebLogic Server and Create the Middleware Home" for more information.

On UNIX systems:

```
./runInstaller -jreLoc JRE_LOCATION
```

On Windows systems:

```
setup.exe -jreLoc JRE_LOCATION
```

You must specify the absolute path to your `JRE_LOCATION`; relative paths will not work.

Note: Starting the installer as `root` user is not supported.

4.2 Installation Screens

To install Oracle SOA Suite and Oracle BAM:

1. Welcome Screen

Click **Next**.

2. Prerequisite Checks Screen

After the prerequisite checking is complete with no errors, click **Next**.

3. Specify Installation Location Screen

Oracle Middleware Home: Specify the location where WebLogic Server was installed.

Oracle Home Directory: Specify the location where you want to install the software:

- If you specify a directory that already exists, it must be an empty directory and it must be inside the Oracle Middleware Home.

- If you specify a new directory, it will be created inside the Oracle Middleware Home.

This will be your Oracle Home directory. Runtime components cannot write to this directory.

Note: For the remainder of this document, this directory will be referred to as your SOA Oracle Home to avoid any confusion with the Oracle Home directories of other Oracle Fusion Middleware products. For more information about Oracle Home directories, refer to "Oracle Home Directory" in *Oracle Fusion Middleware Installation Planning Guide*.

4. Installation Summary Screen

Click **Install**.

5. Installation Progress Screen

No action is required on this screen; the installer will automatically advance to the next screen when installation is complete.

6. Installation Completed Screen

Click **Finish**.

4.3 Configuring your Products

After the installation is complete, you can run the Configuration Wizard to configure your product(s) for use:

- If you want to configure Oracle BAM, go to [Section 5, "Configuring Oracle BAM"](#).
- If you want to configure Oracle SOA Suite, go to [Section 6, "Configuring Oracle SOA Suite"](#).

After you are finished configuring one or both products, go to [Section 7, "Post-Installation Tasks"](#).

5 Configuring Oracle BAM

After you have successfully run the installer, you can run the Oracle Fusion Middleware Configuration Wizard. This Configuration Wizard is located in the *SOA_ORACLE_HOME/common/bin* (on UNIX systems) or *SOA_ORACLE_HOME\common\bin* (on Windows systems) directory.

1. Start the Configuration Wizard.

On UNIX systems:

```
./config.sh
```

On Windows systems:

```
config.cmd
```

2. Welcome Screen

Select **Create a New WebLogic Domain**.

Click **Next**.

3. Select Domain Source Screen

Select **Generate a domain configured automatically to support the following products**, then select the following products:

- Oracle Enterprise Manager - 11.1.1.0 (Oracle_SOA1)
- Oracle Business Activity Monitoring - 11.1.1.0 (Oracle_SOA1)

Click **Next**.

4. Specify Domain Name and Location Screen

Specify the following domain information:

- **Domain name:** The name of the domain you want to create. The default name is `base_domain`.
- **Domain location:** The absolute path to the directory where this domain should be created. The default location is `MW_HOME/user_projects/domains` (for UNIX) or `MW_HOME\user_projects\domains` (for Windows).
- **Application location:** The absolute path to the directory where applications created in this domain should reside. The default location is `MW_HOME/user_projects/applications` (for UNIX) or `MW_HOME\user_projects\applications` (for Windows).

Click **Next**.

5. Configure Administrator Username and Password Screen

Specify the following credentials for your administrator:

- **User name:** The name of the administrator for this domain. The default name is `weblogic`.
- **User password:** The administrator's password.
- **Confirm user password:** Re-enter the administrator's password.

- **Description:** Enter a description for this user, or leave the default description as is. This field is optional.

Click **Next**.

6. Configure Server Start Mode and JDK Screen

In the "WebLogic Domain Startup Mode" portion of the screen, Select **Development Mode**.

In the "JDK Selection" portion of the screen, select Sun SDK 1.6.0_11 from the list of available JDKs. This was one of the JDKs installed on your system when you installed Oracle WebLogic Server.

Click **Next**.

7. Configure JDBC Component Schema Screen

Configure the schema information for each data source listed on this screen. When you make changes to any field on this screen, the changes are applied to selected data sources only. For fields that are common with all data sources (for example, all data sources reside on the same database), you should select all of the data sources and make your changes. The changes are saved automatically as you type.

After all of the information that is common to all data sources has been specified, then you will need to select individual or smaller groups of data sources and enter information that is specific to them (for example, the schema owner).

Review the table on this screen and identify which fields you need to modify:

- **Vendor:** Select the vendor for your database from the drop-down list.
- **Driver:** Select the driver type from the drop-down list.
- **Schema Owner:** Specify the schema owner for the schema; this is the name of the schema for this component in the following format:

prefix_schema-name

This information was specified on the [Select Components Screen](#) when the schemas were created using RCU. For more information, refer to [Section 3.2, "Create Schemas for Oracle SOA Suite and Oracle BAM"](#).

- **Password:** Specify the password for the schema. You specified this password on the [Schema Passwords Screen](#) when creating the schemas using RCU. For more infor-

mation, refer to [Section 3.2, "Create Schemas for Oracle SOA Suite and Oracle BAM"](#).

- **DBMS/Service:** Specify the service name for your database. This is the database on which the schema resides.
- **Host Name:** Specify the name of the machine where your database is running.
- **Port:** Specify the database listen port number.

Click **Next**.

8. Test Component Schema Screen

Verify that the connections to your data sources are successful.

Click **Next**.

9. Select Advanced Configuration Screen

Do not select anything on this screen.

Click **Next**.

10. Configuration Summary

Verify the information on this screen. Use the navigation pane on the left or the **Previous** button if you want to return to a previous screen to alter some portion of the configuration.

If everything is correct, click **Create**.

11. Creating Domain Screen

When the domain has been successfully created, the progress bar will be at 100% and the **Done** button will be active.

The last line in the summary information is the URL of the Administration Server. You should make a note of this URL so that you can access the Administration Server after it has been started.

Click **Done** to dismiss the Configuration Wizard.

For more information about configuring WebLogic domains, refer to *Oracle WebLogic Server Creating WebLogic Domains Using the Configuration Wizard*.

6 Configuring Oracle SOA Suite

After you have successfully run the installer, you can configure Oracle SOA Suite using the Oracle Fusion Middleware Configuration Wizard. This Configuration Wizard is located in the *SOA_*

ORACLE_HOME/common/bin (on UNIX systems) or *SOA_ORACLE_HOME*\common\bin (on Windows systems) directory.

1. Start the Configuration Wizard.

On UNIX systems:

```
./config.sh
```

On Windows systems:

```
config.cmd
```

2. Welcome Screen

Select **Create a New WebLogic Domain**.

Click **Next**.

3. Select Domain Source Screen

Select **Generate a domain configured automatically to support the following products**, then select the following products:

- Oracle SOA Suite - 11.1.1.0 (Oracle_SOA1)
- Oracle Enterprise Manager - 11.1.1.0 (Oracle_SOA1)

Click **Next**.

4. Specify Domain Name and Location Screen

Specify the following domain information:

- **Domain name:** The name of the domain you want to create. The default name is `base_domain`.
- **Domain location:** The absolute path to the directory where this domain should be created. The default location is `MW_HOME/user_projects/domains` (for UNIX) or `MW_HOME\user_projects\domains` (for Windows).
- **Application location:** The absolute path to the directory where applications created in this domain should reside. The default location is `MW_HOME/user_projects/applications` (for UNIX) or `MW_HOME\user_projects\applications` (for Windows).

Click **Next**.

5. Configure Administrator Username and Password Screen

Specify the following credentials for your administrator:

- **User name:** The name of the administrator for this domain. The default name is `weblogic`.
- **User password:** The administrator's password.

- **Confirm user password:** Re-enter the administrator's password.
- **Description:** Enter a description for this user, or leave the default description as is. This field is optional.

Click **Next**.

6. Configure Server Start Mode and JDK Screen

In the "WebLogic Domain Startup Mode" portion of the screen, Select **Development Mode**.

In the "JDK Selection" portion of the screen, select Sun SDK 1.6.0_11 from the list of available JDKs. This was one of the JDKs installed on your system when you installed Oracle WebLogic Server.

Click **Next**.

7. Configure JDBC Component Schema Screen

Configure the schema information for each data source listed on this screen. When you make changes to any field on this screen, the changes are applied to selected data sources only. For fields that are common with all data sources (for example, all data sources reside on the same database), you should

select all of the data sources and make your changes. The changes are saved automatically as you type.

After all of the information that is common to all data sources has been specified, then you will need to select individual or smaller groups of data sources and enter information that is specific to them (for example, the schema owner).

Review the table on this screen and identify which fields you need to modify:

- **Vendor:** Select the vendor for your database from the drop-down list.
- **Driver:** Select the driver type from the drop-down list.
- **Schema Owner:** Specify the schema owner for the schema; this is the name of the schema for this component in the following format:

prefix_schema-name

This information was specified on the [Select Components Screen](#) when the schemas were created using RCU. For more information, refer to [Section 3.2, "Create Schemas for Oracle SOA Suite and Oracle BAM"](#).

- **Password:** Specify the password for the schema. You specified this password on the [Schema Passwords Screen](#)

when creating the schemas using RCU. For more information, refer to [Section 3.2, "Create Schemas for Oracle SOA Suite and Oracle BAM"](#).

- **DBMS/Service:** Specify the service name for your database. This is the database on which the schema resides.
- **Host Name:** Specify the name of the machine where your database is running.
- **Port:** Specify the database listen port number.

Click **Next**.

8. Test Component Schema Screen

Verify that the connections to your data sources are successful.

Click **Next**.

9. Select Advanced Configuration Screen

Do not select anything on this screen.

Click **Next**.

10. Configuration Summary

Verify the information on this screen. Use the navigation pane on the left or the **Previous** button if you want to return to a previous screen to alter some portion of the configuration.

If everything is correct, click **Create**.

11. Creating Domain Screen

When the domain has been successfully created, the progress bar will be at 100% and the **Done** button will be active.

The last line in the summary information is the URL of the Administration Server. You should make a note of this URL so that you can access the Administration Server after it has been started.

Click **Done** to dismiss the Configuration Wizard.

For more information about configuring WebLogic domains, refer to *Oracle WebLogic Server Creating WebLogic Domains Using the Configuration Wizard*.

7 Post-Installation Tasks

This section contains general information that will help you verify your installation and configuration. Some components may

require custom or manual configuration, and this information is also included in this section:

- [Configuring Custom Port Numbers for Oracle BAM](#)
- [Launching the Servers](#)
- [Starting Node Manager](#)
- [Verifying the Installation](#)

7.1 Configuring Custom Port Numbers for Oracle BAM

The default port number of the Oracle BAM managed server (`bam_server1`) is 9001. If, during configuration, you changed this port number or specified a listen address using the Configuration Wizard, you must make the following changes:

1. Manually change the port number from 9001 to the new port number in the `SOA_ORACLE_HOME/bam/config/BAMICommandConfig.xml` (for UNIX) or `SOA_ORACLE_HOME\bam\config\BAMICommandConfig.xml` (for Windows) file. The parameter that needs to be changed is shown below:

```
<ADCServerPort>9001</ADCServerPort>
```

2. Oracle BAM single-instance web application configuration information is maintained in the `MW_HOME/user_projects/domains/domain_name/servers/BAM_server_name/tmp/_WL_user/oracle-bam_11.1.1/yhryfp/APP-INF/classes/config` (for UNIX) or `MW_HOME\user_projects\domains\domain_name\servers\BAM_server_name\tmp_WL_user\oracle-bam_11.1.1\yhryfp\APP-INF\classes\config` (for Windows) directory. The properties in these files can be modified by using the Mbeans exposed in the Oracle Enterprise Manager Fusion Middleware Control. The properties exposed through MBeans are specific to each server:

Note: The folder name under `oracle-bam_11.1.1` is randomly generated (in this case, it is `yhryfp`). When you are looking for this directory on your system, be aware that the name of the directory on your system may not match the name of the directory shown in the documentation.

- a. Changes in `BAMCommonConfig.xml`:

The `<ApplicationURL>` parameter should contain the new URL.

b. Changes in `BAMServerConfig.xml`:

```
<ADCServerName>localhost</ADCServerName>  
<ADCServerPort>9001</ADCServerPort>
```

c. Changes in `BAMWebConfig.xml`:

```
<ServerName>localhost</ServerName>  
<ServerPort>9001</ServerPort>
```

7.2 Launching the Servers

To get your deployments up and running, you must start the Administration Server and various Managed Servers:

1. To start the Administration Server, run the `startWebLogic.sh` (for UNIX) or `startWebLogic.cmd` (for Windows) script in the directory where you created your new domain.

On UNIX systems:

```
MW_HOME/user_projects/domains/domain_  
name/startWebLogic.sh
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\startWebLogic.cmd
```

You entered the domain name and location on the [Specify Domain Name and Location Screen](#) in the configuration wizard.

2. To start the Managed Servers, run the `startManagedWebLogic.sh` (for UNIX) or `startManagedWebLogic.cmd` (for Windows) script in the `bin` directory inside the directory where you created your domain.

This command also requires that you specify a server name. The servers that need to be started are:

- `soa_server1` (Oracle SOA Server)
- `bam_server1` (Oracle BAM Server)

For example, to start Oracle SOA Server on a UNIX system:

```
./startManagedWebLogic.sh soa_server1
```

On Windows systems:

```
startManagedWebLogic.cmd soa_server1
```

Before WebLogic Server is started, you will be prompted for the WebLogic Server username and password. These were provided on the Configure Administrator Username and Password Screen in the configuration wizard.

Note: If this is the first time that both Oracle SOA Server and Oracle BAM Server are being started after installation and configuration, you must make sure that your startup of Oracle SOA Server is complete before starting Oracle BAM Server.

If you do not know the names of the managed servers that need to be started, you can view the contents of the following file on UNIX systems:

```
MW_HOME/user_projects/domains/domain_name/startManagedWebLogic_readme.txt
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_
```

```
name\startManagedWebLogic_readme.txt
```

Or, you can access the Administration Server console at the following URL:

```
http://host:admin_server_port/console
```

Supply the username and password that you specified on the [Configure Administrator Username and Password Screen](#) of the Configuration Wizard. Then, navigate to **Environment > Servers** to see the names of your managed servers.

7.3 Starting Node Manager

Starting Node Manager on a machine that hosts Managed Servers allows you to start and stop the Managed Servers remotely using the Administration Console or the command line. Node Manager can also automatically restart a Managed Server after an unexpected failure.

To start Node Manager:

1. On UNIX systems, run the `SOA_ORACLE_HOME/common/bin/setNMProps.sh` script.

On Windows systems, run the `SOA_ORACLE_HOME\common\bin\setNMProps.cmd` script.

2. On UNIX systems, start Node Manager by running the `SOA_Oracle_Home/server/bin/startNodeManager.sh` script.

On Windows systems, start Node Manager by running the `SOA_Oracle_Home\server\bin\startNodeManager.cmd` script.

For more information about Node Manager, refer to *Oracle Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server*.

7.4 Verifying the Installation

Start your browser and enter the following URLs:

- To access the Administration Server:

`http://host:admin_server_port`

This information was visible on the [Creating Domain Screen](#) (the last screen) of the Configuration Wizard.

- To access the Administration Server console:

```
http://host:admin_server_port/console
```

You will be prompted for the username and password credentials that you specified on the [Configure Administrator Username and Password Screen](#) of the Configuration Wizard.

- To access Enterprise Manager:

```
http://host:admin_server_port/em
```

8 Installing Oracle SOA Suite Design-Time Components

Oracle SOA Suite is not automatically installed with Oracle JDeveloper. Before you can create a SOA application and project, you must download the SOA Suite extension for JDeveloper (file name `soa-jdev-extension.zip`) from the Oracle Technology Network (<http://www.oracle.com/technology/>) and import it into Oracle JDeveloper.

For instructions on downloading and installing SOA Suite extension for JDeveloper, see *Oracle Fusion Middleware Installation Guide for Oracle JDeveloper*.

9 Deinstalling Oracle SOA Suite

Deinstalling Oracle SOA Suite from your system involves the following:

- [Stopping Oracle Fusion Middleware](#)
- [Removing the Oracle SOA Suite Schemas](#)
- [Deinstalling Oracle SOA Suite](#)
- [Deinstalling Oracle WebLogic Server](#)
- [Deinstalling Oracle JDeveloper](#)
- [Removing the Oracle Home and JDeveloper Home Directories](#)

You should always use the instructions provided in this section for removing the software. If you try to remove the software manually, you may experience problems when you try to reinstall the software again at a later time. Following the procedures in this section will ensure that the software is properly removed.

9.1 Stopping Oracle Fusion Middleware

Before deinstalling Oracle Fusion Middleware software components, you should stop all servers and processes.

1. Stop the WebLogic Managed Servers.

On UNIX:

```
MW_HOME/user_projects/domains/domain_  
name/bin/stopManagedWeblogic.sh managed_server_name  
admin_url username password
```

On Windows:

```
MW_HOME\user_projects\domains\domain_  
name\bin\stopManagedWeblogic.cmd managed_server_name  
admin_url username password
```

2. Stop WebLogic Administration Server.

On UNIX:

```
MW_HOME/user_projects/domains/domain_  
name/bin/stopWeblogic.sh username password admin_url
```

On Windows:

```
MW_HOME\user_projects\domains\domain_  
name\bin\stopWeblogic.cmd username password admin_url
```

For more information about starting and stopping Oracle Fusion Middleware, refer to "Starting and Stopping Oracle Fusion

Middleware" in Oracle Fusion Middleware Administrator's Guide.

9.2 Removing the Oracle SOA Suite Schemas

Run the Repository Creation Utility (RCU) to drop the Oracle SOA Suite schemas from your database.

9.2.1 Starting RCU Insert the RCU CD-ROM and start RCU from the `rcuHome/bin` (on UNIX) or `rcuHome\bin` (on Windows) directory:

On UNIX:

```
./rcu
```

On Windows:

```
rcu.bat
```

If you download the RCU `.zip` file from OTN, then you can also start RCU as shown above from the `rcuHome/bin` (on UNIX) or `rcuHome\bin` (on Windows) directory on your system.

9.2.2 Instructions for Dropping the SOA Suite Schemas Follow the instructions below to drop the SOA Suite schemas:

1. Welcome Screen

Click **Next**.

2. Create Repository Screen

Select **Drop**.

Click **Next**.

3. Database Connection Details Screen

Provide the following credentials to connect to your Oracle database. These are the same credentials you provided on this screen when you created the SOA Suite schemas. See [Section 3.2, "Create Schemas for Oracle SOA Suite and Oracle BAM"](#) for more information.

Click **Next**. A "Checking Prerequisites" screen will appear. If there are errors, some details about the error will be displayed on the Database Connection Details Screen. Fix the error messages and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

4. Select Components Screen

Select the prefix and schemas you want to drop from the repository.

Click **Next**. A "Checking Prerequisites" screen will appear. If there are errors, some details about the error will be displayed on the Select Components Screen. Fix the error messages and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

5. Summary Screen

Click **Drop**. A "DROP" screen will appear. If there are errors, some details about the error will be displayed on the Summary Screen. Fix the error messages and click **Next** again.

After the schemas are dropped with no errors, click **OK** to dismiss the screen.

6. Completion Summary Screen

Click **Close**.

9.3 Deinstalling Oracle SOA Suite

The deinstaller will attempt to remove the SOA Oracle Home from which it was started. This procedure will not remove any

WebLogic domains that you have created - it only removes the software in the SOA Oracle Home.

Before you choose to remove your SOA Oracle Home, make sure that it is not in use by an existing domain, and also make sure you stop all running processes that use this Oracle Home. After you remove the software, you will no longer be able to use your WebLogic domain.

Starting the Deinstaller

To start the deinstaller, navigate to the *SOA_ORACLE_HOME/oui/bin* (for UNIX) or *SOA_ORACLE_HOME\oui\bin* (for Windows) directory and start the deinstaller.

On UNIX systems:

```
./runInstaller -deinstall -jreLoc JRE_LOCATION
```

On Windows systems:

```
setup.exe -deinstall -jreLoc JRE_LOCATION
```

You must specify the absolute path to your *JRE_LOCATION*; relative paths will not work.

On Windows systems, you can also start the deinstaller from the Start menu by selecting **Programs > Oracle SOA 11g - Home1 > Uninstall**.

9.3.1 Deinstallation Screens and Instructions Follow the instructions below to remove the installed software.

1. Welcome Screen

Click **Next**.

2. Deinstall Oracle Home Screen

Verify the Oracle Home you are about to deinstall.

Click **Deinstall** to continue.

3. Deinstall Progress Screen

This screen shows the progress and status of the deinstallation.

4. Deinstall Completed Screen

Click **Finish**.

9.4 Deinstalling Oracle WebLogic Server

To deinstall Oracle WebLogic Server:

1. Start the deinstaller from the *WebLogic_Home/uninstall* (for UNIX) or *WebLogic_Home\uninstall* (for Windows) directory. You specified the location of the WebLogic Home directory on the [Choose Product Installation Directories Screen](#) in [Section 3.3, "Install Oracle WebLogic Server and Create the Middleware Home"](#).

On UNIX systems:

```
./uninstall.sh
```

On Windows systems:

```
uninstall.cmd
```

On Windows systems, you can also start the deinstaller from the Start menu by selecting **Programs > Oracle WebLogic > Uninstall Oracle WebLogic**.

2. Welcome Screen

Click **Next**.

3. Choose Components Screen

By default, all components are selected.

Click **Next**.

4. Uninstalling WebLogic Platform Screen

Click **Done**.

9.5 Deinstalling Oracle JDeveloper

If you have installed Oracle JDeveloper on your system, refer to *Oracle Fusion Middleware Installation Guide for Oracle JDeveloper* for instructions on how to remove this software from your system.

9.6 Removing the Oracle Home and JDeveloper Home Directories

Manually remove the SOA Oracle Home directory and all sub-directories. For example, if your SOA Oracle Home directory was `/home/Oracle/Middleware/Oracle_SOA1` on a UNIX system:

```
> cd /home/Oracle/Middleware
> rm -rf Oracle_SOA1
```

On a Windows system, if your Middleware Home directory was `C:\Oracle\Middleware\Oracle_SOA1`, use a file manager window and navigate to the `C:\Oracle\Middleware` directory, then right-click on the `Oracle_SOA1` folder and select **Delete**.

Repeat this procedure for your Oracle JDeveloper installation directories, as the deinstaller removes the software but not all of the installation directories. Before doing so, be sure to make copies of the projects you want to save.

On Windows systems, you must also manually remove the program groups from the `Start Menu\Programs` folder. As an example (the folder names and program group names on your system may be different), you might remove the following from `C:\Document and Settings\All Users\Start Menu\Programs`:

- Oracle Fusion Middleware 11.1.1.1.0
- Oracle SOA 11g - Home1
- Oracle WebLogic

10 Additional Resources

For additional information, refer to the *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite*, which is available on the Oracle Fusion Middleware Documentation CD-ROM.

Printed documentation is available for sale through your Oracle representative or in the Oracle Store at <http://oraclestore.oracle.com>.

To download free release notes, installation documentation, white papers, or other collateral, visit Oracle Technology Network (OTN). You must register online before using OTN; registration is free and can be done at <http://www.oracle.com/technology/membership/>.

If you already have a username and password for OTN, then you can go directly to the documentation section of OTN at <http://www.oracle.com/technology/documentation>.

10.1 Oracle Support Services

If you purchased Oracle Product Support, you can call Oracle Support Services for assistance. Oracle Support Services include phone assistance, version updates and access to our service offerings. You have access to phone support 24 hours a day, 7 days a week. In the U.S.A., you can call Product Support at 1-800-223-1711.

Make sure you have your CSI (CPU Support Identifier) number ready when you call. Keep the CSI number for your records, because it is your key to Oracle Support Services. The Oracle Store

sends the CSI number to you in an e-mail alert when it processes your order. If you do not have your CSI number and you are in the U.S.A., you can look up your CSI number by accessing our online Order Tracker which provides detailed order information. Go to the Oracle Store and click on Order Tracker located above the top navigation bar.

For Oracle Support Services locations outside the U.S.A., call your local support center for information on how to access support. To find the local support center in your country, visit the Support Web Center at <http://www.oracle.com/support>.

At the Support Web Center you will find information on Oracle Support Services, such as:

- Contact Information
- Instructions for Accessing Electronic Services
- Helpful Web Sites
- Support Resources
- Oracle Support Portfolio
- Oracle Support Services news

With Oracle Product Support, you have round-the-clock access to My Oracle Support (formerly *OracleMetaLink*), Oracle Support

Services premier Web support offering. My Oracle Support offers you access to installation assistance, product documentation, and a technical solution knowledge base.

It has technical forums, where you can post questions about your Oracle products and receive answers from Oracle Technical Support Analysts and other Oracle users. The questions and answers remain posted for the benefit of all users.

My Oracle Support options include:

- Technical Assistance Request (TAR) access
- Patch Downloads
- Bug Database Query Access
- Product Life-Cycle Information

You can access My Oracle Support at <http://metalink.oracle.com>.

10.2 Version Updates

If you do not have a currently supported license, you can purchase the most recent version of an Oracle product from the Oracle Store at <http://oraclestore.oracle.com>.

If you do have a currently supported license, you can place non-urgent requests for version update shipments through the iTAR feature on My Oracle Support. You will need to log the iTAR type as a U.S. Client Relations/Non-Technical Request.

You can also request Version Update shipments in the U.S.A. by calling Client Relations. When requesting a Version Update, provide the following information to the Client Relations Analyst:

- CSI Number
- Contact Information
- Platform
- Product Name
- Shipping Address
- Product Version Number

Outside the U.S.A., call your local Oracle Support Center.

10.3 Premium Services

For information on our Premium Services, including onsite support, OracleGOLD, remote services, and upgrade packages,

visit the Support Web Center at
<http://www.oracle.com/support>.

You can also call your Support Sales Representative in the U.S.A
at 1-800-833-3536.

10.4 Quick Reference

For quick access to additional information, refer to [Table 5](#):

Table 5 *Links to Additional Information and Resources*

I want to...	Contact Information or Web Site
Purchase additional products, full-use licenses, version updates, and documentation in the U.S.A.	http://oraclestore.oracle.com
Access technical resources for developers.	http://www.oracle.com/technology
Access installation documentation.	http://www.oracle.com/technology/documentation
Access information about technical support.	http://www.oracle.com/support

Table 5 (Cont.) Links to Additional Information and Resources

I want to...	Contact Information or Web Site
Locate local Oracle Support Centers outside the U.S.A.	http://www.oracle.com/support
Locate local Oracle offices outside the U.S.A.	http://www.oracle.com/global
Call Client Relations in the U.S.A.	1-800-223-1711
Speak with your sales representative in the U.S.A.	1-800-ORACLE-1
Locate TTY Access to technical support in the U.S.A.	1-800-446-2398

11 Documentation Accessibility

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actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at <http://www.oracle.com/accessibility/>.

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Deaf/Hard of Hearing Access to Oracle Support Services

To reach Oracle Support Services, use a telecommunications relay service (TRS) to call Oracle Support at 1.800.223.1711. An Oracle Support Services engineer will handle technical issues and

provide customer support according to the Oracle service request process. Information about TRS is available at <http://www.fcc.gov/cgb/consumerfacts/trs.html>, and a list of phone numbers is available at <http://www.fcc.gov/cgb/dro/trsphonebk.html>.

