SERENA®

DIMENSIONS® CM and RM

Installing the Serena-Supplied Runtime RDBMS

Serena Proprietary and Confidential Information

Publication date: June 2016

Table of Contents

Chapter 1

Installing the Windows Serena RDBMS

Introduction

The Serena RDBMS is an optional runtime, install locally or remotely, used as foundation software for Dimensions CM and RM servers.

IMPORTANT!

- Serena Runtime RDBMS 12.1.0.2 may only be used on servers that have a maximum capacity of 2 sockets. When used with Oracle Real Application Clusters, Serena Runtime RDBMS 12.1.0.2 may only be used on a maximum of 2 one socket servers. Each Serena Runtime RDBMS 12.1.0.2 may use a maximum of 16 CPU threads at any time. When used with Oracle Real Application Clusters, each Serena Runtime RDBMS 12.1.0.2 may use a maximum of 8 CPU threads per instance at any time. The new 16 CPU thread cap is a technical limitation in the database program, not merely a contractual license limitation. Serena Runtime RDBMS 12.1.0.2 cannot utilize more than 16 threads at any time. On a typical Intel processor, each core contains 2 threads. For example, a 2- socket Intel-based server may contain two processors each having 10 cores, so the server has 20 threads in total (if hyper threading is enabled). Serena Runtime RDBMS 12.1.0.2 can utilize a maximum of 16 threads at any time.
- The Serena RDBMS is third-party licensed software. Consequently, this software can only be used as stated on the Copyright page of this manual, that is, "Third-party programs included with the Dimensions product are subject to a restricted-use license and can be used only in conjunction with Dimensions".

Platform Support

The Serena RDBMS can be located locally or remotely with a CM or RM server. The supported Windows platforms are Windows Server 2008 and 2012 64-bit. For full details see the platform matrix on Serena Support.

Pre-Installation Tasks

Disk Space Requirements

The Serena RDBMS with default database instance requires approximately 20 GB of free disk space.

Utilizing DHCP

Dynamic Host Configuration Protocol (DHCP) assigns dynamic IP addresses on a computer network. Dynamic addressing allows a computer to have a different IP address each time it connects to the network. This simplifies network administration by enabling you to add a new computer to the network without having to manually assign that computer a unique IP address.

The Serena RDBMS requires a static IP address. On a DHCP network, you can assign a static IP address by installing a Microsoft Loopback Adapter as the primary adapter. After you install a Microsoft Loopback Adapter you will have at least two network adapters:

- Your own network adapter
- The Microsoft Loopback Adapter.

The Serena RDBMS requires the Microsoft Loopback Adapter to be the *primary* adapter.

The primary adapter is determined by the order in which you install adapters; it is the *last* adapter installed. If you install additional network adapters after you install the Microsoft Loopback Adapter, uninstall the Microsoft Loopback Adapter and reinstall it to ensure it is the primary adapter.

CAUTION!

If a Microsoft Loopback Adapter is *not* the primary adapter, when you install the Serena RDBMS you will receive a warning about a prerequisite check failure. If you proceed with the installation it will complete successfully. However, when the DHCP-assigned IP address changes, the Oracle Net Listener will no longer work and will have to recreate it using the Oracle Net Configuration Assistant tool:

Start | Programs | Oracle - Dimensions | Configuration and Migration Tools | Net Configuration Assistant

You can install the Microsoft Loopback Adapter after installation of the Serena RDBMS to ensure that the Oracle Net Listener will continue to work after subsequent system reboots.

Checking for a Microsoft Loopback Adapter

To check if a Microsoft Loopback Adapter is installed on your computer, run the `ipconfig /all` command from a command prompt window:

```
C:\> ipconfig /all
```

If there is a Microsoft Loopback Adapter installed it will be listed, for example:

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

If a Microsoft Loopback Adapter is installed, verify that it is the *last* adapter installed. If not, uninstall and reinstall to ensure it becomes the last adapter installed.

Installing a Microsoft Loopback Adapter

1. Open the Control Panel and select **Device Manager**.
2. Right-click the server name (at the top of the tree) and select **Add Legacy Hardware**.
3. In the Welcome window click **Next**. Select **Install the hardware that I manually select from a list** and click **Next**.
4. From the list of hardware types select **Network adapters** and click **Next**.

5 In the Select Network Adapter window select:

- Manufacturer: **Microsoft**
- Network Adapter: **Microsoft Loopback Adapter** or **Microsoft KM_TEST Loopback Adapter**

Click **Next**.

6 To install the loopback adapter click **Next**. When the installation is complete click **Finish**.

7 To configure the network connection do the following:

a In the Control Panel select **Network and Sharing Center**.

b Select the loopback adapter network connection you just installed. Typically this is called *Local Area Connection* <*n*> or *Ethernet* <*n*>.

c On the **General** tab click **Properties**.

d Select **Internet Protocol Version 6 (TCP/IPv6)** or **Internet Protocol 4 Version (TCP/IPv4)** and click **Properties**.

e Select **Use the following IP address.** For **IP address** enter a non-routable IP for the loopback adapter. Record the values you entered (you will need them later).

f If required, configure a DNS server address.

NOTE: For more information about setting the properties of the loopback adapter consult your network administrator or operating system documentation.

g Click **OK**.

8 Click **Close** and restart the computer.

9 After the computer restarts open the following file in a text editor:

```
C:\WINDOWS\system32\drivers\etc\hosts
```

Add the following line (and format) immediately after `localhost`:

```
IP_address   hostname.domainname   hostname
```

where:

- `IP_address` is the non-routable IP address.
- `hostname` is the name of the computer.
- `domainname` is the name of the domain.

For example:

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

10 Check the network configuration:

a In the Control Panel select **System**. In the Computer Name section verify that **Full computer name** displays the host name and the domain name, for example: `serena.example.com`.

b Click **Change settings**. In **Full computer name** you should see the host name and domain name.

c Click **Change** and then **More**. In **Primary DNS suffix of this computer** you should see the domain name.

Uninstalling a Microsoft Loopback Adapter

1 Open the Control Panel and click **Device Manager**.

2 Expand **Network adapters**.

3 Right-click Microsoft Loopback Adapter or Microsoft KM_TEST Loopback Adapter and select Uninstall.

4 Click **OK**.

5 Restart the computer.

6 After the computer restarts open the following file in a text editor:

```
C:\WINDOWS\system32\drivers\etc\hosts
```

Remove the following line immediately after `localhost`:

```
IP_address   hostname.domainname   hostname
```

Preparing the Serena RDBMS

The Windows Serena RDBMS is available from Serena Support.

IMPORTANT!

The Serena RDBMS installer is not able to properly resolve Microsoft Universal Naming Convention (UNC) pathnames when accessing the installation software located on a shared network disk. An example of an UNC pathname is: `\\server\share\directory`

The installer will exit with an error condition if you attempt to use an UNC pathname. To workaround this, you will have to copy the installation software to a local area where it can be accessed by the installer using conventional MS-DOS directory naming such as: `D:\users\fred`

NOTE

The default character set for the Serena RDBMS is Unicode UTF-8. Dimensions CM and Dimensions RM are designed to work with the AL32UTF8 character set, and for best performance that character set should be used. Dimensions CM and Dimensions RM automatically detect the character set when connecting to a database and process the data appropriately.

If you plan to use a character set other than AL32UTF8, consult Serena Support before proceeding.

Serena Response Files

The Serena response files are located in the following directories:

- Windows: `12c\response`
- UNIX: `database\response`

Installing the Windows Serena RDBMS

1. Login as a user with local administrative privileges.
2. Extract the Zip file provided by Serena:

   `dimensions_runtime_12102_win64.zip`
3. Run the extracted file:

   `SerenaRuntime64.exe`
4. Click Next, read and accept the license agreement, and click Next.

   If a previous instance of Serena RDBMS is already installed the default installer values may be wrong. Do not accept these defaults; you must specify new, unique values for the new RDBMS installation.
5. Select an installation type and click Next.
   - The options Install Runtime 12c and Create Instance are selected by default.
   - You cannot use the installer Create Instance option to separately create an instance in an existing RDBMS. To separately create an instance, use the template provided by Serena (or your own) and the Database Configuration Assistant utility.
   - To use a locally installed Serena RDBMS as a client to communicate with a remotely installed Serena RDBMS, unselect Create Instance.
6. Accept the default destination directory or select a different location.
   - Spaces are not allowed in the directory name.
   - Only accept the default location if there is no existing Serena RDBMS installation on your system. Otherwise browse to a new, unique directory.
7. Specify a home name for the installation.
   - Default: `DimOra12`
   - If there is an existing Serena RDBMS installation with the same home name, specify a new, unique name.
   - Record the home name as you will need it when installing a CM or RM server.

8 Specify an SID/DSN. This is an alphanumeric string, up to eight characters long, used to uniquely identify this installation.

- Default: `DIM14`
- The SID name must only contain alphanumeric characters.
- The first character of the SID must be alphabetic.
- The SID is case-sensitive.

9 Specify the root directory for the database. The database files will be created in a sub-directory with the same name as the SID:

- Default root directory: `C:\RDBMS\ora12c\oradata`
- Default sub-directory: `DIM14`

10 Specify the character set that will be used when creating the database and click Next. This field must contain a valid character set for the installation to succeed.

- Default: AL32UTF8
- To use a different character set consult Serena Support before proceeding.

11 Enter and confirm the password for the `SYSTEM` user.

- Do not use the default '`manager`' (or any case variants of that password).
- Keep a record of the password.

12 Enter and confirm the password for the `SYS` user.

- Do not use the default '`change_on_install`' (or any case variants of those passwords) for `SYS`.
- Keep a record of the password.

13 Review your installation settings and click Install.

- A default installation takes about an hour to complete.
- Installation logs are generated in:

  `c:\RDBMS\Inventory\logs`

  `c:\RDBMS\cfgtoollogs\dsbc\<SID>`

- If the installation appears to stall see page 16.

- On some Windows systems you may need to 'unblock' system blockers.
- The installer monitors the progress of the installation. After this stage of the installation is completed you are prompted to exit. If this screen fails to appear the prerequisite checks have probably failed, see page 7.

Post-Installation Tasks

General Tasks

Before using the new installation, check that the following services have been automatically started:

```
OracleService<oracle_service_name>
Oracle<oracle_home_name>TNSListener
```

There may be other Oracle Services installed, but only the two identified above are required by Dimensions CM or Dimensions RM.

For a default Serena RDBMS installation these services are:

```
OracleServiceDIM14
OracleDIOra12TNSListener
```

If these services are not running restart. If cannot manually restart them see page 16.

Applying Patches

Patching is not allowed.

Creating an Instance

The default instance created by the Serena RDBMS installer utilizes a Dimensions 12.1.0.2 database template. This instance can be used either:

- Separately by either a Dimensions CM or a Dimensions RM server installation.
- Jointly for Dimensions CM and Dimensions RM server installations associated together in an Application Lifecycle Management (ALM) integration.

Password Expiration

The account passwords expire after 180 days. To make passwords permanent consult your DBA or run the following command:

```
$ sqlplus system/<sysytem_password>@<OraSID>
SQL> ALTER PROFILE DEFAULT LIMIT PASSWORD_LIFE_TIME UNLIMITED;
SQL> EXIT;
```

If you do not make the account passwords permanent this will also effect the Dimensions CM base databases/schemas. When the account passwords are reset by the Serena RDBMS after 180 days, the corresponding entries in the `%DM_ROOT%\dfs\registry.dat` file need to be re-registered using the `dmpasswd` utility. See the section "Registering of Base Databases for Dimensions CM Connectivity" in the *Installation Guide for Windows* and the *System Administration Guide* for details on using `dmpasswd`.

Error Recovery

If the installation fails to complete successfully you will need to perform a complete re-installation. Check the contents of the log files to understand why the installation failed and perform any corrective actions:

- `c:\RDBMS\Inventory\logs`
- `c:\RDBMS\cfgtoollogs\dsbc\<SID>`

NOTES

- The inventory logs are always located in `C:\RDBMS\Inventorylogs` regardless of the disk and directory you chose for receipt of the third-party files in the installation wizard.
- The most likely cause of an error is that a previous Serena RDBMS installation has not been uninstalled correctly.
- If an installation prerequisite is not met you will receive a warning message about a prerequisite check failure. The file

  `C:\RDBMS\Inventory\logs\opraInstallActions<date>.log`

  contains a "Prerequisites Checks" page, which details the prerequisite that failed to be met. You must rectify the failed prerequisite and repeat the Serena RDBMS installation.
- Do not manually delete a Serena RDBMS installation. Use the Oracle Universal Installer (OUI), which will automatically uninstall the files and accordingly update the inventory information. Failure to do so may affect the success of subsequent installations. To invoke the OUI go to:

  Start | Programs | Oracle - Dimensions | Oracle Installation Products | Universal Installer
- If you need to restart the Serena RDBMS Windows services, see page 14.

Chapter 2

Installing the UNIX Serena RDBMS

Introduction

The Serena RDBMS is an optional runtime, install locally or remotely, used as foundation software for Dimensions CM and RM servers.

IMPORTANT!

- Serena Runtime RDBMS 12.1.0.2 may only be used on servers that have a maximum capacity of 2 sockets. When used with Oracle Real Application Clusters, Serena Runtime RDBMS 12.1.0.2 may only be used on a maximum of 2 one socket servers. Each Serena Runtime RDBMS 12.1.0.2 may use a maximum of 16 CPU threads at any time. When used with Oracle Real Application Clusters, each Serena Runtime RDBMS 12.1.0.2 may use a maximum of 8 CPU threads per instance at any time. The new 16 CPU thread cap is a technical limitation in the database program, not merely a contractual license limitation. Serena Runtime RDBMS 12.1.0.2 cannot utilize more than 16 threads at any time. On a typical Intel processor, each core contains 2 threads. For example, a 2- socket Intel-based server may contain two processors each having 10 cores, so the server has 20 threads in total (if hyper threading is enabled). Serena Runtime RDBMS 12.1.0.2 can utilize a maximum of 16 threads at any time.
- The Serena RDBMS is third-party licensed software. Consequently, this software can only be used as stated on the Copyright page of this manual, that is, "Third-party programs included with the Dimensions product are subject to a restricted-use license and can be used only in conjunction with Dimensions".

Platform Support

The Serena RDBMS can be located locally or remotely with a CM or RM server. The supported UNIX platforms are:

- AIX 64-bit Power PC
- Red Hat, SUSE, and CentOS Linux 64-bit
- Solaris 64-bit SPARC

For full details see the platform matrix on Serena Support.

Pre-Installation Tasks

Disk Space Requirements

The Serena RDBMS with default database instance requires approximately 20 GB of free disk space.

Installer Prerequisites

The installer requires the following to be pre-installed:

- Java runtime 1.1.5 or later
- GNU C Library `glibc`

Configuring System Kernel

The UNIX Serena RDBMS requires the UNIX system kernel to be configured for shared memory and semaphores. The RDBMS database will require one semaphore per RDBMS user process (or Dimensions CM or Dimensions RM user), plus one. The maximum number of user processes is governed by the `init.ora` parameter "processes", which by default is set by Dimensions CM or Dimensions RM to 100. You may need to adjust the values of the following UNIX system parameters to meet this requirement:

Parameter	Description
`SHMMAX`	The maximum size in bytes of a single shared memory segment.
`SHMMIN`	The minimum size in bytes of a single shared memory segment.
`SHMMNI`	The number of shared memory identifiers.
`SHMSEG`	The maximum number of shared memory segments that can be attached by a process.
`SEMMNI`	The number of semaphore set identifiers in the system. `SEMMNI` determines the number of semaphore sets that can be created at any one time.

Parameter	Description
SEMMNS	The number of semaphores system-wide.
SEMMSL	The maximum number of semaphores that can be in one semaphore set. Should be the same size as the maximum number of Serena RDBMS processes.

The default settings are usually sufficient.

CAUTION! If you set these parameters too high your machine may not boot up. Refer to your operating system administration documentation for further information.

Changes to Default Parameter Files

The default UNIX system kernel configuration values assume that you are using the default values from the parameter files provided with Dimensions CM or Dimensions RM. If you *change or reconfigure* these values, then you may need to rebuild the UNIX kernel to reflect these changes.

IBM AIX Kernel Configuration Requirements

If you are installing Dimensions CM or RM against the Serena RDBMS on IBM AIX, the runtime requires a special Post-Wait Kernel Extension to be loaded prior to installation. To load this extension, navigate to the following directory in the Serena RDBMS software media:

```
<installation_media>/database
```

Run the following command as user `root`:

```
$ sh ./rootpre.sh
```

For further information relating to the Post-Wait Kernel Extension see the README.txt file located in the `rootpre` directory.

UNIX "uncompress" Utility

The Serena RDBMS installer relies on the UNIX `uncompress` utility. Use these commands to confirm that it is installed:

```
$ which uncompress
$ uncompress -h
```

If your UNIX machine does not have `uncompress` your system administrator will need to install it before you can proceed with the installation of the Serena RDBMS.

User Account

A pre-existing operating system user account name must be available for the owner of the Serena RDBMS files that will be installed, and it must be a member of a group named `dba`.

Use the standard UNIX utilities to:

1 Create a group called `dba`.

2 Create a user account name for the files. The installer default is 'oracle'.

3 Assign the user account name to the group dba.

Preparing the Software

The UNIX Serena RDBMS is available from Serena Support. Each supported UNIX platform is located in a platform-specific tar file. The tar filename is:

`dimensions_runtime_12201-<platform>.tar`

Each tar file contains a UNIX installer file:

`serena_runtime121.bin`

NOTE The default character set for the Serena RDBMS is Unicode UTF-8. Dimensions CM and Dimensions RM are, by preference, designed to work with the AL32UTF8 character set, and for best performance that character set should be used. Dimensions CM and Dimensions RM automatically detects the type of the character set upon connecting to the database and processes the data appropriately.

If you plan to use a character set for the Serena RDBMS installation other than AL32UTF8, Serena strongly advises you to consult Serena Support before proceeding.

Installing the UNIX Serena RDBMS

1. Login as a user root.
2. Do one of the following:
   - GUI mode:

     ```
     # xhost +
     # ./serena_runtime121.bin
     ```

   - CUI mode:

     ```
     # ./serena_runtime121.bin -i console
     ```

3. Click Next, read and accept the license agreement, and click Next.
4. Select an installation type and click Next.
   - The options Install Runtime 12c and Create Instance are selected by default.
   - To use a locally installed Serena RDBMS as a client to communicate with a remotely installed Serena RDBMS, unselect Create Instance.
5. Accept the default directory for the Inventory files or enter a different location.
   - Default: `/var/opt/serena/rdbmsInventory`
   - The installer automatically sets up sub-directories for each product to contain inventory data.
   - Spaces are *not* allowed in the directory name.

6 Accept the default home destination root-directory for the software and configuration files or select a different location.

- Default: `/opt/serena/rdbms/12_1`
- Only accept the default if there is no existing Serena RDBMS installation on your system. Otherwise select a new, unique directory name
- Space characters are *not* allowed in the directory name.
- Database instance creation requires approximately 11 GB of free disk space.

7 Accept the following default values or specify different ones:

- RDBMS Owner: `oracle`
- OSDBA Group: `dba`
- OSOPER Group: `dba`

These groups identify operating-system user accounts that have database administrative privileges (the `SYSDBA` privilege) or system users that have a limited set of database administrative privileges (the `SYSOPER` privilege).

8 Accept the following default values or specify different ones:

- Server Hostname: `<local-hostname>`
- SID: `DIM14`
  - The SID is an alphanumeric string used to uniquely identify this installation.
  - The first character of the SID must be alphabetic.
  - The SID is case-sensitive.
- Database Character Set: `AL32UTF8`
  - This field must contain a valid character set for the installation to succeed when creating the Dimensions database.
  - If you plan to use a different character set consult Serena Support before proceeding.

9 Specify a common password for the following user accounts:

- SYSTEM
- SYS
- SYSMAN
- DBSNMP

Serena recommends that you do not use the default 'manager' (or any case variants of that password) for SYSTEM. Keep a record of the password you assign.

10 Confirm the password.

11 Accept the following default values or specify different ones:

- Listener Name: LISTENER
- TCP/IP Port Number: 1521

These parameters are required to configure the Net listener to allow connections to be made to the database instance.

Click Next.

12 Click OK and then Install.

- A default installation takes about an hour to complete.
- If the installation appears to stall see page 30.

If the pre-installation checks fail a message appears. Do the following:

a Click Cancel to stop the installation.

b View the log:

```
/tmp/serena_orcle_install/pre_install_checks.log
```

c Fix the problems.

d Restart the installer.

Post-Installation Tasks

Applying Patches

Patching is not allowed.

Creating an Instance

The default instance created by the Serena RDBMS installer can be used:

- Separately by either a Dimensions CM or a Dimensions RM server installation.
- Jointly for Dimensions CM and Dimensions RM server installations associated together in an Application Lifecycle Management (ALM) integration.

Checking Services

The instance creation procedure should start up services by creating processes with names similar to:

```
ora_ckpt_<orasid>
ora_dbw0_<orasid>
ora_lgwr_<orasid>
ora_pmon_<orasid>
ora_psp0_<orasid>
ora_mman_<orasid>
ora_mmnl_<orasid>
ora_mmon_<orasid>
ora_q000_<orasid>
ora_q001_<orasid>
ora_qmnc_<orasid>
ora_reco_<orasid>
ora_smon_<orasid>
```

where `<orasid>` is the SID supplied by the installer.

It should also start the listener:

```
tnslsnr LISTENER
```

To check these processes:

```
ps -eaf | grep ora
```

Manually Starting Services

If your services have not started following instance creation, manually start them as described below. In the following example, Serena RDBMS 12.1.0.2 is installed in `/opt/serena/rdbms/12_1` and the SID is `DIM14`.

1 Log in as the owner (by default UNIX user-id oracle). *Do not try and start the services as UNIX user `root`*.

2 Set up the environment `<libvar>`:

- AIX: `LIBPATH`
- Solaris and Linux: `LD_LIBRARY_PATH`

Specify ORACLE_HOME for your installation:

- Bourne Shell

```
$ ORACLE_HOME=/opt/serena/rdbms/12_1
$ export ORACLE_HOME
$ <lib_var>=/opt/serena/rdbms/12_1/lib:/usr/lib:/lib
$ export <lib_var>
$ PATH=/opt/serena/rdbms/12_1/bin:$PATH
$ export PATH
$ ORACLE_SID=DIM14
$ export ORACLE_SID
```

- C Shell

```
$ setenv ORACLE_HOME /opt/serena/rdbms/12_1
$ setenv <lib_var> /opt/serena/rdbms/12_1/lib:/usr/
    lib:/lib
$ set path = (/opt/serena/rdbms/12_1/bin $path)
$ rehash
$ setenv ORACLE_SID DIM14
```

3 Start the services as follows:

```
$ sqlplus /nolog
SQL> connect / as sysdba
SQL> shutdown
SQL> startup
SQL> exit
```

4 Confirm that the services have started:

```
ps -eaf | grep ora
```

5 Start the listener (see the next section).

Manually Checking and Starting the Listener

1 If you are not performing this procedure immediately after manually restarting the services, log in as the owner (by default UNIX user-id oracle) and set up your environment as described above. D*o not try and start the services as UNIX user* `root`.

2 Check that the file `/etc/tnsnames.ora` has been updated with the new service name. On Solaris this file is `/var/opt/rdbms/tnsnames.ora`

If that file has not been automatically updated, manually edit it using `$ORACLE_HOME/network/admin/tnsnames.ora` as a template. You must *not* copy the file.

3 Start the listener:

```
$ lsnrctl
```

4 Check for the existence of any listener services:

```
LSNRCTL > services
```

The services summary should display information for the new instance that was created using the `create_ora_inst` script.

5 If the listener is not running *or has not been updated with the new Service name*, run these commands:

NOTE: If you are running multiple instances on the database server machine, manually update the file `/etc/listener.ora` (on Solaris `/var/opt/listener.ora`) with the new service name before restarting the listener.

```
LSNRCTL > stop
LSNRCTL > start
LSNRCTL > services
LSNRCTL > exit
```

6 Check that the listener has started:

```
ps -eaf | grep tnslsnr
```

7 If you are ready to install Dimensions CM enter the following commands (assuming that you will install Dimensions CM as user SYSTEM):

```
$ sqlplus system/<system_password>@<dsn_name>
```

for example:

```
$ sqlplus system/manager@DIM14
```

This should connect you to the instance and display the SQL> prompt.

8 Exit sqlplus:

```
SQL> exit
```

9 Log out from the user UNIX account.

Password Expiration

Account passwords expire after 180 days. To make passwords permanent consult your DBA or run the following command:

```
$ sqlplus system/<sysytem_password>@<OraSID>
SQL> ALTER PROFILE DEFAULT LIMIT PASSWORD_LIFE_TIME UNLIMITED;
SQL> EXIT;
```

IMPORTANT! If you do not make the account passwords permanent this will have an effect on the Dimensions CM base databases/schemas. When the account passwords are reset by the Serena RDBMS after 180 days, the corresponding entries in the $DM_ROOT/dfs/registry.dat file will need to be re-registered using the dmpasswd utility. See "Registering of Base Databases for Dimensions CM Connectivity" in the *Installation for UNIX* and the *System Administration Guide* for details on using dmpasswd.

Serena Response Files

The Serena response files are extracted to the temporary location INSTALLER_TEMP_DIR. This directory is referenced in the installation log file and contains the Serena response files. To find this location enter:

```
$ grep INSTALLER_TEMP_DIR /tmp/serena_rdbms_install/
    verbose.log
```

This will return an output string such as:

```
INSTALLER_TEMP_DIR=/tmp/393850.tmp
```

If you list that directory you will see the Serena response files, for example:

```
$ ls /tmp/393850.tmp/*.rsp

/tmp/393850.tmp/serena_dbca.rsp

/tmp/393850.tmp/serena_install.rsp

/tmp/393850.tmp/serena_netca.rsp
```

General Tasks

1 Check if PCMS_SYS exits:

```
$ sqlplus system/<system_passwd>@<dsn>
SQL> select * from all_users where
    username='PCMS_SYS';
```

If user PCMS_SYS exists, you will get output confirming that and the date upon which it was created.

2 If PCMS_SYS *does not* exist, create it as follows:

```
$ sqlplus /nolog
$ SQL> connect / as sysdba
$ SQL> create user pcms_sys identified by
    <pcms_sys_password> default tablespace PCMS_DATA
    temporary tablespace PCMS_TEMP;
$ SQL> grant connect, resource, create view to
    pcms_sys;
$ SQL> commit;
$ SQL> exit;
```

3 Copy the network configuration files to directory /etc.

If the configuration files do not already exist in /etc, copy the file $ORACLE_HOME/network/admin/tnsnames.ora to /etc.

If this file does already exists in /etc, then merge the contents of $ORACLE_HOME/network/admin/tnsnames.ora with /etc/tnsnames.ora.

Error Recovery

If the Serena RDBMS installation fails to successfully complete, perform a complete re-installation after checking the contents of the log files in /var/opt/serena/rdbmsInventory

1 Log in as user root.

2 Navigate to the uninstall directory located at:

```
$ORACLE_HOME/../"Uninstall_Serena Runtime 12.1.0.2"
```

3 Run the following program:

```
"Uninstall_Serena Runtime 12.1.0.2"
```

4 After the uninstaller completes, delete the directory tree containing the remainder of runtime executables, for example:

/opt/serena/rdbms/12_1

5 If you are not re-installing the Serena RDBMS, remove the TSNAMES.ora, SQLNET.ora, and LISTENER entries from the /etc/services file.

Index