CHAPTER 4

Installing the Oracle9i RDBMS

This chapter's goal is to give you a good understanding of the requirements for the correct installation of the Oracle9i server software. This chapter deals with an actual installation on a UNIX server. Chapter 22 contains a discussion of Oracle installation on Windows servers. There are some variations of the installation steps for the different flavors of UNIX such as Sun's Solaris, Hewlett Packard's HP-UX, IBM's AIX, and so on, but the essential steps are the same. You need to follow these steps and incorporate the necessary changes suggested by the Oracle installation manuals for your operating system. Several steps need to be performed before and after the installation of the software, by you and the UNIX system administrator, and this chapter explains those steps. It is necessary to install the software according to a sensible plan, and this chapter shows you how to install Oracle by following the well-known Optimal Flexible Architecture (OFA) guidelines.

Note that you'll be going through the main features of generic Oracle installation in this chapter. It's important that you have access to the Oracle installation manuals for your specific operating system before you begin installing the Oracle9i software. The installation manuals are all available on the Oracle site at http://technet.oracle.com/docs/products/oracle9i/content.html.

There are minor differences in some of the steps, and the manuals go into great detail regarding all those different steps. However, Oracle software installation itself is no different from any other software installation, and if you follow all the preinstallation procedures, there's no reason you can't have a clean installation in a couple of hours or less on even the most complex machines. Of course, if you're configuring Oracle Real Application Clusters (ORAC) or some such advanced architecture, you'll need more time to finish the installation. Complex as the Oracle9i database server software is, the actual time you need to install the software is trivial compared to the time you need to spend to ensure that all the preinstallation steps have been completed correctly. If you follow all the recommended steps, the installation process should work the first time around.

Installing Oracle on UNIX Systems

When it comes to the mechanics of the process, installing the Oracle server software is really a simple affair. Installation of all the software for Oracle9i will probably not take you more than a couple of hours. All the real effort goes into the proper planning of the installation. This planning will involve consultations with the UNIX systems administrator regarding the physical space and memory.
allocation you need as well as configuring the operating system itself, UNIX, for
the optimal functioning of your Oracle databases.

Although the software and the databases managed by it will function even if
they're installed on a single disk or a set of disks without any organization as such,
you'll lose performance and endanger the safety of the databases if you don't
follow a well-thought-out strategy regarding disk allocation. Oracle strongly rec-
ommends a disk layout methodology formally called the **Optimal Flexible
Architecture (OFA)**, for efficiency as well as many other reasons. Before you start
any installation of the Oracle software itself, it is absolutely necessary for you to
know what the OFA recommendations are regarding proper disk layout.

**NOTE** This chapter deals with the installation of Oracle server software on
UNIX systems. Installing the Oracle client is a much simpler task. When
you invoke the Oracle Installer, simply choose the client installation option
instead of the server installation option.

I'm assuming that you or your organization has bought the necessary software
from Oracle Corporation. If that's the case, you'll have the software CDs sent to
you by Oracle. If you just want to try the Oracle9i software, you don't have to pur-
chase a thing. You can download the Oracle9i server software freely from the
OTN site has complete enterprise versions of the server software for all UNIX
flavors, as well as Linux, and Windows servers. In addition, you can check out the
operating system installation and administration manuals at the OTN site.

**NOTE** Although the general methodology is the same, there may be slight
differences in the installation procedures among the various operating
systems. Treat the following discussion as a set of generic installation pro-
cedures, and read the installation manual for your operating system before
you proceed toward an installation of the software.

**Reviewing the Documentation**

You can save yourself a lot of grief during the installation process by carefully
reviewing the operating system–specific Oracle installation manuals. These
manuals are very clear and specific, and provide you with a detailed roadmap of
the installation process. You'll need to review three sets of installation documents:

- **Oracle Installation Guide for your operating system**: This document will
  provide you with information about the system requirements, UNIX users
  and groups, and other requirements, and step you through the installation
  and postinstallation processes.

- **Release Notes and Release Notes Addendums**: The Release Notes are very
  important, and they cover the most recent changes to the installation and
  upgrade procedures for many components of the Oracle9i server and client.