# **Oracle eMail Server**

Installation Guide

Release 5.2 for Windows NT

March, 2001

Part No. A86742-01



Installation Guide, Release 5.2 for Windows NT

Part No. A86742-01

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# **Send Us Your Comments**

# Oracle eMail Server Installation Guide, Release 5.2 for Windows NT Part No. A86742-01

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

- Did you find any errors?
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If you have problems with the software, please contact your local Oracle Support Services.

# **Preface**

 ${\it Oracle~eMail~Server~Installation~Guide~for~Windows~NT~describes~how~to~install~and~configure~Oracle~eMail~Server~for~Windows~NT.}$ 

This preface contains these topics:

- Audience
- Organization
- Related Documentation
- Conventions

#### **Audience**

This guide is intended for anyone who is installing and configuring Oracle eMail Server. It provides instructions for the installation and configuration tasks to be performed.

# **Organization**

This document contains:

#### Chapter 1, "Preinstallation"

This chapter describes the preinstallation procedures for Oracle eMail Server and includes an installation overview, system requirements, and preinstallation tasks.

#### Chapter 2, "Installing and Configuring eMail Server"

This chapter describes Oracle eMail Server installation and configuration procedures for new installations and upgrades. It contains step-by-step procedures for installing and configuring Oracle eMail Server.

#### Chapter 3, "Postinstallation"

This chapter describes tasks that must be done after Oracle eMail Server is installed or upgraded.

#### Chapter 4, "Deinstallation"

This chapter contains step-by-step instructions for deinstalling database objects and software.

#### Chapter 5, "Troubleshooting"

This chapter contains information relating to troubleshooting the installation of Oracle eMail Server.

### **Related Documentation**

For more information, see the following Oracle resources:

- Net8 Administrator's Guide
- Oracle8i Installation Guide, Release 3 (8.1.7) for Windows NT
- Oracle8i Administrator's Reference, Release 3 (8.1.7) for Windows NT

Many of the examples in this book use the sample schemas of the seed database, which is installed by default when you install the Oracle database. Refer to *Oracle9i Sample Schemas* for information on how these schemas were created and how you can use them.

In North America, printed documentation is available for sale in the Oracle Store at

http://oraclestore.oracle.com/

Customers in Europe, the Middle East, and Africa (EMEA) can purchase documentation from

http://www.oraclebookshop.com/

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http://technet.oracle.com/membership/index.htm

If you already have a username and password for OTN, then you can go directly to the documentation section of the OTN Web site at

http://technet.oracle.com/docs/index.htm

For additional information, see:

• Sendmail, 2nd Editon by Brian Costales with Eric Allman. O'Reilly, 1997.

http://www.sendmail.org

### **Conventions**

This section describes the conventions used in the text and code examples of this documentation set. It describes:

- Conventions in Text
- Conventions in Code Examples
- Conventions for Windows Operating Systems

#### **Conventions in Text**

We use various conventions in text to help you more quickly identify special terms. The following table describes those conventions and provides examples of their use.

Convention	Meaning	Example
Bold	Bold typeface indicates terms that are defined in the text or terms that appear in a glossary, or both.	When you specify this clause, you create an index-organized table.
Italics	Italic typeface indicates book titles or	Oracle8i Concepts
	emphasis.	Ensure that the recovery catalog and target database do <i>not</i> reside on the same disk.
UPPERCASE monospace	ospace elements supplied by the system. Such elements include parameters, privileges,	You can specify this clause only for a $\ensuremath{\mathtt{NUMBER}}$ column.
(fixed-width font)		You can back up the database by using the BACKUP command.
	packages and methods, as well as system-supplied column names, database	Query the TABLE_NAME column in the USER_TABLES data dictionary view.
	objects and structures, usernames, and roles.	Use the DBMS_STATS.GENERATE_STATS procedure.
lowercase	Lowercase monospace typeface indicates	Enter sqlplus to open SQL*Plus.
monospace (fixed-width	executables, filenames, directory names, and sample user-supplied elements. Such	The password is specified in the orapwd file.
font)	elements include computer and database names, net service names, and connect identifiers, as well as user-supplied database objects and structures, column names, packages and classes, usernames and roles, program units, and parameter values.  Note: Some programmatic elements use a mixture of UPPERCASE and lowercase.	Back up the datafiles and control files in the /disk1/oracle/dbs directory.
		The department_id, department_name, and location_id columns are in the hr.departments table.
		Set the QUERY_REWRITE_ENABLED initialization parameter to true.
		Connect as oe user.
	Enter these elements as shown.	The JRepUtil class implements these methods.
lowercase	Lowercase monospace italic font	You can specify the parallel_clause.
monospace (fixed-width font) italic	represents placeholders or variables.	Run Uold_release. SQL where old_release refers to the release you installed prior to upgrading.

#### **Conventions in Code Examples**

Code examples illustrate SQL, PL/SQL, SQL\*Plus, or other command-line statements. They are displayed in a monospace (fixed-width) font and separated from normal text as shown in this example:

```
SELECT username FROM dba_users WHERE username = 'MIGRATE';
```

The following table describes typographic conventions used in code examples and provides examples of their use.

Convention	Meaning	Example
[]	Brackets enclose one or more optional items. Do not enter the brackets.	DECIMAL (digits [ , precision ])
{}	Braces enclose two or more items, one of which is required. Do not enter the braces.	{ENABLE   DISABLE}
	A vertical bar represents a choice of two	{ENABLE   DISABLE}
	or more options within brackets or braces. Enter one of the options. Do not enter the vertical bar.	[COMPRESS   NOCOMPRESS]
	Horizontal ellipsis points indicate either:	
	That we have omitted parts of the code that are not directly related to the example	CREATE TABLE AS subquery;
	That you can repeat a portion of the code	SELECT col1, col2,, coln FROM employees;
· ·	Vertical ellipsis points indicate that we have omitted several lines of code not directly related to the example.	
Other notation	You must enter symbols other than brackets, braces, vertical bars, and ellipsis points as shown.	acctbal NUMBER(11,2);
		acct CONSTANT NUMBER(4) := 3;
Italics	Italicized text indicates placeholders or	CONNECT SYSTEM/system_password
	variables for which you must supply particular values.	DB_NAME = database_name

Convention	Meaning	Example
UPPERCASE	supplied by the system. We show these terms in uppercase in order to distinguish them from terms you define. Unless terms	<pre>SELECT last_name, employee_id FROM employees;</pre>
		SELECT * FROM USER_TABLES;
		DROP TABLE hr.employees;
lowercase	Lowercase typeface indicates programmatic elements that you supply.	<pre>SELECT last_name, employee_id FROM employees;</pre>
	For example, lowercase indicates names of tables, columns, or files.  Note: Some programmatic elements use a mixture of UPPERCASE and lowercase. Enter these elements as shown.	sqlplus hr/hr
		CREATE USER mjones IDENTIFIED BY ty3MU9;

## **Conventions for Windows Operating Systems**

The following table describes conventions for Windows operating systems and provides examples of their use.

Convention	Meaning	Example
Choose Start >	How to start a program. For example, to start Oracle Database Configuration Assistant, you must click the Start button on the taskbar and then choose Programs > Oracle - HOME_NAME > Database Administration > Database Configuration Assistant.	Choose Start > Programs > Oracle - HOME_ NAME > Database Administration > Database Configuration Assistant
C:/>	Represents the Windows command prompt of the current hard disk drive. Your prompt reflects the subdirectory in which you are working. Referred to as the command prompt in this guide.	C:\oracle\oradata>
HOME_NAME	Represents the Oracle home name.  The home name can be up to 16 alphanumeric characters. The only special character allowed in the home name is the underscore.	C:\> net start OracleHOME_ NAMETNSListener

Convention	Meaning	Example
ORACLE_HOME and ORACLE_ BASE	In releases prior to 8.1, when you installed Oracle components, all subdirectories were located under a top level ORACLE_HOME directory that by default was:	Go to the ORACLE_BASE\ORACLE_HOME\rdbms\admin directory.
	<ul> <li>C:\orant for Windows NT</li> <li>C:\orawin95 for Windows 95</li> <li>C:\orawin98 for Windows 98</li> <li>or whatever you called your Oracle home.</li> </ul>	
	In this Optimal Flexible Architecture (OFA)-compliant release, all subdirectories are not under a top level <code>ORACLE_HOME</code> directory. There is a top level directory called <code>ORACLE_BASE</code> that by default is <code>C:\oracle</code> . If you install release 8.1.7 on a computer with no other Oracle software installed, the default setting for the first Oracle home directory is <code>C:\oracle\ora81</code> . The Oracle home directory is located directly under <code>ORACLE_BASE</code> .	
	All directory path examples in this guide follow OFA conventions.	
	See Oracle9i Quick Reference for Windows for additional information on OFA compliances and for information on installing Oracle products in non-OFA compliant directories.	

# **Preinstallation**

This chapter describes the preinstallation procedures for Oracle eMail Server. Topics covered include:

- **Installation Overview**
- **Installation Requirements**
- **Preinstallation Tasks**

### **Installation Overview**

Oracle eMail Server is a highly scalable messaging framework that integrates messages from multiple sources into a single inbox. Prior to installation, you should plan your implementation strategy and be familiar with Oracle eMail Server system components, concepts, and terminology.

**See Also:** Oracle eMail Server Concepts Guide on the Oracle Technology Network website at http://otn.oracle.com/products/ias

The installation process is composed of the following steps:

- 1. Plan an implementation strategy, considering the following factors:
  - Anticipated usage of the e-mail system (total number of users, anticipated number of concurrent users at peak load, how much e-mail you expect to transmit and receive each day, and how much e-mail you expect to store)
  - Domain requirements (acme.com as opposed to us.acme.com and uk.acme.com, for instance)
  - E-mail clients you plan to use

- Security concerns
- Network topology and bandwidth
- Performance and availability requirements
- 2. Complete the necessary preinstallation tasks including backing up your existing system, configuring the Windows NT environment, and preparing related processes and products for the installation.
- 3. Use the Oracle Universal Installer on the Oracle software CD to install Oracle eMail Server and related software products.
- **4.** Perform the postinstallation steps.
- Verify the configuration by starting processes and checking process logs.

# **Installation Requirements**

The following system and software requirements are required to install Oracle eMail Server.

- **Hardware Requirements**
- **Software Requirements**
- **Memory Requirements**
- **Disk Space Requirements**

#### **Hardware Requirements**

Oracle eMail Server requires the following hardware for Windows NT installation:

- Compaq, HP, or 100% compatible PC based on a Pentium processor
- Windows NT compatible network interface card (NIC)
- Connected CD-ROM drive functioning as a logical drive

## **Software Requirements**

Oracle eMail Server requires the following software components and associated versions:

Software Requirements	Version	State During Oracle eMail Server Installation
Windows NT service pack 4 server or workstation	4.0	Installed and running
Network Listener	8.1.7	Installed and running
Oracle Net8	8.1.7	Installed
Oracle8i Database Server	8.1.7	Installed and running
PL/SQL V2	8.1.7	Installed
SQL*Plus	8.1.7	Installed
Sendmail	3.0	Installed
MKS Toolkit	6.1	Installed

# **Memory Requirements**

The minimum RAM requirements for Oracle eMail Server, administration tool, and the protocol server depend upon the number of machines on which these products are installed.

Oracle eMail Server Components	Minimum RAM Requirements
Oracle eMail Server	128 MB
Administration Tool	64 MB
IMAP4 and POP3 Protocol Server	20 MB

# **Disk Space Requirements**

The following disk space is required for Oracle eMail Server:

Oracle eMail Server Components	Minimum Disk Space Requirements
Oracle eMail Server	500 MB
Administration Tool	100 MB
IMAP4 and POP3 Protocol Server	65 MB

#### **Preinstallation Tasks**

The following tasks must be performed prior to installing Oracle eMail Server:

- Task 1: Shutting Down and Backing Up Existing Database and Log Files
- Task 2: Configuring the Oracle8i Database Server
- Task 3: Verifying that the NLS\_LANG Parameter is Configured Correctly
- Task 4: Starting the Processes Necessary for Installation
- Task 5: Configuring Net8 and Check the LISTENER.ORA and TNSNAMES.ORA Files
- Task 6: Configuring the INIT.ORA, LISTENER.ORA, and TNSNAMES.ORA
- Task 7: Including oratnsapi8.dll in the System Path
- Task 8: Configuring Oracle Internet File System and Oracle eMail Server to Run on the Same Machine (Optional)

#### Task 1: Shutting Down and Backing Up Existing Database and Log Files

Perform a full backup of your existing Oracle8i Database Server before you perform any new installation or upgrade. A full backup ensures that you can recover from errors encountered during an installation or upgrade processes.

The backup should be performed with the database shut down cleanly. If you use shutdown immediate or shutdown abort to force users off the system, be sure to restart the database in restricted mode, and then shut it down with normal mode. See the Oracle8i Administrator's Guide or Oracle8i Backup and Recovery Overview for more information.

Note: See the Oracle8i Installation Guide for Windows NT for more information on planning and configuring your server.

### Task 2: Configuring the Oracle8 i Database Server

Oracle eMail Server requires reconfiguration of specific database parameters. Before starting the configuration, shut down the network listener and the database where Oracle eMail Server will be installed.

To shut down all Oracle instances including the network listener, use the following procedure:

- 1. Choose Start > Settings > Control Panel > Services. The Services window displays.
- **2.** Select the following Oracle processes and click Stop:
  - OracleServiceSID
  - OracleHOME NAMETNSListener
- **3.** Edit the init SID. ora file located in the ORACLE\_HOME\database directory to reflect the following minimum values for the listed parameters:

Parameter	Minimum Settings
job_queue_processes	10
job_queue_interval	60
DB_Files	80
DB_Block_Buffers	550
Shared_Pool_Size	35 MB
Processes	200
DML_Locks	200
Log_Buffer	32768
Open_Cursors	255
Open_Links	4
Global_Names	False
Remote_Login_ Passwordfile	Shared
Compatible	8.1.7

**Note:** Any missing parameters can be added by the user at any time. See Oracle8i Administrator's Guide for more information.

# Task 3: Verifying that the NLS\_LANG Parameter is Configured Correctly

Use the following steps to configure the NLS\_LANG parameter to AMERICAN\_AMERICA.UTF8.

**Note:** If the NLS\_LANG parameter defined in the Oracle 8.1.7 database is something other than AMERICAN\_AMERICA.UTF8, eMail Server will still function. The language character sets supported by the mail system, however, will be limited to that set.

Because using AMERICAN\_AMERICA.UTF8 has a minimal affect on resource requirements, Oracle Corporation recommends using it when installing the database.

- 1. Choose Start > Run.
- 2. Select regedit from the dropdown menu or type regedit in the field.
- 3. Navigate through HKEY\_LOCAL\_MACHINE\SOFTWARE\ORACLE.
- **4.** Select the *HOME NAME* folder.
- **5.** Select the NLS\_LANG parameter.
- **6.** Right click and select Modify, or go to Edit > Modify.
- **7.** Change the value to:

AMERICAN\_AMERICA.UTF8

### Task 4: Starting the Processes Necessary for Installation

1. Start the database using the NT Services tool or from the command prompt.

From the NT Services tool:

Choose Start > Settings > Control Panel > Services. The Services window displays. Select the OracleHome SID process and click Start.

From the command prompt:

Choose Start > Programs > Command Prompt. Enter the following:

```
C:\>cd ORACLE HOME\bin
C:\>sqlplus
enter user-name: system
enter password: manager
SQL> startup
SQL> exit
```

2. Start the network listener using the NT Services tool or from the command prompt.

From the NT Services tool:

Choose Start > Settings > Control Panel > Services. The Services window displays. Select the OracleHOME\_NAMETNSListener process and click Start.

From the command prompt:

Choose Start > Programs > Command Prompt. Enter the following:

C:\>lsnrctl start

# Task 5: Configuring Net8 and Check the LISTENER.ORA and TNSNAMES.ORA Files

**Note:** The following task is for installations of domain configuration nodes (DCNs) or member nodes only.

If you are installing a DCN or member node, configure Net8 to enable the new node to connect to the host server.

The following are methods for configuring Net8:

- Configuring Net8 with an Oracle Names Server
- Configuring Net8 with a TNSNAMES.ORA Configuration File

#### Configuring Net8 with an Oracle Names Server

Use an Oracle Names server to simplify the setup and administration of global client/server computing networks by maintaining a central directory of service names for all the services on the network.

> **See Also:** The Oracle Names Server or Net8 documentation for more information

#### Configuring Net8 with a TNSNAMES.ORA Configuration File

If you are not using an Oracle Names Server, you must add entries to the tnsnames.ora configuration file.

1. Use a text editor to open the tnsnames.ora file in the ORACLE HOME\network\admin directory.

Note: If the tnsnames.ora file does not exist, see the Net8 documentation for information on how to create this file.

2. Add the following entry for each Oracle eMail Server node to which you want to connect:

```
connect_string =
    (DESCRIPTION=
        (ADDRESS=( PROTOCOL= TCP)(HOST= host_server_name)(PORT= 1521))
        (CONNECT_DATA= (SID= sid)))
```

Follow these guidelines when adding entries:

- The tnsnames.ora file must contain an entry for each Oracle eMail Server node to which you want to connect.
- The tnsnames.ora file should be copied to each node that will be part of the network configuration.
- The connect string for each entry must match the service name that you specified when the node was installed. You can also define additional entries that use other connect strings as aliases.

The following is an example:

```
host1,io1,host1.us.oracle.com,io1.us.oracle.com =
    (DESCRIPTION =
        (ADDRESS = (PROTOCOL= TCP) (HOST=
              iosun-test1.us.oracle.com)(PORT=1521))
        (CONNECT_DATA = (SID= io1)))
```

**3.** Verify the modified tnsnames.ora file:

C:\>tnsping host

**4.** Start the network listener:

```
C:\>lsnrctl start
```

5. The listener.ora and thsnames.ora files are automatically configured during the installation of an Oracle database. They are located in the ORACLE HOME\network\admin directory.

Verify that the listener.ora file contains entries for an IPC key EXTPROC and a SID PLSExtProc.

(KEY=EXTPROC) (SID\_NAME=PLSExtProc)

Verify that the tnsnames.ora file contains an entry for EXTPROC CONNECTION DATA that uses the IPC key EXTPROC and SID PLSExtProc.

**See Also:** *Net8 Administrator's Guide* for more information regarding the listener.ora and thshames.ora files

#### Task 6: Configuring the INIT.ORA, LISTENER.ORA, and TNSNAMES.ORA Files

1. In the init.ora file, add or enable the following entry:

utl file dir = ORACLE HOME\office\log

**Note:** Set this file so that ORACLE\_HOME is replaced by the absolute path to your ORACLE\_HOME. For example: utl\_file\_dir = D:\oracle\ora81\office\log

For the following two steps, use the Net8 Assistant. To start the Net8 Assistant choose Start > Programs > Oracle - HOME\_NAME > Network Administration > Net8 Assistant.

- 2. Verify that the listener.ora file contains entries for an IPC key EXTPROC and a SID plsextproc.
- 3. Verify that the tnsnames.ora file contains an entry for EXTPROC\_CONNECTION\_DATA that uses the IPC key EXTPROC and SID plsextproc.

# Task 7: Including oratnsapi8.dll in the System Path

The library oratnsapi8.dll is a network dll and needs to be included in the system path. Usually, the file is located in the ORACLE\_HOME\network\tnsapi\bin directory.

Use the following steps to amend the system path:

- 1. Choose Start > Settings > Control Panel. Double click on System. The System Properties window displays.
- **2.** Select the Environment tab. From the System Variables pane, select Path.

3. In the Value field at the bottom of the window add the absolute path to the oratnsapi8.dll library to the end of the string. Use a semicolon to separate the last entry from this additional entry. For example:

;D:\oracle\ora81\network\tnsapi\bin directory.

## Task 8: Configuring Oracle Internet File System and Oracle eMail Server to Run on the Same Machine (Optional)

The Oracle Internet File System e-mail component and Oracle eMail Server both use Sendmail for mail transfer. Windows NT and Windows 2000 installations require purchasing Sendmail version 3.0 or 3.0.2, respectively, for both e-mail components.

To run Oracle Internet File System and eMail Server on the same machine, configure them using the following procedure:

1. Use the Oracle Internet File System postinstallation scripts to set up the Sendmail executable and generate the sendmail.cf file.

> **Note:** If you are using a standalone version of Oracle Internet File System, consult the Oracle Internet File System Installation Guide for further information. If you are using Oracle9i Application Server, then Oracle Internet File System is included. Refer to the Oracle9i Application Server installation documentation for further information.

2. Incorporate the changes required for eMail Server into the sendmail.cf file, using the procedure outlined in Chapter 3, "Postinstallation".

If you incorporate the eMail Server configuration changes into the sendmail.cf file and then run the scripts, the scripts will generate a new sendmail.cf file.

If the IMAP servers provided by Oracle Internet File System and eMail Server are to be run on the same machine, configure them to listen on different ports. Use the Oracle Internet File System configuration utility and the eMail Server Administration tool to specify the port for the component.

For example, configure eMail Server to listen on the default port 143 and configure the Oracle Internet File System IMAP server to listen on some other port, as required by the installation.

The clients accessing the IMAP servers must have accounts mapped to these specific ports. To access both servers at the same time, use clients that allow you to set the IMAP servers on two different eMail Server installations.

# **Installing and Configuring eMail Server**

This chapter describes Oracle eMail Server installation and configuration procedures for new installations and upgrades.

The chapter contains these topics:

- Installing Oracle eMail Server
- Configuring Oracle eMail Server

# **Installing Oracle eMail Server**

This section contains the following tasks:

- Task 1: Running Oracle Universal Installer
- **Task 2: Entering File Locations**
- **Task 3: Selecting Available Products**
- Task 4: Verifying Installation Settings
- Task 5: Completing the Installation

### **Task 1: Running Oracle Universal Installer**

- 1. Log on to the Microsoft Windows NT server or workstation.
- Insert the Oracle eMail Server for Windows NT CD-ROM into the CD-ROM drive.
- **3.** Choose Start > Run. The Open dialog box displays.
- 4. Select the CD-ROM drive and double click on Setup.exe. The Oracle Universal Installer (OUI) launches and the Welcome screen appears.



Figure 2-1 OUI Welcome Screen

This table provides information about Oracle Universal Installer buttons.

Screen Button	Function
Deinstall Products	Opens the Deinstall screen
About Oracle Universal Installer	Provides the version number
Exit	Exits the install session
Help	Accesses the online help
Installed Products	Lists the Oracle products you have installed
Previous	Opens the previous screen
Next	Opens the next screen

## **Task 2: Entering File Locations**

1. At the Welcome screen, click Next. The File Locations screen displays.



Figure 2-2 OUI File Locations Screen

Enter the locations of the source and destination. The source is where the Oracle eMail Server stage is located (for example, the CD-ROM drive). The destination is the name assigned to the location of the database and its full path. This is where Oracle eMail Server is to be installed.

- Enter the full path or use the Browse button to select the source and destination directories for the installation.
- Click Next. The Available Products screen appears.

# **Task 3: Selecting Available Products**





The Available Products screen lists the Oracle eMail Server products to install, as described in the following table:

Available Product	Components	Appropriate Uses
Oracle eMail Server 5.2	Installs the eMail Server, IMAP4 & POP3 servers, and the eMail Server Administration Tool	Select this option if you have never installed eMail Server
IMAP4 & POP3 Protocol Server 5.2	Installs IMAP4 & POP3 protocol servers only	Select this option if you only want to install the IMAP4 & POP3 protocol servers
eMail Server 5.2	Installs the eMail Server only	Select this option if you only want to install the eMail Server
eMail Server Administration 5.2	Installs the eMail Server Administration Tool only	Select this option if you only want to install the eMail Server Administration Tool

Select the product to install and click Next. The Summary screen displays.

### Task 4: Verifying Installation Settings

Figure 2-4 OUI Summary Screen



The Summary screen verifies the installation settings. The settings include the specified source and destination locations; the selected installation type; the product language; the space requirement for installation and the space currently available; and the Oracle eMail Server products that will be installed.

To change the source or destination location, or installation type, click Previous to return to the appropriate screen.

Click Install to start the installation. The Install screen appears.

The Install screen shows the installation progress. To stop the installation, click Cancel.

# Task 5: Completing the Installation

The products are installed in the specified location. When installation is complete, the End of Installation screen appears.



Figure 2-5 OUI End of Installation Screen

Once installation is complete, click the Configuration Tools button and select Setup Wizard to begin configuration. Otherwise, click Exit.

# **Configuring Oracle eMail Server**

This section contains the following tasks:

- Task 1: Starting the Configuration Assistant
- Task 2: Selecting the Configuration Type
- Task 3: Creating a New Node
- Task 4: Upgrading an Existing eMail Server Node
- Task 5: Adding Components to an Existing Node
- Task 6: Configuring a Protocol Server
- Task 7: Running Utilities
- Task 8: Enabling the IMAP4 and POP3 Servers
- Task 9: Enabling the SMTP Gateway
- Task 10: Enabling LDAP
- Task 11: Completing the Configuration

### Task 1: Starting the Configuration Assistant

The Configuration Assistant is designed to aid in configuring Oracle eMail Server and can be launched automatically or manually.

#### **Starting the Configuration Assistant Automatically**

1. From the End of Installation screen, select the Configuration Tools button to display the Optional Configuration Tools screen.

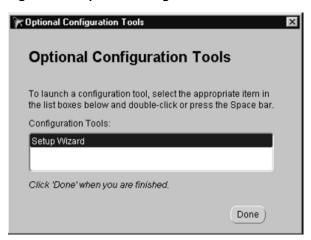


Figure 2–6 Optional Configuration Tools Screen

Double click Setup Wizard in the Configuration Tools field to display the Configuration Assistant screen.

#### **Starting the Configuration Assistant Manually**

Choose Start > Programs > Oracle-HOME\_NAME > Oracle eMail Server > Oracle eMail Server Setup Wizard. The setup Wizard launches and the Welcome screen appears.



Figure 2–7 Configuration Assistant Welcome Screen

#### **Configuration Assistant Screen Buttons**

This table provides information about the Configuration Assistant screen buttons.

Screen Button	Function
Cancel	Exits the Configuration Assistant
Back	Returns to the previous screen
Next	Proceeds to the next screen

Click Next. The Configuration Type Menu screen displays.

# Task 2: Selecting the Configuration Type

The Configuration Type screen allows the user to select the appropriate configuration for installation. The table below Figure 2–8 summarizes the different configuration types.



Figure 2-8 Configuration Type Screen

Configuration Type	Function	Appropriate Uses
Create a new node	Creates a new eMail Server node	Select this configuration type to create a new eMail Server node
Upgrade or Add components	Upgrades or adds components to an existing eMail Server system	Select this configuration type if you have an existing eMail Server node
Configure a protocol server	Creates a POP3/IMAP4 server layer	Select this configuration type to create a POP3/IMAP4 server layer
Run utilities	Creates or stores an SSL certificate and migrates directory data	Select this configuration type to create or store an SSL certificate, or to migrate directory data

Select the appropriate configuration type and click Next.

- If you selected "Create a new node," go to "Task 3: Creating a New Node" on page 2-12.
- If you selected "Upgrade or Add components," and you are upgrading, go to "Task 4: Upgrading an Existing eMail Server Node" on page 2-26.
- If you selected "Upgrade or Add components," and you are adding one or more components, go to "Task 5: Adding Components to an Existing Node" on page 2-29.

- If you selected "Configure a protocol server," go to "Task 6: Configuring a Protocol Server" on page 2-30.
- If you selected "Run utilities," go to "Task 7: Running Utilities" on page 2-30.

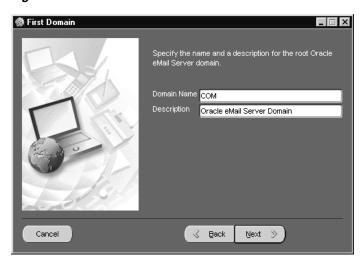
### Task 3: Creating a New Node

Instructions in this procedure describe:

- Configuring a Default Node
- Configuring a Custom Node
- Installing Additional Oracle eMail Server Nodes
- Creating a New Domain Configuration Node
- Adding a Member Node

If you selected Create a new node from the Configuration Type screen the First Domain screen displays.

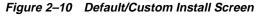
Figure 2-9 First Domain Screen



To install a new eMail Server, enter a domain name such as com, gov, org, or edu, and a domain description, and click Next. The Default/Custom Install screen displays.

**Note:** The domain name and description shown in Figure 2–9 of COM and Oracle eMail Server Domain, respectively, are default values.

Note: Write down the domain name you choose, because you will need it later.





#### **Configuring a Default Node**

To configure a Default Node, select Default in the Default/Custom Install screen, and click Next. Proceed to "Task 11: Completing the Configuration" on page 2-44.

> **Note:** The default configuration does not enable synchronization processes that load an LDAP server. To enable LDAP, see "Task 5: Adding Components to an Existing Node" on page 2-29 or refer to Oracle eMail Server Administrator's Guide.

#### **Configuring a Custom Node**

To configure a custom node, select Custom in the Default/Custom Install screen and click Next. The First Node screen displays.

Figure 2-11 First Node Screen



- 1. If this is the first eMail Server node you are installing, select Yes and click Next. The Node Information screen displays.
- 2. If this is not the first eMail Server node you are installing, select No and click Next.

See "Installing Additional Oracle eMail Server Nodes" on page 2-20 to continue.



Figure 2-12 Node Information Screen

At the Node Information screen, the default value of the Node Name is ESNODE and the default value of Description is Oracle eMail Server Node. To change the default values, enter a Node Name and a Description, and click Next. The First Community screen displays.

**Note:** If you change the node name and description, be sure to note the node name in order to enter it later. You can change the values of these two fields, and the values of subsequent fields, at any time.



Figure 2-13 First Community Screen

At the First Community screen, enter the community name and the description and click Next. The TNS Connection screen displays.

Note: If you choose not to use the default Community Name and Description, note your choices because you will need that information later.



Figure 2-14 TNS Connection Screen

At the TNS Connection screen, specify the service name or connect string in the Service Name field. This connect string will be used by other eMail Server nodes in the same community to access this node. Click Next. The Time Zone screen displays.





6. At the Time Zone screen, select the local time zone from the dropdown list and click Next. The Admin User screen displays.

Figure 2-16 Admin User Screen



**Note:** Note the password you choose for the following steps.

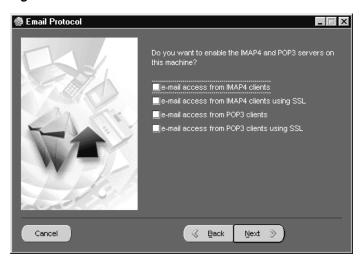
7. At the Admin User screen choose and confirm the administrator password and click Next. The User Account screen displays.



Figure 2-17 User Account Screen

At the User Account screen, choose and confirm an Oracle eMail Server database password and click Next. The Email Protocol screen displays.

Figure 2-18 Email Protocol Screen



Proceed to "Task 8: Enabling the IMAP4 and POP3 Servers" on page 2-37.

### **Installing Additional Oracle eMail Server Nodes**

Note: Additional eMail Server nodes must be installed on a different database, with a different ORACLE\_HOME, from the initial installation.

1. At the First Node screen (see Figure 2-11), if this is not the first eMail Server node you are installing, select No and click Next. The Sponsor Node screen displays.

Figure 2-19 Sponsor Node



Enter the service name and OO password and click Next. The Node Definition screen displays.



Figure 2-20 Node Definition Screen

At the Node Definition screen, select the mode of definition for creating the new Node and click Next. The New Domain screen displays.

Figure 2-21 New Domain Screen



At the New Domain Screen, choose one of the following:

Create a Domain Configuration Node in the new Oracle eMail Server domain.

See: "Creating a New Domain Configuration Node" on page 2-22

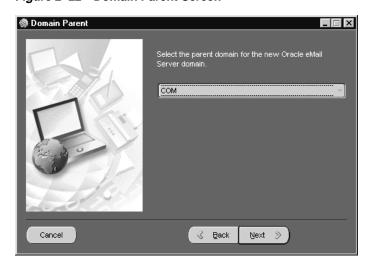
Add a new member node to an existing Oracle eMail Server domain.

See: "Adding a Member Node" on page 2-24

#### **Creating a New Domain Configuration Node**

To create a domain configuration node (DCN), select Create DCN from the New Domain screen (see Figure 2-21) and click Next. The Domain Parent screen displays.

Figure 2-22 Domain Parent Screen



1. Click the dropdown list, select the parent domain, and click Next. The Domain Information screen displays.



Figure 2-23 Domain Information Screen

At the Domain Information screen, enter the domain name and description and click Next. The New Node Information screen displays.





3. At the New Node Information screen, enter the node name and description and click Next. The Select Community screen displays.



Figure 2-25 Select Community Screen

- At the Select Community screen, select the Oracle eMail Server community of the node from the dropdown list and click Next. The TNS Connection screen displays (see Figure 2-14).
- In the Service Name field of the TNS Connection screen, enter the service name and click Next. The Time Zone screen displays (see Figure 2–15).
- At the Time Zone screen, select the local time zone from the dropdown list and click Next. The Admin User screen displays (see Figure 2–16).
- At the Admin User screen choose and confirm an administrator password and click Next. The User Account screen displays. (see Figure 2–17).
- At the User Account screen, choose and confirm an Oracle eMail Server database password and click Next. The Email Protocol screen displays.
- Proceed to "Task 8: Enabling the IMAP4 and POP3 Servers" on page 2-37.

#### Adding a Member Node

To add a member node to an existing Oracle eMail Server domain, select Add member node form the New Domain screen (see Figure 2-21) and click Next. The Select Domain screen displays.



Figure 2-26 Select Domain Screen

- At the Select Domain screen, click on the dropdown list, select the parent domain, and click Next. The New Node Information screen displays (see Figure 2-24).
- At the New Node Information screen, enter the domain name and the domain description and click Next. The Select Community screen displays (see Figure 2-25).
- At the Select Community screen, select the Oracle eMail Server community of the node from the dropdown list and click Next. The TNS Connection screen displays (see Figure 2-14).
- In the Service Name field of the TNS Connection screen, enter the service name and click Next. The Time Zone screen displays (see Figure 2–15).
- At the Time Zone screen, select the local time zone from the dropdown list and click Next. The Admin User screen displays (see Figure 2–16).
- At the Admin User screen choose and confirm an administrator password and click Next. The User Account screen displays. (see Figure 2–17).
- At the User Account screen, choose and confirm an Oracle eMail Server database password and click Next. The Email Protocol screen displays.
- Proceed to "Task 8: Enabling the IMAP4 and POP3 Servers" on page 2-37.

## Task 4: Upgrading an Existing eMail Server Node

If you select Upgrad or Add Component(s) option in the Configuration Type screen (see Figure 2–8), the Upgrade screen displays.

Figure 2-27 Upgrade Screen



If the current eMail Server installation does not use default tablespace names for eMail Server objects, create default tablespaces before starting the upgrade.

To create default tablespaces, use SQL\*Plus as the SYS user and run the deftblspc.sql script located in the ORACLE\_HOME\office\admin\rsql directory:

C:\>cd ORACLE\_HOME\office\admin\rsql C:\>sqlplus SYS/SYS\_password SQL> @deftblspc.sql

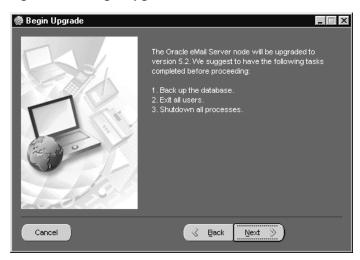
2. From the Upgrade screen, select Upgrade and click Next. The Existing Node screen displays.



Figure 2-28 Existing Node Screen

At the Existing Node screen enter the service name and OO password and click Next. The Begin Upgrade screen displays.

Figure 2-29 Begin Upgrade Screen



Complete the steps listed and click Next. The DCN Version screen displays.

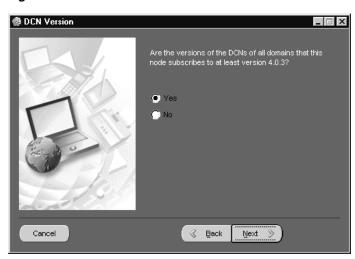


Figure 2-30 DCN Version Screen

- If the DCN version is 4.03 or greater, select Yes and click Next. Otherwise, select No and click Next (in either case, the following steps and screen displays are the same). The CTXSYS User screen displays.
  - To determine the DCN version, enter:

C:\>oomgr

The computer returns the following:

Oracle eMail Server Manager: Release #

The Release # is the DCN version.



Figure 2-31 CTXSYS User Screen

**Note:** If you installed Oracle *inter*Media prior to installing eMail Server, enter in your CTXSYS password as instructed in Step 6. If you did not install Oracle interMedia prior to eMail Server, the Configuration Assistant skips the CTXSYS User screen.

- **6.** At the CTXSYS User screen, enter in the CTXSYS password (the default password is CTXSYS) and click Next. The Begin Setup screen displays.
- 7. At the Begin Setup screen, click Next to begin configuration, or click Cancel to exit the Configuration Assistant.
- After the setup wizard is finished, copy the configuration files from ORACLE\_HOME\office\admin to ORACLE\_HOME \office\config\SID.

## Task 5: Adding Components to an Existing Node

If you selected Upgrade or Add Component(s) from the Configuration Type screen (see Figure 2-8), the Upgrade screen (see Figure 2-27) displays.

- 1. Select Add Component(s) and click Next. The Existing Node screen displays (see Figure 2-28).
- 2. At the Existing Node screen, enter the service name and OO password and click Next. The Email Protocol screen (see Figure 2–18) displays.

3. Proceed to "Task 8: Enabling the IMAP4 and POP3 Servers" on page 2-37 to complete this procedure.

## Task 6: Configuring a Protocol Server

This section describes the procedure for configuring a protocol server.

If you selected Configure a protocol server from the Configuration Type screen (see Figure 2–8), the Existing Node screen displays (see Figure 2–28).

1. At the Existing Node screen, enter the service name and OO password and click Next. The Guardian screen displays.



Figure 2-32 Guardian Screen

- From the dropdown menu, select a guardian process ID that is not being used by the eMail Server node, and click Next. The Email Protocol screen appears (see Figure 2-18).
- 3. Proceed to "Task 8: Enabling the IMAP4 and POP3 Servers" on page 2-37 to complete this procedure.

# Task 7: Running Utilities

If you selected Run utilities from the Configuration Type screen (see Figure 2-8), the Utility screen displays.



Figure 2-33 Utility Screen

This section describes the procedures to perform the following functions:

- Generating an SSL Certificate
- Storing an SSL Certificate
- **Migrating Directory Data**

### **Generating an SSL Certificate**

At the Utility screen, select Generate or Store SSL certificate and click Next. The Generate SSL screen displays.



Figure 2-34 Generate SSL Screen

Select Generate certificate and click Next. The Certify SSL screen displays.

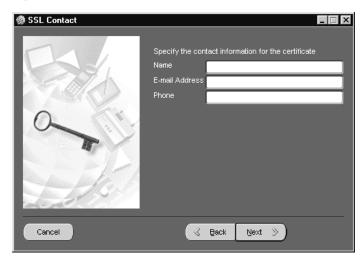




 $Enter\ the\ Common\ Name,\ Organization,\ Organization\ Unit,\ City/Location,$ State/Province, and Country. See the table below for more information. Click Next to display the SSL Contact screen.

Parameter	Description	
Common Name	Name of the person requesting the certificate	
Organization	Name of your company	
Organization Unit	Name of your department or division	
City/Location	The city or location where your company is located	
State/Province	The state or province your company is located	
Country	The country your company is located	

Figure 2–36 SSL Contact Screen



4. Enter the contact information for the certificate and click Next. The SSL Password screen displays.



Figure 2-37 SSL Password Screen

- Choose and confirm an SSL password and click Next. The SSL Processing screen displays.
- At the SSL Processing screen, click Next to complete the process and generate a certificate.

#### Storing an SSL Certificate

Use the following procedure to store an SSL certificate.

- At the Utility screen, select Generate or Store SSL certificate and click Next. The Generate SSL screen (see Figure 2–34).
- 2. At the Generate SSL screen, select Store certificate and click Next. The SSL Admin screen displays.

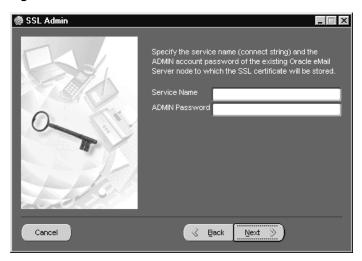
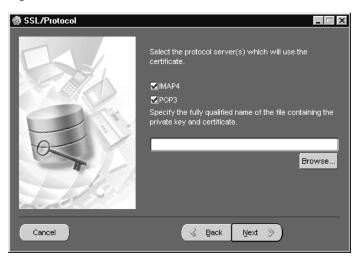


Figure 2-38 SSL Admin Screen

At the SSL Admin screen, enter the service name and administrator password and click Next. The SSL/Protocol screen displays.





At the SSL/Protocol screen, select the protocol server or servers that will be using the SSL certificate. You can select one or both protocol servers. Enter the

- file location of the private key and certificate. Click Browse to choose a location other than the default.
- Click Next. The Password Specification screen displays.
- **6.** At the Password Specification screen, enter the password you want to use to encrypt and decrypt the private key.
- 7. In the Confirm field of the Password Specification screen, enter the password again to confirm the password and click Next. The Generate Certificate Request screen displays.
- Click Next to generate the certificate, or click Cancel to exit the Configuration Assistant.

#### **Migrating Directory Data**

Use the following procedure to migrate directory data.

- At the Utility screen (see Figure 2–33), select Migrate Directory Data and click Next. The Existing Node screen displays (see Figure 2–28).
- 2. At the Existing Node screen, enter the service name and OO Password and click Next. The Migration screen displays.



Figure 2-40 Migration Screen

- 3. Select the domain from the dropdown list, enter the admin password, and click Next. The LDAP Migration screen displays.
- 4. Click Next to start directory data migration, or click Cancel to exit the Configuration Assistant.

## Task 8: Enabling the IMAP4 and POP3 Servers

Use the following procedure to enable IMAP and/or POP3 servers.

1. At the eMail Protocol screen (see Figure 2–18), select the IMAP4 and POP3 servers to enable and click Next (you can select more than one option). The SMTP Gateway screen displays.

Figure 2-41 SMTP Gateway Screen



2. Select Yes and click Next. Proceed to "Task 9: Enabling the SMTP Gateway" on page 2-38.

**Note:** If you do not want to enable SMTP, select No and click Next. Proceed to "Task 10: Enabling LDAP" on page 2-40 to enable LDAP or, if you choose not to enable LDAP, proceed to "Task 11: Completing the Configuration" on page 2-44.

## Task 9: Enabling the SMTP Gateway

Use the following procedure to enable SMTP.

At the SMTP Gateway screen, select Yes and click Next. The Gateway screen displays.

Figure 2-42 Gateway Screen



At the Gateway screen, select Define and configure a new gateway or Configure a previously defined gateway, and click Next. The SMTP Information screen displays.

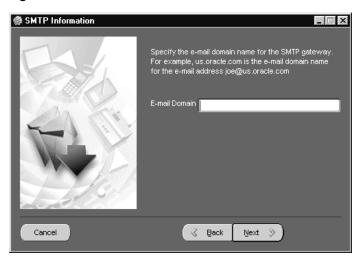


Figure 2-43 SMTP Information Screen

At the SMTP Information screen, enter the e-mail domain for the SMTP gateway and click Next. The LDAP screen displays.

Figure 2-44 LDAP Screen



**4.** If you do not want to enable LDAP, select No and click Next. Go to "Task 11: Completing the Configuration" on page 2-44.

# Task 10: Enabling LDAP

To enable LDAP, at the LDAP screen, select Yes and click Next. The LDAP Server screen displays.

Figure 2-45 LDAP Server Screen



At the LDAP Server screen, select the directory server to synchronize with the eMail Server directory and click Next. The Synchronization screen displays.

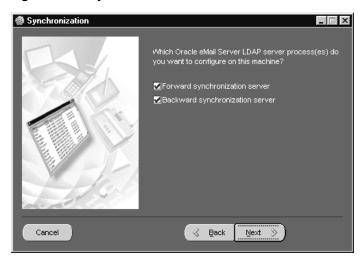


Figure 2-46 Synchronization Screen

At the Synchronization screen, select the server process or processes to configure. You can select either or both. See the table below for more information.

Synchronization	Description	Appropriate Use
Forward	Oracle eMail Server to LDAP Directory	The data is administered on the Oracle eMail Server server and you want it synchronized with the LDAP Directory server
Backward	LDAP Directory to Oracle eMail Server	The data is administered on the LDAP Directory server and you want it synchronized with the Oracle eMail Server

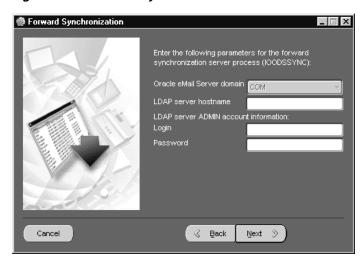
- 4. Make a selection and click Next.
  - If you select Forward synchronization, see "Forward Synchronization Parameters" on page 2-42.
  - If you select Backward synchronization, see "Backward Synchronization Parameters" on page 2-42.

If you selected both Forward and Backward synchronizations, see "Forward Synchronization Parameters" on page 2-42 and "Backward Synchronization Parameters" on page 2-42.

### **Forward Synchronization Parameters**

1. From the Synchronization screen, select Forward synchronization server (or both Forward and Backward synchronization server) and click Next. The Forward Synchronization screen displays.

Figure 2-47 Forward Synchronization Screen



- Enter the LDAP server hostname and the LDAP server ADMIN account login and password, and click Next.
  - If you selected only the Forward Synchronization process, see "Task 11: Completing the Configuration" on page 2-44.
  - If you selected both Forward and Backward Synchronization processes, continue on to "Backward Synchronization Parameters" on page 2-42.

#### **Backward Synchronization Parameters**

From the Synchronization screen, select Backward synchronization server (or both Forward and Backward synchronization server) and click Next. The Backward Synchronization screen displays.

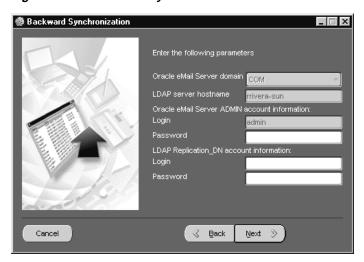


Figure 2-48 Backward Synchronization Screen

Enter the eMail Server Admin account login and password and the LDAP Replication\_DN account login and password, and click Next. The Database screen displays.

Figure 2-49 Database Screen



Click Next. The Database Connection screen appears.

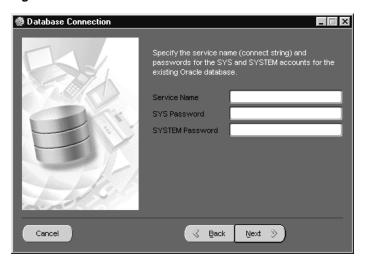


Figure 2-50 Database Connection Screen

- At the Database Connection screen, enter the service name, SYS password, and SYSTEM password, and click Next. The CTXSYS User screen displays (see Figure 2-31).
- At the CTXSYS User screen, enter the CTXSYS password (the default CTXSYS Password is CTXSYS) and click Next. The Begin Setup screen displays. Click Next to complete the configuration.

**Note:** Your configuration of eMail Server is now complete. Proceed to Chapter 3, "Postinstallation".

## Task 11: Completing the Configuration

Use the following procedure to complete configuration of the Oracle eMail Server system.

- At the Database screen (see Figure 2–49), click Next. The Database Connection screen displays (see Figure 2-50).
- At the Database Connection screen, enter the service name, SYS password, and SYSTEM password, and click Next. The CTXSYS User screen (see Figure 2–31) displays.
- At the CTXSYS User screen, type in the CTXSYS password (the default password is CTXSYS) and click Next. The Begin Setup screen displays.

**4.** Click Next to start the configuration, or click Cancel to exit the Configuration Assistant.

# **Postinstallation**

This chapter describes tasks to be done after Oracle eMail Server has been installed or upgraded.

The chapter contains this topic:

**Postinstallation Tasks** 

#### Postinstallation Tasks

Perform the tasks described in this section after completing an Oracle eMail Server installation.

- Task 1: Verifying the Network Services Setup
- Task 2: Starting the Oracle eMail Server Service
- Task 3: Registering the SMTP Gateway with Sendmail
- Task 4: Setting up ESPrefs
- Task 5: Setting Up the ESPrefs Server
- Task 6: Migrating Directory Data to an LDAP Directory
- Task 7: Configuring eMail Server Thin Client
- **Task 8: Configuring Protocol Servers**
- Task 9: Loading Shipped Statistics File for the Cost Based Optimization (Optional)
- Task 10: Configure Oracle Enterprise Manager E-mail Capacity Monitoring Pack (Optional)

#### Task 1: Verifying the Network Services Setup

The Oracle Universal Installer (OUI) creates a new tnsnames.ora file in the ORACLE HOME\network\admin directory if none exists. If it exists, the OUI appends the contents of the new tnsnames.ora to the existing one. To use information from the new listener.ora, edit the existing one and manually add information from the new one.

A copy of the new tnsnames.ora and listener.ora is created in the ORACLE HOME\office\network directory. Ensure that the files contain the same value for the domain as the sqlnet.ora file.

## Task 2: Starting the Oracle eMail Server Service

To start eMail Server automatically, perform the following procedure:

- Start Oracle eMail Server by starting the OracleEmailServerSID service. Choose Start > Settings > Control Panel > Services.
- 2. Locate and select the entry for OracleEmailServerSID in the services list and select Start.

**See Also:** Oracle eMail Server Administrator's Guide for instructions on manually starting Oracle eMail Server processes

To manually start eMail Server, choose Start > Programs > Command Prompt and enter the following:

```
C:\>svrmgrl
SVRMGR> connect internal
SVRMGR> startup
SVRMGR> exit
C:\>ofcguard start
C:\>oomgr admin/password/connect_string/qualified_domain_name
IOFCMGR> startup all;
   Started successfully
IOFCMGR> exit;
```

#### Task 3: Registering the SMTP Gateway with Sendmail

After creating the gateway configuration file, register the gateway with Sendmail, the standard mail transfer agent that handles all messages traveling to and from the Internet. To register the gateway with Sendmail, specify gateway information in the sendmail.cf file so that Sendmail can forward messages coming in from the Internet.

Note: You can use any version of Sendmail 8.9 or later, supplied with your operating system. For download instructions and documentation on Sendmail, go to http://www.sendmail.org (for commercial versions got to http://www.sendmail.com).

**Note:** The Sendmail file can require configuration steps in addition to those provided here, depending on how many gateways you are using and the complexity of your system. See the Sendmail documentation for more information.

Note: Oracle Support Services can only provide information for the basic Sendmail configuration required to receive messages. For more complex configurations, contact the distributor of your Sendmail program.

Perform the following tasks to register the SMTP gateway with Sendmail.

1. Using a text editor, modify the sendmail.cf file, usually located in the Sendmail installation directory, by adding the following information about the SMTP/MIME mailer to the end of the file:

```
Mofcmail, P=ORACLE_HOME\\bin\\ofcuto.exe, F=xrlSsDCFMPpmnA, S=10, R=20,
   A=ofcuto - -u SMTP_GATEWAY_NAME -t 10 - \"$g\"\"$a\"$b\"\"$f\"
   \"$x\" ( $u )
Mlocal, P=ORACLE_HOME\\bin\\ofcuto.exe, F=xrlSsDCFMPpmnA, S=10, R=20,
   A=ofcuto - -u SMTP_GATEWAY_NAME -t 10 - \"$g\"\"$a\"$b\"\"$f\"
   \"$x\" ( $u )
```

**Note:** Mofcmail tells Sendmail to run the eMail Server mailer. The mailer delivers the message to the Gateway process, which then inserts the message into the eMail Server database. You can specify a different mailer name. See the Sendmail documentation for more information about mailers.

Replace	With	
ORACLE_HOME	Enter the full path for the ORACLE_HOME directory where eMail Server is installed. Each folder must separated by two backslashes ("\\"). For example: C:\\oracle\\ora81.	
config_file	Enter the name of the gateway configuration file. The default filename is smtp.cfg.	
[tab]	Press the Tab key where indicated instead of the space bar.	

2. In the machine-dependent section of the sendmail.cf file, add one of the following entries to the second-to-last entry of ruleset 0 before the local names line:

```
## Oracle eMail Server: Hook to Oracle eMail Server mailer
R$+.ofcmail [tab][tab] $#ofcmail $:$1 [tab][tab] Oracle eMail Server passoff
```

#### and

```
## Oracle eMail Server: Hook to Oracle eMail Server mailer
R$+.OFCMAIL [tab][tab] $#ofcmail $:$1 [tab][tab] Oracle eMail Server passoff
```

3. In the list of trusted users in the sendmail.cf file, add the user name of the owner of the eMail Server ORACLE\_HOME directory.

> Note: Trusted users such as root, daemon, and uucp generally begin with a "T".

T root daemon uucp Oracle eMail Server\_owner

- 4. After modifying the sendmail.cf file and the rc.local file, restart Sendmail.
- Set up aliases to redirect incoming mail to the gateway.
- Verify that the sendmail.exe file is in the system environment variable called PATH.

# Task 4: Setting up ESPrefs

**Note:** ESPrefs requires Oracle9*i* Application Server and must be installed on the same ORACLE\_HOME where Oracle9i Application Server is installed.

Perform the following steps to set up ESPrefs.

- Copy the espref directory located in <code>ORACLE\_HOME\office\admin</code> to the host where the web server is running. The espref directory contains the following directories:
  - beans
  - config
  - jsp
  - media

**2.** Expand the espref.jar file:

```
C:\>cd ORACLE_HOME\office\admin\espref\beans
C:\>jar xvf espref.jar
```

3. Edit the configuration files located in the espref\config directory. The configuration files are text files, where each entry is separated by a space.

The configuration files are:

- esConnectStrings.cfg
- esDomains.cfq
- esPrefs.cfg

#### esConnectStrings.cfg

The esConnectStrings.cfg file contains the following connect information for all the nodes in the system:

- connectstring = database connect string
- host = host name of the database
- SID = SID of the database
- port = port number on which the sqlnet listener is running.

All entries in the file must be formatted in the following way:

```
connectstring host SID port
```

#### Example

```
imapmail mail.acme.com mail 1521
```

#### esDomains.cfg

The esDomains.cfg file lists the following domain information:

- domain = domain name
- host = name of the DCN node
- SID = SID of the database
- port = port number on which the sqlnet listener is running.

All entries in the file must be formatted in the following way:

```
domain host SID port
```

#### Example

```
acme.com mail.acme.com mail 1521
```

**Note:** Only one entry per domain is required.

#### esPrefs.cfg

The esPrefs.cfg file contains an array of key and value pairs the administrator sets to enable subscribers to set the auto-reply and auto-forward templates. This must be set to either Yes or No, depending on the administrator's preference.

Format the values in the following way:

```
AutoReplySet Yes/No
AutoForwardSet Yes/No
```

## Task 5: Setting Up the ESPrefs Server

To configure the ESPrefs server, set the path of the configuration directory.

1. Set up the Oracle9*i* Application Server configuration file.

Use a text editor to open the jserv.properties file located in the ORACLE\_HOME\Apache\Jserv\conf directory and add the following two lines to the end of the file:

```
wrapper.bin.parameters=-DFILE_LOCATION=ORACLE_HOME\Apache\Apache\htdocs
\espref\config\
```

```
wrapper.classpath=ORACLE_HOME\Apache\Apache\htdocs\espref
```

2. Restart Oracle9*i* Application Server using either the command prompt or from the Start menu.

At the command prompt, enter the following commands:

```
C:\>cd ORACLE_HOME\Apache\bin
C:\>.\apachectl stop
C:\>.\apachectl start
```

From the Start menu, choose Start > Programs > HOME NAME - iSuites > Oracle HTTP Server > Start HTTP Server powered by Apache.

Test to ensure that ESPrefs operates properly. Open a browser and enter the following URL:

http://hostname:port/espref/jsp/esLogin.jsp

You should see the logon page.

#### Task 6: Migrating Directory Data to an LDAP Directory

Export private aliases and distribution lists from the eMail Server directory to an LDAP directory. To replicate data from the eMail Server directory to an LDAP directory, you must run a migration script to create data files that you can import into the LDAP directory.

> **Note:** The private aliases and distribution lists that were stored in the eMail Server directory can be migrated to a standard-based LDIF representation of this data. However, to store these in the directory, use the Thin Client.

> **Note:** eMail Server Version 5.2 has a PL/SQL package that migrates the data to an LDIF file. Ensure that the database parameter UTL\_FILE\_DIR has been specified in the initSID.ora file. The script that starts the migration is MigrateIOData.sh. Use MKS Toolkit to invoke the script.

> Note: You must run the migration script to use the client's address book search feature.

Use the following procedure to replicate the private aliases, distribution lists, and public data from the eMail Server directory to an LDAP directory:

- Manually invoke the MigrateIOData.sh scripts that generate the following two data files in the ORACLE\_HOME\bin directory:
  - replog.log contains all data except private aliases and distribution lists
  - private\_aliases\_and\_dls.log contains only private aliases and distribution lists

2. If you are using Oracle Internet Directory for the LDAP directory, configure the initial context and add the initial directory tree before importing the data.

**See Also:** Oracle Internet Directory Administrator's Guide. "Managing Entries" and "Managing Schema" for more information

3. Start the LDAP server.

**See Also:** Oracle Internet Directory Administrator's Guide, "Preliminary Tasks" for more information

Insert the eMail Server database schema (not the data) into the Oracle Internet Directory database. Using the command prompt, enter the following:

```
C:\>cd ORACLE_HOME\office\admin\rsql
C:\>ldapadd -h hostname -D "cn=orcladmin" -w password -p 389 -f add_ldap_
attr.dat
C:\>ldapadd -h hostname -D "cn=orcladmin" -w password -p 389 -f add_ldap_
obj.dat
```

Replace hostname with the name of the machine on which Oracle Internet Directory is running.

If you are using a third-party LDAP directory, you must define the eMail Server database schema specified in the add\_ldap\_attr.dat and add\_ldap\_ obj.dat files before importing the data into the directory.

**See Also:** The documentation for the third-party LDAP directory for instructions on how to do this

Use a text editor to create two files (initial.ldif and domain.ldif) for the LDAP domain context. This is essential for synchronizing eMail Server database schema with the LDAP server.

```
initial.ldif
dn:
changetype: modify
replace: namingcontexts
namingcontexts: dc=top_level_domain
domain.ldif
dn: dc=top_level_domain
```

```
dc: top level domain
objectclass: domain
objectclass: top
dn: dc=subdomain,dc=top_level_domain
dc: subdomain
objectclass: domain
objectclass: top
```

Repeat the last four lines for every subdomain in the hierarchy.

6. Add the initial.ldif and domain.ldif files to the LDAP server using the following commands:

```
C:\>ldapmodify -h hostname -D "cn=orcladmin" -w password -p 389 -f
initial.ldif
C:\>ldapadd -h hostname -D "cn=orcladmin" -w password -p 389 -f domain.ldif
```

7. Copy the replog.log and private\_aliases\_and\_dls.log files to the \temp directory of the LDAP server.

> **Note:** You can copy the files to a directory other than the \tmp directory; the \temp directory is used in this step and subsequent steps as an example.

Check the eMail Server directory entries in the replog.log file for erroneous data, by running the following command on the LDAP server as the LDAP directory database owner:

```
C:\>ORACLE_HOME\ldap\bin\bulkload.sh -connect service_name -check -generate
c:\temp\replog.log
```

**Note:** ORACLE HOME is located where the LDAP server is installed.

Replace  $service\_name$  with the LDAP directory database service name in the tnsnames.ora file.

If the bulkload check is successful, the files in the <code>ORACLE\_HOME\ldap\log</code> directory show no errors. Bulk load the data on the LDAP server as follows:

```
C:\>bulkload.sh -connect service_name -load -generate
c:\temp\replog.log
```

**Note:** The bulkload.sh script is located in the ORACLE\_HOME\ldap\bin directory on the LDAP server.

Replace service\_name with the LDAP directory database service name in the tnsnames.ora file.

At this point, all directory objects except private aliases and distribution lists are loaded into the directory.

10. To load the private aliases and distribution lists into the directory, begin by running one of the following commands on eMail Server:

> **Note:** You will need a PERL scripting language interpreter to run the following commands.

For Oracle Internet Directory:

C:\>acl.pl replog.log

For a Netscape LDAP directory:

C:\>acl.pl replog.log netscape

**Note:** The acl.pl script only supports Netscape as a third party vendor.

The command creates a file called replog.log.acl. The generated Access Control List, ACL, will be for Oracle Internet Directory or Netscape.

## Task 7: Configuring eMail Server Thin Client

The Thin Client is an application that provides access to e-mail functions, directory, and message searching capability from a single web page. You can customize the Thin Client to support your working style. With the Thin Client, you can compose new messages, organize existing messages and message folders, search for messages, create address book aliases and distribution lists, change your password, check mail quotas, change time zones, create mail rules and filters, and customize the look of the Thin Client.

Note: The Thin Client requires Oracle9i Application Server and must be installed on the ORACLE\_HOME where Oracle9i Application Server is installed.

- 1. Use Windows NT Explorer to move the esclient.zip and escommonjars.zip files from ORACLE HOME\office\admin (where ORACLE HOME is the directory where eMail Server is installed) to ORACLE HOME\Apache\Apache\htdocs (where ORACLE HOME is the directory in which Oracle9*i* Application Server is installed).
- 2. Use a compression utility to expand the esclient.zip file into the ORACLE\_ HOME \Apache \Apache \ntdocs directory. This creates a new directory called esclient into which all the files from the esclient.zip file are extracted.
- 3. Use a compression utility to expand the escommonjars.zip file into the ORACLE\_HOME\Apache\Apache\htdocs\esclient\lib directory.

To set up Oracle9i Application Server to run the Thin Client, perform the following steps:

1. Open ORACLE\_HOME\Apache\Jserv\conf\jserv.properties and use a text editor, such as Notepad, to insert the following lines into the file:

wrapper.bin.parameters=-DES\_PROPERTIES=ORACLE\_HOME\Apache\Apache\htdocs \esclient\es.properties  $wrapper.classpath = \textit{ORACLE\_HOME} \\ A pache \\ A pache \\ htdocs \\ esclient \\ lib \\ j2ee.jar$ wrapper.classpath=ORACLE\_HOME\Apache\Apache\htdocs\esclient\lib\jgl.zip wrapper.classpath=ORACLE\_HOME\Apache\Apache\htdocs\esclient\lib\ldap.jar wrapper.classpath=ORACLE\_HOME\Apache\Apache\htdocs\esclient\lib\es.jar

**2.** Use a text editor to verify or insert the following lines into the zone.properties file, located in the ORACLE\_HOME\Apache\Jserv \servlets directory:

repositories=ORACLE\_HOME\Apache\Jserv\servlets

**3.** Configure Oracle Internet Directory by loading \* . dat files as follows:

C:\>ldapadd -h host -D 'cn=orcladmin' -w password -f \*.dat

**See Also:** *Oracle Internet Directory Administrator's Guide* for more information about loading the preferences schema manually using the Oracle Internet Directory administrator's console. The orclMailApplicationPreferences.readme file contains a list of required attributes.

Load the oracle.ldif file as follows:

C:\>ldapadd -h host -D 'cn=orcladmin' -w password -f oracle.ldif

- 4. Configure the es.properties file located in the ORACLE\_HOME\Apache \Apache\htdocs\esclient directory using a text editor. Instructions on how to configure the file are located within the es.properties file.
- **5.** Test to ensure that the Thin Client works. Restart Oracle9*i* Application Server (see Task 5: Setting Up the ESPrefs Server, Step 2) open a browser, and enter the following url:

http://hostname:port/esclient/templates/login.jsp

Where hostname: port refers to the Oracle9i Application Server hostname and port.

You should see the logon page.

### Task 8: Configuring Protocol Servers

Depending upon how you utilize Oracle eMail Server (such as number of users and number of messages), you may find that the default settings in the scalable protocol server (SPS) files are too low. Monitor the IMAP4 log file,

node name imap01.log, located in the ORACLE HOME\office\log\SID directory while the system is in use, to determine whether or not the protocol servers are adequately configured.

> **See Also:** Oracle eMail Server Administrator's Guide, Chapter 10, for information and instructions regarding configuration of the SPS

## Task 9: Loading Shipped Statistics File for the Cost Based Optimization (Optional)

Perform the following steps to import the statistics file:

**1.** Set the ORACLE HOME by entering the following command:

C:\>set ORACLE HOME=ORACLE HOME

**2.** Enter the path of the statistics file:

C:\>ORACLE\_HOME\office\admin\pckg\apply\_stats.cmd system\_password

### Task 10: Configure Oracle Enterprise Manager E-mail Capacity Monitoring Pack (Optional)

Note: To use the Monitoring Pack, Oracle Enterprise Manager (OEM) and the associated Diagnostic Pack are required. Please contact Oracle Sales for more information.

The Oracle Enterprise Manager (OEM) Capacity Monitoring Pack allows an administrator to monitor e-mail traffic on the server.

**Note:** You must be using a TCP/IP network protocol.

1. Install OEM, including the Diagnostic Pack.

**See Also:** Oracle Enterprise Manager Installation for more information

- 2. Discover a node with Oracle database server and applications installed.
  - Choose Navigator from the OEM menu bar.
  - Open the folder called Nodes and enter the name of the node you want to discover in the text window of the Discover Nodes dialog box. Click OK to continue.

Note: To discover multiple nodes at one time, enter each node you want to discover on a new line with the text window.

A status dialog box will tell you when a node is discovered. Discovered nodes will appear on the Navigator Tree.

3. The Navigator provides access to the Discovery/Refresh Wizard, which simplifies identifying network services and populating the Navigator tree. These services, such as databases and listeners, can be administered with OEM components. If you cannot discover a node (because an Agent is not running on the node), the Discovery/Refresh Wizard allows you to manually enter the information about services on nodes.

**Note:** Access to OEM services, such as jobs and events, will not be available if a node is manually configured.

- To discover new services, select Discover Node from the Console Navigator menu to start the Discovery Wizard.
  - Use the Discover Node function for nodes that have an Intelligent Agent. If you add services to these nodes, you must restart the agent on the nodes before discovering the new services.
- To refresh existing services, select Refresh Node from the Console Navigator menu to start the Refresh Wizard.

**Note:** Databases on a machine where Oracle Management Server is running are discovered automatically.

# **Deinstallation**

Before deinstalling Oracle eMail Server you must deinstall database objects. You must deinstall both software and database objects before you can reinstall Oracle eMail Server.

This chapter contains these topics:

- **Deinstalling Database Objects**
- **Deinstalling Software**

## **Deinstalling Database Objects**

To remove database objects, complete the following steps from the command prompt. Choose Start > Programs > Command Prompt and proceed through the following steps:

1. Use IOFCMGR to shut down the eMail Server processes:

```
C:\>oomgr admin/password
IOFCMGR> shutdown all;
IOFCMGR> exit;
```

**2.** Stop the guardian process:

```
C:\>ofcguard stop
```

3. Shut down and restart the database:

```
C:\>svrmgrl
SVRMGR> connect internal
SVRMGR> shutdown
SVRMGR> startup
SVRMGR> exit
```

**4.** With the database running, use SQL\*Plus as the SYS or SYSTEM user and use the ofcdrp.sql script to drop all eMail Server views, tables, users, and their data:

```
C:\>cd ORACLE HOME\office\admin\pckq
C:\>sqlplus SYS/password
SQL> @ofcdrp.sql;
```

The script displays default values for the user accounts and tablespace names.

**5.** Press Enter after each of the prompts to accept the default value:

```
Please enter the name of the OFC_MAIN tablespace:
Please enter the name of the OFC_MESG tablespace:
Please enter the name of the OFC_INDB tablespace:
Please enter the name of the OFC_INDS tablespace:
```

The results of ofcdrp.sql are logged to

ORACLE\_HOME\office\admin\pckg\ofcdrp.log. This process takes several minutes to complete.

**6.** Change directories to ORACLE\_HOME and shut down the database:

```
C:\>cd ORACLE HOME\bin
```

```
C:\>svrmgrl
SVRMGR> connect internal
SVRMGR> shutdown
Database closed.
Database dismounted.
ORACLE instance shut down.
SVRMGR> exit
```

Remove the files used for eMail Server tablespaces. The following datafiles are located in the default datafile directory and are created by the default installation:

```
OFC_MAIN - omnSID.dbf
OFC_MESG - omsgSID.dbf
OFC_INDB - oidbSID.dbf
OFC_INDS - oidsSID.dbf
```

Remove the OracleEmailServerSID service using the following command:

```
C:\>ORACLE_HOME\bin\ofcsvdel SID
```

After removing both software and database objects, you can reinstall Oracle eMail Server.

# **Deinstalling Software**

To remove Oracle eMail Server software, complete the following steps.

- Log on to the Microsoft Windows NT server or workstation as an adminsitrator.
- 2. Insert the Oracle eMail Server for Windows NT CD-ROM into the CD-ROM drive.
- Choose Start > Run. The Open dialog box displays.
  - Select the CD-ROM drive and double click on setup.exe. The Oracle Universal Installer launches and the Welcome screen appears.
- Click the Deinstall Products button. The Inventory screen appears.
- Check the box in front of the products to deinstall and click Remove. The Confirmation screen displays.
- Click Yes to remove the selected products.
- Remove any installed database objects to complete Oracle eMail Server deinstallation. See "Deinstalling Database Objects" on page 4-2 for instructions.

# Troubleshooting

# **Troubleshooting the Installation**

This section contains information to assist with installation errors and problem diagnosis. The install.log file located in the ORACLE\_HOME\orainst directory lists any errors encountered during installation.

#### **Common Errors**

Most installation errors usually involve failure to carefully follow pre-installation instructions. The following table describes common installation problems, what may have caused them, and what you should check or do to correct the problem.

Problem	Probable Cause	Corrective Action
Error in creating or upgrading database objects	Database not running or available Listener not running	Start the database or listener prior to database actions.
Database-related Installer error messages	Starting installation without the database running	Start database prior to installation. See Chapter 1.
Oracle eMail Server fails due to insufficient database resources	Failing to edit the initSID. ora file located in the ORACLE_HOME\dbs directory to reflect the minimum values for the listed parameters	Check the ORACLE_HOME\office \log\SID file for error description. Edit the initSID. ora file as described in Chapter 1.
Some or all Oracle eMail Server processes do not load	Insufficient disk, RAM, or swap space	Check memory and disk space. See the Oracle eMail Server Administration Guide for requirements.

#### Contacting Oracle Support Services

Before calling Oracle Support Services, verify that your software, database, and environment configurations match those contained in Chapter 1. Be prepared with your CSI number (if applicable) or full contact details, including any special project information, complete release numbers of Oracle eMail Server and associated products, operating system name and version number. Record any error code numbers full description of the issue, including:

- What did or did not happen? For example, the command used and result obtained.
- When did it happen? For example, did it occur during peak system load, or after a certain command, or after an O/S upgrade.
- Where did it happen? For example, did it occur on a particular system or within a certain procedure or table.
- What is the extent of the problem? For example, was the production system unavailable? Or was the impact moderate but increasing with time, or minimal and stable?
- Maintain copies of trace files, core dumps, and redo log files recorded at or near the time of the incident. Oracle Support Services might need these to further investigate the problem.

For installation-related problems, please have the following additional information available:

- Listings of the contents of ORACLE\_HOME and any staging area, if used.
- Location and names of the Configuration Wizard log files:
  - ORACLE\_HOME\office\log\SID\IOSETUP.log
- Log files are located in ORACLE\_HOME\office\log\SID:
  - installActions.log

Oracle Support Services can be reached at the following numbers. The hours are provided in your support contract.

In the USA: 1.650.506.1500

In Europe: +44 1344 860160

In Asia: +61 3.924.6060