Installing Oracle 8i for Linux on the Cobalt RaQ 3i and 4 Servers

1 About Oracle 8i on the RaQ 3i or RaQ 4

Running Oracle 8i on the RaQ 3i or RaQ 4 is a win-win opportunity for both Oracle 8i and RaQ developers and users. Oracle 8i is one of the products making the Internet the great enabler of business processes. Databases play a central role in e-business and e-commerce infrastructures making Oracle 8i a key platform for many companies.

1.1 Requirements

The following are required for installing Oracle 8i on the RaQ 3i or RaQ 4:

- A Cobalt RaQ 3i or RaQ 4 with a minimum of 256 megabytes of RAM

- A local console machine, which is a desktop or laptop computer running an X-Windows Server. You could use a Unix computer or a Linux desktop or laptop running `Enlightenment`, `KDE`, or `FVWM`; Cobalt has not yet tested Macintosh or Windows machine running MI/X[1].

- You must have experience operating X Windows and telnet sessions.

1.2 Before You Begin

Installing Oracle 8i on the RaQ takes about 45 minutes after you have copied all the necessary files to the target RaQ. The files you must copy are very large and can take a long time to copy.

You **must** have the 2.2.14C10 kernel or higher. Check to be sure that is already installed on the RaQ 3i in one of the following ways:

- As the Administrator, click **Maintenance** from the left column, then click **Install Software** from the list across the top. In the portion of the page under **Software on the Cobalt Server**, you should see `All-Kernel_i386-1.1`. If not, you must install it.

or

- Use telnet to log in to the RaQ. Type:

      uname -r

or

- Use telnet to look for the kernel RPM directly. Type:

      rpm -qa | more

  to list all the RPMs installed on the machine.

If the Linux kernel RPM is 2.2.14C10 or higher, you can install Oracle. If the 2.2.14 or later kernel is not on the RaQ 3, download it from
`http://ftp.cobalt.com/pub/packages/raq3/eng/All-Kernel_i386-1.1.pkg`

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[1]. MI/X is a product from Microimages, Inc., `http://www.microimages.com`. Be aware that installation with Windows might cause fonts to display incorrectly.

> **Note**
> The 2.2.14 kernel or higher is installed on the RaQ 4.

2 Installation Overview

The following list is a high-level view of the task need to install Oracle. Full details are included in the sections that follow.

To install Oracle 8i:

1) You must download the latest Java JDK from Sun Microsystems.

2) You transfer Oracle files to the RaQ, `telnet` into the RaQ, and issue commands at the Linux command line.

3) You must then reboot the machine, bring up X windows on your local console machine, and then run the Oracle installation procedures.

4) Once you have installed Oracle, you then perform standard Oracle database setup to create and use Oracle databases.

2.1 Installing Oracle 8i on the Cobalt RaQ 3i or 4

1) Go to `http://www.javasoft.com` and download the latest JDK for Linux from the site; Cobalt used JDK version1.2.2.

2) Use `ftp` to login to your RaQ 3i as the administrator. Transfer the following files to it from `http://www.oracle.com`:

   ```
   vmlinux.gz
   xfree-3.3.5-3-test.tar.gz
   xpm-3.4k-test.tar.gz
   jre_1.1.6-v5-glibc-x86.tar.gz
   ```

3) Exit `ftp` and telnet into the RaQ3, then log in as admin.

4) Copy `vmlinux.gz` to `/boot`

5) Copy `xfree-3.3.5-3-test.tar.gz` to the root directory (`/`) and unzip and untar the file.

6) Copy `xpm-3.4k-test.tar.gz` to the root directory (`/`) and unzip and untar the file.

7) Unzip and untar `jre_1.1.6-v5-glibc-x86.tar.gz` and move the resulting directory to `/usr/local/jre`.

8) Unzip and untar the Sun JDK for Linux and move the resulting directory to `/usr/local/<resulting directory name>`.

9) Type the following commands:

   ```
   /usr/sbin/groupadd dba
   /usr/sbin/groupadd oinstall
   /usr/sbin/useradd -g oinstall oracle

   mkdir /home/OraHome1
   chown oracle /home/OraHome1
   chgrp oinstall /home/OraHome1
   ```

```
mkdir /home/oracledb
chown oracle /home/oracledb
chgrp oinstall /home/oracledb
```

Note

The above commands assume that you are creating a directory `/home/oracledb` for your Oracle database. If you want another name for your Oracle database, change the above commands accordingly.

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10) Reboot the RaQ.

11) While the machine is rebooting, type the following command on your local console:

```
xhost +<RaQ Address>
```

Replace *<RaQ Address>* with the actual address of the machine in which you are going to install Oracle, for example:

```
xhost +10.9.20.66
```

12) Once the RaQ has finished rebooting, telnet into it. Type `su admin` and press **Enter**.

13) Login to Oracle. Type `su oracle` and press **Enter**.

14) Type the following command:

```
export DISPLAY=<Address of your workstation>:0.0
```

For example:

```
export DISPLAY=10.9.23.216:0.0
```

15) Unzip and untar the Oracle 8i distribution `tar` file.

16) Change to the directory that you created.

17) Type:

```
/runInstaller
```

A window should appear on your local machine within 30 seconds.

18) When prompted, make the ORACLE_BASE `/home/OraHome1` your default directory and make the database location the `/home/oracledb` directory.

After a few minutes, Oracle 8i should complete installation.

Note

The utilities with Oracle 8i are Java-based; you must either type the `export DISPLAY=<address>` command every time you open a new telnet session or else provide a script to enter the command. Also, you must re-execute the `xhost` command every time you restart X Windows on your own workstation.