SERENA®

DIMENSIONS® CM and RM

Installing the Serena-Supplied Runtime RDBMS

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Welcome to the Serena-Supplied Runtime RDBMS.

IMPORTANT! The 64-bit Windows Oracle 11gR2 Serena-Supplied Runtime RDBMS referred to throughout this guide will be released shortly after the earliest release of Dimensions RM 2010 R1. If you plan to use this RDBMS, please check for its availability on the Serena Support download site or contact Serena Support regarding its planned release date.

The Windows Serena-Supplied Runtime RDBMS is an optional Serena supplied Windows runtime RDBMS (based on 32-bit Oracle 10g or 64-bit Oracle 11gR2) to be used as foundation software for the Serena® Dimensions® CM and Serena® Dimensions® RM server. For Dimensions CM for Windows or Dimensions RM, it can be installed either locally or remotely with respect to the server; whereas, for Dimensions CM for UNIX, it can only be installed remotely with respect to the server.

The UNIX Serena-Supplied Runtime RDBMS is an optional Serena supplied UNIX runtime RDBMS (based on 32-bit Oracle 10g) to be used as foundation software for the Dimensions CM and Dimensions RM server. For Dimensions CM for UNIX, it can be installed either locally or remotely with respect to the server; whereas, for Dimensions CM for Windows or Dimensions RM, it can only be installed remotely with respect to the server.

NOTES

- The UNIX Serena-Supplied Runtime RDBMS is currently only available based on 32-bit Oracle 10g, and this will be the only type available at the initial shipping of Dimensions RM 2010 R1. A version based on 64-bit Oracle 11gR2 is currently planned to be available when the next version of Dimensions CM ships.
- See "Introduction" on page 12 and "Introduction" on page 52 for further details on Serena-Supplied Runtime RDBMS supported platforms and operating systems relevant to a local Windows or UNIX node respectively.

If the option to use the Serena-Supplied Runtime RDBMS is not exercised, then you must have your own RDBMS pre-installed for use by Dimensions CM or Dimensions RM, namely:

- For Dimensions CM for Windows: you own Oracle 10g or 11gR2; or Microsoft SQL Server Enterprise 2005 or 2008 RDBMS.
- For Dimensions CM for UNIX, you own Oracle 10g or 11gR2 RDBMS.
- For Dimensions RM, you own Oracle 10g, 11gR1, or 11gR2 RDBMS.

For the exact versions, please see:

- TheDimensions CM or Dimensions RM readme file.
- The Serena public Dimensions CM Supported Platforms Web site at:

  http://support.serena.com/roadmap/PVDIMENSIONS/2010R1/PVDIMENSIONS_2010_R1_Supported_Platforms.aspx

- The Serena public Dimensions RM Supported Platforms Web site at:

  http://support.serena.com/roadmap/RTM/RTM_Supported_Platforms.aspx

About Serena Dimensions

Dimensions CM is the configuration management component of the integrated components that constitute the Serena Dimensions product. Dimensions CM is a powerful process management and change control system that will revolutionize the way you develop software. Dimensions CM helps you organize, manage, and protect your software development projects on every level—from storing and tracking changes to individual files, to managing and monitoring an entire development cycle. It also provides a powerful client reporting functionality.

The other constituent component of the Serena Dimensions product is Dimensions RM, which offers full requirements management and traceability throughout the development lifecycle by centralizing and organizing requirements using role base views and a user configurable requirements process.

Purpose of this manual

This manual describes:

- The pre-installation tasks and considerations for the Serena-Supplied Runtime RDBMS.
- Installing the Serena-Supplied Runtime RDBMS.
- Post-installation activities for the Serena-Supplied Runtime RDBMS.

For more information

Refer to:

- The Dimensions CM *Installation Guide for Windows* and *Installation Guide for UNIX*.
- The Dimensions RM *Installation Guide*.

Edition status

The information in this guide applies to:

- Various 32-bit versions of the Windows Oracle 10g based Serena-Supplied Runtime RDBMS.
- The 64-bit version of the Windows Oracle 11gR2 based Serena-Supplied Runtime RDBMS to be initially generally available with *Serena® Dimensions® RM 2010 R1* and later with the next release of *Serena® Dimensions® CM*.
- Various 32-bit versions of the UNIX Oracle 10g based Serena-Supplied Runtime RDBMS.

NOTE 64-bit versions of the UNIX Oracle 11gR2 based Serena-Supplied Runtime RDBMS are planned for release with the next release of *Serena®* Dimensions® CM. Please contact Serena for release details.

E-Learning Tutorials

E-Learning tutorials for Dimensions CM can be accessed at the following public Web site:

http://www.serena.com/serenacourseware/dimensions

E-Learning tutorials for Dimensions RM can be accessed at the following public Web site:

http://www.serena.com/serenacourseware/dimensionsrm/import

Typographical Conventions

The following typographical conventions are used in the online manuals and online help. These typographical conventions are used to assist you when using the documentation; they are not meant to contradict or change any standard use of typographical conventions in the various product components or the host operating system.

italics	Introduces new terms that you may not be familiar with and occasionally indicates emphasis.
bold	Emphasizes important information and field names.
UPPERCASE	Indicates keys or key combinations that you can use. For example, press the ENTER key.
`monospace`	Indicates syntax examples, values that you specify, or results that you receive.
`monospaced italics`	Indicates names that are placeholders for values you specify; for example, *`filename`*.
`monospace bold`	Indicates the results of an executed command.
vertical rule |	Separates menus and their associated commands. For example, select File | Copy means to select Copy from the File menu. Also, indicates mutually exclusive choices in a command syntax line.
brackets []	Indicates optional items. For example, in the following statement: `SELECT [DISTINCT]`, DISTINCT is an optional keyword.
. . .	Indicates command arguments that can have more than one value.

Printing Manuals

As part of your Dimensions license agreement, you may print and distribute as many copies of the Dimensions manuals as needed *for your internal use, so long as you maintain all copies in strict confidence and take all reasonable steps necessary to ensure that the manuals are not*

made available or disclosed to anyone who is not authorized to access Dimensions under your Dimensions license agreement.

Contacting Technical Support

Serena provides technical support for all registered users of this product, including limited installation support for the first 30 days. If you need support after that time, contact Serena Support at the following URL and follow the instructions:

http://www.serena.com/support/

Language-specific technical support is available during local business hours. For all other hours, technical support is provided in English.

The Serena Support web page can also be used to:

- Report problems and ask questions.
- Obtain up-to-date technical support information, including that shared by our customers via the Web, automatic e-mail notification, newsgroups, and regional user groups.
- Access a knowledge base, which contains how-to information and allows you to search on keywords for technical bulletins.
- Download fix releases for your Serena products.

Chapter 1

Installing the Windows Serena-Supplied Runtime RDBMS

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IMPORTANT! The 64-bit Windows Oracle 11gR2 Serena-Supplied Runtime RDBMS referred to throughout this chapter will be released shortly after the earliest release of Dimensions RM 2010 R1. If you plan to use this RDBMS, please check for its availability on the Serena Support download site or contact Serena Support regarding its planned release date.

Introduction

The Windows Serena-Supplied Runtime RDBMS is an optional Serena supplied Windows runtime RDBMS (based on 32-bit Oracle 10g or 64-bit 11gR2) to be used as foundation software for the Serena® Dimensions® CM and Serena® Dimensions® RM server. For Dimensions CM for Windows or Dimensions RM, it can be installed either locally or remotely with respect to the server; whereas, for Dimensions CM for UNIX, it can only be installed remotely with respect to the server.

If the option to use the Serena-Supplied Runtime RDBMS is not exercised, then you must have your own RDBMS pre-installed for use by Dimensions CM or Dimensions RM, namely:

- For Dimensions CM for Windows: you own Oracle 10g or 11gR2; or Microsoft SQL Server Enterprise 2005 or 2008 RDBMS.
- For Dimensions CM for UNIX, you own Oracle 10g or 11gR2 RDBMS.
- For Dimensions RM, you own Oracle 10g, 11gR1, or 11gR2 RDBMS.

For the exact versions of the Serena-Supplied Runtime RDBMS or your own Oracle or SQL Server RDBMS please see:

- The Dimensions CM or Dimensions RM readme file.
- The Serena public Dimensions CM Supported Platforms Web site at:

  http://support.serena.com/roadmap/PVDIMENSIONS/2010R1/PVDIMENSIONS_2010_R1_Supported_Platforms.aspx

- The Serena public Dimensions RM Supported Platforms Web site at:

  http://support.serena.com/roadmap/RTM/RTM_Supported_Platforms.aspx
  RTM_Supported_Platforms.aspx

IMPORTANT! The Serena-Supplied Runtime RDBMS is third-party licensed software based on Oracle 10g or 11gR2. 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 only be used in conjunction with Dimensions". Additionally, all problems relating to the Serena-Supplied Runtime RDBMS must be addressed to Serena Support *not* the Oracle Corporation.

NOTE The Serena-Supplied Runtime RDBMS operating systems specified in the table below are supported by both co-located Dimensions CM and Dimensions RM servers unless specified otherwise.

Serena-Supplied Runtime RDBMS Operating System Type	Local Windows Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2003, 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
Windows Server 2003, Standard Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.

Serena-Supplied Runtime RDBMS Operating System Type	Local Windows Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2003, Standard Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
Windows Server 2003 SP2, Enterprise Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS.	Yes.	Yes.
Windows Server 2003 SP2, Enterprise Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
Windows Server 2003 R1, Enterprise Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
Windows Server 2003 R1, Enterprise Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
Windows Server 2003 R2, 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.

Serena-Supplied Runtime RDBMS Operating System Type	Local Windows Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2003 R2, Enterprise Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS.	Yes.	Yes.
Windows Server 2003 R2, Enterprise Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
Windows Server 2008, Enterprise Edition 32-bit x86. *32-bit 10g Serena-Supplied Runtime RDBMS not supported.* **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes (subject to statement in left hand column).
Windows Server 2008, Enterprise Edition 64-bit x86. 64-bit 11gR2 Serena-Supplied Runtime RDBMS only. *32-bit 10g* Serena-*Supplied Runtime RDBMS not supported.*	Yes (64-bit version only).	Yes (subject to statement in left hand column).
Windows Server 2008 R1, Enterprise Edition 32-bit x86. *32-bit 10g Serena-Supplied Runtime RDBMS not supported.* **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes (subject to statement in left hand column).
Windows Server 2008 R1, Enterprise Edition 64-bit x86. 64-bit 11gR2 Serena-Supplied Runtime RDBMS only. *32-bit 10g* Serena-*Supplied Runtime RDBMS not supported.* **NOTE** This operating-system is not supported for a co-locatedDimensions CM server.	Yes (64-bit version only).	Yes (subject to statement in left hand column).

Serena-Supplied Runtime RDBMS Operating System Type	Local Windows Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2008 R2, Enterprise Edition 64-bit x86. 64-bit 11gR2 Serena-Supplied Runtime RDBMS only. *32-bit 10g* Serena-*Supplied Runtime RDBMS not supported.*	Yes (64-bit version only).	Yes (subject to statement in left hand column).
Windows Vista 64-bit x86-64. 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
Windows 7 Professional 64-bit x86-64. 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	Yes.	Yes.
AIX 5.x 64-bit Power PC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.
AIX 6.x 64-bit Power PC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.
HP-UX 11.2x 64-bit PA-RISC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.
HP-UX 11.3x 64-bit x64 Itanium. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.

Serena-Supplied Runtime RDBMS Operating System Type	Local Windows Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Red Hat 5.x 64-bit x86-64. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.
SLES 10.x 64-bit x86-64. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.
SLES 10.x 64-bit x64 Itanium. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.
SLES 11.x 64-bit x86-64. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.
Solaris 10 64-bit SPARC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	No.	Yes. See Chapter 2.

The Serena-Supplied Runtime RDBMS for each particular software platform is available

- Directly from the Serena-supplied platform-specific Runtime DVDs.
- By copying the contents of the appropriate DVD to your disk of choice, being careful to maintain the directory layout structure.
- By downloading a compressed file from the Serena Support Web site.

NOTE The default character set for the Serena-Supplied Runtime RDBMS is Unicode UTF-8 (Oracle designate this AL32UTF8). 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-Supplied Runtime RDBMS installation other than AL32UTF8, Serena strongly advises you to consult Serena Support before proceeding.

Checklist

☐	If you will be installing on a Windows PC that utilizes DHCP, ensure that you first install a Microsoft Loopback Adapter (see "Installing the Windows Serena-Supplied Runtime RDBMS on a Computer that Utilizes DHCP Network Addressing" on page 19).
☐	Ensure that the installation software is not located on a shared disk utilizing UNC pathnames (see "Preparing the Windows Serena-Supplied Runtime RDBMS Software" on page 24).
☐	If you will be installing the 64-bit 11gR2 version of the Serena-Runtime RDBMS, decide whether you want the installer to install it with or without enhanced Oracle 11gR2 security (see "Setting Serena-Supplied Runtime RDBMS Enhanced Oracle 11gR2 Security" on page 25).
☐	Review the installation overview (see "Windows Serena-Supplied Runtime RDBMS Installation Overview" on page 26).
☐	Launch the installation (see "Launching the Serena-Supplied Runtime RDBMS Installation" on page 27).

☐	Follow the installation steps for either: ▪ 64-bit 11gR2 (see "Running the 64-Bit 11gR2 Windows Serena-Supplied Runtime RDBMS Installer" on page 30), or ▪ 32-bit 10g (see "Running the 32-Bit 10g Windows Serena-Supplied Runtime RDBMS Installer" on page 38).
☐	Perform the post-installation steps necessary to configure the Serena-Supplied Runtime RDBMS (see "Post-Installation Activities" on page 45).

Pre-Installation Considerations

Installing the Windows Serena-Supplied Runtime RDBMS on a Computer that Utilizes DHCP Network Addressing

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 letting you add a new computer to the network without having to manually assign that computer a unique IP address.

The Serena-Supplied Runtime RDBMS, however, requires a static IP address. On a DHCP network, the assignment of a static IP address can be achieved by installing a Microsoft Loopback Adapter as the primary adapter.

When you install a Microsoft Loopback Adapter, you will have at least two network adapters on your computer: your own network adapter and the Microsoft Loopback Adapter. The Serena-Supplied Runtime RDBMS needs to have Windows using the Microsoft Loopback Adapter as 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, you will need

to uninstall the Microsoft Loopback Adapter and reinstall it to ensure it is the primary adapter.

CAUTION!

If you do not install a Microsoft Loopback Adapter as the primary adapter when connected to a DHCP network, during installation of the Serena-Supplied Runtime RDBMS you will receive a warning message about a prerequisite check failure and a prompt to proceed (YES) or not proceed (NO).

If you click YES, the installation will proceed and complete successfully. However, whenever the DHCP-assigned IP address subsequently changes (for example, at a system reboot), the Oracle Net Listener will no longer work and will have to be recreated using the Oracle Net Configuration Assistant tool.

To start the Oracle Net Configuration Assistant tool, click the Windows Start menu and then select

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

and click the **Help** button on each dialog box for guidance in using this tool.

In such circumstances, you can install the Microsoft Loopback Adapter after installation of the Serena-Supplied Runtime RDBMS to ensure that the Oracle Net Listener will continue to work after subsequent system reboots.

Checking if a Microsoft Loopback Adapter Is Already Installed on Your Computer

To check whether a Microsoft Loopback Adapter is already installed on your computer, run the `ipconfig /all` command from the Command Prompt window:

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

If there is a Microsoft Loopback Adapter already installed, its values will be listed in the output of the above command. 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
```

Even if a Microsoft Loopback Adapter is installed, you need to check that it is listed as the last adapter installed. If it is not, you will need to uninstall it (see "Uninstalling a Microsoft Loopback Adapter" on page 24) and install it again (see "Installing a Microsoft Loopback Adapter on Windows Server 2003 and 2008" on page 21) to ensure it becomes the last adapter installed.

Installing a Microsoft Loopback Adapter on Windows Server 2003 and 2008

To install a loopback adapter on Windows Server 2003 or 2008:

1 Start | Control Panel.

2 Start the Add Hardware wizard (in Classic View you do this by double clicking **Add Hardware**).

3 In the Welcome window, click **Next**. For Windows Server 2008, proceed to Step 6 on page 21.

4 In the **Is the hardware connected?** window, select **Yes, I have already connected the hardware**, and click **Next**.

5 In the **The following hardware is already installed on your computer** window, at the end of the **Installed hardware list**, select **Add a new hardware device**, and click **Next**.

6 In the **The wizard can help you install other hardware** window, select **Install the hardware that I manually select from a list**, and click **Next**.

7 From the list of hardware types, select **Network adapters**, and click **Next**.

8 In the Select Network Adapter window:

a Make the following selections:

- Manufacturer: Select **Microsoft**.
- Network Adapter: Select **Microsoft Loopback Adapter**.

b Click **Next**.

9 In the **The wizard is ready to install your hardware** window, click **Next**.

10 In the **Completing the Add Hardware Wizard** window, click **Finish**.

11 Restart your computer.

12 Right click **My Network Places** on the desktop or Windows Explorer and chose **Properties**; or, from control panel, right click **Network Connections** in Windows Server 2003 or **Networking and Sharing Center** in Windows Server 2008 and chose **Properties**. This displays the Network **Connections Panel** in Windows Server 2003 or the **Networking and Sharing Center** in Windows Server 2008. For Windows Server 2008, click the **Manage network connections** Task to show the **Connections Panel**.

13 Right click the connection that was just created. This is usually named **Local Area Connection n** and can also be confirmed to be the Microsoft Loopback Adapter by hovering the mouse over that entry. Choose **Properties**.

14 On the General tab (Windows Server 2003) or the Networking tab (Windows Server 2008), select:

- For Windows Server 2003: **Internet Protocol (TCP/IP)**.
- For Windows Server 2008: **Internet Protocol Version 4 (TCP/IPv4)** or **Internet Protocol Version 6 (TCP/IPv6)**. The version you need to choose will be the one corresponding to the networking protocol used by your site. Version 6 is the latest version of protocol that provides communication across diverse interconnected networks; whereas, Version 4 is the default version, and the one that would normally be chosen.

  Click the **Properties** button.

15 In the Properties dialog box, click **Use the following IP address** on the General tab and enter the following:

a IP Address: Enter a non-routable IP for the loopback adapter. Oracle recommends the following non-routable addresses:

- `192.168.x.x` (where x is any value between 0 and 255)
- `10.10.10.10 (available for TCP/IPv4 only)`

b Subnet mask: Enter `255.255.255.0`.

c Record the values you entered, which you will need later in this procedure.

d Leave all other fields empty.

e Click **OK**.

16 Click **Close** to close Network Connections.

17 Restart the computer.

18 In the `C:\WINDOWS\system32\drivers\etc\hosts` file, use a text editor to add a line immediately after the `localhost` line with the following format:

```
IP_address    hostname.domainname    hostname
```

where each entry is followed by white space (for example, spaces or a tab character):

- `IP_address` is the non-routable IP address you entered in Step 15.
- `hostname` is the name of the computer.
- `domainname` is the name of the domain.

For example:

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

19 Check the network configuration:

a Open **System** in the Control Panel, and select the Computer Name tab.

In **Full computer name**, make sure you see the host name.

b Click **Change**.

In **Computer name**, you should see the hostname.

c Exit the System Control Panel.

Uninstalling a Microsoft Loopback Adapter

To remove the loopback adapter:

1. Open **System** in the Control Panel.
2. For Windows Server 2003, on the Hardware tab, click **Device Manager**; for Windows Server 2008, click the **Device Manager Tasks** link.
3. In the Device Manager window, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.
4. Right click **Microsoft Loopback Adapter** and select **Uninstall**.
5. Click **OK**.

Preparing the Windows Serena-Supplied Runtime RDBMS Software

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

Consequently, 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`.

The Windows Serena-Supplied Runtime RDBMS for each particular software platform is available:

- Directly from the Serena-supplied platform-specific Runtime DVDs (Dimensions CM only).
- By copying the contents of the appropriate DVD to your disk of choice, being careful to maintain the directory layout structure (Dimensions CM only).
- As a downloadable Windows zip file. This zip file is available for download from Serena Support. Once you download the zip file, you will need to extract its contents to a local disk area as described in

the next subsection. The extracted contents will include the required Windows installers and Windows binaries necessary for the Serena-Supplied Runtime RDBMS.

Making the Contents of the Zip File Available to the Installer

For the installer to be able to install the Serena-Supplied Runtime RDBMS, you will need to extract the contents of the zip file into a sub-directory on your hard disk.

Before beginning the installation, you therefore need to:

1. Decide where to locate the sub-directory.
2. Ensure you have adequate space available.
3. Extract the contents of the zip file to the sub-directory.

Setting Serena-Supplied Runtime RDBMS Enhanced Oracle 11gR2 Security

CAUTION! For the correct functioning of Dimensions CM in particular, enhanced Oracle 11gR2 security *must* always remain at the default *not enabled* state.

Oracle 11gR2 provides the option of enhanced security (including enabling audit settings, configuring password profiles, and revoking some grants to public). By default this is *not enabled* in the installed 64-bit 11gR2 Serena-Supplied Runtime RDBMS as a result of running the Serena-Supplied installer.

If you want the installer to activate the enhanced security option when it is run:

1. Navigate to the following directory in the Serena-Supplied Runtime RDBMS installation software:

   `11gR2\response`

2. Open serena_db.rsp in a text editor.

3 Change the parameter:

```
oracle.install.db.config.starterdb.enableSecuritySettings=false
```

to

```
oracle.install.db.config.starterdb.enableSecuritySettings=true
```

Windows Serena-Supplied Runtime RDBMS Installation Overview

The Windows Serena-Supplied Runtime RDBMS installation includes:

1 Automatic running of various prerequisite checks. If any of these fail, you will receive a warning message about a prerequisite check failure and a prompt to proceed (`YES`) or not proceed (`NO`). In such circumstances, you should *always* answer `NO` and proceed to "Incomplete Installation" on page 48.

IMPORTANT! Sometimes this warning message referred to above can get hidden behind other windows you may have opened during installation. Therefore, if the installation appears to have hung, minimize all opened windows to check for the presence of this warning message.

2 Automatically checking if any Serena-Supplied Runtime RDBMS and/or RDBMS instance has already been installed.

3 Copying the Serena-Supplied Runtime RDBMS files into the directory structure you specify.

For the 32-bit Oracle 10g version of the files, this is an automatic two step process:

a Firstly, the Oracle 10.2.0.1 software will be installed.

b Secondly, the Oracle 10.2.0.2 patch will be installed onto the Oracle 10.2.0.1 software.

For the 64-bit Oracle 11gR2 version of the files, this is an automatic one step process in which the Oracle 11.2.0.1 software will be installed.

4 Optionally, by default, creating a database instance.

5 Starting the Serena-Supplied Runtime RDBMS by creating and automatically starting Windows services with names:

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

For a default 32-bit 10g Serena-Supplied Runtime RDBMS installation these services will be:

```
OracleServiceDIM10
OracleDimensionsTNSListener
```

For a default 64-bit 11gR2 Serena-Supplied Runtime RDBMS installation these services will also be:

```
OracleServiceDIM10
OracleDimensionsTNSListener
```

NOTE All other `Oracle<oracle_home_name>*` services created by the Serena-Supplied Runtime RDBMS installer do not need to be started or active to access Dimensions CM or Dimensions RM.

Launching the Serena-Supplied Runtime RDBMS Installation

Introduction

CAUTION! Ensure that all Windows programs are shut down before beginning the installation—this especially includes background programs such as virus checkers. If you do not shut down these programs, the installation may fail.

Depending on how you obtained the Serena-Supplied Runtime RDBMS installer software, you either launch the installer:

- From the HTML front end that comes with the Serena-Supplied Runtime RDBMS Software DVD (Dimensions CM only and currently restricted to the 32-bit 10g Serena-Supplied Runtime RDBMS software). Proceed to "Launching the Installer from the HTML Front End (Dimensions CM Only)" on page 28.

- From the installer software extracted from the zip file that you downloaded from the Serena Support Web site. Proceed to "Launching the Installer from the Extracted Downloaded Zip File Contents" on page 29.

Launching the Installer from the HTML Front End (Dimensions CM Only)

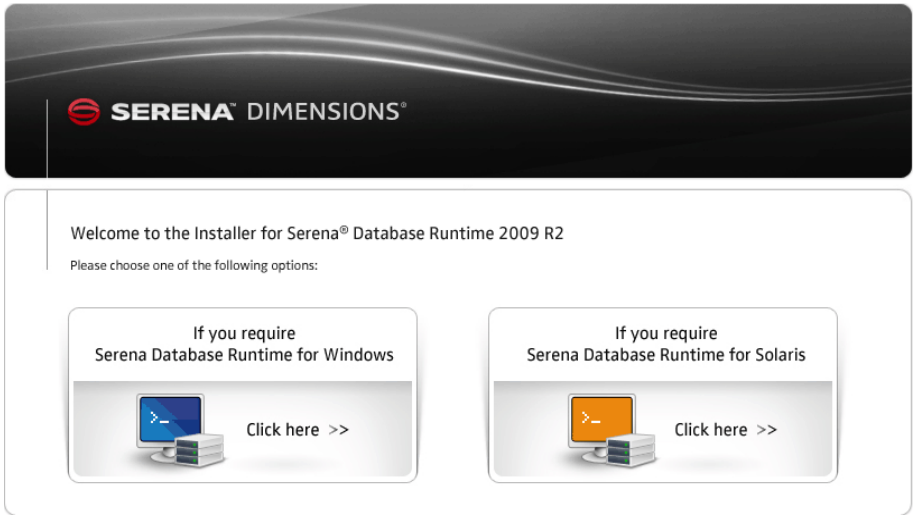
1. Log in as a user with local Administrative privileges.
2. Insert the Dimensions 32-bit 10g Serena-Supplied Runtime RDBMS Windows Software DVD into your DVD drive (or navigate to and run the HTML installation front end `index.html` file in the directory containing the copied contents of the DVD).
3. If the HTML installation front end does not automatically start when using a DVD, do one of the following:
   - From My Computer, right click the **DVD** icon and select **AutoPlay**.
   - Run `index.html` from the DVD drive.

NOTES

- If running Microsoft Internet Explorer 8 browser, please ensure that you are running in compatibly view:

```
Tools | Compatibility View Settings |
    Display all Websites in Compatibility View
```

- Some Windows systems, such as Windows Server 2003 or 2008, have high default security settings. If you are installing the Serena-Supplied Runtime RDBMS on a platform with such default settings, you may receive a warning to the effect that "Some files can harm your computer ..." when you attempt to initiate the installation. Click the **Open** button to proceed in such circumstances.
- Depending on your browser and its settings, you may receive:
  - **a** **File Download - Security Warning** message **Do you want to run or save this file?** If so, click **Run**.
  - **b** **Internet Explorer - Security Warning** message **The publisher could not be verified...** If so, click **Run**.



4 Click **Click here >>** in the **If you require Serena Database Runtime for Windows** region to initiate the installation wizard.

5 Proceed to "Running the 32-Bit 10g Windows Serena-Supplied Runtime RDBMS Installer" on page 38.

NOTE It will take some time for the installer to process various files before the **Welcome** screen appears, please be patient.

Launching the Installer from the Extracted Downloaded Zip File Contents

1 Log in as a user with local Administrative privileges.

2 Navigate down to and run the extracted downloaded file

```
setup.exe
```

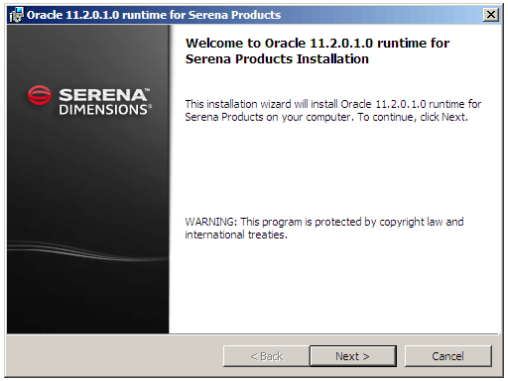
NOTE Some Windows systems (for example Windows Server 2003 or 2008) have high default security settings. If you are installing the Serena-Supplied Runtime RDBMS on a platform with such default settings, you may receive a warning to the effect that "Some files can harm your computer ..." when you attempt to initiate the installation. Click the **Open** button to proceed in such circumstances.

3 Proceed to "Running the 64-Bit 11gR2 Windows Serena-Supplied Runtime RDBMS Installer" on page 30 or "Running the 32-Bit 10g Windows Serena-Supplied Runtime RDBMS Installer" on page 38.

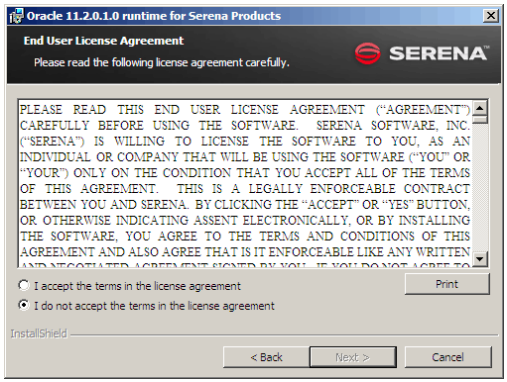
NOTE It will take some time for the installer to process various files before the **Welcome** screen appears, please be patient.

Running the 64-Bit 11gR2 Windows Serena-Supplied Runtime RDBMS Installer

Initial Steps



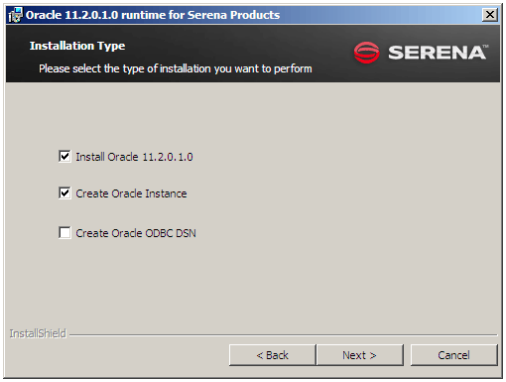
1 Click **Next** to start the installation.



2 Read the license agreement and click **I accept the terms of the End User License Agreement** to accept the terms, and then click **Next**.

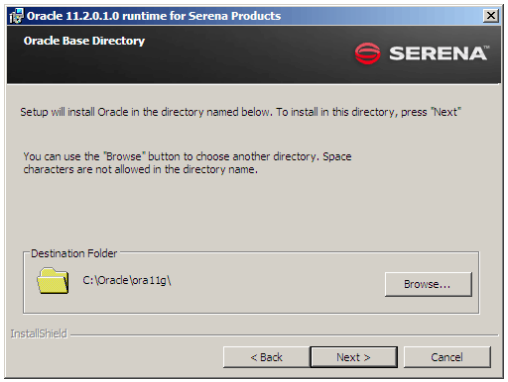
Specifying Installation Parameters

IMPORTANT! In *steps 4 to 6* of the following, if a Serena-Supplied Runtime RDBMS from a previous Dimensions CM for Windows or Dimensions RM installation is still present on your Windows system or has not been completely uninstalled (for example, old registry entries still exist), then the default values presented by the installer (directory names, Oracle home name, and Oracle SID) may reflect these old values. In such circumstances, you must *not* accept these defaults as this may cause the installation to fail; you must specify new, unique values for the new Serena-Supplied Runtime RDBMS installation.



3 Select the type of installation you wish to perform and click **Next**. The default is for the **Install Oracle 11.2.0.1** and **Create Oracle Instance** check boxes to be checked. Dimensions CM for Windows and Dimensions RM, by default, use the Oracle Open Call Interface (OCI) connectivity mechanism, so you should only check the additional **Create Oracle ODBC DSN** check box if you plan to use the alternative Open Database Connectivity (ODBC) mechanism.

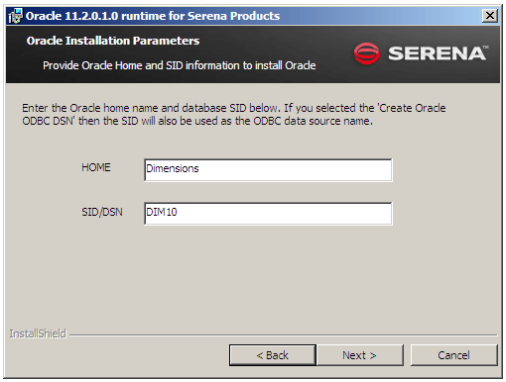
If you plan to plan to use a locally installed Serena-Supplied Runtime RDBMS as a client to communicate with a remotely installed Serena-Supplied Runtime RDBMS, you should also uncheck **Create Oracle Instance**.



4 Accept the default destination directory for the Oracle software or click **Browse** to select a different location, and click **Next**.

Only accept the default if there is no existing Serena-Supplied Runtime RDBMS installation on your Windows system; otherwise, use **Browse** to select a new, unique directory name.

IMPORTANT! Space characters are *not* allowed in the directory name.



5 Specify values for the parameters that are requested on this page.

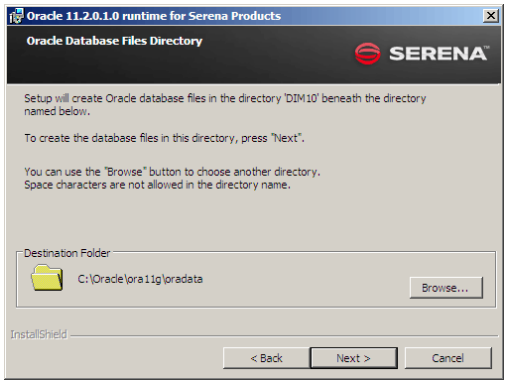
a Specify an Oracle home name to be given to the Oracle installation.

If there is an existing Serena-Supplied Runtime RDBMS installation on your Windows system with a home name of, for example, `Dimensions`, make sure you specify a new, unique home name, for example, `Dimensions 2010`.

IMPORTANT! Make a note of this name, as it will appear in the list of known Oracle home names displayed during the installation of the Dimensions CM for Windows or Dimensions RM server, and you must ensure at that point that you select the name that you are specifying here.

b Specify an Oracle SID/DSN. This is an alphanumeric string, up to six characters long, used to uniquely identify this installation of the third-party Oracle installation—the default is `DIM10`.

If you checked the additional **Create Oracle ODBC DSN** check box at Step 3 on page 32, then this entry will also be used as the ODBC data source name.

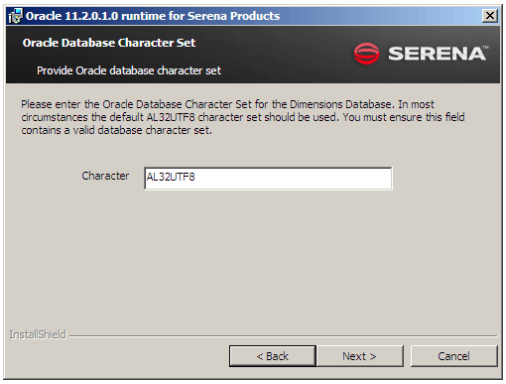


6 Specify the directory into which the Serena-Supplied Runtime RDBMS database files will be created.

Only accept the default if there is no existing Serena-Supplied Runtime RDBMS installation on your Windows system; otherwise, use **Browse** to select a new, unique directory name.

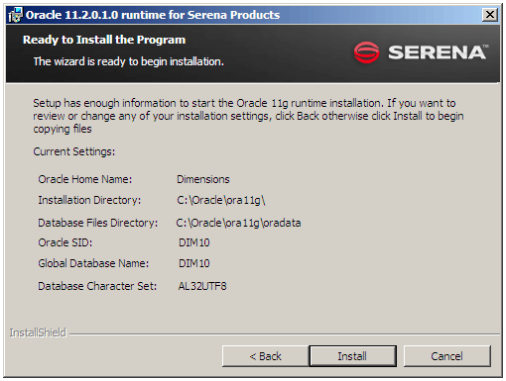
IMPORTANT! Space characters are not allowed in the directory name.

NOTE If the destination you specify contains insufficient space, you will be notified of that fact.



7 Specify the Serena-Supplied Runtime RDBMS database character set that will be used when creating the Dimensions database and click **Next**. This field must contain a valid character set for the installation to succeed.

IMPORTANT! If you plan to use a character set other than the Unicode UTF-8 AL32UTF8 character set, Serena strongly advises you to consult Serena Support before proceeding. See page 18 for a discussion of database character sets.



8 Review your installation settings carefully and click **Install** if they are correct and complete. Go to "Progress Monitoring" on page 44. See also, "Error Recovery" on page 48 if the installation appears to stall.

To make changes to your installation settings, you must click **Back** until you reach the relevant page and start the installation sequence again.

IMPORTANT! If you specified the default **Create Oracle Instance** option at Step 3 on page 32, during creation of the Oracle database instance you will be asked to assign passwords for the Oracle users `SYS` and `SYSTEM`. Oracle 11g2R2 password recommendations are that you do not use `change_on_install` or `manager` (or any case variants of those passwords) for `SYS` and `SYSTEM`. If you follow those recommendations, you *must* ensure that you keep a record of the passwords you assign, otherwise Serena Support will not be able to provide you with assistance if you have any problems with you database.

Progress Monitoring

If all the installer options were chosen, an installation of the Serena-Supplied Runtime RDBMS will typically take about an hour to complete, depending on the recipient system's attributes.

During the installation, a third-party Oracle Universal Installer console window and a Windows Command Prompt window will monitor and provide feedback on the progress of the installation. In addition, logs of the installation will be generated in:

- `C:\Oracle\Inventory\logs`
- `X:\Oracle\ora11g2\cfgtoollogs\dbca\<OraSID>`

NOTES

- On certain Windows systems you may need to 'unblock' system blockers that pop up during installation.
- The inventory logs will always be located in

  `C:\Oracle\Inventory\logs`

  regardless of the directories you chose for receipt of the third-party Oracle files in the installation wizard.

9 The third-party Oracle Universal Installer console window monitors the progress of the installation of the Oracle 11.2.0.1 base server

files. Once this stage of the installation is completed successfully, you will be prompted to press ENTER to exit the Oracle Universal Installer console window.

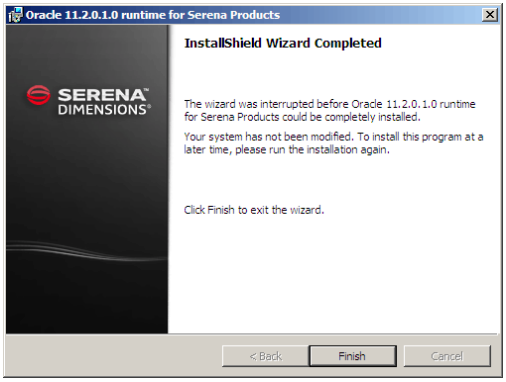
IMPORTANT! If this screen fails to appear after a few minutes, the prerequisite checks will probably have failed. See Step 1 on page 26 for details of how to proceed.

10 If the default **Create Oracle Instance** check box was left checked in Step 3 on page 32, the third-party Database Configuration Assistant will start creating the instance; otherwise, the installation will progress to Step 11 on page 38. During the instance creation process:

A Command Prompt window appears to monitor progress of the database instance creation and initially prompts you for the passwords for the Oracle accounts `SYS` and `SYSTEM`.

IMPORTANT!

- Be very careful when typing these passwords in the Command Prompt window as no visual echoing of your password keystrokes (such as '*') is provided.
- Oracle 11g2R2 password recommendations are that you do not use `change_on_install` or `manager` (or any case variants of those passwords) for `SYS` and `SYSTEM`. If you follow those recommendations, you must ensure that you keep a record of the passwords you assign, otherwise Serena Support will not be able to provide you with assistance if you have any problems with you database.
- Creating an Oracle instance takes a fairly long time. Please be patient.

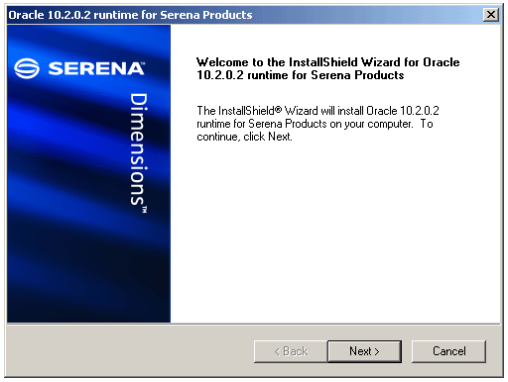


11 When installation completes, the above screen appears. Click **Finish** to exit the Wizard.

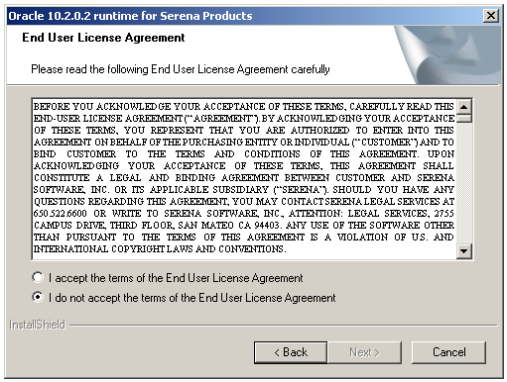
12 Proceed to "Post-Installation Activities" on page 45.

Running the 32-Bit 10g Windows Serena-Supplied Runtime RDBMS Installer

Initial Steps



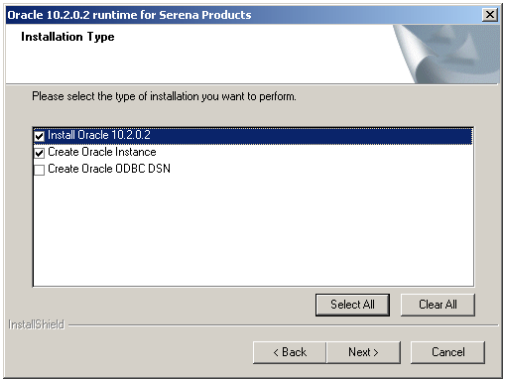
1 Click **Next** to start the installation.



2 Read the license agreement and click **I accept the terms of the End User License Agreement** to accept the terms, and then click **Next**.

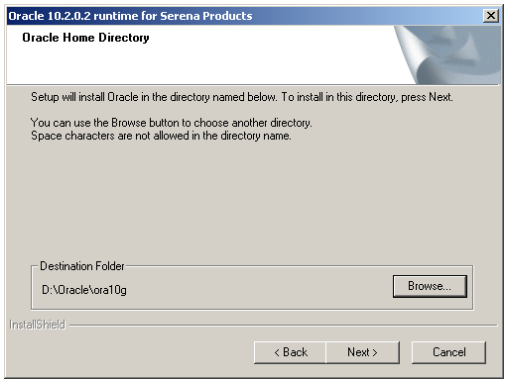
Specifying Installation Parameters

IMPORTANT! In *steps 4 to 6* of the following, if a Serena-Supplied Runtime RDBMS from a previous Dimensions CM for Windows or Dimensions RM installation is still present on your Windows system or has not been completely uninstalled (for example, old registry entries still exist), then the default values presented by the installer (directory names, Oracle home name, and Oracle SID) may reflect these old values. In such circumstances, you must *not* accept these defaults as this may cause the installation to fail; you must specify new, unique values for the new Serena-Supplied Runtime RDBMS installation.



3 Select the type of installation you wish to perform and click **Next**. The default is for the **Install Oracle 10.2.0.2** and **Create Oracle Instance** check boxes to be checked. Dimensions CM for Windows and Dimensions RM, by default, uses the Oracle Open Call Interface (OCI) connectivity mechanism, so you should only check the additional **Create Oracle ODBC DSN** check box if you plan to use the alternative Open Database Connectivity (ODBC) mechanism.

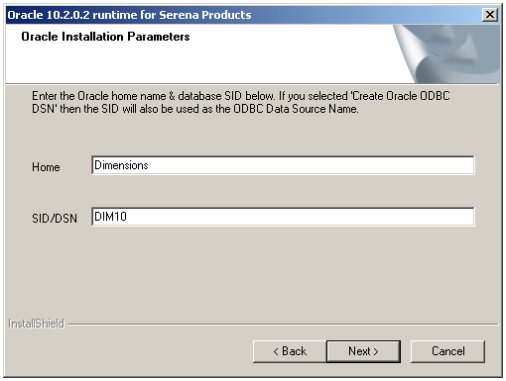
If you plan to plan to use a locally installed Serena-Supplied Runtime RDBMS as a client to communicate with a remotely installed Serena-Supplied Runtime RDBMS, you should also uncheck **Create Oracle Instance**.



4 Accept the default destination directory for the third-party Oracle software or click **Browse** to select a different location, and click **Next**.

Only accept the default if there is no existing Serena-Supplied Runtime RDBMS installation on your Windows system; otherwise, use **Browse** to select a new, unique directory name.

IMPORTANT! Space characters are *not* allowed in the directory name.



5 Specify values for the parameters that are requested on this page.

a Specify an Oracle home name to be given to the third-party Oracle installation.

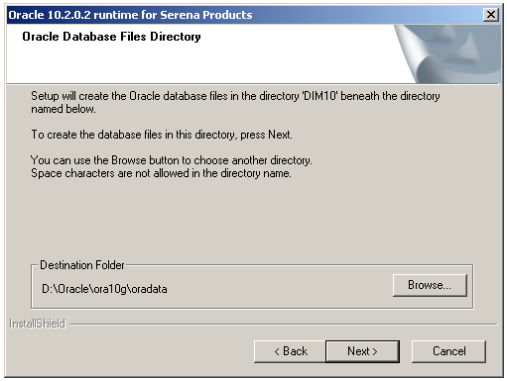
If there is an existing Serena-Supplied Runtime RDBMS installation on your Windows system with a home name of, for example, `Dimensions`, make sure you specify a new, unique home name, for example, `Dimensions 2010`.

IMPORTANT! Make a note of this name, as it will appear in the list of known Oracle home names displayed during the installation of the Dimensions CM or Dimensions RM server, and you must ensure at that point that you select the name that you are specifying here.

b Specify an Oracle SID/DSN. This is an alphanumeric string, up to six characters long, used to uniquely identify this installation of

the third-party Oracle installation. The default for both Dimensions CM and Dimensions RM is `DIM10`.

If you checked the additional **Create Oracle ODBC DSN** check box at Step 3 on page 40, then this entry will also be used as the ODBC data source name.

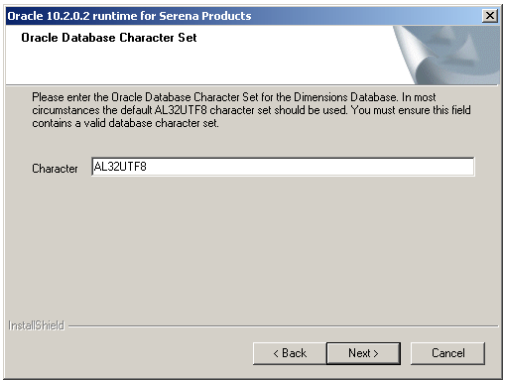


6 Specify the directory into which the Serena-Supplied Runtime RDBMS database files will be created.

Only accept the default if there is no existing Serena-Supplied Runtime RDBMS installation on your Windows system; otherwise, use **Browse** to select a new, unique directory name.

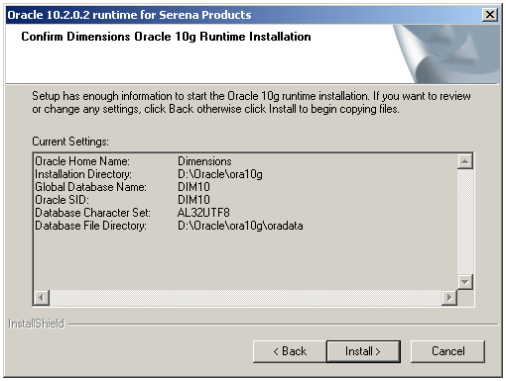
IMPORTANT! Space characters are not allowed in the directory name.

NOTE If the destination you specify contains insufficient space, you will be notified of that fact.



7 Specify the Serena-Supplied Runtime RDBMS database character set that will be used when creating the Dimensions database and click **Next**. This field must contain a valid character set for the installation to succeed.

IMPORTANT! If you plan to use a character set other than the Unicode UTF-8 AL32UTF8 character set, Serena strongly advises you to consult Serena Support before proceeding. See page 18 for a discussion of database character sets.



8 Review your installation settings carefully and click **Install** if they are correct and complete. Go to "Progress Monitoring" on page 44. See also, "Error Recovery" on page 48 if the installation appears to stall.

To make changes, you must click **Back** until you reach the relevant page and start the installation sequence again.

Progress Monitoring

If all the installer options were chosen, an installation of the Serena-Supplied Runtime RDBMS will typically take about an hour to complete, depending on the recipient system's attributes.

During the installation, third-party Oracle Universal Installer (twice) and Database Configuration Assistant screens will monitor and provide feedback on the progress of the installation. In addition, logs of the installation will be generated in:

- `C:\Oracle\Inventory\logs`
- `X:\Oracle\ora10g\cfgtoollogs\dbca\<oraSID>`

NOTES

- On certain Windows systems you may need to 'unblock' system blockers that pop up during installation.
- The inventory logs will always be located in

  `C:\Oracle\Inventory\logs`

  regardless of the directories you chose for receipt of the third-party Oracle files in the installation wizard.

9 The first occurrence of the third-party Oracle Universal Installer screen monitors the progress of the installation of the Oracle 10.2.0.1 base server files. No input is required.

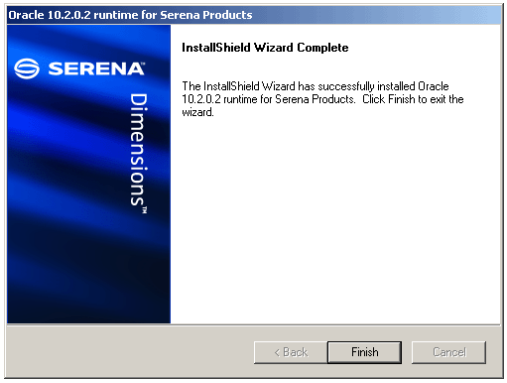
IMPORTANT! If this screen fails to appear after a few minutes, the prerequisite checks will probably have failed. See Step 1 on page 26 for details of how to proceed.

10 The second occurrence of the third-party Oracle Universal Installer screen monitors the progress of the installation of the Oracle 10.2.0.2 patch to the Oracle 10.2.0.1 base server files. No input is required.

11 If the default **Create Oracle Instance** check box was left checked in Step 3, the third-party Database Configuration Assistant screen will be displayed; otherwise, the installation will progress to Step 13.

IMPORTANT! Creating an Oracle instance will take a fairly long time. Some of the steps, for example, **Creating data dictionary views** and **Adding Enterprise Manager Repository** may appear to "freeze". Please be patient, do *not* click the **Stop** button.

12 When the Oracle instance completes, click **OK** on the associated third-party Database Configuration Assistant screen. Please ignore the Password Management facility.



13 When installation completes, the above screen appears. Click **Finish** to exit the Wizard.

14 Proceed to "Post-Installation Activities" on page 45.

Post-Installation Activities

General Post-Installation Activities

Before the new installation can be used, check in the Windows Services Tool (`Control Panel | Administrative Tools | Services`) that the following Windows 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 32-bit 10g Serena-Supplied Runtime RDBMS installation these services will be:

```
OracleServiceDIM10
OracleDimensionsTNSListener
```

For a default 64-bit 11gR2 Serena-Supplied Runtime RDBMS installation these services will also be:

```
OracleServiceDIM10
OracleDimensionsTNSListener
```

If these Windows services are not running, attempt to start them using the Windows Services Tool. If it is not possible to manually start them, proceed to "Error Recovery" on page 48.

Applying Oracle Patches

Patching the 32-Bit 10g Serena-Supplied Runtime RDBMS

The installed 32-bit Serena-Supplied Runtime RDBMS is at Oracle release level 10.2.0.2. For Dimensions CM, no subsequent patching is required.

For Dimensions RM, however, the 32-bit Serena-Supplied Runtime RDBMS needs to be patched to a minimum of Oracle release level 10.2.0.3 or, preferably, 10.2.0.4. You can download the 10.2.0.4 patch from:

http://www.serena.com/support/

In the **Ask a Question** search field, search for the following patch:

P2484

Oracle 10.2.0.4 Windows 32bit Patch Set

After unzipping the Oracle patch, locate the Oracle 10.2.0.4 patchset installation instructions in the `patch_note.htm` file in the top-level

directory. Apply the patch according to instructions and upgrade the `DIM10` database as part of those instructions.

Patching the 64-Bit 11gR2 Serena-Supplied Runtime RDBMS

The installed 64-bit Serena-Supplied Runtime RDBMS is at Oracle release level 11.2.0.1. For both Dimensions CM and Dimensions RM, no subsequent patching is required.

Creating an Oracle Instance

Creating a 32-Bit 10g Serena-Supplied Runtime Oracle Instance

For Dimensions CM, the default Oracle instance (`DIM10`) created by the 32-bit 10g Serena-Supplied Runtime RDBMS installer can be directly used when installing a Dimensions CM server.

For Dimensions RM, however, `DIM10` is only suitable if you are an experienced Oracle DBA, as to use it involves manually merging the Dimensions CM Oracle template `Dim10Oracle10g.dbt` and the standard Oracle Provided `Transaction Processing` template, plus various other manual Oracle tasks. Consequently, Serena normally recommend that you create a new instance for Dimensions RM (typically called `RM`) when installing a Dimensions RM server.

Full instructions on how to create a new Oracle instance for use by the Dimensions RM server (using the Windows Oracle Database Configuration Assistant (DBCA)) are provided in the Dimensions RM *Installation Guide*. That guide also describes how to delete the `DIM10` instance, which helps improve database performance.

IMPORTANT! Do *not* delete the `DIM10` instance if you plan to install both Dimensions CM and Dimensions RM into the same RDBMS to make use of the ALM integration between these two products.

Creating a 64-Bit 11gR2 Serena-Supplied Runtime Oracle Instance

The default Oracle instance (`DIM10`) created by the 64-bit 11gR2 Serena-Supplied Runtime RDBMS installer utilizes a Dimensions ALM Oracle 11gR2 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.

Serena may also in the future release additional database templates (for use with either the Serena-Supplied Runtime RDBMS or your own company's Oracle)—these will be specifically tailored for particular Dimensions CM or Dimensions RM circumstances (for example, optimized for a particular number of users). The Oracle DBCA utility will need to be used to utilize these additional templates (as discussed in the Dimensions CM *Installation Guide for Windows* or *Installation Guide for UNIX* or the Dimensions RM *Installation Guide.*

Please contact Serena Support for latest details on the planned availability of these additional database templates.

Next Step

If the post-installation checks are successfully, proceed as appropriate to:

- The Dimensions CM Installation Guide for Windows.
- The Dimensions RM Installation Guide for Windows.

Error Recovery

Incomplete Installation

If the Serena-Supplied Runtime RDBMS installation fails to successfully complete, you will need to perform a complete re-installation.

It is advisable to, first however, check the contents of the log files (file extension `'.log'`) in the directories

- `C:\Oracle\Inventorylogs`
- `X:\Oracle\ora10g\cfgtoollogs\dbca\<oraSID>`

to endeavor to understand why the installation failed, and perform any corrective actions required.

NOTES

- The inventory logs will always be located in

  `C:\Oracle\Inventorylogs`

  regardless of the disk (`X:\`) and directory you chose for receipt of the third-party Oracle files in the installation wizard.
- The most likely cause of an error is that a previous Serena-Supplied Runtime RDBMS installation has not been uninstalled correctly. See the **IMPORTANT** note that follows for instructions on how to correctly perform an uninstallation.
- If an installation prerequisite, for example, the presence of a Microsoft Loopback Adapter or minimum RAM, is not met, then you will receive a warning message about a prerequisite check failure and a prompt to proceed (`YES`) or not proceed (`NO`). In such circumstances, you should answer `NO`.

  The text file

  `C:\Oracle\InventorylogsInstallActions<date>.log`

  contains a "Prerequisites Checks" page, which will detail the prerequisite that failed to be met. You must rectify the failed prerequisite and repeat the Serena-Supplied Runtime RDBMS installation.

IMPORTANT! Do not attempt to manually delete a Serena-Supplied Runtime 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.

The OUI is invoked by:

```
Start | Programs | Oracle - <oraclehome> | Oracle
    Installation Products | Universal Installer
```

If you need to restart the Serena-Supplied Runtime RDBMS Windows services, see "General Post-Installation Activities" on page 45.

Chapter 2

Installing the UNIX Serena-Supplied Runtime RDBMS

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IMPORTANT! The 64-bit Windows Oracle 11gR2 Serena-Supplied Runtime RDBMS referred to throughout this chapter will be released shortly after the earliest release of Dimensions RM 2010 R1. If you plan to use this RDBMS, please check for its availability on the Serena Support download site or contact Serena Support regarding its planned release date.

Introduction

The various UNIX and Linux versions of the Serena-Supplied Runtime RDBMS are optional Serena supplied UNIX runtime RDBMS (based on 32-bit Oracle 10g) to be used as foundation software for the Serena® Dimensions® CM and Serena® Dimensions® RM server. For Dimensions CM for UNIX, they can be installed either locally or remotely with respect to the server; whereas, for Dimensions RM, they can only be installed remotely with respect to the server.

NOTE 64-bit versions of the UNIX Oracle 11gR2 based Serena-Supplied Runtime RDBMS are planned for release with the next release of *Serena*® Dimensions® CM. Please contact Serena for release details.

If the option to use the Serena-Supplied Runtime RDBMS is not exercised, then you must have your own RDBMS pre-installed for use by Dimensions CM or Dimensions RM, namely:

- For Dimensions CM for Windows: you own Oracle 10g or 11gR2; or Microsoft SQL Server Enterprise 2005 or 2008 RDBMS.
- For Dimensions CM for UNIX, you own Oracle 10g or 11gR2 RDBMS.
- For Dimensions RM, you own Oracle 10g, 11gR1, or 11gR2 RDBMS.

For the exact versions of the Serena-Supplied Runtime RDBMS or your own Oracle or SQL Server RDBMS please see:

- The Dimensions CM or Dimensions RM readme file.

- The Serena public Dimensions CM Supported Platforms Web site at:

  http://support.serena.com/roadmap/PVDIMENSIONS/2010R1/PVDIMENSIONS_2010_R1_Supported_Platforms.aspx

- The Serena public Dimensions RM Supported Platforms Web site at:

  http://support.serena.com/roadmap/RTM/RTM_Supported_Platforms.aspx
  RTM_Supported_Platforms.aspx

IMPORTANT! The Serena-Supplied Runtime RDBMS is third-party licensed software based on Oracle 10g or 11gR2. 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 only be used in conjunction with Dimensions". Additionally, all problems relating to the Serena-Supplied Runtime RDBMS must be addressed to Serena Support *not* the Oracle Corporation.

NOTE The Serena-Supplied Runtime RDBMS operating systems specified in the table below are supported by both co-located Dimensions CM and Dimensions RM servers unless specified otherwise.

Serena-Supplied Runtime RDBMS Operating System Type	Local UNIX Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2003, 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes.
Windows Server 2003, Standard Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes.

Serena-Supplied Runtime RDBMS Operating System Type	Local UNIX Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2003, Standard Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes.
Windows Server 2003 SP2, Enterprise Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS.	No.	Yes. See Chapter 1.
Windows Server 2003 SP2, Enterprise Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes. See Chapter 1.
Windows Server 2003 R1, Enterprise Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes. See Chapter 1.
Windows Server 2003 R1, Enterprise Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes. See Chapter 1.
Windows Server 2003 R2, 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes. See Chapter 1.

Serena-Supplied Runtime RDBMS Operating System Type	Local UNIX Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2003 R2, Enterprise Edition 32-bit x86. 32-bit 10g Serena-Supplied Runtime RDBMS.	No.	Yes. See Chapter 1.
Windows Server 2003 R2, Enterprise Edition 64-bit x86-64. 32-bit 10g or 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes. See Chapter 1.
Windows Server 2008, Enterprise Edition 32-bit x86. *32-bit 10g Serena-Supplied Runtime RDBMS not supported.* **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes (subject to conditions). See Chapter 1.
Windows Server 2008, Enterprise Edition 64-bit x86. 64-bit 11gR2 Serena-Supplied Runtime RDBMS only. *32-bit 10g* Serena-*Supplied Runtime RDBMS not supported.*	No.	Yes (subject to conditions). See Chapter 1.
Windows Server 2008 R1, Enterprise Edition 32-bit x86. *32-bit 10g Serena-Supplied Runtime RDBMS not supported.* **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes (subject to conditions). See Chapter 1.
Windows Server 2008 R1, Enterprise Edition 64-bit x86. 64-bit 11gR2 Serena-Supplied Runtime RDBMS only. *32-bit 10g* Serena-*Supplied Runtime RDBMS not supported.* **NOTE** This operating-system is not supported for a co-locatedDimensions CM server.	No.	Yes (subject to conditions). See Chapter 1.

Serena-Supplied Runtime RDBMS Operating System Type	Local UNIX Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Windows Server 2008 R2, Enterprise Edition 64-bit x86. 64-bit 11gR2 Serena-Supplied Runtime RDBMS only. *32-bit 10g* Serena-*Supplied Runtime RDBMS not supported.*	No.	Yes (subject to conditions). See Chapter 1.
Windows Vista 64-bit x86-64. 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes. See Chapter 1.
Windows 7 Professional 64-bit x86-64. 64-bit 11gR2 Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions CM server.	No.	Yes. See Chapter 1.
AIX 5.x 64-bit Power PC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.
AIX 6.x 64-bit Power PC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.
HP-UX 11.2x 64-bit PA-RISC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.
HP-UX 11.3x 64-bit x64 Itanium. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.

Serena-Supplied Runtime RDBMS Operating System Type	Local UNIX Node Location Supported	Remote Node Location Supported (Windows or UNIX as Appropriate)
Red Hat 5.x 64-bit x86-64. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.
SLES 10.x 64-bit x86-64. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.
SLES 10.x 64-bit x64 Itanium. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.
SLES 11.x 64-bit x86-64. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.
Solaris 10 64-bit SPARC. 32-bit 10g Serena-Supplied Runtime RDBMS. **NOTE** This operating-system is not supported for a co-located Dimensions RM server.	Yes.	Yes.

The Serena-Supplied Runtime RDBMS for each particular software platform is available

- Directly from the Serena-supplied platform-specific Runtime DVDs.
- By copying the contents of the appropriate DVD to your disk of choice, being careful to maintain the directory layout structure.
- By downloading a compressed file from the Serena Support Web site.

NOTE The default character set for the Serena-Supplied Runtime RDBMS is Unicode UTF-8 (Oracle designate this AL32UTF8). 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-Supplied Runtime RDBMS installation other than AL32UTF8, Serena strongly advises you to consult Serena Support before proceeding.

Checklist

☐	Ensure that you satisfy the general and platform specific Oracle pre-installation considerations (see "Pre-Installation Considerations" on page 59). Failure to do is likely to lead to an incorrectly functioning Serena-Supplied Runtime RDBMS.
☐	Review the installation overview (see "UNIX Serena-Supplied Runtime RDBMS Installation Overview" on page 64).
☐	Launch the installation (see "Starting the Installation" on page 64).
☐	Follow the installation steps (see "Performing the Installation" on page 67).
☐	Perform the post-installation steps necessary to configure the Serena-Supplied Runtime RDBMS (see "Post-Installation Activities" on page 69).

Pre-Installation Considerations

Configuring System Kernel for Shared Memory and Semaphores

The UNIX Serena-Supplied Runtime 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 will be set by Dimensions CM or Dimensions RM to 100. It may, thus, be necessary 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.
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-Supplied Runtime RDBMS Oracle processes.

The default settings for the above are usually sufficient, except if detailed in the readme file for particular UNIX platforms.

CAUTION! Setting the above parameters to too high a value may prevent the machine from booting up. Refer to your operating system administration documentation for further information about these parameters.

Changes to the 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. The following table is provided to help you with this process:

Kernel Parameter	Formula to Calculate Value
SHMMAX	0.5 * (physical memory present in machine)
SEMMSL	10 + GREATEST ('PROCESSES' parameter of all the init<sid>.ora files in your Serena-Supplied Runtime RDBMS installation)
SEMMNS	(SUM('PROCESSES' parameter of each init<sid>.ora file in your Oracle installation EXCEPT the greatest of those 'PROCESSES' values) + (GREATEST('PROCESSES' parameter of all the init<sid>.ora files in your Serena-Supplied Runtime RDBMS installation)*2) + ((number of Serena-Supplied Runtime RDBMS Oracle instances you have installed)*10))

Linux-Specific Operating System Requirements

Workaround for Display Problems when Creating an Oracle Instance

By default on some Linux distributions, the X Display Manager (XDM) (required when creating an Oracle instance, see the Dimensions CM *Installation Guide for UNIX* or Dimensions RM *Installation Guide*) does not listen for XDMCP or Chooser requests for security reasons. This means that XDMCP is disabled and a remote X terminal cannot contact this XDM. This causes problems when trying to create an Oracle instance, because the RDBMS needs to have access to the display.

This can be bypassed by the following steps.

1 Edit the following two files:

a `/etc/opt/kde3/share/config/kdm/kdmrc`

or

`/etc/kde/kdm/kdmrc`

find the `[Xdmcp]` section and make sure that `Enable` is set to `true`.

b `/etc/X11/xdm/xdm-config`

make sure that the line

```
DisplayManager.requestPort:    0
```

is commented out (has a "!" in front)

2 Restart XDM by typing

```
kill -HUP `cat /var/run/xdm.pid`
```

or

```
kill -HUP `cat /var/run/kdm.pid`
```

SuSE Linux Enterprise Server Pre-installation Requirements

Ensure that you have met all the pre-installation requirements detailed in the documentation found at the following URL:

http://www.novell.com/products/linuxenterpriseserver/oracle/

Red Hat Enterprise Linux Pre-installation Requirements

Ensure that you have met all the pre-installation requirements detailed in Oracle Corporation documentation.

IBM AIX Kernel Configuration Requirements

If installing Dimensions CM or Dimensions RM products against the Serena-Supplied Runtime RDBMS under IBM AIX, the Serena-Supplied

Runtime RDBMS Oracle requires that a special Oracle Post-Wait Kernel Extension be loaded prior to installation. To load this kernel extension, navigate to the `oracle/10.2.0.2/aix/rootpre` directory and run the following commands as user `root`:

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

For further information relating to the Oracle Post-Wait Kernel Extension see the README.txt file located in the `oracle/10.2.0.2/aix/rootpre` directory.

Presence of the UNIX "uncompress" Utility

The Serena-Supplied Runtime RDBMS installer relies on the UNIX `uncompress` utility and this must be present on the UNIX machine. Most UNIX machines will have this installed as standard, and its presence can be confirmed with commands such as:

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

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

Pre-Existing Operating System User Account

A pre-existing operating system user account name must be available for the owner of the Serena-Supplied Runtime 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 Oracle files (the Serena-Supplied Runtime RDBMS runtime installer will default to the account name `oracle` unless told otherwise).
3. Assign the user account name to the group dba.

Preparing the Serena-Supplied Runtime RDBMS Software

The UNIX Serena-Supplied Runtime RDBMS for each particular software platform is available

- Directly from the Serena-supplied platform-specific Runtime DVDs (Dimensions CM only).
- By copying the contents of the appropriate DVD to your disk of choice, being careful to maintain the directory layout structure (Dimensions CM only).
- As a downloadable `tar` file. This tar file is available for download from Serena Support. Once you download the tar file, you will need to extract its contents to a local disk area as described in the next subsection. The extracted contents will include the required UNIX installers and UNIX binaries necessary for the Serena-Supplied Runtime RDBMS.

Making the Contents of the Compressed tar File Available to the Installer

For the installer to be able to install the Serena-Supplied Runtime RDBMS, you will need to extract the contents of the compressed `tar` file into a sub-directory on your hard disk.

Before beginning the installation, you therefore need to:

1. Decide where to locate the sub-directory.
2. Ensure you have adequate space available.
3. Extract the contents of the compressed `tar` file to the sub-directory.

UNIX Serena-Supplied Runtime RDBMS Installation Overview

The UNIX Serena-Supplied Runtime RDBMS installation includes:

- Renaming the Oracle home directory supplied by the installer if it appears that a Serena-Supplied Runtime RDBMS has already been installed in that directory. This is done before the new Oracle files are loaded. The directory will be renamed by appending `.old` to the old directory, for example, `/usr/oracle` will be renamed to `/usr/oracle.old` (and the new Oracle files will then be installed in `/usr/oracle`).
- Loading the Oracle files into the Oracle home directory, setting up the file protections appropriately, and performing consistency checks to identify any data corruption that might have taken place during the media-to-media file transfers.
- Creating an RDBMS database of the minimum (installation default) size. Particular Dimensions CM and Dimensions RM UNIX and Linux platforms will have different sized Serena-Supplied Runtime RDBMS binaries.

Starting the Installation

At various points, the installer displays messages and asks for the input of appropriate information. Where there is a default value, this is shown in square brackets. This will be used if the input is just the `RETURN` key.

NOTE It is good practice to keep a log of the installation using the UNIX command `script`, if available. If keeping a log, then remember to exit from the log session after the installation.

The Serena-Supplied Runtime RDBMS installation software is available in the following ways:

- A downloadable compressed UNIX `tar` image

```
dimensions_oracle_<platform_id>.tar
```

for example `dimensions_oracle_aix.tar`. Each image, one for each UNIX flavor supported, is available for download from Serena Support.

Once you have downloaded this compressed `tar` image, you will need to uncompress it and extract its contents to an appropriate local disk area. These extracted contents will include the required installation scripts and an included UNIX `tar` file necessary for the Serena-Supplied Runtime RDBMS.

- A UNIX platform specific DVD (Dimensions CM only).
- The copied contents of the appropriate DVD directories (Dimensions CM only).

IMPORTANT! You must log in to the `root` account to perform the installation *not* the user account that will own the Oracle files

Start the Serena-Supplied Runtime RDBMS installation procedure with the following initial commands for all UNIX or Linux platforms:

```
# script install_ora.log
# umask 022
```

NOTE Remember to exit script logging after completion of the Oracle installation by typing `exit`.

If installing the Serena-Supplied Runtime RDBMS from a local disk area into which you extracted the downloaded Serena-supplied `tar` image or have copied the DVD contents, navigate to the top of that area and then type the following operating-system commands:

```
# cd oracle/10.2.0.2/<platform_id>
# sh install_ora
```

Alternatively, if installing the Serena-Supplied Runtime RDBMS from a Oracle runtime DVD, type the following operating-system command:

```
# cd /cdrom/oracle/10.2.0.2/<platform_id>
# sh install_ora
```

Where `<platform_id>` corresponds to the flavor of UNIX/Linux, namely, `aix`, `hpux`, hpuxia64, `linux`, linux-suse32, or `solaris`.

NOTE *Sun Sparc:* If your machine uses Volume Management to automount DVD-ROMs (`vold(1M)` daemon will be running), then instead of the above, type:

```
# cd /cdrom/<volume_id>/oracle/10.2.0.2/solaris
# sh install_ora
```

where `<volume_id>` is the Volume Label of the DVD e.g. `cdrom0`.

CAUTION! *Hewlett Packard HP-UX:* If the `mount` command on your system fails to convert filenames to lower case and does not remove version strings, then type instead:

```
# cd /cdrom/<volume_id>/oracle/10.2.0.2/hpux
# sh 'INSTALL_ORA;1' default
```

The following message will be displayed:

Screen Output

```
Oracle 10.2.0.2 Runtime for Dimensions Installation Requirements
----------------------------------------------------------------

      1 You are currently running from the root account.
      2 OS user account exists for the Oracle owner and is in
          group dba.
      3 The Oracle runtime DVD-ROM is mounted or there is a copy
        of the tar file available on this machine.
      4 The following disk space requirements are met:
        -- xxx Gbytes for Oracle Runtime
```

NOTE The `tar` file referred to here is not the compressed `tar` file downloadable from Serena Support. It is a constituent of that file or the DVD.

Prompt **Please confirm continue (** *[y]/n***)**

Hit RETURN to continue, or enter **y** to exit.

The installer will now search the current directory for the file `ora_run_reply.txt`. It uses this file to save your replies to the

questions it asks during installation, so that they can be provided as default answers during subsequent re-installations.

The installer will proceed as follows:

- If an `ora_run_reply.txt` file *is not found* in the current directory, you will be prompted to supply the name of another *directory* containing an `ora_run_reply.txt` file generated during a previous installation.

  If you:

  - *Have not got* an `ora_run_reply.txt` file, which will be the case for an initial installation, you must either enter **'c'** to create one or **'q'** to quit the installation. If you answer **'c',** the installer will continue with the installation (providing its own default answers to its installation questions) and create the `ora_run_reply.txt` file to capture your replies. These pre-defined default answers are the ones shown in the remainder of this chapter.
  - *Have got* an `ora_run_reply.txt` file located in a directory (other than the current) to which you have supplied the directory path above, then the answers stored in that file will determine the default answers that the installer will present to you during the installation.

- If a `ora_run_reply.txt` file *is found* in the current directory, the installer will present the answers stored in that file as the default answers during the installation.

Proceed as described in the following section for the installation of the Serena-Supplied Runtime RDBMS.

Performing the Installation

Screen Output

```
*********************************************************
Please read the following license agreement carefully
*********************************************************
<Serena End User License Agreement>
```

Prompt **Do you accept the terms of the Serena License Agreement (Yes,No)?** *[No]*

Read the license agreement and type **y(es)** to accept the terms.

Prompt **Enter installation medium (or Ctrl-c to quit)** [*/cdrom/oracle/10.2.0.2/<platform_id>/oracle.tar*]

If the installation is being performed directly from a Serena-Supplied Runtime RDBMS DVD, the "installation medium" is the absolute pathname of the file `oracle.tar` located on the appropriate DVD.

Alternatively, if you have extracted the downloaded Serena-supplied tar image to a disk of your choice or you have copied the appropriate `oracle.tar` file from the DVD to a disk of your choice, then that absolute pathname must be entered.

Prompt **Enter main Oracle directory** [*<pwd>/oracle*]

- If the directory you specify does not exist then the following message will be displayed:

```
Directory <directory> not found. It will be created.
```

- If this directory already contains Oracle files, the installer gives the message:

CAUTION! `Oracle appears already to be installed in this directory. Before installing the new Oracle, the installation script will rename this directory to /usr/oracle.old.`

```
Please confirm continue ? (y/[n])
```

Unless **y** is entered, the message *"Please choose a different directory to install Oracle"* is displayed, and the installer re-displays the previous prompt. (If you would prefer to restart you can do so below when you have been asked to confirm the parameters.)

Prompt **Enter the name of the owner of the Oracle files** [*oracle*]

NOTE The user must already exist.

Prompt **Enter the name of the group to own the Oracle files** [*dba*]

NOTE The group must already exist.

The installer now has all the information it requires to perform a Serena-Supplied Runtime RDBMS installation. It will output a summary of the values it will use (below is a partial example, yours will be particular to the values you specified) followed by a confirmation to proceed prompt:

Screen Output

```
Oracle Runtime Installation Parameters
--------------------------------------
Install from:
    /cdrom/oracle/10.2.0.2/<platform_id>/oracle.tar
Oracle location:
    <pwd>/oracle/10.2.0.2/<platform_id>/oracle
Oracle owner/group:   oracle/dba
```

Prompt

Please confirm you wish to proceed with these parameters (*y/[n]*)

Reply **y** to continue the installation. Replying **n** will terminate the installation.

The installation script uses your responses to load and set up Serena-Supplied Runtime RDBMS server files. It will give suitable messages indicating the task being performed at each stage. After the installation completes, perform the post-installation activities detailed below.

Post-Installation Activities

Applying Oracle Patches

The installed 32-bit Serena-Supplied Runtime RDBMS is at Oracle release level 10.2.0.2. For Dimensions CM, no subsequent patching is required.

For Dimensions RM, however, the 32-bit Serena-Supplied Runtime RDBMS needs to be patched to a minimum of Oracle release level 10.2.0.3 or, preferably, 10.2.0.4. You can download appropriate UNIX or Linux 10.2.0.4 patches from:

http://www.serena.com/support/

For example, in the **Ask a Question** search field, search for the following patch:

P6810189

Oracle 10.2.0.4 Linux 32bit Patch Set

After unzipping the Oracle patch, locate the Oracle 10.2.0.4 patchset installation instructions in the `patch_note.htm` file in the top-level directory. Apply the patch according to instructions and upgrade the `DIM10` database as part of those instructions.

Creating an Oracle Instance

The installation of a UNIX Serena-Supplied Runtime RDBMS, unlike a default installation of its Windows equivalent, does not create the requisite Oracle database instance ready for a Dimensions CM or Dimensions RM installation.

For Dimensions CM for UNIX, the following UNIX shell script is provided to enable you to create the requisite Oracle instance (default name DIM10):

```
create_ora_inst
```

Full instructions on how to run this script are provided in the Dimensions CM *Installation Guide for UNIX*.

For Dimensions RM, you need to create the requisite Oracle instance yourself by using the UNIX Oracle Database Configuration Assistant (DBCA). Full instructions on how to do this are provided in the Dimensions RM *Installation Guide*.

Error Recovery

Incomplete Installation

If the installation fails to successfully complete, you will need to perform a complete re-installation.

It is advisable to, first, check the contents of the log files (file extension `'.log'`) in the directory `/tmp`

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