Parametric Technology Corporation

Installing Vault and Locator

Optegra® Release 6

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Preface

Installing Vault and Locator provides system administrators with instructions for installing Vault, Distributed Vault, Vault Programming, and Locator. The instructions also apply for installations or upgrades.

For information about

- Installing Vault on UNIX-based systems—See chapters 1 to 10
- Installing Oracle for Vault—See chapter 5
- Installing Vault on Windows NT—See chapters 11 to 16
- Installing Locator—See chapters 17 and 18

Related Documents

The following documents may be helpful as you use *Installing Vault and Locator*:

- *Installing Optegra Applications*
- *Using the License Manager*
- *Vault System Administrator Guide*

Book Conventions

The following table illustrates and explains conventions used in writing about Optegra applications.

Convention	Example	Explanation
EPD_HOME	`cd $EPD_HOME/install` (UNIX) `cd %EPD_HOME%\install` (Windows)	Represents the default path where the current version of the product is installed.
Menu selections	Vault > Check Out > Lock	Indicates a command that you can choose from a menu.
Command buttons and options	Mandatory check box, Add button, Description text box	Names selectable items from dialog boxes: options, buttons, toggles, text boxes, and switches.

User input and code	`Wheel_Assy_details`
	`-xvf /dev/rst0`
	`Enter command>` **`plot_config`**
		Enter the text in a text box or on a command line.
		Where system output and user input are mixed, user input is bold.

System output	`CT_struct.aename`	Indicates system responses.
Parameter and variable names	`tar -cvf /dev/rst0` filename	Supply an appropriate substitute for each parameter or variable; for example, replace filename with an actual file name.
Commands and keywords	The `ciaddobj` command creates an instance of a binder.	Shows command syntax.
Text string	`"SRFGROUPA"` or `'SRFGROUPA'`	Shows text strings. Enclose text strings with single or double quotation marks.
Integer	n	Supply an integer for *n.*
Real number	x	Supply a real number for *x.*
#	`# mkdir /cdrom`	Indicates the root (superuser) prompt on command lines.
%	`% rlogin` remote_system_name `-l root`	Indicates the C shell prompt on command lines.

Convention	Example	Explanation
$	$ rlogin remote_system_name -l root	Indicates the Bourne shell prompt on command lines.
>	> copy filename	Indicates the MS-DOS prompt on command lines.
Keystrokes	Return or Control-g	Indicates the keys to press on a keyboard.

Online User Documentation

Online documentation for each Optegra book is provided in HTML if the documentation CD-ROM is installed. You can view the online documentation from an HTML browser or from the HELP command.

You can also view the online documentation directly from the CD-ROM without installing it.

From an HTML Browser:

1. Navigate to the directory where the documents are installed. For example,

   $EPD_HOME/data/html/htmldoc/ (UNIX)

   %EPD_HOME%\data\html\htmldoc\ (Windows NT)
2. Click mainmenu.html. A list of available Optegra documentation appears.
3. Click the book title you want to view.

From the HELP Command:

To view the online documentation for your specific application, click HELP. (Consult the documentation specific to your application for more information.)

From the Documentation CD-ROM:

1. Mount the documentation CD-ROM.
2. Point your browser to:

   CDROM_mount_point/htmldoc/mainmenu.html (UNIX)

   CDROM_Drive:\htmldoc\mainmenu.html (Windows NT)

Printing Documentation

A PDF (Portable Document Format) file is included on the CD-ROM for each online book. See the first page of each online book for the document number referenced in the PDF file name. Check with your system administrator if you need more information.

You must have Acrobat Reader installed to view and print PDF files.

The default documentation directories are:

- $EPD_HOME/data/html/pdf/doc_number.pdf (UNIX)
- %EPD_HOME%\data\html\pdf\doc_number.pdf (Windows NT)

Resources and Services

For resources and services to help you with PTC (Parametric Technology Corporation) software products, see the *PTC Customer Service Guide*. It includes instructions for using the World Wide Web or fax transmissions for customer support.

Documentation Comments

PTC welcomes your suggestions and comments. You can send feedback in the following ways:

- Send comments electronically to doc-webhelp@ptc.com.
- Fill out and mail the PTC Documentation Survey located in the *PTC Customer Service Guide.*

Chapter 1

Preparing to Install Vault Software on UNIX

This chapter provides instructions you must follow before installing the Vault software. Refer to *Optegra Release Notes* and *Installing Optegra Applications* before using this book.

- Preinstallation Steps for Configuration
- Determining Disk Space Requirements
- Allocating Directories on Disk Drives
- Planning for Vault Storage Pools
- Creating Vault Storage Pools
- Planning for Oracle Tablespaces
- Using the Vault Checklist and Worksheet

Preinstallation Steps for Configuration

Steps to load Vault and Locator vary with the configuration and the host operating system. Refer to the information below to find the appropriate steps for new or existing customers. Use these steps on each Vault and each client.

Please note: In this document, $EDM_HOME represents the Vault home directory. The default is `/opt/epd/dm/current_release`. If you choose to install Vault software in another directory, identify the correct location when executing commands.

Install the Oracle applications before installing Vault and Distributed Vault. See *Installing Optegra Applications* for Oracle requirements to execute Vault.

New Installations

To install the current release of Optegra applications, new customers must perform the following steps:

1. Make sure your operating system is at the correct level. For this information, refer to the *Optegra Release Notes* for your software release.
2. Install the Oracle Server (RDBMS). Refer to *Installing Optegra Applications*.
3. Download Vault from the Optegra CD-ROM. Refer to *Installing Optegra Applications*.
4. Request your Vault licenses. Refer to *Using the License Manager.*
5. Install Vault. Refer to Chapter 2, “Installing Vault Software on UNIX.”
6. Install Distributed Vault, if purchased. Refer to Chapter 4, “Installing Distributed Vault on UNIX.”
7. Perform the postinstallation steps. Refer to Chapter 3, “Postinstallation Tasks for UNIX.”

Refreshing Previous Releases of Vault to the Current Release

To refresh Vault to the current release, follow this procedure:

1. Make sure your operating system is at the correct level. For this information, refer to the *Optegra Release Notes* for your software release.
2. Install the Oracle Server (RDBMS). Refer to *Installing Optegra Applications*.
3. Download your products from the Optegra CD-ROM. Refer to *Installing Optegra Applications*.
4. Request Vault licenses. Refer to *Using the License Manager.*
5. Refresh Vault to the current release. Refer to Chapter 7, “Refreshing Previous Releases of Vault to the Current Release.”
6. Refresh Distributed Vault. Refer to “Step 6: Refreshing Distributed Vault” on page 7-9.
7. Perform the postinstallation steps. Refer to Chapter 3, “Postinstallation Tasks for UNIX.”

Determining Disk Space Requirements

To determine the disk space for a Vault installation, add the disk space for the software to the disk space for other disk space requirements. The following example is for the Solaris operating system. For a different operating system or for different product selections, modify the example with the disk space figures found in *Installing Optegra Applications*.

Table 1-1 Disk Space for a New Default Installation

Oracle 8*i* Server V8.1.7 and PL/ SQL	500MB
Oracle 8*i* Database	900MB
Vault	180MB
Programming (optional)	25
Distributed Vault (optional)	9 (difference for DV modules)
Subtotal	1614MB
Storage pools (at least 50MB x 2 storage pools)	100
Tablespaces	200MB
Swap space	100MB
Subtotal	400MB
Total	2014MB

Allocating Directories on Disk Drives

The following figures show the suggested placement of high-activity Optegra Vault directories on three and two disks, respectively. Using three disks is more efficient than using two or one.

Figure 1-1 Optegra Directories on Three Disks (most efficient)

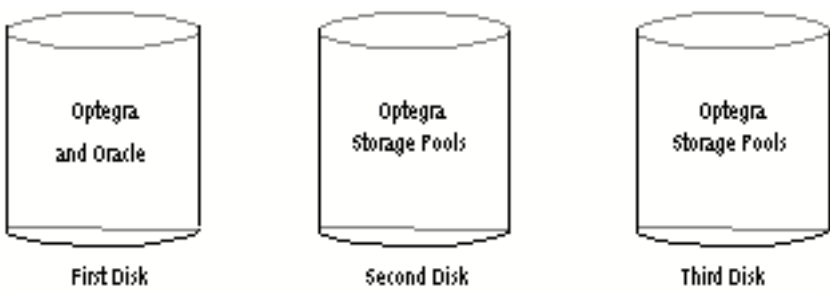
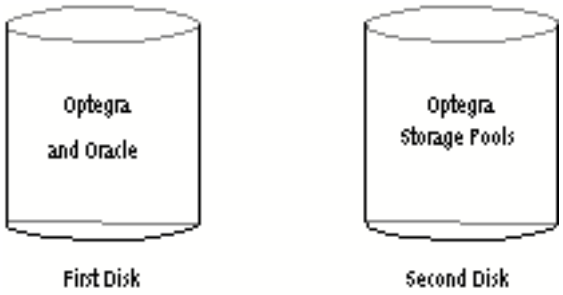


Figure 1-2 Optegra Directories on Two Disks (less efficient)



Please note: Consider the following guidelines when you decide which disk drives will have the Optegra software and storage pools:

- Optegra software should not be installed on the system disk. Dedicate a separate disk partition to Optegra software and another disk partition to OracleV8.1.7 software.
- The OracleV8.1.7 tablespaces contain information about the files stored in Optegra storage pools. Therefore, do not place OracleV8.1.7 tablespaces and Optegra storage pools on the same disk drive.
- To optimize Vault performance and to minimize the damage from media failure, use three or more disk drives to store Optegra software and storage pools.
- Set up disk partitions used for Optegra storage pools (one disk partition per storage pool) across multiple disk drives. Put storage pools and Optegra software on different disks.

Planning for Vault Storage Pools

Before installing Vault, create storage pools. A storage pool is a disk partition mounted on your local file system. A storage pool stores parts and other files. Vault requires two storage pools.

A recommended minimum number of storage pools for your use of Vault can be calculated using the formula:

Number of Pools = Number of Data Distribution Servers + 1

Storage Pool Description

Each storage pool occupies a partition on a disk. Defining Vault storage pools is part of the installation process and requires planning. Before you create the storage pools:

- Decide which disk device(s) to allocate to the storage pools. For the best performance, set up your storage pools across multiple disk devices. Have the storage pools reside on a disk different from the Vault software.
- Determine the size of the storage pools. The size determines the amount of data that can be stored online. Mounted file systems allocated to Vault storage pools require at least 50 megabytes.
- Establish naming conventions for the storage pools. You want to easily tell which disk device and partition go with each Vault storage pool. (Storage pool names limited to 8 characters.)
- Decide if you want to use particular storage pools for certain types of files. You can assign labels to your storage pools and customize the storage pool selection process to allocate files appropriately.

After you decide which disk devices to allocate to the Vault storage pools, you can create them and set them up for Vault use. You can create local storage pools on the Vault server, NFS-mounted storage on another system, or a combination of local and NFS-mounted storage pools.

Creating Vault Storage Pools

Each operating system has utilities for partitioning disk drives to create local and NFS-mounted storage pools.

Creating Local Storage Pools

For each operating system, the utility for partitioning disk drives to create local storage pools follows.

- AIX — Use the `SMIT` utility (System Management Interface Tool). Refer to your system documentation for more information.
- HP-UX — Use the System Administration Manager (`SAM`) utility to create storage pools. This utility helps you set up the needed mounted file systems for the Vault storage pools. See your HP-UX documentation for instructions.

- Digital UNIX — Use the `disklabel` and `newfs` utilities. Refer to your system documentation for more information.
- Solaris or SunOS — Use the `format` and `newfs` utilities to create storage pools. See your Sun documentation for instructions and for information about UNIX file systems.
- IRIX — Use the `fx` and `mkfs` utilities to create storage pools. See your IRIX man page, or documentation for information about these commands and the UNIX file system.

Creating NFS-mounted Storage Pools

Documentation for your operating system provides information about NFS. To use NFS-mounted storage pools, follow these steps:

1. On the system with the disk drive, create the mounted file system.
2. On the system running Vault, use NFS to mount the remote file system.

Please note: Oracle does not support the use of NFS-mounted file systems for its database files.

For instructions on adding storage pools to the database independent of Vault installation, see “Step 8: Adding Storage Pools” on page 2-26.

Planning for Oracle Tablespaces

Tablespaces can be in one tablespace directory or separated into two; Vault tablespaces and rollback tablespaces. The minimum required disk space required for all tablespaces is 200 megabytes. An additional 60 megabytes is needed for Distributed Vault.

Tablespaces in One Directory

If you are using the same directory for all Vault tablespaces, you need a minimum of 200 megabytes of disk space. If you are running Distributed Vault, the minimum is 260 megabytes.

Tablespaces in Two Directories

If you are putting the rollback tablespace in a directory separate from the other tablespace, the Vault tablespace directory must have a minimum of 134 megabytes (194MB if using Distributed Vault). The Vault rollback tablespace needs a minimum of 66 megabytes.

Using the Vault Checklist and Worksheet

Use the Installation Input Worksheet data to respond to the system prompts generated during installation. This ensures a successful installation of the Vault software.

Installation Input Worksheet

Accept the default by pressing `RETURN`. Otherwise, you can enter any other values. You can type a question mark `(?)` at any prompt to see the information.

If you enter an invalid value, the system instructs you on how to enter a valid value.

Table 1-2 Input Installation Worksheet

Prompt	Default Value
Vault account name:	edm
Vault account user ID number:	200
Oracle account name:	oracle
Oracle SID:	oracle
Vault tablespace directory:	$ORACLE_HOME/dbs/edm_dbs
Vault rollback tablespace directory:	$ORACLE_HOME/dbs/edm_dbs
Vault revision code scheme:	1=alphabet, 2=letters, 3=numbersdefault=3
Set up storage pools?	yes
First storage pool directory name:	example: /pool1 Pool name:_____(8 chars.) example: pool1
Second storage pool directory name:	Pool Name_____ (8 chars.)
Third storage pool directory name:	Pool Name_____ (8 chars.)
Fourth storage pool directory name:	Pool Name_____ (8 chars.)

Table 1-2 Input Installation Worksheet

Prompt	Default Value
Fifth storage pool directory name:	Pool Name_____ (8 chars.)
Sixth storage pool directory name:	Pool Name_____ (8 chars.)
Seventh storage pool directory name:	Pool Name_____ (8 chars.)
Activate email trigger?	no default
Vault TAPE1 tape device:	no default
Vault TAPE2 tape device:	no default
Vault TAPE3 tape device:	no default
Vault TAPE4 tape device:	no default

Preinstallation Checklist

The following steps prepare you for installing Vault. Check off each step after you complete it.

1. _____ Operating system and software backups performed?

_____ Operating system

_____ Vault software (for existing installations)

_____ Oracle software (for existing installations)

_____ Oracle database(s) (for existing or shared installations)

2. _____ Required version of operating system running?

3. _____ Oracle Server 8.1.7 software revision installed?

4. _____ Storage pools created for first time users?

5. _____ Input Worksheet filled out?

6. _____ Vault software loaded using SLIC?

(Refer to *Installing Optegra Applications*)

7. _____ Vault software licenses requested and installed?

(For information on software license management, see *Installing Optegra Applications* and *Using the License Manager*.)

Additional Tasks for Existing Vault Sites

1. _____ Oracle account password set to default of `manager`?
2. _____ Vault Oracle account passwords set to their defaults?
   (`asm`, `edmattr`, `edmui`, `pdmdm`, `pdmqf`, and `edmdv` (for DV))
3. _____ Name changed on the Vault account?
4. _____ Name changed on the Vault home directory?
5. _____ Vault configuration files saved?

Chapter 2

Installing Vault Software on UNIX

This chapter provides background information about using the automated tools for installations and migrations. Follow the suggestions provided in this chapter to ensure successful installation of your Vault software. Included in this chapter are installation procedures for the first-time user. Current Vault users are directed to the appropriate chapters for their installation needs.

- Addressing Oracle Requirements
- Running the Installation or Refresh Tools
- Step 1: Entering the Required Information
- Step 2: Setting Up the Vault Account
- Step 3: Creating Vault Tablespaces
- Step 4: Creating and Loading Vault Tables
- Step 5: Updating the EDMADMIN Password
- Step 6: Loading the Revision Code Scheme
- Step 7: Starting the Server Network Processes
- Step 8: Adding Storage Pools
- Step 9: Installing Vault Attributes and Views
- Step 10: Activating the E-Mail Trigger

Addressing Oracle Requirements

Before installing Vault or Distributed Vault, install the necessary Oracle applications. Refer to *Installing Optegra Applications* for the Oracle requirements. Also refer to the documentation for your operating system on installation and system maintenance. If you purchased Oracle with your EPD.Connect and Optegra applications, use the Oracle CD-ROM provided for your Oracle software installation.

Please note: If you use a previously installed Oracle V8.1.7 RDBMS for Vault 6, ensure that you have both the Oracle V8.1.7 server and the Procedural Option running.

If you are installing Vault applications for the first time and are using an existing Oracle database or if you have an existing Vault installation, you might need to modify the Oracle V8.1.7 installation before you load the Vault distribution CD-ROM. Refer to the next topics in this section.

Comparing the Contents of .ora Files

A Vault installation creates a new `init.ora` file and renames your existing file to `init$ORACLE_SID.ora.orig`. Compare the contents of both files for any changes that you might want in the new one.

For example, the db_files parameter is reset to 40 in the new `init.ora` file. If your previous file had a value greater than 40, change the value of db_files in the new `init.ora` file to that number.

If you are unsure of using the old or new value, contact Customer Service.

Using an Existing Oracle Database

If you want to share an existing Oracle database with your new Optegra software, you must perform the following steps to increase the size of your Oracle initialization parameters:

1. Log in to the Oracle software account.
2. Make sure that the Oracle initialization parameters in the `init$ORACLE_SID.ora` file meet the minimum requirements for Optegra software. The `init$ORACLE_SID.ora` file is usually located in the directory $ORACLE_HOME`/dbs`.

The following table shows the Oracle initialization parameters and the Optegra software requirements for each Oracle parameter. Increase the values as needed in the `init$ORACLE_SID.ora` file to meet the minimum requirements for the Optegra software.

Oracle Initialization Parameter	Oracle Default	Optegra Minimum Requirement
db_block_buffers	200	200
log_checkpoint_interval	10000	10000
open_cursors	100	512
processes	100	50
db_files	80	512

Please note: The default value for an Oracle variable can result in the message maximum open cursors exceeded when you are deleting objects. To avoid this, edit the file `init$ORACLE_SID.ora` by giving the parameter `open_cursors` the value `512`. The file's name depends on the value of the $ORACLE_SID parameter which it includes. Two directories contain this same file through links. Shutting down and restarting the database instance makes the new value effective.

$ORACLE_BASE/`admin`/$ORACLE_SID/`pfile`
$ORACLE_HOME/`dbs`.

Please note: If you modify any Oracle initialization parameter in the `init$ORACLE_SID.ora` file, you must shut down and restart your Oracle database. This puts these changes into effect. For more information on this parameter, refer to *ORACLE8i RDBMS Server Administrator's Guide.*

3. Create the `edm_dbs` directory.

```
% cd $ORACLE_HOME/dbs
% mkdir edm_dbs
```

If your system meets the requirements for rollback segments and you do not want the `edminstall` script to create tablespaces for rollback segments and temporary segments in this directory, create a custom RDBMS tempspace using step 4.

4. Create the `custom_rdbms.tmp` file in the `edm_dbs` directory where the Optegra tablespace files are created.

```
% cd edm_dbs
% touch custom_rdbms.tmp
```

The `custom_rdbms.tmp` file flags the Relational Database Setup Module (`edmrdsm`) to indicate that the database already has other applications running against it.

Increasing the Maximum Datafiles

To increase your maxdatafile parameter for Oracle, follow the instructions in the next section. Perform this operation if you expect significant growth in your Oracle database. Only someone who is familiar with Oracle database administration should attempt this procedure. Contact your support center with any questions.

To increase the maximum datafiles, follow the process as described in the following sections:

1. Determine the parameter value for your datafiles
2. Export the database and remove files
3. Specify the maximum datafiles

Determine the Parameter Value

First, determine the parameter value for your datafiles.

1. Query your database for the number of datafiles in use and their respective path names:

```
% svrmgrl
SVRMGR> connect internal
SVRMGR> spool datafile.info.log
SVRMGR> select count(*) from v$datafile;
SVRMGR> select name from v$datafile;
SVRMGR> select name from v$controlfile;
SVRMGR> select member from v$logfile;
SVRMGR> spool off
SVRMGR> exit
```

2. Determine your maxdatafile parameter; see if the sum of the value returned from the first query plus 30 is greater than 60. Otherwise, simply use 60 as your new value.

   Example 1: If the query above produced the value 22

   22+30=52 —> use 60.

   Example 2: If the query above produced the value 35

   35+30=65 —> use 65.

Please note: The 60 and the 65 represent the minimum value for the maxdatafile parameter in each example. Use a higher value if you expect significant growth on your database.

Export the Database and Remove Files

Oracle must be running to export the database. However, you must restrict access to the database during the export. In this example, the name of your database is $ORACLE_SID and $ORACLE_HOME is the path to your Oracle home directory.

1. As the user, shut down the network:

```
% nsmstop -all
% nsmstop -pca
```

2. Bring down Oracle and restart it in restricted mode:

```
% svrmgrl
SVRMGR> connect internal
SVRMGR> shutdown
SVRMGR> startup restrict
SVRMGR> exit
```

3. Export the full database from the Oracle account. See *ORACLE RDBMS Utilities User's Guide* for details.

Warning

To avoid losing your database, back up the exported file and keep the tape in a safe place.

```
% exp system/manager full=y grants=y
file=export_filename log=export.log
```

4. Shut down Oracle:

```
% svrmgrl
SVRMGR> connect internal
SVRMGR> shutdown
```

5. At the operating system level remove the datafiles, control files, and redo log files associated with this database. The paths for these files are recorded in the second, third, and fourth queries issued in step 1 above.

Warning

If you are uncertain of the location of the files in this step, please contact your support center.

Specify the Maximum Datafiles

To specify the maximum datafiles, follow these steps. Set the value to 60 or greater. See “Determine the Parameter Value” on page 2-4.

1. Edit the `crdb$ORACLE_SID.sql` file in the $ORACLE_HOME/`dbs` directory. After the `maxlogfiles` statement add the following line:

   ```
   maxdatafiles 60
   ```

2. Edit the `init$ORACLE_SID_0.ora` file to change the db_files parameter to the value specified above.
3. Edit the `init$ORACLE_SID.ora` file to change the db_files parameter to the value specified above.

Running the Installation or Refresh Tools

Installation or refresh tools for Vault software are easy to use and self-explanatory. The tools prompt you to answer questions and then wait for your responses. Most questions have default values. To get online help at each prompt, type `help`.

Please note: Installing Vault on an SGI machine also installs the Oracle N32 shared library, `libclntshcdk.so.8.0`. This library is copied to the `$ORACLE_HOME/lib32` directory during Vault installation.

Before You Proceed

Before you proceed, take the actions listed below. They ensure a successful installation of your Vault software. Your installation may fail if you have missed any of the steps.

1. Meet all Oracle requirements as suggested in *Installing Optegra Applications.*
2. Complete the Pre-installation Checklist in Chapter 1, “Preparing to Install Vault Software on UNIX”, including performing necessary backups.
3. Log in to the local system on which you are installing the software.
4. Refer to your completed Input Worksheet from Chapter 1, “Preparing to Install Vault Software on UNIX” and follow the instructions.

Please note: Software licenses are required before you install your Vault software. See *Optegra Release Notes* for more information.

Installation or Refresh Procedures

After you have installed your software and licenses, use the procedures in described in this section for a first-time installation using the Automated Installation Tool (`edminstall`). See Chapter 4, “Installing Distributed Vault on UNIX” to install Distributed Vault.

If you fail to install `edminstall`, refer to Chapter 9, “UNIX Vault Troubleshooting”for instructions on how to rerun `edminstall`.

Exiting the Automated Tool

You can exit the automated tool in two ways:

- Press `CONTROL-C` to exit the procedure at any time.
- Answer `n` (no) to one of the continuation prompts displayed by the tool, for example;

```
Would you like to continue [yes]? n
```

If you exit the automated tool in the middle of the process, you can restart it by reentering the command. The tool resumes where you left off.

Adding Storage Pools for a First-Time Installation

You must add storage pools when you install Vault for the first time. Refer to *Installing Optegra Applications* for instructions on creating mounted file systems in preparation for adding the storage pools. This must be done before installation.

Chapter 3, “Postinstallation Tasks for UNIX” contains instructions for adding additional storage pools after the installation is completed.

Step 1: Entering the Required Information

Start your Vault installation by invoking the automated installation tool. Log in as `root`, then follow these steps.

1. Change to the Vault home install directory:

   ```
   # cd $EDM_HOME/install
   ```

To create a history file of the procedure, follow the instructions in item 2.

If you do not want a history file, follow the instructions in item 3.

2. To invoke the Automated Installation Tool, install Vault for the first time and create a history log, enter

   ```
   # ./edminstall | tee edminstall.log
   ```

   To read the history log, look for it in the $EDM_HOME/`install` directory.

3. To invoke the Automated Installation Tool to install Vault for the first time without creating a history log, enter

   ```
   # ./edminstall
   ```

Next, provide essential values as shown in the following procedure. Default values are shown in brackets ([ ]).

Please note: After you do this, the system displays your input and asks if it is correct. It then gives you the chance to fix whatever is incorrect.

```
EDM163I*****************************************
EDM163I Vault Software Installation module.
EDM163I (edminstall)
EDM163I
EDM163I This module installs the Vault Software on
EDM163I your system.
EDM163I
EDM163I The Vault Software Installation module
EDM163I installs the Vault Software on your
EDM163I system by calling the following Vault
EDM163I Software Installation Modules:
EDM163I
EDM163I edmsirm [Vault Software Installation
EDM163I Requirements Module]
EDM163I edmsasm [Vault Software Account Setup
EDM163I Module]
```

```
EDM163I edmrdsm [Vault Relational Database Setup
EDM163I Module]
EDM163I edmrdlm [Vault Relational Database Table
EDM163I Creation and Loading Module]
EDM163I edmepum [Vault User EDMADMIN Password
EDM163I Update Module]
EDM163I edmrclm [Vault Revision Code Loading
EDM163I Module]
EDM163I edmsnsm [Vault Server Network Startup
EDM163I Module]
EDM163I edmspcm [Vault Storage Pool Creation
EDM163I Module]
EDM163I edmaetm [Vault Activate E-MAIL Trigger
EDM163I Module]
EDM163I
EDM163I It uses as input, the edmodule.defaults.sh
EDM163I file to obtain the appropriate information
EDM163I to EDM163I perform these tasks.
EDM163I ****************************************

Would you like to continue [yes]? :

EDM164I ****************************************
EDM164I Running Vault Software Installation
EDM163I Requirements Module
EDM164I (edmsirm).
EDM164I ****************************************

EDM000I ****************************************
EDM000I Vault Software Installation Requirements
EDM000I module [edmsirm]
EDM000I
EDM000I This module gathers and validates all
EDM000I required information pertaining to
EDM000I installing Vault EDM163I Software on a
EDM000I system.
EDM000I
EDM000I It copies edmodule.defaults-template.sh to
EDM000I edmodule.defaults.sh and updates the
EDM000I edmodule.defaults.sh whenever the installer
EDM000I deviates an input value from the original
EDM000I default value.
EDM000I
EDM000I Special Features:
EDM000I
```

```
EDM000I 1) On-line Help
EDM000I     [enter help, ?, HELP, h, H; at any
EDM000I      prompt]
EDM000I 2) Supplied Defaults
EDM000I     [hit RETURN; to accept default value]
EDM000I 3) Dynamic Defaults
EDM000I     [override default with your value]
EDM000I 4) Exit/Quit
EDM000I     [enter exit, quit, cntrl-c; at any
EDM000I       prompt]
EDM000I 5) Escape to shell
EDM000I     [enter sh; at any prompt. enter exit;
EDM000I       to returns prompt]
EDM000I 6) Invalid Input Data Validation
EDM000I     [Invalid Input Data not allowed as
EDM000I      input]
EDM000I 7) Rerun capability
EDM000I     [enter edmsirm; will resume where you
EDM000I      left EDM000I off]
EDM000I ****************************************

Would you like to continue [yes]? :

Enter the Vault account name [edm]:edm

Enter the ORACLE account name [oracle]:oracle
Enter the Vault account userid number [200]:200
Enter the ORACLE SID [oracle]:EDM
Enter the Vault Tablespace directory
[/opt/app/oracle/product/8.1.7/dbs/edm_dbs]:/opt/a
pp/oracle/product/8.1.7/dbs/edm_dbs
Enter the Vault Rollback Tablespace directory
[/opt/app/oracle/product/8.1.7/dbs/edm_dbs]:/opt/a
pp/oracle/ product/8.1.7/dbs/edm_dbs
Enter the Vault Revision Code Scheme filename
1) ALPHABET.REVCODES
2) LETTERS.REVCODES
3) NUMBERS.REVCODES (CADDS supports only
   NUMBERS.REVCODES)

Enter 1, 2, or 3 [3]: 3
```

Please note: If you answer yes to the next question, the file systems must have been previously created.

```
Would you like to setup the Vault Storage Pools
[yes]?:yes

Enter Vault Storage Pool Directory names and
Storage Pool names,
one on each line, for example;
/pool1 pool1
/pool2 pool2
.
End the list with a period (.) on a separate line:
/pool20 pool20
```

Please note: Enter one pool's directory name and storage pool name followed by a carriage return. Your data is echoed and the full prompt repeated after each pool that you enter, as shown in the example.

```
Vault Storage Pool Information = /pool20 pool20
Enter Vault Storage Pool Directory names and
Storage Pool names, one on each line, for example;
/pool1 pool1
/pool2 pool2
.
End the list with a period (.) on a separate
line:/pool21 pool21
Vault Storage Pool Information        = /pool20
pool20
Vault Storage Pool Information           = /pool21
pool21

Enter Vault Storage Pool Directory names and
Storage Pool names, one on each line, for example;
/pool1 pool1
/pool2 pool2
.
End the list with a period (.) on a separate line: .

Would you like the Vault E-Mail Trigger Interface
activated (*optional)[no]?:y

Would you like to setup the Vault Tape Devices
(*optional) [no]?:y
```

Please note: You only see the next four lines if you answer yes to the previous question. These lines require that you specify a real device name. Do not use the defaults. Issue the `ls -l` command on the device

directory to determine the real device names. Enter the real device names here and be sure to enter them when using `edminstall`.

```
Enter the Vault TAPE1 tape device name
[No_Default]: nrst0
Enter the Vault TAPE2 tape device name
[No_Default]: nrst8
Enter the Vault TAPE3 tape device name
[No_Default]: nrst16
Enter the Vault TAPE4 tape device name
[No_Default]: nrst24
If you have filled everything in or accepted the
defaults, your values will be displayed as in the
following example.
Here are the Input Values that you have entered.
Please confirm that they are correct.

Vault account name              = edm
Vault account userid            = 200
Vault home directory            = $EDM_HOME
Vault group name                = operator
Oracle account name           = oracle
Oracle SID                    = EDM
Vault Tablespace directory         =
/opt/app/oracle/product/8.1.7/dbs/edm_dbs
Vault Rollback Tablespace directory =
/opt/app/oracle/product/8.1.7/dbs/edm_dbs
Vault Revision Code Scheme       = NUMBERS
Vault Storage Pool Information   = /pool20 pool20
Vault Storage Pool Information   = /pool21 pool21
Vault E-Mail Trigger Activation= no
Vault TAPE1 tape device= nrst0
Vault TAPE2 tape device= nrst8
Vault TAPE3 tape device= nrst16
Vault TAPE4 tape device= nrst24

Are these correct [yes]?:y

EDM162I ****************************************
EDM162I The Vault Software Installation
EDM162I Requirements Module has
EDM1621 completed successfully
EDM162I ****************************************
```

If you answer no, the installation tool prompts you to indicate whether you want to modify a single value you entered, a single default value you accepted, all values you entered, or all defaults you accepted.

Step 2: Setting Up the Vault Account

During the rest of the procedure, you need take only a few actions. The tool occasionally checks to see if you want to continue; you can enter either `yes` or `no`. If you enter `no`, you can restart the procedure later at the point where you left off; the automated tool saves your answers and keeps track of the steps you have already completed.

In this step, the automated tool sets up the Vault software account.

```
EDM168I ****************************************
EDM168I Running Vault Software Account Setup Module
EDM168I (edmsasm).
EDM168I ****************************************

EDM001I ****************************************
EDM001I Vault Software Account Setup module.
EDM001I (edmsasm)
EDM001I
EDM001I This module creates the Vault Software
EDM001I Account if appropriate; and customizes the
EDM001I .cshrc, .login, nsm.config, pm.config,
EDM001I and EDM.DEFAULTS files for this Vault
EDM001I Installation.
EDM001I
EDM001I It uses as input, the edmodule.defaults.sh
EDM001I file to EDM001I obtain the appropriate
EDM001I information to perform these
EDM001I tasks.
EDM001I ****************************************

Would you like to continue [yes]?:

EDM028I ****************************************
EDM028I Customizing the Vault Account's .cshrc
EDM001I file.
EDM028I ****************************************
```

```
EDM029I ****************************************
EDM029I Customizing the Vault Account's .login
EDM001I file.
EDM029I ****************************************

EDM030I ****************************************
EDM030I Customizing the nsm.config and pm.config
EDM030I files.
EDM030I ****************************************

EDM077W ****************************************
EDM077W Customizing the EDM.DEFAULTS file for
EDM077W Rulebase Support.  EDM077W The file exists
EDM077W and has been renamed to
EDM077W $EDM_HOME/data/EDM.DEFAULTS.orig.copy.
EDM077W If you have additional customizations, they
EDM077W will need to be added to the new
EDM077W $EDM_HOME/data/EDM.DEFAULTS file.
EDM077W ****************************************

Customizing the Vault TAPE devices.

EDM155I ****************************************
EDM155I The Vault Software Account Setup module has
EDM155I completed EDM155I successfully.
EDM155I ****************************************
```

Step 3: Creating Vault Tablespaces

The installation tool next sets up the Vault relational database, creating tablespace files, rollback segments, and tempspaces. You must do this for a first time installation.

A tablespace is the location within the relational database where the Vault relational database tables are created. A rollback segment is the location within the relational database where a Vault relational database transaction is stored until a commit operation is accomplished.

```
EDM170I ****************************************
EDM170I Running Vault Relational Database Setup
EDM170I Module (edmrdsm).
EDM170I ****************************************

ORACLE_SID = oracle
```

```
EDM033I ******************************************
EDM033I Vault Relational Database Setup module.
EDM033I (edmrdsm)
EDM033I
EDM033I This module creates the Vault Relational
EDM033I Database Tablespace files and generates
EDM033I the Vault Relational Database Rollback
EDM033I Segments and Tempspaces.
EDM033I
EDM033I It uses as input, the edmodule.defaults.sh
EDM033I file to obtain the appropriate information
EDM033I to perform these tasks
EDM033I ******************************************

Would you like to continue [yes]?:

EDM034I ******************************************
EDM034I Creating the Vault Relational Database
EDM034I Tablespaces/Rollback Segments.
EDM034I ******************************************

EDM048I ******************************************
EDM048I Creating non-system Rollback Segment.
EDM048I ******************************************

EDM049I ******************************************
EDM049I Shutting down ORACLE, so we can restart
EDM049I ORACLE and see EDM049I the non-system
EDM049I Rollback Segment.
EDM049I ******************************************

EDM050I ******************************************
EDM050I Starting up ORACLE, so we can see the
EDM050I non-system Rollback Segment.
EDM050I ******************************************

EDM051I ******************************************
EDM051I Creating the EDM_ROLLSPACE Tablespace.
EDM051I ******************************************

EDM052I ******************************************
EDM052I Creating the RBS_01 Rollback Segment in the
EDM052I EDM_ROLLSPACE Tablespace.
EDM052I ******************************************
```

```
EDM053I ******************************************
EDM053I Creating the RBS_02 Rollback Segment in the
EDM053I EDM_ROLLSPACE Tablespace.
EDM053I ******************************************

EDM054I ******************************************
EDM054I Creating the RBS_03 Rollback Segment in the
EDM054I EDM_ROLLSPACE Tablespace.
EDM054I ******************************************

EDM055I ******************************************
EDM055I Creating the RBS_04 Rollback Segment in the
EDM055I EDM_ROLLSPACE Tablespace.
EDM055I ******************************************

EDM056I ******************************************
EDM056I Creating the RBS_05 Rollback Segment in the
EDM056I EDM_ROLLSPACE Tablespace.
EDM056I ******************************************

EDM057I ******************************************
EDM057I Creating the RBS_06 Rollback Segment in the
EDM057I EDM_ROLLSPACE Tablespace.
EDM057I ******************************************

EDM058I ******************************************
EDM058I Creating the CV_ASMGR Tablespace.
EDM058I ******************************************

EDM059I ******************************************
EDM059I Creating the EDM_ARCHIVE Tablespace.
EDM059I ******************************************

EDM060I ******************************************
EDM060I Creating the EDM_AUDIT_LOG Tablespace.
EDM060I ******************************************

EDM061I ******************************************
EDM061I Creating the EDM_FILE_BACKUP Tablespace.
EDM061I ******************************************

EDM062I ******************************************
EDM062I Creating the EDM_FILE_DIRECTORY Tablespace.
EDM062I ******************************************
```

```
EDM063I ******************************************
EDM063I Creating the EDM_HISTORY Tablespace.
EDM063I ******************************************

EDM064I ******************************************
EDM064I Creating the EDM_SYSTEM Tablespace.
EDM064I ******************************************

EDM065I ******************************************
EDM065I Creating the EDM_ATTRIBUTES Tablespace.
EDM065I ******************************************

EDM066I ******************************************
EDM066I Creating the EDM_ATTRDATA Tablespace.
EDM066I ******************************************

EDM249I ******************************************
EDM249I Creating the EDM_TEMPSPACE Tablespace.
EDM249I ******************************************

EDM067I ******************************************
EDM067I Shutting down ORACLE, so we can startup
EDM067I ORACLE and see the Rollback Segments
EDM067I RBS_01, RBS_02, ..., RBS_06.
EDM067I ******************************************

EDM068I ******************************************
EDM068I Starting up ORACLE to see the Rollback
EDM068I Segments RBS_01, RBS_02, ..., RBS_06.
EDM068I ******************************************

EDM069I ******************************************
EDM069I Dropping the non-system Rollback Segment
EDM069I that we added earlier. We no longer need
EDM069I this Rollback Segment, EDM069I because we
EDM069I added the EDM RBS_01 through RBS_06 Private
EDM069I Rollback Segments.
EDM069I ******************************************

EDM161I ******************************************
EDM161I The Vault Relational Database Setup Module
EDM161I has completed successfully.
EDM161I ******************************************
```

Description of Vault RDBMS Tablespaces

The following table shows the names and default sizes of Vault's 11 RDBMS tablespaces. Each Vault tablespace is described after the table.

Tablespace File	Disk Storage in Bytes
CV_ASMGR	52,8384
EDM_ARCHIVE	1,048,576
EDM_ATTRDATA	4,194,304
EDM_ATTRIBUTES	2,097,152
EDM_AUDIT_LOG	614,400
EDM_FILE_BACKUP	4,194,304
EDM_FILE_DIRECTORY	6,291,456
EDM_HISTORY	3,145,728
EDM_ROLLSPACE	67,635,200
EDM_SYSTEM	20,914,560
EDM_TEMPSPACE	8,388,608

CV_ASMGR

This tablespace contains all the security and concurrency control logic tables and associated logic; it has high-activity read-only access.

EDM_ARCHIVE

This tablespace contains all archived file entries generated by the Vault command `ARCHIVE`; it has low-activity read and insert access.

EDM_ATTRDATA

This tablespace contains the values assigned to user-defined attributes for Vault parts and files. This data is generated by the Vault commands `STORE`, `UPDATE`, and `REPLACE`; it has high-activity read and insert access. This tablespace includes pointers to other tablespaces, as well as actual data.

EDM_ATTRIBUTES

This tablespace contains the administrative information for user-defined attributes and parts and files. This includes the attribute and set definitions,

which attributes belong to which sets, and data validation rules for applying each set. Depending on usage, this tablespace may have very high activity.

EDM_AUDIT_LOG

This tablespace contains all audit log entries generated by Vault; it has high-activity insert access.

EDM_FILE_BACKUP

This tablespace contains all backup entries for files currently residing on Vault incremental backup tapes or files that are candidates for backup by the Incremental Backup utility; it has very high activity.

EDM_FILE_DIRECTORY

This tablespace contains all entries for items managed by Vault, including file directory table entries, file set definitions, and work tables required for recursive file set checking and set explosion; it has very high activity.

EDM_HISTORY

This tablespace contains the history of all items managed by Vault. Tables stored in this tablespace contain status code changes, revision changes, successful and failed reviews, and all review votes by reviewers. This tablespace has low-activity insert access.

EDM_ROLLSPACE

This tablespace contains Oracle V8.1.7 rollback segments for use by Vault. This tablespace has very high activity; however, it is not required for sites that are already set up with Oracle V8.1.7 rollback segments.

EDM_SYSTEM

This tablespace contains various static and dynamic control tables used by Vault. Tables stored in this tablespace contain command description tables, menu description and command-to-menu cross-reference tables, the user-defined revision code table, all Help tables, message tables, storage pool information tables, and all control tables needed to manage a Vault installation. This tablespace has very high activity.

EDM_TEMPSPACE

This tablespace contains Oracle V8.1.7 temporary segments for use by Vault. This tablespace has very high activity; however, it is not required for sites that are already set up with Oracle V8.1.7 temporary segments.

Step 4: Creating and Loading Vault Tables

In this step, the tool creates and loads all Vault database tables for the first time. Enter either `yes` or `no` when the tool asks you whether it should continue.

```
EDM172I ****************************************
EDM172I Running Vault Relational Database Table
EDM172I Creation and Loading Module (edmrdlm).
EDM172I ****************************************

EDM035I ****************************************
EDM035I Vault Relational Database Table Creation
EDM035I and Loading module. (edmrdlm)
EDM035I This module creates and loads the Vault
EDM035I Relational Database Tables.
EDM035I It uses as input, the edmodule.defaults.sh
EDM035I file to obtain the appropriate information
EDM035I to perform these tasks.
EDM035I ****************************************

Would you like to continue [yes]?:

EDM036I ****************************************
EDM036I Creating and Loading the Vault Relational
EDM036I Database Tables.
EDM036I ****************************************

EDM093I ****************************************
EDM093I Generating the Access and Security Manager
EDM093I Tables.
EDM093I ****************************************

./asmgen: Access and Security Manager
./asmgen: SQL table and view creation.
```

```
EDM094I ******************************************
EDM094I Generating the Vault Database Tables.
EDM094I ******************************************

./edmgen: EDMVault SQL Table and View Creation

EDM271I ******************************************
EDM271I Generating the Vault Database Table
EDM271I Indexes.
EDM271I ******************************************

./edmindex: EDMVault SQL Database Index Creation

EDM095I ******************************************
EDM095I Generating the Vault Database Table Views.
EDM095I ******************************************

./edmview: EDMVault SQL View Creation

EDM096I ******************************************
EDM096I Generating the Attribute Management Tables.
EDM096I ******************************************

./attrgen: Vault attribute management control table
generation for EDMVault

EDM273I ******************************************
EDM273I Generating the Attribute Management
EDM273I Database Table Indexes.
EDM273I ******************************************

./attrindx: EDMVault Attribute Management SQL
Database Index Creation

EDM346I ******************************************
EDM346I Generating the Unit of Measurement related
EDM346I tables
EDM346I ******************************************

./uomgen: Vault attribute management control table
generation for EDMVault
```

```
EDM097I ******************************************
EDM097I Generating the Attribute Management Table
EDM097I Views.
EDM097I ******************************************

./attrview: Vault attribute management control
table view generation for EDMVault

EDM098I ******************************************
EDM098I Generating the Graphical User Interface
EDM098I Tables.
EDM098I ******************************************

./guigen: Vault SQL Table Creation

EDM099I ******************************************
EDM099I Generating the Graphical User Interface
EDM099I Table Views.
EDM099I ******************************************

./guiview: Vault SQL View Creation

EDM225I ******************************************
EDM225I Assigning Vault ORACLE Userid's to the
EDM225I EDM_TEMPSPACE Tablespace.
EDM225I ******************************************

./tempgen: Assigning Vault ORACLE Userid's
./tempgen: to the EDM_TEMPSPACE Tablespace

EDM100I ******************************************
EDM100I Loading the Access and Security Manager
EDM100I (EDMVault) EDM100I Tables.
EDM100I ******************************************

./ldasmba: EDMVault Run-time SQL Logic load.

EDM101I ******************************************
EDM101I Loading the Vault Database (EDMVault)
EDM101I Tables.
EDM101I ******************************************

./ldedmba: Vault control table load for EDMVault
```

```
EDM102I ****************************************
EDM102I Loading the Attribute Management Tables.
EDM102I ****************************************

./ldedmam: Vault Attribute Management control table
load for EDMVault

EDM103I ****************************************
EDM103I Loading the Access and Security Manager
EDM103I (EDMProjects) Tables.
EDM103I ****************************************

./ldasmpa: EDMProjects Run-time SQL Logic load.

EDM104I ****************************************
EDM104I Loading the Vault Database (EDMProjects)
EDM104I Tables.
EDM104I ****************************************

./ldedmpa: Vault control table load for EDMProjects

EDM348I ****************************************
EDM348I Loading the Unit of Measurement related
EDM348I Tables.
EDM348I ****************************************

./ldattr: Vault control table load for EDMVault

EDM156I ****************************************
EDM156I The Vault Relational Database Table
EDM156I Creation and Loading module has completed
EDM156I successfully.
EDM156I ****************************************
```

Step 5: Updating the EDMADMIN Password

In this step, the tool encrypts the `EDMADMIN` password.

Enter either `yes` or `no` when the tool asks you whether it should continue.

```
EDM176I ****************************************
EDM176I Running Vault User EDMADMIN Password Update
EDM176I Module (edmepum).
EDM176I ****************************************
```

```
EDM118I ****************************************
EDM118I Vault User EDMADMIN Password Update module.
EDM118I (edmepum)
EDM118I
EDM118I This module updates the Vault User
EDM118I EDMADMIN's password in the Vault Relational
EDM118I Database.
EDM118I
EDM118I It uses as input, the edmodule.defaults.sh
EDM118I file to obtain the appropriate information
EDM118I to perform these tasks.
EDM118I ****************************************

Would you like to continue [yes]?:

EDM120I ****************************************
EDM120I Updating the Vault User EDMADMIN's Password
EDM120I in the Vault Relational Database.
EDM120I ****************************************

CINAPW008I The Vault password for Vault user
EDMADMIN has been updated.

EDM158I ****************************************
EDM158I The Vault User EDMADMIN Password Update
EDM158I Module has completed successfully.
EDM158I ****************************************
```

Step 6: Loading the Revision Code Scheme

In this step, the tool loads the revision code scheme.

Enter either yes or no when the tool asks you whether it should continue.

```
EDM178I ****************************************
EDM178I Running Vault Revision Code Loading Module
EDM178I (edmrclm).
EDM178I ****************************************
```

```
EDM121I ****************************************
EDM121I Vault Revision Code Scheme Loading module.
EDM121I (edmrclm)
EDM121I
EDM121I This module loads the Vault Revision Code
EDM121I Scheme into the Vault Relational Database.
EDM121I
EDM121I It uses as input, the edmodule.defaults.sh
EDM121I file to obtain the appropriate information
EDM121I to perform these tasks.
EDM121I ****************************************

Would you like to continue [yes]?:

EDM123I ****************************************
EDM123I Loading the Vault Revision Code Scheme into
EDM123I the Vault Relational Database.
EDM123I ****************************************

The revision codes have been successfully loaded.

EDM159I ****************************************
EDM159I The Vault Revision Code Scheme Loading
EDM159I Module has completed successfully.
EDM159I ****************************************
```

Step 7: Starting the Server Network Processes

In this step, the tool starts up the server network processes in background.

Enter either yes or no when the tool asks you whether it should continue.

```
EDM180I ****************************************
EDM180I Running Vault Server Network Startup Module
EDM180I (edmsnsm).
EDM180I ****************************************

EDM124I ****************************************
EDM124I Vault Server Network Startup module.
EDM124I (edmsnsm)
EDM124I
```

```
EDM124I This module starts the Vault Server Network
EDM124I Processes.
EDM124I
EDM124I It uses as input, the edmodule.defaults.sh
EDM124I file to obtain the appropriate information
EDM124I to perform these tasks.
EDM124I ****************************************

Would you like to continue [yes]?:

EDM126I ****************************************
EDM126I Starting the Vault Server Network
EDM126I Processes.
EDM126I
EDM126I The Vault Server Network Processes are
EDM126I being started in background.
EDM126I
EDM126I This will take a few minutes; please be
EDM126I patient.
EDM126I ****************************************

EDM127I ****************************************
EDM127I The Vault Server Network Processes have
EDM127I been successfully started.
EDM127I ****************************************
```

Step 8: Adding Storage Pools

In this step, the tool adds storage pools to the Vault relational database. You must have created the storage pools before starting this installation. Refer to Chapter 1, “Preparing to Install Vault Software on UNIX” for pre-installation tasks.

Enter either yes or no when the asks with you whether it should continue.

```
EDM182I ****************************************
EDM182I Running Vault Storage Pool Creation Module
EDM182I (edmspcm).
EDM182I ****************************************

EDM148I ****************************************
EDM148I Vault Storage Pool Creation module.
EDM148I (edmspcm)
EDM148I
```

```
EDM148I This module adds the Vault Storage Pools to
EDM148I the Vault Relational Database.
EDM148I
EDM148I It uses as input, the edmodule.defaults.sh
EDM148I file to obtain the appropriate information
EDM148I to perform these to tasks.
EDM148I ****************************************

Would you like to continue [yes]?:

EDM150I ****************************************
EDM150I Adding the Vault Storage Pools to the Vault
EDM150I Relational Database.
EDM150I ****************************************

EDM151I ****************************************
EDM151I Signing on to Vault.
EDM151I ****************************************

EDM152I ****************************************
EDM152I Adding the Vault Storage Pools.
EDM152I ****************************************

CDMASP354I Storage pool POOL1 has been added.
CDMASP354I Storage pool POOL2 has been added.

EDM153I ****************************************
EDM153I Signing off from Vault.
EDM153I ****************************************

CDMSOF017I Sign off from Vault completed
successfully.

EDM154I ****************************************
EDM154I Vault Storage Pools have been successfully
EDM154I added to the Vault Relational Database.
EDM154I ****************************************
```

Step 9: Installing Vault Attributes and Views

In this step, to update Oracle tables and install Vault attribute rules, Vault views, and Vault attributes, run the `navinstall` script.

Please note: Before running this script on a Vault that is to be distributed, perform the tasks described in Chapter 4, "Installing Distributed Vault on UNIX."

Run the `navinstall` script twice. The first time, the Vault attribute rules are installed. Stop and restart Vault and run the script again to install the Vault attributes.

The `navinstall` program is interactive. It asks you to accept or supply system data and prompts you to confirm that information.

To run `navinstall`, follow these steps:

1. Log in as `root` and set the $EPD_HOME environment variable to the appropriate Optegra home directory.
2. At the prompt run the `navinstall` script as follows:

   ```
   # $EPD_HOME/install/navinstall
   ```

   In the result generated, default values are shown in brackets ([]). Press `Return` to accept them.

   If the environment variable `LANG` is not set, it defaults to `C` and asks whether you want to accept `LANG=C`. If you accept the default `yes` by pressing `Return`, it will continue processing. If you enter `No`, `navinstall` aborts. Set the `LANG` variable and run the `navinstall` script again.

```
****************************************
Environment variable LANG is undefined
****************************************
LANG will default to C (English), Continue? [yes]:
```

3. Enter the user ID of your Optegra Vault Administration account after the following prompt:

Please note: In this sample result, the Vault Administration account is `edm` and the $EPD_HOME environment variable is set to the `/opt/epd/dm/v60/bin`.

```
Enter the user ID of your Optegra Vault
Administration account: edm
```

4. Verify the values and press `Return` to accept them or enter `yes` and correct them.

```
************************************************
Installation details you have specified are:-

Optegra Vault Administration account: edm
Optegra Vault/EPD.Connect installation directory
                                    :/opt/epd/dm/v60
************************************************
 Do you want to re-enter any values [no] ? :
```

5. Press `Return` to install the EPD.Connect Oracle tables. Then, either press `Return` to confirm the default `pdmdm` values, or enter new values.

```
OK to install the EPD.Connect Oracle Tables [yes]:

Enter the Optegra Vault Oracle database manager
userid [pdmdm]:
Enter the Optegra Vault Oracle database manager
password [pdmdm]:

Enter the Optegra Vault Oracle IQF userid [pdmqf]:
Enter the Optegra Vault Oracle IQF password [pdmqf]:

Enter the Optegra Vault Batch Transfer
Concurrency [6]:

Creating New Tables in ORACLE Database.
************************************************
Processing completed.
************************************************
```

6. Press `Return` to install the Optegra Vault. Then, either press `Return` to confirm the default `pdmqf` values, or enter new values.

```
OK to install the EPD.Connect Optegra Vault Views
[yes]:

Enter the Optegra Vault Oracle database manager
userid   [pdmdm]:
Enter the Optegra Vault Oracle database manager
password [pdmdm]:

Enter the Optegra Vault Oracle IQF userid [pdmqf]:
Enter the Optegra Vault Oracle IQF password [pdmqf]:

************************************************
```

```
Creating New Views and Synonyms in ORACLE Database.
************************************************
Press Return to install DV support for Oracle IQF
user.
Install the DV support for Oracle IQF user [yes]:
************************************************
Granting SELECT to Optegra Vault Oracle IQF User.
************************************************
Processing completed.
```

7. Press Return not to install EPD.Connect DV Views.

```
 OK to install the EPD.Connect DV Views [no]:
************************************************
Requested NOT to install EPD.Connect DV Views.
************************************************
Sun Microsystems Inc.SunOS 5.6 GenericAugust 1997

OK to install the Navigator Optegra Vault Attribute
rules [yes]:
****************************************
The filename attribute rule already exists.
****************************************

****************************************
Running edmrparser for attrrule.cg
****************************************

****************************************
Running edmrparser for attrtyps.cg
****************************************

****************************************
Running ldamlogic.
****************************************

./ldamlogic: EDM control table load for EDMVault

****************************************
Successfully installed new rule.
****************************************

****************************************
THE VAULT MUST BE RESTARTED FOR THIS RULE TO BECOME
ACTIVE THIS WILL BE REQUIRED WHEN INSTALLING THE
VAULT ATTRIBUTES.
```

```
PLEASE RESTART THE VAULT BEFORE CONTINUING RE-RUN
THE INSTALL SCRIPT and INSTALL NAV005I ATTRIBUTES
ONLY.
*****************************************
```

8. At the following prompt, enter no and exit `navinstall`.

```
OK to install EPD Interface to CADDS5[yes]:yes
To install CADDS rulebase, accept the default yes
for the following option. The following is a sample
log of the CADDS rulebase installation:
OK to add CADDS Application Environment to Optegra
Vault [yes]:

Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:

Checking New Tables in ORACLE Database.....
Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:

Checking New Tables in ORACLE Database.....

Enter the Vault Oracle IQF userid [pdmqf]:
Enter the Vault Oracle IQF password [pdmqf]:

Creating New Tables and Views in ORACLE Database
.....

Toolkit Table creation Complete.

Enter the Vault Oracle database manager userid
[pdmdm]:
Enter the Vault Oracle database manager password
[pdmdm] :

Adding CADDS Application to Optegra Vault.

Addition of CADDS Application to Optegra Vault

OK to install the CADDS Vault Attributes [yes]:
```

```
Enter the EDMADMIN user password [edmadmin]:

Signing on to the Vault as edmadmin...

Adding CADDS attributes.
CAMARL100I CONFIG_RULE_DB1 has been added.
CAMARL100I CONFIG_RULE_PS has been added.
CAMARL100I CONFIG_OPT_RULE_DB1 has been added.
CAMARL100I CONFIG_OPT_RULE_PS has been added.

CADDS attributes added.

Optegra Interface for CADDS Installation Complete.

****************************************
EPD.Connect Installation completed.
****************************************
```

Step 10: Activating the E-Mail Trigger

In this final step, the tool activates the e-mail trigger. The e-mail trigger sends e-mail in addition to messages when users execute the REQRVW (request review), RSVP (respond to review), or SENDMSG (send message) commands. E-mail is sent at the same time as the duplicate message.

Please note: If you want to edit e-mail triggers or create new ones, you must have purchased Vault Programming. See the *Vault Programmer Guide* for details.

E-mail recipients must have an alias in the /etc/aliases file. The alias must map their user ID to the UNIX-based user ID on the node where the triggered process is executed.

If you already have triggers for the RSVP, REQRVW, and SENDMSG commands, performing this step replaces your trigger for each of these commands. To set the trigger for one or two of the commands or to merge your trigger with the e-mail trigger, do not perform this step. Instead, execute the CHGCTL (change command trigger list) command.

Warning

When the trigger is activated, sign on to Vault with the user ID. This user ID defaults to EDMADMIN. You

can append files to the SENDMSG, RSVP, and REQRVW commands. For SENDMSG, the file is appended to the message text box, while for RSVP and REQRVW, the file is appended to the comment box. The user ID that had signed on must have access to any appended files or else the contents of these files will not be displayed in the e-mail message.

When you execute the `cichgetl` command, first issue the `cichgetl` command with `all` as the command name and Active set to `yes`. Then execute `cichgetl` for `cireqrvw`, `cisendmsg`, or `cirsvp` with the values that follow.

- Active = `Y`
- Trigger at beginning = `N`

  Timeout = `0`
- Trigger at end = `Y`

  Timeout = `0`
- Application entity name = `COMMAND_TRIGGER`

You must have Vault Programming installed in order to use the `CHGCTL` command. For additional information, see the *Vault System Administrator Guide*.

Enter either `yes` or `no` when the tool asks you whether it should continue.

```
EDM184I ****************************************
EDM184I Running Vault Activate E-Mail Trigger
EDM184I Module (edmaetm).
EDM184I ****************************************

EDM128I ****************************************
EDM128I Vault Activate E-Mail Trigger module.
EDM128I (edmaetm)
EDM128I This module Activates the Vault E-Mail
EDM128I Trigger.
EDM128I It uses as input, the edmodule.defaults.sh
EDM128I file to obtain the appropriate information
EDM128I to perform these tasks.
EDM128I ****************************************

Would you like to continue [yes]?:
```

```
EDM151I ****************************************
EDM151I Signing on to Vault.
EDM151I ****************************************
CDMSON016I Sign on to Vault server SHWETHA
completed successfully. You have 55 Vault
message(s).
EDM130I ****************************************
EDM130I Activating the Vault E-Mail Trigger.
EDM130I ****************************************
CDMCTL387I The command trigger for SENDMSG has been
CDMCTL387I changed.
CDMCTL387I The command trigger for REQRVW has been
CDMCTL387I changed.
CDMCTL387I The command trigger for RSVP has been
CDMCTL387I changed.
CDMCTL388I The command trigger list has been
CDMCTL387I changed to active.

EDM153I ****************************************
EDM153I Signing off from Vault.
EDM153I ****************************************
CDMSOF017I Sign off from Vault completed
successfully.

EDM160I ****************************************
EDM160I The Vault Activate E-Mail Trigger Module
EDM160I has completed successfully.
EDM160I ****************************************

EDM186I ****************************************
EDM186I The Vault Software Installation Module has
EDM186I finished successfully.
EDM186I
EDM186I The Vault Software has been successfully
EDM186I installed.
EDM186I ****************************************
```

Chapter 3

Postinstallation Tasks for UNIX

This chapter discusses the final tasks in the installation of Vault and Programming. Perform these tasks after you have installed Vault for the first time or after you have performed your refresh or migration.

- Supporting the Data Dictionary
- Assigning Database Users to Temporary Tablespace
- Changing Your Account Passwords
- Adding Clients and Changing Passwords in the NSM Configuration File
- Specifying Attribute Server Information in the NSM Configuration File
- Implementing Client Entries
- Distributing the PM Configuration File
- Creating Additional Storage Pools
- Setting Storage Pool Ownership and Permissions
- NFS Pool Support
- Enabling Archivelog Mode
- Setting Up a Second Oracle Control File
- Setting Environment Variables for Interfaces
- Setting Up EPD Interfaces for Vault on UNIX
- Backing Up the Vault Database

Supporting the Data Dictionary

After your first installation of Vault, you must run a script (once) to support the Data Dictionary for the graphical user interface and the binders facility. From the $EDM_HOME/dictionary directory, as the UNIX Vault account, enter:

```
% ./ddinstall
```

If you need more information, refer to the README file in the above directory.

Assigning Database Users to Temporary Tablespace

Use the Oracle `alter user` command to assign the following database users to a temporary tablespace so that they can create the temporary segments within:

```
asm  edmattr  edmui  pdmdm  pdmqf
```

Here is a sample of the `alter user` command, showing the Oracle user ID `asm` being set up to use `tempspace_name`:

```
% svrmgrl
SVRMGR> connect system/password
SVRMGR> alter user asm temporary tablespace
tempspace_name;
SVRMGR> exit
```

Refer to *ORACLE Server Administrator's Guide* for specific information pertaining to the `alter user` command.

If you choose not to assign the database users to your own temporary tablespace, the Vault database users default to using the temporary segments located in the EDM_TEMPSPACE tablespace.

Please note: Oracle V8.1.7 does not recommend using temporary segments in the Oracle V8.1.7 system tablespace for third-party applications.

Changing Your Account Passwords

It is optional, but recommended, that you change the passwords for the Oracle accounts: `asm`, `edmattr`, `edmui`, `pdmdm`, `pdmqf`, and `edmdv` (for DV only). To do this, enter the following commands:

```
% svrmgrl
SVRMGR> connect system/password
SVRMGR> grant connect to asm identified by
newpassword1;
SVRMGR> grant connect to edmattr identified by
newpassword2;
SVRMGR> grant connect to edmui identified by
newpassword3;
SVRMGR> grant connect to pdmdm identified by
newpassword4;
SVRMGR> grant connect to pdmqf identified by
newpassword5;
SVRMGR> grant connect to system identified by
newpassword6;
```

The password parameter is for the Oracle V8.1.7 user system and newpassword1-n is for the new password (8 or fewer characters) for each account.

Please note:

- If, as recommended, you change the passwords for the Oracle V8.1.7 `edmattr`, `edmui`, `pdmdm`, and `pdmqf`, you must change them in the `nsm.config` file, as shown in “Adding Clients and Changing Passwords in the NSM Configuration File” on page 3-3.
- For the `asm` user, do not modify the `nsm.config` file.

Adding Clients and Changing Passwords in the NSM Configuration File

After successfully installing Vault, edit the NSM configuration file to create system entries for your client nodes. The installation tool has already created a workable version of the file.

An example of an edited `nsm.config` file follows. Edited parameters are in bold. These are the portions that you must edit.

Create a workstation entry for each workstation in your Vault network.

```
#######################################################
#           Vault
#######################################################
# EDMVault NSM Configuration file template
#
# To use this template:
# 1. Copy nsm.config-template to
#    $EDM_HOME/data/nsm.config
#    Edit this file by:
#
# 1. Globally substituting “largo” for your servers
#    node name.
# 2. Globally substituting “LARGO” for your servers
#    node name in upper case.
# 3. Make a copy of the Client Model for each
#    workstation node.
#    Change “NODE(name)” to be the workstation’s
#    node name and “ALIAS(NAME)” to be the
#    workstation’s node name in upper case.
# 4. Change OWNER(edm) to an appropriate value for
#    your installation.This parameter value should
#    match the group id for the EDMVault server
#    process accounts (LOG,DM,DD,,etc.). If not
#    properly set then the Process Control Agent
#    (PCA) may NOT be able to start EDM processes.
# 5. Save the file after editing.
#######################################################

#######################################################
#  EDMVault Server node Configuration
#######################################################

GROUP(edmgrp,1)

##DISTRIBUTED-VAULT##
GROUP(edm1_dvgroup,1)
##DISTRIBUTED-VAULT##

NODE(largo)
 ALIAS(LARGO,largo-gw,LARGO-GW,PDM)

  DOMAIN(process_manager_domain)
    AE(process_manager_AE)
```

```
        SELF
        INSTANCE(0)
           NETADDR(udp,9000)
             NETADDR(loc,PMGR)
  DOMAIN(LARGO)
    ALIAS(largo)

#  Application Entity for PDM Logging.
    AE(PDMLOG,edmgrp,1)
        USER(LOG=IEWFVT)
        OWNER(edm)
        PATH($EDM_HOME/scripts/LOG.STARTUP)
        WORKDIR(/tmp)
        CLOSE
        DEMAND(NEVER)
        SERVER
        CONCURRENCY(25,25)
        GRPCTL(1,1,2)

#  Application Entity for EDM Attribute management.

    AE(EDMATTR,edmgrp,2)
        OWNER(edm)
        PATH($EDM_HOME/scripts/ATTR.STARTUP)
        WORKDIR(/tmp)
        DMSQLID(EDMATTR)
        DMSQLPW(TRUNCATE)
        CLOSE
        DEMAND(IF_STARTED)
        SERVER(NO_TIMEOUTS)
        CONCURRENCY(25,25)
        GRPCTL(1,1,2)

#  Application Entity for PDM Data Manager
Facility.

    AE(PDMDM,edmgrp,3)
        PATH($EDM_HOME/scripts/DM.STARTUP)
        OWNER(edm)
        WORKDIR(/tmp)
        CLOSE
        DEMAND(NEVER)
        SERVER(NO_TIMEOUTS)
        CONCURRENCY(10,10)
        GRPCTL(1,1,2)
```

```
#  Application Entity for PDM Data Distribution
Facility.

    AE(PDMDD,edmgrp,4)
        PATH($EDM_HOME/scripts/DD.STARTUP)
        OWNER(edm)
        WORKDIR(/tmp)
        USER(AUTOREGISTER=NO)
        USER(REGLEVEL=R)
        CLOSE
        DEMAND(IF_STARTED)
        SERVER
        CONCURRENCY(1,1)
        MAXINST(6)
        GRPCTL(1,1,2)

#  Application Entity for PDM Administrative
Commands.

    AE(PDMADMN,edmgrp,5)
        PATH($EDM_HOME/scripts/ADMN.STARTUP)
        OWNER(edm)
        WORKDIR(/tmp)
        CLOSE
        DEMAND(IF_STARTED)
        SERVER
        CONCURRENCY(1,1)
        MAXINST(4)
        GRPCTL(1,1,2)

#  Application Entity For Administrative Commands.

    AE(ADMIN_SERVER,edmgrp,6)
       ALIAS(EDMADMINSVR)
       PATH($EDM_HOME/scripts/ADMIN.STARTUP)
       OWNER(edm)
       WORKDIR(/tmp)
       CLOSE
       DMSQLID(PDMDM)
       DMSQLPW(TRUNCATE)
       DEMAND(IF_STARTED)
       SERVER(NO_TIMEOUTS)
       CONCURRENCY(1,1)
       USER(SVR_DISPATCH=SQLSVR)
       USER(SVR_DB_CONNECT=YES)
```

```
        MAXINST(3)
        GRPCTL(1,1,2)

#
# The following AE should be uncommented in order
# to run the Pro/INTRALINK Optegra Interface.
# This requires the Pro/INTRALINK Optegra Software
# to be installed first.
#

#  Application Entity for OPTCHECKER

      AE(OPTCHECKER,edmilink,1)
      DMSQLID(PDMDM)
      DMSQLPW(TRUNCATE)
      OWNER(edm)
      USER(SVR_PM_BIND=YES)
      USER(SVR_OPTCHECKER=YES)
      USER(SVR_DB_CONNECT=YES)
      DEMAND(ANYTIME)
      USER(OPTCHECKER_EXECUTION_FREQUENCY=60)
USER(OPTCHECKER_INIT=$EDM_HOME/reposit/optchecker.
ini)
      USER(ILINK_HOME=$EDM_HOME)
      PATH($EDM_HOME/scripts/OPTCHECKER.STARTUP)
      WORKDIR(/tmp)
      MAXINST(1)
      CLOSE
      GRPCTL(1,1,2)

#
# The following AE should be uncommented in order
# to run the E-Mail Trigger,
# but this requires the EDMProjects Software to be
# installed first.
#

# E-Mail Command Trigger

     AE(COMMAND_TRIGGER,edmgrp,7)
       ALIAS(TRIGGER)
       PATH($EDM_HOME/trig/start-COMMAND-TRIGGER)
       OWNER(edm)
       USER(CT_USERID=edmadmin)
       USER(CT_USERPW=TRUNCATE)
```

```
        WORKDIR(/tmp)
        CLOSE
        MAXINST(2)
        GRPCTL(1,1,0)

#  TRIGGER MANAGER DEFINITION
#
# The following AE is intended for use with FTR.
# This AE is the TRIGGER MANAGER
# for the following post_command triggers;
#
# delete
# get
# marka
# markd
# replace
# store
# unmark
# update
#
# These triggers, named with the following format;
# post_<cmd>_00
#
#  where <cmd> is one of the preceding list,
#  reside, by at location;
#
#   $EDM_HOME/triggers/run/post_<cmd>_00 etc.
#
# If FTR is to be executed on this vault server
# node, then please
# uncomment this AE definition, and make
# appropriate changes for
#  your site.
#
#  Please note, and modify, as necessary;
#
#    GTM_ORACLEID=PDMDM
#    GTM_ORACLEPW=TRUNCATE
#    GTM_USERID=EDMADMIN
#    GTM_USERPW=CHANGE
#    TRIG_ORACLEID=PDMDM
#    TRIG_ORACLEPW=TRUNCATE
#
# You should also note the commands indicated
# above must be
```

```
#  enabled, via the CHGCTL command for post command
#  triggering.
#
#   AE(TRIGGER_MANAGER,edmgrp,8)
#     PATH($EDM_HOME/trig/start-TRIGGER-MANAGER)
#     OWNER(edm)
#     USER(GTM_ORACLEID=PDMDM)
#     USER(GTM_ORACLEPW=TRUNCATE)
#     USER(GTM_USERID=EDMADMIN)
#     USER(GTM_USERPW=CHANGE)
#     USER(TRIG_ORACLEID=PDMDM)
#     USER(TRIG_ORACLEPW=TRUNCATE)
#     WORKDIR(/tmp)
#     CLOSE
#     MAXINST(2)
#     GRPCTL(1,1,1)
#

#  Application Entity for NAS SQL Facility Server

    AE(NSQL_Server,sqlgrp,1)
        DEMAND(ANYTIME)
        SERVER
        CLOSE
        CONCURRENCY(1,11)
        PATH($EDM_HOME/bin/anasqlsv)
        OWNER(edm)
        WORKDIR(/tmp)
        MAXINST(5)
        GRPCTL(0,0,1)

#  Application Entity for NAS SQL Facility Client

    AE(NSQL_Client)
        CLOSE
        MAXINST(5)

# SQLHLI Query Server for up to 15 Clients per
database connection (ReadOnly)

    AE(QUERY_SERVER,edmgrp,8)
      ALIAS(EDMQRYSVR)
        OWNER(edm)
        PATH($EDM_HOME/scripts/QRYSVR.STARTUP)
        WORKDIR(/tmp)
```

```
            DMSQLID(PDMDM)
            DMSQLPW(TRUNCATE)
            CLOSE
            DEMAND(ANYTIME)
            SERVER
            CONCURRENCY(15,15)
            USER(SVR_DISPATCH=SQLSVR)
            USER(SVR_DB_CONNECT=YES)
            MAXINST(5)
            GRPCTL(1,1,2)

    # SQLHLI SQL Server one Client per Server and
    database connection (ReadWrite)

        AE(SQL_SERVER,edmgrp,9)
          ALIAS(EDMSQLSVR)
          ALIAS(SQLSVR)
            OWNER(edm)
            PATH($EDM_HOME/scripts/SQLSVR.STARTUP)
            WORKDIR(/tmp)
            DMSQLID(PDMDM)
            DMSQLPW(TRUNCATE)
            CLOSE
            DEMAND(ANYTIME)
            SERVER(NO_TIMEOUTS)
            CONCURRENCY(1,1)
            USER(SVR_DISPATCH=SQLSVR)
            USER(SVR_DB_CONNECT=YES)
            MAXINST(5)
            GRPCTL(1,1,2)

    # PC Server for Desktop Support

        AE(DESKTOP_SERVER,edmgrp,10)
            OWNER(edm)

    PATH($EDM_HOME/scripts/DESKTOP_SERVER.STARTUP)
            WORKDIR(/tmp)
            CLOSE
            GRPCTL(1,1,1)

    # EDM_O Server for Desktop Support

        AE(DESKTOP_EDMOSRV,edmgrp,11)
            OWNER(edm)
```

```
PATH($EDM_HOME/scripts/DESKTOP_EDMOSRV.STARTUP)
        WORKDIR(/tmp)
        CLOSE
        GRPCTL(1,1,1)

# AE for EDM GUI

    AE(WG_Client)
        CLOSE
        MAXINST(3)

# AE for EDMOSRV Client/Navigator

    AE(EDMOSRV_Client)
        CLOSE
        MAXINST(15)

#  Application Entity for PDM Client Users
    AE(PDMUSER)
        USER(PDMNODE=LARGO)
        DMSQLID(PDMDM)
           DMSQLPW (TRUNCATE)
           QFSQLID(PDMQF)
           QFSQLPW (CHANGE)
          CONCURRENCY(1,1)
        UISQLID(EDMUI)
        UISQLPW(CHANGE)
        MAXINST(12)
        CLOSE
        DOMAIN(PDM)
        AE(CADDS)
           USER(DMNODETYPE=PDM)
           MAXINST(12)
           CLOSE
#####################################################
# Model configuration parameters users to define
# EDMClient nodes.
#####################################################
MODEL(EDMClient)
    DOMAIN(LARGO)
     ALIAS(largo)
     AE(PDMUSER)
        USER(PDMNODE=LARGO)
        DMSQLID(PDMDM)
```

```
            DMSQLPW(TRUNCATE)
            QFSQLID(PDMQF)
            QFSQLPW(TRUNC)
            UISQLID(EDMUI)
            UISQLPW(TRUN)
            MAXINST(12)
            CLOSE
        AE(NSQL_Client)
            CLOSE
            MAXINST(5)

    # AE for EDM GUI
        AE(WG_Client)
            CLOSE
            MAXINST(3)

    # AE for Navigator
        AE(EDMOSRV_Client)
            CLOSE
            MAXINST(15)

        DOMAIN(PDM)
         AE(CADDS)
            MAXINST(6)
            CLOSE
    END_MODEL

    ######################################################
    # Model for Remote Tape Server AE rc.local should
    # be modified to start a Process Control Agent
    # (PCA) at reboot for the remote tape node.
    #
    # SERVER(NO_SERVER_TIMEOUTS) indicates that this
    # server will not suffer heartbeat timeouts during
    # tape control operations
    ######################################################
    MODEL(Tape_Server)
      DOMAIN (LARGO)
        AE(EDMTS_CLASSA_V1,tapegrp,1)
          SERVER(NO_SERVER_TIMEOUTS)
          PATH($EDM_HOME/bin/asrtserv)
          DEMAND(ANYTIME)
          OWNER(root)
          WORKDIR(/tmp)
          CONCURRENCY(1,1)
```

```
      CLOSE
      GRPCTL(0,0,2)
END_MODEL

#####################################################
# Sample CADDStation Client node using Client Model
#####################################################
NODE (mango)
 ALIAS (MANGO)
@EDMClient
#####################################################
# Sample CADDStation Client node with Remote
# Tape
#####################################################
NODE (kiwi)
 ALIAS (KIWI)
 @EDMClient
 @Tape_Server

#####################################################
# Starting PDM Network processes with the PCA.
#####################################################
          START(:LARGO.edmgrp)
##DISTRIBUTED-VAULT##
          START(:LARGO.edm_dvgrp)
##DISTRIBUTED-VAULT##
#         START(:LARGO.edmilink)
$
```

Specifying Attribute Server Information in the NSM Configuration File

During process initialization, the attribute server retrieves the contents of the `USER` parameter defined for the `EDMATTR AE` in the `nsm.config` file. The `USER` parameter has a single argument of the form keyword=data.

The keyword is `WARMSTART`, in uppercase and the data is `YES` or `NO`. A `YES` value causes the attribute server to warmstart the attribute database. A `NO` value causes the attribute server to skip the warmstart processing. If the `USER` parameter is missing or the keyword is not `WARMSTART`, then a `YES` value is assumed.

When the attribute server does warmstart, it disconnects from the process manager by means of a deactivate call. This avoids the 30-minute connection timeout problem. When the warmstart completes, the attribute server reconnects to the process manager and announces to the process manager that it is available for user input.

Implementing Client Entries

After editing the `nsm.config` file to create entries for the client nodes, bring down the network and restart it. The network will then recognize the new nodes. The procedure follows.

1. Log in to the Vault account.
2. To bring down the network, enter these commands:

```
% nsmstop -pca
% nsmstop -all
```

3. Verify that the processes are down.
4. To bring up the network, enter this command to start the process manager:

```
% PMGR.STARTUP &
```

5. Enter this command to start all other network processes:

```
% PCA.STARTUP &
```

Distributing the PM Configuration File

After you have restarted the Vault processes, distribute the Process Manager (`pm.config-client`) file to the client stations. The `pm.config` file defines where the NSM Process Manager resides.

Copy the `pm.config` file (located in the $EDM_HOME`/data` directory) to each workstation that will access Vault. The `pm.config` file must exist on each workstation in the directory $EDM_HOME. You can use the File Transfer Protocol (`ftp`) to transfer the file to each workstation that will access Vault.

Perform the following sequence for each Locator or Vault client system that you have set up in the `nsm.config` file to access the server.

1. Log in to the Vault account:

   ```
   # cd $EDM_HOME/data
   ```

2. Use the File Transfer Protocol (`ftp`) to connect to the client system:

   ```
   # ftp client_system_name
   Name (client_system_name: user ) : edm_client_account_name
   Password:
   ```

3. Change directory to the client's `$EDM_HOME/data`:

   ```
   ftp> cd $EDM_HOME/data
   ```

4. Copy the `pm.config` file to the client's `$EDM_HOME/data` directory:

   ```
   ftp> put pm.config-client pm.config
   ftp> bye
   ```

Creating Additional Storage Pools

Before installing Vault refer to *Installing Optegra Applications* and follow the instructions on planning and creating storage pools.

To add the storage pools to the Vault database, you must have read and write access to the storage pool directories. Storage pools must have been created before your installation, refresh, or migration for you to be able to add additional ones.

To add a storage pool, sign on to Vault as user `edmadmin` and issue the `ADDSP` (Add Storage Pool) command. The `ADDSP` command makes a storage pool directory available for Vault file storage by mapping a Vault logical storage pool name to a storage pool directory.

Storage pool names can have up to 8 characters.

Warning

Once a storage pool has been added to the Vault database, neither the storage pool nor the storage pool directory name can be removed. Files within the directory can be removed only by authorized Vault users.

An example using the command-line format follows.

```
% cisignon userid=edmadmin userpw=edmadmin
% ciaddsp poolname=pool1 poolinfo=/pool1
```

Here is an example of adding an NFS-mounted storage pool to the database:

```
% ciaddsp poolname=pool2 poolinfo=/farm.pool2
```

Setting Storage Pool Ownership and Permissions

You can establish the ownership of storage pools and set the permissions by logging in to the Vault server system as `root`:

```
# cd /
```

Next, enter the following command to change the ownership as shown in this example:

```
# chown -R edm pool1 /farm.pool2
# chgrp -R dba pool1 /farm.pool2
```

where edm is the name of your Vault account and dba is the number of the Vault group name.

Next, enter the following command to change the permissions:

```
# chmod -R 770 pool1 /farm.pool2
```

Please note: Additional steps must be performed if you are adding NFS storage pools. These are provided in the next topic, “NFS Pool Support” on page 3-16.

NFS Pool Support

If you have created or added NFS storage pools, you must perform the following steps:

1. Get the Vault Account’s password entry information from the actual Vault Server system:

   ```
   % grep ^edm_account_name: /etc/passwd
   edm::12:5:EDM account:$EDM_HOME:/bin/csh
   ```

2. Log in as `root` to the REMOTE system where the NFS storage pools actually reside.

   ```
   % rlogin remote_system_name -l root
   ```

3. Add the Vault Account's password entry to the REMOTE system's `/etc/passwd` file.

```
# vi /etc/passwd
edm::12:5:EDM account:$EDM_HOME:/bin/csh
```

4. Make the Vault Account the owner of the NFS pool directories.

```
# cd /
# chown -R edm pool1 pool2
# chgrp -R dba pool1 pool2
```

where edm is the name of your Vault account and dba is the number of the Vault group name.

5. Set the file protection mode to 770 for the `nfs` pool directories

```
# cd /
# chmod -R 770 pool1 pool2
```

Enabling Archivelog Mode

Vault's database recovery mechanisms require that the database be run in archivelog mode to provide complete roll-forward recovery in the event of a media failure, for example, a disk crash.

If archivelog mode is not used, the `recsp` (recover storage pool) command cannot be used to restore storage pools, because the Oracle V8.1.7 and Vault databases would subsequently be out of sync.

Warning

Oracle V8.1.7 online redo log files should be on a different disk drive from the database files. Offline redo log files, those files that have been archived, should be copied to tape and removed.

See the *ORACLE RDBMS Database Administrator's Guide* for instructions.

Setting Up a Second Oracle Control File

It is advisable to use at least two Oracle control files, each located on a different device. To set up a second control file, follow these steps:

1. Log in as root on the Vault server system.
2. On another device (where Oracle is not installed), create an Oracle directory to hold the second control file:

```
# cd /usr2
# mkdir oracle
# chown oracle_owner oracle
```

   Where oracle_owner is the owner of the oracle account.

```
# chgrp dba oracle
```

3. Log in as Oracle on the Vault server system and shut down the Oracle database:

```
# svrmgrl
SVRMGR> connect internal
SVRMGR> shutdown
SVRMGR> exit
```

4. Change to the Oracle database directory:

```
# cd ${ORACLE_HOME}/dbs
```

5. Copy the first control file to make the second control file:

```
# cp cntrl${ORACLE_SID}.dbf /usr2/oracle
```

6. Edit the `init${ORACLE_SID}.ora` file, adding the following line:

```
control_files =
${ORACLE_HOME}/dbs/cntrl${ORACLE_SID}.dbf,
/usr2/oracle/cntrl${ORACLE_SID}.dbf
```

7. Start up Oracle.

```
# svrmgrl
SVRMGR> connect internal
SVRMGR> startup
SVRMGR> exit
```

Repeat these steps whenever you need to add more control files.

Setting Environment Variables for Interfaces

Log in as Vault Administrator and set the following environment variables in the `.login` file after installing or refreshing Vault:

- `CVEPD_WIN_CONFIG=${EPD_HOME}/data/reposit/cfgmotif.ini`
- `CVEPD_INIT=$HOME/cvepd.ini`

Please note: Set the preceding variable if `cvepd.ini` is present in the home directory.

- `CVEPD_INIT=${EPD_HOME}/data/reposit/cvepd.ini`

Please note: Set the preceding variable if `cvepd.ini` is not present in the home directory.

- `CA_BINDIR=${EPD_HOME}/bin`
- `CA_LIBDIR=${EPD_HOME}/data/explorer/library`
- `STEP_DIR=${EPD_HOME}/data/step`

Please note: These variables exist in the `.login-template` file. When a Vault refresh is performed, the `.login` file of the Vault Administrator account is not replaced by the `.login-template` file. Therefore, when you perform a Vault refresh, you must set these variables.

Setting Up EPD Interfaces for Vault on UNIX

After installing or refreshing Vault, set up the EPD interfaces for Pro/ENGINEER, MEDUSA, and CATIA on Vault if you use any of these products. Set up these interfaces after installing Vault for the first time as well as after a Vault refresh.

Before setting up an EPD interface on Vault, do the following:

1. Log in as Vault Administrator.
2. Add `$EPD_HOME/cvperl/bin` to the PATH environment variable.
3. Set the LANG variable to the appropriate value (for example, en_US and fr) depending on the locale.

Pro/ENGINEER Support

To set up the EPD interface for Pro/ENGINEER support on Vault, do the following:

1. Change directory to `$EPD_HOME/install`:

   ```
   % cd $EPD_HOME/install
   ```

2. Execute the following command:

   ```
   % ./proeinst
   ```

   In the resulting output, default values are shown in brackets ([]). Press `Return` to accept them. The following is a sample of the output:

```
Enter the user id of your Vault Administration
account: edm

Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:

OK to add Pro/E Application Environment to Optegra
Vault [yes]:

Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:
Checking New Tables in ORACLE Database.....
New tables already exist.

Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:

Adding Pro/E Application to Optegra Vault.

Addition of Pro/E Application to optegra Vault
Complete.

OK to install the Pro/E Vault Attributes [yes]:

Enter the EDMADMIN user password [edmadmin]:
```

```
Signing on to the Vault as edmadmin

CDMSON016I Sign on to Vault server ADBHUT completed
successfully. You have n Vault message(s).

Adding Pro/E attributes.

CDMSOF017I Sign off from Vault completed
CDMSOF017I successfully.

Pro/E attributes added.
Optegra Interface for Pro/E Installation Complete.
```

MEDUSA Interface

To set up the EPD interface for MEDUSA support on Vault, do the following:

1. Change directory to `$EPD_HOME/install`:

   ```
   % cd $EPD_HOME/install
   ```

2. Execute the following command:

   ```
   % ./medinst
   ```

   In the resulting output, default values are shown in brackets ([]). Press `Return` to accept them. The following is a sample of the output:

```
Enter the user id of your Vault Administration
account: edm

OK to add MEDUSA Application Environment to Optegra
Vault [yes]:
Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:

Checking New Tables in ORACLE Database.....
New tables already exist.

Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:
```

```
Adding MEDUSA Application to Optegra Vault.

OK to install the MEDUSA Vault Attributes [yes]:

Enter the EDMADMIN user password [edmadmin]:
Signing on to the Vault as edmadmin
CDMSON016I Sign on to Vault server CHANDINI
CDMSON016I completed successfully. You have
CDMSON016I 69 Vault message(s).

Adding MEDUSA attributes.
MEDUSA attributes added.

Optegra Interface for MEDUSA Installation Complete.
```

CATIA Interface

To set up the EPD interface for CATIA on Vault, do the following:

1. Change directory to `$EPD_HOME/install`:

   ```
   % cd $EPD_HOME/install
   ```

2. Execute the following command:

   ```
   % ./catinst
   ```

   In the resulting output, default values are shown in brackets ([]). Press `Return` to accept them. The following is a sample of the output:

```
Enter the user id of your Vault Administration
account:edm

OK to add CATIA Application Environment to Optegra
Vault [yes]:
Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:

Checking New Tables in ORACLE Database.....
New tables already exist.

Enter the Vault Oracle database manager
userid [pdmdm]:
Enter the Vault Oracle database manager
password [pdmdm]:
```

```
Adding CATIA Application to Optegra Vault.

OK to install the CATIA Vault Attributes [yes]:

Enter the EDMADMIN user password [edmadmin]:
Signing on to the Vault as edmadmin
CDMSON016I Sign on to Vault server CHANDINI
CDMSON016I completed successfully. You have
CDMSON016I 69 Vault message(s).

Adding CATIA attributes.

CATIA attributes added.

Optegra Interface for CATIA Installation Complete.
```

Backing Up the Vault Database

After performing all the refresh and postinstallation tasks, execute the `ciubkup` command to universally back up the Vault database. For details of the `ciubkup` command, refer to *Vault Command Reference*.

Please note: Do not back up the Vault database after installing Vault for the first time.

Chapter 4

Installing Distributed Vault on UNIX

This chapter contains information on installing multiple Vaults for a distributed Vault environment.

- Installing Multiple Vaults
- Adding a New DOD to a Distributed Vault
- Sample Distributed Vault Installation
- Description of Distributed Vault Tablespaces
- Changing Your Password
- DV Setup for Rulebases

Installing Multiple Vaults

The installation of Distributed Vault (DV) links your Vaults into one logical system, the Distributed Object Directory. All participating Vaults must know about one another to directly access objects on remote Vaults. This section includes preparatory information and sample installations for two and three Vaults. You can link any number of Vaults.

Before Installing Distributed Vault

A Distributed Vault environment shares one Distributed Object Directory (`DOD`), on which you install on your first Vault. Each Vault must be installed before you begin. Determine the following in advance:

- Decide which Vault will have the `DOD`.
- Ensure that the Oracle V8.1.7 Server (RDBMS) and Oracle V8.1.7 Procedural Option (PL/SQL V2) have been installed.
- Increase your Oracle maximum datafiles to at least 60, otherwise you may have to regenerate your database. Refer to *Installing Optegra Applications*.
- Run `edminstall` on each Vault and perform the postinstallation tasks.

For ease of installation of your distributed Vaults, use distinct names for the Vault ID and the node ID. Write down the Vault ID, the node, the type, and the sequence number for each Vault for reference. Remember that all entries in the automatic installation are case-sensitive.

Please note: Running a portion of `dvinstall` that shuts down the network can take up to 8 minutes. Please be patient.

Procedure for Installing DV on Two Vaults

After installing Distributed Vault on two Vaults, the two Vaults will know about one another and the Distributed Object Directory (`DOD`).

Start Installation on Vault1 and Install the DOD

Install the DOD during the first installation. At the end of this procedure, Vault1 will know about Vault2.

1. Log in as Administrator (edmadmin) on Vault1.
2. Change to the $EDM_HOME/install directory.
3. Run edmdvinstall. The portion that shuts down the Vault network can take up to 8 minutes. See the sample installation of Distributed Vault at the end of this chapter.

```
# ./edmdvinstall
```

Please note: Answer yes when asked about installing the DOD on this node. Continue with the installation and answer the rest of the questions.

4. Sign on as Administrator (edmadmin).

```
% cisignon userid=edmadmin userpw=edmadmin
```

5. To add Vault2, enter this command:

```
% ciaddvault vaultid=VAULT2 node=vault2
type=vault seqno=2
```

Where VAULT2 is the name of the Vault you are adding.

Please note: The vaultid and node parameters are case sensitive. Shut down and restart the network processes so the command takes effect.

6. Run the following script to support Distributed Vault as the Optegra account, depending on either of the following two situations:
   a. If ddinstall and dddvinstall were not run during the postinstallation process of Vault installation, then do the following:

```
i)  % cd $EDM_HOME/dictionary
    % ./ddinstall
```

Answer yes when asked about installing Distributed Vault.

```
ii) % cd $EDM_HOME/dictionary/dv
    % ./dddvinstall
```

Please note: The dddvinstall script is to be executed on the DOD Vault only.

OR

   b. If ddinstall and dddvinstall were already run during the postinstallation process of Vault installation, do the following:

```
i)  % cd $EDM_HOME/dictionary
```

```
% ./ddrefresh
```

Answer yes when asked about installing Distributed Vault.

ii)
```
% cd $EDM_HOME/dictionary/dv
% ./dddvrefresh
```

Please note: The dddvrefresh script is to be executed on the DOD Vault only.

For more information, refer to the README file in $EDM_HOME/dictionary.

Installing Vault2 with the DOD Remote

This procedure lets Vault2 know about the DOD location and about Vault1.

1. Log in as Administrator (edmadmin) on Vault2.
2. Change to the $EDM_HOME/install directory.
3. Run edmdvinstall.

   ```
   # ./edmdvinstall
   ```

   Answer no, the default, when asked about installing the DOD on this node.

   Respond with Vault1 and Node1 about the DOD. Vault and node names are case-sensitive.

   Continue with the installation and answer the rest of the questions.
4. Sign on as Administrator (edmadmin).

   ```
   % cisignon userid=edmadmin userpw=edmadmin
   ```
5. To let Vault2 know about Vault1, enter this command:

   ```
   % ciaddvault vaultid=VAULT1 node=vault1
   type=vault seqno=2
   ```

   Where VAULT1 is the name of the system you are adding.

   Please note: The vaultid and node parameter is case sensitive.

   Shut down and restart the network processes, so the command takes effect.

6. Run the following script to support Distributed Vault as the Optegra account, depending on either of the following two situations:

   a. If `ddinstall` and `dddvinstall` were not run during the postinstallation process of Vault installation, then do the following:

```
% cd $EDM_HOME/dictionary
% ./ddinstall
```

OR

   b. For a previously installed Vault, changed to a Distributed Vault. If `ddinstall` and `dddvinstall` were already run during the postinstallation process of Vault installation, then do the following:

```
% cd $EDM_HOME/dictionary
% ./ddrefresh
```

Please note: For more information, refer to the `README` file in $EDM_HOME/`dictionary`.

This completes the installation for two Distributed Vaults.

Installing DV on Three or More Vaults

To install Distributed Vault on three or more Vaults, familiarize yourself with the previous procedure for installing two Distributed Vaults. The following must be true of all the Vaults in the distributive vault environment:

- Each Vault knows about all other Vaults in the distributed environment.
- Each additional Distributed Vault is linked remotely to the Distributed Object Directory (DOD).

In general, if you are adding Vaults to an existing Distributed Vault environment, follow this process:

1. Execute `edmdvinstall` to both configure the new Vault with the Distributed Vault feature and to identify the DOD-Vault to this new vault.
2. Execute `ciaddvault` to identify all of the other non-DOD Vaults to the new Vault.

For all the existing Vaults, you must execute `ciaddvault` there as well, identifying the new Vault to each of them. Keep in mind that in order for any two Vaults to perform together in a Distributed Vault environment, both vaults must be configured to know each other.

Adding a New DOD to a Distributed Vault

Perform the following steps to add a new primary or secondary DOD to a distributed Vault.

Adding a Primary DOD

1. Add the primary DOD.

```
${EDM_HOME}/bin/adcci ADDVAULT vaultid=${DODID}
vault-type=D vault-seqno=1
```

2. Create a LOCALDOD list.

```
${EDM_HOME}/bin/adcci ADDVLIST vaultlst=LOCALDOD
```

3. Add a primary DOD to the LOCALDOD.

```
${EDM_HOME}/bin/adcci ADDVLMEM vaultid=${DODID}
vaultlst=LOCALDOD
```

Adding a Secondary DOD

1. Add the secondary DOD.

```
${EDM_HOME}/bin/adcci ADDVAULT vaultid=${DODID}
vault-type=O vault-seqno=2
```

2. Create a LOCALDOD list. (The list may be already created while adding the primary DOD.)

```
# ${EDM_HOME}/bin/adcci ADDVLIST vaultlst=LOCALDOD
```

3. Add the secondary DOD to the LOCALDOD.

```
${EDM_HOME}/bin/adcci ADDVLMEM vaultid=${DODID}
vaultlst=LOCALDOD
```

Sample Distributed Vault Installation

The following sample Distributed Vault installation is provided for reference.

Enter either `yes` or `no` when the tool asks you whether it should continue. The default values are indicated in the brackets `[]`.

```
DVI001I ****************************************
DVI001I Distributed Vault Software Installation
DVI001I module. (edmdvinstall)
DVI001I
DVI001I This Installation module installs the Vault
DVI001I Software on your system by calling the
DVI001I following Vault DVI001I Software
DVI001I Installation Modules:
DVI001I
DVI001I edmsncm     [Vault Network Shutdown Module]
DVI001I edmdvfifm   [Vault Relational Database Fix
DVI001I              Module]
DVI001I edmdvmcnf   [Vault Network Setup Module]
DVI001I edmdvrdsm   [Vault DV Relational Database
DVI001I              Setup Module]
DVI001I edmdvrdlm   [Vault DV RDBMS Table Creation
DVI001I              and Loading Module]
DVI001I edmdodrdsm  [Vault DOD Relational Database
DVI001I              Setup Module]
DVI001I edmdodrdlm  [Vault DOD RDBMS Table Creation
DVI001I              and Loading Module]
DVI001I edmsnsm     [Vault Network Startup Module]
DVI001I edmdvadvm   [Vault Add Vault and DOD to
DVI001I              Database Module]
DVI001I
DVI001I It uses as input, the edmodule.defaults.sh
DVI001I file to obtain the appropriate information
DVI001I to DVI001I perform these tasks.
DVI001I ****************************************

Would you like to continue [yes]? :
DVI088I ****************************************
DVI088I Verifying ${EDM_TBL_DIRECTORY} has
DVI088I sufficient space for Distributed
DVI088I Vault and Distributed Object Directory
DVI088I Tablespaces.
DVI088I ****************************************

EDM211I ****************************************
EDM211I Running Vault Server Network Cleanup Module
EDM211I (edmsncm).
EDM211I ****************************************

EDM206I ****************************************
```

```
EDM206I Vault Server Network Cleanup module.
EDM206I (edmsncm)
EDM206I
EDM206I This module stops the Vault Server Network
EDM206I Processes in preparation for an Vault
EDM206I Software Refresh.
EDM206I
EDM206I It uses as input, the edmodule.defaults.sh
EDM206I file to obtain the appropriate information
EDM206I to perform these tasks.
EDM206I ****************************************

Would you like to continue [yes]? :

EDM207I ****************************************
EDM207I Stopping the Vault Server Network
EDM207I Processes.
EDM207I
EDM207I This will take a few minutes; please be
EDM207I patient.
EDM207I ****************************************

EDM208I ****************************************
EDM208I The Vault Server Network Processes have
EDM208I been successfully stopped.
EDM208I
EDM208I ****************************************
DVI053I ****************************************
DVI053I Running the Distributed Vault Database
DVI053I Configuration Module (edmdvfifm).
DVI053I ****************************************

DVI061I ****************************************
DVI061I Distributed Vault Database Configuration
DVI061I Module (edmdvfifm).
DVI061I
DVI061I This module ensures the db_files parameter
DVI061I in the init${ORACLE_SID}.ora file is
DVI061I sufficient.
DVI061I
DVI061I It uses as input, the edmodule.defaults.sh
DVI061I file to obtain the appropriate information
DVI061I to perform these DVI061I tasks.
DVI061I ****************************************
```

```
Would you like to continue [yes]? :

DVI054I ****************************************
DVI054I Counting the number of Database files.
DVI054I ****************************************

DVI055I ****************************************
DVI055I Shutting Down the Oracle Database Instance.
DVI055I ****************************************

DVI056I ****************************************
DVI056I Modifying the "db_files" parameter in the
DVI056I init${ORACLE_SID}.ora file.
DVI056I ****************************************

DVI057I ****************************************
DVI057I Restarting the Oracle Database Instance.
DVI057I ****************************************

DVI059I ****************************************
DVI059I The Distributed Vault Database
Configuration Module has
DVI059I completed successfully.
DVI059I ****************************************
DVI089I ****************************************
DVI089I Running the Distributed Vault Network
DVI089I Configuration Module (edmdvmcnf).
DVI089I ****************************************

DVI062I ****************************************
DVI062I Distributed Vault Network Configuration
DVI062I Module (edmdvmcnf).
DVI062I
DVI062I This module adds the Distributed Vault AE's
DVI062I to the network configuration file.
DVI062I
DVI062I It uses as input, the edmodule.defaults.sh
DVI062I file to obtain the appropriate information
DVI062I to perform these tasks.
DVI062I ****************************************

Would you like to continue [yes]? :

DVI110I ****************************************
```

```
DVI110I Modifying nsm.config file for Automatic
DVI110I Registration with STORE/GET.
DVI110I ****************************************

Would you like to enable AUTO REGISTRATION
(*optional) [YES]:

Please enter REGISTRATION LEVEL (R, W, Q, or O)[R]:
DVI110I ****************************************
DVI110I Modifying nsm.config file for Automatic
DVI110I Registration with STORE/GET.
DVI110I ****************************************

DVI111I ****************************************
DVI111I You must shutdown and restart Vault for
DVI111I Automatic Registration setup changes to be
DVI111I effective.
DVI111I ****************************************
```

Please note: The lines of code between the # marks appear only if you alter the existing settings for Autoregistration. For further details on Autoregistration refer “Sample Distributed Vault Installation” on page 4-6.

```
DVI059I ****************************************

DVI059I The Distributed Vault Database
DVI059I Configuration Module has completed
DVI059I successfully.
DVI059I ****************************************

DVI091I ****************************************
DVI091I You will be asked to select the name of the
DVI091I LOCAL Vault. A list of Vault names will be
DVI091I read from the DVI091I nsm.config file. You
DVI091I must select one from the list.
DVI091I ****************************************

DVI065I ****************************************
DVI065I Adding the Distributed Vault AE's to the
DVI065I installation configuration files.
DVI065I ****************************************

DVI063I ****************************************
DVI063I Please specify where the Distributed Vault
DVI063I Object Directory will reside.
```

```
DVI063I ****************************************

Install Distributed Object Directory on this node?
[no]: yes

DVI066I ****************************************
DVI066I Adding the Distributed Vault Object
DVI066I Directory AE's to the installation
DVI066I configuration files.
DVI066I ****************************************

DVI059I ****************************************
DVI059I The Distributed Vault Database
DVI059I Configuration Module has completed
DVI059I successfully.
DVI059I ****************************************

DVI002I ****************************************
DVI002I Running the Distributed Relational Database
DVI002I Setup Module (edmdvrdsm).
DVI002I ****************************************
DVI026I ****************************************
DVI026I Distributed Vault Database Setup module.
DVI026I (edmdvrdsm)
DVI026I
DVI026I This module creates the Distributed Vault
DVI026I Database Tablespace files.
DVI026I
DVI026I It uses as input, the edmodule.defaults.sh
DVI026I file to obtain the appropriate information
DVI026I to perform these tasks.
DVI026I ****************************************

Would you like to continue [yes]? :

DVI027I ****************************************
DVI027I Creating the EDM_DISTDATA Tablespace.
DVI027I ****************************************

DVI029I ****************************************
DVI029I Creating the EDM_DISTDATA_INDX Tablespace.
DVI029I ****************************************

DVI031I ****************************************
DVI031I Creating the EDM_EVENT_MANAGER Tablespace.
```

```
DVI031I ****************************************

DVI033I ****************************************
DVI033I Creating the EDM_EVENTMAN_INDX Tablespace.
DVI033I ****************************************

DVI035I ****************************************
DVI035I Creating the EDM_ACTIONDATA Tablespace.
DVI035I ****************************************

DVI037I ****************************************
DVI037I Creating the EDM_ACTDATA_INDX Tablespace.
DVI037I ****************************************

DVI039I ****************************************
DVI039I Creating the EDM_SUBSCRIPTION Tablespace.
DVI039I ****************************************

DVI041I ****************************************
DVI041I Creating the EDM_SUBSCR_INDX Tablespace.
DVI041I ****************************************

DVI043I ****************************************
DVI043I Creating the EDM_DISTCONTROL Tablespace.
DVI043I ****************************************

DVI045I ****************************************
DVI045I Creating the EDM_DISTCONT_INDX Tablespace.
DVI045I ****************************************

DVI047I ****************************************
DVI047I Creating the EDM_EDITSUPPORT Tablespace.
DVI047I ****************************************

DVI049I ****************************************
DVI049I Creating the EDM_EDITSUPP_INDX Tablespace.
DVI049I ****************************************

DVI051I ****************************************
DVI051I The Distributed Vault Relational Database
Setup Module
DVI051I has completed successfully.
DVI051I ****************************************

DVI004I ****************************************
```

```
DVI004I Running the Distributed Relational Database
Table
DVI004I Creation and Loading Module (edmdvrdlm).
DVI004I ****************************************

DVI008I ****************************************
DVI008I Distributed Vault Database Table Creation
DVI008I and Loading module. (edmdvrdlm)
DVI008I
DVI008I This module creates and loads the
DVI008I Distributed Vault Database Tables.
DVI008I
DVI008I It uses as input, the edmodule.defaults.sh
DVI008I file to obtain the appropriate information
DVI008I to perform these tasks.
DVI008I ****************************************

Would you like to continue [yes]? :
DVI023I ****************************************
DVI023I Creating and Loading the Distributed Vault
DVI023I Database Tables.
DVI023I ****************************************

DVI009I ****************************************
DVI009I Generating the Distributed Vault Database
DVI009I Tables.
DVI009I ****************************************

./edmdvgen: EDMVault SQL Table and View Creation
for Distributed Vaults

DVI011I ****************************************
DVI011I Generating the Distributed Vault Database
DVI011I Table Indexes.
DVI011I ****************************************

./edmdvindex: EDMVault SQL Index Creation for
Distributed Vault

DVI013I ****************************************
DVI013I Generating the Distributed Vault Database
DVI013I Table Views.
DVI013I ****************************************

./edmdvview: Distributed Vault View Creation
```

```
DVI015I ****************************************
DVI015I Loading the Distributed Vault Database
DVI015I Triggers.
DVI015I ****************************************

./edmdvdbt: EDMVault Database Trigger Load for
Distributed Vault

DVI017I ****************************************
DVI017I Loading the Distributed Vault Access and
DVI017I Security Manager Logic.
DVI017I ****************************************

./ldasmdv: EDMVault Run-time SQL Logic load for
Distributed Vault
DVI019I ****************************************
DVI019I Loading the Distributed Vault Database
DVI019I Tables.
DVI019I ****************************************

./ldedmdv: EDMVault Control Table Load for
Distributed Vault

DVI021I ****************************************
DVI021I Loading the Distributed Vault Editting
DVI021I Logic.
DVI021I ****************************************

./ldedmedi: EDMVault Control Table Load for
Distributed Vault

DVI024I ****************************************
DVI024I The Distributed Vault Relational Database
DVI024I Table Creation and Loading module has
DVI024I completed successfully.
DVI024I ****************************************

DVI071I ****************************************
DVI071I Running the Distributed Object Directory
DVI071I Tablespace Creation Module (edmdodrdsm).
DVI071I ****************************************

DVI072I ****************************************
```

```
DVI072I Distributed Object Directory Tablespace
DVI072I Creation Module (edmdodrdsm).
DVI072I
DVI072I This module create the Distributed Object
DVI072I Directory Tablespace in the
DVI072I ${EDM_TBL_DIRECTORY} directory.
DVI072I
DVI072I It uses as input, the edmodule.defaults.sh
DVI072I file to obtain the appropriate information
DVI072I to perform these tasks.
DVI072I ****************************************

Would you like to continue [yes]? :

DVI074I ****************************************
DVI074I Creating the EDM_OBJ_DIRECTORY Tablespace.
DVI074I ****************************************

DVI086I ****************************************
DVI086I Creating the EDM_OBJ_DIR_INDX Tablespace.
DVI086I ****************************************

DVI073I ****************************************
DVI073I The Distributed Object Directory Tablespace
DVI073I Creation Module has completed
DVI073I successfully.
DVI073I ****************************************

DVI071I ****************************************
DVI071I Running the Distributed Object Directory
DVI071I Tablespace Creation Module (edmdodrdsm).
DVI071I ****************************************

DVI076I ****************************************
DVI076I Distributed Vault Object Directory Database
DVI076I Table Creation and Loading module
DVI076I (edmdodrdlm).
DVI076I
DVI076I This module creates and loads the
DVI076I Distributed Object Directory Database
DVI076I Tables.
DVI076I
DVI076I It uses as input, the edmodule.defaults.sh
DVI076I file to obtain the appropriate information
DVI076I to perform these tasks.
```

```
DVI076I ****************************************

Would you like to continue [yes]? :

DVI083I ****************************************
DVI083I Creating and Loading the Distributed Object
DVI083I Directory Database Tables.
DVI083I ****************************************

DVI077I ****************************************
DVI077I Generating the Distributed Object Directory
DVI077I Database Tables.
DVI077I ****************************************

./edmdodgen: EDMVault SQL Table and View Creation
for Distributed Vaults

DVI108I ****************************************
DVI108I Running alter the object directory table
DVI108I for DV part num changes.
DVI108I ****************************************

./optpartnumdv: Alter the object directory table
for DV part num changes.

DVI082I ****************************************
DVI082I Generating the Distributed Object Directory
DVI082I Database Table Indexes.
DVI082I ****************************************

./edmdodindex: EDMVault SQL Index Creation for
Distributed Vault

DVI084I ****************************************
DVI084I The Distributed Object Directory Relational
DVI084I Database Table Creation and Loading module
DVI084I has completed successfully.
DVI084I ****************************************

EDM180I ****************************************
EDM180I Running Vault Server Network Startup Module
EDM180I (edmsnsm).
EDM180I ****************************************

EDM124I ****************************************
```

```
EDM124I Vault Server Network Startup module.
EDM124I (edmsnsm)
EDM124I
EDM124I This module starts the Vault Server Network
EDM124I Processes.
EDM124I
EDM124I It uses as input, the edmodule.defaults.sh
EDM124I file to obtain the appropriate information
EDM124I to perform these tasks.
EDM124I ****************************************

Would you like to continue [yes]? :

EDM126I ****************************************
EDM126I Starting the Vault Server Network
EDM126I Processes.
EDM126I
EDM126I The Vault Server Network Processes are
EDM126I being started in background.
EDM126I
EDM126I This will take a few minutes; please be
EDM126I patient.
EDM126I ****************************************

EDM127I ****************************************
EDM127I The Vault Server Network Processes have
EDM127I been successfully started.
EDM127I ****************************************

DVI096I ****************************************
DVI096I Adding the Local Vault and the Distributed
DVI096I Object Directory to the Database.
DVI096I ****************************************

DVI095I ****************************************
DVI095I Distributed Vault Add Vault and Distributed
DVI095I Object Directory Module (edmdvadvm).
DVI095I
DVI095I This module adds the Local Vault and the
DVI095I Distributed Object Directory to the
DVI095I database.
DVI095I
DVI095I It uses as input, the edmodule.defaults.sh
DVI095I file to obtain the appropriate information
DVI095I to perform these tasks.
```

```
DVI095I ****************************************

Would you like to continue [yes]? :

EDM151I ****************************************
EDM151I Signing on to Vault.
EDM151I ****************************************

DVI096I ****************************************
DVI096I Adding the Local Vault and the Distributed
DVI096I Object Directory to the Database.
DVI096I ****************************************
CDMAVT100I Vault has been added.
DVI097I ****************************************
DVI097I Adding the Distributed Object Directory to
DVI097I the Database.
DVI097I ****************************************
CDMAVT100I Vault has been added.

DVI099I ****************************************
DVI099I Adding the Local DOD Vault List to the
DVI099I Database.
DVI099I ****************************************

CDMAVL100I LOCALDOD has been added.
CDMAVM100I Vault has been added.

EDM153I ****************************************
EDM153I Signing off from Vault.
EDM153I ****************************************
CDMSOF017I Sign off from Vault completed
successfully.

DVI093I ****************************************
DVI093I The Distributed Vault Add Vault and
DVI093I Distributed Object Directory Module has
DVI093I completed.
DVI093I
DVI093I The Local Vault and the Distributed Object
DVI093I Directory have been loaded,
DVI093I ****************************************

DVI006I ****************************************
DVI006I The Distributed Vault Software Installation
DVI006I Module has completed.
```

```
DVI006I
DVI006I The Distributed Vault Software has been
DVI006I successfully installed.
DVI006I ****************************************
```

Description of Distributed Vault Tablespaces

This section describes the RDBMS tablespaces for Distributed Vault. A tablespace is the location within the relational database where the relational database tables are created. A rollback segment is the location within the relational database where a relational database transaction is stored until a commit operation is accomplished.

EDM_ACTIONDATA

```
DM_ACTION_TEMPLATE
DM_ACTTEMPLATE_SUB
DM_ACTION_QUEUE
DM_ACTION_DATA
DM_ACTMANAGER
```

This tablespace contains tables related to the Action Manager. `DM_ACTION_TEMPLATE`, `DM_ACTTEMPLATE_SUB` tables are static and define possible actions for subscription purposes.

`DM_ACTION_QUEUE`, `DM_ACTION_DATA`, and `DM_ACTMANAGER` are highly active insert/query/delete tables, driven by the Event Manager, which populates `DM_ACTION_QUEUE` and `DM_ACTION_DATA`, and the Action Manager, which queries and deletes from those tables and inserts/deletes from `DM_ACTMANAGER`.

These tables — `DM_ACTION_QUEUE`, `DM_ACTION_DATA`, and `DM_ACTMANAGER` — receive high activity rates when registered files/parts are accessed or when subscriptions are being executed.

EDM_DISTCONTROL

```
DM_DISTRIBUTION_HIST
DM_DISTRIBUTION_CONTROL
```

These tables are accessed by Export/Import and the Import Manager. They are used to control export/import activities and to record the history of export/import. For the DM_DISTRIBUTION_CONTROL table, a row is created for each export operation, for each importer listed in the export vault list. The DM_DISTRIBUTION_HIST table will contain a row for each export operation and a row for each import operation.

EDM_DISTCONT_INDX

```
DM_DISTH_INDX ON DM_DISTRIBUTION_HIST (by Object
Name)
DM_DISTHT_INDX ON DM_DISTRIBUTION_HIST (by Tag)
DM_DISTC_INDX ON DM_DISTRIBUTION_CONTROL (by Tag)
```

This tablespace contains the indexes for the DM_DISTRIBUTION_HIST and DM_DISTRIBUTION_CONTROL tables.

EDM_DISTDATA

```
DM_VAULT_CONFIG
DM_USER_ALIAS
DM_VAULT_LIST
DM_VAULT_LISTID
DM_DIST_TAG
```

This tablespace contains essential control tables for Distributed Vault.

Most notable is the DM_VAULT_CONFIG table, which is accessed for all distributed vault transactions (query access, for the most part), including CILOCATE, CIEXPORT, CILOCATE, CIIMPORT, the Import Manager, Event Manager, and the Action Manager.

Update/Insert accesses are minimal.

EDM_DISTDATA_INDX

```
DM_VAULT_INDX ON DM_VAULT_CONFIG
DM_USERALIAS_INDX ON DM_USER_ALIAS
DM_VAULTLIST_INDX ON DM_VAULT_LIST
DM_VAULTLISTID_INDX ON DM_VAULT_LISTID
DM_TAG_INDX ON DM_DIST_TAG
```

This tablespace contains indexes for the table located in `EDM_DISTDATA` tablespace.

EDM_EDITSUPPORT

`DM_KEYWORD_EDIT`

This tablespace contains the table used for editing subscription parameters. Access rates are low, occurring only during the processing of `CIADDSUB`.

EDM_EVENT_MANAGER

```
DM_EVENT_CODE
DM_EVENT_QUEUE
```

This tablespace contains the `DM_EVENT_QUEUE`, the table which holds all events arising out of the Vault for files/parts that are either registered or that have outstanding subscriptions.

`DM_EVENT_QUEUE` table is highly active with frequent insert/query/delete activity. The degree of activity is a function of the amount of Vault activity that takes place on registered or subscribed files/parts.

`DM_EVENT_CODE` table is used by graphical user interface only.

EDM_EVENTMAN_INDX

```
DM_EVENT_INDX ON DM_EVENT_CODE
DM_EQ_SUB_INDX ON DM_EVENT_QUEUE
DM_EQ_XCTN_INDX ON DM_EVENT_QUEUE
```

This tablespace contains the indexes for `EDM_EVENT_MANAGER` tables.

EDM_OBJ_DIRECTORY

```
DM_OBJECT_DIRECTORY
DM_OBJ_NAME1_INDX ON DM_OBJECT_DIRECTORY
DM_OBJ_NAME3_INDX ON DM_OBJECT_DIRECTORY
DM_OBJ_NAMROW_INDX ON DM_OBJECT_DIRECTORY
```

This tablespace contains the Distributed Object Directory and its indexes. This table is highly accessed for all types of insert, update, query, and delete activity. The volume of activity is directly influenced by the number of registered files/parts stored therein, in conjunction with the rate of their access within the participating vaults.

EDM_SUBSCRIPTION

```
DM_REGISTRATION
DM_SUBSCRIPTION
DM_SUBSCRIPT_SUB
```

This tablespace contains the registration and subscription tables used by `REGISTER, ADDSUB, DELSUB, EXPORT, IMPORT,` and the Import Manager.

These tables are highly accessed for query purposes. Update activity is small, on the order of `<10` updates per registered file/part. `DM_REGISTRATION` is `EDM_SUBSCR_INDX`

This tablespace contains indexes for `EDM_SUBSCRIPTION` tables.

EDM_SUBSCR_INDX

This tablespace contains indexes for `EDM_SUBSCRIPTION` tables.

Changing Your Password

For sites with Distributed Vault, you will want to change your password for the Distributed Vault environment. Do the following on the node where the Distributed Object Directory is installed:

```
% svrmgrl
SVRMGR> connect system/password
SVRMGR> grant connect to edmdv identified by
        newpassword;
```

where `password` is the password for the Oracle user system and `newpassword` is the new password (8 or fewer characters) for each account.

DV Setup for Rulebases

To setup DV for rulebases, do the following:

- You must download the desired CADDS release from the product distribution media (using SLIC) before running `navinstall`. For details, refer to “Step 9: Installing Vault Attributes and Views” on page 2-28.
- If you are dealing with Pro/ENGINEER, CATIA, or MEDUSA in the DV environment, install the respective rulebases.

Chapter 5

Installing Oracle8*i* for Vault

This release of Optegra supports Oracle8*i* Release 3 (8.1.7) except on SGI IRIX where Oracle8*i* Release 2 (8.1.7) is supported. This chapter provides instructions on installing Oracle8*i* Release 2 (8.1.7) on SGI IRIX and Oracle8*i* Release 3 (8.1.7) on other operating systems supported by Optegra.

Please note: Unless specifically mentioned, the term “Oracle” in this chapter refers to Oracle8*i* Release 3 (8.1.7).

- Before You Begin
- Installing Oracle on Sun Solaris
- Installing Oracle on HP-UX
- Installing Oracle on IBM AIX
- Installing Oracle on Compaq Tru64 UNIX
- Installing Oracle on SGI IRIX
- Installing Oracle on Windows NT

Before You Begin

Before you install Oracle, perform the following tasks described in this section.

Preparing Directories and Accounts

Before you install Oracle or Optegra, set up the directory structure for both accounts:

1. Decide where to locate the Oracle home directory, `$ORACLE_HOME`. For example, `/opt/app/oracle`. Refer to “Location of $ORACLE_HOME” on page 5-3.

Please note: For all platforms, `$ORACLE_HOME` must point to an actual path, not a link.

2. Pick a name for the Oracle database (`$ORACLE_SID`).
3. Decide where to locate the `$EPD_HOME` home directory.
4. Create Vault and Oracle accounts in the `/etc/passwd` file.

Changing the Oracle Password

For all installation and migration steps, the Oracle user system must have the default password of `manager`. After installing or migrating the Optegra software, you can change the password back to the original password.

To change the default password to `manager`:

1. Make sure that the Oracle database is running before you begin.
2. Log in to the `Oracle` account.
3. Enter the following commands:

```
% svrmgrl
SVRMGR> connect internal
SVRMGR> grant connect to system identified by
manager;
SVRMGR> exit
```

Installation Considerations

Consider the following situations before installation.

Oracle Database

A new Optegra installation creates a new `init$ORACLE_HOME.ora` file and renames the existing file to `init$ORACLE_SID.ora.orig`. Compare the contents of both the files for any changes that you might want in the new one.

For example, the db_files parameter is reset to 40 in the new `init.ora` file. If the previous file had a value greater than 40, change the value of db_files in the new `init$ORACLE_HOME.ora` file to that number. To change the file:

1. Stop all the EPD.Connect and Vault processes.
2. Log in as the Oracle user and shut down Oracle.
3. Edit the `$ORACLE_HOME/dbs/init$ORACLE_SID.ora` file and change the parameters to correct value.
4. Restart the Oracle database.
5. Restart the Optegra processes.

If you are unsure as to whether the old or new value should be used, contact Customer Service.

Location of $ORACLE_HOME

When you install Optegra applications, the installation setup program expects the `$ORACLE_HOME` directory to be the same as the home directory of the Oracle Administration account. If it has another location, follow these steps:

1. Run `edminstall` as explained in the *Vault Programmer Guide*.
   a. Complete the `edmsirm` module for installation requirements. The module creates `edmodule.defaults.sh in $EDM_HOME/install` and prompts you with a series of questions.
   b. Answer **no** when asked if you want to continue to the next step. You can return to this point after you complete the step below.
2. Open a shell window. Edit the `edmodule.defaults.sh` file by entering the correct value of the Oracle Home.
3. Go back to the install process and answer **yes** when asked if you want to continue.

Installing Oracle on Sun Solaris

The following sections provide instructions for installing Oracle on the Sun Solaris operating system.

Setting Up the Oracle Account

To set up an Oracle account:

1. Log in as `root`.
2. Verify that the required Solaris packages are installed:

```
# pkginfo -i SUNWarc SUNWbtool SUNWlibm
# pkginfo -i SUNWlibms SUNWsprot SUNWtoo
# pkginfo -i SUNWhea
```

3. Set the following shared memory and semaphore parameters in the `/etc/system` file:

```
# set shmsys:shminfo_shmmax=4294967295
# set shmsys:shminfo_shmmin=1
# set shmsys:shminfo_shmmni=100
# set shmsys:shminfo_shmseg=10
# set semsys:seminfo_semmns=110
```

Please note: Set the seminfo_semmns variable to the sum of the `PROCESSES` parameter for each Oracle database, adding the largest one twice. Then add an additional 10 for each database. The `PROCESSES` value is assumed to be 50, the recommended value for Optegra installation.

```
# set semsys:seminfo_semmni=70
# set semsys:seminfo_semmsl=60
```

Please note: Set the seminfo_semmsl variable to 10 plus the largest `PROCESSES` parameter of any Oracle database on the system. The `PROCESSES` parameter exists in each `initsid.ora` file, located in the `$ORACLE_HOME/dbs` directory. The `PROCESSES` value is assumed to be 50, the recommended value for Optegra installation.

4. If the /tmp and /var/tmp directories have less than 20MB available space, identify a directory (alt_tmp_dir) that contains at least 20MB of available space that can be used temporarily.

   For C shell:

   ```
   # setenv TMPDIR alt_tmp_dir
   # chmod 777 $TMPDIR
   ```

   For Bourne shell:

   ```
   # set TMPDIR=alt_tmp_dir
   # export TMPDIR
   # chmod 777 $TMPDIR
   ```

5. Verify that ftp is working:

   ```
   # ftp remote_server_name
   ftp> put test_filename
   ftp> get test_filename
   ```

6. Verify that the following line exists in the /etc/services file (used by the TCP/IP Protocol Adapter):

   ```
   listener_name port#/protocol
   ```

   where

   - listener_name=name of the Net8 listener. Default/recommended name: listener
   - port#=port number on which Net8 listener listens for TCP/IP connections. Recommended: 1521
   - protocol=protocol of listener

   Example:

   ```
   listener 1521/tcp
   ```

7. Create and identify the mount point (mp0) for the Oracle owner and software. Create the app directory if it does not exist:

   ```
   cd mp0
   mkdir app
   ```

8. Add the dba group:

   ```
   groupadd dba
   ```

9. Create the oracle owner:

   ```
   useradd -c “Optegra Oracle dba”
   -d mp0/app/oracle -g dba
   -s /bin/csh -m oracle_owner
   ```

   oracle_owner is the UNIX ID of the Oracle owner.

   The -s option sets the C shell as the default shell. Do not use this option for the Bourne shell.

10. Set the Oracle owner's password:

```
# passwd oracle_owner
```

11. Add the word `root` to the `dba` group in the `/etc/group` file:

```
# dba::101:root
```

The group number, for example 101, may be different on your system.

12. Create and identify the mount points and set the owner and group.

It is recommended that the datafiles, control files, and the redo logfiles be distributed across at least three mount points:

```
# cd /
# chown oracle_owner mp1 mp2 mp3
# chgrp dba mp1 mp2 mp3
```

Example:

```
# cd /
# chown optora db1 db2 db3
# chgrp dba db1 db2 db3
```

13. Create directories for the shared files, if they do not exist:

```
# cd /opt
# mkdir bin
# cd /var/opt
# mkdir oracle
# chown oracle_owner oracle
# chgrp dba oracle
```

14. Restart the system and log in as `Oracle`.

15. Create `.login` or `.profile`, depending on whether you are using the C or Bourne shell.

For C shell:

a. `cp local.login .login`

b. `vi .login`

c. Insert the following lines:

```
umask 022
setenv PATH
/bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
setenv SHELL /bin/csh
setenv ORACLE_HOME
/mp0/app/oracle/product/8.1.7
setenv ORACLE_BASE /mp0/app/oracle
setenv ORACLE_SID oracle_sid
setenv ORACLE_TERM sun
```

`ORACLE_TERM` as shown is for a type 4 keyboard. Use `sun5` for a type 5. If `/usr/ucb` is required, place it at the end of the path.

d. Comment the logout command near the bottom of the script.

For Bourne shell:

a. `cp local.profile .profile`

b. `vi .profile`

c. Comment the following lines:

```
PATH=/usr/bin:/usr/ucb:/etc:.
export PATH
```

d. Insert the following lines:

```
umask 022
PATH=/bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
ORACLE_HOME=/mp0/app/oracle/product/8.1.7
ORACLE_BASE=/mp0/app/oracle
ORACLE_SID=oracle_sid
ORACLE_TERM=sun
export PATH ORACLE_HOME
export ORACLE_BASE ORACLE_SID ORACLE_TERM
```

`ORACLE_TERM` as shown is for a type 4 keyboard. Use `sun5` for a type 5. If `/usr/ucb` is required, place it at the end of the path.

e. Comment the exit command near the bottom of the script.

16. Log out and log in to test changes.

Installing the Oracle Server

To install the server:

1. Log in as an Oracle user.
2. Insert the first CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs.

3. Change the directory (cd) to / and then type:

   ```
   % ./cdrom/oracle8i/runInstaller
   ```

4. The Oracle Universal Installer Type dialog box opens along with the Welcome screen.

   a. Click Installed Products. In the Inventory dialog box that opens, verify that there are no installed products and click Close.

   b. Click Next in the Welcome dialog box.

5. The File Locations dialog box opens.

   a. In the Source field, enter the path of the file representing the product(s) you want to install.

   ```
   /cdrom/oracle8i/stage/products.jar
   ```

   b. In the Destination field, enter the path for Oracle Home:

   ```
   /mp0/app/oracle/product/8.1.7
   ```

   c. Click Next.

6. The Available Products dialog box opens.

   a. Select a product to be installed.

   b. Select Oracle8i 8.1.7.0.0.

7. The Installation Types dialog box opens. Select the third option as Custom.

8. The Available Product Component dialog box allows you to select the component.

   a. Click Product Language to select the current language setting for running the Oracle product.

Please note: Changing the language of the product does not affect the current installation session's language. The Oracle Universal Installer runs in the language detected at the operating system level.

   b. Select the following products for Vault.

   Oracle8*i* Server 8.1.7.0.0
   Oracle Configuration Assistants —
   Oracle Database Configuration Assistant 8.1.7.0.0
   Oracle Data Migration Assistant 8.1.7.0.0
   Oracle Utilities 8.1.7.0.0 —
   Oracle Database Utilities 8.1.7.0.0
   SQL*PLus 8.1.7.0.0
   Oracle Installation Products 8.1.7.0.0 —
   Oracle Universal Installer 1.7.0.18.0A

c. Click Next to proceed.

9. The Component Locations dialog box opens. You can select alternate locations for some components. You can verify the required and available disk space for installation of the selected components. Click Next.

10. In the Privileged Operation System Groups dialog box, enter groups as follows:

```
Database Administrator (OSDBA) Group: dba
Database Operator     (OSOPER) Group: dba
```

11. The Upgrading or Migrating an Existing Database dialog box opens if an Oracle installation exists on the machine. Do not select the Upgrade or Migrate option. Click Next.

12. The Start Database Create window appears. Click Yes and then click Next.

13. In the Database Identification window, enter the global database name and SID. Choose an SID name less than 8 characters.

14. You are prompted for the database file location. Enter `/mp0/app/oracle`.

15. Verify the summary of all the settings. If a tree option appears in red, verify and correct it. Click Install. The Oracle installation procedure starts and the progress is displayed in a progress window.

16. After completion, you are prompted to insert the second CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs. Eject the first CD-ROM, insert the second CD-ROM, and enter the complete path of the CD-ROM (`/cdrom/oracle8i#1`).

17. The Setup Privileges dialog box opens and prompts you to run `/mp0/app/oracle/product/8.1.7/root.sh`. Use instructions described in “Performing Root Install” on page 5-11. You can verify the installation logs at `/mp0/app/oracle/product/oraInventory/logs/installActions.log`. Click OK. Click Next.

18. The Configuration Tools dialog box opens and automatically starts the Net8 Configuration Assistant. Select Perform Typical Configuration and click Next.

19. After completing Listener Configuration, the Database Assistant dialog box opens.

a. Select OLTP as the server type.

b. Enter 20 as the Concurrently connected users.

c. Select Dedicated Server Mode as the database operation mode.

d. Do not select any other options like Oracle J Server, SQL*Plus Help, Database Configuration Assistant and so on.

e. Review database information such as Compatible Parameter 8.1.0, Language, Initialization Filename along with previously entered Global Database Name, and SID.

Enter the following information:

Maximum datafiles: 512

Maximum Log Files: 32

Maximum Log Members: 2

f. Click Next.

g. In the next dialog box, click the respective tabs to verify the system, tools, user, rollback, index and temporary settings.

h. Verify the locations and set the file size for all the Redo Log files.

i. Enter new Checkpoint Interval and Checkpoint Timeout values or accept the default values.

j. Enter new values or accept default values for the following:

Shared Pool Size: 6MB recommended.

Block Buffers: 200 recommended.

Log Buffer Size: 16384 recommended.

Processes: 50 recommended.

Block Size: 4096

k. Verify the locations for the following:

Trace User Processes

Background Processes

l. Select Create database now and click Finish.

20. The Configuration Assistant Progress Box appears. Click Close.

21. The End Of Installation dialog box displays the completion of the installation process.

22. Click Installed Products to verify all installed Oracle components.

Performing Root Install

To perform root install:

1. Login as `root`.
2. Run the `root.sh` script as follows:

```
su
cd $ORACLE_HOME/
./root.sh
```

The following messages are displayed:

```
Running Oracle8 root.sh script...
The following environment variables are set as:
ORACLE_OWNER=optora
ORACLE_HOME=/opt/app/oracle/product/8.1.7
ORACLE_SID=parth
```

3. Enter the path for the local bin directory, when prompted as follows.

```
Enter the full pathname of the local bin
directory: [/usr/local/bin]:
```

The following messages are displayed:

```
Entry will be added to the /var/opt/oracle/oratab
file by Database Configuration Assistant when a
database is created.
Finished running generic part of root.sh script.
Now product-specific root actions will be
performed.
```

Installing Oracle on HP-UX

The following sections provide instructions for installing Oracle on the HP-UX operating system.

Setting Up the Oracle Account

To set up the Oracle account on an HP system:

1. Log in as `root`.
2. Set the shared memory and semaphore parameters in the `/stand/system` file using SAM as follows:
   a. Choose Kernel Configuration.
   b. Choose Configurable Parameters.

c. Set the following variables to the values shown next to them:

```
sema=1 (Enables Sys V Semaphores)
shmmax=1073741824
shmin=1
shmmni=100
shmseg=10
semmni=70
semmns=200
```

d. Choose Actions/Create a New Kernel. This creates a new kernel and force a reboot of the system. This includes moving the new kernel into place and saving existing information to the `stand/system` directory. If necessary, do a soft reboot of the system using `/etc/reboot`.

e. Once the system has been rebooted, reenter `SAM` to ensure that the parameters changed have taken affect.

3. If `/tmp` and `/var/tmp` have less than 20MB available, identify a directory (`alt_tmp_dir`) that contains at least 20MB of available space that can be used as temp space. This can be done using the `bdf` command using `bdf | more`.

For C shell:

```
# setenv TMPDIR alt_tmp_dir
# chmod 777 $TMPDIR
```

For Bourne shell:

```
# set TMPDIR=alt_tmp_dir
# export TMPDIR
# chmod 777 $TMPDIR
```

4. Verify that `ftp` is working:

```
$ftp remote_server_name
ftp> put test_filename
ftp> get test_filename
```

5. Verify that the following line is in the `/etc/services` file (used by the TCP/IP Protocol Adapter):

```
listener_name port# /protocol
```

where

- `listener_name`=name of the Net8 listener. Default/recommended name: `listener`
- `port#`=port number on which Net8 listener listens for TCP/IP connections. Recommended: `1521`
- `protocol`=protocol of listener

Example:

```
listener 1521/tcp
```

6. Create and identify the mount point (`mp0`) for the Oracle owner and software. Create the `app` directory if it does not already exist:

```
cd mp0
mkdir app
```

7. Add the `dba` group. Verify by checking `/etc/group`:

```
more /etc/group | grep dba
groupadd dba
```

8. Create the `oracle` owner:

```
useradd-c “Optegra Oracle dba” -d
mp0/app/oracle -g dba -s /bin/csh
-m oracle_owner
```

`oracle_owner` is the UNIX ID of the Oracle owner.

The `-s` option indicates C shell. Do not use this option for Bourne shell.

9. Set the Oracle owner's password:

```
# passwd oracle_owner
```

10. Add the word `root` to the dba group in the `/etc/group` file:

```
# dba::101:root
```

The group number, for example 101, may be different on your system.

11. Create and identify the mount points and set the owner and group.

It is recommended that the datafiles, control files, and the redo logfiles be distributed across at least three mount points:

```
# cd /
# chown oracle_owner mp1 mp2 mp3
# chgrp dba mp1 mp2 mp3
```

Example:

```
# cd /
# chown optora db1 db2 db3
# chgrp dba db1 db2 db3
```

12. Create directories for the shared files, if they do not exist:

```
# cd /opt
# mkdir bin
# cd /var/opt
# mkdir oracle
# chown oracle_owner oracle
# chgrp dba oracle
```

13. Log in as `Oracle`.

14. Create `.login` or `.profile` depending on whether you are using the C or Bourne shell:

For C shell:

a. `chmod 744 .login` (to enable editing)

b. `vi .login`

c. Insert the following lines:

```
# The following lines were added
# before the installation.
#
umask 022
#
setenv SHELL /bin/csh
setenv PATH
/bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
setenv ORACLE_HOME
 /mp0/app/oracle/product/8.1.7
setenv ORACLE_BASE /mp0/app/oracle
setenv ORACLE_SID oracle_sid
setenv ORACLE_TERM hp
#
```

For Bourne shell:

a. `chmod 744 .login` (to enable editing)

b. `vi .profile`

a. Comment the following lines:

```
PATH=/usr/bin:/usr/ucb:/etc:.
export PATH
```

b. Insert the following lines:

```
# The following lines were added
# before the installation.
#
umask 022
#
PATH=/bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
ORACLE_HOME=/mp0/app/oracle/product/8.1.7
ORACLE_BASE=/mp0/app/oracle
ORACLE_SID=oracle_sid
ORACLE_TERM=hp
export PATH ORACLE_HOME
export ORACLE_BASE ORACLE_SID ORACLE_TERM
```

15. Log out and log in to test changes.

Installing the Oracle Server

Follow the installation instructions outlined in the following sections.

Mounting the CD-ROM

To mount the CD-ROM:

1. Use a system editor to add the following line to the `etc/pfs_fstab` file:

   ```
   device_file mount_point filesystem_type
   translation_method
   ```

   where

   ```
   device_file=the CD-ROM device file
   mount_point=the mount point
   filesystem_type=the CD-ROM to be mounted
   ```

   For example:

   ```
   /dev/dsk/c5t2d0 /SD_CDROM pfs-rrip xlat=unix 0 0
   ```

2. Log in as the root user.
3. Run the following file:

   ```
   # nohup /usr/sbin/pfs_mountd &
   ```

4. Run the following file:

   ```
   # nohup /usr/sbin/pfsd &
   ```

5. Insert the CD-ROM into the tray and run the following to mount the CD-ROM:

   ```
   # /usr/sbin/pfs_mount /SD_CDROM
   ```

6. Exit the Superuser account:

```
# exit
```

Please note: Change directories to /SD_CDROM, where you can see a lowercase listing of the directories and files on the CD-ROM. The mounted directories should appear as another read-only file system.

7. Verify the existences of the shared HP libraries:

```
# cd /usr/lib
# ls libX11.sl libXm.sl libXt.sl
```

If the preceding shared HP libraries do not exist, create the following links:

```
# ln -s libX11.2 libX11.sl
# ln -s libXm.2 libXm.sl
# ln -s libXt.2 libXt.sl
```

Installing the Server

To install the server:

1. Log in as an Oracle user.
2. Insert the first CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs.
3. Change the directory (cd) to / and then type:

```
% ./cdrom/runInstaller
```

4. The Oracle Universal Installer Type dialog box opens along with the Welcome screen.
   a. Click Installed Products. In the Inventory dialog box that opens, verify that there are no installed products and click Close.
   b. Click Next in the Welcome dialog box.
5. The File Locations dialog box opens.
   a. In the Source field, enter the path of the file representing the product(s) you want to install.

      /cdrom/oracle8i/stage/products.jar

   b. In the Destination field, enter the path for Oracle Home:

      /mp0/app/oracle/product/8.1.7

   c. Click Next.
6. The Available Products dialog box opens.
   a. Select a product to be installed.

b. Select Oracle8i 8.1.7.0.0.

7. The Installation Types dialog box opens. Select the third option as Custom.

8. The Available Product Component dialog box allows you to select the component.

a. Click Product Language to select the current language setting for running the Oracle product.

Please note: Changing the language of the product does not affect the current installation session's language. The Oracle Universal Installer runs in the language detected at the operating system level.

b. Select the following products for Vault.

Oracle8*i* Server 8.1.7.0.0

Oracle Configuration Assistants —

Oracle Database Configuration Assistant 8.1.7.0.0

Oracle Data Migration Assistant 8.1.7.0.0

Oracle Utilities 8.1.7.0.0 —

Oracle Database Utilities 8.1.7.0.0

SQL*PLus 8.1.7.0.0

Oracle Installation Products 8.1.7.0.0 —

Oracle Universal Installer 1.7.0.18.0A

c. Click Next to proceed.

9. The Component Locations dialog box opens. You can select alternate locations for some components. You can verify the required and available disk space for installation of the selected components.
Click Next.

10. In the Privileged Operation System Groups dialog box, enter groups as follows:

```
Database Administrator (OSDBA) Group: dba
Database Operator     (OSOPER) Group: dba
```

11. The Upgrading or Migrating an Existing Database dialog box opens if an Oracle installation exists on the machine. Do not select the Upgrade or Migrate option. Click Next.

12. The Start Database Create window appears. Click Yes and then click Next.

13. In the Database Identification window, enter the global database name and SID.

14. You are prompted for the database file location. Enter `/mp0/app/oracle`.

15. Verify the summary of all the settings. If a tree option appears in red, verify and correct it. Click Install. The Oracle installation procedure starts and the progress is displayed in a progress window.
16. After completion, you are prompted to insert the second CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs. Eject the first CD-ROM, insert the second CD-ROM, and enter the complete path of the CD-ROM (`/cdrom#1`).
17. The Setup Privileges dialog box opens and prompts you to run `/mp0/app/oracle/product/8.1.7/root.sh`. Use instructions described in "Performing Root Install" on page 5-19. You can verify the installation logs at `/mp0/app/oracle/product/oraInventory/logs/installActions.log`. Click OK. Click Next.
18. The Configuration Tools dialog box opens and automatically starts the Net8 Configuration Assistant. Select Perform Typical Configuration and click Next.
19. After completing Listener Configuration, the Database Assistant dialog box opens.
    a. Select OLTP as the server type.
    b. Enter 20 as the Concurrently connected users.
    c. Select Dedicated Server Mode as the database operation mode.
    d. Do not select any other options like Oracle J Server, SQL*Plus Help, Database Configuration Assistant and so on.
    e. Review database information such as Compatible Parameter 8.1.0, Language, Initialization Filename along with previously entered Global Database Name, and SID.

       Enter the following information:

       Maximum datafiles: 512

       Maximum Log Files: 32

       Maximum Log Members: 2
    f. Click Next.
    g. In the next dialog box, click the respective tabs to verify the system, tools, user, rollback, index and temporary settings.
    h. Verify the locations and set the file size for all the Redo Log files.
    i. Enter new Checkpoint Interval and Checkpoint Timeout values or accept the default values.
    j. Enter new values or accept default values for the following:

       Shared Pool Size: 6MB recommended.

       Block Buffers: 200 recommended.

Log Buffer Size: 16384 recommended.

Processes: 50 recommended.

Block Size: 4096.

k. Verify the locations for the following:

Trace User Processes

Background Processes

l. Select Create database now and click Finish.

20. The Configuration Assistant Progress Box appears. Click Close.

21. The End Of Installation dialog box displays the completion of the installation process.

22. Click Installed Products to verify all installed Oracle components.

Performing Root Install

To perform root install:

1. Run the `root.sh` script as follows:

```
su
cd $ORACLE_HOME/
./root.sh
```

The following messages are displayed:

```
Running Oracle8 root.sh script...
The following environment variables are set as:
ORACLE_OWNER=optora
ORACLE_HOME=/opt/app/oracle/product/8.1.7
ORACLE_SID=parth
```

2. Enter the path for the local bin directory, when prompted as follows.

```
Enter the full pathname of the local bin
directory: [/usr/local/bin]:
```

The following messages are displayed:

```
Entry will be added to the /var/opt/oracle/oratab
file by Database Configuration Assistant when a
database is created.
Finished running generic part of root.sh script.
Now product-specific root actions will be
performed.
```

Installing Oracle on IBM AIX

The following sections provide instructions for installing Oracle in an IBM AIX operating environment.

Setting Up the Oracle Account

To set up the Oracle account on an AIX operating system:

1. Log in as `root`.
2. Using the `ipcs` command, obtain a list of the system's current shared memory, and its identification number and owner.
3. Set kernel parameters corresponding to the maximum:
   - Size of the shared memory segment (`SHMMAX`)
   - Number of shared memory segments in the system (`SHMMNI`)
   - Number of shared memory segments a user process can attach (`SHMSEG`)
   - Amount of shared memory that can be allocated systemwide (`SHMMNS`)
4. Relink and reboot after configuring the kernel and the shared memory parameters on the system.
5. Set additional parameters, depending on the configuration and planned database use.
6. If the `/tmp` and `/var/tmp` directories have less than 20MB space available, identify a directory (`alt_tmp_dir`) that contains at least 20MB of available space that can be used temporarily.

   For C shell:

   ```
   # setenv TMP alt_tmp_dir
   # chmod 777 $TMP
   ```

   For Bourne shell:

   ```
   # set TMP=alt_tmp_dir
   # export TMP
   # chmod 777 $TMP
   ```

7. Verify that the fileset `bos.adt.libm` has already been installed.

   ```
   lslpp -L all | grep bos.adt.libm
   ```

   If it is not installed, install it through SMIT.

8. Verify that `ftp` is working:

   ```
   $ftp remote_server_name
   ftp> put test_filename
   ```

```
ftp> get test_filename
```

9. Verify that the following line is in the `/etc/services` file (used by the TCP/IP Protocol Adapter):

   ```
   listener_name port#/protocol
   ```

   where,

   - `listener_name`=name of the Net8 listener. Default/recommended name: `listener`
   - `port#`=port number on which Net8 listener listens for tcp/ip connections. Recommended: `1521`
   - `protocol`=protocol of listener

   Example:

   ```
   listener 1521/tcp
   ```

10. Create and identify a mount point (`mp0`) for the Oracle owner and software. Create the `app` directory if it does not already exist:

    ```
    cd mp0
    mkdir app
    ```

11. Add the `dba` group with a group ID (GID) of 101:

    ```
    # mkgroup - "A" id=101 dba
    ```

12. Use `mkuser`, which supplies the UID number and adds the Oracle user (named oracle) to both the `dba` and `oper` groups:

    ```
    # mkuser -id=101 pgrp=dba home=/u1/app/oracle \
    shell=/bin/csh oracle
    ```

13. Set the Oracle owner's password:

```
# passwd oracle_owner
```

14. Add the word `root` to the dba group in the `/etc/group` file:

    ```
    # dba::101:root
    ```

    The group number, for example 101, may be different on your system.

15. Create and identify the mount points and set the owner and group.

    It is recommended that the datafiles, control files, and the redo logfiles be distributed across at least three mount points.

    ```
    # cd /
    # chown oracle_owner mp1 mp2 mp3
    # chgrp dba mp1 mp2 mp3
    ```

    Example:

    ```
    # cd /
    # chown optora db1 db2 db3
    # chgrp dba db1 db2 db3
    ```

16. Create directories for shared files (if they do not already exist):

```
# mkdir -p /opt/bin
# mkdir -p /usr/local/bin
# chown oracle_owner /usr/local/bin
# chgrp dba /usr/local/bin
# chmod 777 /usr/local/bin
```

17. Reboot the system and log in as `Oracle`.

18. Create `.login` or `.profile`:

For C shell:

a. `chmod 744 .login` (to enable editing)

b. `vi .login`

c. Insert the following lines:

```
# The following lines were added
# before the installation
%
% umask 022
%
% setenv PATH
  /bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
% setenv SHELL /bin/csh
% setenv
  ORACLE_HOME /mp0/app/oracle/product/8.1.7
% setenv ORACLE_BASE /mp0/app/oracle
% setenv ORACLE_SID oracle_sid
% setenv ORACLE_TERM xterm
```

d. Comment out the `logout` command near the bottom of the script.

For Bourne shell:

a. `chmod 744 .profile` (to enable editing)

b. `vi .profile`

c. Comment the following lines:

```
PATH=/usr/bin:/usr/ucb:/etc:.
export PATH
```

d. Insert the following lines:

```
# The following lines were added
# before the installation.
% umask 022
% PATH=/bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
% ORACLE_HOME=/mp0/app/oracle/product/8.1.7
% ORACLE_BASE=/mp0/app/oracle
```

```
% ORACLE_SID=oracle_sid
% ORACLE_TERM=xterm
% export PATH ORACLE_HOME
% export ORACLE_BASE ORACLE_SID
  ORACLE_TERM
```

e. Comment the `exit` command near the bottom of the script.

19. Log out and log in to test changes.

Installing the Oracle Server

To install the server:

1. Log in as an Oracle user.
2. Insert the first CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs.
3. Change the directory (`cd`) to `/` and then type:

   ```
   % ./cdrom/runInstaller
   ```

4. The system asks you whether the `rootpre.sh` script has been executed. Execute the `/cdrom/rootpre.sh` script from a different root window and enter `y` in the Installer dialog box.
5. The Welcome dialog box opens. Click Next.
6. The File Locations dialog box opens.
   a. In the Source field, enter the path of the file representing the product(s) you want to install.
   b. In the Destination field, enter the path for Oracle Home.
   c. Click Next.
7. The Available Products dialog box opens.
   a. Select a product to be installed.
   b. Select Oracle8i Enterprise Edition 8.1.7.0.0.
8. The Installation Types dialog box opens. Select Custom.
9. The Available Product Component dialog box allows you to select the component. Select the following products and deselect all other options.

   Oracle8*i* Server 8.1.7.0.0
   Oracle Configuration Assistants —
   Oracle Database Configuration Assistant 8.1.7.0.0
   Oracle Data Migration Assistant 8.1.7.0.0
   Oracle Utilities 8.1.7.0.0 —
   Oracle Database Utilities 8.1.7.0.0

SQL*PLus 8.1.7.0.0

Oracle Installation Products 8.1.7.0.0 —

Oracle Universal Installer 1.7.0.18.0A

10. Click Next to proceed. You will be prompted to select alternate locations for the Java Runtime Environment. Specify an alternate location, if required.

11. The Privileged Operation System Groups dialog box opens. Enter groups as follows:

```
Database Administrator (OSDBA) Group: dba
Database Operator     (OSOPER) Group: dba
```

12. You will be prompted to use an Oracle Database Configuration Assistant. The default is Yes. Click Next.

13. In the Database Identification window, enter the global database name and SID.

14. You will be prompted for the database file location.

15. Verify the summary of all the settings. If a tree option appears in red, verify and correct it. Click Install. The Oracle installation procedure starts and the progress is displayed in a progress window.

16. After completion, you are prompted to insert the second CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs. Eject the first CD-ROM, insert the second CD-ROM, and enter the complete path of the CD-ROM (`/cdrom#1`).

17. The Setup Privileges dialog box opens and prompts you to run `/mp0/app/oracle/product/8.1.7/root.sh`. You can verify the installation logs at `/mp0/app/oracle/product/oraInventory/logs/installActions.log`. Click OK. Click Next.

18. The Configuration Tools dialog box opens and automatically starts the Net8 Configuration Assistant. Select Perform Typical Configuration and click Next.

19. After completing Listener Configuration, the Database Assistant dialog box opens.

- **a.** Select OLTP as the server type.
- **b.** Enter 20 as the Concurrently connected users.
- **c.** Select Dedicated Server Mode as the database operation mode.
- **d.** Do not select any other options like Oracle J Server, SQL*Plus Help, Database Configuration Assistant and so on.

e. Review database information such as Compatible Parameter 8.1.0, Language, Initialization Filename along with previously entered Global Database Name, and SID.

Enter the following information:

Maximum datafiles: 512

Maximum Log Files: 32

Maximum Log Members: 2

f. Click Next.

g. In the next dialog box, click the respective tabs to verify the system, tools, user, rollback, index and temporary settings.

h. Verify the locations and set the file size for all the Redo Log files.

i. Enter new Checkpoint Interval and Checkpoint Timeout values or accept the default values.

j. Enter new values or accept default values for the following:

Shared Pool Size: 6MB recommended.

Block Buffers: 200 recommended.

Log Buffer Size: 16384 recommended.

Processes: 50 recommended.

Block Size: 4096

k. Verify the locations for the following:

Trace User Processes

Background Processes

l. Select Create database now and click Finish.

20. The Configuration Assistant Progress Box appears. Click Close.

21. The End Of Installation dialog box displays the completion of the installation process.

22. Click Installed Products to verify all installed Oracle components.

Installing Oracle on Compaq Tru64 UNIX

The following sections provide instructions for installing Oracle in the Compaq Tru64 UNIX operating environment.

Setting Up the Oracle Account

To set up an Oracle account on a Tru64 UNIX operating system:

1. Log in as `root`.
2. Using the `ipcs` command, obtain a list of the system's current shared memory, and its identification number and owner.
3. Set kernel parameters corresponding to the maximum:
   - Size of the shared memory segment (`SHMMAX`) Recommended: 2139095040
   - Number of shared memory segments in the system (`SHMMNI`) Recommended: 100
   - Number of shared memory segments a user process can attach (`SHMSEG`) Recommended: 32
   - Amount of shared memory that can be allocated system-wide (`SHMMNS`)
4. Relink and reboot after configuring the kernel and the shared memory parameters on the system.
5. Set additional parameters, depending on the configuration and planned database use.
6. If the `/tmp` and `/var/tmp` directories have less than 20MB space available, identify a directory (`alt_tmp_dir`) that contains at least 20MB of available space that can be used temporarily.

   For C shell:

   ```
   # setenv TMPDIR alt_tmp_dir
   # chmod 777 $TMPDIR
   ```

   For Bourne shell:

   ```
   # set TMPDIR=alt_tmp_dir
   # export TMPDIR
   # chmod 777 $TMPDIR
   ```

7. Verify that `ftp` is working.

   ```
   $ftp remote_server_name
   ftp> put test_filename
   ftp> get test_filename
   ```

8. Verify that the following line is in the `/etc/services` file (used by the TCP/IP Protocol Adapter):

   ```
   listener_name port#/protocol
   ```

   where

   - `listener_name`=name of the Net8 listener. Default/recommended name: `listener`

- port#=port number on which Net8 listener listens for tcp/ip connections. Recommended: 1521
- protocol=protocol of listener

Example:

```
listener 1521/tcp
```

9. Create and identify a mount point (mp0) for the Oracle owner and software. Create the app directory if it does not already exist:

```
cd mp0
mkdir app
```

10. Add the dba group:

```
/usr/sbin/addgroup
Enter a new group name or Return to exit: dba
Enter a new group number [72]:101
Group dba was added to the etc/group file.
```

11. As root, use the operating system administration utility (adduser) to create an oracle software owner account with the following properties:

- login name — oracle
- UID number — Specify a free user number between 3 and 32767 (the default is the existing highest number +1)
- default GID number — Specify a number between 2 and 32767, corresponding to the dba group (for example, 101 as shown in step 10)
- GCOS field — Specify the oracle software owner for the user name
- home directory — Choose a home directory for the oracle user
- login shell — /bin/sh, /bin/csh, or /bin/ksh

12. Set the Oracle owner's password:

```
# passwd oracle_owner
```

13. Add the word root to the dba group in the /etc/group file:

```
# dba::101:root
```

The group number, for example 101, may be different on your system.

14. Create and identify the mount points and set the owner and group.

It is recommended that the datafiles, control files, and the redo logfiles be distributed across at least three mount points:

```
# cd /
# chown oracle_owner mp1 mp2 mp3
# chgrp dba mp1 mp2 mp3
```

Example:

```
# cd /
# chown optora db1 db2 db3
# chgrp dba db1 db2 db3
```

15. Create directories for the shared files, if they do not exist:

```
# mkdir -p /opt/bin
# mkdir -p /usr/local/bin
# chown oracle_owner /usr/local/bin
# chgrp dba /usr/local/bin
# chmod 777 /usr/local/bin
```

16. Reboot the system and log in as `Oracle`.

17. Create `.login` or `.profile`:

For C shell:

a. `chmod 744 .login` (to enable editing)

b. `vi .login`

c. Insert the following lines:

```
%
% The following lines were added
% before the installation.
%
% umask 022
%
% setenv PATH
  /bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
% setenv SHELL /bin/csh
% setenv
  ORACLE_HOME /mp0/app/oracle/product/8.1.7
% setenv ORACLE_BASE /mp0/app/oracle
% setenv ORACLE_SID oracle_sid
% setenv ORACLE_TERM xterm
%
```

d. Comment out the `logout` command near the bottom of the script.

For Bourne shell:

a. `chmod 744 .profile` (to enable editing)

b. `vi .profile`

c. Comment the following lines:

```
PATH=/usr/bin:/usr/ucb:/etc:.
export PATH
```

d. Insert the following lines:

```
% The following lines were added
% before the installation
%
% umask 022
%
% PATH=/bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
% ORACLE_HOME=/mp0/app/oracle/product/8.1.7
% ORACLE_BASE=/mp0/app/oracle
% ORACLE_SID=oracle_sid
% ORACLE_TERM=xterm
% export PATH ORACLE_HOME
% export ORACLE_BASE ORACLE_SID
  ORACLE_TERM
```

e. Comment the `exit` command near the bottom of the script.

18. Log out and log in to test changes.

Installing the Oracle Server

To install the server:

1. Log in as an Oracle user.

2. Insert the first CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs.

3. Change the directory (`cd`) to `/` and then type:

```
% ./cdrom/runInstaller
```

4. The Oracle Universal Installer Type dialog box opens along with the Welcome screen.

a. Click Installed Products. In the Inventory dialog box that opens, verify that there are no installed products and click Close.

b. Click Next in the Welcome dialog box.

5. The File Locations dialog box opens.

a. In the Source field, enter the path of the file representing the product(s) you want to install.

```
/cdrom/oracle8i/stage/products.jar
```

b. In the Destination field, enter the path for Oracle Home:

```
/mp0/app/oracle/product/8.1.7
```

c. Click Next.

6. The Available Products dialog box opens.
   a. Select a product to be installed.
   b. Select Oracle8i 8.1.7.0.0.
7. The Installation Types dialog box opens. Select the third option as Custom.
8. The Available Product Component dialog box allows you to select the component.
   a. Click Product Language to select the current language setting for running the Oracle product.

Please note: Changing the language of the product does not affect the current installation session's language. The Oracle Universal Installer runs in the language detected at the operating system level.

   b. Select the following products for Vault.

      Oracle8*i* Server 8.1.7.0.0
      Oracle Configuration Assistants —
            Oracle Database Configuration Assistant 8.1.7.0.0
            Oracle Data Migration Assistant 8.1.7.0.0
      Oracle Utilities 8.1.7.0.0 —
            Oracle Database Utilities 8.1.7.0.0
            SQL*PLus 8.1.7.0.0
      Oracle Installation Products 8.1.7.0.0 —
            Oracle Universal Installer 1.7.0.18.0A

   c. Click Next to proceed.
9. The Component Locations dialog box opens. You can select alternate locations for some components. You can verify the required and available disk space for installation of the selected components.
   Click Next.
10. In the Privileged Operation System Groups dialog box, enter groups as follows:

```
Database Administrator (OSDBA) Group: dba
Database Operator     (OSOPER) Group: dba
```

11. The Upgrading or Migrating an Existing Database dialog box opens if an Oracle installation exists on the machine. Do not select the Upgrade or Migrate option. Click Next.
12. The Start Database Create window appears. Click Yes and then click Next.

13. In the Database Identification window, enter the global database name and SID.
14. You are prompted for the database file location. Enter `/mp0/app/oracle`.
15. Verify the summary of all the settings. If a tree option appears in red, verify and correct it. Click Install. The Oracle installation procedure starts and the progress is displayed in a progress window.
16. After completion, you are prompted to insert the second CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs. Eject the first CD-ROM, insert the second CD-ROM, and enter the complete path of the CD-ROM (`/cdrom#1`).
17. The Setup Privileges dialog box opens and prompts you to run `/mp0/app/oracle/product/8.1.7/root.sh`. Use instructions described in "Performing Root Install" on page 5-32. You can verify the installation logs at `/mp0/app/oracle/product/oraInventory/logs/installActions.log`. Click OK. Click Next.
18. The Configuration Tools dialog box opens and automatically starts the Net8 Configuration Assistant. Select Perform Typical Configuration and click Next.
19. After completing Listener Configuration, the Database Assistant dialog box opens.
    a. Select OLTP as the server type.
    b. Enter 20 as the Concurrently connected users.
    c. Select Dedicated Server Mode as the database operation mode.
    d. Do not select any other options like Oracle J Server, SQL*Plus Help, Database Configuration Assistant and so on.
    e. Review database information such as Compatible Parameter 8.1.0, Language, Initialization Filename along with previously entered Global Database Name, and SID.

       Enter the following information:

       Maximum datafiles: 512

       Maximum Log Files: 32

       Maximum Log Members: 2
    f. Click Next.
    g. In the next dialog box, click the respective tabs to verify the system, tools, user, rollback, index and temporary settings.
    h. Verify the locations and set the file size for all the Redo Log files.

i. Enter new Checkpoint Interval and Checkpoint Timeout values or accept the default values.

j. Enter new values or accept default values for the following:

Shared Pool Size: 6MB recommended.

Block Buffers: 200 recommended.

Log Buffer Size: 16384 recommended.

Processes: 50 recommended.

Block Size: 4096

k. Verify the locations for the following:

Trace User Processes

Background Processes

l. Select Create database now and click Finish.

20. The Configuration Assistant Progress Box appears. Click Close.

21. The End Of Installation dialog box displays the completion of the installation process.

22. Click Installed Products to verify all installed Oracle components.

Performing Root Install

To perform root install:

1. Run the `root.sh` script as follows:

```
su
cd $ORACLE_HOME/
./root.sh
```

The following messages are displayed:

```
Running Oracle8 root.sh script...
The following environment variables are set as:
ORACLE_OWNER=optora
ORACLE_HOME=/opt/app/oracle/product/8.1.7
ORACLE_SID=parth
```

2. Enter the path for the local bin directory, when prompted as follows.

```
Enter the full pathname of the local bin
directory: [/usr/local/bin]:
```

The following messages are displayed:

```
Entry will be added to the /var/opt/oracle/oratab
file by Database Configuration Assistant when a
database is created.
Finished running generic part of root.sh script.
```

```
Now product-specific root actions will be
performed.
```

Installing Oracle on SGI IRIX

The following sections provide instructions for loading Oracle in an SGI IRIX operating environment.

Please note: This release of Optegra supports Oracle8*i* Release 2 (8.1.7) on SGI IRIX.

Setting Up the Oracle Account

To set up an Oracle account on SGI IRIX:

1. Log in as `root`.
2. Set the following shared memory and semaphore parameters using the `systune -i` command:

```
# systune -i
systune-> shmmax 134217728
systune-> shmin 1
systune-> shmmni 100
systune-> shmseg 100
systune-> semmni 100
systune-> semopm 100
systune-> semmsl 60
```

Please note: Set the semmsl variable to 10 plus the largest `PROCESSES` parameter of any Oracle database on the system. The `PROCESSES` parameter can be found in each `initsid.ora` file, located in the `$ORACLE_HOME/dbs` directory. The `PROCESSES` value is assumed to be 50, the recommended value for Optegra installation.

```
systune-> semmns 110
```

Please note: Set the semmns variable to the sum of the `PROCESSES` parameter for each Oracle database, adding the largest one twice. Then add an additional 10 for each database. The `PROCESSES` value is assumed to be 50, the recommended value for Optegra installation.

3. Verify that `ftp` is working:

```
$ftp remote_server_name
ftp> put test_filename
```

```
ftp> get test_filename
```

4. Verify that the following line is in the `/etc/services` file (used by the TCP/IP Protocol Adapter):

   ```
   listener_name port#/protocol
   ```

   where

   - `listener_name`=name of the Net8 listener. Default/recommended name: `listener`
   - `port#`=port number on which Net8 listener listens for TCP/IP connections. Recommended: `1521`
   - `protocol`=protocol of listener

   Example:

   ```
   listener 1521/tcp
   ```

5. Create and identify mount point (`mp0`) for the `Oracle` owner and software. Create the `app` directory if it does not already exist:

   ```
   cd mp0
   mkdir app
   ```

6. Use the USER MANAGER GUI tool to create the `Oracle` user and enter `dba` into the group field (It will ask you if you want to create a new group called `dba`).

   ```
   # cd /mp0
   # chown -R oracle_owner.dba app
   ```

7. Set the Oracle owner's password:

   ```
   # passwd oracle_owner
   ```

8. Add the word `root` to the dba group in the `/etc/group` file:

   ```
   # dba::101:root
   ```

   The group number, for example 101, may be different on your system.

9. Create and identify the mount points and set the owner and group.

   It is recommended that the datafiles, control files, and the redo logfiles be distributed across at least three mount points.

   ```
   # cd /
   # chown oracle_owner.dba mp1 mp2 mp3
   ```

   Example:

   ```
   # cd /
   # chown optora.dba db1 db2 db3
   ```

10. Create directories for shared files (if they do not already exist):

    ```
    # cd /opt
    # mkdir bin
    ```

```
# cd /var/opt
# mkdir oracle
# chown oracle_owner oracle
# chgrp dba oracle
```

11. Reboot the system and log in as `Oracle`.

12. Edit the `.login` file and insert the following lines:

For C shell:

a. `vi .login`

b. Insert the following lines:

```
#
# The following lines were added
# before the installation.
#
 umask 022
#
setenv PATH /usr/bin /usr/bsd /sbin
/usr/sbin /bin /usr/bin/X11 /opt/bin .
setenv SHELL /bin/csh
```

c. Edit the `.cshrc` file and add the following lines:

```
 setenv ORACLE_HOME
 /mp0/app/oracle/product/8.1.7
 setenv ORACLE_BASE /mp0/app/oracle
 setenv ORACLE_SID oracle_sid
 setenv ORACLE_TERM xterm
#
```

d. Comment the `logout` command near the bottom of the script.

For Bourne shell:

a. `vi .profile`

b. Comment the following lines:

```
PATH=/usr/bin:/usr/bsd:/sbin:/usr/sbin:/bin:
/usr/bin/X11:/opt/bin:.
export PATH
```

c. Insert the following lines:

```
# The following lines were added
# before the installation.
#
  % umask 022
#
 PATH=/bin:/usr/bin:/usr/ccs/bin:/opt/bin:.
 ORACLE_HOME=/mp0/app/oracle/product/8.1.7
```

```
ORACLE_BASE=/mp0/app/oracle
ORACLE_SID=oracle_sid
ORACLE_TERM=xterm
export PATH ORACLE_HOME
export ORACLE_BASE ORACLE_SID ORACLE_TERM
#
```

d. Comment the `exit` command near the bottom of the script:

13. Log out and log in to test changes.

Please note: Before you install the Oracle server,

- Set the environment variable `SGI_ABI=-64`.
- Unset the environment variables `LD_LIBRARY64_PATH` & `LD_LIBRARYN32_PATH`.

Errors

1. You may encounter the following linking error while setting up the Oracle account on an SGI IRIX operating system:

```
ld64: WARNING 126: The archive
/software/app/oracle/product/8.1.7/lib/libn8.a defines
no global symbols. Ignoring.
ld64: WARNING 126: The archive
/software/app/oracle/product/8.1.7/lib/libn8.a defines
no global symbols. Ignoring.
ld64: WARNING 126: The archive
/software/app/oracle/product/8.1.7/lib/libn8.a defines
no global symbols. Ignoring.
ld64: ERROR 28: GP-relative sections overflow by 0x78
bytes. Please recompile with a smaller -G value.
You can see gprel section layout with -m -aoutkeep
See the explanation in the gp_overflow(5) manpage.
ld64: INFO 152: Output file removed because of error.
```

In such cases replace all occurrences of `mips3` with `mips4` under all the makefiles (`*.mk` files) in `$ORACLE_HOME/<MODULE>/lib`.

2. While installing Vault you may encounter an error if the `.login` file contains `ORACLE ENVIRONMENT SETUP`. In such cases you cannot execute the `su - ${LOGIN} -c` command. To avoid this, set the `ORACLE_HOME` and `ORACLE_SID` environment variables in `.cshrc` or source the related setup from `.cshrc`.

Installing the Oracle Server

To install the server:

1. Log in as an Oracle user.
2. Insert the CD-ROM.
3. Change the directory (cd) to / and then type:

   ```
   % ./cdrom/runInstaller
   ```

4. The Oracle Universal Installer Type dialog box opens along with the Welcome screen.
   a. Click Installed Products. In the Inventory dialog box that opens, verify that there are no installed products and click Close.
   b. Click Next in the Welcome dialog box.
5. The File Locations dialog box opens.
   a. In the Source field, enter the path of the file representing the product(s) you want to install.

      ```
      /cdrom/oracle8i/stage/products.jar
      ```

   b. In the Destination field, enter the path for Oracle Home:

      ```
      /mp0/app/oracle/product/8.1.7
      ```

   c. Click Next.
6. The Available Products dialog box opens.
   a. Select a product to be installed.
   b. Select Oracle8i 8.1.7.0.0.
7. The Installation Types dialog box opens. Select the third option as Custom.
8. The Available Product Component dialog box allows you to select the component.
   a. Click Product Language to select the current language setting for running the Oracle product.

Please note: Changing the language of the product does not affect the current installation session's language. The Oracle Universal Installer runs in the language detected at the operating system level.

   b. Select the following products for Vault.

      Oracle8*i* Server 8.1.7.0.0 —

      Oracle Database Configuration Assistant 8.1.7.0.0

      Oracle Data Migration Assistant 8.1.7.0.0

Migration Utility 8.1.7.0.0
Oracle Utilities 8.1.7.0.0 —
Oracle Database Utilities 8.1.7.0.0
SQL*PLus 8.1.7.0.0
Oracle Installation Products 8.1.7.0.0 —
Oracle Universal Installer 1.7.0.18.0A

c. Click Next to proceed.

9. The Component Locations dialog box opens. You can select alternate locations for some components. You can verify the required and available disk space for installation of the selected components. Click Next.

10. In the Privileged Operation System Groups dialog box, enter groups as follows:

```
Database Administrator (OSDBA) Group: dba
Database Operator     (OSOPER) Group: dba
```

11. The Upgrading or Migrating an Existing Database dialog box opens if an Oracle installation exists on the machine. Do not select the Upgrade or Migrate option. Click Next.

12. The Start Database Create window appears. Click Yes and then click Next.

13. In the Database Identification window, enter the global database name and SID.

14. You are prompted for the database file location. Enter `/mp0/app/oracle`.

15. Verify the summary of all the settings. If a tree option appears in red, verify and correct it. Click Install. The Oracle installation procedure starts and the progress is displayed in a progress window.

16. After completion, the Setup Privileges dialog box opens and prompts you to run `/mp0/app/oracle/product/8.1.7/root.sh`. Use instructions described in “Performing Root Install” on page 5-40. You can verify the installation logs at `/mp0/app/oracle/product/oraInventory/logs/installActions.log`. Click OK. Click Next.

17. The Configuration Tools dialog box opens and automatically starts the Net8 Configuration Assistant. Select Perform Typical Configuration and click Next.

18. After completing Listener Configuration, the Database Assistant dialog box opens.
    a. Select OLTP as the server type.
    b. Enter 20 as the Concurrently connected users.
    c. Select Dedicated Server Mode as the database operation mode.
    d. Do not select any other options like Oracle J Server, SQL*Plus Help, Database Configuration Assistant and so on.
    e. Review database information such as Compatible Parameter 8.1.0, Language, Initialization Filename along with previously entered Global Database Name, and SID.

       Enter the following information:

       Maximum datafiles: 512

       Maximum Log Files: 32

       Maximum Log Members: 2
    f. Click Next.
    g. In the next dialog box, click the respective tabs to verify the system, tools, user, rollback, index and temporary settings.
    h. Verify the locations and set the file size for all the Redo Log files.
    i. Enter new Checkpoint Interval and Checkpoint Timeout values or accept the default values.
    j. Enter new values or accept default values for the following:

       Shared Pool Size: 6MB recommended.

       Block Buffers: 200 recommended.

       Log Buffer Size: 16384 recommended.

       Processes: 50 recommended.

       Block Size: 4096
    k. Verify the locations for the following:

       Trace User Processes

       Background Processes
    l. Select Create database now and click Finish.
19. The Configuration Assistant Progress Box appears. Click Close.
20. The End Of Installation dialog box displays the completion of the installation process.
21. Click Installed Products to verify all installed Oracle components.

Performing Root Install

To perform root install:

1. Run the `root.sh` script as follows:

```
su
cd $ORACLE_HOME/
./root.sh
```

The following messages are displayed:

```
Running Oracle8 root.sh script...
The following environment variables are set as:
ORACLE_OWNER=optora
ORACLE_HOME=/opt/app/oracle/product/8.1.7
ORACLE_SID=parth
```

2. Enter the path for the local bin directory, when prompted as follows.

```
Enter the full pathname of the local bin
directory: [/usr/local/bin]:
```

The following messages are displayed:

```
Entry will be added to the /var/opt/oracle/oratab
file by Database Configuration Assistant when a
database is created.
Finished running generic part of root.sh script.
Now product-specific root actions will be
performed.
```

Software Requirements for SGI IRIX

The following are the software requirements for the SGI IRIX operating system:

Table 5-1 Software Requirements for SGI IRIX

Software Items	Requirements
Operating system	SGI IRIX 6.5 and IRIS Development Option 6.5
Networking software	eoe.sw.svr4net subsystem installing on IRIX 6.5

Installing Oracle on Windows NT

This section provides instructions for loading Oracle on the Windows NT operating system.

Installing the Server

To install the server:

1. Log in as an Oracle user.
2. Insert the first CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs.
3. An Autorun window opens. Select Begin Installation from the window. If this window fails to open, you can run SETUP.EXE located in the root directory on the CD-ROM.
4. The Oracle Universal Installer Type dialog box opens along with the Welcome screen.
   a. Click Installed Products. In the Inventory dialog box that opens, verify that there are no installed products and click Close.
   b. Click Next in the Welcome dialog box.
5. The File Locations dialog box opens.
   a. In the Source field, enter the path of the file representing the product(s) you want to install.

      `D:\stage\products.jar`

   b. In the Destination field, enter the path for Oracle Home:

      `F:\Oracle\ora81`

   c. Click Next.
6. The Available Products dialog box opens.
   a. Select a product to be installed.
   b. Select Oracle8i Enterprise Edition 8.1.7.0.0.
7. The Installation Types dialog box opens. Select the third option as Custom.
8. The Available Product Component dialog box allows you to select the component.
   a. Click Product Language to select the current language setting for running the Oracle product.

Please note: Changing the language of the product does not affect the current installation session's language. The Oracle Universal Installer runs in the language detected at the operating system level.

   b. Select the following products for Vault.

      Oracle8*i* Server 8.1.7.0.0

      Oracle Configuration Assistants —

Oracle Database Configuration Assistant 8.1.7.0.0

Oracle Data Migration Assistant 8.1.7.0.0

Oracle Utilities 8.1.7.0.0 —

Oracle Database Utilities 8.1.7.0.0

SQL*PLus 8.1.7.0.0

Oracle Installation Products 8.1.7.0.0 —

Oracle Universal Installer 1.7.0.18.0A

c. Click Next to proceed.

9. The Component Locations dialog box opens. You can select alternate locations for some components. You can verify the required and available disk space for installation of the selected components.
Click Next.

10. In the Privileged Operation System Groups dialog box, enter groups as follows:

```
Database Administrator (OSDBA) Group: dba
Database Operator     (OSOPER) Group: dba
```

11. The Upgrading or Migrating an Existing Database dialog box opens if an Oracle installation exists on the machine. Do not select the Upgrade or Migrate option. Click Next.

12. The Start Database Create window appears. Click Yes and then click Next.

13. In the Database Identification window, enter the global database name and SID. Choose an SID name less than 8 characters.

14. You are prompted for the database file location. Enter `F:\Oracle\Ora81`.

15. Verify the summary of all the settings. If a tree option appears in red, verify and correct it. Click Install. The Oracle installation procedure starts and the progress is displayed in a progress window.

16. After completion, you are prompted to insert the second CD-ROM from the set of Oracle 8.1.7.0.0 (Enterprise edition) CD-ROMs. Eject the first CD-ROM, insert the second CD-ROM, and enter the complete path of the CD-ROM (`\cdrom#1`).

17. The Configuration Tools dialog box opens and automatically starts the Net8 Configuration Assistant. Select Perform Typical Configuration and click Next.

18. After completing Listener Configuration, the Database Assistant dialog box opens.

a. Select OLTP as the server type.

b. Enter 20 as the Concurrently connected users.

c. Select Dedicated Server Mode as the database operation mode.

d. The Oracle Database Configuration Assistance dialog box opens. Do not select the Oracle Jserver or SQL* Plus Help options. Click Next.

e. The Oracle Database Configuration Assistance dialog box opens. Select Compatible Parameter = 8.1.0. Click Next.

f. Review database information such as Compatible Parameter 8.1.0, Language, Initialization Filename along with previously entered Global Database Name, and SID.

Enter the following information:

Maximum datafiles: 512

Maximum Log Files: 32

Maximum Log Members: 2

g. Click Next.

h. In the next dialog box, click the respective tabs to verify the system, tools, user, rollback, index and temporary settings.

i. Verify the locations and set the file size for all the Redo Log files.

j. Enter new Checkpoint Interval and Checkpoint Timeout values or accept the default values.

k. Enter new values or accept default values for the following:

Shared Pool Size: 6MB recommended.

Block Buffers: 200 recommended.

Log Buffer Size: 16384 recommended.

Processes: 50 recommended.

Block Size: 4096

l. Verify the locations for the following:

Trace User Processes

Background Processes

m. Select Create database now and click Finish.

19. The Configuration Assistant Progress Box appears. Click Close.

20. The End Of Installation dialog box displays the completion of the installation process.

21. Click Installed Products to verify all installed Oracle components.

Verifying the Oracle Revision for Optegra

Make sure that you have configured Oracle correctly if you have previously installed this release.

The configuration file is `INITORCL.ORA`, and it is located in the `DATABASE` subdirectory of the `Oracle8i` program directory (the default program directory is `oraclora81`). You can edit this file with any text editor.

Please note: The default file may not contain the parameter `open_cursors`. If it does, add it to the file and set its values to correspond with the Optegra Minimum Value provided in the following table.

The required parameter values are as follows:

Table 5-2 Required Parameters and their Values

Parameter Name	Oracle Default Value	Optegra Minimum Value
db_block_buffers	-	200
log_checkpoint_interval	-	10000
processes	-	50
open_cursors	-	255
db_file_multiblock_read_count	8	8
db_files	20	60
shared_pool_size	3,500,000	6000000

After changing any parameter values, you must restart Oracle for the changes to take effect.

If you are sharing an existing database application, make sure that the password for the `SYSTEM` account of that database is `manager`. See the Oracle documentation for further details on this topic.

You can share the rollback segments with another Oracle application in addition to Optegra. The rollback tablespace must have a minimum of six rollback segments, each capable of growing to 11MB.

Enabling the ARCHIVELOG Feature

For increased protection from catastrophic media failure, you can enable the ARCHIVELOG feature of Oracle. This feature provides roll-forward recovery in the event of a simultaneous media failure of both the RDBMS and the storage pool. The ARCHIVELOG mode synchronizes the Oracle and the Optegra databases. This allows the Optegra `Recover Storage Pool` command to work correctly. The default setting is disabled (NOARCHIVELOG mode).

After installing Vault, you can enable the Oracle ARCHIVELOG mode as follows:

1. Add the following to the parameter file INIT<SID> (located in the \DATABASE directory on the Oracle home drive):

   ```
   LOG_ARCHIVE_START=TRUE
   LOG_ARCHIVE_DEST=pathname
   ```

   The path name is the one to be used for storing redo log files (for example, F:\Optegra_ARC).

Please note: Oracle redo log files that are online should be on a different physical disk drive from the database file.

2. Shut down the database with normal priority if necessary, start up exclusive, activate ARCHIVELOG mode, and verify. The full set of commands follows without the system messages:

   ```
   C:\> svrmgrl
   SVRMGR> connect internal/manager;
   SVRMGR> shutdown normal;
   SVRMGR> startup mount exclusive;
   SVRMGR> alter database archivelog;
   SVRMGR> archive log list;
   SVRMGR> exit;
   ```

3. Restart the database:

   ```
   SVRMGR> connect internal;
   ```

4. The system requests a password. Type it, and press the `Return` key.

5. Enter the following:

   ```
   SVRMGR> startup;
   ```

Starting the Oracle Server

The Oracle server service is named `OracleService<SID>`. For most systems, the `OracleService<SID>` is set to start up automatically on powering the computer. Consult the Windows NT documentation on configuring service startup.

Please note: The default <SID> is `ORCL`.

Starting the Server

You can start the Oracle Server either from the Services panel or manually from the command prompt. Log in as an Administrator group on Windows NT.

From the Services Panel:

To start the server from the Services panel:

1. Start OracleService<SID> from the Services dialog box. Open the Services dialog box as follows: On the Windows NT taskbar, select Start > Settings > Control Panel > Services.
2. Select OracleService<SID> and click Start to start the service. For more information about Services, the Administrator accounts, and logging on, consult the Windows NT documentation. This starts the Oracle Optegra database.

From the Command Prompt:

To start the server from the command prompt:

1. Open a new command prompt and run `svrmgrl`.
2. The full set of commands follows without the system messages:

```
C:\> svrmgrl
SVRMGR> connect internal/manager
SVRMGR> startup
SVRMGR> exit
```

This command starts a database instance. During this process, you are connected through the Oracle INTERNAL account. If the OracleService<SID> is started, you are prompted for the required password for this account, which is MANAGER. If your password is not MANAGER, temporarily change it. Refer to the following section "Changing the INTERNAL Account Password". When the correct password is entered, the system displays the following message:

```
Connected. ORACLE instance started. Database
mounted.
```

Changing the INTERNAL Account Password:

To change the INTERNAL account password, start the Instance Manager.

1. On the Windows NT taskbar, click Start > Oracle for Windows NT > Instance Manager.
2. Select the ORCL Instance.
3. Choose Edit and proceed to change the password.

Language Support for Oracle

If you have installed Oracle in a language other than English, set the Oracle variable NLS_LANG to the name of character set loaded. Perform the following steps before installing Vault on Windows NT:

1. At the command prompt, run regedit.exe.
2. Open the HKEY_LOCAL_MACHINE on the local machine window.
3. Click SOFTWARE and double-click ORACLE.
4. Double-click the NLS_LANG line to display the menu in the Variable menu.

   This has a value in the form language_territory.charset.
5. Remove the language_territory portion from NLS_LANG.

   For example, FINNISH_FINLAND.WE8ISO8859P1 is now be WE8ISO8859P1.

Chapter 6

Preparing the ORACLE Database for a Vault Refresh on UNIX

This chapter discusses the tasks you must perform before refreshing Vault from a previous release to the current release on the UNIX platform.

Please note: You can use the procedure discussed in this chapter only if you want to migrate to the Vault database for OracleV8.1.7 on the same machine. To migrate the Vault database for Oracle V8.1.7 from a UNIX machine to a different machine on the same platform, refer to the procedure discussed in Chapter 15, “Migrating Vault Across Platforms.”

- Migrating the Vault Database from Oracle V7.3.4/8.0.4 to Oracle V8.1.7
- Back Up of the Vault Data
- Downloading and Setting Up the Current Release

Migrating the Vault Database from Oracle V7.3.4/8.0.4 to Oracle V8.1.7

Before refreshing Vault 3.x, Vault 4.x, or Vault 5.0 on UNIX or NT to Vault 6.0 on UNIX, migrate the Vault database from Oracle V7.3.4/8.0.4 to Oracle V8.1.7.

Exporting the Vault Database

To export the existing Vault database from Oracle V7.3.4/8.0.4 to Oracle V8.1.7, perform the following steps:

1. Export the Oracle database as follows:

```
> cd $ORACLE_HOME/bin
> exp system/password
```

Please note: In the following steps, accept the default by pressing `Return` at the prompt unless otherwise specified.

```
Enter array fetch buffer size: 4096 >
Export file: expdat.dmp >
```

If you want to specify another file, you can do so; otherwise, press `Return`. The default is `expdat.dmp`.

```
(1)E(ntire database), (2)U(sers), or (3)T(ables):
(2)U >
Export grants (yes/no): yes >
Export table data (yes/no): yes >
Compress extents (yes/no): yes >
User to be exported: (Press Return to quit)> username
```

At this prompt, enter the user names as listed one at a time:

`pdmdm`
`pdmqf`
`edmattr`
`edmdv` (for DOD only)
`edmui`
`asm`

2. Remove the existing Oracle version.
3. Install Oracle V8.1.7.

Please note: On the SGI platform, install the N32 toolkit library.

4. Change the ORACLE_HOME and ORACLE_SID variables settings in the `$EDM_HOME/.login` file according to the new Oracle home directory and SID.
5. Download Vault and the related products from the CD-ROM using the SLIC utility with root privileges.
6. Delete the `edmsirm.tmp` file from the following path: `$EPD_HOME/install/temp_flags`.
7. Run `edmsirm` to create `edmodule.defaults.sh` from `$EPD_HOME/INSTALL` as the edm user.
8. Run `edmsasm` as the edm user.
9. Delete the following files from `$EPD_HOME/install/temp_flags`
   - `edmrdsm.tmp`
   - `edmdvrdsm.tmp` (for DV)
   - `edmdodrdsm.tmp` (for DOD)
10. Run the following scripts with `root` privileges to create tablespace:
    - `edmrdsm.root`
    - `edmdvrdsm.root` (for DV only)
    - `edmdodrdsm.root` (if the DOD is in this node)
11. Create users `ASM`, `EDMATTR`, `EDMDV` (for DOD only), `EDMUI`, `PDMDM`, `PDMQF` as follows:

```
% svrmgrl
SVRMGR> connect system/password
Connected.
SVRMGR> CREATE USER ASM IDENTIFIED BY ASM DEFAULT
TABLESPACE "SYSTEM" TEMPORARY TABLESPACE
"EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO ASM;
SVRMGR> GRANT "RESOURCE" TO ASM;

SVRMGR> CREATE USER EDMATTR IDENTIFIED BY EDMATTR
DEFAULT TABLESPACE "EDM_TEMPSPACE" TEMPORARY
TABLESPACE "EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO EDMATTR;
SVRMGR> GRANT "RESOURCE" TO EDMATTR;

SVRMGR> CREATE USER EDMDV IDENTIFIED BY EDMDV
DEFAULT TABLESPACE "EDM_DISTDATA" TEMPORARY
TABLESPACE "EDM-TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO EDMDV;
SVRMGR> GRANT "RESOURCE" TO EDMDV;
```

```
SVRMGR> CREATE USER EDMUI IDENTIFIED BY EDMUI
DEFAULT TABLESPACE "SYSTEM" TEMPORARY TABLESPACE
"EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO EDMUI;
SVRMGR> GRANT "RESOURCE" TO EDMUI;

SVRMGR> CREATE USER PDMDM IDENTIFIED BY PDMDM
DEFAULT TABLESPACE "EDM_SYSTEM" TEMPORARY
TABLESPACE "EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO PDMDM;
SVRMGR> GRANT "RESOURCE" TO PDMDM;

SVRMGR> CREATE USER PDMQF IDENTIFIED BY PDMQF
DEFAULT TABLESPACE "SYSTEM" TEMPORARY TABLESPACE
"EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO PDMQF;
SVRMGR> GRANT "RESOURCE" TO PDMQF;
```

Importing the Vault Database

1. Import the Oracle database as follows:

```
> cd $ORACLE_HOME/bin
> imp system/password
```

Please note: In the following steps, press `Return` at the prompt to accept the default unless otherwise specified.

```
Import file: expdat.dmp >
Enter insert buffer size (minimum size
is 4096) 30720 >
Export the file created by EXPORT:V08.00.04 via the
conventional path
List the contents of import file only (yes/no): No >
Ignore create error due to object
existence (yes/no): No >
Import grants (yes/no): YES >
Import table data (yes/no): YES >
Import entire export file (yes/no): No > yes
```

Requirements for Importing the Database

The following requirements must be satisfied before you import the Vault database:

1. The free space in system tablespace must be greater than 100 MB after installing Oracle 8*i* 8.1.7.
2. The system should have at least 10 MB of free space in addition to the space allocated for all the other EDM tablespaces like `EDM_ATTRIBUTES`, `EDM_FILE_DIRECTORY`, `EDM_AUDIT_LOG` and `EDM_HISTORY`.
3. Use the correct number of rollback segments.

Back Up of the Vault Data

1. Log in to the account on which you are refreshing Vault.
2. Back up the following files and directories:

```
$EDM_HOME/.login
$EDM_HOME/.cshrc
$EDM_HOME/data/pm.config
$EDM_HOME/data/nsm.config
$EDM_HOME/install/temp_flags/*
```

3. Back up the storage pools.

Downloading and Setting Up the Current Release

To set up the current release, do the following:

1. Download Vault and the related products from the CD-ROM using the SLIC (Software Loading and Installation Command) utility with root privileges. (As this step has already been performed earlier in "Exporting the Vault Database" on page 6-2, you do not need to repeat it here.)
2. Copy backed up data from storage pool back in place.
3. Edit the `$EDM_HOME/data/nsm.config` file to make sure that the passwords for the `EDMATTR`, `EDMDV` (for DOD only), `EDMUI`, `PDMDM`, and `PDMQF` users are as indicated in parentheses for all occurrences of the following lines:

   ```
   DMSQLPW(EDMATTR)
   DMSQLPW(EDMDV)
   DMSQLPW(PDMDM)
   QFSQLPW(PDMQF)
   UISQLPW(EDMUI)
   ```

4. Refresh Vault to the current release. For the detailed procedure, refer Chapter 7, "Refreshing Previous Releases of Vault to the Current Release."

Chapter 7

Refreshing Previous Releases of Vault to the Current Release

This chapter provides instructions for a software refresh from previous releases of Vault to the current release on the UNIX and NT platforms. A refresh installs a newer version of Vault. A refresh can only be performed on an existing version of Vault.

- Preparing for a Vault Software Refresh
- Step 1: Invoking the Refresh Tool and Validating Information
- Step 2: Shutting Down the Network
- Step 3: Refreshing Relational Database Tables
- Step 4: Starting the Server Network Processes
- Step 5: Activating the E-Mail Trigger
- Step 6: Refreshing Distributed Vault
- Step 7: Refreshing the Data Dictionary
- Step 8: Refreshing Vault Attributes and Views
- Postinstallation Tasks

Preparing for a Vault Software Refresh

Use the refresh process only if you are already running an earlier version of Vault. A refresh installs a newer version of Vault.

Please note: When you are refreshing Vault, notify all Vault users of the upgrade. Tell the users not to access Vault until notified.

Warning

Do not proceed until you have completed all the preparatory steps in the Preinstallation Checklist in Chapter 1, "Preparing to Install Vault Software on UNIX." Your refresh might fail if you have not met all refresh prerequisites. See the background information on using the automated tools in Chapter 4, "Installing Distributed Vault on UNIX."

Loading the New Vault

Use the refresh process only if you are already running an earlier version of Vault. A refresh installs a newer version of Vault.

Loading Your New Vault Software

1. Migrate the Oracle data from the previous version to the current version.

   For information on exporting and importing the Vault database, refer to Chapter 6, "Preparing the ORACLE Database for a Vault Refresh on UNIX."
2. Log in to the account on which you are refreshing Vault.
3. Back up the following files and directories:

   ```
   $EDM_HOME/.login
   $EDM_HOME/.cshrc
   $EDM_HOME/data/pm.config
   $EDM_HOME/data/nsm.config
   $EDM_HOME/install/temp_flags/*
   ```
4. Back up the storage pools.
5. Download Vault and the related products from the CD-ROM using the SLIC utility with root privileges.
6. Copy the backed up data from the storage pool back in place.

7. Edit the `$EDM_HOME/data/nsm.config` file to make sure that the passwords for the `EDMATTR`, `EDMDV` (for DV only), `EDMUI`, `PDMDM`, and `PDMQF` users are as indicated in the parentheses for all occurrences of the following lines:

```
DMSQLPW(EDMATTR)
DMSQLPW(EDMDV)
DMSQLPW(PDMDM)
QFSQLPW(PDMQF)
UISQLPW(EDMUI)
```

Input Worksheet

The input worksheet is a list of system prompts and their default values generated during installation. Refer to the section, “Installation Input Worksheet” on page 1-8 for details.

Step 1: Invoking the Refresh Tool and Validating Information

Load Vault to your system according to the instructions in *Installing Optegra Applications.* Log in as `root` to refresh from a CD-ROM.

Invoke the Software Refresh Main Tool from `root` to start refresh. Perform the following steps:

1. Change to the `$EDM_HOME/install` directory:

```
# cd $EDM_HOME/install
```

2. If you want to create a history file of your refresh, follow the instructions in step 3. If you do not want to create a history file, follow the instructions in step 4.
3. Invoke the automated refresh tool and create a history log by entering:

```
# ./edmrefresh | tee edmrefresh.log
```

   To read the history log, look for it in `$EDM_HOME/install`.

4. Invoke the automated refresh tool without creating a history log by entering:

```
# ./edmrefresh
```

The system shows you the previous inputs and prompts you to indicate whether they are correct or not. It then gives you the chance to fix whatever is incorrect.

Default values are shown in brackets ([ ]).

```
Vault Software Refresh module. (edmrefresh)

This module refreshes the Vault Software on your
system.
The Vault Software Refresh module refreshes the
Vault Software on your system by calling the
following Vault Software Refresh Modules:

edmsrdm : Vault Show Refresh Defaults Module
edmsncm : Vault Server Network Cleanup Module
edmrdlm : Vault Relational Database Table Creation
edmrdlm : and Loading Module
edmsnsm : Vault Server Network Startup Module
edmaetm : Vault Activate E-Mail Trigger Module

It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.

Would you like to continue [yes]? :

Running Vault Show Refresh Defaults Module
(edmsrdm).

Vault Show Refresh Defaults module. (edmsrdm)
This module shows the Vault Software Refresh values
that will be used to perform the Vault Software
Refresh on this system.

The Vault Software Refresh values can be modified
before continuing the Vault Software Refresh by
entering (no) to the prompt that asks whether or
not the Vault Software Refresh values are okay.
It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.

Would you like to continue [yes]? :
```

```
Here are the Vault Software Refresh Values that
will be used to perform the Vault Software Refresh
for this system. Please confirm that they are
correct:

Vault account name    = edm
Vault home directory  = $EDM_HOME
Oracle account name   = oracle
Oracle SID            = oracle
Vault E-Mail Trigger Activation = yes

If the Vault Software Refresh Values are not
correct, then answer no to the next prompt. You
will be given the opportunity to modify the Vault
Software Refresh Values:

Are these correct [yes]? :

The Vault Show Refresh Defaults Module has
completed successfully.
```

Step 2: Shutting Down the Network

For the remainder of the automated refresh, you need take only a few actions. The tool occasionally checks to see if you want to continue. You can enter either `yes` or `no`. If you enter `no`, you may restart the refresh later at the point where you left off. The automatic refresh tool will remember your answers.

In the following sequence, the tool shuts down the network to prepare for the new software.

```
Running Vault Server Network Cleanup Module
(edmsncm).

Vault Server Network Cleanup module. (edmsncm) This
module stops the Vault Server Network Processes in
preparation for a Vault Software Refresh. It uses
as input, the edmodule.defaults.sh file to obtain
the appropriate information to perform these tasks.
Would you like to continue [yes]? :

Stopping the Vault Server Network Processes.
```

```
This will take a few minutes; please be patient.

The Vault Server Network Processes have been
successfully stopped.
```

Step 3: Refreshing Relational Database Tables

In this step, the tool loads all relational database tables if the refresh includes changes to these tables.

```
Running Vault Relational Database Table Creation
and Loading Module (edmrdlm).

Vault Relational Database Table Creation and
Loading module. (edmrdlm) This module creates and
loads the Vault Relational Database Tables. It uses
as input, the edmodule.defaults.sh file to obtain
the appropriate information to perform these tasks.

Would you like to continue [yes]? :

Creating and Loading the Vault Relational Database
Tables.

Skipping the generate Access and Security Manager
Tables step, this step has already been done.

Skipping the generate Vault Database Tables step,
this step has already been done.

Generating the Vault Database Table Indexes.
Vault SQL Database Index Creation
Generating the Vault Database Table Views.
Vault SQL View Creation

Skipping the generate Attribute Management Tables
step, this step has already been done.

Generating the Attribute Management Database Table
Indexes.
```

```
Vault Attribute Management SQL Database Index
Creation

Generating the Attribute Management Table Views.

Vault attribute management control table view
generation for Vault Skipping the generate
Graphical User Interface Tables step, this step has
already been done.

Generating the Graphical User Interface Table
Views.

Vault SQL View Creation

Assigning Vault ORACLE Userid's to the
EDM_TEMPSPACE Tablespace.
Assigning Vault ORACLE Userid's to the
EDM_TEMPSPACE Tablespace

Loading the Access and Security Manager (EDMVault)
Tables.

Vault Run-time SQL Logic load.

Loading the Vault Database (EDMVault) Tables.

Vault control table load for EDMVault

Loading the Attribute Management Tables.

Vault Attribute Management control table load for
Vault

Loading the Access and Security Manager
(EDMProjects) Tables.

Vault Projects Run-time SQL Logic load.

Loading the Vault Database (EDMProjects) Tables.

Vault control table load for EDMProjects

The Vault Relational Database Table Creation and
Loading module has completed successfully.
```

Step 4: Starting the Server Network Processes

In this step, the tool starts up the server network processes in the background.

```
Running Vault Server Network Startup Module
(edmsnsm).

Vault Server Network Startup module. (edmsnsm)
This module starts the Vault Server Network
Processes. It uses as input, the edmodule.defaults.sh
file to obtain the appropriate information to
perform these tasks.

Would you like to continue [yes]? :

Starting the Vault Server Network Processes.

The Vault Server Network Processes are being
started in background.

This will take a few minutes. Please be patient.

The Vault Server Network Processes have been
successfully started.
```

Step 5: Activating the E-Mail Trigger

In this step of the refresh process, the tool activates the E-Mail trigger. Indicate `yes` or `no` when the tool prompts about whether to continue.

Please note: Vault messages use SQL servers. When the number of servers defined by the `MAXINST` parameter are all in use, the E-Mail trigger does not work. No message is returned.

```
Running Vault Activate E-Mail Trigger Module
(edmaetm).

Vault Activate E-Mail Trigger module. (edmaetm)
This module Activates the Vault E-Mail Trigger. It
uses as input, the edmodule.defaults.sh file to
```

```
obtain the appropriate information to perform these
tasks.

Would you like to continue [yes]? :

Signing on to Vault.

Sign on to Vault server BETELGEUSE completed
successfully. You have 6 Vault message(s).

Activating the Vault E-Mail Trigger.

The command trigger for SENDMSG has been changed.
The command trigger for REQRVW has been changed.
The command trigger for RSVP has been changed.
The command trigger list has been changed to
active.

Signing off from Vault.
Sign off from Vault completed successfully.

The Vault Activate E-Mail Trigger Module has
completed successfully.

The Vault Software Refresh Module has finished
successfully.

The Vault Software has been successfully refreshed.
```

Step 6: Refreshing Distributed Vault

Start the Software Distributed Vault Refresh Main Tool from `root` to start refresh. Perform the following steps:

Please note: Perform the tasks in this step only on a machine with Distributed Vault already installed.

To refresh Distributed Vault:

1. Shut down the Optegra network. Otherwise, the `edmdvindex` portion can fail and terminate the refresh.
2. Change to the `$EDM_HOME/install` directory:

   ```
   # cd $EDM_HOME/install
   ```

3. At this stage, you can either:

- Execute the refresh tool and create a history log by entering:

  # **./edmdvrefresh | tee edmdvrefresh.log**

  To read the history log, look for it in the `$EDM_HOME/install` directory.

  OR

- Execute the refresh tool without creating a history log by entering:

  # **./edmdvrefresh**

The system now shows you the previous inputs and prompts you to indicate whether or not they are correct. You can fix whatever is incorrect.

An example follows. Default values are shown in brackets ([ ]).

```
****************************************
Distributed Vault Software Refresh module.
(edmdvrefresh)

This Installation module refreshes the Distributed
Vault Software on your system by calling the
following Vault Software Installation Modules:

edmdvrdlm [Vault DV RDBMS Table Creation and
Loading Module]
edmdodrdlm[Vault DOD RDBMS Table Creation and
Loading Module]

It uses as input, the edmodule.defaults.sh to
obtain the appropriate information to perform these
tasks.
****************************************

Would you like to continue [yes]?:

****************************************
Skipping the Vault Server Network Cleanup Module
(edmsncm).

This module has already been run.
****************************************

****************************************
Running the Distributed Relational Database Table
Creation and Loading Module (edmdvrdlm).
```

```
****************************************
Sun Microsystems Inc. SunOS 5.6 Generic August 1997
****************************************
Distributed Vault Database Table Creation and
Loading module. (edmdvrdlm)

This module creates and loads the Distributed Vault
Database Tables.

It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.
****************************************

Would you like to continue [yes]?:

****************************************
Creating and Loading the Distributed Vault Database
Tables.
****************************************

****************************************
Skipping the Distributed Vault Database Table
generation step, this step has already been
performed.
****************************************

****************************************
Generating the Distributed Vault Database Table
Indexes.
****************************************

./edmdvindex: EDMVault SQL Index Creation for
Distributed Vault

****************************************
Generating the Distributed Vault Database Table
Views.
****************************************

./edmdvview: Distributed Vault View Creation

****************************************
Loading the Distributed Vault Database Triggers.
****************************************
```

```
./edmdvdbt: EDMVault Database Trigger Load for
Distributed Vault
****************************************
Loading the Distributed Vault Access and Security
Manager Logic.
****************************************

./ldasmdv: EDMVault Run-time SQL Logic load for
Distributed Vault

****************************************
Loading the Distributed Vault Database Tables.
****************************************

./ldedmdv: EDMVault Control Table Load for
Distributed Vault

****************************************
Loading the Distributed Vault Editing Logic.
****************************************

./ldedmedi: Vault Control Table Load for
Distributed Vault

****************************************
The Distributed Vault Relational Database Table
Creation and Loading module has completed
successfully.
****************************************

****************************************
Running the Distributed Object Directory
Tablespace Creation Module (edmdodrdsm).
****************************************
Sun Microsystems Inc. SunOS 5.6 Generic August 1997

****************************************
Distributed Vault Object Directory Database Table
Creation and Loading module (edmdodrdlm).

This module creates and loads the Distributed
Object Directory Database Tables.
```

```
It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.
****************************************
*
```

At this stage, accept the default `yes` only if you are performing the refresh on a Vault with DOD installed. Otherwise, enter `no` and the script exits.

```
Would you like to continue [yes]?:
****************************************
Creating and Loading the Distributed Object
Directory Database Tables.
****************************************

****************************************
Skipping the Distributed Object Directory
Database Table generation step, this step has
already been performed.
****************************************

****************************************
Generating the Distributed Object Directory
Database Table Indexes.
****************************************

./edmdodindex: EDMVault SQL Index Creation for
Distributed Vault

****************************************
Generating the Distributed Object Directory
Database Table Views.
****************************************

./edmdodview: Create views/synonym on LOCAL DOD for
InfoBrowser DV support

****************************************
The Distributed Object Directory Relational
Database Table Creation and Loading module has
completed successfully.
****************************************

****************************************
```

```
Running the Distributed Vault Network Configuration
Module (edmdvmcnf).
****************************************
Sun Microsystems Inc. SunOS 5.6 GenericAugust 1997
****************************************
Distributed Vault Network Configuration Module
(edmdvmcnf).

This module adds the Distributed Vault AE's to the
network configuration file.

It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.
****************************************

Would you like to continue [yes]?:
****************************************
Modifying nsm.config file for Automatic
Registration with STORE/GET.
****************************************

Would you like to enable AUTO REGISTRATION
(*optional) [NO]:
****************************************
The Distributed Vault Database Configuration Module
has completed successfully.
****************************************

****************************************
Running Vault Server Network Startup Module
(edmsnsm).
****************************************
Sun Microsystems Inc. SunOS 5.6 GenericAugust 1997

****************************************
Vault Server Network Startup module. (edmsnsm)

This module starts the Vault Server Network
Processes.

It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.
****************************************
```

```
Would you like to continue [yes]?:
****************************************
Starting the Vault Server Network Processes.

The Vault Server Network Processes are being
started in background.

This will take a few minutes; please be patient.
****************************************

****************************************
The Vault Server Network Processes have been
successfully started.
****************************************

****************************************
The Distributed Vault Software Refresh Module has
completed.

The Distributed Vault Software has been
successfully refreshed.
****************************************
```

Step 7: Refreshing the Data Dictionary

In this step, run the `ddrefresh` script to refresh the data dictionary. Log in as Administrator and enter the following at the command prompt:

```
# cd $EDM_HOME/dictionary
# ./ddrefresh
```

In the output, default values are shown in brackets ([]). Press `Return` to accept them. The following is a sample of the output:

```
Please enter the Oracle password for the user
SYSTEM (manager):

Please enter the Oracle password for the user PDMDM
(pdmdm):

Select yes if you are installing Vault in a
distributed environment.
```

```
Have you installed distributed Vault? [y,n] (n):y

Updating Data in the Data Dictionary Tables.

Data Updation in the Data Dictionary Tables
Completed.

Do you want to install JAPANESE? [y,n] (n):
Do you want to install GERMAN   ? [y,n] (n):
Do you want to install FRENCH   ? [y,n] (n):

Creating Indexes of Data Dictionary.

Data Dictionary Refresh Completed.
```

When performing the refresh on a DOD node, execute the `dddvrefresh` script after executing the `ddrefresh` script. An example follows.

```
Please enter the Oracle password for the user
SYSTEM (manager):

Please enter the Oracle password for the user EDMDV
(edmdv) :

Updating Data in the Data Dictionary Tables.

Data Updation in the Data Dictionary Tables
Completed.

Do you want to install JAPANESE? [y,n] (n):
Do you want to install GERMAN   ? [y,n] (n):
Do you want to install FRENCH   ? [y,n] (n):

Distributed Vault (DV) Data Dictionary Refresh
Completed.
```

Step 8: Refreshing Vault Attributes and Views

In this step, run the navrefresh script to refresh Vault attributes and views. Perform the following steps:

1. Log in as root and set the $EPD_HOME environment variable to the appropriate Optegra home directory.
2. At the prompt, run the navrefresh script as follows:

   ```
   # cd $EPD_HOME/install
   # ./navrefresh
   ```

   In the output, default values are shown in brackets ([]). Press Return to accept them.

Please note: In the following sample output, the Vault Administration account is edm and the $EPD_HOME environment variable is set to the /opt/epd/dm/v60/bin.

```
Database Refresh Utility for EPD.Connect
Navigator

Enter the user id of your Optegra Vault
Administration account:edm

Installation details you have specified are:-

Optegra Vault Administration account : edm
Optegra Vault/EPD.Connect installation directory
                                : /opt/epd/dm/v60

Do you want to re-enter any values [no]?:

OK to refresh the EPD.Connect Oracle Tables [yes]:

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Enter the Optegra Vault Oracle database manager
userid   [pdmdm]:

Enter the Optegra Vault Oracle database manager
password [pdmdm]:

Enter the Optegra Vault Oracle IQF userid [pdmqf]:
```

```
Enter the Optegra Vault Oracle IQF password[pdmqf]:

Updating Tables in ORACLE Database.

Processing completed.

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OK to refresh the EPD.Connect Oracle Tables
for DV [yes]:

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Enter the Optegra Vault Oracle database manager
userid   [pdmdm]:

Enter the Optegra Vault Oracle database manager
password [pdmdm]:

Enter the Optegra Vault Oracle IQF userid [pdmqf]:

Enter the Optegra Vault Oracle IQF password[pdmqf]:

Enter the Optegra Distributed Vault Oracle admin
userid   [edmdv]:

Enter the Optegra Distributed Vault Oracle admin
password [edmdv]:

Creating New Views and Synonyms in ORACLE Database.

Processing completed.

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Enter the EDMADMIN user password[edmadmin]:

Signing on to the Optegra Vaults as edmadmin.

Adding mandatory attribute set and attributes.

Adding Optional Attributes.

CAMAAT100I SYMMETRY-FLAG has been added.
```

```
CAMAAT100I TIM-FLAG has been added.
CAMAAT100I TIM-SOURCE has been added.

Populating Attribute Sets.

CAMAMA112E Processing not done - SYMMETRY-FLAG is
CAMAMA112E already a member of CONFIG_OPTIONAL.
CAMAMA112E Processing not done - TIM-FLAG is
CAMAMA112E already a member of CONFIG_OPTIONAL.
CAMAMA112E Processing not done - TIM-SOURCE is
CAMAMA112E already a member of CONFIG_OPTIONAL.

OK to install the EPD Interface to CADDS5 [yes]:

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Installation Utility

OK to add CADDS Application Environment to Optegra
Vault [yes]:

Enter the Vault Oracle database manager
userid [pdmdm]:

Enter the Vault Oracle database manager
password [pdmdm]:

Checking New Tables in ORACLE Database.....

New tables already exist.

Enter the Vault Oracle database manager
userid [pdmdm]:

Enter the Vault Oracle database manager
password [pdmdm]:

Adding CADDS Application to Optegra Vault.

OK to install the CADDS Vault Attributes [yes]:

Enter the EDMADMIN user password [edmadmin]:

Adding CADDS attributes.
```

```
CAMARL103E Processing not done - CONFIG_RULE_DB
CAMARL103E already exists.
CAMARL103E Processing not done - CONFIG_RULE_PS
CAMARL103E already exists.
CAMARL103E Processing not done - CONFIG_OPT_RULE_DB
CAMARL103E already exists.
CAMARL103E Processing not done - CONFIG_OPT_RULE_PS
CAMARL103E already exists.

TRI292I CADDS attributes added.

TRI211I Optegra Interface for CADDS Installation
TRI211I Complete.

Migrating filesets in IN-REVIEW status
from 2.0.6 to 6.0 if any.

Sun Microsystems Inc.SunOS 5.6 GenericAugust 1997

Enter the Optegra Vault Oracle database manager
userid [pdmdm]:

Enter the Optegra Vault Oracle database manager
password [pdmdm]:

Updating Tables in ORACLE Database.

Processing completed.

EPD.Connect Refresh completed.
```

Postinstallation Tasks

The Vault refresh has been completed. Perform the final postinstallation procedures as described in Chapter 3, “Postinstallation Tasks for UNIX.”

Chapter 8

Customizing the Installation or Refresh on UNIX

This chapter provides instructions for additional customization of your Vault installation or refresh.

- Enabling the E-mail Trigger
- Manually Changing the CADDS Part Definition
- Creating and Loading the Revision Code Scheme

Enabling the E-mail Trigger

If you did not enable the e-mail trigger when you installed Vault software and you now want to use e-mail command triggers, perform the following steps:

1. Shut down Vault or verify that it is down.
2. Correct the `nsm.config` file by uncommenting the e-mail trigger `AE` definition.
3. Restart Vault.
4. From the `$EDM_HOME/install` directory run `edmaetm` to enable the e-mail command triggers.

Manually Changing the CADDS Part Definition

As an optional step, you can customize the list of `CADDS` files that constitute a CADDS part to include any file of a type recognized by CADDS. (You can also change the definition of a CADDS part any time after installing Vault.) See *Vault Manager Guide* for additional information about the Load CADDS Part Definition utility.

Warning

Any changes you make to the default definition of a CADDS part are global changes and will affect all CADDS users who store parts in Vault. Before you change the definition of a CADDS part, make sure that the changes are appropriate to your environment and inform all CADDS users of the change.

To customize this file, follow these steps:

1. Using the command line interface, sign on as the Administrator account user. For example:

   ```
   % cisignon userid=edmadmin userpwd=edmadmin
   ```

2. In another window, log in to the Vault software account.
3. Enter

   ```
   % cd $EDM_HOME/install
   ```

4. Enter

```
% cp DEFAULT.CDPRTDEF INSTALL.CDPRTDEF
```

5. Edit and customize the `INSTALL.CDPRTDEF` file.
6. To load what you customized, enter

```
% ldedmcpd
```

7. Stop and restart the network server processes.

A printout of the file you want to customize follows.

```
"INSTALL.CDPRTDEF" 17 lines, 51 characters
00
20
21
22
23
24
25
26
27
28
29
2A
2B
2C
2D
2E
2F
~
~
~
~
```

Creating and Loading the Revision Code Scheme

Three files are provided as possible revision code schemes. You can use any one of these, or you can create your own file with the system editor. (For more information about Vault revision codes, see *Vault Manager Guide.)* The three files and their contents are described below.

- `NUMBERS.REVCODES` — This file contains 500 numerical revision codes from 1 through 500.
- `LETTERS.REVCODES` — This file contains 552 standard engineering alphabetic revision codes from A to ZZ. In this file, the letters I, O, and Q are not used.
- `ALPHABET.REVCODES` — This file contains 702 alphabetic revision codes from A to ZZ, using all letters in the alphabet.

Revision Code Scheme Rules

If you create a file containing your own revision code scheme, the following rules apply:

- Each entry (record) in the file will match the corresponding Vault internal revision number. For example, the first entry is internal revision number 1, the second entry is internal revision number 2 and so forth.
- The entries in the file will be ordered as an ascending sequence of revision codes. For example, if the entries in the file are

  ```
  Z
  A
  Y
  B
  ```

  then the translation to Vault internal revision numbers will be

  ```
  1.  Z
  2.  A
  3.  Y
  4.  B
  ```

- The number of the entries (records) in the file determines the maximum number of revisions a file can have.
- Revision codes consist of 20 or fewer numbers, or uppercase characters with no embedded blanks. If lowercase alphabetic characters are present in the file, they will be translated to uppercase before being inserted into the revision code table.

- Revision codes can contain special characters. However, remember that not all special characters exist on all terminal keyboards.
- Duplicate revision codes are not allowed.

Please note: CADDS does not support alphanumeric revision codes. When you enter `GET PART READ`, you can supply only an integer revision code.

Installing the Revision Code Table

To install the revision code translation table, do the following:

1. Copy your selected revision code file into the file `INSTALL.REVCODES`. For example, if you select the `MY_OWN.REVCODES` file as your revision code scheme, enter

   ```
   % cp MY_OWN.REVCODES INSTALL.REVCODES
   ```

   (If you created your own revision code file, enter the same command shown above with the name of your file in place of `MY_OWN.REVCODES`.)

2. Execute the `ldedmrev` command file to load the revision codes into the revision code table in the database.

   ```
   % ldedmrev
   ```

Please note: The `ldedmrev` command file loads these revision codes under the revision sequence named `DEFAULT`. You can create other revision code sequences, as described in Chapter 4 of *Vault Manager Guide*.

Chapter 9

UNIX Vault Troubleshooting

This chapter provides information on troubleshooting techniques that can be used during the installation, migration, or refresh of Vault.

- Starting the Process Manager
- Starting Other Network Processes
- Listing Started Processes
- Stopping and Restarting Network Processes
- Adjusting .tmp Files When Rerunning Scripts
- Working Around $ORACLE_HOME Errors
- Tracing Execution of Install or Refresh Scripts
- Logging the Install, Migrate, or Refresh Script Output
- Changing Previously Entered Defaults

Starting the Process Manager

You can start the network Process Manager to run in the foreground by following these steps:

1. Log in to the Vault software account.
2. Enter these commands:

```
% setenv ANSTLEVL 31
```

   Use the above command only if you want to use the tracing capability, but use the following command whether you are using tracing or not.

```
% PMGR.STARTUP
```

When the Process Manager starts, it uses the current process and task.

If you do not want to run it in the foreground, follow these steps instead:

1. Log in to the Vault software account.
2. Enter these commands:

```
% setenv ANSTLEVL 31
```

   Use the command above only if you want to use the tracing capability, but use the following command whether you are using tracing or not.

```
% PMGR.STARTUP &
```

Please note: For more information about network processes and the commands used to start, stop, and query them, see *Vault System Administrator Guide*.

Starting Other Network Processes

After you start the Process Manager, you can automatically start the Data Management Log, the Administrator processes, the Attribute Management process, the Data Management process, and the Data Distribution processes using the Process Control Agent (pca).

To start the pca, running in the foreground, follow these steps:

1. Log in to the Vault software account.
2. Enter these commands:

```
% setenv ANSTLEVL 31
```

Use the above command only if you want to use the tracing capability, but use the following command whether you are using tracing or not.

```
% PCA.STARTUP
```

You will see messages on your terminal as each AE binds to the Process Manager.

If you do not want to run it in foreground, follow these steps instead:

1. Log in to the Vault software account.
2. Enter these commands:

```
% setenv ANSTLEVL 31
```

Use the above command only if you want to use the tracing capability, but use the following command whether you are using tracing or not.

```
% PCA.STARTUP &
```

Listing Started Processes

To make sure all network processes have been started, enter these commands:

```
% ps x
% nsmquery -pm | more
% nsmquery -ds | more
```

The last command produces a display similar to the examples that follow for Vault and Distributed Vault.

Processes for Vault

```
 *********** PM_BIND TABLES ***************

process name      matthew:MATTHEW:PDMLOG:0
process id        646
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:35:07 2000

process name      matthew:MATTHEW:EDMATTR:0
process id        659
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:34:57 2000
```

```
process name      matthew:MATTHEW:PDMDM:0
process id        677
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:35:49 2000

process name      matthew:MATTHEW:PDMDD:0
process id        691
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:35:22 2000

process name      matthew:MATTHEW:PDMADMN:0
process id        705
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:35:10 2000

process name       matthew:MATTHEW:ADMIN_SERVER:0
 process id        714
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:35:12 2000

process name      matthew:MATTHEW:COMMAND_TRIGGER:0
process id        725
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:35:39 2000

process name      matthew:MATTHEW:DESKTOP_SERVER:0
process id        764
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:35:06 2000

process name      matthew:MATTHEW:DESKTOP_EDMOSRV:0
process id        777
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:34:54 2000
```

Processes for Distributed Vault

```
*********** PM_BIND TABLES ***************

process name      whoisnext:WHOISNEXT:PDMLOG:0
process id        9428
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:26 2000
```

```
process name      whoisnext:WHOISNEXT:EDMATTR:0
process id        9488
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:36:44 2000

process name      whoisnext:WHOISNEXT:PDMDM:0
process id        9535
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:23 2000

process name      whoisnext:WHOISNEXT:PDMDD:0
process id        9596
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:36:43 2000

process name      whoisnext:WHOISNEXT:PDMADMN:0
process id        9658
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:31 2000

process name     whoisnext:WHOISNEXT:ADMIN_SERVER:0
process id        9667
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:36:49 2000

process name  whoisnext:WHOISNEXT:COMMAND_TRIGGER:0
process id        9678
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:04 2000

process name     whoisnext:WHOISNEXT:QUERY_SERVER:0
process id        9691
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:27 2000

process name      whoisnext:WHOISNEXT:SQL_SERVER:0
process id        9703
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:28 2000

process name   whoisnext:WHOISNEXT:DESKTOP_SERVER:0
process id        9718
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:36:51 2000
```

```
process name  whoisnext:WHOISNEXT:DESKTOP_EDMOSRV:0
process id        9739
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:36:49 2000

process name      whoisnext:WHOISNEXT:EDMEMGR:0
process id        9747
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:32 2000

process name      whoisnext:WHOISNEXT:EDMAMAN:0
process id        9762
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:18 2000

process name      whoisnext:WHOISNEXT:EDMIMGR:0
process id        9776
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:36:49 2000

process name      whoisnext:WHOISNEXT:OAXIS:0
process id        9794
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:37:22 2000
```

Processes for Distributed Vault with the DOD

```
 *********** PM_BIND TABLES ***************

process name      tiger:TIGER:PDMLOG:0
process id        27422
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:47:54 2000

process name      tiger:TIGER:EDMATTR:0
process id        27436
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:48:27 2000

process name      tiger:TIGER:PDMDM:0
process id        27525
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:48:17 2000
```

```
process name      tiger:TIGER:PDMDD:0
process id        27562
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:48:05 2000

process name      tiger:TIGER:PDMADMN:0
process id        27575
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:47:51 2000

process name      tiger:TIGER:ADMIN_SERVER:0
process id        27592
process state     CONFIRMED
last heartbeat    Fri Nov 9 11:06:51 2000

process name      tiger:TIGER:COMMAND_TRIGGER:0
process id        27620
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:47:43 2000

process name      tiger:TIGER:QUERY_SERVER:0
process id        27628
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:47:55 2000

process name      tiger:TIGER:SQL_SERVER:0
process id        27664
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:47:42 2000

process name      tiger:TIGER:DOD_QUERY_SERVER:0
process id        27765
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:48:05 2000

process name      tiger:TIGER:DIST_SERVER:0
process id        27772
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:48:06 2000

process name      tiger:TIGER:EDMEMGR:0
process id        27774
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:48:21 2000
```

```
process name      tiger:TIGER:EDMAMAN:0
process id        27793
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:47:37 2000

process name      tiger:TIGER:EDMIMGR:0
process id        27808
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:48:08 2000

process name      tiger:TIGER:OAXIS:0
process id        27827
process state     CONFIRMED
last heartbeat    Tue Nov 21 15:47:54 2000

  process name
tiger:TIGER:DESKTOP_SERVER:0
  process id              15390
  process state           CONFIRMED
  last heartbeat          Tue Nov 21 15:47:49 2000

  process name
tiger:TIGER:DESKTOP_EDMOSRV:0
  process id              27712
  process state           CONFIRMED
  last heartbeat          Tue Nov 21 15:48:09 2000
```

Stopping and Restarting Network Processes

If the network processes are currently running in the foreground, stop the network processes and restart them in the background, as shown in the following steps:

1. Log in to the software account (`edm`).
2. Stop all network processes with these commands:

```
% nsmstop -pca
% nsmstop -all
```

3. Start the Process Manager and the other network processes in the background by executing the following commands:

```
% pmgr.startup &
% pca.startup &
```

Adjusting .tmp Files When Rerunning Scripts

All the installation, migration, and refresh scripts create `.tmp` files to allow them to be rerun and pick up from where they left off.

Intermediate .tmp Files

Each script creates intermediate `.tmp` files in the account's Vault install directory while the script is running.

An intermediate `.tmp` file is created after the successful completion of a required step in the script. Some scripts perform multiple steps and thus create multiple `.tmp` files, one for each successful step.

If the script that is running is aborted, whether by user intervention or by an error, it will pick up where it left off by checking for the existence of the intermediate `.tmp` files when it is rerun. If it finds an intermediate `.tmp` file for a particular step, it will skip that step.

Final .tmp Files

Once a script finishes running successfully, all intermediate `.tmp` files are removed. A final `.tmp` file is created in the Vault account's `install/temp_flags` directory. The final `.tmp` file name is the script name with `.tmp` added at the end.

The final `.tmp` file remains in the account's `install/temp_flags` directory. If the script that created the final `.tmp` file is rerun, it checks to see if the final `.tmp` file exists that is related to this script. If it exists, the script will not rerun. Instead, the script issues the appropriate message that it has already been run successfully to completion and that in order to rerun this script you will have to manually delete the final `.tmp` file that is associated with that script.

Override Intermediate .tmp Files When Necessary

If a Vault installation, migration or refresh script erroneously creates an intermediate `.tmp` file because the script's error checking logic did not determine that an error had occurred for that step, you can abort the script.

After you have corrected the problem that caused the error, you can delete the appropriate intermediate `.tmp` file for the step that you would like to rerun and rerun the script. After the script reruns the step you chose, it continues with the rest of the steps.

Working Around $ORACLE_HOME Errors

During the installation, migration, or refresh of Vault, you may encounter the following error.

```
ORA-00205: error in identifying control file
'?/dbs/cntrl@.dbf'
ORA-09782: sfifi: another instance has the same
database mounted.
```

This error occurs because the `$ORACLE_HOME` value being used to start the database is not the same `$ORACLE_HOME` value which was used to create the database. Possible causes of the error are:

- The database was created with `$ORACLE_HOME` equal to a real directory (for example, `/usr2/oracle8`) but `$ORACLE_HOME` is now set to a soft link (for example, `/usr/oracle > /usr2/oracle8`).
- The database was created with `$ORACLE_HOME` equal to a soft link (for example, `$ORACLE_HOME > /usr2/oracle8`), but `$ORACLE_HOME` is now set to the real directory (for example, `/usr2/oracle8`).

When the error occurs, the script exits and you must use the following workaround to finish the Vault installation, migration, or refresh.

1. Switch to the Oracle user.

   ```
   % su - oracle
   ```

2. Manually start the database.

   ```
   % cd ${ORACLE_HOME}/dbs/edm_dbs
   % svrmgrl
   SVRMGR> connect internal
   ```

```
SVRMGR> startup pfile=init1.ora
```

3. Touch the setup file.

```
SVRMGR> touch setup_rdbms_3_done.tmp
```

4. Exit the Oracle session and return to root.

```
SVRMGR> exit
```

5. Restart the automated script you were using, either `edminstall`, `edmigrate`, or `edmrefresh`. If you were performing a manual procedure, restart the module you were in when you received the error.

The script continues, but after a while the same Oracle error occurs again and you receive the message again. The workaround is slightly different this time. The installation, migration, or refresh completes successfully after you perform the steps below.

1. Switch to the Oracle user.

```
% su - oracle
```

2. Manually start the database.

```
% cd $ORACLE_HOME/dbs/edm_dbs
% svrmgrl
SVRMGR> connect internal
SVRMGR> startup pfile=init2.ora
```

3. Touch the setup file.

```
SVRMGR> touch setup_rdbms_22_done.tmp
```

4. Exit the Oracle session and return to root.

```
SVRMGR> exit
```

5. Restart the automated script you were using. If you were performing a manual procedure, restart the module you were in when you received the error.

Tracing Execution of Install or Refresh Scripts

Output generated by the Vault script tracing capability is a behind-the-scenes look at everything the Vault installation or refresh script does as it executes. When you run without the tracing capability activated, you only see the generated errors, messages, and prompts.

The tracing capability is most useful when an error is causing an installation or refresh to fail and the reason for the failure is not apparent. When you

execute a Vault installation, migration, or refresh script with the script tracing capability activated, the reason for the failure might become clear. Thus, you can take corrective action because of the additional information that the script tracing capability has provided.

To enable the script tracing capability, run the appropriate installation, migration or refresh script with the `-t` tracing parameter. For example,

```
% edmigrate -t
```

— to have all tracing information output to the screen.

or

```
% edmigrate -t | tee edmigrate.log
```

— to have all tracing information output to the `edmigrate.log` file.

The `-t` parameter activates the script tracing capability.

If you are not able to determine the reason for the script failure, even with the additional information provided by the script tracing capability, save the script tracing output in a log file so that a Service Representative can research and correct the failure.

Logging the Install, Migrate, or Refresh Script Output

You can generate a log file of output generated by an installation, migration, or refresh script by using the UNIX "`tee`" utility. The `tee` utility transcribes the standard input to the standard output and outputs this information into a filename that you provide.

You can execute any of the installation, migration, or refresh scripts and redirect the output to a log file that you specify.

The following example shows how to use the `tee` utility to output all information generated by the `edmrefresh` script:

```
% edmrefresh | tee edmrefresh.log
```

Output generated by an installation, migration, or refresh script that is being redirected to a log file is also displayed on the screen. Thus, you are able to see the output while it is being logged.

See the UNIX man pages for more information on the `tee` utility.

Changing Previously Entered Defaults

The Vault Software Installation/Migration Requirements Module Defaults File controls the behavior of all Vault installation, migration, and refresh script modules. The name of this file is `edmodule.defaults.sh` and it is located in the account's install directory.

The `edmodule.defaults.sh` file is generated by the Software Installation/Migration Requirements, known as `edmsirm` in the installation script and `edmsmrm` in the migration script. This script is also located in the Vault account's install directory.

If you want to change the software requirement default value to something different from what you had entered earlier, you can do this by rerunning `edmsirm` or `edmsmrm`. To rerun either of them, do the following:

1. Log in to the Vault account if one exists at this point, or use the root account if the account does not exist yet.
2. Change directory to the Vault account's install directory.

   ```
   % cd $EDM_HOME/install
   ```

3. Execute the Software Installation/Migration Requirements part.

   ```
   % edmsirm  (for a new installation)
   % edmsmrm  (for a migration)
   ```

   You are informed that the respective part has previously been run to completion. You are then asked whether you would like to continue and are offered two options:

   - Continue with the input values that you had entered earlier being displayed as the defaults shown in brackets ([ ]) at each input value prompt.
   - Continue with the original default values being displayed as the defaults shown in brackets ([ ]) at each input value prompt

   Whichever option you choose, you are again prompted for each input value and given the opportunity to make appropriate changes.

Warning

Depending on how far along you were in the installation, migration, or refresh process, you might be modifying a Vault installation, migration, or refresh required input value that affects a step that has already been performed.

If this is the case, you will need to rerun the affected step after you modify the appropriate input value.

To determine the impact of changing a particular input value, look in the `edmodule.defaults.sh` file and find the input value that you want to modify. Then, search the `edm*` scripts in the Vault account's install directory. The `edm*` scripts that are affected by this input value have references to this input value. Thus, you will have to rerun these `edm*` scripts.

Refer to the topic Adjusting `.tmp` Files when Rerunning Scripts in this chapter for information on how to rerun a particular Vault script.

Here is an example where the `EDM_TBL_DIRECTORY` (Vault Tablespace Directory) is changed from what was entered originally when the requirements were gathered:

- The `edmodule.defaults.sh` file was checked for the Vault Tablespace Directory input value name and was determined to be `EDM_TBL_DIRECTORY`.
- The `edm* installation`, `migration` and `refresh` scripts were searched to see what scripts reference the `EDM_TBL_DIRECTORY` input value.

```
% grep EDM_TBL_DIRECTORY edm* | grep # | grep -v
edmodule.defaults-template.sh | grep -v
edmodule.defaults.sh | grep -v edmsmrm
```

Here is the output from the search command line above:

```
edmrdmm:# EDM_TBL_DIRECTORY - EDM Tablespace
Directory
edmdmsm:# EDM_TBL_DIRECTORY - EDM Tablespace
Directory
```

4. It has now been determined that if the `EDM_TBL_DIRECTORY` input value is changed, then the `edmrdmm` and `edmdmsm` scripts need to be rerun if they have already been run successfully to completion using the old `EDM_TBL_DIRECTORY` input value.

We recommend that if you need to modify an input value that is stored in the `edmodule.defaults.sh` file, you use the Vault Software Installation/Migration Requirements and not edit the `edmodule.defaults.sh` file manually to make modifications.

The Vault Software Installation/Migration Requirements performs input value validation checks on all required Vault input values to ensure that the input value you are using is acceptable for use by the Vault installation, migration, and refresh scripts.

Chapter 10

Internationalization Considerations for UNIX

This chapter describes considerations for localizing Vault and related products.

- Setting the Language Environment Variable
- Multilingual Option of Oracle

Setting the Language Environment Variable

With the exception of keywords, Vault supports English, French, German, and Japanese versions of visible text, such as help text, GUI labels and messages.

To use a language other than the default of English, set the language environment variable, LANG, according to the following table.

Language	Solaris	IRIX	OSF/1	SunOS	HP-UX	AIX
English	C	C	C	C	C	En_US
French	fr	fr	fr_FR	fr	french	fr_FR
German	de	de	de_DE	de	german	de_DE
Japanese	ja	ja_JP.EUC	ja_JP.euc	japanese	japanese.euc	ja_JP

When NLSPATH is set: If you already have NLSPATH set in your environment, you must add the following path to the NLSPATH:

$DATA_DIRECTORY/reposit/%L/%N.cat

Please note: The Vault shell scripts set LANG to C if you do not specify a value. They set NLSPATH to $DATA_DIRECTORY/reposit/%L/%N.cat if you do not set an NLSPATH value prior to executing the script.

- For the Bourne shell, enter:

```
$ NLSPATH=$NLSPATH:$DATA_DIRECTORY/reposit/%L/
%N.cat
$ export NLSPATH
```

- For the C shell, enter:

```
% setenv NLSPATH
$NLSPATH:$DATA_DIRECTORY/reposit/%L/%N.cat
```

SunOS users: In addition to setting LANG, users of SunOS must set LC_MESSAGES to fr (French), de (German), or C (English).

SunOS/JLE users: In addition to setting LANG, users of SunOS/JLE must set LC_MESSAGES to Japanese.

Japanese packages: You can execute Vault executables and executables built using Vault Programming in Japanese only if you install the appropriate Japanese platform package indicated in the following table.

Platform	Japanese Package
Sun	Japanese Feature Package (JFP) Solaris Japanese Language Environment (JLE) SunOS
SGI	Japanese Feature Module (JFM) IRIX
DEC Alpha	Internationalization OSF/1 Subsets (I18N)
HP	Japanese Native language Input/Output (JNLIO)

Multilingual Option of Oracle

Before starting Vault, you must set the environment variable `NLS_LANG` to language_territory.character_set. Language, territory, and character are a subset of the language you used when you create your Oracle database.

- For the Bourne shell, enter:

```
$ NLS_LANG=language_territory.character_set
$ export NLS_LANG
```

- For the C shell, enter:

```
% setenv NLS_LANG
language_territory.character_set
```

The following table gives example settings of `NLS_LANG` for supported languages, territories, and character sets:

Language	NLS_LANG
English	american_america.us7ascii
French	french_france.we8dec
German	german_germany.we8dec
Japanese	japanese_japan.ja16euc

For more information, see the section referring to the Multilingual option in *Installing Optegra Applications*.

Chapter 11

Introduction to Vault and Distributed Vault on Windows NT

This chapter introduces Vault and Distributed Vault (DV) on Windows NT. It provides an overview of the setup and configuration process.

- Overview of Vault and Distributed Vault
- Required Steps for Vault Installation
- Refreshing Vault from a Previous to the Current Release
- Refreshing the Data Dictionary
- Installing or Refreshing EPD.Connect and Navigator Attributes

Please note: Refer to *Optegra Release Notes* and *Installing Optegra Applications* before performing the postinstallation tasks in this book.

Overview of Vault and Distributed Vault

Vault and Distributed Vault (DV) combine relational database management systems (RDBMS) with task-oriented applications to control, manage, and distribute electronic objects. These objects may come from any computer application and may include computer-aided engineering (CAE, CAD, and CAM) parts, word processing documents, spreadsheet files, and plain text.

Vault and Distributed Vault are customizable, modular, multiuser, client-server products. The core modules are the Vault server, DV, and the Locator end-user software. Vault for Windows NT uses the full 32-bit, preemptive multitasking operating system of Windows NT.

Vault for Windows NT includes:

- Vault
- Distributed Vault
- Programming
- EPD Interface for Pro/ENGINEER
- CATIA
- MEDUSA

Please note: For information on programming, refer to the *Vault Programmer Guide.* You can find information on the EPD Interface to Pro/ENGINEER in the *EPD.Connect User Guide*.

Required Steps for Vault Installation

To install Vault on Windows NT successfully, you must perform a sequence of steps. Do not skip any steps. Use the following documents for your Vault installation:

- *Optegra Release Notes*
- *Installing Optegra Applications*
- *Using the License Manager*
- *Vault Administrator for Windows NT User Guide*

Please note: Before starting the Vault installation, stop the `Oracle{ORACLE_HOME_NAME}Agent` service. Restart this service after the Vault installation is complete. The value of the `ORACLE_HOME_NAME` variable is specified in the registry under ORACLE > HOME.

For steps 1 through 8, use the documents indicated for each task.

1. Refer to *Optegra Release Notes* for last-minute information.
2. Meet the hardware and software prerequisites for your operation system. Refer to *Installing Optegra Applications*.
3. Create partitions for your storage pools. First determine the size and number of NTFS volume requirements.
4. Install Oracle. Refer to *Installing Optegra Applications*.
5. Load Vault from the EPD.Connect and Optegra CD-ROM. Refer to *Installing Optegra Applications*.
6. Load the HTML and PDF files for the documentation of your choice. Refer to *Installing Optegra Applications*.
7. Request your EPD licenses. See *Using the License Manager* for details about the License Manager and license files.
8. Start the EPD License Manager Daemon. For complete information on how to receive, install, and use the EPD license daemon and license files, see *Using the License Manager.*
9. Initiate Vault, referring to “Postinstallation Setup” on page 12-2 for further details.

Addressing Oracle Requirements

Before installing Vault or Distributed Vault, install the necessary Oracle applications. Refer to *Installing Optegra Applications* for the Oracle requirements for your application. Also refer to the documentation for your operating system for installation and system maintenance information. If you purchased Oracle with your EPD.Connect and Optegra applications, use the Oracle CD-ROM provided for your Oracle software installation.

To install Vault on a Windows NT machine that has multiple Oracle versions like Oracle 8.0.4 and 8.1.7, select the appropriate `ORACLE_HOME`. Use Start > Programs > Oracle for Windows NT > Oracle Home Selector.

Select the `ORACLE_SID` values. Use Start > Settings > Control Panel > System > Environment.

Refreshing Vault from a Previous to the Current Release

To refresh Vault from a previous release to the current release, do the following:

1. Request Vault licenses. (See the *Using the License Manager* manual for further information.)
2. Log in as Administrator.
3. To prevent the system from crashing, stop all Optegra services.
4. Shut down the Portmapper for TCP from the Service control panel.
5. Export the registry entries of the previous software installations to a file. You must do this because certain registry entries can be lost if the installation stops before it is complete. In such a case, you cannot continue with the refresh. To export the appropriate registry entries to a file, do the following:
   a. Choose Start > Run to start `regedit`.
   b. Enter `regedit` and click OK. The Registry Editor is launched.
   c. Open the folders `HKEY_LOCAL_MACHINE\SOFTWARE`.

d. Highlight the entry named Parametric Technology Corporation.

e. Choose Registry > Export Registry File.

f. Enter a file name in which to store the registry information and click Save. If the refresh stops, import the registry information that was previously exported.

Please note: To recover the registry entries, import the file as follows:

a. Choose Start > Run to start `regedit`.

b. Enter `regedit` and click OK. The Registry Editor is launched.

c. Choose Registry > Import Registry File.

d. Browse and select the file to which you exported the registry entries in step 7.

e. Click OK in the Import Registry File dialog box.

6. Make sure that Oracle services and the database are running.

7. Run `setup.exe` from the installation CD-ROM.

8. Select the language from the Choose Setup Language dialog box.

Please note: The refresh uses the current location of the Vault by using the EDM_HOME information located in the registry. The Destination Folder information is used to upgrade the clients and Perl installations.

9. Select the Destination Folder in which Vault is already installed. The Select Components window opens.

10. Select Vault Server and confirm whether you want the services of Distributed Vault, CATIA Support, MEDUSA Support, Programmer, or Pro/ENGINEER Support.

11. Click Next when finished.

Please note: Distributed Vault must be refreshed separately. The procedure for this is the same as refreshing Vault.

12. Choose the Oracle SID. Click Next.

13. Choose Refresh and click Next. Selecting this option automatically upgrades the existing installation to the current release.

14. Select the name of the Program Folder and click Next. The system will ask you to confirm the settings of the software to be copied.

15. Click Next to continue.

If the refresh is successful, a confirmation window opens.

Refreshing the Data Dictionary

After refreshing Vault, to refresh the Data Dictionary, execute the following at the prompt:

```
> cd %EDM_HOME%\dictionary
> ddrefresh.exe
```

In the resulting output, default values are shown in brackets ([]). Press `Return` to accept them.

For a sample of the output, refer to the section “Refreshing the Data Dictionary,” on page 11-6.

Refreshing the Data Dictionary on DOD

To refresh the data dictionary on a Vault with Distributed Object Directory installed, perform these steps:

1. Shut down the Optegra network.
2. Change to the `$EDM_HOME/install` directory:

   ```
   > cd %EPD_HOME%/dictionary/dv
   ```

3. Execute the refresh tool as follows:

   ```
   > dddvrefresh.exe
   ```

After you do this, the system shows you the previous inputs and prompts you to indicate whether or not they are correct. You can fix whatever is incorrect.

Installing or Refreshing EPD.Connect and Navigator Attributes

If you are running EPD.Connect or Navigator, install the attributes required for EPD.Connect and Navigator using `nav_install.exe` when you install Vault for the first time. This procedure is not necessary for Vault as a standalone application.

If you are refreshing Vault to the current release, execute `nav_refresh.exe` to refresh the EPD.Connect and Navigator Attributes.

Please note: If you are installing EPD.Connect and Navigator attributes on a system that has Distributed Vault installed but is not a DOD Vault, respond `No` to the following prompt when you run `nav_install.exe` or `nav_refesh.exe`:

```
NNT116P OK to refresh the EPD.Connect Oracle Tables
for DV [yes]:
```

If you enter `Yes` by mistake, the Vault is not affected. To correct the response, rerun the scripts and enter `No`.

To install EPD.Connect and Navigator attributes:

1. Shut down Vault.
2. Change the directory to `%EDM_HOME%\bin`.
3. Run `connect.bat` and note the entry for the PERL_PATH variable for later use.
4. Click Start > Settings > Control Panel > System. The Systems Properties dialog box opens. Click Environment.
5. Set PERL_PATH=<value of PERL_PATH as in the `connect.bat` file>
6. Click OK and set the following variables:
   - `CVEPD_WIN_CONFIG=%EPD_HOME%\data\reposit\cfgmotif.ini`
   - `CVEPD_INIT=WINDIR/cvepd.ini`

Please note: The preceding environment variable overrides default settings in the `cvepd.ini` file.

   - `CA_BINDIR=%EPD_HOME%\bin`
   - `CA_LIBDIR=%EPD_HOME%\data\explorer\library`
   - `STEP_DIR=%EPD_HOME%\data\step`
7. Change directory to `%EDM_HOME%\install`.

8. Run the command `ldamlogic.`

9. Start up Vault from Services.

10. Set the variable `LANG` before running `nav_install.exe`.

Please note: You can set the `LANG ENVIRONMENT` variable to any of the following:

English — enu

German — de

French — fr

Japanese — ja

If the `LANG ENVIRONMENT` variable is not set, the following message appears when you run `nav_install.exe`:

```
NNT001P LANG will default to enu (English),
Continue ? [yes] :
```

11. Run the command `nav_install` from the `%EPD_HOME%\install` directory.

Warning

Before executing `nav_install` make sure that no Optegra products are running simultaneously. This may result in an error indicated by the message `Exception Access violation`.

This installs the required Oracle database objects and EPD.Connect attributes for Vault on Windows NT.

12. Click Start > Settings > Control Panel > System. The System Properties dialog box opens.

13. Click the Environment tab.

14. Set the following system variable:

```
dbms_array_size=30
```

To create a system variable, select an existing system variable (top list) and then edit the Variable and Value fields. Click Set and then click Apply.

Please note: To refresh database objects and EPD.Connect attributes already installed, run `nav_refresh.exe` from the %EPD_HOME%\install directory.

Chapter 12

NT Vault Setup and Configuration

This chapter enables you to set up, start, configure, stop, and customize Vault on Windows NT for first-time users. For instructions on upgrading your current Vault installation refer to “Introduction to Vault and Distributed Vault on Windows NT” on page 11-1.

- Overview of the Postinstallation Process
- Postinstallation Setup
- Starting and Stopping Vault
- Configuration
- Setting Up EPD Interfaces for Vault
- Managing and Customizing Vault
- Back Up of the Vault Database

Overview of the Postinstallation Process

After you load Vault on Windows NT, use the following process for postinstallation. Detailed steps for each item follow in this chapter.

- Install the Portmapper
- Install the Data Dictionary
- Restart the computer
- Start Optegra Service

  Check the network processes
- Stop Optegra Service

Postinstallation Setup

The postinstallation setup for Vault on Windows NT requires the following steps in sequential order for language support, the Portmapper, and the Data Dictionary.

1. Log off and log in as `Administrator`.
2. Install the Portmapper using the script `portinst.exe` located in %EDM_HOME%\`scripts` directory:
   a. From the command window, type:

      % **`portinst.exe`**

      The NobleNet Portmapper Utility dialog box opens.
   b. Select Install NobleNet Portmapper and Start automatically during system startup and click OK.
3. Start the NobleNet Portmapper. Make sure that the Noblenet Portmapper for TCP service is started as follows:
   a. Choose Start > Settings > Control Panel > Services.
   b. Click NobleNet Portmapper for TCP.

   You can view the portmapping using the `portview.exe` command.
4. Install the Data Dictionary as follows:

   Run `ddinstall.exe` from the command line located in the `%EDM_HOME%\dictionary` directory.

Starting and Stopping Vault

This section describes how to start and stop Optegra Service for the first time. This process starts and stops the Vault.

Starting Optegra Service for the First Time

Make sure that you have installed and started Oracle and the "Noblenet Portmapper for TCP" service before you start the Optegra service:

1. In the Services window, select Optegra Service.
2. Click Startup. A Service dialog box opens.
3. Enter the Windows NT `Administrator` password.
4. Reenter the password for confirmation and click OK.
5. In the Services window, click Start.

Restarting the computer may be required. When you try to start Optegra Service using the Services panel and get the following message, restart your computer:

```
      Dr. Watson for Windows NT
An application error has occurred
and an application error log is being generated.

            gtm.exe

      Exception access violation (0x0000005).
Address: 0x77f6741b
```

Starting the Vault

Installing Vault activates the Optegra Service. If the server has been shut down, you must perform the following steps in the Services panel to start Vault. Refer to the Windows NT documentation for more information on Windows NT Services and Administrator accounts. You can start the Vault from the interface or from the command line.

Starting Vault from the Interface

To start the Vault using the graphical user interface, follow these steps:

1. Click Start > Settings > Control Panel > Services.
2. Select OracleStartORCL and click Start. See *Installing Optegra Applications* for this procedure.
3. Verify that the EPD License Manager Service, the FLEXlm License Server, is started. The service must be set to the automatic mode.
4. Select Optegra and click Start.

   Note: Make sure that the Optegra Service is set to manual mode.
5. To make sure that all network processes have been started, enter these commands:

```
% nsmquery -pm | more
% nsmquery -ds | more
```

The last command displays Vault processes similar to the examples that follow.

```
********** PM_BIND TABLES ***************
process name
systemname:SYSTEMNAME:PDMLOG:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:06:02 1998

process name
systemname:SYSTEMNAME:EDMATTR:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:54 1998

process name
systemname:SYSTEMNAME:PDMDM:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:56 1998

process name
systemname:SYSTEMNAME:PDMDD:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:56 1998
```

```
process name
systemname:SYSTEMNAME:PDMADMN:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:06:02 1998

process name
systemname:SYSTEMNAME:ADMIN_SERVER:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:57 1998

process name
systemname:SYSTEMNAME:QUERY_SERVER:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:58 1998

process name
systemname:SYSTEMNAME:SQL_SERVER:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:59 1998

process name
systemname:SYSTEMNAME:DESKTOP_SERVER:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:59 1998

process name
systemname:SYSTEMNAME:DESKTOP_EDMOSRV:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:05:59 1998

process name
systemname:SYSTEMNAME:TRIGGER_MANAGER:0
process id              PID_UNKNOWN
process state           CONFIRMED
last heartbeat          Fri Jan 30 16:06:03 1998
```

Starting Vault from the Command Line

You can also start the Vault from the command line:

1. Run `anspmgr.exe`. Wait for 10 seconds.
2. Run `ansprcoa.exe` from another command line. This will display all the Application Entities on the screen.

Please note: Starting Vault from the command prompt will invoke other `C:\winnt\system32>` command prompt windows. These windows trace the process of initiating Vault and are to be ignored, you can close them.

Stopping the Vault

To stop the Vault, you must shut down the Optegra Service. Refer to the Windows NT documentation for more information on Windows NT Services and Administrator accounts. You can stop the Vault from the interface or from the command line.

Stopping Vault from the Interface

To stop the Vault using the graphical user interface, follow these steps:

1. Click Start > Settings > Control Panel Services.
2. Select Optegra and click Stop.

Stopping Vault from the Command Line

You can also stop the Vault from the command line. Enter the following:

```
% nsmstop -pca
% nsmstop -all
```

Configuration

After the basic setup tasks, you can complete the final configuration for the installation of Vault on Windows NT. These tasks include the following:

- Creating storage pools
- Activating e-mail triggers
- Installing EPD.Connect and Navigator attributes

Creating Storage Pools

Install two storage pools from either the command line or the Administrator. See the *Vault Administrator for Windows NT User Guide* for details.

Creating Storage Pools with Commands

Please note: Before you attempt to create storage pools, make sure that license management support is properly configured on your system. Refer to *Using the License Manager.*

To create storage pools using the command line, follow these steps:

1. Start Vault as explained in "Starting and Stopping Vault" on page 12-3.
2. Sign on to the Vault from the command line:

   ```
   % cisignon userid=edmadmin userpw=edmadmin
   ```
3. Add at least two storage pools using the following command syntax:

   ```
   % ciaddsp poolname=poolname poolinfo=drive_name
   ```

   poolname is the name of the pool, for example `POOL1`, and drive_name is the name of the drive, for example `e:\`. The following example uses these values:

   ```
   % ciaddsp poolname=POOL1 poolinfo=e:\
   ```

Please note: Make sure that the `$PATH` variable definition has no more than one semicolon. For example, the following is incorrect and may result in failure while adding storage pools.

```
PATH=C:\WINNT\system32;;C:\WINNT
```

Creating Storage Pools from the Vault Administrator

You must have Administrator installed on your computer. For more details, refer to the *Vault Administrator for Windows NT User Guide*.

Activating E-Mail Triggers

Please note: If you want to edit e-mail triggers or create new ones, you must have purchased Vault Programming. See the *Vault Programmer Guide* for details.

Vault on Windows NT supports the MSMail setup to send e-mail in addition to Vault messages when users execute the REQRVW (request review), RSVP (respond to review), or SENDMSG (send message) commands. E-mail is sent concurrently with the duplicate message.

To set up an e-mail trigger, create a new user in MSMail named edmadmin with the password edmadmin.

The Vault user ID, the e-mail recipient mailbox user ID, and the Windows NT user ID must all have the same name. The e-mail recipient must also have an alias in the \%EDM_HOME%\data\aliases file. This alias must map the user's Vault user ID to the MSMail user ID on the node on which the triggered process is executed.

To activate the e-mail triggers for rsvp, reqrvw, or sendmsg commands, execute the chgctl command as follows:

1. Sign on to the Vault as user edmadmin.
2. Execute chgctl for reqrvw, sendmsg, or rsvp with the following values:
   - Active = Y
   - Trigger at beginning = N
     Timeout = 0
   - Trigger at end = Y
     Timeout = 0
   - Application entity name = COMMAND_TRIGGER

   The following code illustrates this:

```
CICHGCTL COMMAND=SENDMSG ACTIVE=Y BEGIN=N WBTIME=0
END=Y WETIME=0 AENAME=COMMAND_TRIGGER
CICHGCTL COMMAND=RSVP ACTIVE=Y BEGIN=N WBTIME=0 END=Y
WETIME=0 AENAME=COMMAND_TRIGGER
CICHGCTL COMMAND=REQRVW ACTIVE=Y BEGIN=N WBTIME=0 END=Y
WETIME=0 AENAME=COMMAND_TRIGGER
```

3. Run the chgctl command with parameters Command=**ALL** and Active=**YES**.

   The following code illustrates this:

```
CICHGCTL COMMAND=ALL ACTIVE=Y
```

4. Uncomment the section titled Sample Command Trigger in the nsm.config file for the e-mail trigger.
5. Stop Vault and restart it.

6. Enter the following at the command line to verify that AE COMMAND_TRIGGER has started:

```
% nsmquery -pm
```

For information on nsmquery, refer to “Starting Distributed Vault” on page 13-5.

Postinstallation Issues

You may encounter the following problems after performing the postinstallation setup for Vault:

Startup Issue

If the portmapper is already installed and running during the Vault installation, you may encounter problems in the Vault startup. To avoid this, run the Vault setup and follow the procedure given below:

1. Click Start > Programs > Control Panel > Services and stop the Noblenet Portmapper process.
2. Run portinst.exe from the command prompt and select the Remove Noblenet Portmapper option. Click OK.
3. Run portinst.exe from the command prompt and perform the steps given below:
   a. Click the Install Noblenet Portmapper option.
   b. Select start automatically during system startup and click OK.
   c. Select Yes for the following prompt:

      Noblenet Portmapper installed successfully. Would you like to start it?

   d. Click Cancel when the Noblenet Portmapper Utility appears.

Service Issue

You may encounter the following error, while starting the Optegra Vault Service:

```
Could not start Optegra Service on <Machine_name>.
Error 1069:The service did not start due to logon
failure.
```

In this case, follow the steps given below:

1. Click Start > Programs > Control Panel > Services and select Optegra service.
2. Click Startup, and change the service information by assigning the Vault system administrator user account information.
3. Click OK.

Storage Pools Issue

If the Recycle folder exists on the driver selected for the Vault pool, you may not be able to add storage pools to Vault. To avoid this, do not move files to the Recycle Bin. Remove all the deleted files immediately and use the same setting for all the drives.

Setting Up EPD Interfaces for Vault

After you install or refresh Vault, set up the EPD interfaces for Pro/ENGINEER, MEDUSA, and CATIA if you use any of these products.

Please note: When you install Vault, the base Vault server and the corresponding options do not get installed at the same time. Install the Vault server first and then set up the interfaces for its components such as, MEDUSA, CATIA, Pro/ENGINEER, and Distributed Vault support.

Before setting up an EPD interface on Vault, do the following:

1. Log in as Vault Administrator.
2. Add `%EPD_HOME%\perl5\bin` to the PATH environment variable.
3. Set the LANG variable to the appropriate value (for example, `enu` for English and `ja` for Japanese) depending on the locale.

MEDUSA Support

To set up the EPD interface for Medusa support on Vault, do the following:

1. Log in as the Vault Administrator.
2. Change directory to `%EPD_HOME%\install`.

3. Execute the following command at the prompt:

```
%EPD_HOME%\install> %PERL_PATH%-console medinst
```

4. In the resulting output, press `Return` at the prompt to accept the default unless otherwise specified.

For a sample of the output, refer to the section “MEDUSA Interface” on page 3-21.

CATIA Support

To set up the EPD interface for CATIA support on Vault, do the following:

1. Log in as the Vault Administrator.
2. Change directory to `%EPD_HOME%\install`.
3. Execute the following command:

```
%EPD_HOME%\install> %PERL_PATH%-console catinst
```

4. In the resulting output, press `Return` at the prompt to accept the default unless otherwise specified.

For a sample of the output, refer to the section “CATIA Interface,” on page 3-22.

EPD Interface for Pro/ENGINEER Support

To set up Pro/ENGINEER support on the Vault, log in as the Vault Administrator and proceed as follows:

1. Add `%EPD_HOME%\perl5\bin` to the PATH environment variable.
2. Set the LANG variable to the appropriate value (for example, en_US and fr) depending on the locale.
3. Change directory to %EPD_HOME%\install.
4. Run the following command:

```
      %EPD_HOME%\perl5\bin>%perl_path%-console
proeinst
This command displays the following:
TRI002P Enter the user id of your Vault
Administration account  :

TRI008P Enter the Vault Oracle database manager
userid [pdmdm] :
```

```
TRI009P Enter the Vault Oracle database manager
password [pdmdm] :

TRI502P OK to add Pro/E Application Environment to
Optegra Vault [yes] :

TRI008P Enter the Vault Oracle database manager
userid [pdmdm] :
TRI009P Enter the Vault Oracle database manager
password [pdmdm] :

TRI152I Checking New Tables in ORACLE Database
.....
TRI169I New tables already exist.

TRI008P Enter the Vault Oracle database manager
userid [pdmdm] :
TRI009P Enter the Vault Oracle database manager
password [pdmdm] :

TRI553I Adding Pro/E Application to Optegra Vault.

TRI555I Addition of Pro/E Application to optegra
Vault Complete.

TRI505P OK to install the Pro/E Vault Attributes
[yes] :
TRI012P Enter the EDMADMIN user password
[edmadmin]:

TRI013I Signing on to the Vault as edmadmin

CDMSON016I Sign on to Vault server ADBHUT completed
successfully. You have n Vault message(s).

TRI591I Adding Pro/E attributes.

CDMSOF017I Sign off from Vault completed
successfully.

TRI592I Pro/E attributes added.
TRI511I Optegra Interface for Pro/E Installation
Complete.
```

Managing and Customizing Vault

To manage and customize your Vault or Distributed Vault, use the Vault Administrator software program. Refer to the *Vault Administrator for Windows NT User Guide* for further details.

Back Up of the Vault Database

After performing all the refresh and postinstallation tasks, execute the `ciubkup` command to universally back up the Vault database. For details of the `ciubkup` command, refer to *Vault Command Reference*.

Please note: Do not back up the Vault database after installing Vault for the first time.

Chapter 13

NT Distributed Vault Setup and Configuration

This chapter helps a user to set up, start, and configure Distributed Vault on Windows NT for first-time users.

Please note: Make sure that you have Vault installed and set up before performing the steps in this chapter.

- Installation Process for Distributed Vault
- Setting Up Distributed Vault
- Autoregistration on Distributed Vault
- Creating Tag Files
- Starting Distributed Vault
- Installation of Sample Distributed Vault

Installation Process for Distributed Vault

Before installing Distributed Vault, determine the name of the machine on which you want to install the Distributed Object Directory (DOD). You need this information to reply to a prompt from the installation script.

The following steps install Distributed Vault on Windows NT. For details on Step 1 through 4, see Chapters 10 and 11.

Please note: These steps are detailed in the body of this manual.

1. Verify that your system already has Vault installed.
2. Make sure that you have enough space for your Distributed Vault installation.
3. Stop Vault if it is running.
4. Shut down the Portmapper from the services control panel.
5. Install Distributed Vault. See Chapter 11, “Introduction to Vault and Distributed Vault on Windows NT” for more information.
6. Set up Distributed Vault, see “Setting Up Distributed Vault” on page 13-2.
7. Enable autoregistration, see “Autoregistration on Distributed Vault” on page 13-4”.
8. Create the tag files, see “Creating Tag Files” on page 13-4”.

Setting Up Distributed Vault

After installing Distributed Vault, follow these steps:

1. Start Vault. For more details, see “Starting and Stopping Vault” on page 12-3.

   Run the `cisignon` and `adcci` commands from the command line.

2. Sign on to Vault as follows:

   ```
   % cisignon userid=edmadmin userpw=edmadmin
   ```

3. (Mandatory) Add a new vault to the Distributed Vault (DV) environment. You can add either the self vault or another vault into the DV environment.

   a. To add a self vault, type:

```
% adcci ADDVAULT vaultid=DOMAINNAME vault-type=S
vault-seqno=1
```

DomainName is the name of the Vault (in caps) on which you are installing DV.

`vault-type=`**`S`** indicates a self vault.

b. To add the DOD vault, type:

`adcci ADDVAULT vaultid=`Domain Name `vault-type=`**`D`**
`vault-seqno=`**`1`**

Domain name is the name of the vault (in caps) where the DOD is located. If the DOD is installed on the current system, then the domain name is the same as above.

`vault-type=`**`D`** indicates DOD vault.

```
% adcci ADDVLIST vaultlst=LOCALDOD
% adcci ADDVLMEM vaultid=DomainName
vaultlst=LOCALDOD
```

Domain name is the name of the DOD vault (in caps).

4. (Optional) To add other vaults to the distributed environment, enter this command:

`% `**`ciaddvault vaultid=vaultid type=VAULT seqno=2`**
`node=`node

vaultid is the name of the other vault (in caps) in the distributed environment

`type=`**`VAULT`** indicates another Vault.

`seqno=`**`2`** represents the order of the vault names in search operations. It is a number between 1 and n. The default is none.

node is the system name of the other vault (not in caps) in the distributed environment.

Please note: Run the `ciaddvault` command for every Vault you want to add to the distributed environment. For example, if you want to add two vaults to the distributed environment, you need to run this command twice.

5. (Optional) If you are installing the DOD in the current vault, then run the `dddvinstall` from `%EDM_HOME%\dictionary\dv.`

6. Stop and start the Optegra Service.

Autoregistration on Distributed Vault

To implement automatic registration on Distributed Vault, you have to manually edit the `nsm.config` file located in the %EDM_HOME%\data directory. Locate the following lines of code in the configuration file:

```
#  Application Entity for PDM Data Distribution
Facility.

    AE(PDMDD,edmgrp,3)
        PATH(%EDM_HOME%\scripts\DD.STARTUP)
        OWNER(edm)
        WORKDIR(\tmp)
        CLOSE
        SERVER
        CONCURRENCY(1,1)
        MAXINST(6)
        GRPCTL(1,1,2)
```

To enable autoregistration insert the following lines after `WORKDIR(\tmp)`.

```
USER(AUTOREGISTER=YES)
USER(REGLEVEL=W)
```

The Registration levels can be:

- W — Write
- R — Read only
- Q — Queryable only
- O — Ownership

To discontinue autoregistration replace the value `YES` with `NO`.

Creating Tag Files

To create the tag files follow these steps:

1. Change the directory to `%EDM_HOME%\data\oaxis\tags`.
2. Run the following commands:

```
echo INTENT=COPY>copy
echo INTENT=MOVE>move
echo INTENT=RETURN_ORIGINAL>replace
```

```
echo INTENT=REPLICATE_FOR_READ>replicate_read
echo INTENT=REPLICATE_FOR_WRITE>replicate_write
echo INTENT=UPDATE_ORIGINAL>update
```

Starting Distributed Vault

To start Distributed Vault follow these steps:

1. Start the Distributed Vault.
2. Make sure that all network processes have been started. Enter these commands:

   ```
   % nsmquery -pm | more
   % nsmquery -ds | more
   ```

   The last command produces a listing of Distributed Vault processes. Your listing will be similar to the following sample.

Processes for Distributed Vault

The following listing shows the various processes for Distributed Vault.

```
********** PM_BIND TABLES ***************

process name      shwetha:SHWETHA:PDMLOG:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:53 1998

process name      shwetha:SHWETHA:EDMATTR:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:40 1998

process name      shwetha:SHWETHA:PDMDM:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:46 1998

process name      shwetha:SHWETHA:PDMDD:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:47 1998
```

```
process name      shwetha:SHWETHA:PDMADMN:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:49 1998

process name      shwetha:SHWETHA:ADMIN_SERVER:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:48 1998

process name      shwetha:SHWETHA:COMMAND_TRIGGER:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:49 1998

process name      shwetha:SHWETHA:QUERY_SERVER:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:50 1998

process name      shwetha:SHWETHA:SQL_SERVER:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:50 1998

process name      shwetha:SHWETHA:DESKTOP_SERVER:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:50 1998

process name      shwetha:SHWETHA:DESKTOP_EDMOSRV:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:51 1998

process name      shwetha:SHWETHA:EDMEMGR:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:52 1998

process name      shwetha:SHWETHA:EDMAMAN:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:52 1998
```

```
process name      shwetha:SHWETHA:EDMIMGR:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:53 1998

process name      shwetha:SHWETHA:OAXIS:0
process id        PID_UNKNOWN
process state     CONFIRMED
last heartbeat    Wed Nov 25 16:09:53 1998
```

Processes for Distributed Vault with the DOD

The following listing shows the various processes for Distributed Vault with the DOD.

```
********** PM_BIND TABLES ***************

  process name           panchali:PANCHALI:PDMLOG:0
  process id              314
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:48 1998

  process name
panchali:PANCHALI:EDMATTR:0
  process id              351
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:48 1998

  process name            panchali:PANCHALI:PDMDM:0
  process id              312
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:51 1998

  process name            panchali:PANCHALI:PDMDD:0
  process id              341
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:52 1998

  process name
panchali:PANCHALI:PDMADMN:0
  process id              198
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:52 1998
```

```
  process name
panchali:PANCHALI:ADMIN_SERVER:0
  process id              190
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:08:01 1998

  process name
panchali:PANCHALI:QUERY_SERVER:0
  process id              285
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:46 1998

  process name
panchali:PANCHALI:SQL_SERVER:0
  process id              114
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:08:17 1998

  process name
panchali:PANCHALI:DESKTOP_SERVER:0
  process id              135
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:08:04 1998

  process name
panchali:PANCHALI:DESKTOP_EDMOSRV:0
  process id              193
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:08:16 1998

  process name
panchali:PANCHALI:TRIGGER_MANAGER:0
  process id              262
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:46 1998

  process name
panchali:PANCHALI:DIST_SERVER:0
  process id              330
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:49 1998

  process name
panchali:PANCHALI:DOD_QUERY_SERVER:0
  process id              175
```

```
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:07:39 1998

  process name
panchali:PANCHALI:EDMEMGR:0
  process id              66
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:08:00 1998

  process name
panchali:PANCHALI:EDMIMGR:0
  process id              266
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:09:00 1998

  process name
panchali:PANCHALI:EDMAMAN:0
  process id              234
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:09:36 1998

  process name            panchali:PANCHALI:OAIXS:0
  process id              321
  process state           CONFIRMED
  last heartbeat          Wed Nov 25 16:10:36 1998
```

Installation of Sample Distributed Vault

Please note: Before installing Distributed Vault, shut down the Portmapper from the Services section of the Control panel.

In the sample procedures that follow, the Distributed Vault environment contains the following three Vaults:

- Example 1 - owl (Assume that this is the DOD vault.)
- Example 2 - tiara
- Example 3 - gargant

Substitute your own Vault names when installing the Distributed Vault on your system.

Installing Distributed Vault for Windows NT as a DOD Vault—Example1

The following procedure installs a Distributed Vault named `owl` as a DOD Distributed Vault:

1. Install the Distributed Vault using the DOD Local option. For this example, enter `owl` as the remote DOD Vault name. When actually installing the Distribute Vault, enter your own DOD vault name.
2. Start the Vault.
3. Enter the following commands:

```
cisignon userid=edmadmin userpw=edmadmin
adcci ADDVAULT vaultid=OWL vault-type=S
vault-seqno=1
adcci ADDVAULT vaultid=OWL vault-type=D
vault-seqno=1
adcci ADDVLIST vaultlst=LOCALDOD
adcci ADDVLMEM vaultid=OWL vaultlst=LOCALDOD
```

4. To add other Vaults, enter:

```
ciaddvault vaultid=TIARA type=VAULT seqno=2
node=tiara
ciaddvault vaultid=GARGANT type=VAULT seqno=3
node=gargant
```

5. Run `%EDM_HOME%\dictionary\dv\dddvinstall.exe`

   `%EDM_HOME%` is an environment variable that represents the directory in which you are installing Vault.

The Vault named `owl` is now installed as a DOD Vault.

Installing Distributed Vault for Windows NT as a Non-DOD Vault—Example 2

The following procedure installs a Distributed Vault named `tiara` as a non-DOD Vault.

1. Install Distributed Vault using the DOD Remote option. For this example, enter `tiara` as the remote DOD Vault name. When actually installing the Distribute Vault, enter your own DOD vault name.
2. Start the Vault.

3. Enter the following commands:

```
cisignon userid=edmadmin userpw=edmadmin
adcci ADDVAULT vaultid=tiara vault-type=S
vault-seqno=1
adcci ADDVAULT vaultid=OWL vault-type=D
vault-seqno=1
adcci ADDVLIST vaultlst=LOCALDOD
adcci ADDVLMEM vaultid=OWL vaultlst=LOCALDOD
```

4. Enter the following commands:

```
ciaddvault vaultid=OWL type=VAULT seqno=2 node=owl
ciaddvault vaultid=GARGANT type=VAULT seqno=3
node=gargant
```

The Vault named `tiara` is now installed as a non-DOD Vault.

Installing Distributed Vault for Windows NT as a Non-DOD Vault—Example 3

The following procedure installs a Distributed Vault named `gargant` as a non-DOD Vault:

1. Install Distributed Vault using the DOD Remote option. For this example, enter `owl` as the remote DOD Vault name when prompted. When actually installing the Distribute Vault, enter your own DOD vault name.
2. Start the Vault.
3. Enter the following commands:

```
cisignon userid=edmadmin userpw=edmadmin
adcci ADDVAULT vaultid=gargant vault-type=S
vault-seqno=1
adcci ADDVAULT vaultid=OWL vault-type=D
vault-seqno=1
adcci ADDVLIST vaultlst=LOCALDOD
adcci ADDVLMEM vaultid=OWL vaultlst=LOCALDOD
```

4. To add other Vaults, enter:

```
ciaddvault vaultid=OWL type=VAULT seqno=2 node=owl
ciaddvault vaultid=TIARA type=VAULT seqno=3
node=tiara
```

The Vault named `gargant` is now installed as a non-DOD Vault.

Chapter 14

Preparing the ORACLE Database for a Vault Refresh on Windows NT

This chapter discusses the tasks you must perform before refreshing Vault from a previous release to the current release on Windows NT.

- Preparing to Refresh Vault
- Preparing to Migrate Oracle V7.3.4/V8.0.4 to Oracle V8.1.7
- Migrating Oracle V7.3.4/V8.0.4 to Oracle V8.1.7

Preparing to Refresh Vault

Before refreshing Vault from the previous releases to the current release on the Windows NT platform, migrate the Vault database from Oracle V7.3.4 /V8.04 to Oracle V8.1.7.

Please note:

- If you are planning to refresh Vault Revision 4.x to Release 5 or Release 6, do not perform the tasks outlined in this section.
- The Windows NT version must be 4.0 with Service Pack 3, 4, or 5.

Preparing to Migrate Oracle V7.3.4/V8.0.4 to Oracle V8.1.7

Before migrating the existing Oracle database to Oracle V8.1.7, do the following:

1. Log in to the Windows NT server as Administrator.
2. Stop the Optegra Service.
3. Stop the Noblenet Portmapper Service in the Service control panel.
4. Generate a list of control, data, log files, list of tables and views as follows:

```
> svrmgr23 (for Oracle V7.3.4)
  svrmgr30 (for Oracle V8.0.4)
SVRMGR> connect system/password
SVRMGR> spool mig.log
SVRMGR> select member from v$logfile;
SVRMGR> select name from v$datafile;
SVRMGR> select value from v$parameter
     2> where name='CONTROL_FILES';
SVRMGR> connect pdmdm/password
SVRMGR> select count(*) from all_tables;
SVRMGR> select owner,table_name from all_tables;
SVRMGR> select count(*) from all_views;
SVRMGR> select owner, view_name from all_views;
SVRMGR> connect pdmqf/password
SVRMGR> select count(*) from all_tables;
SVRMGR> select owner,table_name from all_tables;
SVRMGR> select count(*) from all_views;
SVRMGR> select owner, view_name from all_views;
```

```
SVRMGR> spool off;
SVRMGR> connect internal/password
SVRMGR> shutdown
SVRMGR> exit
```

Use the information in the `mig.log` file to verify the database after the migration.

5. Make sure that the existing Oracle database is shut down and stop all Oracle services.
6. Remove the `ORACLE_SID` environment variables. Execute the following command at the prompt:

```
> set ORACLE_HOME=
```

7. Install Oracle V8.1.7 in a new directory, preferably on a different drive. This is the Oracle V8.1.7 home directory.

Please note: Install only the software. Choose the same software options that have been used for the fresh Vault installation. Do not choose the database installation option or the migration option at this point.

8. Check for the following before you proceed further:
   a. Make sure that there is sufficient virtual memory (at least 2GB).
   b. Increase the system tablespace to 120MB. Also, check for enough space in the `temp` as well as the `index` tablespaces.

      Add space in the `system` tablespace of the Oracle V7.3.4 database as follows:

```
> svrmgr23
SVRMGR> connect internal/password
SVRMGR> alter tablespace system add datafile
'c:\orant\database\sys1orc2.ora' size 20 M;
Statement processed.
SVRMGR> shutdown
SVRMGR> exit
```

   c. Make sure that there is enough free space in the drive where you want to create the new database. The space requirement for Oracle V8.1.7 database is double the size of the existing database.
9. Shutdown the currently existing Oracle database and stop all Oracle services.

Migrating Oracle V7.3.4/V8.0.4 to Oracle V8.1.7

To migrate the existing Oracle database to Oracle V8.1.7, do the following:

1. Make sure that “Oracle 8*i* Database Migration Utility” is installed.
2. Run the Oracle 8*i* Database Migration Utility. Refer to the *Oracle 8i Migration* documentation for details.
3. Choose the Oracle SID of either Optegra Vault 4.0 or 5.0 when the migration utility prompts you to select the database that needs to be upgraded.
4. Shut down and restart the machine, once the migration process is completed.

Chapter 15

Migrating Vault Across Platforms

This chapter describes the procedure for migrating Vault from previous revisions to the current revision across platforms.

- Preparing to Migrate Vault
- Migrating Vault Objects and User Passwords
- Setting Up Vault After the Migration

Please note: Refer to the *Vault Command Reference* for information about the Vault commands used in this chapter.

Preparing to Migrate Vault

Before migrating Vault from a previous revision to the current revision ensure that the Oracle and Vault versions are installed and set up on the source and the destination platforms. For example, to migrate Vault Revision 3.x and Oracle 7.3.4 on a UNIX platform to Vault Release 6 and Oracle 8.1.7 on Windows NT, these products must already be installed on both the UNIX and Windows NT machines.

Migrating Vault Objects and User Passwords

To migrate Vault objects and user passwords from one platform to another, use the $EPD_HOME/install/adpwmig utility. Follow the procedures given in this section.

On the Source Platform

Complete the following steps on the source platform:

Please note: This procedure uses Solaris (UNIX) as the source platform with Vault Release 6 and Oracle V8.1.7 installed.

1. Change directory to the $EDM_HOME/install directory.

```
% cd $EDM_HOME/install
```

2. Execute the adpwmig utility with the export option as follows:

```
% adpwmig export
```

3. Export the entire database from the Oracle account. For more information, refer to the section “Exporting the Vault Database,” on page 6-2.

On the Destination Platform

Complete the following steps on the destination platform:

Please note: This procedure uses Windows NT as the destination platform with Vault Release 6 and Oracle V8.1.7 installed.

1. Log in as Administrator.
2. Stop all Vault processes as follows:

```
> nsmstop -pca
> nsmstop -all
```

3. Drop the Oracle users from the Oracle account as follows:

```
> Drop user asm cascade;
> Drop user edmui cascade;
> Drop user pdmdm cascade;
> Drop user pdmqf cascade;
> Drop user edmdv cascade;
> Drop user edmattr cascade;
```

Please note: Export, drop, or import `edmdv` user only if the source or destination Vault is a DOD.

4. Create users `ASM`, `EDMATTR`, `EDMDV` (for DOD only), `EDMUI`, `PDMDM`, `PDMQF` as follows:

```
> svrmgrl
SVRMGR> connect system/password
Connected.
SVRMGR> CREATE USER ASM IDENTIFIED BY ASM DEFAULT
TABLESPACE "SYSTEM" TEMPORARY TABLESPACE
"EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO ASM;
SVRMGR> GRANT "RESOURCE" TO ASM;

SVRMGR> CREATE USER EDMATTR IDENTIFIED BY EDMATTR
DEFAULT TABLESPACE "SYSTEM" TEMPORARY TABLESPACE
"EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO EDMATTR;
SVRMGR> GRANT "RESOURCE" TO EDMATTR;
```

```
SVRMGR> CREATE USER EDMDV IDENTIFIED BY EDMDV
DEFAULT TABLESPACE "EDM_DISTDATA" TEMPORARY
TABLESPACE "EDM-TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO EDMDV;
SVRMGR> GRANT "RESOURCE" TO EDMDV;

SVRMGR> CREATE USER EDMUI IDENTIFIED BY EDMUI
DEFAULT TABLESPACE "SYSTEM" TEMPORARY TABLESPACE
"EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO EDMUI;
SVRMGR> GRANT "RESOURCE" TO EDMUI;

SVRMGR> CREATE USER PDMDM IDENTIFIED BY PDMDM
DEFAULT TABLESPACE "EDM_SYSTEM" TEMPORARY
TABLESPACE "EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO PDMDM;
SVRMGR> GRANT "RESOURCE" TO PDMDM;

SVRMGR> CREATE USER PDMQF IDENTIFIED BY PDMQF
DEFAULT TABLESPACE "SYSTEM" TEMPORARY TABLESPACE
"EDM_TEMPSPACE" PROFILE "DEFAULT";
SVRMGR> GRANT "CONNECT" TO PDMQF;
SVRMGR> GRANT "RESOURCE" TO PDMQF;
```

5. Import the entire database from the Oracle account using the Oracle import utility `imp80`.

Please note: Log any errors that the import utility generates and refer to the Oracle documentation for information on how to fix them. After fixing the error, repeat steps 1 through 5.

6. Change directory to %EDM_HOME%/`install`.

```
> cd %EDM_HOME%/install
```

7. Execute the `adpwmig` utility with the import option as follows:

```
> adpwmig import
```

8. Update the `dm_pool_info` table to reflect the destination storage drives as follows:

```
> sqlplus pdmdm/password
SQLPLUS> update dm_pool_info set dm_pool_text='H:\'
where dm_pool_name='POOL1';
```

In the preceding example, `H:` is the path of the storage pool and `POOL1` is the name of the corresponding storage pool.

9. To make the storage pools inaccessible for the duration of the migration, change the status of all storage pools as follows:

```
> cichgsps poolname=storage-pool-name poolstat=7
```

10. Move the storage pool files (`*.PDM`) from the UNIX platform to Windows NT using `ftp` (File Transfer Protocol). Make sure that you transfer the pool files from UNIX to the corresponding pools on Windows NT.

11. Make the storage pools accessible as follows:

```
> cichgsps poolname=storage-pool-name poolstat=0
```

12. To initiate the storage pools, execute the following command at the prompt:

```
> adminit
```

Setting Up Vault After the Migration

As a result of the import operation, the `dm_vault_config` is identical to that of the source system and needs to be changed to reflect the destination system. Update the `dm_vault_config` table to add an entry of the destination Vault as a Self Vault as follows:

1. Remove the entry of the source Vault as the Self Vault from the `dm_vault_config` table as Oracle user `pdmdm` as follows:

```
> sqlplus pdmdm/password
SQLPLUS> delete from dm_vault_config where
dm_vault_id=source_vault_id;
SQLPLUS> commit;
```

2. Add the destination Vault as the Self Vault in the `dm_vault_config` table from $EPD_HOME.

```
> ciaddvault vaultid=dest_vault type=S seqno=seq_no
node=dest_node
```

For a Distributed Vault, if the destination Vault is a DOD, make an entry for it in the `dm_vault_config` type D as follows:

1. If there already is an entry of some other Vault as a Self DOD, give the following command as Oracle user `pdmdm` to remove it:

```
> sqlplus pdmdm/password
SQLPLUS> delete from dm_vault_config where
dm_vault_type='D';
SQLPLUS> commit;
```

2. Add the destination Vault as the DOD Vault as follows:

```
> ciaddadod vaultid=dest_vault_id node=dest_vault_name
type=SELF
```

Finally, stop and start the Vault servers and refresh Vault on the destination system. This ensures that the database contains the correct release of Vault.

This completes the procedure for migrating Vault across platforms.

Chapter 16

NT Tape Drives

This appendix provides information on tape drives for Windows NT.

- Using Tape Drives

Using Tape Drives

Optegra for Windows NT supports 4mm and 8mm media. Supported mechanisms are listed in the [SUPPORTED_TAPES] section of the EDM.INI file located in the Optegra Vault \optegra directory on the Vault drive. Only supported mechanisms appear in the Tape Device lists in System Administrator. This safeguard avoids problems with using unsupported tape drives with Optegra Vault for Windows NT.

To add a tape drive mechanism, you add a line to the [SUPPORTED_TAPES] section. The line begins with the keyword TAPEn followed by (at least) the first 16 characters of the mechanism identifier in the Registry.

For example:

```
[SUPPORTED_TAPES]
     TAPE1="HP     HP35480A"
     TAPE2="Exabyte EXB-8200 8mm"
```

Warning

Only the system Administrator should edit the registry information. An incorrect keystroke may cause your system to hang when it is started.

The Registry can be viewed with the REGEDT32.EXE Windows NT utility located in the \WINNT\SYSTEM32\ subdirectory. A tape drive's mechanism is shown in the Identifier field in the following parameters for the tape device's SCSI port, bus, and ID.

HKEY_LOCAL_MACHINE\HARDWARE\DEVICEMAP\SCSI

Please note:

- On some systems, this file is located in the \WINNT35\SYSTEM32\ subdirectory.

  You can put the lines in the [SUPPORTED_TAPES] section in any order.
- Set the tape drive to low-density mode. Windows NT does not support high-density mode.
- Remote tape drives are not available on Windows NT.

Chapter 17

Installing Locator on UNIX Systems

This chapter provides postinstallation instructions for Locator on UNIX systems. For information on loading Locator from the CD-ROM for both UNIX and Windows, see *Installing Optegra Applications*.

- Postinstallation Steps
- Using the Locator Worksheet
- Running the Locator Installation Tool
- Entering Setup Information
- Editing the NSM Configuration Files
- Editing the PM Configuration Files
- Accessing Online Documentation

Postinstallation Steps

After you load Locator by following the instructions in *Installing Optegra Applications*, perform the tasks in this book. Postinstallation steps for Vault and Locator vary with your configuration and the host operating system. Refer to this chapter to find the steps that apply to new and existing customers. Use these steps on each Vault and each client.

Please note: For localization information for Vault, Locator, and Oracle, refer to Chapter 10, “Internationalization Considerations for UNIX”.

You may also need to use documentation provided by other vendors depending on your setup, particularly for installation and system maintenance.

Using the Locator Worksheet

To ensure a successful installation, fill out the following worksheet and refer to it during the automated installation.

There is a valid range for the values you supply. Enter a question mark (?) at any prompt for information.

Table 17-1 Installation Worksheet

Vault account name:	default=vault
Vault account userid number:	default=200
Vault home directory:	default=$EDM_HOME
Vault group name:	default=operator

Please note: Before you set up and run Locator, install your Locator software licenses. See *Installing Optegra Applications* for details.

Running the Locator Installation Tool

The Installation Tool (`edmcinstall`) prompts you for the information necessary to install Locator, checks this information, records valid information, and updates its own default settings with any valid information you supply that deviates from these defaults. Back up your operating system based on UNIX before you install Locator.

Invoking the Locator Installation Tool

1. Log in as the root UNIX user:

```
su -r
```

2. Change to the $EDM_HOME/install directory, where $EDM_HOME is the directory in which you have installed the software:

```
# cd $EDM_HOME/install
```

3. Invoke the installation tool and record installation events by entering:

```
# ./edmcinstall | tee edmcinstall.log
```

The following message appears:

```
************************************************
EDM Client Software Installation module.
(edmcinstall)
This module installs the EDM Client Software on
your system.

The EDM Client Software Installation module
installs the EDM Client Software on your system by
calling the following EDM Software Installation
Modules:

edmcirm [EDM Client Software Installation
Requirements Module]
edmsasm [EDM Software Account Setup Module]

It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.

Would you like to continue [yes]? :
************************************************
```

Exiting and Restarting the Installation Tool

You can exit the installation tool in three ways:

- Enter sh at any prompt, then enter exit to escape to a shell.
- Press CTRL-C to abort the installation procedure at any time.

- Answer n (no) to a continuation prompt:

```
Would you like to continue [yes]? n
```

To restart the installation tool, invoke the installation tool and record installation events by entering the following:

```
# ./edmcinstall | tee edmcinstall.log
```

If you do not want to resume the original session, you may initiate a new installation session and overwrite previously entered information.

Accepting Defaults

Default values are shown in brackets ([ ]).

```
Would you like to continue [yes]?:
```

To accept a default, press RETURN.

```
Would you like to continue [yes]?: RETURN
```

Overriding Defaults

You may override certain default Vaults with your own value.

```
Enter the Vault account name [vault]: edmdev
```

Obtaining Online Help

Get help at a prompt by typing help

```
Would you like to continue [yes]? help
```

Entering Setup Information

The installation tool begins gathering setup information at the following prompt:

```
Enter the Vault account name [vault]:
```

Enter the name of the UNIX user who will own the Locator account:

```
Enter the Vault account name [vault]: edmdev
```

Using an Existing UNIX Account for Locator

If you enter an account name already in use, the following message appears:

```
************************************************
The UNIX username that you have entered for the EDM
account is already in use.
Do you want to use this account ? [no]:
************************************************
```

To create a new account with the installation tool, select **[no]** by pressing RETURN, and move to the next section.

```
Do you want to use this account ? [no]: RETURN
```

To use this account, type yes and press RETURN.

```
Do you want to use this account ? [no]: Yes
```

If the account you chose is shared by more than one group, the following message appears:

```
************************************************
More than one GROUP Name exists for this account
name.
You can either Exit and rectify this or choose any
one of the following GROUP names.
************************************************
```

To select a group, type one of the names enclosed in brackets, and press RETURN.

```
Enter any one of the Group Names [ daemon operator ]
: operator
```

Creating a UNIX Account for Locator

If you are using an existing UNIX account, the Locator installation will not prompt you for the following information. Skip to the next section.

If the account name you enter does not already exist, the installation tool will prompt you for a UNIX user ID:

```
Enter the Vault account userid [200]: 9985
```

Enter a home directory for the Locator UNIX account. Press RETURN to select the default.

```
Enter the Vault home directory [$EDM_HOME]:
```

Enter the group name. Press RETURN to select the default.

```
Enter the EDM group name [operator]:
**************************************************
Here are the Input Values that you have entered,
Please confirm that they are correct:
EDM account name  = edmdev
EDM account userid = 9985
EDM home directory = $EDM_HOME EDM group name
=operator
**************************************************
Are these correct [yes]? :
**************************************************
The EDM Client Software Installation Requirements
Module has completed successfully.
**************************************************
Running EDM Software Account Setup Module
(edmsasm).
**************************************************
```

If you choose, the automatic installation tool customizes the `.cshrc`, `.login`, `nsm.config, pm.config`, and `EDM.DEFAULTS` files for this Locator installation. It uses the `edmodule.defaults.sh` file as input to obtain the appropriate information to perform these tasks.

To customize the .cshrc, .login, nsm.config, pm.config, and EDM.DEFAULTS files for this installation, press RETURN.

```
      Would you like to continue [yes]? :
**************************************************
Customizing the EDM Account's .cshrc file.
**************************************************
Customizing the EDM Account's .login file.
**************************************************
**************************************************
Customizing the EDM.DEFAULTS file.
**************************************************
**************************************************
The EDM Software Account Setup module has completed
successfully.
**************************************************
**************************************************
The EDM Client Software Installation Module has
finished successfully.
The EDM Software has been successfully installed.
**************************************************
```

Editing the NSM Configuration Files

For nodes to receive services from a Vault server, each node needs the following:

- Locator software loaded
- A Process Manager configuration file (pm.config) with the address of the Process Manager

The NSM and PM files are considered network configuration files and are initialized or read when you start up your network. There is only one NSM configuration file per network, located on a Vault server. A pm.config file is on every node (referencing the Process Manager).

A Vault server has a Network Services Manager configuration file (nsm.config) to identify the following:

- Nodes
- The Process Manager

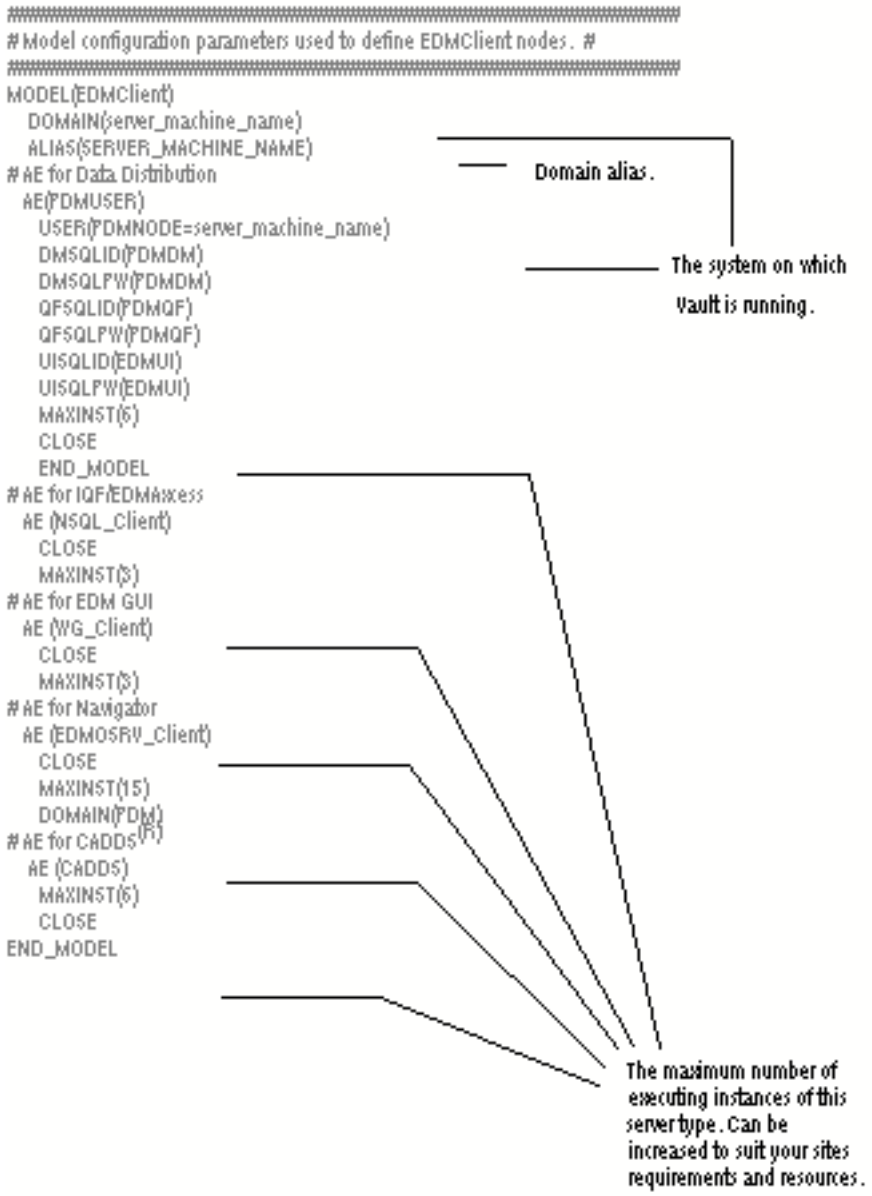
Please note: The NSM configuration file must be located on the server on which the Process Manager is running.

The installation tool `edminstall` sets up both the `nsm.config` and the `pm.config` files automatically. If the network configuration files at your site require adjustments, edit the NSM and PM configuration files.

Template NSM and PM configuration files are provided with Vault software. Before you can start up your network, edit these files. These files are called `nsm.config_template` and `pm.config_template` and are found in $EDM_HOME`/install`

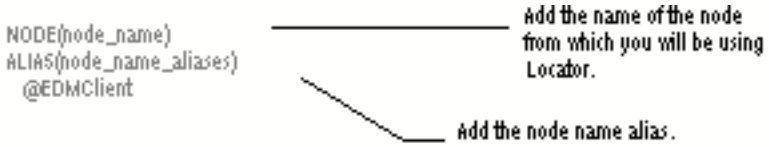
The NSM configuration file (`nsm.config`) contains the node configuration of a Vault including port addresses, node names, and a list of domains (such as Vault application domains and the domain of the Process Manager).

Add to the NSM configuration file the names of nodes that will access Vault. Only those nodes recorded in the NSM file will be visible to Vault.



The following figure shows a sample of a Client Node Entry.

Figure 17-1Sample of a Client Node Entry in the nsm.config File



Warning

After you have edited the network configuration files, stop and restart your Vault processes. Otherwise, updated client nodes will not be recognized by Vault.

Editing the PM Configuration Files

The PM configuration file (`pm.config`) specifies the network address of the Process Manager (PM) for each Vault. Each node must have a `pm.config` to provide this address. The RESOURCE statement in the `pm.config` maps to corresponding fields in the NSM configuration file. Note that the Process Manager looks for the ANSPATH UNIX environment variable to find `pm.config`. Editing the PM Configuration files involves the following tasks:

- Searching for the `pm.config` file (done by the Process Manager)
- Using the system's `pm.config` file in $EDM_HOME`/data/pm.config`
- Editing the `pm.config_template` to run Locator remotely from a single Vault
- Editing the `pm.config_template` so that Locator can access multiple Vaults

Searching for the PM Configuration File

The Process Manager searches for a `pm.config` file in the following order:

1. A path defined by the ANSPATH UNIX environment variable and set in the user's `.cshrc` file or `.login` file:

   ```
   setenv ANSPATH /absolute_path/pm.config
   ```

2. A `pm.config` file in the user's home directory:
3. The default directory $EDM_HOME`/data`

Make sure that a valid copy of the `pm.config` file exists in one of these three locations.

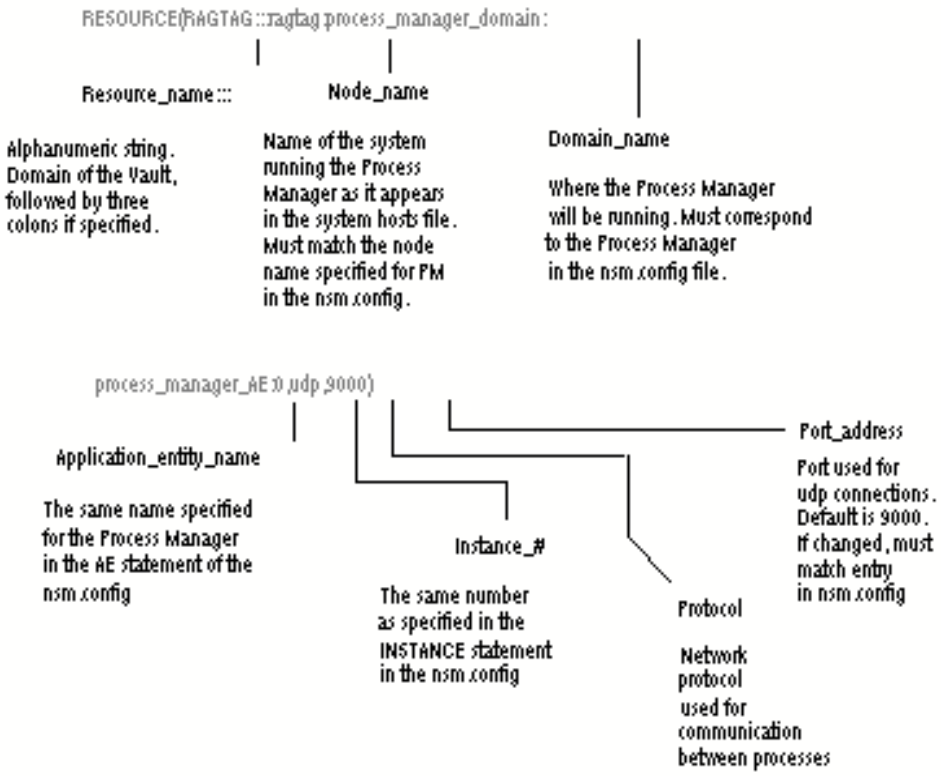
Using the System's PM Configuration File

If the Locator is running on the same node as the Process Manager, use the system `pm.config` file by adding the following line to the user's `.login` or `.cshrc` file:

```
setenv ANSPATH $EDM_HOME/data/pm.config
```

The following figure shows a sample `pm.config` file:

Figure 17-2Sample pm.config File



Editing the PM Configuration File for a Single Vault

Follow this procedure to run Locator remotely from a single Vault.

1. Copy the template to user's home directory:

```
cp $EDM_HOME/install/pm.config-template ~/pm.config
```

2. Copy the Process Manager address from the NSM configuration file into your PM configuration files (on each node).
3. Place `pm.config` where it can be found by the Process Manager:

```
setenv ANSPATH /absolute_path/pm.config
```

4. Set the permissions on the `pm.config` file:

```
chmod 644 pm.config
```

The `pm.config` file is set up as follows to access a single Vault:

```
RESOURCE(JOHN:::john:process_manager_domain:
process_manager_AE:0,udp,9000)
```

Editing the PM Configuration File for Multiple Vaults

Follow this procedure to run Locator remotely with access to multiple Vaults. You must edit your `pm.config` file.

1. Copy the template to the user's home directory:

```
cp $EDM_HOME/install/pm.config-template ~/pm.config
```

2. Copy the Process Manager address from each NSM configuration file on each Vault, into your PM configuration file (on each node). A multiple Vault setup has multiple RESOURCE statements, one corresponding to each Vault.

3. Place `pm.config` where it can be found by the Process Manager:

```
setenv ANSPATH /absolute_path/pm.config
```

4. Set the permissions on the `pm.config` file:

```
chmod 644 pm.config
```

The `pm.config` file is set up as follows to access multiple Vaults:

```
RESOURCE(JOHN:::john:process_manager_domain:
      process_manager_AE:0,udp,9000)
RESOURCE(PAUL:::paul:process_manager_domain:
      process_manager_AE:0,udp,9000)
RESOURCE(GEORGE:::george:process_manager_domain:
      process_manager_AE:0,udp,9000)
RESOURCE(RINGO:::ringo:process_manager_domain:
      process_manager_AE:0,udp,9000)
```

After the installation is complete, refer to the *Locator/PC User Guide* for information on using Locator.

Accessing Online Documentation

The *Locator/PC User Guide* and other Optegra documentation is available in HTML. This documentation can be accessed from the Help menu by selecting Help > Online Documentation. If this does not work, it means that either the path specification for your browser is incorrect, or the path to the online documentation is incorrect. This can be fixed by editing the `EDM_DEFAULTS` and `Edmgui` files.

Editing the EDM_DEFAULTS File

You can configure the browser path by editing the `DOC_BROWSER` variable in the `EDM_DEFAULTS` file located at:

```
$DATA_DIRECTORY/EDM_DEFAULTS
```

The default value of this variable is:

```
DOC_BROWSER=netscape
```

If you intend to use Netscape, you must either include the path to Netscape in your path setting or explicitly define the path in this variable. If you intend to use another browser, you must change this variable accordingly.

Editing the Edmgui File

You can configure the path to your online documentation by editing the `Edmgui.E300.source` variable located in the `Edmgui` file. This file can be found at:

`$DATA_DIRECTORY/app-defaults/$LANG/Edmgui`

The default setting for this variable is:

```
Edmgui.E300.source:$EDM_DOC_BROWSER
$DATA_DIRECTORY/html/htmldoc/mainmenu.html &
```

The default page `mainmenu.html` lists all the documents available for Optegra.

Chapter 18

Refreshing Locator on UNIX Systems

This chapter provides instructions for refreshing previous releases to the current release of Locator on UNIX systems.

- Before Running a Refresh
- Running the Locator Refresh Tool
- Loading Application Software

Before Running a Refresh

Follow the instructions in this section only if you are already running an earlier version of Locator. This section shows how to upgrade the executable files for previous releases to the current release Locator.

Warning

Back up your Vault client software and your operating system before you refresh Vault Client.

Please note: Schedule the refresh and notify all Vault Client users when it will take place. Discontinue Vault Client access until the refresh is complete.

Running the Locator Refresh Tool

You can obtain online help for the automated refresh tool (`edmcrefresh`) at each prompt by typing `HELP` (uppercase or lowercase). All prompts have default values, but you can override these if necessary.

Exiting and Restarting the Refresh Tool

You can exit the refresh tool by:

- Pressing `CTRL-C` to abort the refresh procedure at any time
- Answering `n` (no) to one of the continuation prompts displayed by the tool. For example:

```
Would you like to continue [yes]? n
```

If you exit the refresh tool, you can restart it by running the `edmcrefresh` command file again. The tool resumes the refresh where you aborted by reading one or more `.tmp` files it creates after the successful completion of each portion of the refresh.

You must be logged in as `root` to run `edmcrefresh`.

Starting the Refresh

Follow this procedure to start the refresh.

1. Change to the $EDM_HOME/`install` directory:

```
# cd $EDM_HOME/install
```

Please note: If you want to create a history file of your refresh, go to step 2. If you do not want to create a history file, go to step 3.

2. Invoke the automated refresh tool and create a history log by entering:

```
# edmcrefresh | tee edmcrefresh.log
```

A history log will be created in the $EDM_HOME/`install` directory.

3. Invoke the automated refresh tool with no history log by entering:

```
# edmcrefresh
```

Accepting Defaults

Default values are shown in brackets ([ ]).

```
Would you like to continue [yes]?:
```

To accept a default, press `RETURN`.

```
Would you like to continue [yes]?: RETURN
```

Overriding Defaults

You may override certain default vaults with your own value.

```
Enter the Vault account name [vault]: edm
```

Obtaining Online Help

Get help at a prompt by typing `help`.

```
Would you like to continue [yes]? help
```

Check the values you previously entered into Vault to make sure that they are the ones you want to keep. You can fix whatever is incorrect. Default values are shown in brackets ([ ]).

Sample Output

The following is a sample of the output generated when running the refresh tool.

```
root> edmcrefresh
************************************************
Vault Client Software Refresh. (edmcrefresh)
This module refreshes the Vault Client Software on
your system.

The Vault Client Software Refresh module refreshes
the Vault Client
Software on your system by calling the following
Vault Software Refresh Modules:

edmcrdm [EDM Show Client Refresh Defaults Module]
It uses as input, the edmodule.defaults.sh file to
obtain appropriate information to perform these
tasks.

Would you like to continue [yes]? :
************************************************
Running Vault Show Client Refresh Defaults Module
(edmcrdm).
************************************************
************************************************
Vault Show Client Refresh Defaults module.
(edmcrdm)

This module shows the EDM Client Software Refresh
values that will be used to perform the EDM Client
Software Refresh on this system.

The Vault Client Software Refresh values can be
modified before continuing the EDM Client Software
Refresh by entering (no) to the prompt that asks
whether or not the EDM Client Software Refresh
values are okay.

It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.
************************************************
```

```
Would you like to continue [yes]? :
**************************************************
Here are the Vault Client Software Refresh Values
that will be used to perform the EDM Client
Software Refresh for this system

Please confirm that they are correct:
Vault account name = edmdev
Vault home directory = $EDM_HOME

If the Vault Client Software Refresh Values are not
correct, then answer no to the next prompt; and you
will be given the opportunity to modify the EDM
Client Software Refresh Values:

Are these correct [yes]? :
**************************************************
**************************************************
The Vault Show Client Refresh Defaults Module has
completed successfully.
**************************************************
**************************************************
The Vault Client Software Refresh Module has
finished
successfully.
The Vault Client Software has been successfully
refreshed.
**************************************************
```

Loading Application Software

In this step, the refresh tool downloads the application software into the Vault home directory. Loading Navigator is not a requirement. The following sample assumes that you want to load Navigator, as indicated by the refresh values in the preceding sample.

```
************************************************
Loading the applications which are to be refreshed.
Running Vault Software Downloading Module
(edmsdlm).

Vault Software Downloading module. (edmsdlm)

This module downloads the required EDM software
into the Vault Home Directory.

************************************************
It uses as input, the edmodule.defaults.sh file to
obtain the appropriate information to perform these
tasks.
************************************************
Would you like to continue [yes]? :
About to download the Vault Configuration Navigator
Software from CDROM.
```

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