Oracle® Secure Enterprise Search

Installation Guide

10*g* Release 1 (10.1.8.2) for Microsoft Windows (32-Bit)

E10464-01

October 2007

This document describes how to install Oracle Secure Enterprise Search (SES). It includes the following sections:

Note: After installing Oracle SES, check to see if there is a patch set or critical patch update (CPU) available. A CPU is a collection of patches for security vulnerabilities. It also includes non-security fixes required (because of interdependencies) by those security patches. CPUs are cumulative, and they are provided quarterly on the Oracle Technology Network. Oracle SES 10.1.8.2 includes the July 2007 CPU for the underlying 10.1.0.5 database. If a later CPU is available, then install that. For more information about CPUs, see:

`http://www.oracle.com/security/critical-patch-update.html`

See Also: Up-to-date Release Notes are posted on 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 user name and password for OTN, then you can go directly to the documentation section of OTN at

`http://www.oracle.com/technology/documentation`

Installing Oracle Secure Enterprise Search

This section contains the following topics:

- Post-Installation Tasks
- Silent Installation Tasks
- Deinstallation Tasks

Pre-Installation Tasks

This section contains the following topics:

- Oracle SES Certifications
- Checking the Software Requirements
- Checking Hardware Requirements
- Changing the Oracle SES Middle Tier Port
- Checking the Oracle Base Directory
- Installing a Loopback Adapter

Oracle SES Certifications

Oracle SES can be installed on the following Windows (x86) operating systems: Windows 2000, Windows Server 2003, and Windows XP.

The Oracle SES administration tool and default query application are certified on the following browsers:

- Firefox 1.0, 1.0.1, 1.0.6, 1.0.7, 1.5, 2.x
- Internet Explorer 6.0, 7.0
- Netscape 7.1, 7.2
- Mozilla 1.7.3

Note: The new 10.1.8.2 query application is certified with Internet Explorer versions 6 and 7 and Firefox versions 1.5 and 2.x. Existing 10.1.8.1 functionality is certified on all Oracle SES-supported browsers through the classic user interface:
http://<host>:<port>/search/query/search-classic.jsp

The requirements and certifications included in this installation guide were current at the time this guide was published. See the certification matrix on the Oracle*MetaLink* Web site for the most up-to-date information.

See Also: "Oracle Support Services" on page 18

Checking the Software Requirements

This section lists software requirements for Microsoft Windows installations.

A Windows system must meet the following minimum operating system requirements:

- Windows Server 2003 - all editions
- Windows 2000 with Service Pack 2 or later
- Windows XP Professional

Checking Hardware Requirements

Oracle SES requires a minimum of 2 gigabytes of disk space. This includes 1 gigabyte to install and approximately 0.5 gigabytes to create the initial Oracle SES index. Additional Oracle SES requirements are based on the amount of data that you need to search. Here are some configuration examples:

To index 100,000 documents:

- 4 gigabytes disk space
- 1 gigabyte RAM

To index 1,000,000 documents:

- 20 gigabytes disk space
- 6 gigabytes RAM

For installation help, including pre-installation tips, see the Oracle SES tutorial:

http://st-curriculum.oracle.com/tutorial/SESAdminTutorial/index.htm

---

Note: An error is encountered if the disk hosting Oracle SES is FAT32 formatted. The maximum file size limit of FAT32 is 4GB. Convert the disk from FAT32 to NTFS with the following:

```
convert D: /fs:ntfs
```

Changing the Oracle SES Middle Tier Port

To change the Oracle SES middle tier port, follow these steps:

1. Shutdown the middle tier with the following command:

   ```
   %ORACLE_HOME%/bin/searchctl stop
   ```

2. Edit the value for the `port` attribute in `%ORACLE_HOME%/oc4j/j2ee/OC4J_SEARCH/config/http-web-site.xml`. (Make sure that the new port is not already in use.)

3. Start the middle tier with the following command:

   ```
   %ORACLE_HOME%/bin/searchctl start
   ```

Checking the Oracle Base Directory

The Oracle home directory generally is a subdirectory of the Oracle base directory. Before installing Oracle SES, check to see if the `ORACLE_BASE` environment variable is set. If it is, then make sure that you have write permission to that location. It is not recommended to put `ORACLE_BASE` under other user's account/location.

Installing a Loopback Adapter

A loopback adapter is required if:

- You are installing on a DHCP computer, or
- You are installing on a non-networked computer and plan to connect the computer to a network after installation.

When you install a loopback adapter, the loopback adapter assigns a local IP for your computer. After you install a loopback adapter on your computer, you have at least two network adapters on your computer: your own network adapter and the loopback adapter. Oracle Secure Enterprise Search needs to have Windows using the loopback adapter as the primary adapter.

The primary adapter is determined by the order in which you installed the adapters:

- On Windows NT, the primary adapter is the *first* adapter installed. This means that you have to install the loopback adapter, deinstall your network adapter, and reinstall the network adapter.
- On Windows 2000, Windows Server 2003, and Windows XP, the primary adapter is the *last* adapter installed. If you install additional network adapters after you install the loopback adapter, you need to deinstall the loopback adapter and reinstall it.

The procedure for installing a loopback adapter depends on the version of Windows on which you plan to install Oracle Secure Enterprise Search:

Checking if a Loopback Adapter Is Installed on Your Computer To check if a loopback adapter is installed on your computer, run the `ipconfig /all` command:

```
prompt> ipconfig /all
```

If there is a loopback adapter installed, you would see a section that lists the values for the loopback adapter. For example:

```
Ethernet adapter Local Area Connection 2:
  Connection-specific DNS Suffix  . :
  Description . . . . . . . . . . . : Microsoft Loopback Adapter
  Physical Address. . . . . . . . . : 02-00-4C-4F-4F-50
  DHCP Enabled. . . . . . . . . . . : Yes
  Autoconfiguration Enabled . . . . : Yes
  Autoconfiguration IP Address. . . : 169.254.25.129
  Subnet Mask . . . . . . . . . . . : 255.255.0.0
```

Installing a Loopback Adapter on Windows NT Installing a loopback adapter on Windows NT is more complicated than on other Windows platforms because Windows NT reports on the *first* network adapter installed. Since your DHCP computer already has a network adapter, you need to remove it and reinstall it later so that the loopback adapter becomes the first network adapter installed. This section describes how to do this in these subsections:

High-Level Steps

The high-level steps to install a loopback adapter on Windows NT are:

1. Collect information for the existing network adapter on your computer.

   You need to perform this step because you must remove the existing network adapter and reinstall it.

2. Install the loopback adapter.
3. Remove the existing network adapter.
4. Finish configuring the loopback adapter.
5. Restart the computer.
6. Reinstall the network adapter.
7. Restart the computer.

Requirements

To install a loopback adapter on Windows NT, you need the following items:

- Windows NT Installation CD-ROM, so you can install the loopback adapter.
- Drivers for your network adapters when you reinstall the network adapters.

Detailed Steps

1. Collect information for your existing network adapter so that you can reinstall it. Typically you need the following pieces of information:

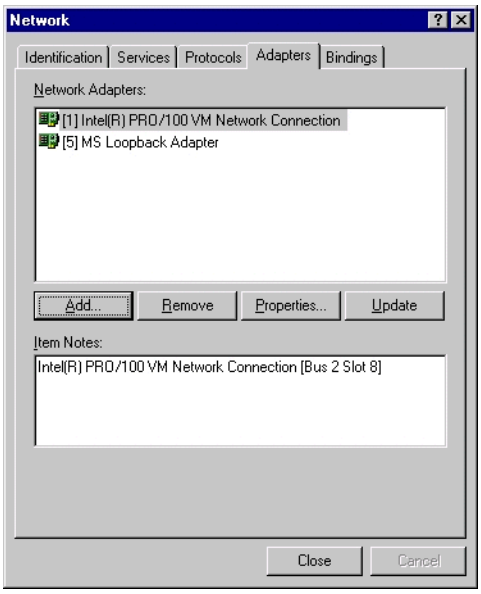
Table 1 Information for Your Existing Network Adapter

Item	Where to Get Its Value
IP address	Network control panel, **Adapter** tab. Select the network adapter, then click **Properties**.
Subnet mask	Network control panel, **Protocols** tab. Select **TCP/IP**, then click **Properties**. In the Properties dialog, select the **IP Address** tab and click **Advanced**.
WINS Server address	Network control panel, **Protocols** tab. Select **TCP/IP**, then click **Properties**. In the Properties dialog, select the **WINS Address** tab.
DNS Server address	Network control panel, **Protocols** tab. Select **TCP/IP**, then click **Properties**. In the Properties dialog, select the **DNS** tab.

2. Insert the Windows NT Installation CD-ROM in the CD-ROM drive.
3. Right-click **Network Neighborhood** on the desktop, and choose **Properties**. This displays the Network control panel.
4. Select the **Adapters** tab.
5. Click **Add**.
6. Select **MS Loopback Adapter** and click **OK**.
7. In the MS Loopback Adapter Card Setup dialog, click **OK** to accept the default frame type (the default value is 802.3).
8. Enter the location of your Windows NT CD-ROM (for example, `E:\i386`) and click **Continue**.

When the loopback adapter is installed, Windows NT displays the Network control panel showing all the network adapters (Figure 1).

Figure 1 Network Control Panel



9. In the Network control panel, delete the network adapters that were installed before the loopback adapter. Select the network adapter and click **Remove**.

   You must do this because you need the loopback adapter to be the first network adapter. In the example, you would delete the Intel network adapter. You will reinstall it later.

10. Click **Close** in the Network control panel. This displays the Microsoft TCP/IP Properties dialog (Figure 2).

11. In the Microsoft TCP/IP Properties dialog, select **MS Loopback Adapter**, 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)

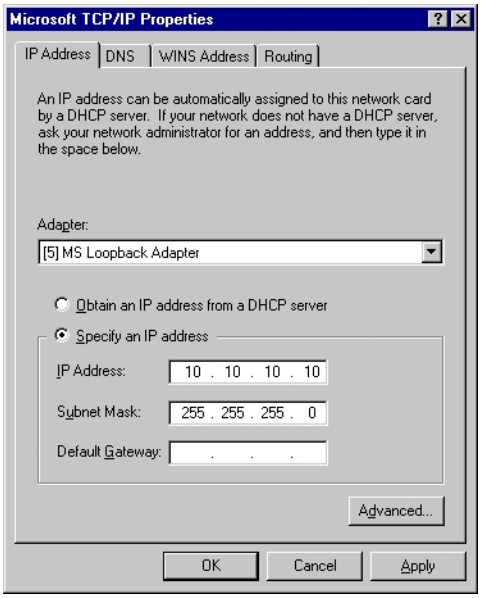
       – `10.10.10.10`

    b. **Subnet mask**: Enter `255.255.255.0`.

    c. Leave all other fields empty.

    d. Click **OK**.

Figure 2 TCP/IP Properties Dialog Showing Values for the Loopback Adapter



12. Restart your computer.
13. When the computer comes back up, reinstall your real network adapter.
14. Restart the computer again.

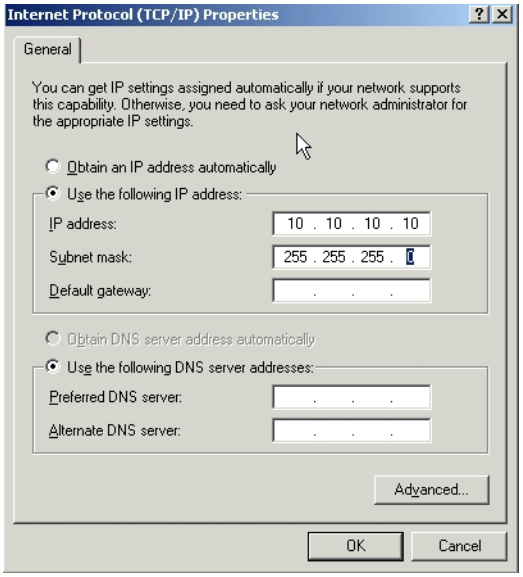
Installing a Loopback Adapter on Windows 2000 Windows 2000 reports on the *last* network adapter installed. This means that if you install additional network adapters after you install the loopback adapter, you need to remove and reinstall the loopback adapter. The loopback adapter must be the last network adapter installed on the computer.

To install a loopback adapter on Windows 2000:

1. From the **Start** menu, select **Settings**, then **Control Panel**.
2. Double-click **Add/Remove Hardware**. This starts up the Add/Remove Hardware wizard.
3. In the Welcome page, click **Next**.
4. In the Choose a Hardware Task page, select **Add/Troubleshoot a device**, and click **Next**.
5. In the Choose a Hardware Device page, select **Add a new device**, and click **Next**.
6. In the Find New Hardware page, select **No, I want to select the hardware from a list**, and click **Next**.
7. In the Hardware Type page, select **Network adapters**, and click **Next**.
8. In the Select Network Adapter page, do the following:
   a. **Manufacturers**: Select **Microsoft**.
   b. **Network Adapter**: Select **Microsoft Loopback Adapter**.
   c. Click **Next**.

9. In the Start Hardware Installation page, click **Next**.
10. In the Completing the Add/Remove Hardware Wizard page, click **Finish**.
11. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network and Dial-up Connections control panel.
12. Right-click the connection that was just created. This is usually "Local Area Connection 2". Choose **Properties**.
13. On the **General** tab, select **Internet Protocol (TCP/IP)**, and click **Properties**.
14. In the Properties dialog (Figure 3), 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. Leave all other fields empty.
    d. Click **OK**.

Figure 3 Internet Protocol (TCP/IP) Properties Dialog Showing Values for the Loopback Adapter



15. Click **OK** in the Local Area Connection 2 Properties dialog.
16. Restart the computer.
17. Add a line to the `C:\windows\system32\drivers\etc\hosts` file with the following format, right after the `localhost` line:

    `IP_address hostname.domainname hostname`

    where:

- *IP_address* is the non-routable IP address entered in step 14.
- *hostname* is the name of the computer.
- *domainname* is the name of the domain.

For example:

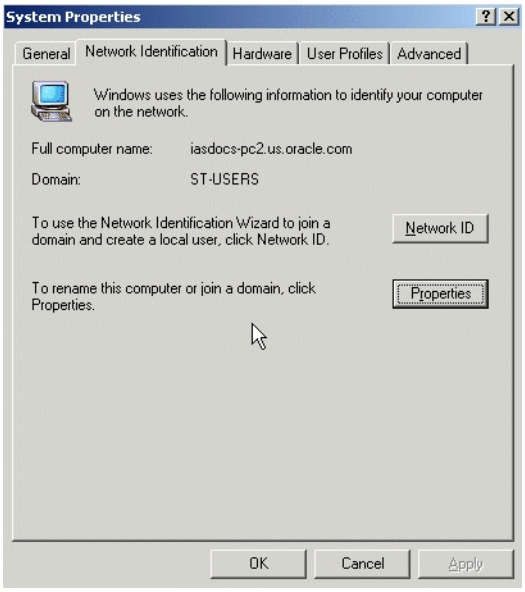
```
10.10.10.10   mycomputer.mydomain.com   mycomputer
```

18. Check the network configuration:

a. Open the System control panel, and select the **Network Identification** tab.

In **Full computer name**, make sure you see the hostname and the domain name (Figure 4).

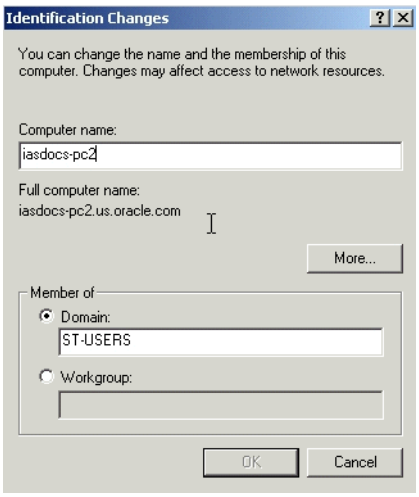
Figure 4 System Control Panel, Network Identification Tab



b. Click **Properties**.

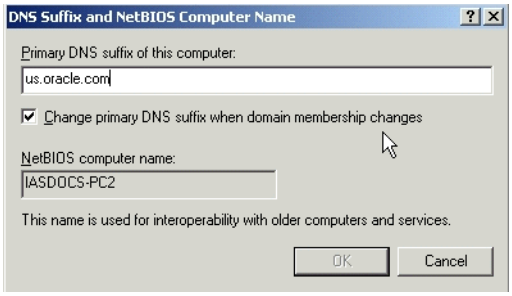
In **Computer name**, you should see the hostname, and in **Full computer name**, you should see the hostname and domain name (Figure 5).

Figure 5 Identification Changes Dialog



c. Click **More**. In **Primary DNS suffix of this computer**, the domain name should appear (Figure 6).

Figure 6 DNS Suffix and NetBIOS Computer Name Dialog



Installing a Loopback Adapter on Windows 2003 or Windows XP To install a loopback adapter on Windows 2003 or Windows XP:

1. From the **Start** menu, select **Control Panel**.
2. Double-click **Add Hardware** to start the Add Hardware wizard.
3. On the Welcome screen, click **Next**.
4. On the Is the hardware connected? screen, select **Yes, I have already connected the hardware**, and click **Next**.
5. On the The following hardware is already installed on your computer screen, select **Add a new hardware device**, and click **Next**.
6. On the The wizard can help you install other hardware screen, select **Install the hardware that I manually select from a list**, and click **Next**.
7. From the list, select the type of hardware you are installing screen, select **Network adapters**, and click **Next**.
8. On the Select Network Adapter screen, make the following selections:

- **Manufacturer**: select **Microsoft**.
- **Network Adapter**: select **Microsoft Loopback Adapter**.

9. Click **Next**.
10. On the The wizard is ready to install your hardware screen, click **Next**.
11. On the Completing the Add Hardware Wizard screen, click **Finish**.
12. If you are using Windows 2003, restart your computer.
13. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections control panel.
14. Right-click the connection that was just created. This is usually named "Local Area Connection 2". Choose **Properties**.
15. On the **General** tab, select **Internet Protocol (TCP/IP)**, and click **Properties**.
16. In the Properties dialog, 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. Leave all other fields empty.
    d. Click **OK**.
17. Click **OK**.
18. Click **OK** in the Local Area Connection 2 Properties dialog.
19. Restart the computer.
20. Add a line to the `C:\windows\system32\drivers\etc\hosts` file with the following format, after the `localhost` line:

    ```
    IP_address   hostname.domainname   hostname
    ```

    where:

    - *`IP_address`* is the non-routable IP address you entered in step 16.
    - *`hostname`* is the name of the computer.
    - *`domainname`* is the name of the domain.

    For example:

    ```
    10.10.10.10   mycomputer.mydomain.com   mycomputer
    ```

21. Check the network configuration:
    a. Open System Properties, and select the **Computer Name** tab. In **Full computer name**, make sure you see the hostname and the domain name.
    b. Click **Change**. In **Computer name**, you should see the hostname, and in **Full computer name**, you should see the hostname and domain name.
    c. Click **More**. In **Primary DNS suffix of this computer**, you should see the domain name.

Removing a Loopback Adapter from Windows NT To remove the loopback adapter from Windows NT:

1. From the **Start** menu, select **Settings**, then **Control Panel**.
2. Double-click **Network**.
3. Select the **Adapters** tab.
4. Select **MS Loopback Adapter** and click **Remove**.
5. Restart your computer.

Removing a Loopback Adapter from Windows 2000, 2003, or XP To remove the loopback adapter from Windows 2000, Windows 2003, or Windows XP:

1. Display the System control panel.
   - **Windows 2000**: From the **Start** menu, select **Settings**, then **Control Panel**, and then double-click **System**.
   - **Windows 2003**: From the **Start** menu, select **Settings**, then **Control Panel**, then **System**.
   - **Windows XP**: From the **Start** menu, select **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**.

Installation Tasks

For easy instructions on installing Oracle SES, see the Installation Tips tutorial:

`http://st-curriculum.oracle.com/tutorial/SESAdminTutorial/index.htm`

To install the Oracle Secure Enterprise Search software:

1. Ensure that you satisfy all minimum requirements, as described in "Pre-Installation Tasks" on page 2.
2. Log on as a member of the Administrators group to the computer on which you will install Oracle components. This user *cannot* be part of more than one domain in the same network.

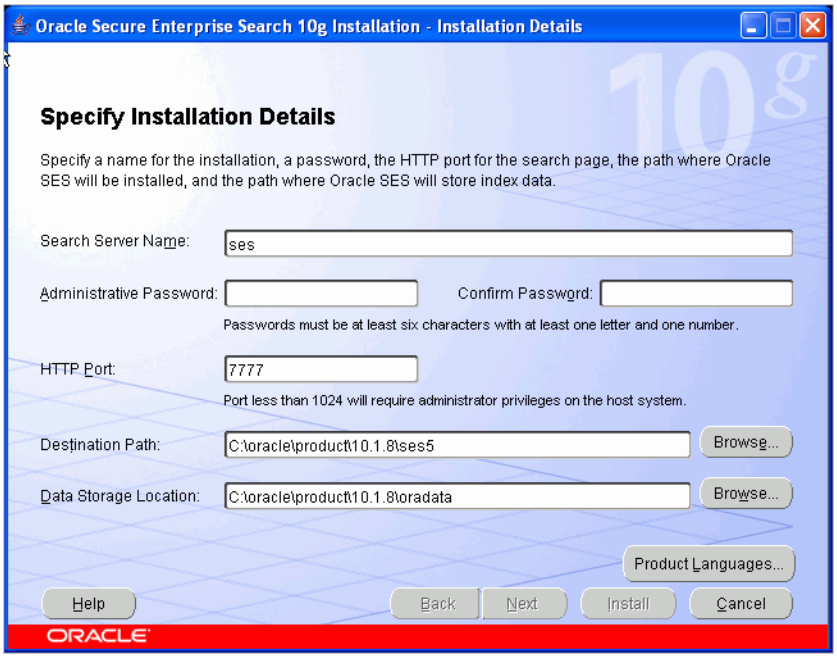
   If you are installing on a Primary Domain Controller (PDC) or a Backup Domain Controller (BDC), then log on as a member of the Domain Administrators group.
3. Insert the DVD or navigate to the directory where you downloaded or copied the installation files. Use the same installation media to install Oracle Secure Enterprise Search on all supported Windows platforms.
4. Start the installer:
   - When installing from a hard disk, double-click `setup.exe` located in the directory you created for the downloaded or copied installation files.
   - When installing from the DVD, enter the following:

```
prompt> cd
prompt> CDROM:\setup.exe
```

This launches Oracle Universal Installer. In the Oracle Universal Installer, the only value that you must specify is the administrative password. The remaining values are set to a default, but they can be overridden. Following is the list of the installation parameters:

- **Search Server Name**: Name for your search server.
- **Administrative Password**: The password that you will later use to log on to the administration tool.
- **HTTP Port**: The port on which the Oracle SES middle tier will listen. For example, if you installed Oracle SES on host myhost.oracle.com and you specify port 7890, then your search page URL will be `http://myhost.oracle.com:7890/search/query/search`.
- **Destination Path**: The location where Oracle SES software is installed.
- **Data Storage Location**: The location where Oracle SES will store its data.

The following screenshot shows the Oracle Universal Installer screen.



5. Click **Install**. The installer will perform the prerequisite checks and proceed with the installation.
6. When all of the configuration tools have finished, click **Exit**, then click **Yes** to exit from Oracle Universal Installer.

The following URLs indicate a successful installation:

- Search: `http://host:port/search/query/search`
- Administration tool: `http://host:port/search/admin/index.jsp` (Log on using the password specified during installation.)

Installing on a System with an Existing Oracle SES Installation

You can install this release (or previous releases) of Oracle SES more than once on the same system as long as each installation is installed in a separate Oracle home directory. Use different values for the **Search Server Name**, **HTTP Port**, and **Destination Path** parameters.

You cannot install products from one release of Oracle SES into an Oracle home directory of a different release. For example, you cannot install release 10.1.8.2 software into an existing 10.1.6 Oracle home directory. If you attempt to install this release into an Oracle home directory that contains software from an earlier Oracle release, then the installation fails.

Post-Installation Tasks

On Windows, Oracle SES cannot allocate memory (SGA + PGA) correctly if the machine has more than 2G physical memory. The maximum memory usage Oracle SES can allocate is 800M. If your server has more than 2G physical memory, you can manually increase the SGA and PGA memory size.

Note: This task is optional.

Because this task increases the SGA and the PGA to improve cache hit ratio, it should be done by an Oracle Database administrator.

See Also: *Oracle Database Concepts* for more information on Oracle memory architecture

In the following steps:

- `%ORACLE_HOME%` is the directory where Oracle SES was installed.
- `<SES Password>` is the Oracle SES administrator password specified during installation.
- `<SES NAME>` is the Oracle SES instance name specified during installation.

1. Open the original initialization parameter file (`init.ora.*)` file with a text editor. It is in the `%ORACLE_HOME%\admin\<SES NAME>\pfile` directory. Remember to make a backup of this file.
2. Find `sga_target` and `pga_aggregate_target`, and increase the size of each. For example, increase the SGA to 800M with `sga_target=800M`.

   Specify 30% of physical memory to `sga_target` and 10% of physical memory to `pga_aggregate_target`. 1.5G is the limit for `sga_target`, even if you specify more than 1.5G. Save the modified file.
3. Start Oracle SES.
4. Enter `sqlplus` in a command prompt to start SQL*Plus.
5. Enter the following in the SQL*Plus login prompt:

   ```
   sys/<SES Password> as sysdba
   ```
6. Create a new server parameter file (`SPFILE`) with the following statement:

   ```
   SQL> CREATE SPFILE='%ORACLE_HOME%\dbs\SPFILE_NEW.ORA'
   FROM PFILE='%ORACLE_HOME%\admin\<SES NAME>\pfile\init.ora.*';
   ```

Specify a new file name for SPFILE, and specify the modified init.ora.* file for initialization parameter file (pfile).

See Also: *Oracle Database SQL Reference* for details on the CREATE SPFILE statement

7. Enter exit to quit SQL*Plus.
8. Shut down Oracle SES.
9. Make a backup for the original SPFILE: %ORACLE_HOME%\dbs\SPFILE.ORA. Then, rename the newly created %ORACLE_HOME%\dbs\SPFILE_NEW.ORA to SPFILE.ORA.
10. Start Oracle SES.
11. To confirm that your change was applied, launch SQL*Plus with the eqsys/<SES Password> user. Then enter the following:

```
SQL> show parameter sga_target
SQL> show parameter pga_aggregate_target
```

If Oracle SES cannot start, then restore the SPFILE.ORA and start Oracle SES again.

Silent Installation Tasks

A silent installation has no graphical output and no input by the user. It is accomplished by supplying Oracle Universal Installer with a response file and specifying the -silent flag on the command line. Use silent installation when you want similar installations on more than one computer. Additionally, you can use silent installation when performing the Oracle SES installation from a remote location using the command line.

Creating Registry Keys

If this is the first time-installation of Oracle SES, then you must create the registry keys before starting.

```
HKEY_LOCAL_MACHINE \ SOFTWARE \ ORACLE \ inst_loc = Inventory_Location
```

The *Inventory_Location* is the location of your installer files. For example:

```
Drive_Letter:\program files\oracle\Inventory
```

Selecting a Response File

Before performing a silent installation, you must provide information specific to your installation in a response file. The installer will fail if you attempt an installation using a response file that is not configured correctly. Response files are text files that you can create or edit in a text editor.

Response files (server.rsp) are located in the \response directory on Disk 1 of the Oracle SES DVD. You must edit the response file according to your requirements for silent installation.

To use a response file, first copy it from the DVD to your system. For example:

1. Go to the \response directory.

2. Copy the `server.rsp` file to your system hard drive:

```
prompt:\> copy server.rsp
Drive_Letter:\1018\Disk1\response\server.rsp
```

Editing the Response File

Use any text editor to edit the response file to include information specific for your system. You must specify values for variables in your response file. Each variable listed in the response file is associated with a comment, which identifies the variable type. For example:

```
string = "Sample Value"
Boolean = True or False
Number = 1000
StringList = {"StringValue 1", "String Value 2"}
```

The values that are given as `<Value Required>` must be specified for silent installation. Remove the comment from the variable values in the response file before starting the Oracle SES installation.

Specifying a Response File and Starting the Installation

Before you specify a response file, ensure that all the values in the response file are correct.

To make Oracle Universal Installer use the response file at installation time, specify the location of the response file as a parameter when starting Oracle Universal Installer. To perform a silent installation, use the `-silent` parameter:

```
Drive_Letter:\> setup.exe -silent -responseFile <absolute_path_and_filename>
```

WARNING: During installation, response files may be copied to subdirectories under %*ORACLE_HOME*%. When the installation completes successfully, these copies are removed. If the installation fails, however, these copies may not be removed. If you have provided passwords or other sensitive information in your response files, Oracle recommends that you delete any copies of the response files that remain in your file system.

The success or failure of silent installations is logged in the `installaction<timestamp>.log` file. Additionally, the silent installation creates the `silentinstall<timestamp>.log` file. The log files are created in the `<Inventory_Location>\logs` directory. Typically, this is located at `C:\Program Files\Oracle\Inventory\logs`.

The `silentinstall<timestamp>.log` file contains the following line if the installation was successful:

```
The installation of Oracle Secure Enterprise Search <Installation Type> was
successful.
```

The `installaction<timestamp>.log` file contains specific information for each installation type.

Security Tips for Silent Installations

The response file contains the installation password in clear text. To minimize security issues, follow these guidelines:

- Set the permissions on the response files so that they are readable only by the operating system user performing the silent installation.
- If possible, remove the response files from the system after the silent installation is completed.

Error Handling

The success or failure of a silent installation is logged in the `silentinstall<timestamp>.log` file. This file is created in the `Inventory\logs` directory.

Values for variables that are of the wrong context, format, or type are treated as if no value were specified. Variables that are outside any section are ignored.

If you attempt a silent installation with an incorrect or incomplete response file, or if Oracle Universal Installer encounters an error, such as insufficient disk space, the installation fails.

Deinstallation Tasks

To deinstall Oracle SES, navigate to **Control Panel - Add or Remove Programs**, and remove Oracle Secure Enterprise Search.

Alternately, run the following command. Select:

Start - Programs - Oracle - <ses_instance_name> - Uninstall SES

During installation, the `oradata` directory (which includes data files, control files, and log files) is created one directory level up from the Oracle home for Oracle SES. During deinstallation, the Oracle home is deleted, but the `oradata` directory (if it still exists outside of the Oracle home) is not deleted. If you intend to use these files, then back up your data files before deinstalling Oracle SES.

Upgrading Oracle Secure Enterprise Search

There is no direct upgrade support to release 10.1.8.2.

To upgrade to Oracle SES release 10.1.8.2, you must first upgrade to release 10.1.8.1 and then install the patch set for release 10.1.8.2.

See Also: *Oracle Secure Enterprise Search Patch Set Readme* for 10.1.8.2

Restarting Oracle Secure Enterprise Search

The tool for starting and stopping the search engine is `searchctl`. To restart Oracle SES after rebooting, navigate to the `%ORACLE_HOME%/bin` directory where Oracle SES is installed and run `searchctl restartall`.

What to Do Next

To become familiar with Oracle Secure Enterprise Search, Oracle suggests that you complete the following tasks:

- Follow the Oracle Secure Enterprise Search tutorial:

  http://st-curriculum.oracle.com/tutorial/SESAdminTutorial/index.htm

- Log in to the Oracle SES administration tool, using the user name and password set in the installation. With the administration tool, you can:
  - Define sources to search
  - Configure and schedule the crawling of the sources
  - Monitor the status and performance of crawling and search

  Click the **Help** link in the top right corner of any page in the administration tool for context-sensitive help.

- In a production environment, where a load balancer or other monitoring tools are used to ensure system availability, Oracle SES can also be easily monitored through the following URL: `http://<host>:<port>/monitor/check.jsp`. The URL should return the following message: **Oracle Secure Enterprise Search instance is up.**

  Note: This message is not translated to other languages, because system monitoring tools may need to byte-compare this string.

  If Oracle Secure Enterprise Search is not available, then the URL returns either a connection error or the HTTP error code 503.

Additional Resources

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 user name and password for OTN, then you can go directly to the documentation section of OTN at

http://www.oracle.com/technology/documentation

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 about 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 on how to access 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 Oracle*MetaLink*, the Oracle Support Services premier Web support offering. Oracle*MetaLink* 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.

Oracle*MetaLink* options include:

- Service Request (SR) access
- Patch downloads
- Bug database query access
- Product life-cycle information

You can access Oracle*MetaLink* at

https://metalink.oracle.com

Quick Reference

Resource	Contact Information or Web Site
Oracle*MetaLink*	https://metalink.oracle.com
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/index.html
Access information about technical support	http://www.oracle.com/support
Locate local Oracle Support Centers outside the U.S.A.	http://www.oracle.com/support

Resource	Contact Information or Web Site
Locate local Oracle offices outside the U.S.A	http://www.oracle.com/global/index.html
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
Obtain TTY access to technical support in the U.S.A.	1-800-446-2398

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is 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/

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, 7 days a week. For TTY support, call 800.446.2398. Outside the United States, call +1.407.458.2479.

Oracle Secure Enterprise Search Installation Guide, 10*g* Release 1 (10.1.8.2) for Microsoft Windows (32-Bit)
E10464-01