

Agile

Version e6.1

ORACLE®

Oracle® Agile

Engineering Data Management

Installing Oracle 11g R2 on Windows for Agile
e6.1.2.2

Part No. E27819-02

April 2012

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Preface

The Oracle documentation set includes Adobe® Acrobat™ PDF files. The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile.html) (<http://www.oracle.com/technology/documentation/agile.html>) contains the latest versions of the Oracle Agile EDM PDF files. You can view or download these manuals from the Web site, or you can ask your Agile administrator if there is an Oracle Documentation folder available on your network from which you can access the documentation (PDF) files.

Note To read the PDF files, you must use the free Adobe Acrobat Reader™ version 7.0 or later. This program can be downloaded from the [Adobe Web site](http://www.adobe.com) (<http://www.adobe.com>).

Note Before calling Agile Support about a problem with an Oracle Agile EDM manual, please have the full part number ready, which is located on the title page.

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Readme

Any last-minute information about Oracle Agile EDM can be found in the Release Notes file on the [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technology/documentation/agile_eseries.html) (http://www.oracle.com/technology/documentation/agile_eseries.html)

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Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

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Chapter 1

Introduction

This guide describes how to install Oracle 11gR2 and adapt the Oracle database for use with Agile e6.1.2.2, running under Windows 2008 SP2 / 2008 R2

Where to Go for More Information

For additional information, refer to the Oracle online installation and administration documentation.

http://www.oracle.com/pls/db112/portal.portal_db?selected=11

Chapter 2

Requirements

Hardware and Software Requirements

Requirement	Minimum Value
Physical memory (RAM)	Minimum 1GB Refer to the Hardware Sizing documentation to determine the required memory for your specific Oracle Server installation.
Virtual memory	Twice the RAM size
Disk space for software files	8 GB It could be smaller depending on the components chosen to be installed.
Disk space for database files	Refer to the Hardware Sizing documentation to determine the required space for the database creation.
System architecture	Processor: Intel Pentium 4 or higher/compatible
Operating system	Microsoft Windows Server 2008 SP2 64 bit. Microsoft Windows Server 2008 R2 64 bit.

Preparing the System

1. You have to be logged on to the computer, on which the Oracle components are to be installed, as a member of the Administrators group.
2. Create the directories/drives for the distribution of the data files depending on the number of disks prepared for the Oracle installation. For instance, if you have prepared 3 disks -
 - E:\
 - F:\
 - H:\

The drive letters E:\, F:\, and H:\ here are just an example. Subdirectories will be created later in these directories by the database creation (see Chapter 4).

Download Oracle Installation Media

1. Download and uncompress the Oracle Database 11g Release 2 (11.2.0.3) for the Windows Server 2008 (part 1 and 2) from Oracle Support (<http://support.oracle.com>) under the section Patches & Updates. Search the patch number 10404530.

Note Although it can be downloaded from the Patches & Updates section, the software is for full installation.

2. Download and uncompress the Oracle Client 11g Release 2 (11.2.0.3) (32-bit) for Microsoft Windows Server 2008 from Oracle Support (<http://support.oracle.com>) under the section Patches & Updates. Search the patch number 10404530.

The 32-bit Oracle client must be installed on the machine where Agile e6.1.2.2 is installed. If Agile e6.1.2.2 and the database are installed on the same machine, the 32-bit Oracle client must be installed on the same machine, too.

Extracting the Installation Files

To extract the installation archive files, change to the directory that contains the downloaded installation archive files. Use a GUI tool, like 7-zip, to extract the installation files.

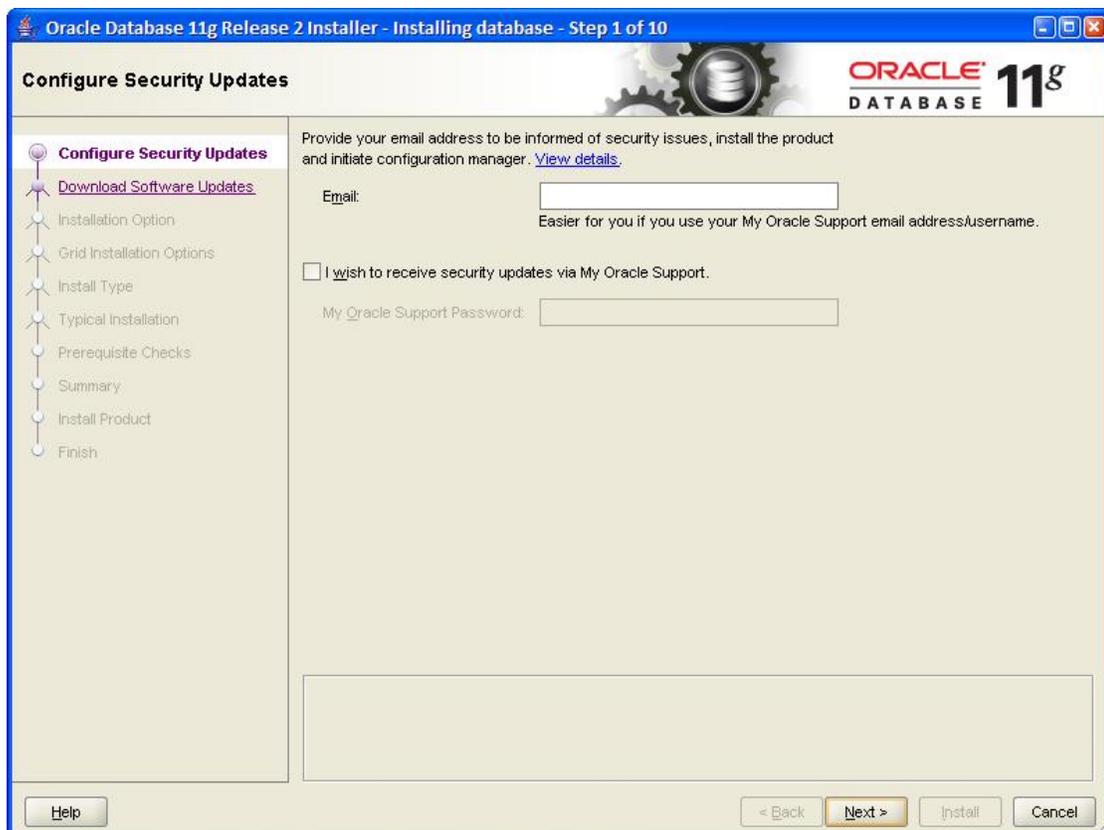
Installing the Oracle 11gR2 Database

This chapter describes the steps required to install the Oracle Database 11g Release 2 (11.2.0.3).

To install the Oracle 11gR2 Database:

1. Run setup.exe from the downloaded Oracle Installation Media.

The *Configure Security Updates* window appears.



You can opt for notifications about the security issues and security updates from My Oracle Support.

1. To receive notifications about the security issues via e-mail, enter your e-mail address in the Email text field.
2. To receive the security updates, enter the e-mail address registered with My Oracle Support, then select the I wish to receive security updates... option and enter your My Oracle Support password.

If you choose not to receive security updates, do not check the I wish to receive security updates via My Oracle Support check box.

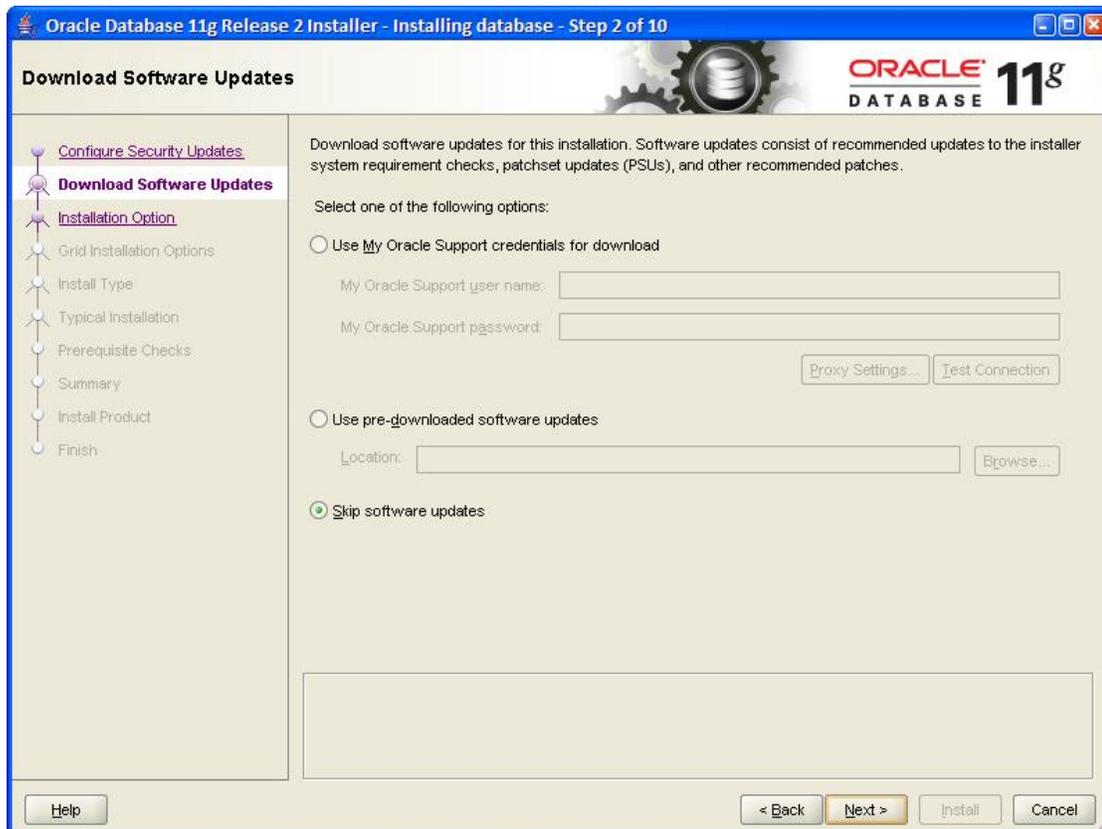
By default, the I wish to receive security updates... option is unchecked, i.e., not selected. If according to the company policy such updates are required, then this option should be selected.

The *My Oracle Support Username/Email Address Not Specified* warning appears.



3. Click Yes to continue.

The *Download Software Updates* window appears.



2. To download software updates for this installation, select Use My Oracle Support credentials for download and enter your My Oracle Support user name and My Oracle Support password.

If you chose not to download software updates for this installation, select Skip software updates.

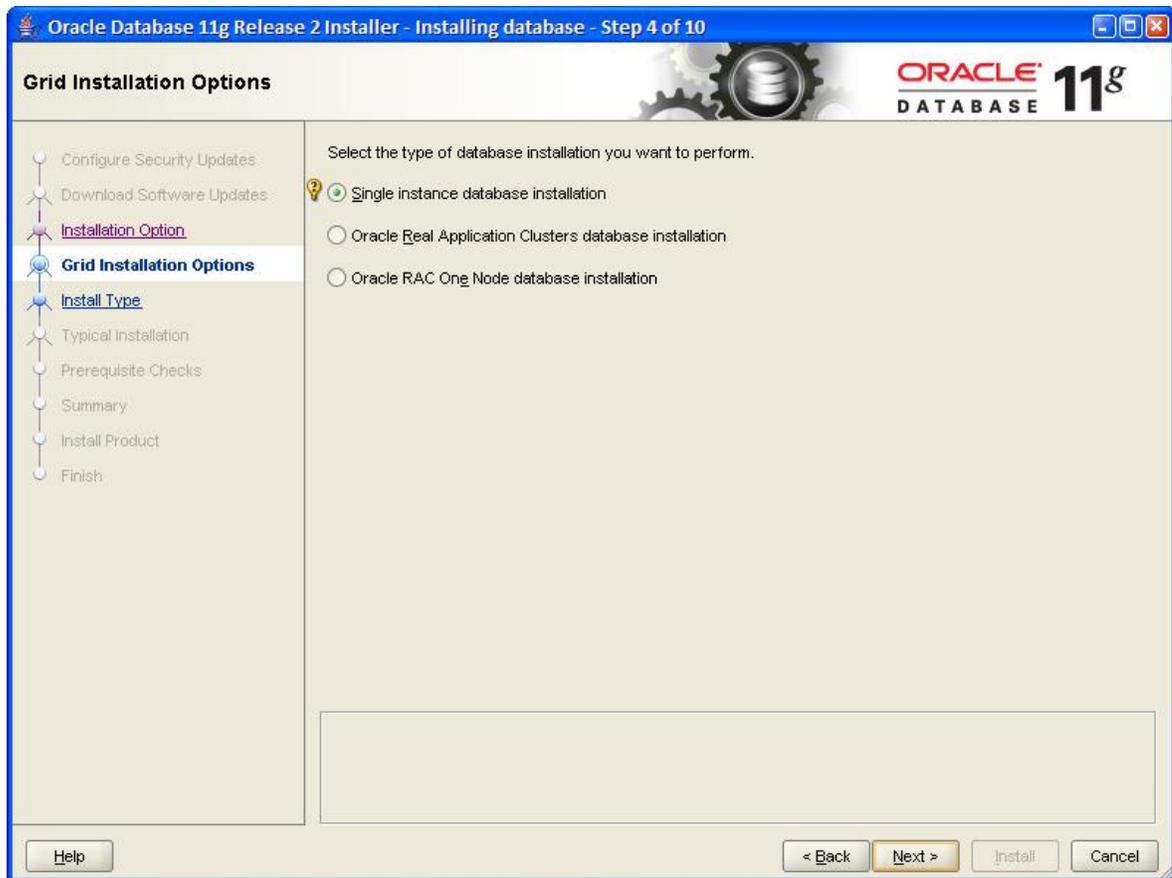
3. Click Next to continue.

The *Select Installation Option* window appears.



4. Select Install database software only and click Next.

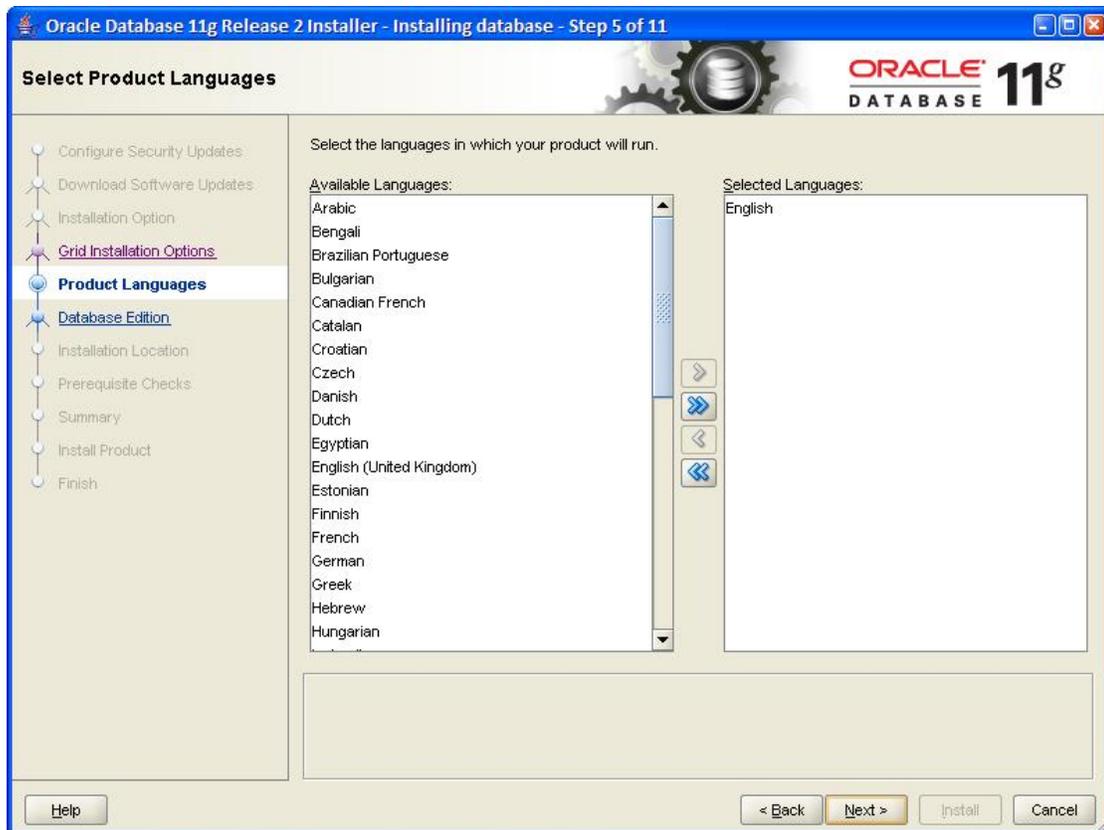
The *Grid Installation Options* window appears.



5. Select Single instance database installation and click Next.

Note The Real Application Cluster database installation is not a subject of this document.

The *Select Product Languages* window appears.



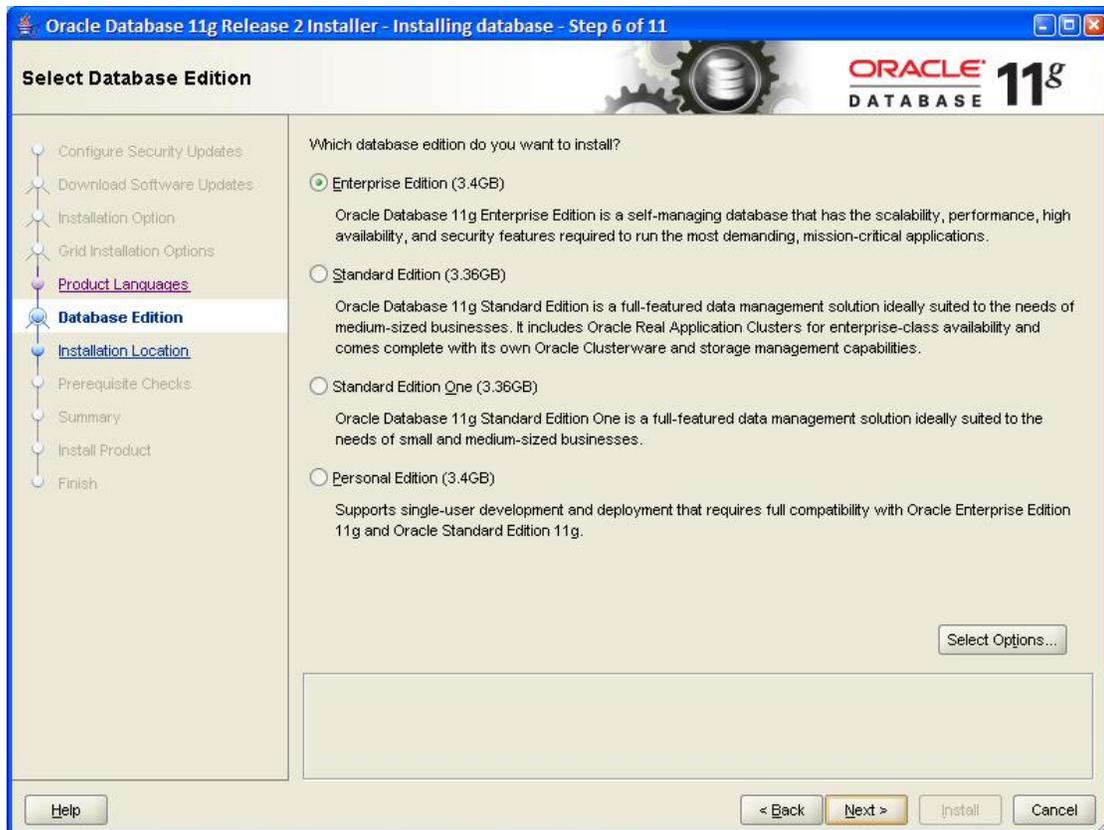
6. Select English as the product language.

If you want the Oracle database to operate in any language other than English, you may select the required language from the list of the product languages.

Note The scope of translation for a given component may differ from language to language. For example, some translations may include all the user interface texts, while some may include only the error messages without any help file.

7. Click Next.

The *Select Database Edition* window appears.



The Enterprise Edition is set as the default database edition.

Note Do not select the Enterprise Edition if you have the Standard Edition license.

With an Agile e6.1.2.2 installation, no further action on the components is necessary. However, the components that are not enabled automatically can be enabled manually. This is only if you have license for the additional components.

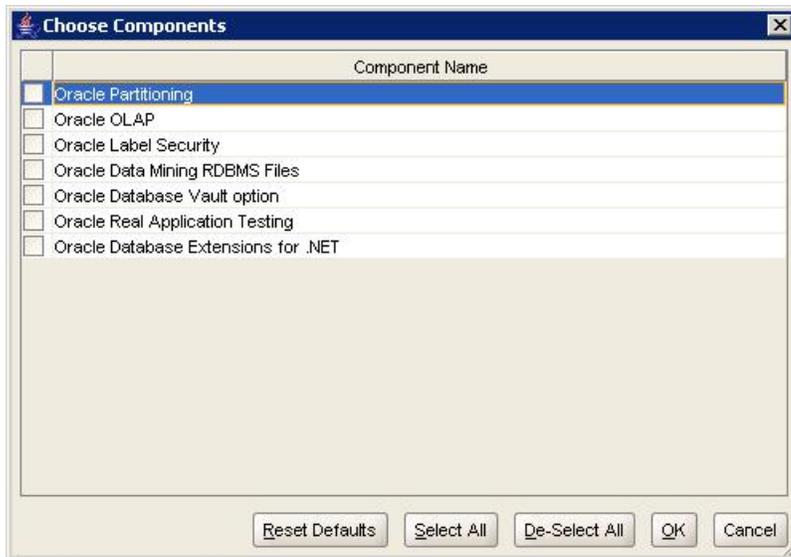
The Enterprise Edition is preset as the default database edition. Do not select the Enterprise Edition if you have a Standard Edition license.

If you select have Enterprise Edition, you are required to click Select Options... to select further options. You must select only those options for which you have a license.

If you select the Standard Edition, no further action is required and you can proceed with the installation.

8. Click the Next button to proceed with the installation.

The *Choose Components* window appears.



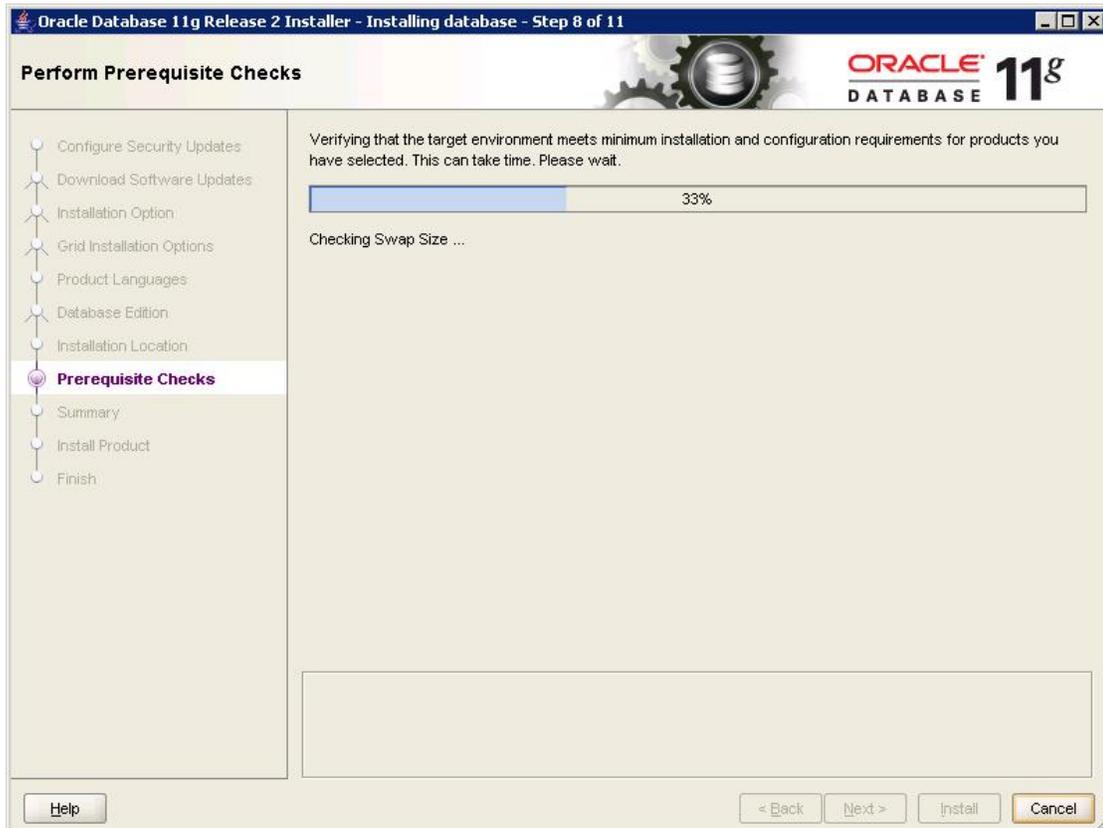
9. Select the required components and click OK.

The *Specify Installation Location* window appears.



10. Specify the installation location for the Oracle Base directory and the Software Location which is the Oracle Home directory.
11. Click Next.

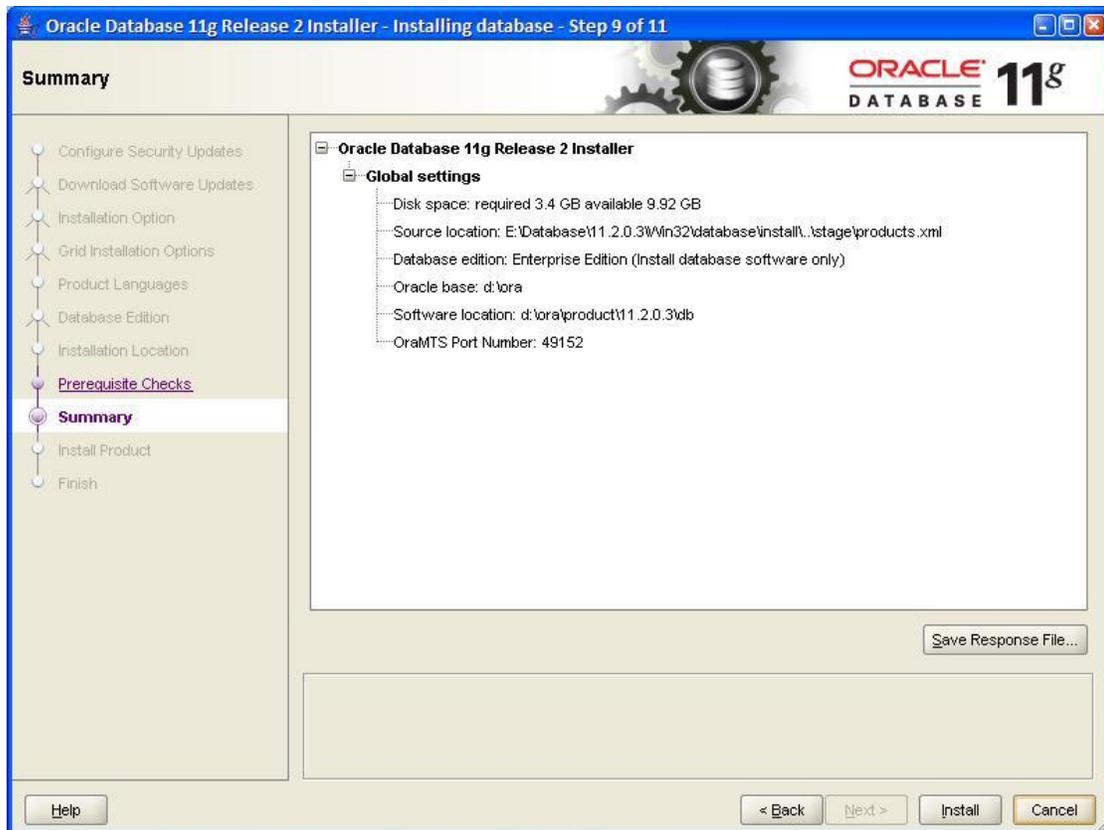
The *Perform Prerequisite Checks* window appears, displaying the verification process.



Upon completion of the checks, the installer displays the results for review.

If any of the requirements is not met, the installer displays a list of the failed checks and their actual and expected values.

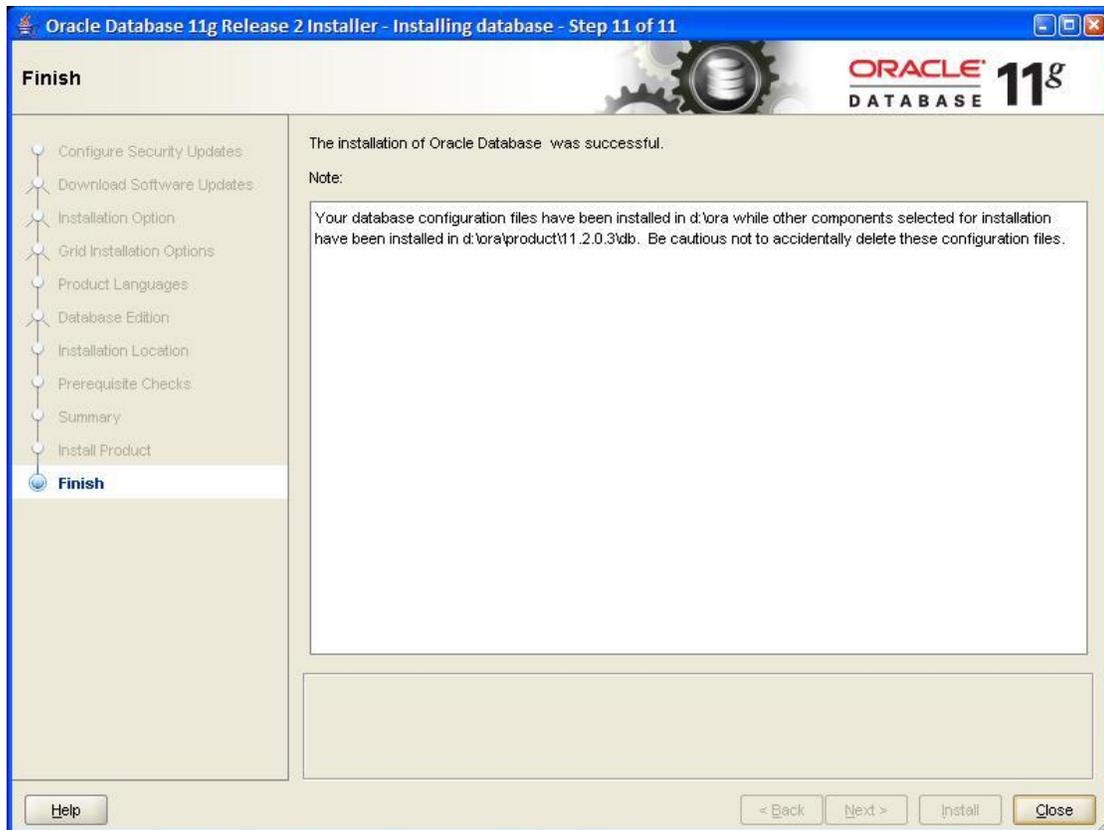
When all of the minimum requirements are met, a *Summary* window appears.



If any of the requirements are not met, the failed checks will be displayed in the Perform Prerequisite Checks window. You will have to fix and check them again.

12. In the Summary window, review the global settings you have chosen and click Install to start the installation.

When the installation completes, the *Finish* window appears.



13. Click Close to exit.

Installing the Oracle 11gR2 Client

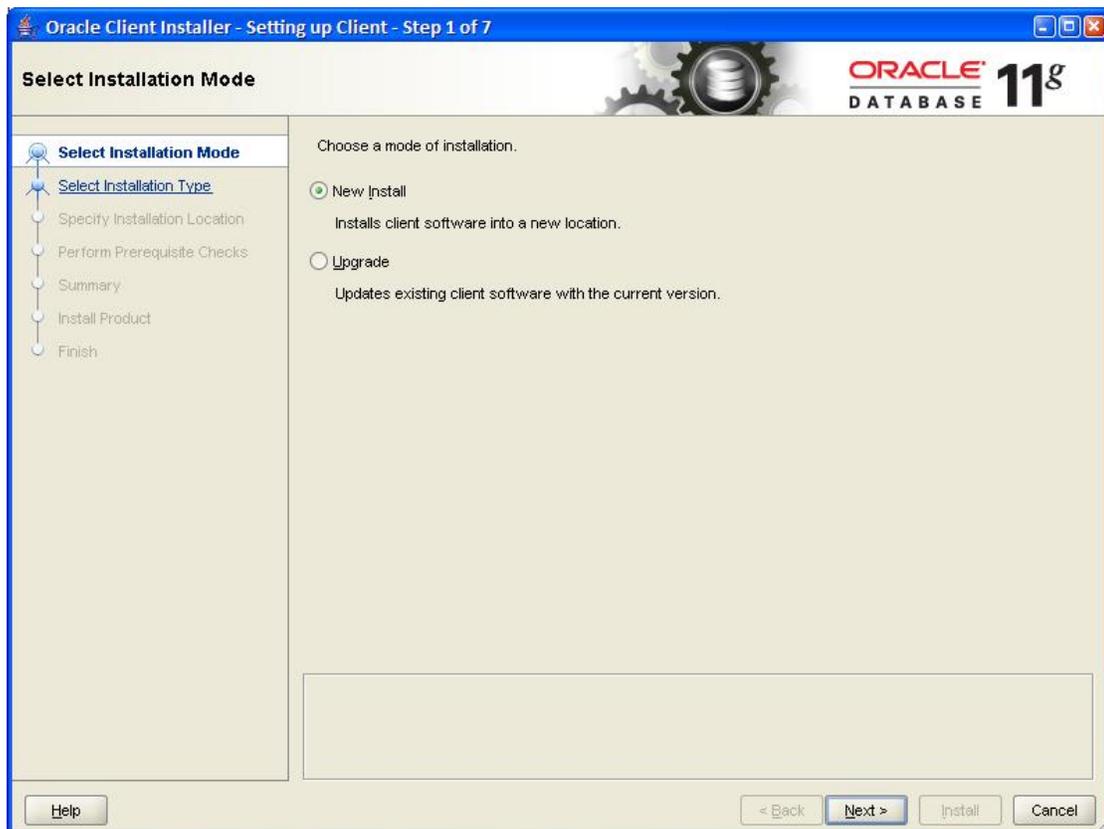
This chapter describes the steps required to install the Oracle Client 11g Release 2 (11.2.0.3).

Note The 32-bit Oracle client must be installed on the machine where Agile e6.1.2.2 is installed. If the Agile e6.1.2.2 and the database are installed on the same machine, the 32-bit Oracle client must be installed on the same machine too.

To install the Oracle 11g Client:

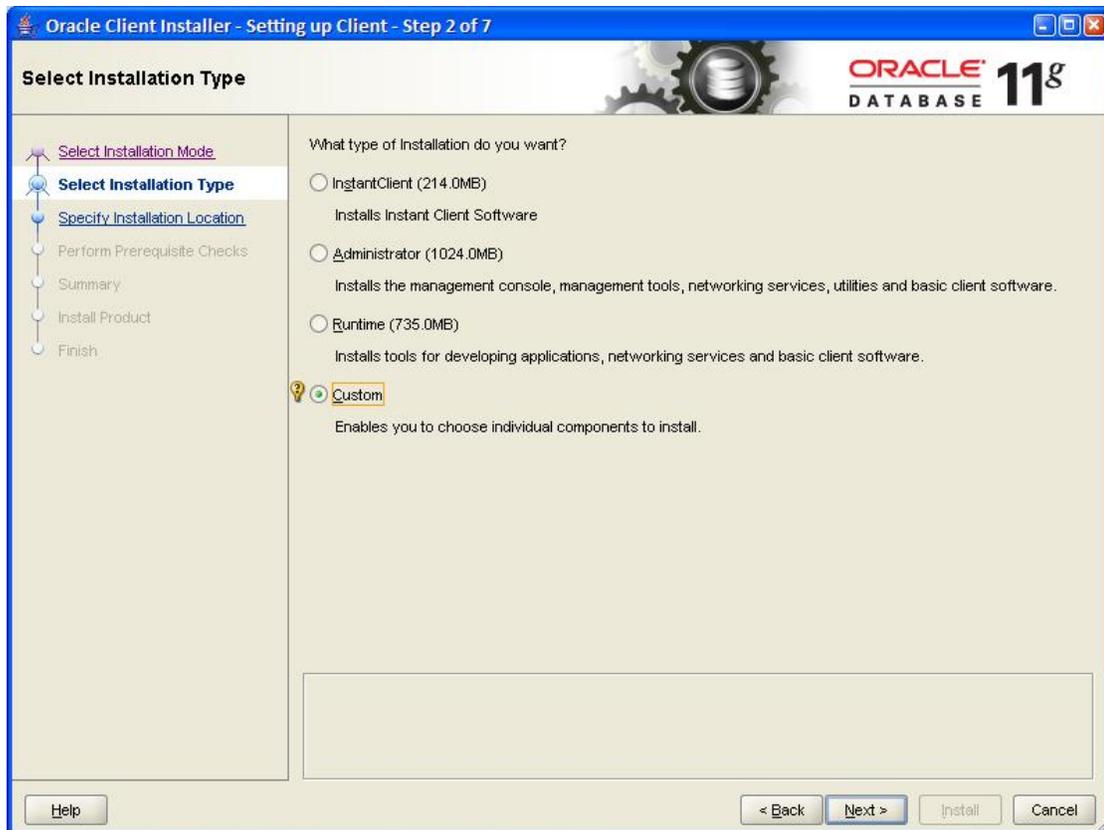
1. Run setup.exe from the downloaded Oracle Client Installation Media.

The *Select Installation Type* window appears.



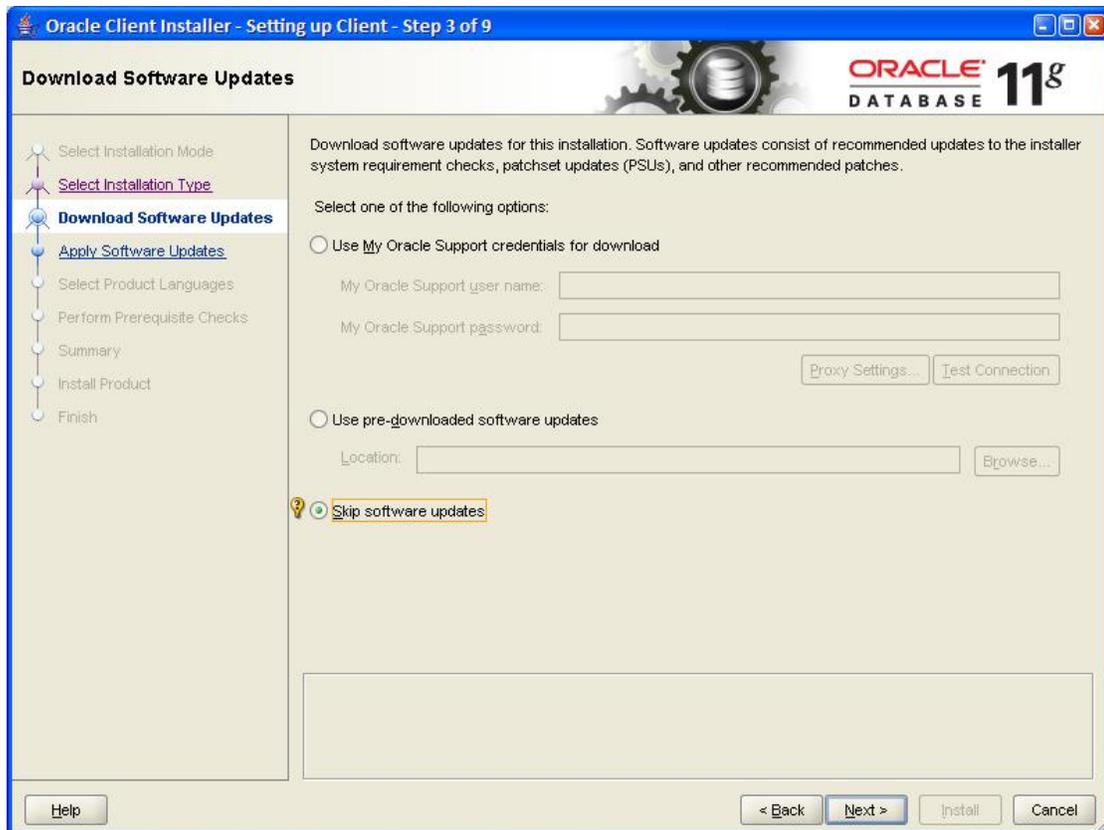
2. Select the default New Install and click Next.

The *Select Installation Type* window appears.



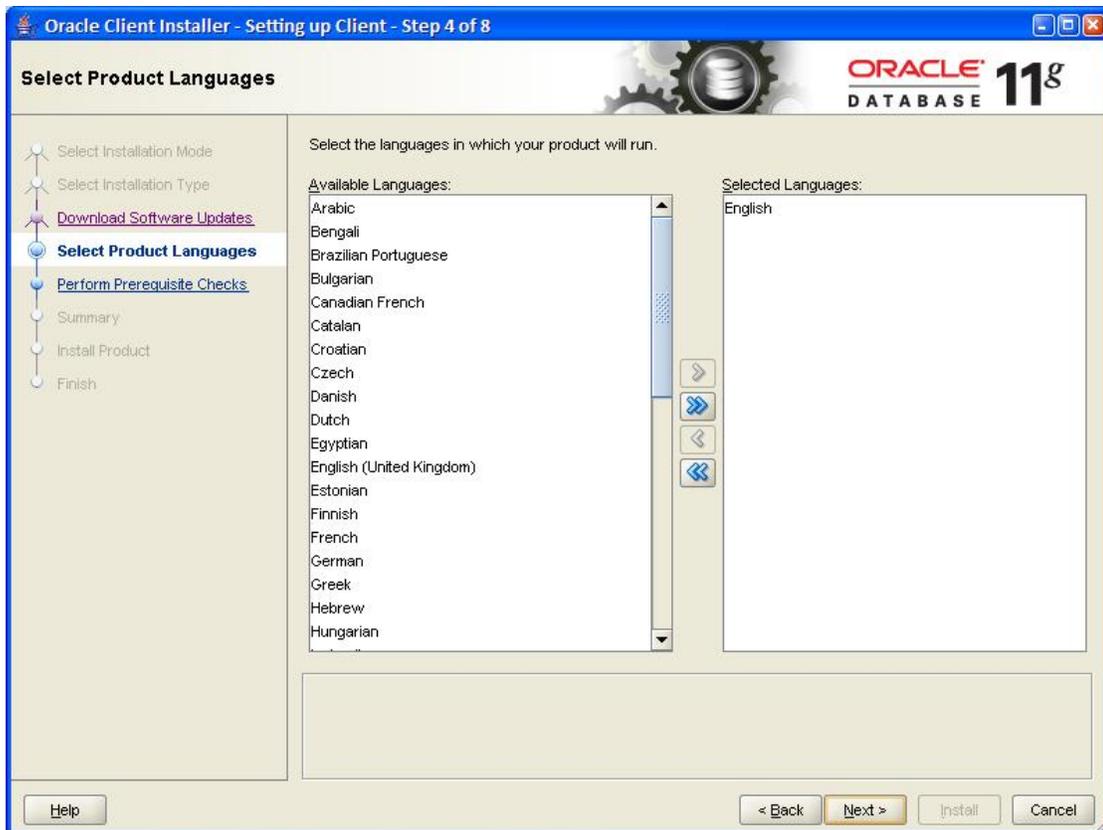
3. Select the Custom type of installation and click Next.

The *Download Software Updates* window appears.

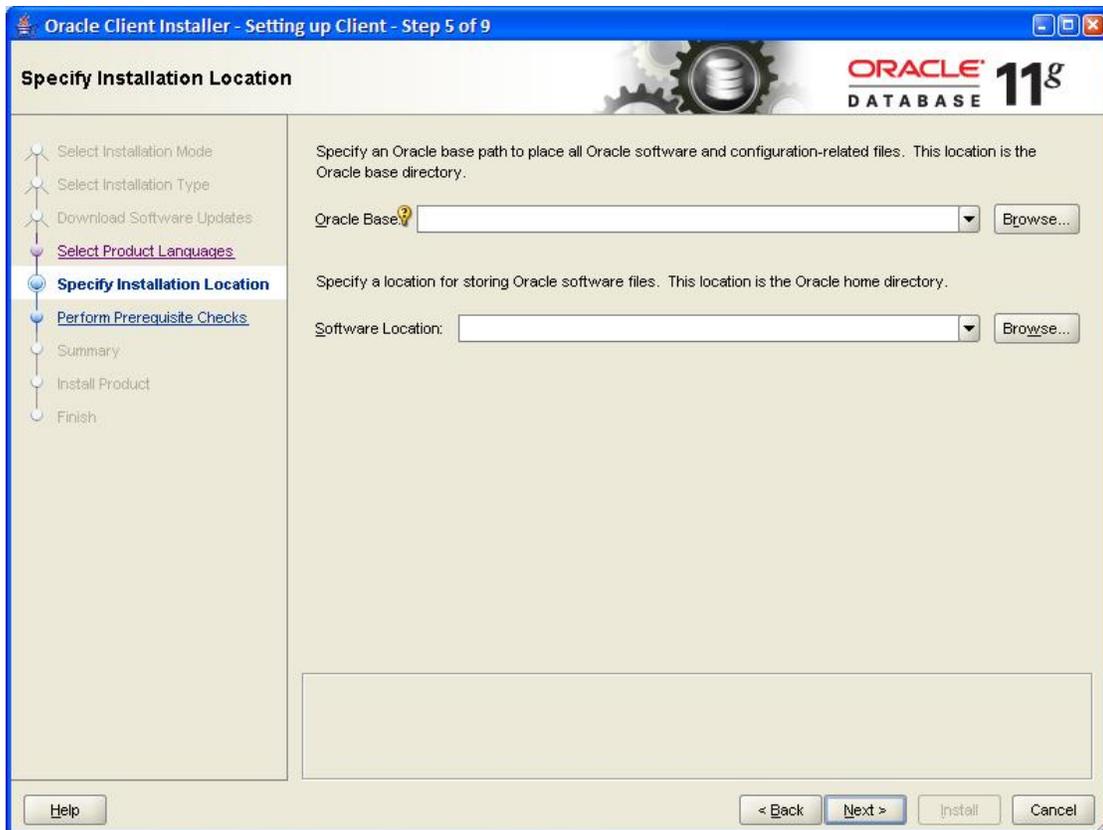


4. Select the default Skip software updates and click Next.

The *Select Product Languages* window appears.

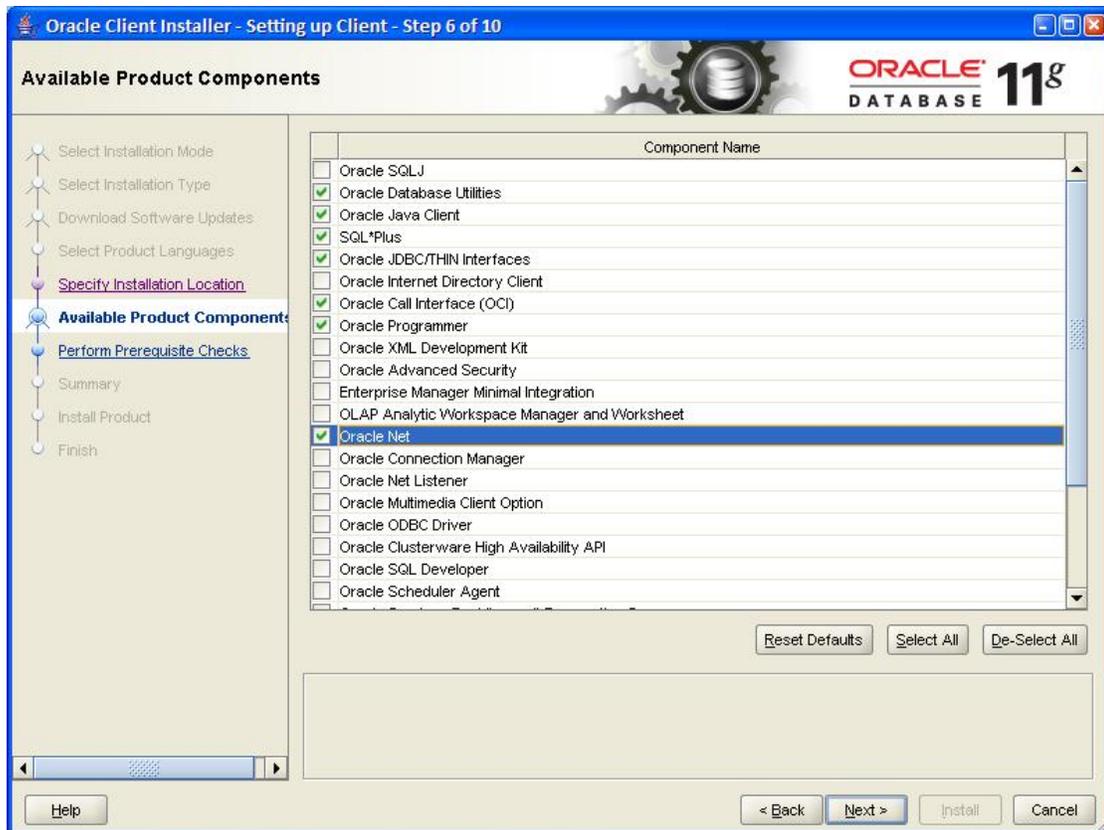


5. Select English as the product language and click Next.
The *Specify Installation Location* window appears.



6. Specify the installation location for the Oracle base directory and the Oracle home directory.
7. Click Next.

The *Available Product Components* window appears.

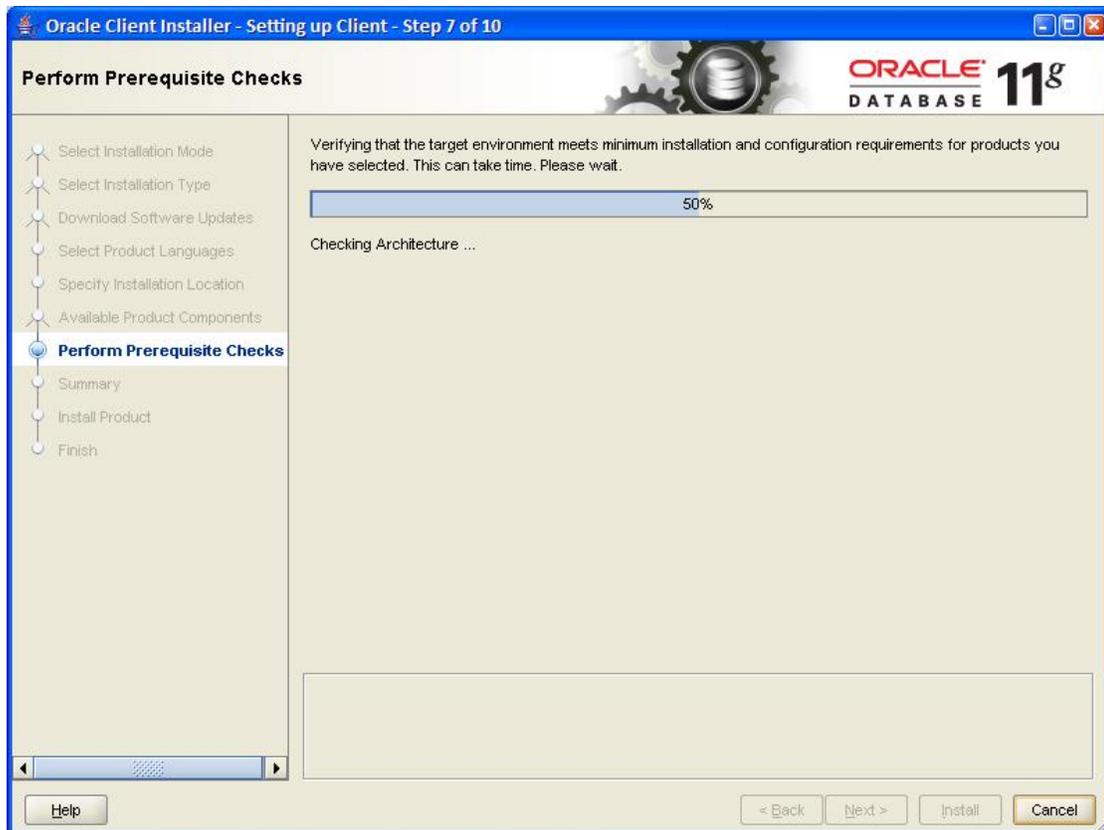


8. Select the following components to install (as shown in the image above):

- Oracle Database Utilities
- Oracle Java Client
- SQL*Plus
- Oracle JDBC/THIN Interfaces
- Oracle Call Interface (OCI)
- Oracle Programmer
- Oracle Net

9. Click Next.

The *Perform Prerequisites Checks* window appears, displaying the verification process.



Upon completion of the checks, the installer displays the results for review.

If any of the requirements is not met, the installer displays a list of the failed checks and their actual and expected values.

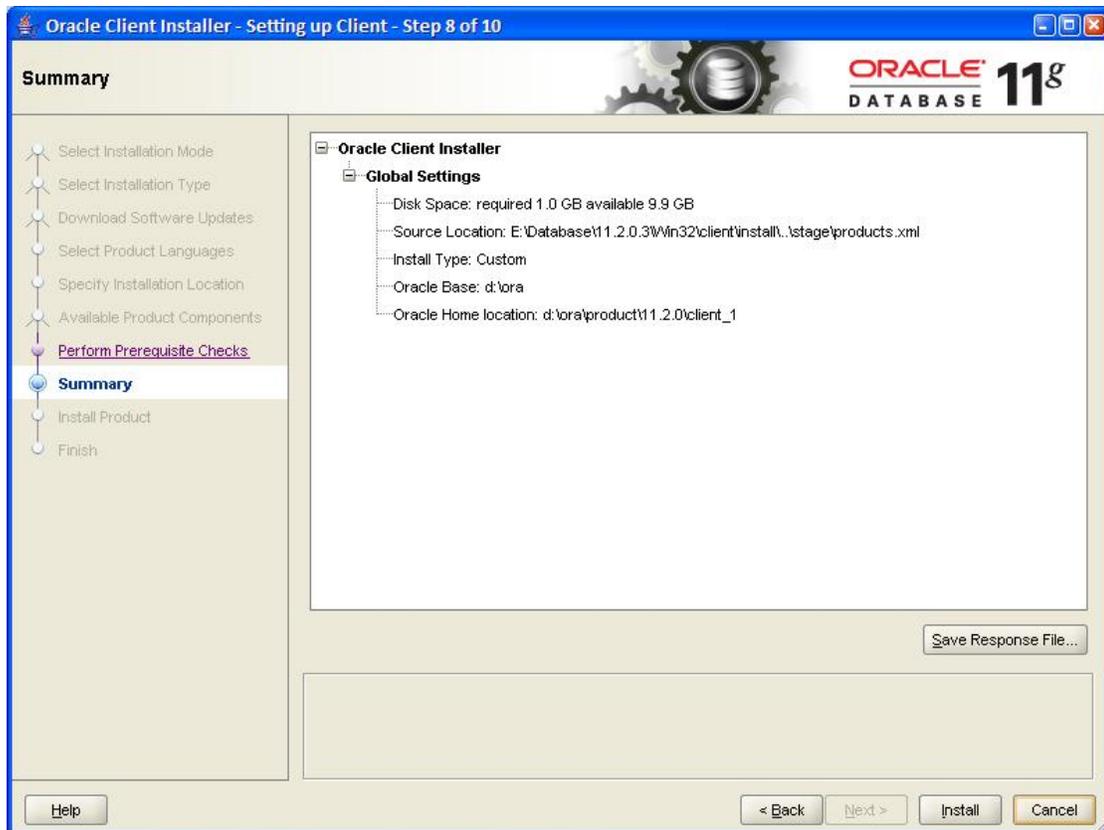
You may click the Fix & Check Again button to generate a fixup script.

The nodes on which the prerequisites failed are listed in the Execute Fixup Script window. You can run the fixup script as a root user to complete the required pre-installation steps.

Note Using the fixup scripts does not ensure that all the prerequisites for installing the Oracle database are satisfied. You must still verify that all the pre-installation requirements are met to ensure a successful installation.

If any of the requirements are not met, the failed checks will be displayed in the Perform Prerequisite Checks window. You will have to fix and check them again.

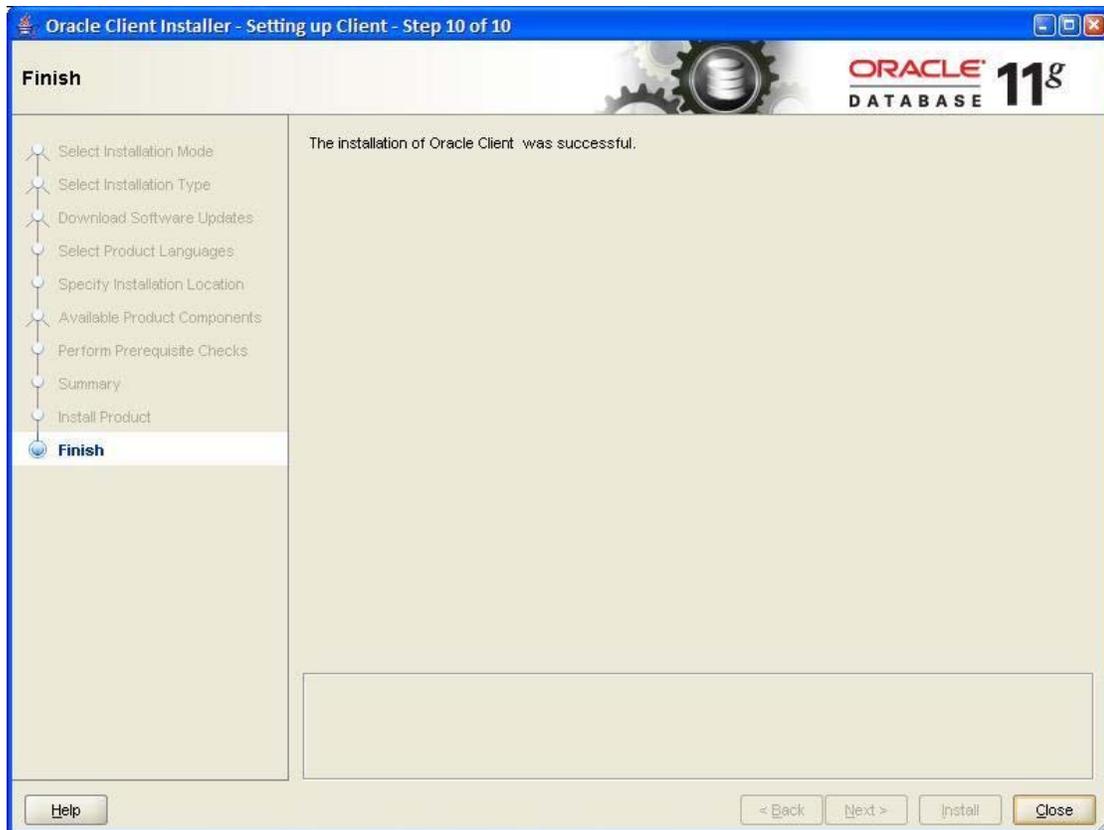
When all of the minimum requirements are met, a *Summary* window appears.



10. In the Summary window, review the global settings you have chosen and click Install to start the installation.

The installation takes some time to complete.

Upon completion, the *Finish* window appears.



11. Click Close to exit the Oracle client installer.

Creating the Database

This chapter provides instructions for creating the Database in Oracle 11gR2 for use with Agile e6.1.2.2.

The database is created by using the Database Configuration Assistant (DBCA) templates. DBCA templates include database options, initialization parameters, and storage information for data files, table spaces, control files and redo logs.

Five different templates are predefined to meet different requirements according to purpose, size and number of the users of the Agile e6.1.2.2 database installation.

Refer to the Hardware Sizing Recommendation for Agile e6.1.2.2 document for additional information on significant database parameters and settings of each template.

1. Refer to the downloaded media pack - *Oracle Agile Engineering Data Management Application* (Release e6.1.2.2). All the templates are in the `addon/db/windows/templates` directory.
2. Copy the DBCA template file (e.g. `plm_prod_medium.dbt`) to the `%ORACLE_HOME%\assistants\dbca\templates` directory.
3. Start the Oracle Database Configuration Assistant from the Windows Start menu.

Start > All Programs > Oracle - OraDb11g_home1 > Configuration and Migration Tools > Database Configuration Assistant.

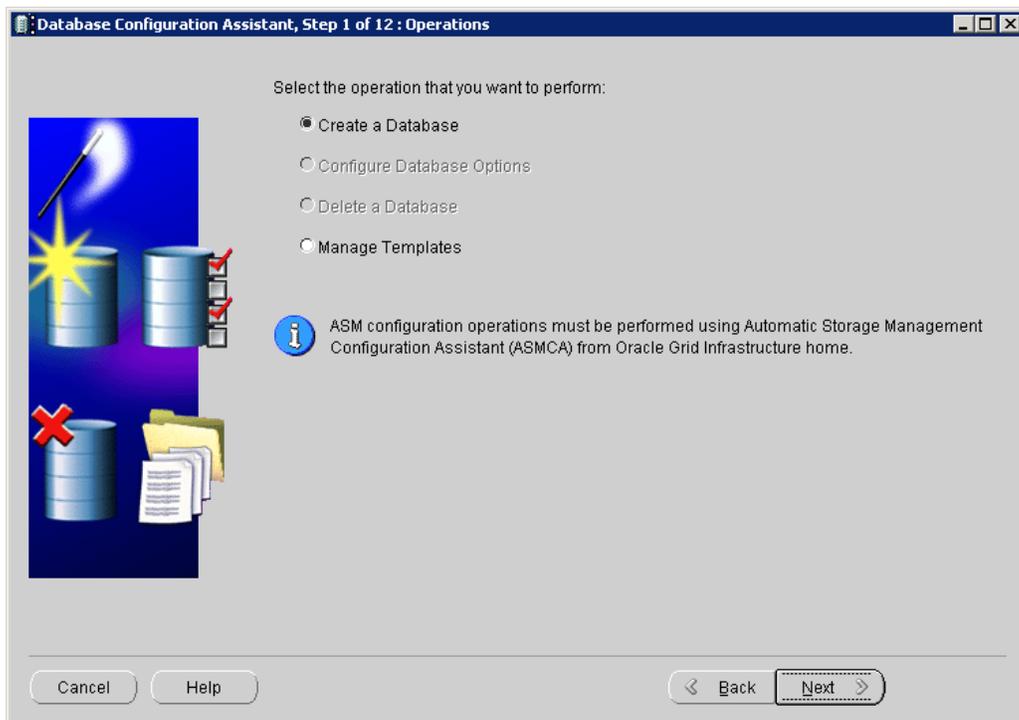
Note In all the examples given in this chapter, the name of the Oracle Home for Oracle database installation is `OraDb11g_home1`. You may use a different name in your installation.

The *Database Configuration Assistant: Welcome* screen appears.



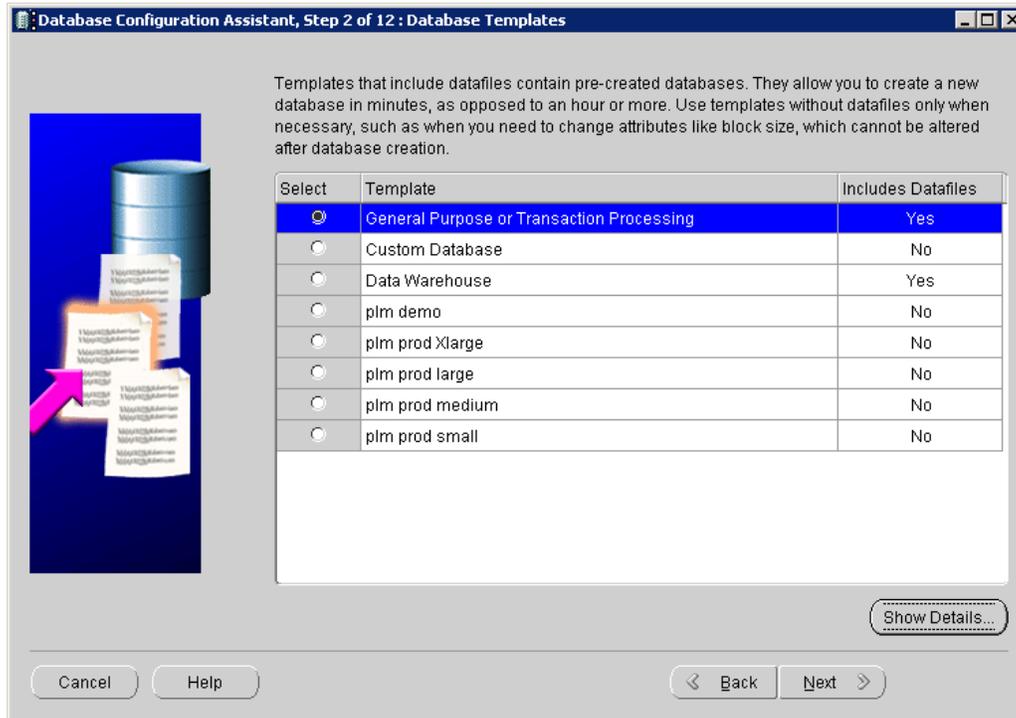
4. Click Next to start the database configuration.

The *Database Configuration Assistant – Operations* screen appears.



5. Select Create a Database and click Next.

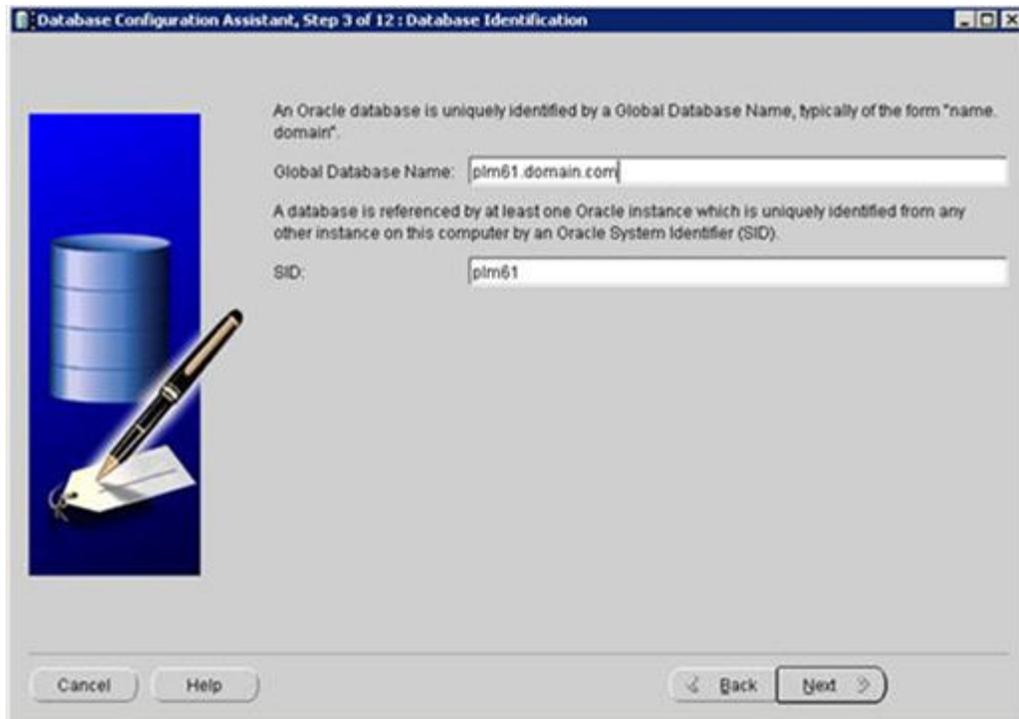
The *Database Configuration Assistant – Database Templates* screen appears.



The template that you have chosen and copied in step 2 is available in this list.

6. Select the template you want to use and click Next.

The *Database Configuration Assistant – Database Identification* screen appears.



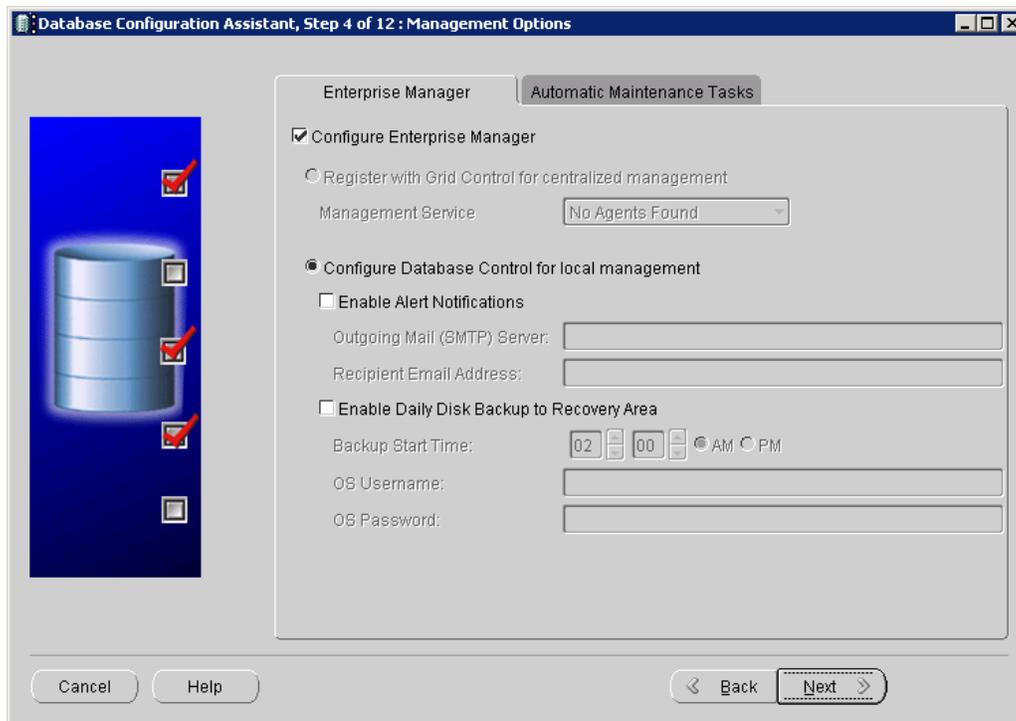
7. Enter the Global database name and database SID.

The default SID is plm61. As a good practice, it is recommended to set the global database name to *SID.<domain name>*; for example, plm61.mydomain.com. But it can be left the same as the database SID.

Note Do not leave this field blank.

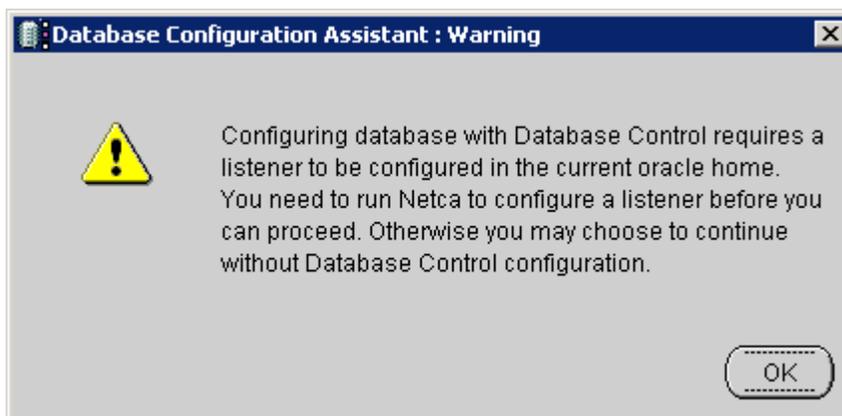
8. Click Next.

The *Database Configuration Assistant – Management Options* screen appears. Here, you can centrally manage the Oracle databases using Oracle Enterprise Manager Database Control.



9. Select the option Configure Enterprise Manager and go to the Automatic Maintenance Tasks tab.

A message is displayed that a listener has to be configured first - prior to configuring the database by dbca.

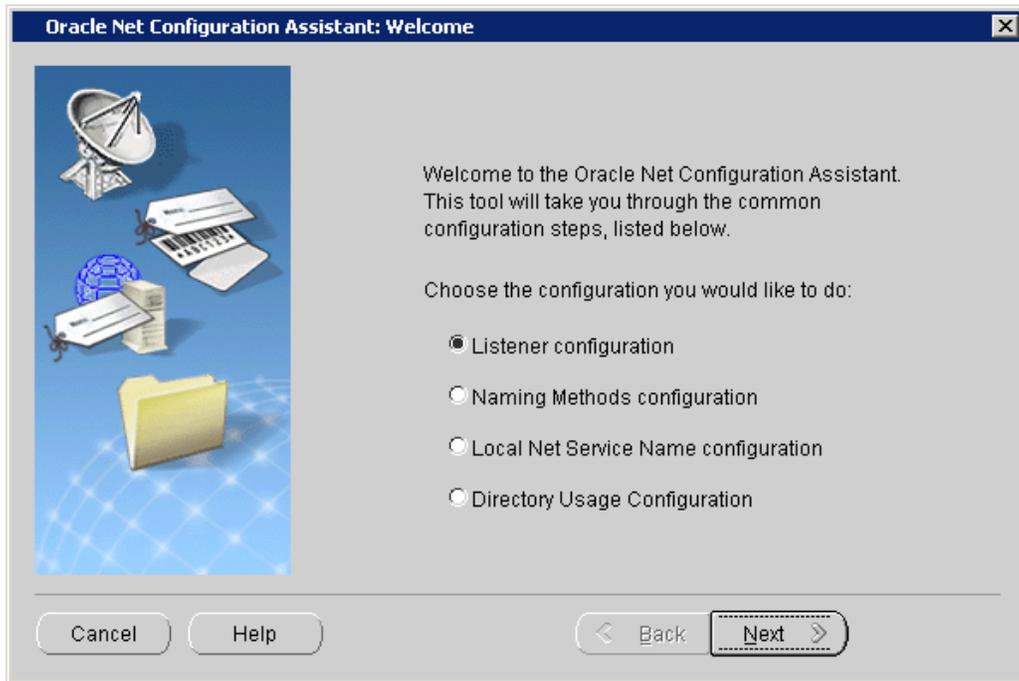


If a configured listener for this Oracle Home already exists, this warning message will be skipped and by clicking on the Automatic Maintenance Tasks tab, you will see the screen from step 19. In this case skip the steps 9-187 and continue with step 19.

10. Click OK to close the warning message.
11. Start the Oracle Net Configuration Assistant from the Windows Start menu.

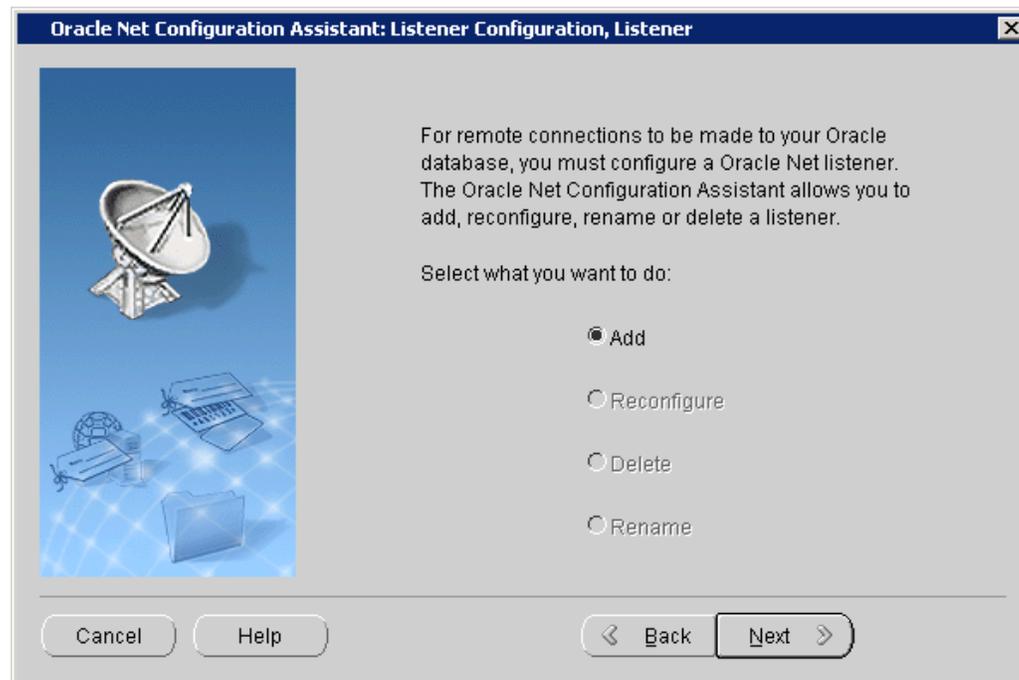
Start > All Programs > Oracle - OraDb11g_home1 > Configuration and Migration Tools > Net Configuration Assistant.

The *Oracle Net configuration Assistant – Welcome* screen appears.



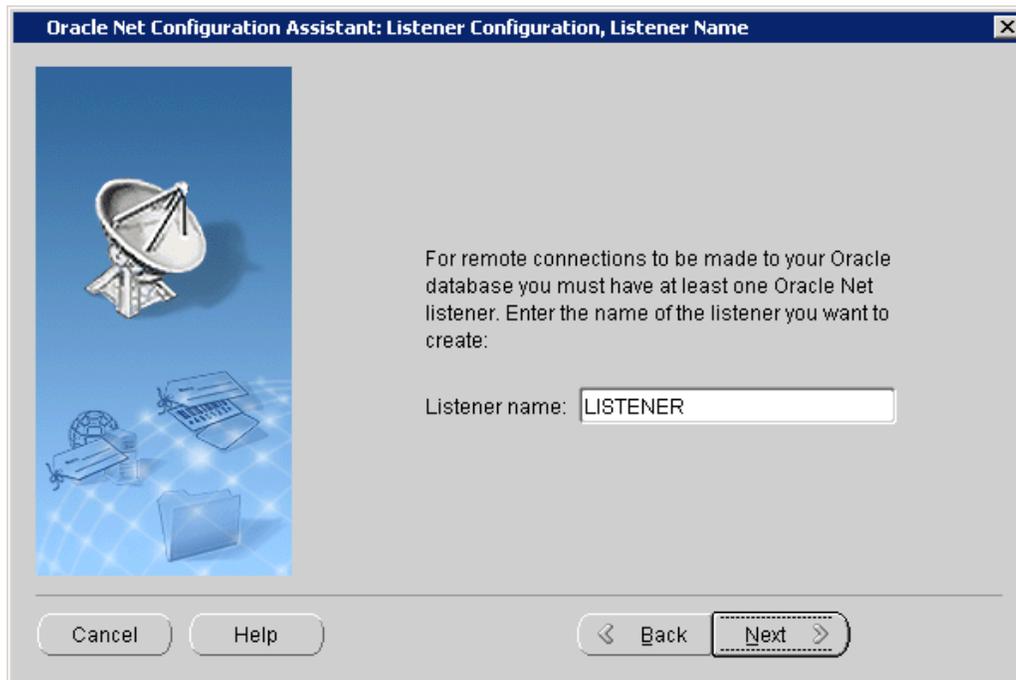
12. Select the Listener configuration and click Next.

The *Oracle Net configuration Assistant – Listener Configuration, Listener* screen appears.



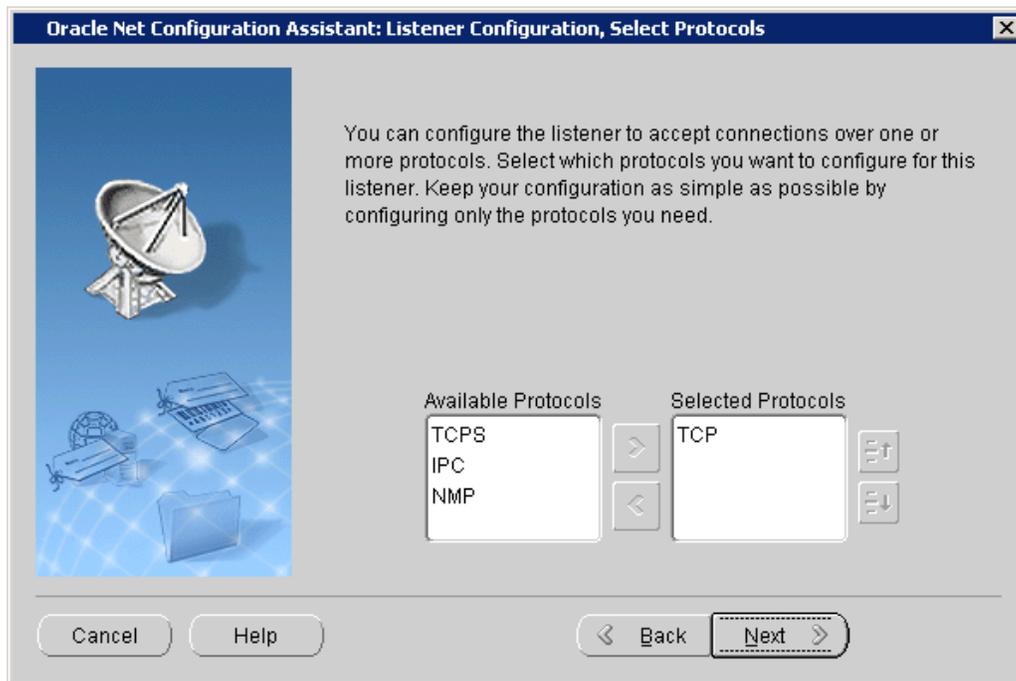
13. Select Add and click Next.

The *Oracle Net configuration Assistant – Listener Configuration, Listener Name* screen appears.



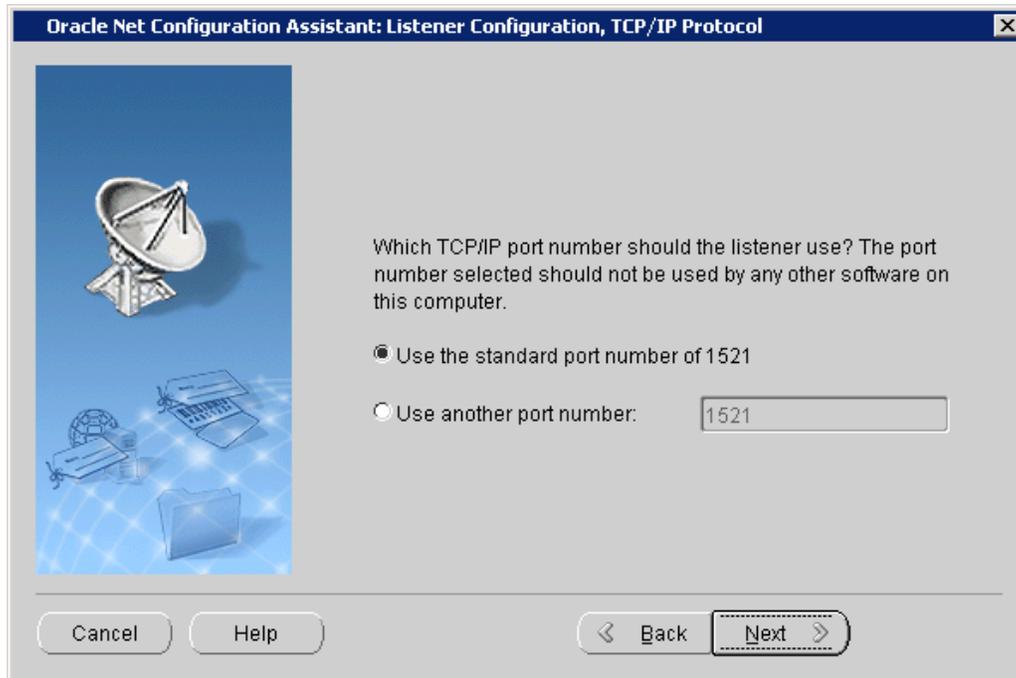
14. Create the Listener name and click Next.

The *Oracle Net configuration Assistant – Listener Configuration, Select Protocols* screen appears.



15. Select TCP from the Available Protocols list (selected by default) and click Next.

The *Oracle Net configuration Assistant – Listener Configuration, TCP/IP Protocol* screen appears.



16. Select the standard port number of 1521.

You may choose any port number that has not been used yet.

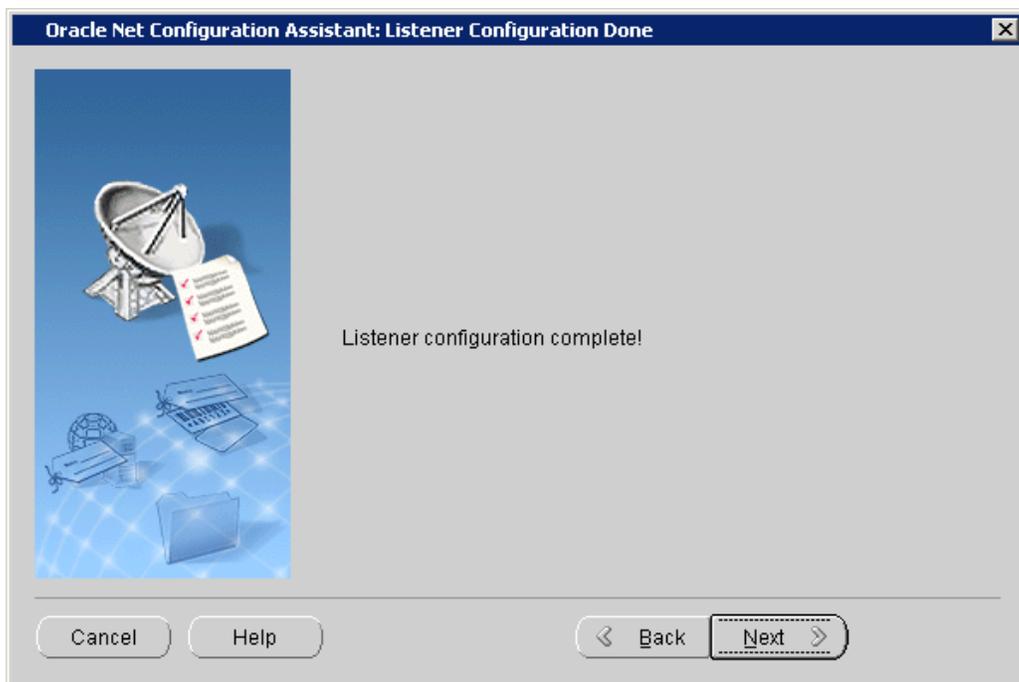
17. Click Next.

The *Oracle Net configuration Assistant – Listener Configuration, More Listeners* screen appears.



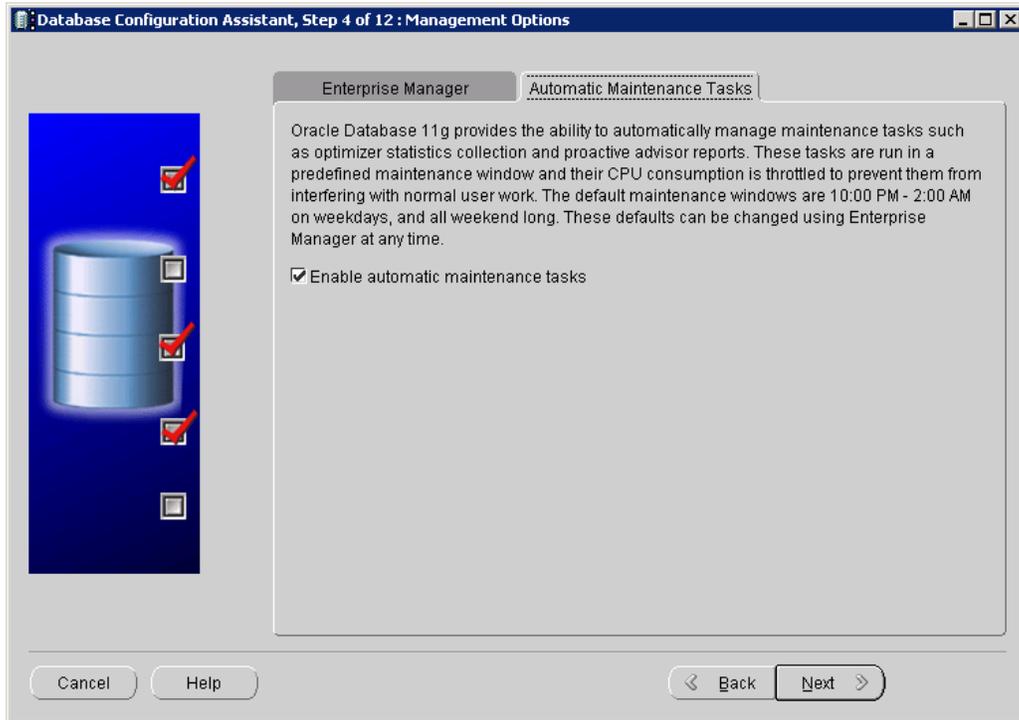
18. Select No and click Next.

The *Oracle Net configuration Assistant – Listener Configuration Done* screen appears.



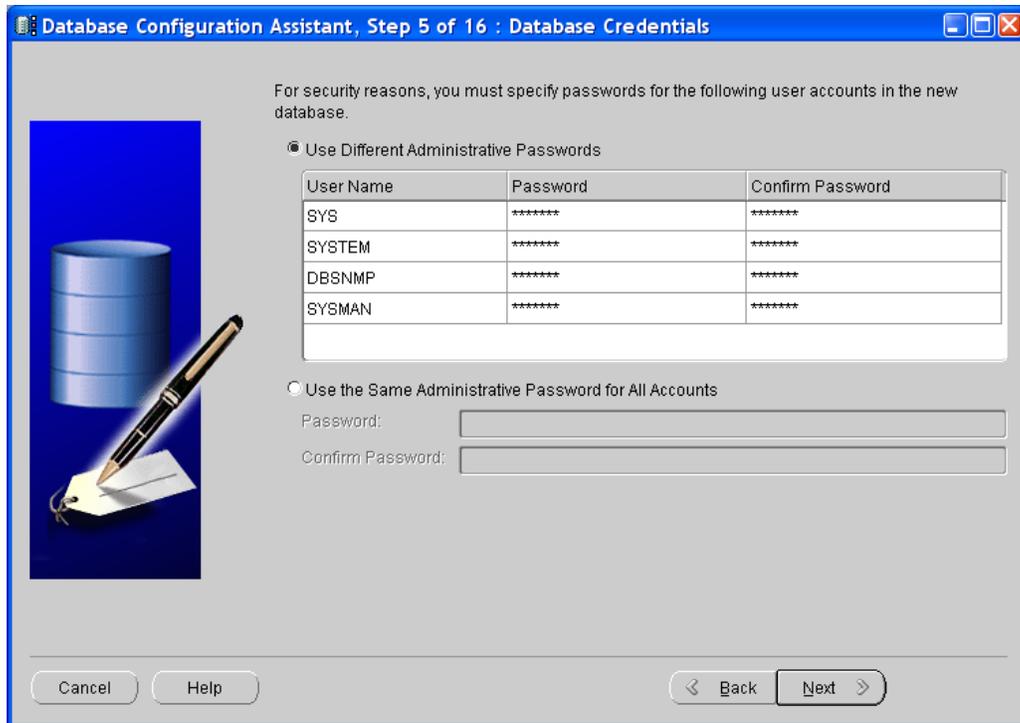
19. Click Next.

The *Oracle Configuration Assistant – Management Options* screen with *Automatic Maintenance Tasks* tab appears.



20. Select Enable automatic maintenance tasks and click Next.

The *Oracle Configuration Assistant – Database Credentials* screen appears.

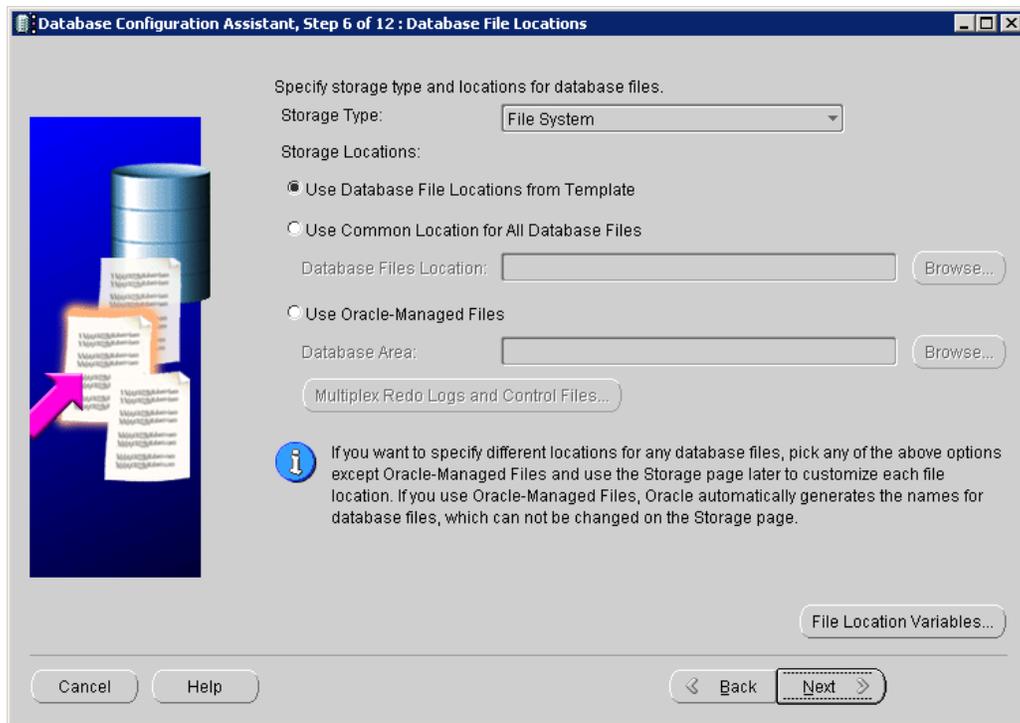


21. Enter passwords for SYS, SYSTEM, SYSMAN and DBSNMP.

It is highly recommended to use different passwords for these accounts.

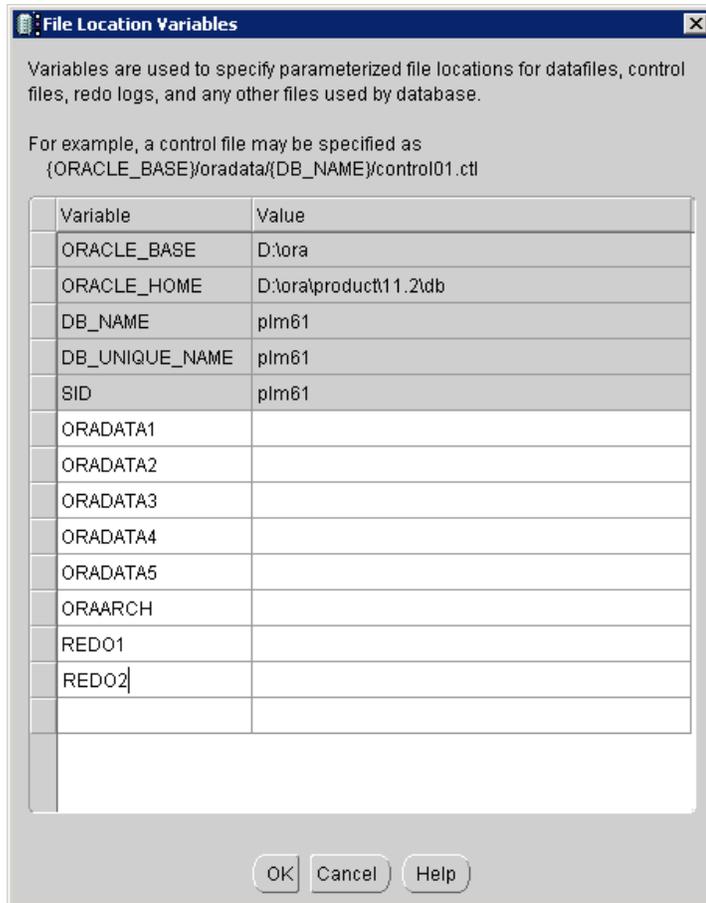
22. Click Next.

The *Oracle Configuration Assistant – Database File Locations* screen appears.



23. Select Use Database File Locations from Template and click the File Location Variables button.

The *File Location Variables* window appears.



1. Enter the value for the variables.

The values that you should provide are the directories created, as described in Chapter 3 (in this example E:, F:, H:). DBCA will create the subdirectory plm61 in the directories where the database data files will be created.

The following table provides the information on predefined file destination variables.

Variable	Description
ORADATA1	Directory for data files of tablespaces EDB, EDB_LOB, EDB_TMPIDX
ORADATA2	Directory for data files of tablespaces EDB_IDX, EDB_TMP
ORADATA3	Directory for data files of temporary tablespace TEMP
ORADATA4	Directory for data files of undo tablespace
ORADATA5	Directory for data files of tablespaces SYSTEM, TOOLS, USERS
ORAARCH	Directory for Archive log files
REDO1	Directory for redo log files
REDO2	Directory for redo log files

The following table gives values that you can set for the variables when you have different number of disks:

- Number of disks: 1 (there is only one directory – e.g. /data1)

Disk1: ORADATA1, ORADATA2, ORADATA3, ORADATA4, ORADATA5,
REDO1, REDO2, ORAARCH – all variables will be set to /disk1
- Number of disks: 2 (there are two directories – e.g. /data1, /data2)

Disk1: ORADATA1, ORADATA4, ORADATA5, REDO1 – they get the value of /data1
Disk2: ORADATA2, ORADATA3, ORAARCH, REDO2 – they get the value of /data2
- Number of disks: 3

Disk1: ORADATA1, ORADATA5
Disk2: ORADATA2, ORADATA4, REDO1
Disk3: ORADATA3, ORAARCH, REDO2
- Number of disks: 4

Disk1: ORADATA1, REDO1
Disk2: ORADATA2, REDO2
Disk3: ORADATA3, ORAARCH
Disk4: ORADATA4, ORADATA5
- Number of disks: 5

Disk1: ORADATA1, REDO1
Disk2: ORADATA2, ORAARCH
Disk3: ORADATA3, ORADATA5
Disk4: ORADATA4
Disk5: REDO2
- Number of disks: 6

Disk1: ORADATA1
Disk2: ORADATA2, ORAARCH
Disk3: ORADATA3
Disk4: ORADATA4
Disk5: ORADATA5, REDO1
Disk6: REDO2
- Number of disks: 7

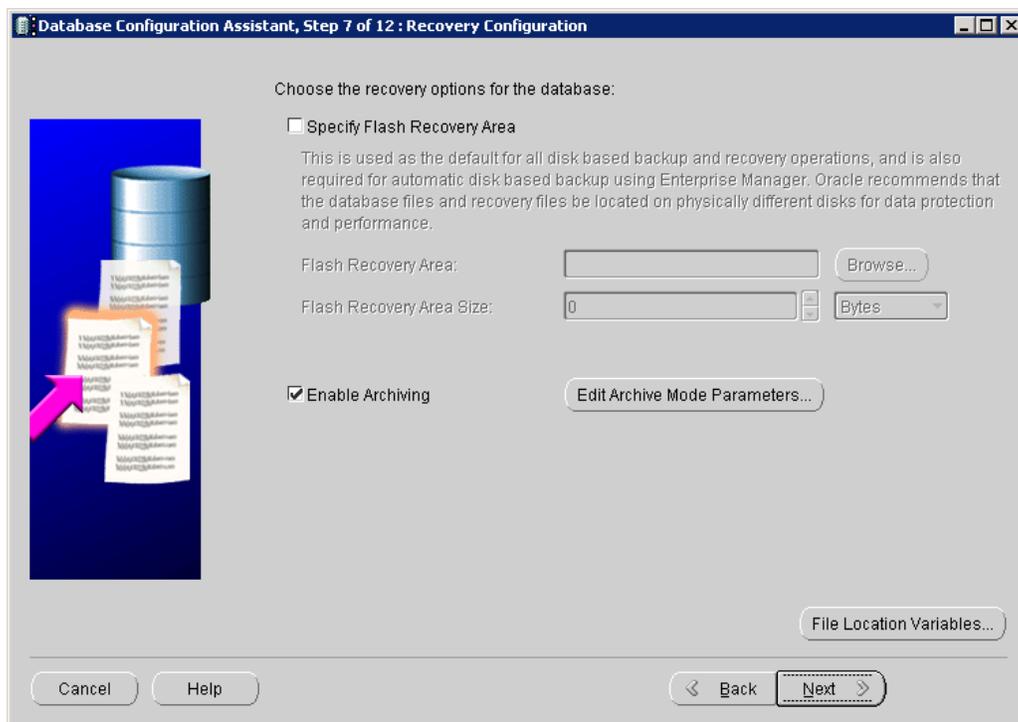
Disk1: ORADATA1
Disk2: ORADATA2
Disk3: ORADATA3
Disk4: ORADATA4
Disk5: ORADATA5, ORAARCH
Disk6: REDO1
Disk7: REDO2

- Number of disks: 8

Disk1: ORADATA1
Disk2: ORADATA2
Disk3: ORADATA3
Disk4: ORADATA4
Disk5: ORADATA5
Disk6: ORAARCH
Disk7: REDO1
Disk8: REDO2

2. Click OK and then Next.

24. Deselect the option Specify Flash Recovery Area in the next window.

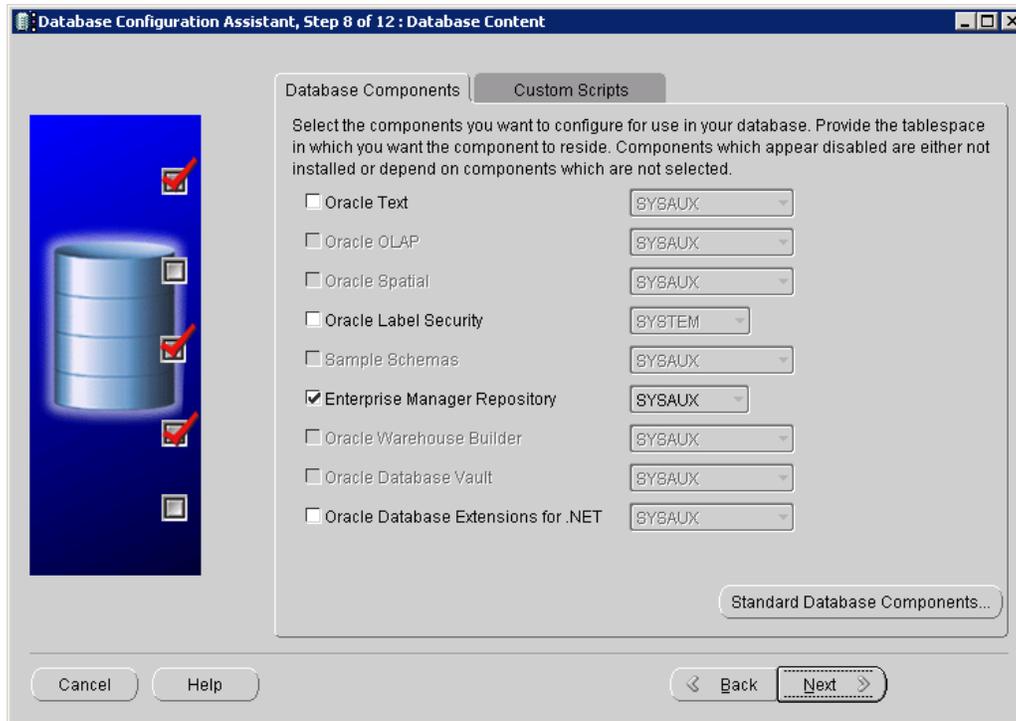


Depending on your backup strategy and used template, archiving can be enabled.

Note For a productive database it is highly recommended to archive the database. The destination of the archive directory can be specified by clicking on the Edit Archive Mode Parameters button (predefined by the variable ORAARCH).

25. Click Next.

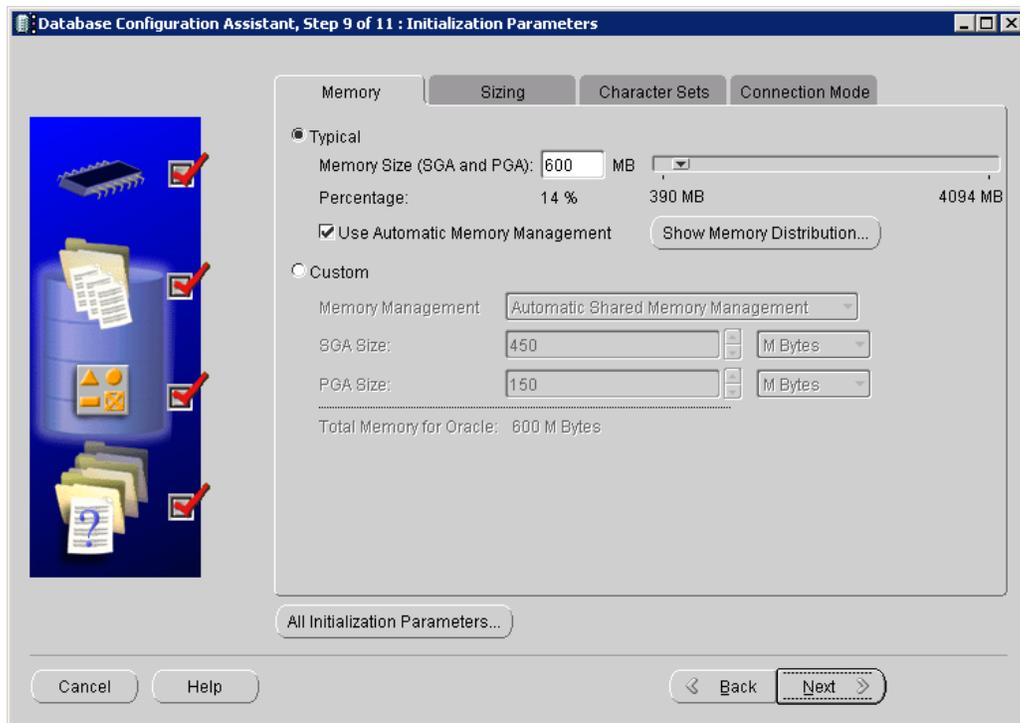
The next window provides database features as well as the possibility to run custom scripts after the database creation. It is not recommended to change the settings provided by the template.



26. Click Next.

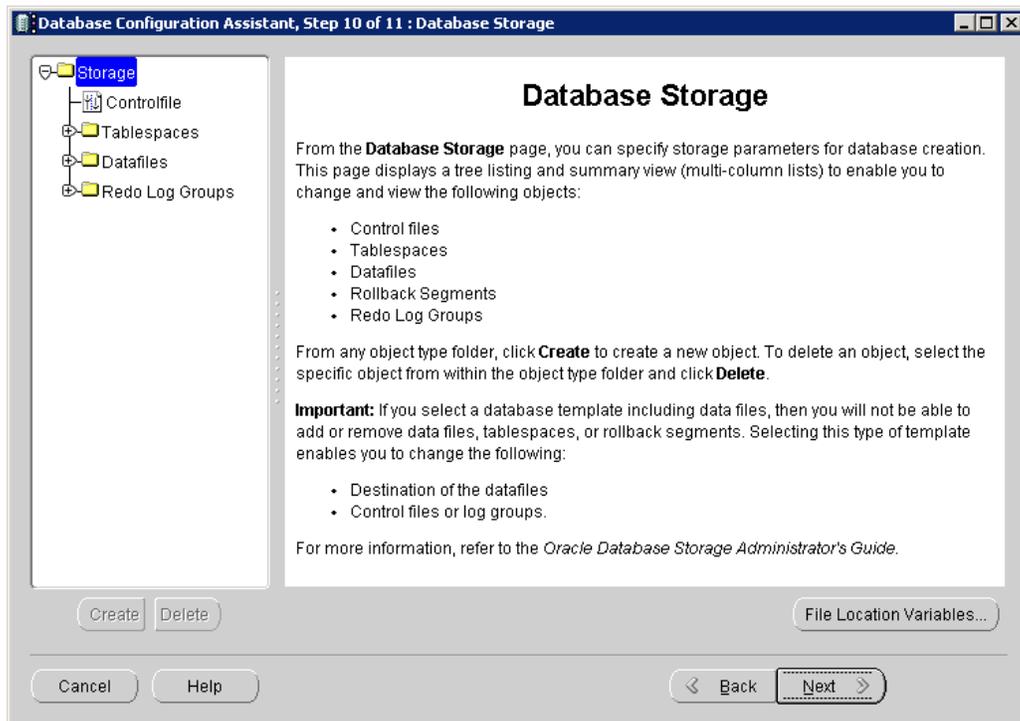
The next window provides different database parameters. You can navigate to the setting of memory, character sets, database sizing, and connection mode. Usually all parameters are set by the selected template and you don't need to change them, but experienced users can modify some parameters depending on the database size and number of users.

Refer to the *Agile e6.1.2.2 Hardware Sizing guide* for complete information on additional parameters, such as, memory, etc.



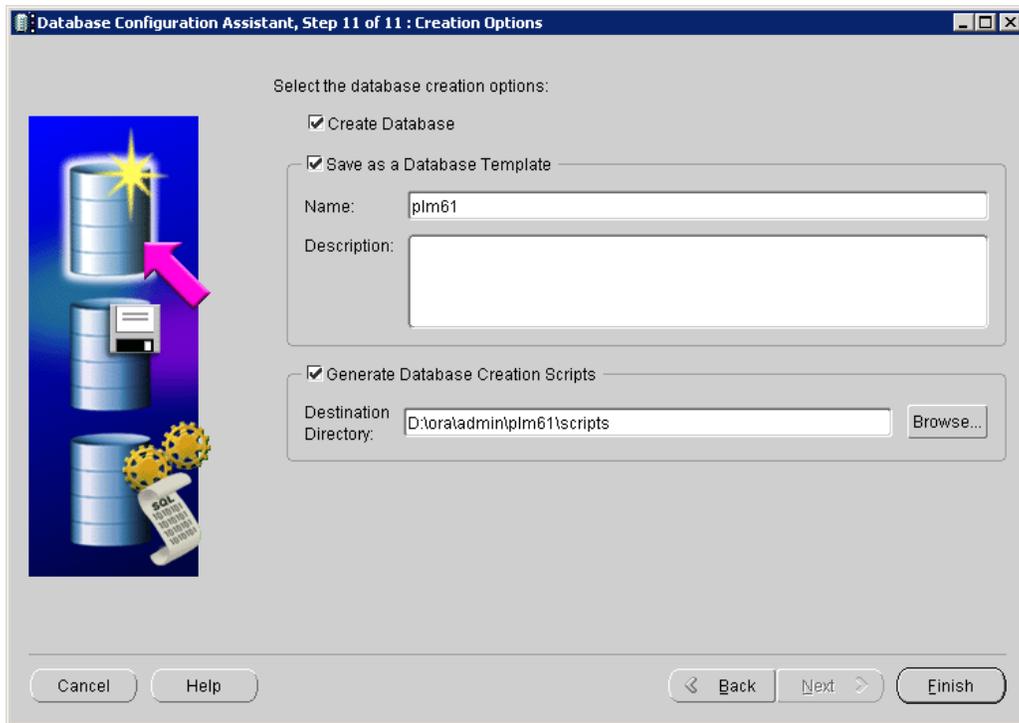
27. Click Next.

The Database Storage window shows table space, data files, control files and redolog groups/files to be created.



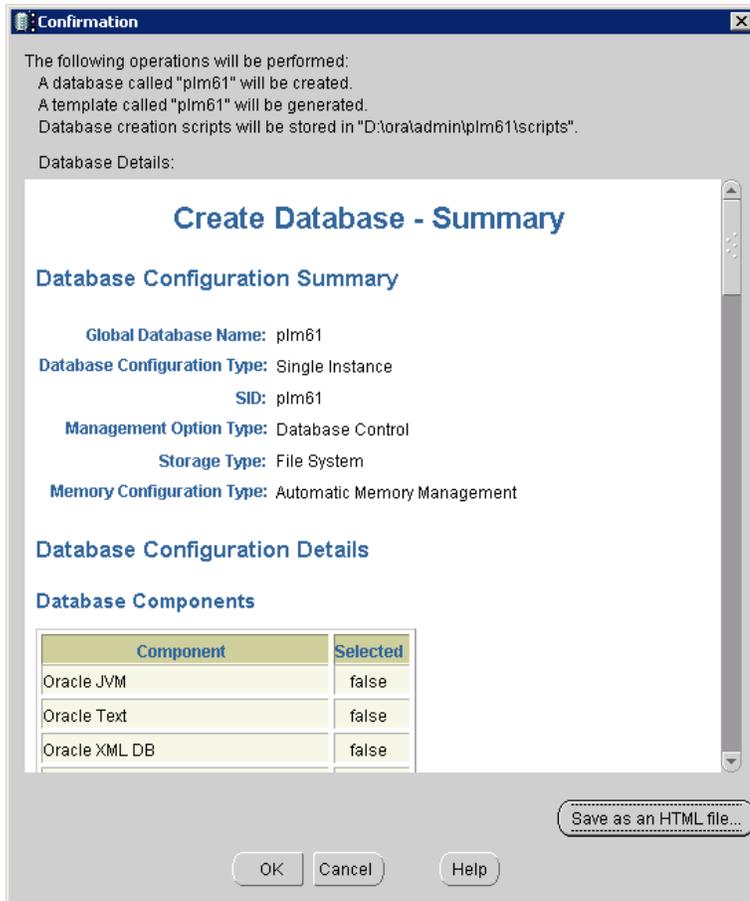
28. Click Next.

The *Creation Options* window appears.



29. Select “Create Database”, “Save as a Database Template” and “Generate Database Creation Scripts” and click **Finish**.

A summary of the database parameters is displayed.



30. Click **OK**.

The database creation process is started.

31. When the database creation is done, click **Exit** to finish the process.

Configuring the DB Services

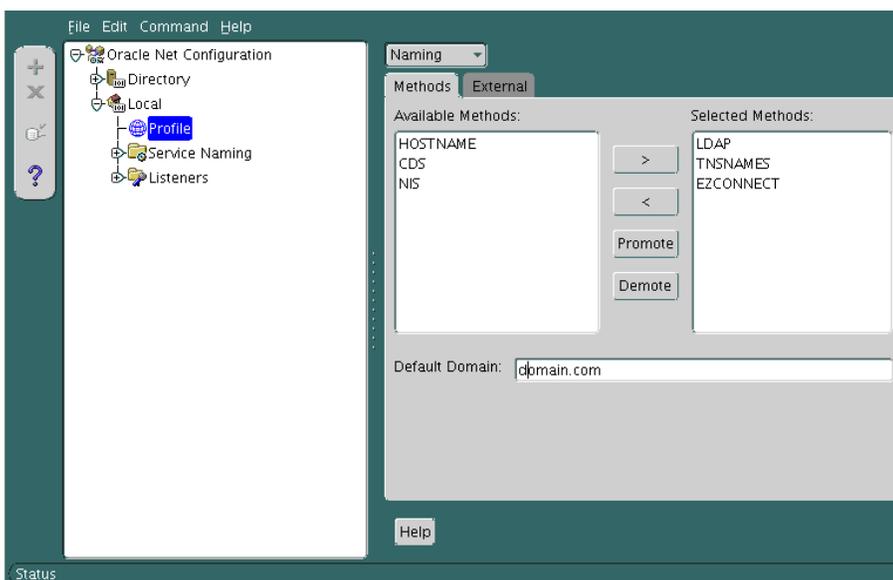
This chapter provides instructions for configuring the tnsnames.ora and sqlnet.ora.

To configure the tnsnames.ora and sqlnet.ora

1. Start the Oracle Net Manager.

Start > All Programs > Oracle - OraDb11g_home1 > Configuration and Migration Tools > Net Manager.

2. Expand the view for **Local** and click on **Profile**.

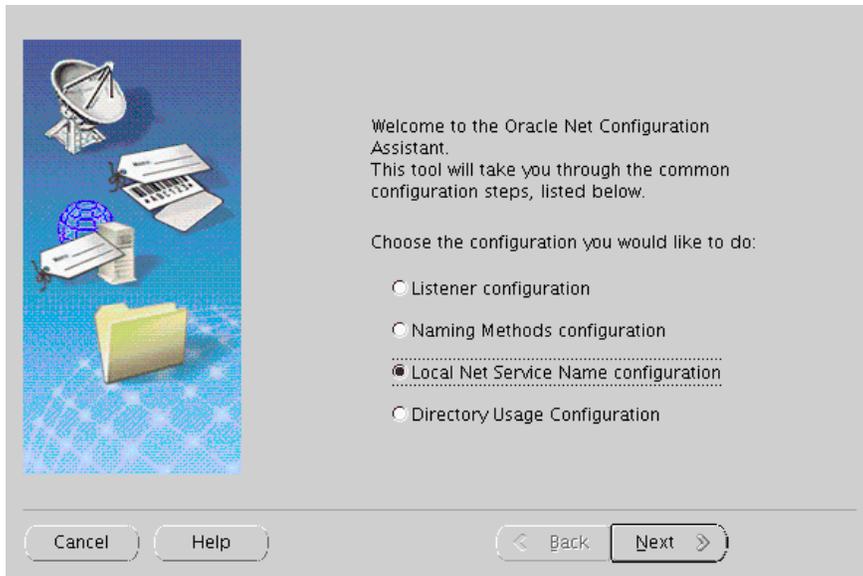


3. Enter your domain name in the field Default Domain.
4. Save the configuration by clicking on File > Save Network Configuration from the main menu and exit the Net Manager by clicking on File > Exit.

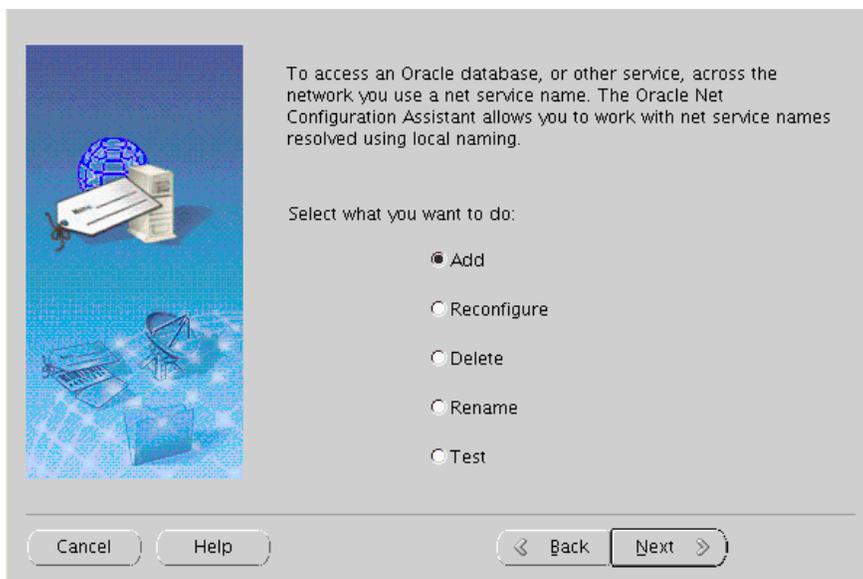
5. Start the Oracle Net Services Configuration Tool.

Start > All Programs > Oracle - OraDb11g_home1 > Configuration and Migration Tools > Net Configuration Assistant.

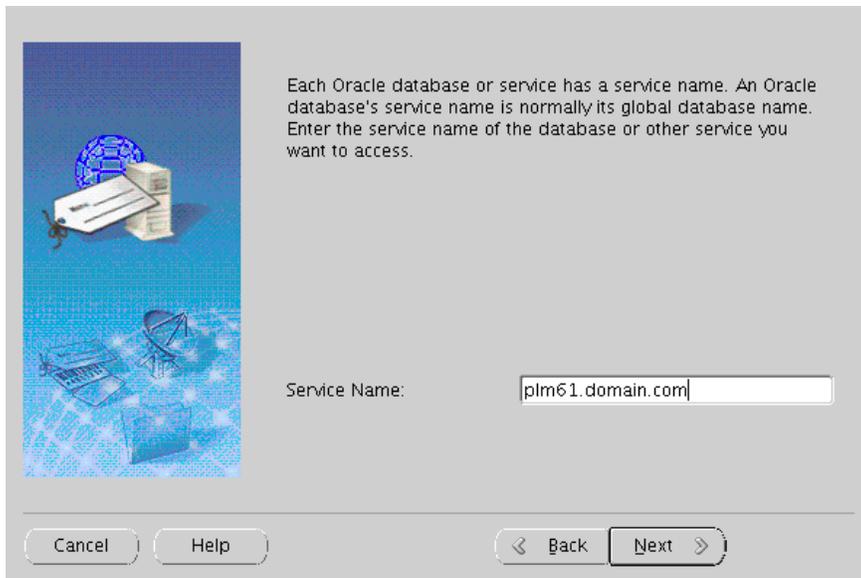
6. Select the Local Net Service configuration and click Next.



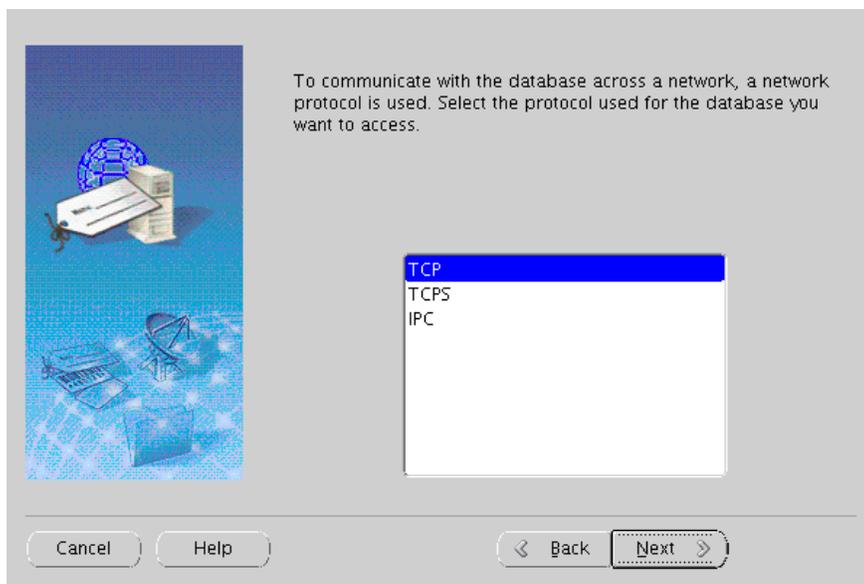
7. Select Add and click Next.



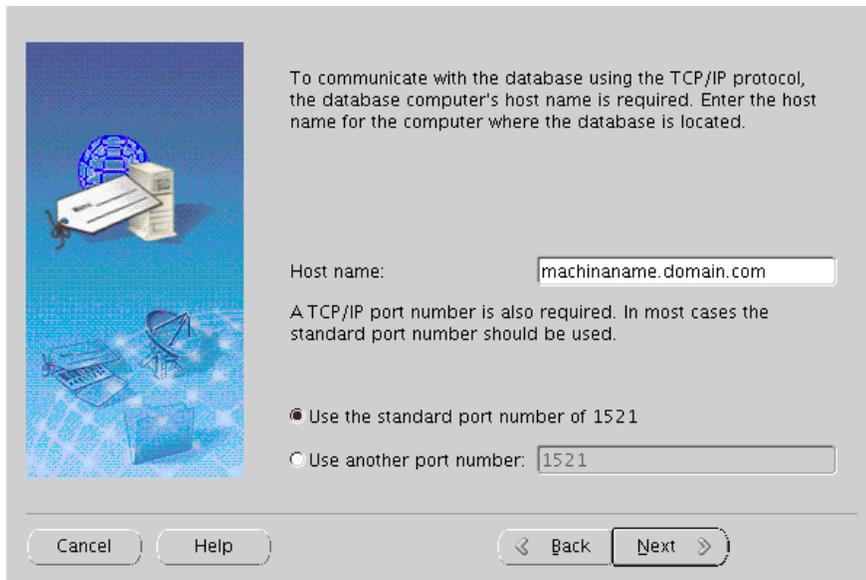
8. Enter the Service Name. This is the global database name you provided by the database creation. In the example it is plm61.domain.com. Click Next.



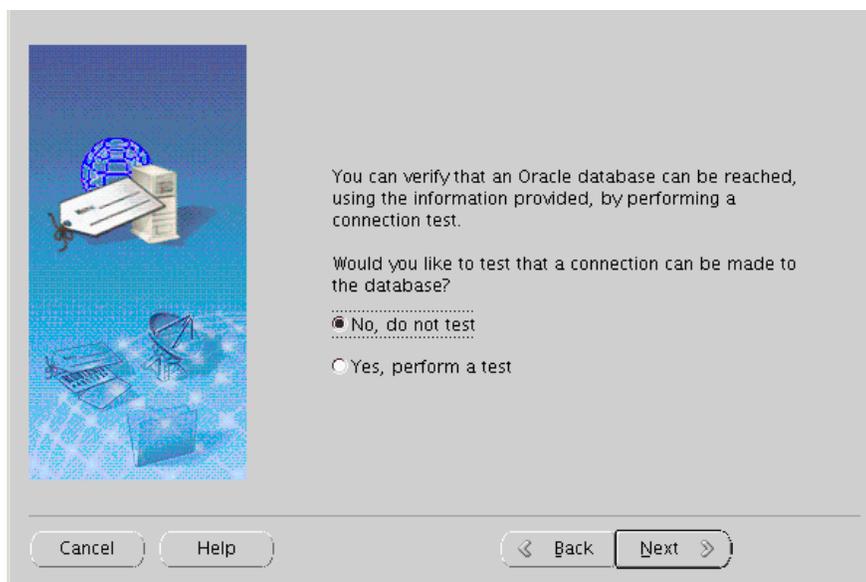
9. Select the TCP protocol and click Next.



10. Enter the fully qualified machine name – where the Oracle database is located and click Next.



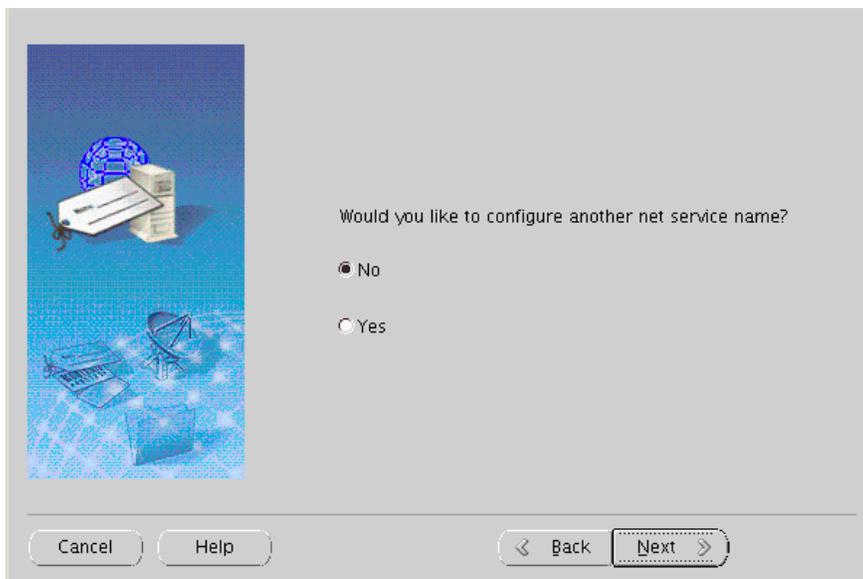
11. Select not to perform a test and click on Next.



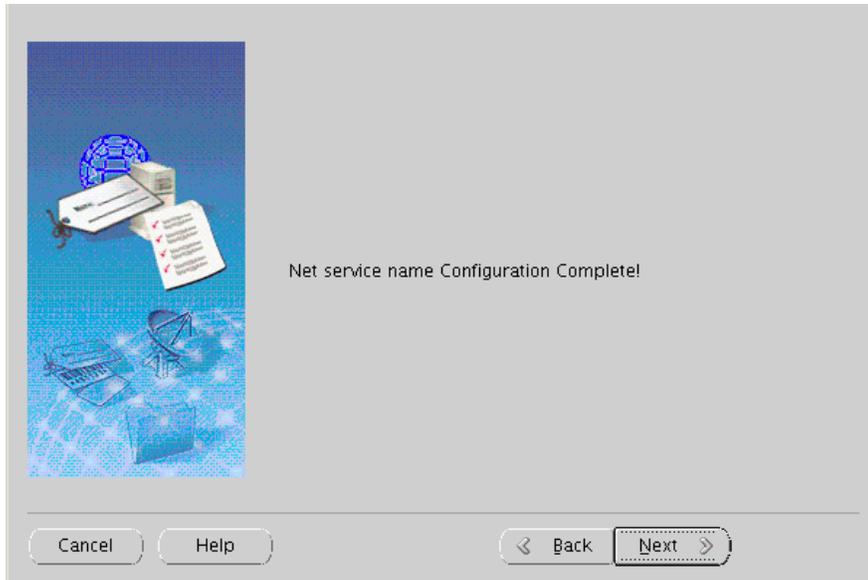
12. Finally, select the Net Service Name and click Next.



13. Select not to configure another service and click Next.



14. The Net service name configuration is completed. Click on Next and then on Finish to quit.



15. Test the database connection with the following command:
`sqlplus system@plm61/<SYSTEM password>`

Modifying the Oracle Database

Create Directories for the Oracle Data Pump Utility

1. Create a directory which will be used for the Oracle Data Pump Export/Import Utility with two subdirectories - system and user (for instance d:\ora_dmp\system; d:\ora_dmp\user).

2. Open a sqlplus session and connect as 'system'.

```
sqlplus system/<system password>
```

3. Run the script ddl_pump_dir.sql which is located in the addon/db/sql directory within the downloaded Oracle Agile Engineering Data Management Application (Release e6.1.2.2) package.

```
SQL>@<full path to the file ddl_pump_dir.sql>
```

4. Enter the path to the main directory created under step 1 (for instance d:\ora_dmp).

The script will create two directory objects – one for system users and one for normal users and will give rights for the second directory to user PLM.

Create a Database User and Role

You will need to create the Agile e6.1.2.2 database user and role and provide the necessary privileges and quotas. You can do this using the following commands or using the Oracle Enterprise Manager Database Control as described in the section below.

You can create AGILE_E_ROLE role and plm schema also by executing the script cre_plm_usr.sql in the directory ../addon/db/sql.

```
SQL>@<full path to the file cre_plm_usr.sql>
```

Username (e.g. PLM) and password have to be provided.

Using SQL to Create a Role

1. Check if the plm role exists – open sqlplus session, connect as SYS or SYSTEM and execute

```
select role from dba_roles where role='AGILE_E_ROLE';
```

2. If string 'AGILE_E_ROLE' is returned, the role exists. Then skip the role creation and continue with the user creation. Otherwise, the role has to be created.

3. Use the sql code below to create the role AGILE_E_ROLE:

```
CREATE ROLE AGILE_E_ROLE;
```

```
GRANT CONNECT TO AGILE_E_ROLE;  
GRANT CREATE TABLE TO AGILE_E_ROLE;  
GRANT CREATE VIEW TO AGILE_E_ROLE;  
GRANT CREATE SYNONYM TO AGILE_E_ROLE;  
GRANT CREATE DATABASE LINK TO AGILE_E_ROLE;  
GRANT CREATE SEQUENCE TO AGILE_E_ROLE;  
GRANT ALTER SESSION TO AGILE_E_ROLE;  
GRANT CREATE PROCEDURE TO AGILE_E_ROLE;  
GRANT CREATE TRIGGER TO AGILE_E_ROLE;  
GRANT ALL ON DIRECTORY ORA_DMP TO AGILE_E_ROLE;
```

Using SQL to Create a User

1. Use the sql code below to create the plm schema (named, e.g. PLM):

```
CREATE USER PLM  
IDENTIFIED BY <PASSWORD>  
DEFAULT TABLESPACE "EDB"  
TEMPORARY TABLESPACE "TEMP"  
PROFILE DEFAULT  
QUOTA UNLIMITED ON "EDB"  
QUOTA UNLIMITED ON "EDB_IDX"  
QUOTA UNLIMITED ON "EDB_TMP"  
QUOTA UNLIMITED ON "EDB_TMPIDX"  
QUOTA UNLIMITED ON "EDB_LOB"  
ACCOUNT UNLOCK;  
GRANT "AGILE_E_ROLE" TO PLM;  
ALTER USER PLM DEFAULT ROLE AGILE_E_ROLE;
```

Using Enterprise Manager Database Control to Create a User

1. Start the Enterprise Manager Database Control.

By default it can be invoked on <https://localhost.localdomain:1158/em/console>, but it can be configured manually to use another port. DB Control port and url can be found by checking the status of the DB Control:

```
emctl status dbconsole
```

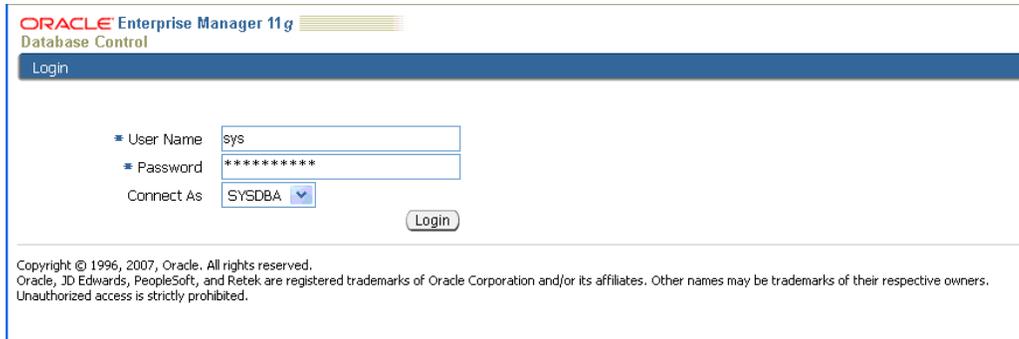
Oracle Enterprise Manager 11g Database Control Release 11.2.0.3

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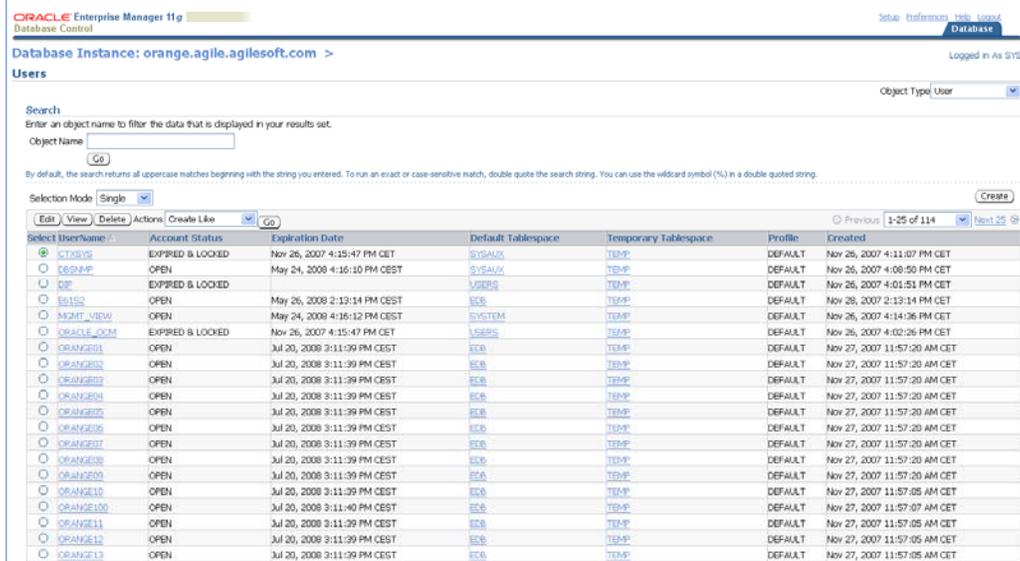
<https://hostname:port/em/console/aboutApplication>

....

2. Enter your user credentials and click Login.



3. Click on the Server tab and in the Security section on Users.
4. Click Create.

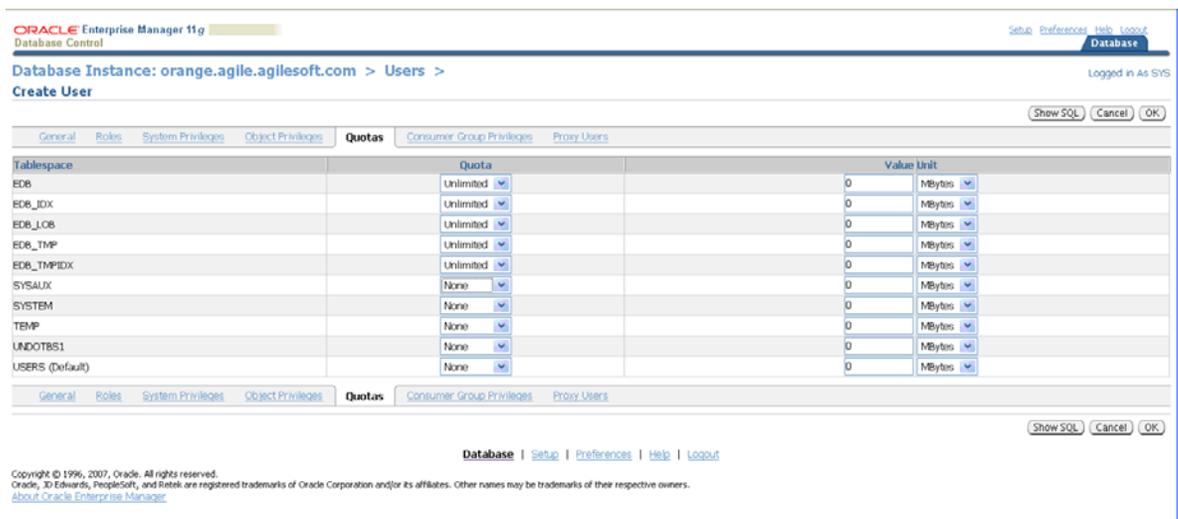


5. Click on the General tab and insert a user name and password and assign default and temporary table space.
6. In the Roles tab click Edit List.
7. Select the role AGILE_E_ROLE from the list with available roles and click Move.
The role is moved to the Selected Roles.
8. Click OK.



The role AGILE_E_ROLE should have been created in the previous step.

- Open the Quotas tab and assign unlimited quota to EDB, EDB_IDX, EDB_LOB, EDB_TMP and EDB_TMPIDX.



- Click OK to finish the database user creation.

Import the Database Dump

Import the Agile e6.1.2.2 dump using the following commands, and then check the log file for errors. Make sure that the variable NLS_LANG is set to AMERICAN_AMERICA.WE8MSWIN1252.

Check the registry for the value of the variable NLS_LANG -
 HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE\KEY_<11gR2 installation>

```
imp username/pass@plm61 file=plm61.dmp log=plm61.log buffer=500000
commit=y statistics=none full=y
username, pass are the name and the password of the user you created in
the database.
```

commit=y	Rollback segments cannot get too small
statistics=n	No statistics will be created
buffer=500000	Necessary for lobs, better performance
full=y	limports full dump even if the dump was exported by different user

Compile All Invalid Objects in Schema PLM

After importing the Agile e6.1.2.2 dump some objects might be invalid. This can be verified by the following way:

1. Open a sqlplus session and connect as 'sys' – as sysdba.

```
sqlplus sys/<sys password> as sysdba
SQL> select count(*) from dba_objects where status <> 'VALID' and
owner='PLM';
```

If the returned message is 'no rows selected', then you have no invalid objects.

2. Otherwise, execute the script utlrp.sql.– the script will compile all invalid objects in the database.

```
SQL> @?/rdbms/admin/utlrp.sql
```

3. Verify once again that there are no invalid objects:

```
SQL> select count(*) from dba_objects where status <> 'VALID' and
owner='PLM';
```

Gather Statistics

In Oracle 11gR2 the default value for the OPTIMIZER_MODE initialization parameter is ALL_ROWS, which means that a cost-based approach will be used for all SQL statements. Oracle highly recommends creating statistics in order to avoid performance losses. This should be done after the dump import and has to be repeated periodically.

- Calculate statistics of all tables and indexes in db schema PLM:

```
SQL> EXECUTE DBMS_STATS.GATHER_SCHEMA_STATS('PLM', CASCADE =>true);
```

- Calculate statistics of all tables and indexes in db schema PLM with 5% of the rows:

```
SQL> EXECUTE DBMS_STATS.GATHER_SCHEMA_STATS('PLM', estimate_percent =>
5, CASCADE =>true);
```

- Drop all statistics of PLM schema objects. Optimizer is now running in rule mode.

```
SQL> EXECUTE DBMS_STATS.DELETE_SCHEMA_STATS('PLM');
```

For all schema objects, statistics have to be available to support the cost based optimizer. If tables and indexes are modified or created, statistics must be established.

- Calculate statistics on all tables without statistics and their indexes in db schema PLM with 5% of the rows:

```
SQL> EXECUTE DBMS_STATS.GATHER_SCHEMA_STATS(ownname => 'PLM',options  
=> 'GATHER EMPTY', estimate_percent => 5, CASCADE =>true);
```

- Calculate statistics on tables t_master_dat and their indexes in db schema PLM with 10% of the rows:

```
SQL> exec sys.dbms_stats.gather_table_stats(ownname=> 'PLM', tablename=>  
'T_MASTER_DAT', partname=> NULL , estimate_percent=> 10 ,cascade=>  
true);
```

Note Statistic information can be viewed, e.g. in user_tables and user_indexes. These views provide information about average width of the row and number of rows.

Uninstalling the Oracle 11gR2 for Windows

It is not possible to uninstall the Oracle 11gR2 database with the Oracle Universal Installer shipped with 11gR1 or an earlier version.

Oracle 11gR2 comes with a de-installation utility. If you want to uninstall Oracle 11gR2, start the script deinstall.bat in the directory %ORACLE_HOME\deinstall. The script may need to be run as Administrator.

```

C:\Windows\System32\cmd.exe
Checking for required files and bootstrapping ...
Please wait ...
14 File(s) copied
610 File(s) copied
    1 file(s) copied.
    1 file(s) copied.
Location of logs C:\Program Files\Oracle\Inventory\logs\
##### ORACLE DEINSTALL & DECONFIG TOOL START #####

##### CHECK OPERATION START #####
Install check configuration START

Checking for existence of the Oracle home location D:\ora\product\11.2
Oracle Home type selected for de-install is: SIDB
Oracle Base selected for de-install is: D:\ora
Checking for existence of central inventory location C:\Program Files\Oracle\Inventory
Install check configuration END

Checking Windows and .NET products configuration START

The following Windows and .NET products will be deconfigured from the Oracle home : asp.net,ode.net,odp.net,ntoledb,oramts
Checking Windows and .NET products configuration END

Network Configuration check config START
Network de-configuration trace file location: C:\Program Files\Oracle\Inventory\logs\netdc_check6549857473081939552.log
Specify all Single Instance listeners that are to be de-configured [LISTENER]:_

```

4. Specify all single instance listeners that are to be de-configured as well as database names that are configured in this Oracle home. Finally, confirm the deinstallation with 'y'.

The \$ORACLE_HOME directory will be deleted after de-installation.

5. If you have an improper Oracle installation, a second installation will fail. You have to uninstall Oracle and then try from the beginning.

Problems During Database Creation

When having problems with the database creation, check the following:

- Database creation logs: %ORACLE_BASE%\cfgtools\dbca\- Instance Parameter file: %ORACLE_BASE%\admin\\pfile\init.ora

- Instance SPFILE: %ORACLE_HOME%\dbs\spfile<db name>.ora
- Database Diagnostics: %ORACLE_BASE%\diag\rdbms\<db name>\<db name>
- Network configuration: %ORACLE_HOME%\network\admin*.ora