Oracle® Agile Engineering Data Management

Installation Manual for Oracle 11g on Windows for Agile e6.1.1

Part No. E15610-01

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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) 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).

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

TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, 7 days a week. For TTY support, call 800.446.2398. Outside the United States, call +1.407.458.2479.

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)

Oracle Training Aids

Go to the Oracle University Web page (http://www.oracle.com/education/chooser/selectcountry_new.html) for more information on Agile Training offerings.

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.

Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Chapter 1

Introduction

This guide describes how to install Oracle 11g and adapt the Oracle database for the use with Agile e6.1.1, running under Windows 2000/XP/2003.

Where to Go for More Information

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

http://download.oracle.com/docs/cd/B28359_01/install.111/b32006/toc.htm

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	Double the amount of RAM
Disk space for software files	8 GB (8388608 KB). 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 (x86), AMD64, and Intel EM64T
Operating system	Microsoft Windows Server 2003 32 or 64 bit. Microsoft Windows Server 2008 64 bit. Note Microsoft Windows Server 2003 only If this machine will be used for Oracle Database installation/database creation and applications will run on the same machine, the following processor is only supported: Intel (x86).

Chapter 3

Prepare the System

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

- E:\
- F:\
- H:\

The drive letters E:, F:, H: are just examples. It is up to you. Subdirectories will be created later in these directories by database creation (see Chapter 4).

Download Oracle Installation Media

Microsoft Windows Server 2008

1. Download and uncompress the Oracle Database 11g Release 1 (11.1.0.7.0) for Microsoft Windows Server 2008 (part 1 and 2), 64-bit from Oracle eDelivery web site.

   Packages could be found under product pack 'Oracle® Database 11g Release 1 (11.1.0.6.0) Media Pack for Microsoft Windows x64 (64-bit)'

Microsoft Windows Server 2003

1. Download and uncompress the Oracle Database 11g Release 1 (11.1.0.6.0) for Microsoft Windows (part1 and 2) 32- or 64-bit from Oracle eDelivery web site.
2. Download and uncompress the Oracle® Database 11g Release 1 (11.1.0.7.0) Patch Set for Agile Engineering Data Management (Release e6.1.1) for Microsoft Windows for relevant platform (32- or 64-bit)

Chapter 4

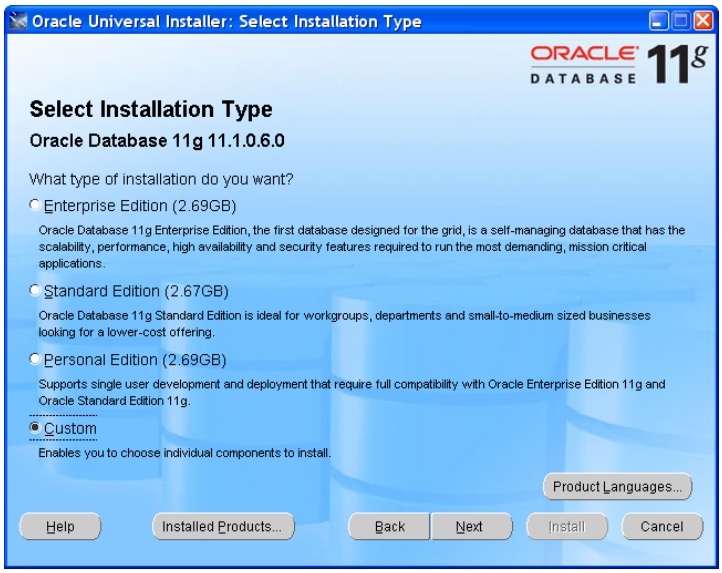
Installing Oracle 11g

This chapter provides instructions for installing the Oracle 11g Database for use with Agile e6.1.

Installation steps for Oracle for Microsoft Windows 2003 and Microsoft Windows 2008 are similar, just the database version is 11.1.0.6 for Microsoft Windows 2003 and 11.1.0.7 for Microsoft Windows 2008.

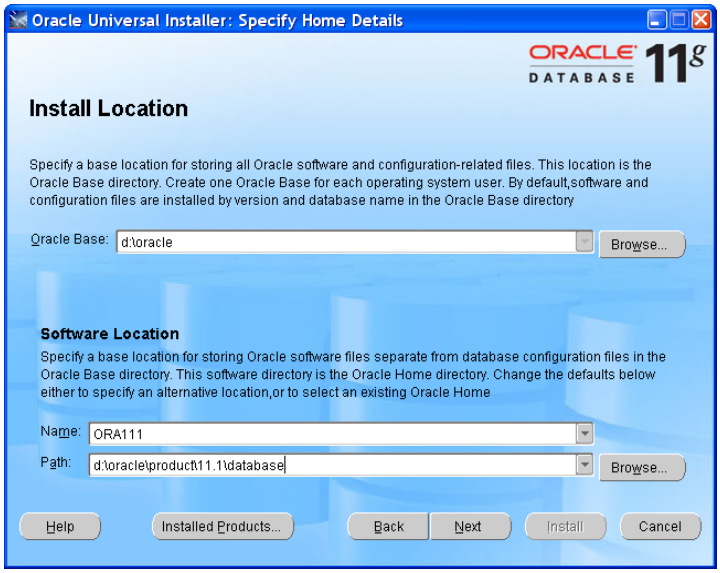
Start the Oracle Database 11g Installation

1. Start setup.exe from the downloaded Oracle Installation Media.
2. Select Advanced Installation.
3. Click Next to continue.
4. Choose the Custom installation and click Next.

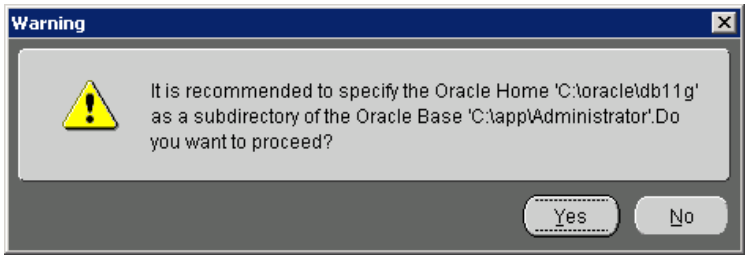


The window for defining the ORACLE_HOME name and path is opened.

5. Enter the full path of your Oracle home directory and click Next.



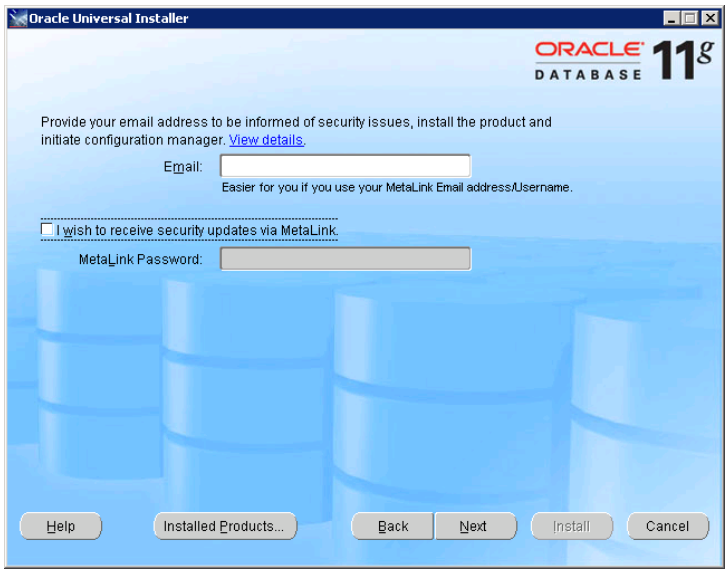
If the Oracle Home is not a subdirectory of the Oracle Base directory, you will get the warning message like



It is not critical if you ignore this warning. But if possible, specify Oracle Home as a subdirectory of Oracle Base.

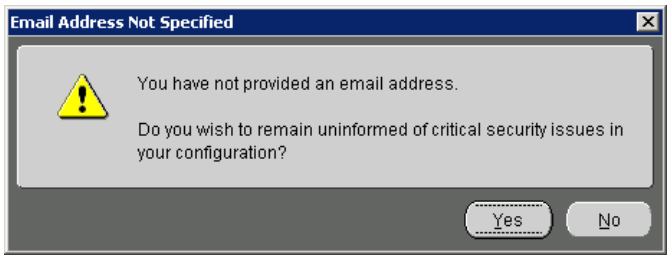
6. Only for installation on Windows 2008 (by installation on Windows 2003 this step is performed by patch 11.1.0.7 installation).

   Provide email and Metalink password if you like to be informed of security issues and to receive security update via Metalink (optional fields, could be left blank). This option can be configured later if needed. Click Next to continue.

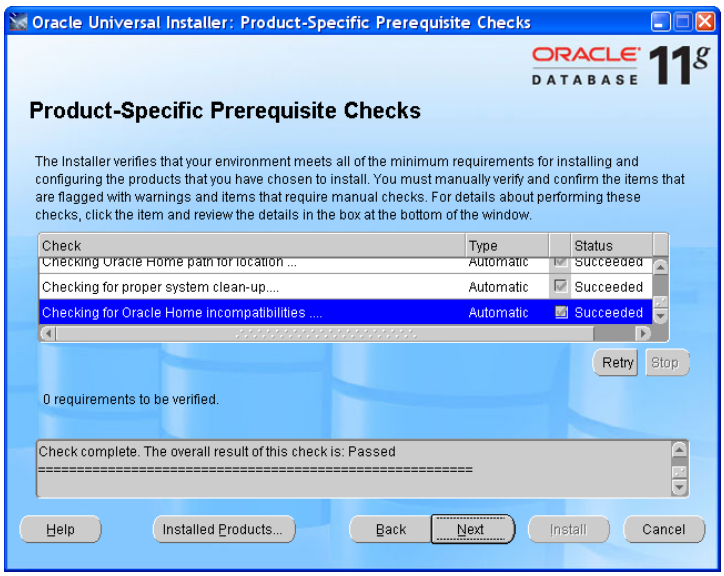


7. Only for installation on Windows 2008 (by installation on Windows 2003 this step is performed by patch 11.1.0.7 installation).

   If the email and password are not provided, you will get the warning message. You can ignore it by clicking Yes.



8. Oracle Universal Installer (OUI) performs prerequisite checks.

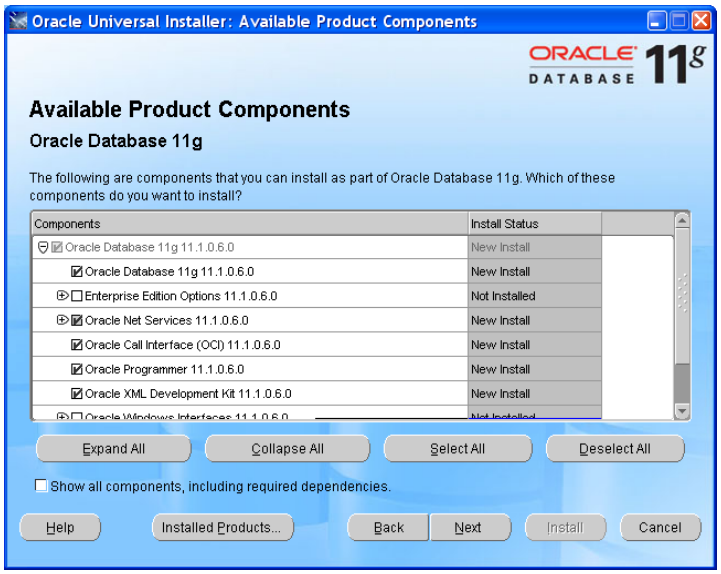


The Installer verifies that your environment meets all of the minimum requirements for 11g installing and configuring. The overall result of the check must be 'Passed'. If some checks have failed, cancel the installation and verify once again if your system meets the hardware and software requirements. Then start the installation again.

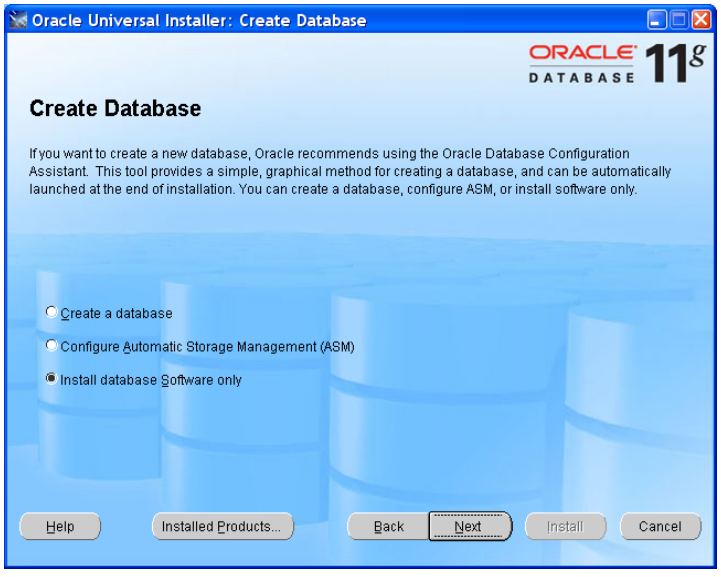
9. Click Next to proceed.

   The next window lets you select the components to be installed.

10. Select the components you want to install and click Next.

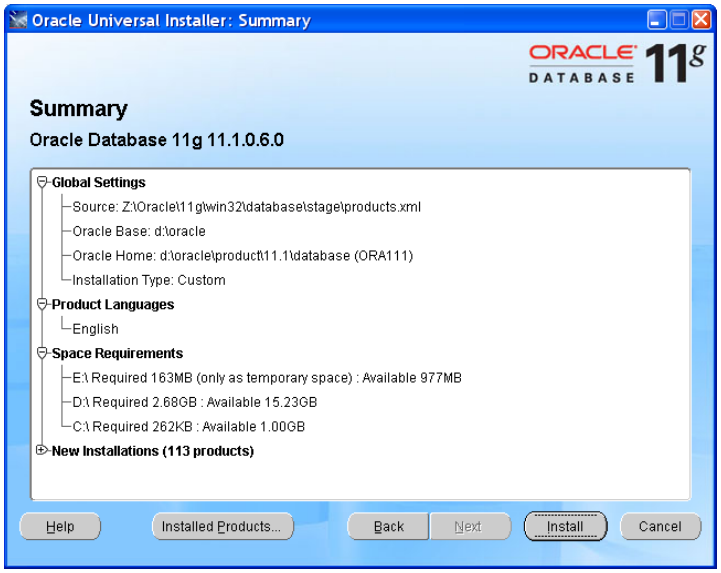


11. In the Create Database window, select Install database Software only as you will create the database later. Click Next.



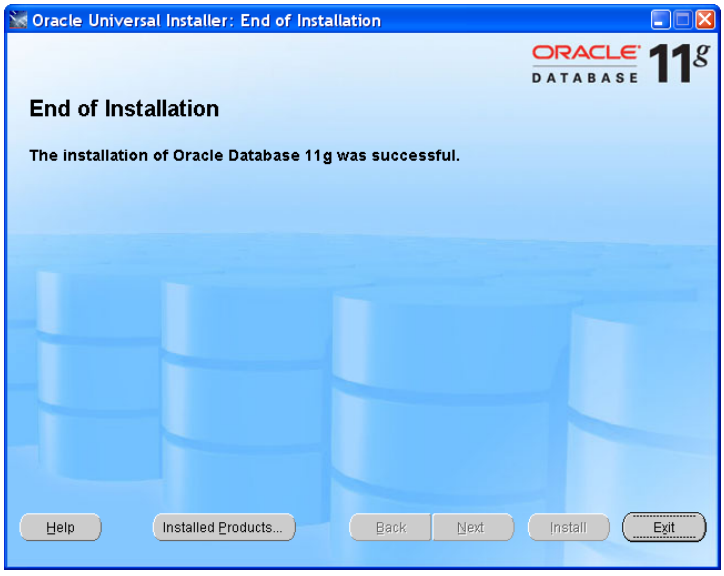
12. Review the options you have chosen in the Summary window.

    To make changes click Back.



13. If the options are correct, click Install to start the installation.

    Oracle 11g will be installed. This may take some time.



14. To leave the Oracle Installer click Exit.

Installing Patch 11.1.0.7

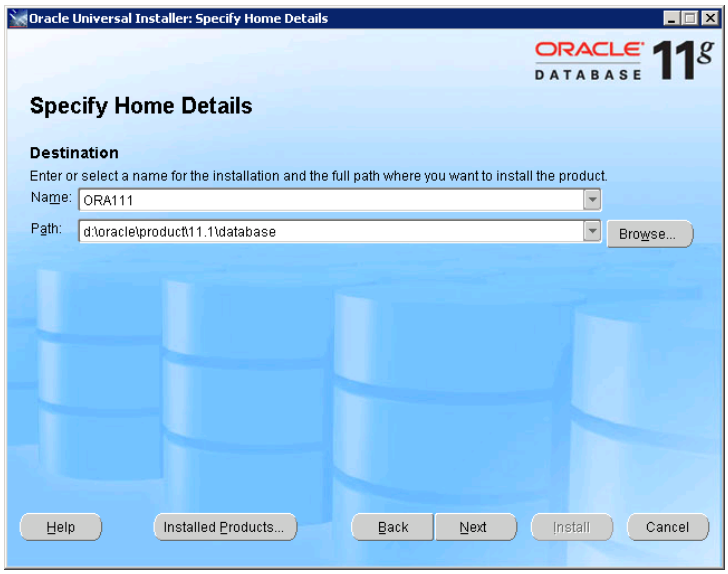
If you are installing Oracle Database 11g on Windows Server 2008, you have to skip 11.1.0.7 patch installation – installed version is 11.1.0.7 and no need patch to be installed.

1. Download and uncompress the Oracle® Database 11g Release 1 (11.1.0.7.0) Patch Set for Agile Engineering Data Management (Release e6.1.1) for Microsoft Windows for relevant platform (32- or 64-bit) from Oracle eDelivery web site. The downloaded zip package contains the directory Agile_e611_db_patches_MSWIN (for 32-bit) or Agile_e611_db_patches_MSWIN64 (for 64-bit)

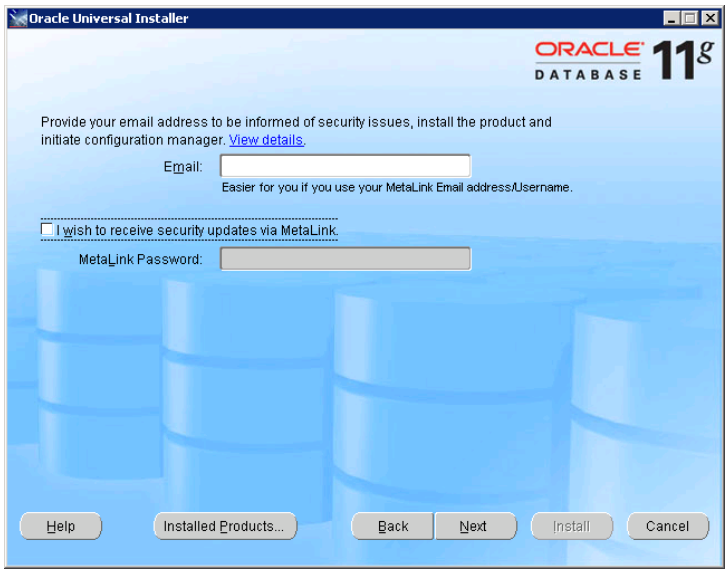
2. Start Oracle Universal Installer (setup.exe)
   Agile_e611_db_patches_MSWIN\database\11_1_0_7\setup.exe (for 32-bit)

   Agile_e611_db_patches_MSWIN64\database\11_1_0_7\setup.exe (for 64-bit)
3. Click Next when the Welcome screen appears.

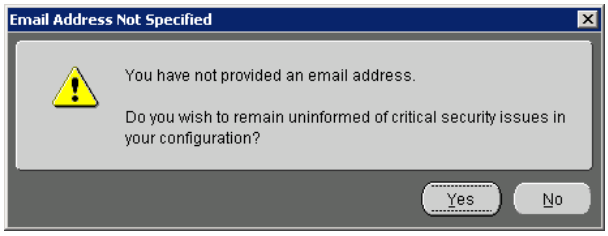
4. Select Oracle Home (where database was installed in the previous steps) name and path and click Next.
5. Select Oracle Home (where database was installed in the previous steps) name and path and click Next.



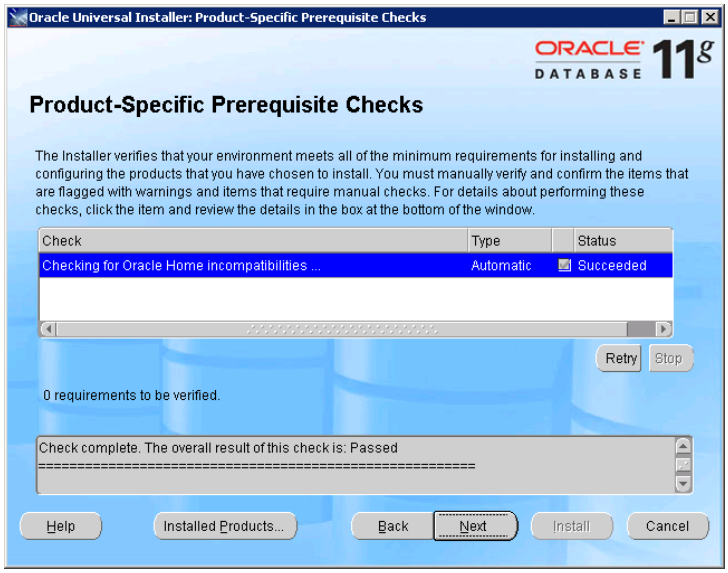
6. Provide email and Metalink password if you like to be informed of security issues and to receive security update via Metalink (optional fields, could be left blank). This option can be configured later if needed. Click Next to continue.



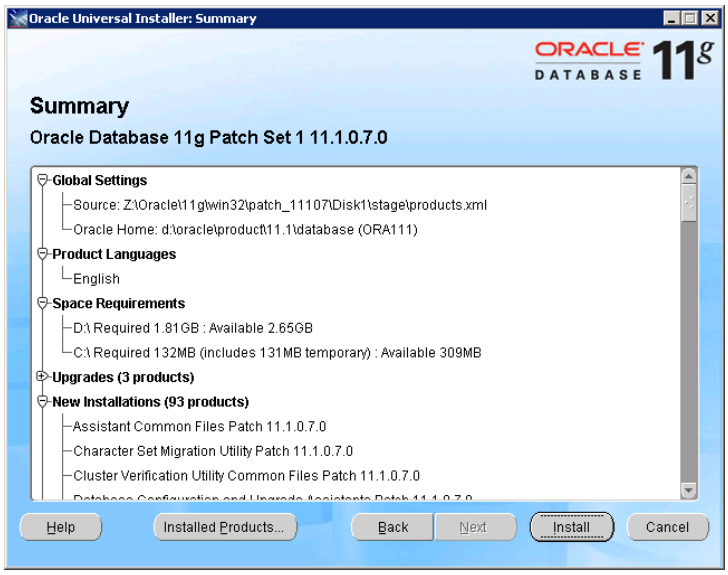
7. If the email and password are not provided, you will get the warning message. You can ignore it by clicking Yes.



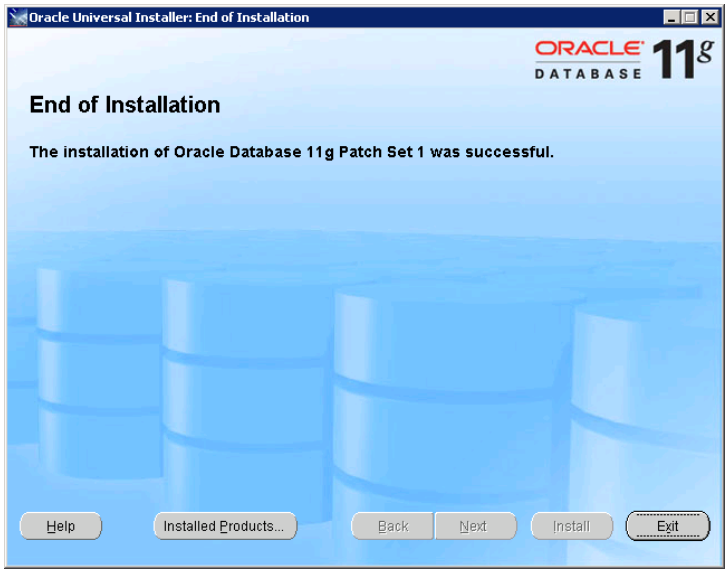
8. If the prerequisite checks passed, click Next. If any of checks has failed, see the details in the box below. Abort the installation by click on Cancel, ensure that all prerequisites are met and start the patch installation again.



9. The summary window appears. Click Next to begin the installation.



10. Click on Exit when installation is finished.



Database Creation

The database will be 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 Agile e6.1.1 database installations. If you install a RAC database, you only must use the RAC database templates (see the table below).

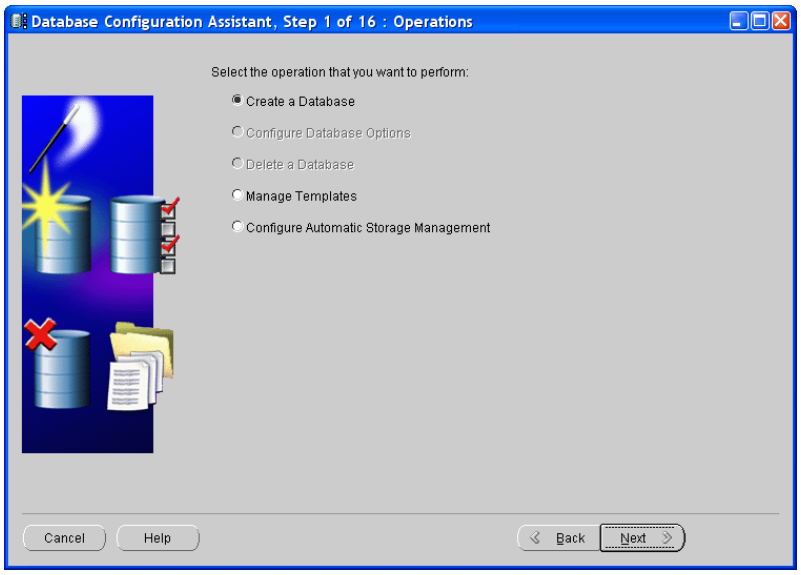
Template Name	Description
plm_demo	database designed for test installations no archiving
plm_prod_small	database designed for productive use max number of concurrent users: 40 archiving enabled
plm_prod_medium	database designed for productive use max number of concurrent users: 80 archiving enabled
plm_prod_large	database designed for productive use max number of concurrent users: 120 archiving enabled
plm_prod_Xlarge	database designed for productive use max number of concurrent users: 150 archiving enabled
RAC_plm_demo	RAC database only database designed for test installations no archiving
RAC_plm_prod_small	RAC database only database designed for productive use max number of concurrent users: 40 archiving enabled
RAC_plm_prod_medium	RAC database only database designed for productive use max number of concurrent users: 80 archiving enabled
RAC_plm_prod_large	RAC database only database designed for productive use max number of concurrent users: 120 archiving enabled
RAC_plm_prod_Xlarge	RAC database only database designed for productive use max number of concurrent users: 150 archiving enabled

Additional information on significant database parameters and settings of each template can be found in the Appendix A. Decide which template corresponds approximately to your needs. It is also possible to adapt any of the values during the database creation process.

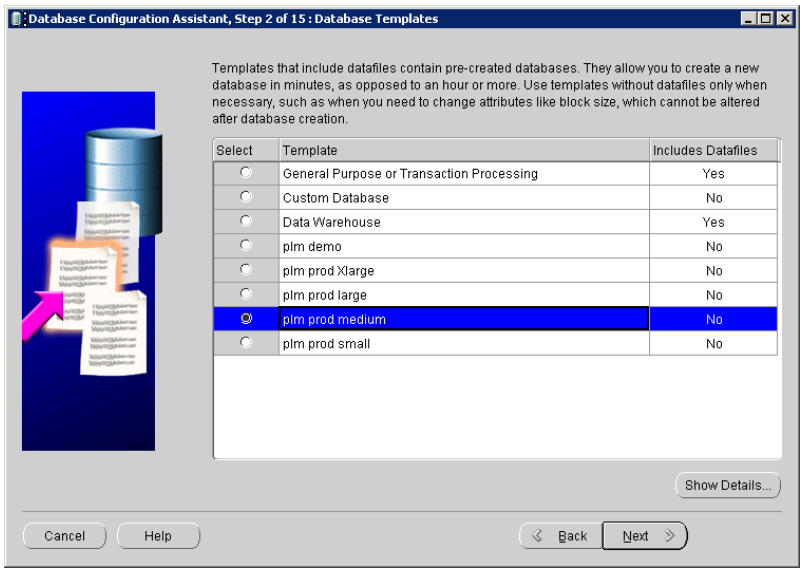
1. Refer to the downloaded media pack - Oracle Agile Engineering Data Management Application Release e6.1. All templates are in **addon/db/windows/templates** directory.
2. Copy the DBCA template file (e.g. plm_prod_medium.dbt) to %ORACLE_HOME%\assistants\dbca\templates directory.
3. Start the Oracle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

   Start > Programs >Oracle – ORA111 > Configuration and Migration Tool > Database Configuration Assistant.

   An introduction window is opened.
4. Click Next to start the database configuration.
5. Select Create a database and click Next.

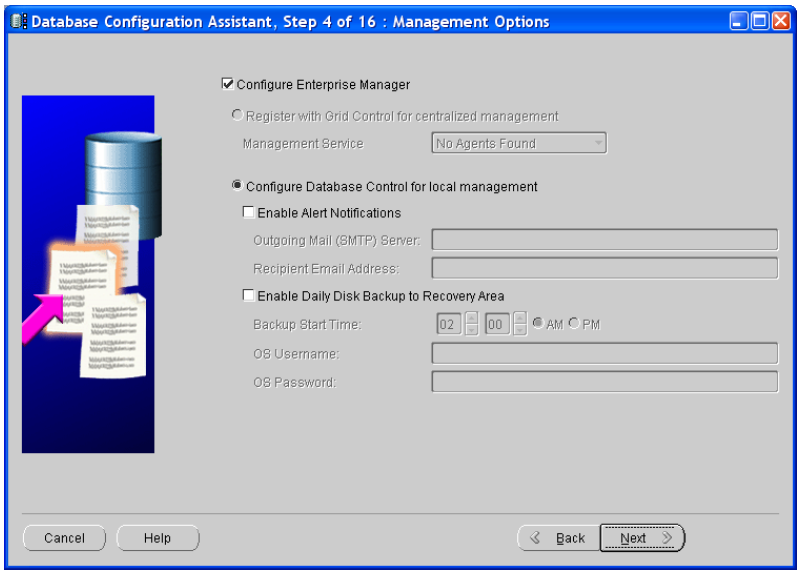


A list of different templates is provided. You should also see the template that you have chosen and copied in step 1.



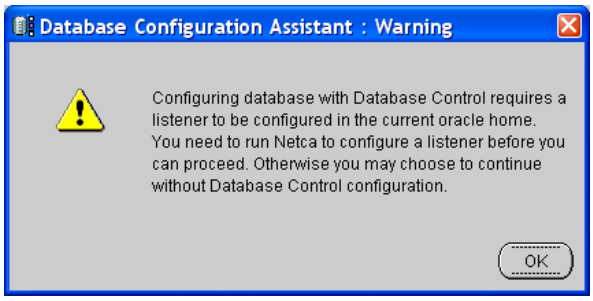
6. Select the template you want to use and click Next.
7. Enter the global database name and SID (default: plm61) and click Next.

   The next window provides the possibility to centrally manage Oracle databases using Oracle Enterprise Manager Database Control.
8. Select this option and click Next.



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

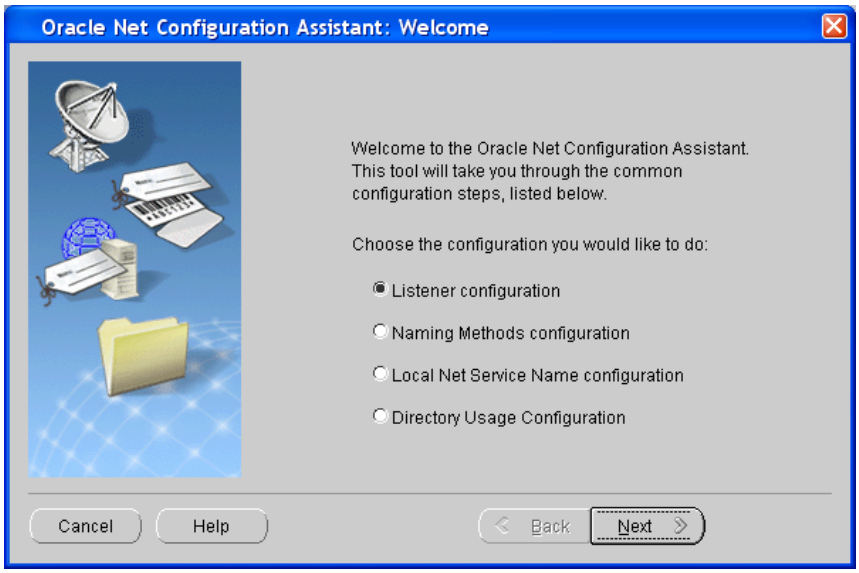
   If a configured listener for this Oracle Home already exists, this step will be skipped (no warning message appears) and by click on Next, you will see the screen from step 18. In this case skip the steps 9-17 and go to step 18.



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

    Start > Programs >Oracle – ORA111 > Configuration and Migration Tool > Net Configuration Assistant.

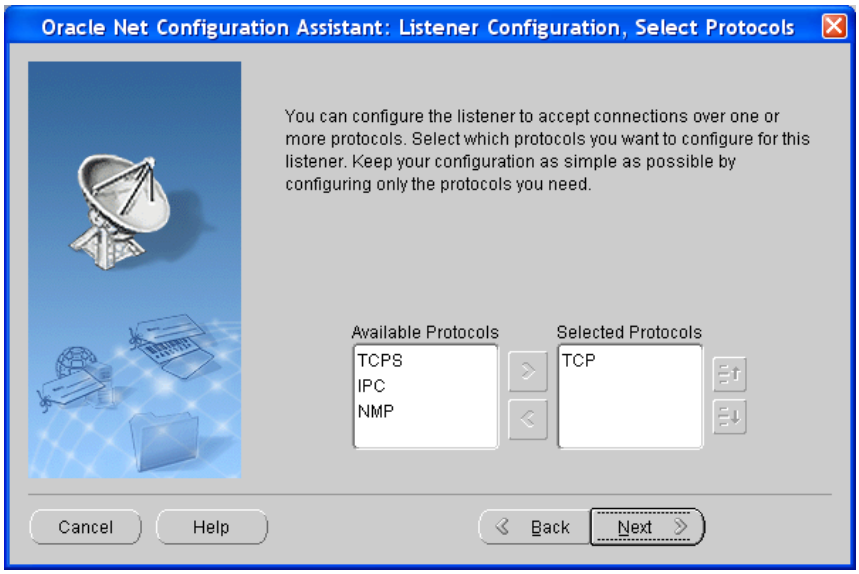
    An introduction window is opened.



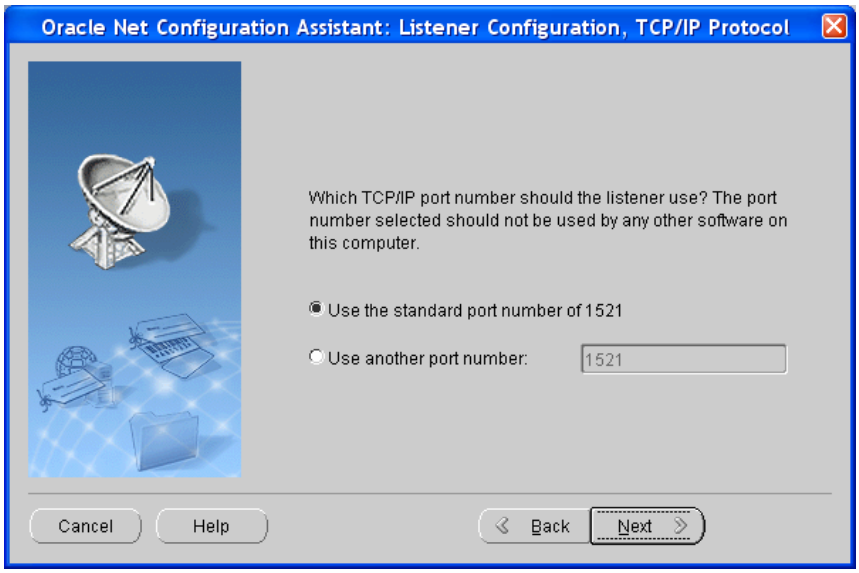
12. Select Listener configuration and click Next.

13. Select Add from the list and click Next.

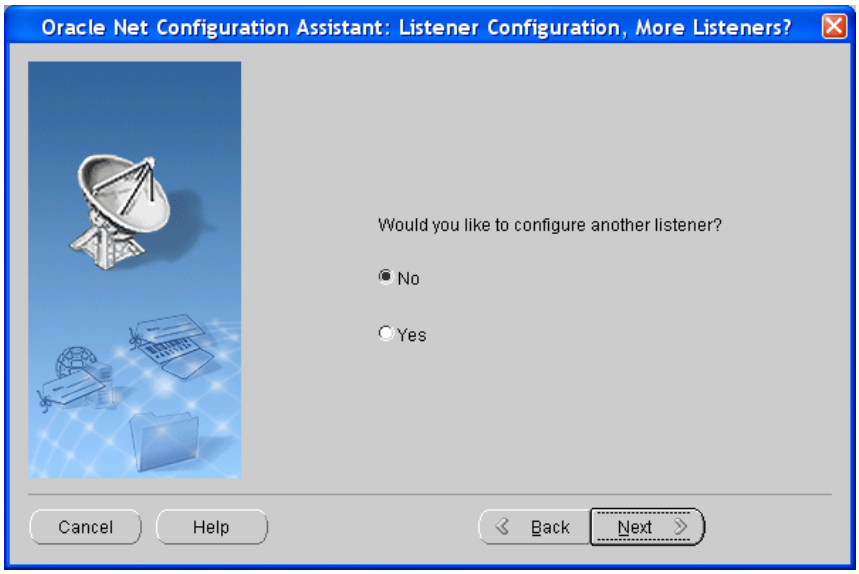
14. Choose name for the listener – LISTENER and click Next.



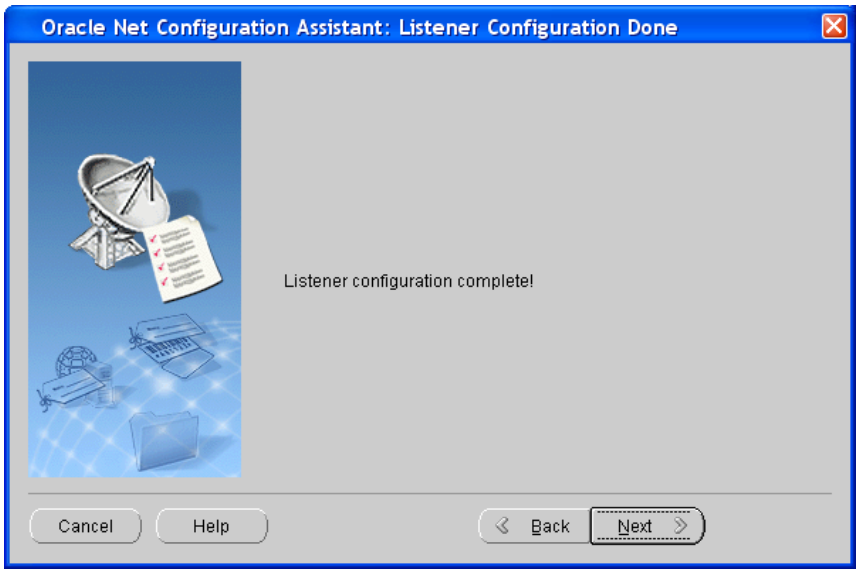
15. Select TCP from Available Protocols (selected by default) and click Next.



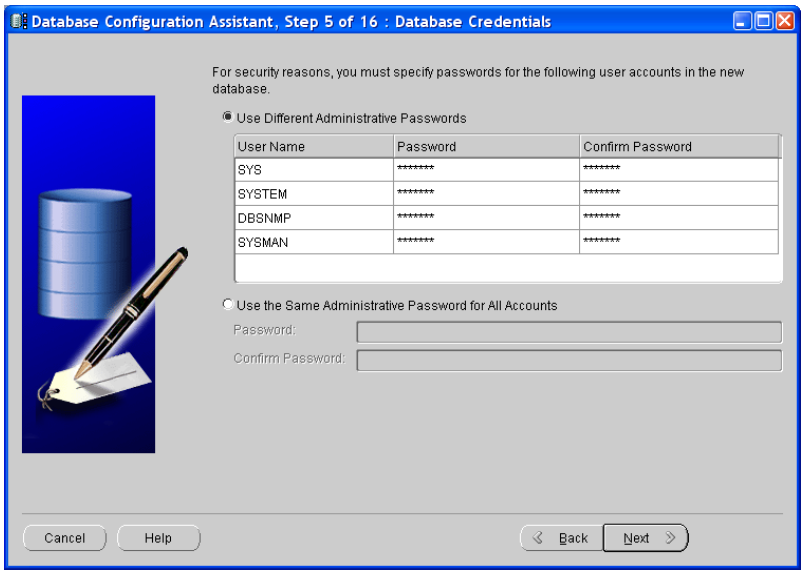
16. Select the standard port – 1521 – for listener and click Next.



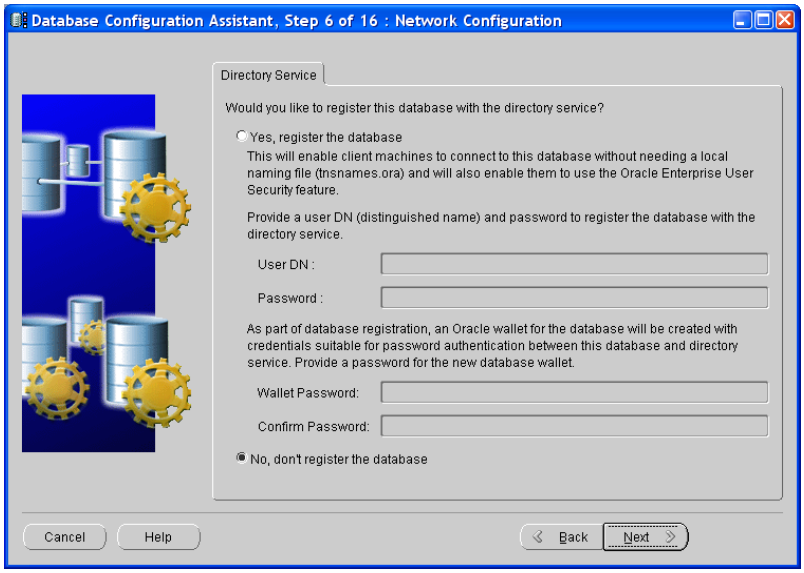
17. Select No to not configure another listener and click Next.



18. Click on Next and then Finish. The Listener configuration is completed.
19. Go back to the dbca and click Next.

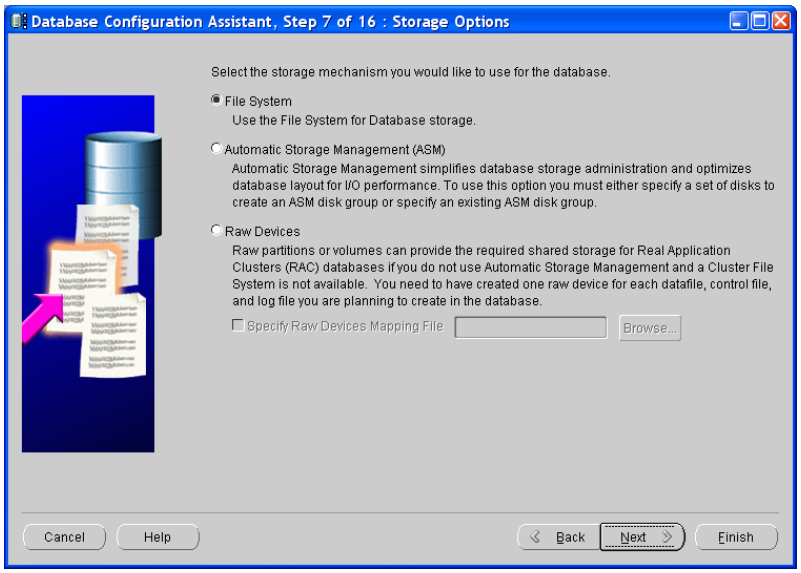


20. Enter passwords for SYS, SYSTEM, SYSMAN and DBSNMP. It is highly recommended to use different passwords for these accounts. Click Next.

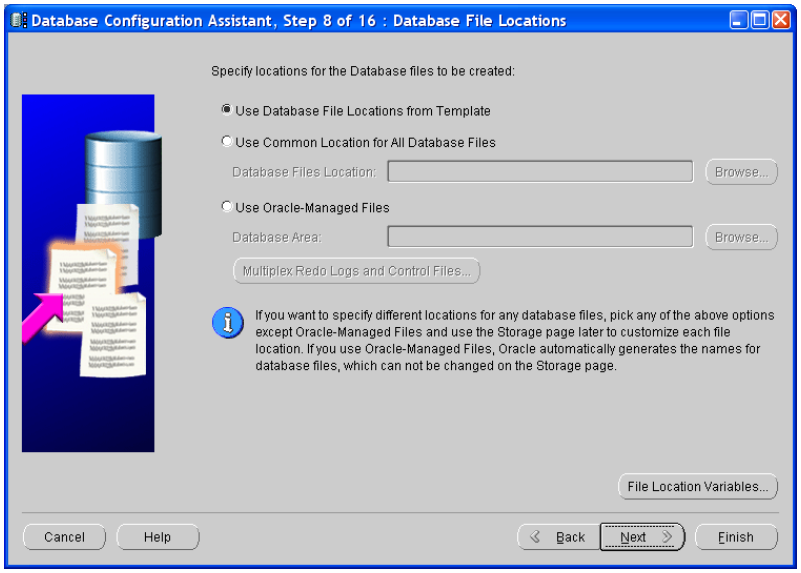


The next window allows registering your database with a directory service.

21. Select No, do not register the database and click Next.



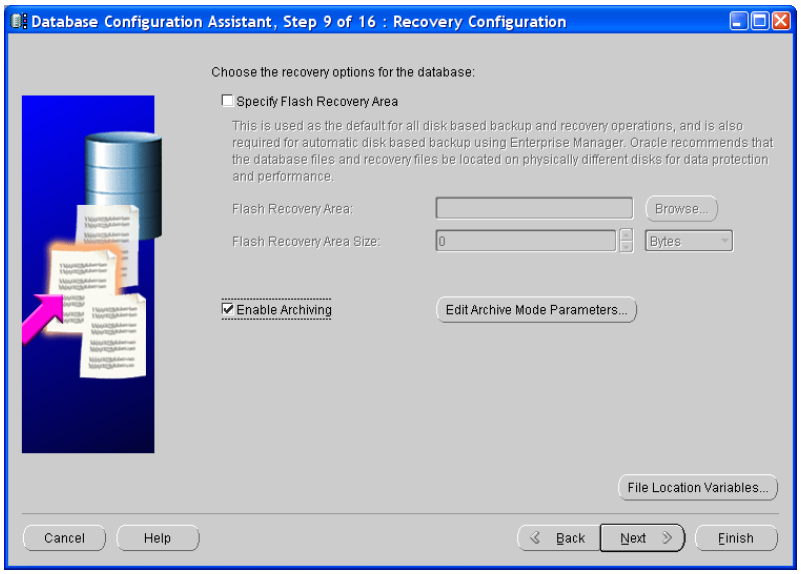
22. Select File System for database storage and click Next.
23. In the next window, choose Use Database File Locations from Template and click Next.



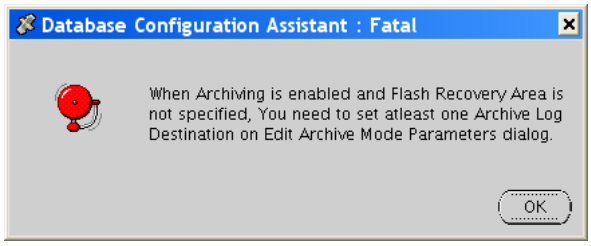
24. Deselect the option Specify Flash Recovery Area in the next window.

    Depending on your backup strategy and used template, archiving could be enabled. Click Next.

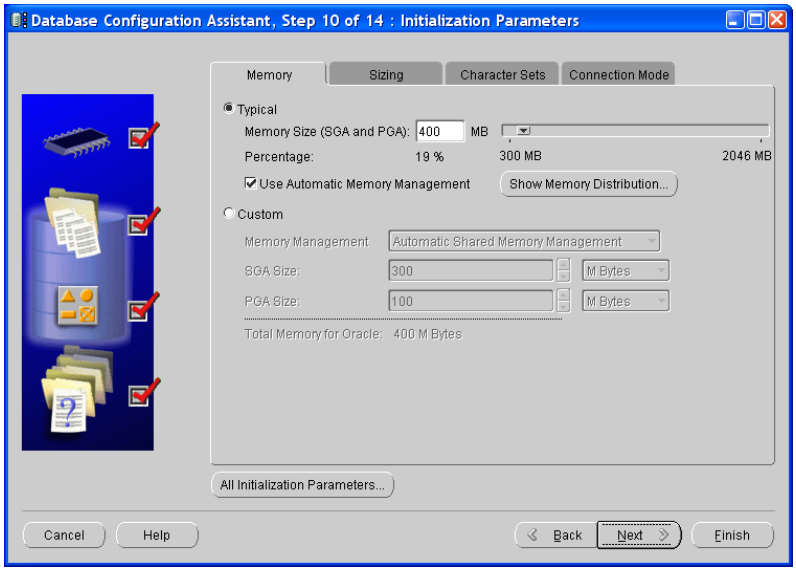
> **Note** For productive database it is highly recommended to archive the database. The destination of the archive directory can be specified by clicking on the Edit Archive Mode Parameters button.



If you have enabled archiving and not specified at least one Archive Log Destination, the following error message appears:



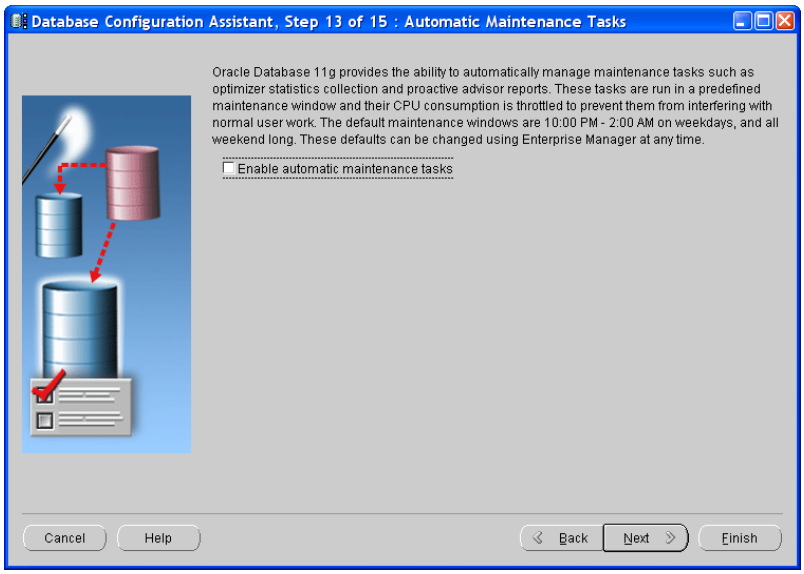
25. The next window provides database features as well as the possibility to run custom scripts after database creation. It is not recommended to change the settings provided by the template. Click Next.
26. The next window provides diverse database parameters. You can navigate to the setting of memory, character sets, database sizing, and connection mode. Usually all parameters are set by selected template and you don't need to change them, but experienced users could modify some parameters depending on the current case. Check if the connection mode is set to Dedicated Server Mode in the folder Connection Mode.
27. Click Next.



28. In the next window choose the option 'Revert to pre-11g default security settings' and ensure that both checkboxes under this option are activated. Click Next.

Note Database passwords case-sensitivity is disabled (set by the parameter **sec_case_sensitive_logon**). Do not enable it after database creation.

29. Uncheck the box Enable automatic maintenance tasks and click Next.



30. In the next window click File Location Variables.

    Enter values for the variables in the table. As value you should provide the directories created in Chapter 3 – in this example E:\, F:\, H:\. DBCA will create the subdirectory oradata\plm61 in these directories where the database data files will be created in. See the table for detailed information on predefined file destination variables.

Variable	Description
ORADATA1	Directory for data files for table spaces EDB, EDB_LOB, EDB_TMPIDX
ORADATA2	Directory for data files for table spaces EDB_IDX, EDB_TMP
ORADATA3	Directory for data files for temporary table space TEMP
ORADATA4	Directory for data files for UNDO table space

ORADATA5	Directory for data files for table spaces SYSTEM, TOOLS, USERS, SYSAUX
ORAARCH	Directory for Archive log files
REDO1	Directory for Redo log files
REDO2	Directory for Redo log files

If you have less than 8 disks (five for data files, two for redologs and one for archived redologs), follow the instructions below to place the data files/redologs/archived redologs.

- Number of disks: 1

  Disk1: ORADATA1, ORADATA2, ORADATA3, ORADATA4, ORADATA5, REDO1, REDO2, ORAARCH

- Number of disks: 2

  Disk1: ORADATA1, ORADATA4, ORADATA5, REDO1

  Disk2: ORADATA2, ORADATA3, ORAARCH, REDO2

- 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

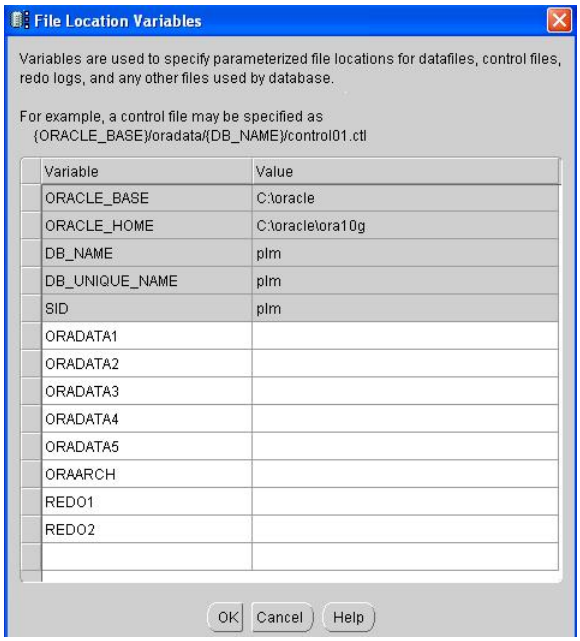
  Disk4: ORADATA4

  Disk5: ORADATA5

  Disk6: ORAARCH

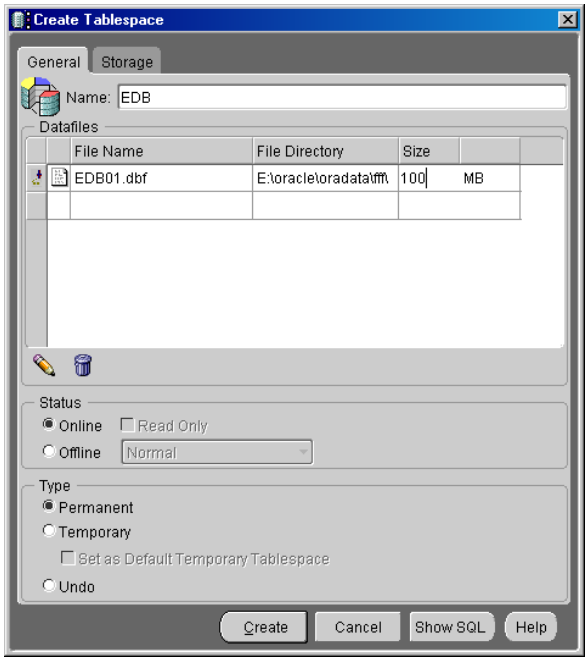
  Disk7: REDO1

  Disk8: REDO2



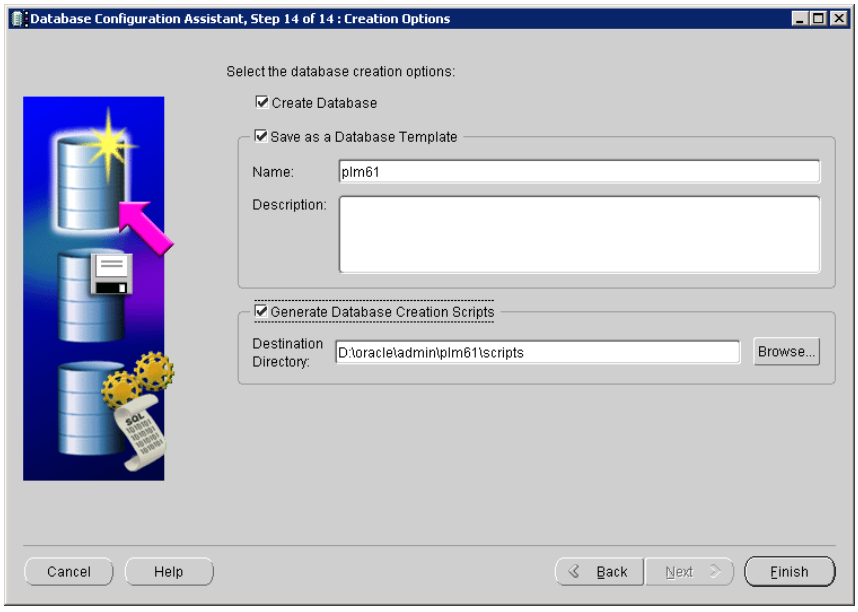
31. Click OK when you have finished.

    The storage parameters for control files, table spaces, data files, rollback segments, and redo log files can be reviewed and modified. Double-click an object in the left window section if you want to edit and modify the settings in the right window section. The required new table spaces can be created.



Note The predefined values are recommended by Agile according to the chosen kind of database installation.

32. When you have finished click Next.
33. Select Create Database to start the database creation immediately.



It is recommended to choose also the option Generate Database Creation Scripts and to define a destination directory (default: %ORACLE_BASE%\admin\plm61\scripts). Those scripts are useful for future reference or use.

34. Click Finish.

A summary of the database parameter is displayed.

35. Click Save as HTML file for future reference and click OK.

    The database creation process is started.

36. Click Exit to finish the process.

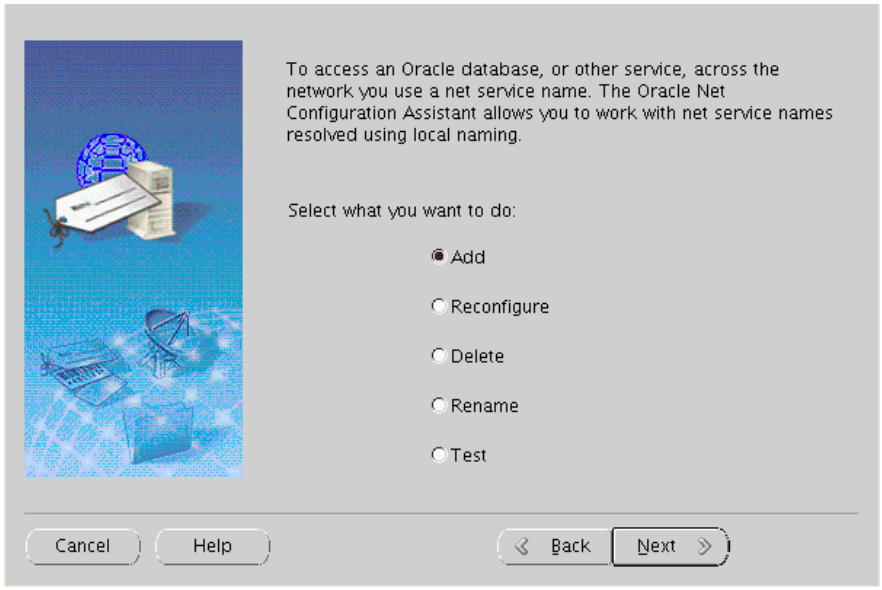
Configuring tnsnames.ora and sqlnet.ora

1. Start Oracle Net Services Configuration Tool.

   Start menu->Programs->Oracle-ORA111->Configuration and Migration Tools->Net Configuration Assistant

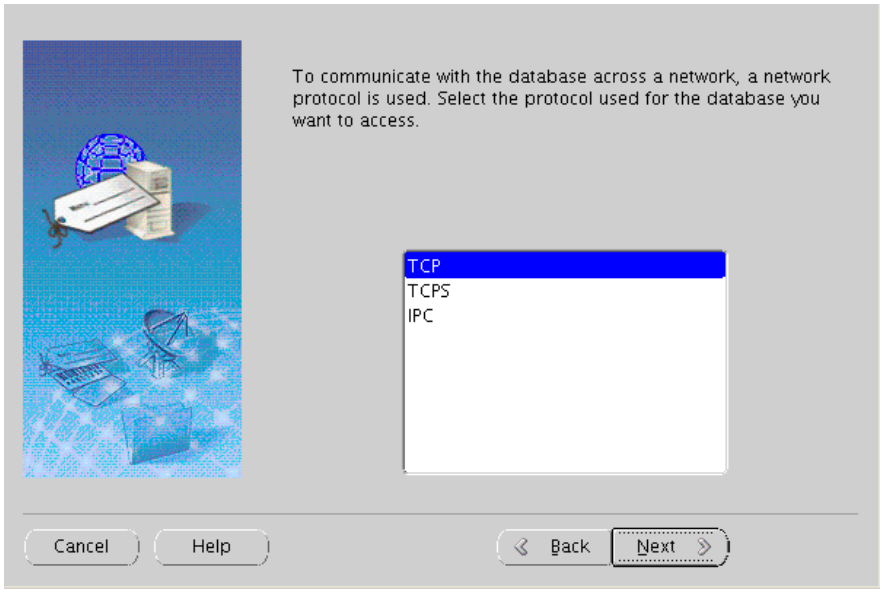
2. Select Local Net Service configuration. Click Next.

3. Select Add and click Next.

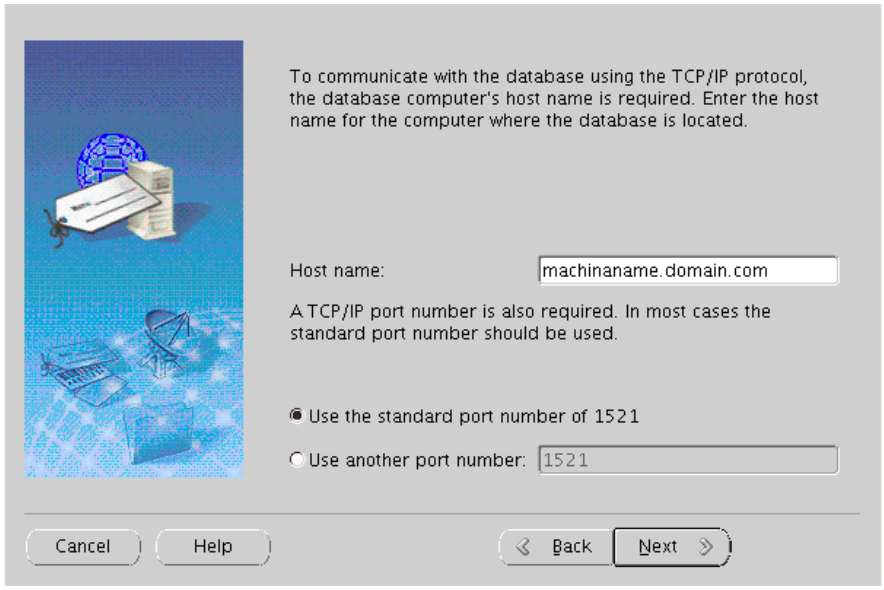


4. Enter the Service Name – plm61.domain.com, where <domain.com> is your domain name and click Next.

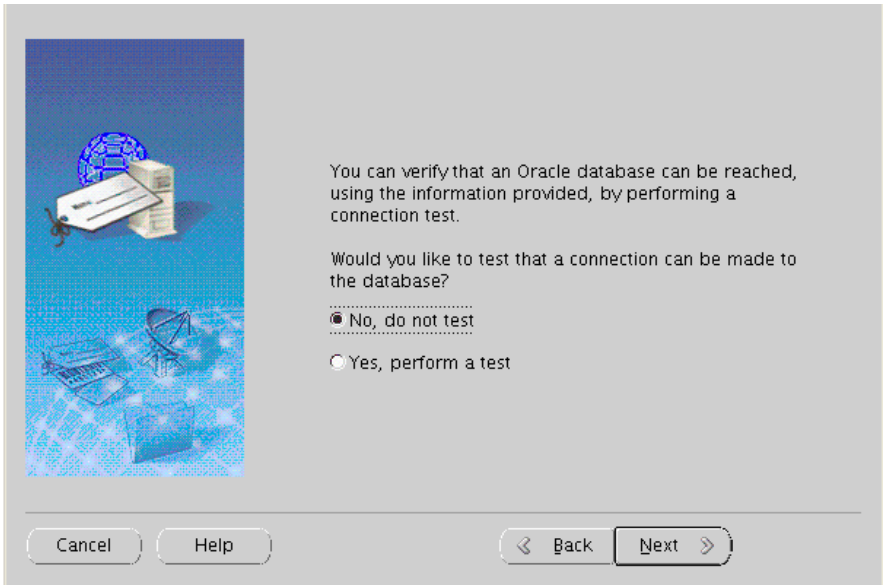
5. Select TCP protocol and click Next.



6. Enter the fully qualified machine name – where Oracle database is - and click Next.

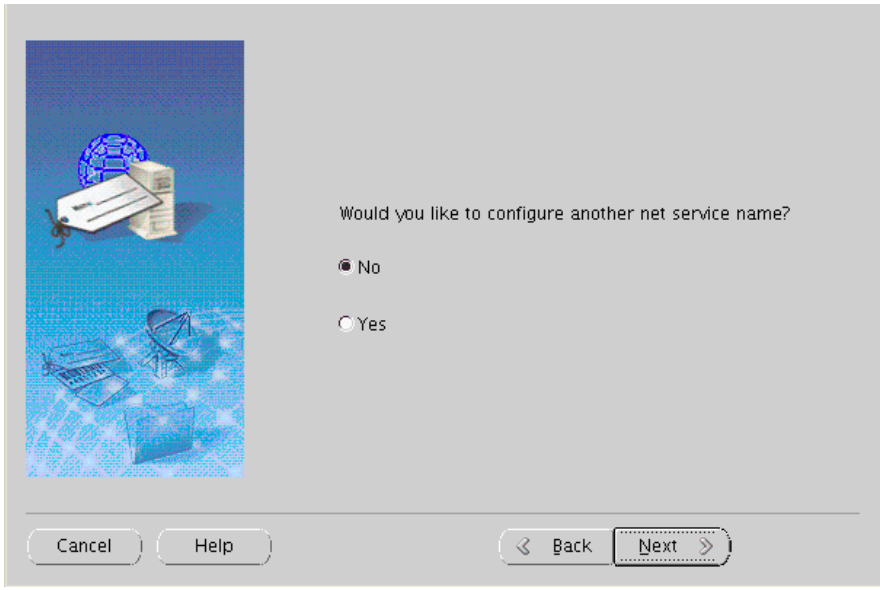


7. Select not to perform test and click on Next.

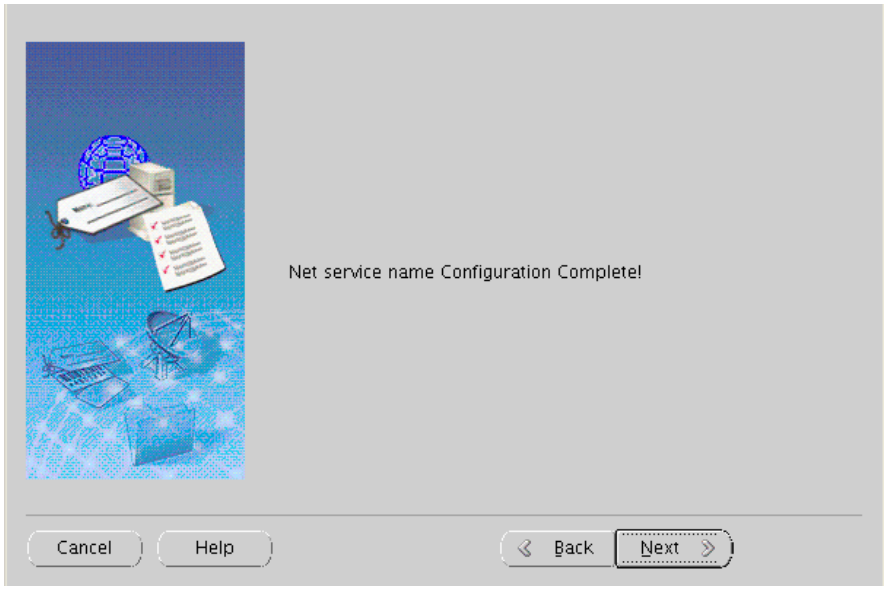


8. Finally, select the Net Service Name – plm61 and click Next.

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



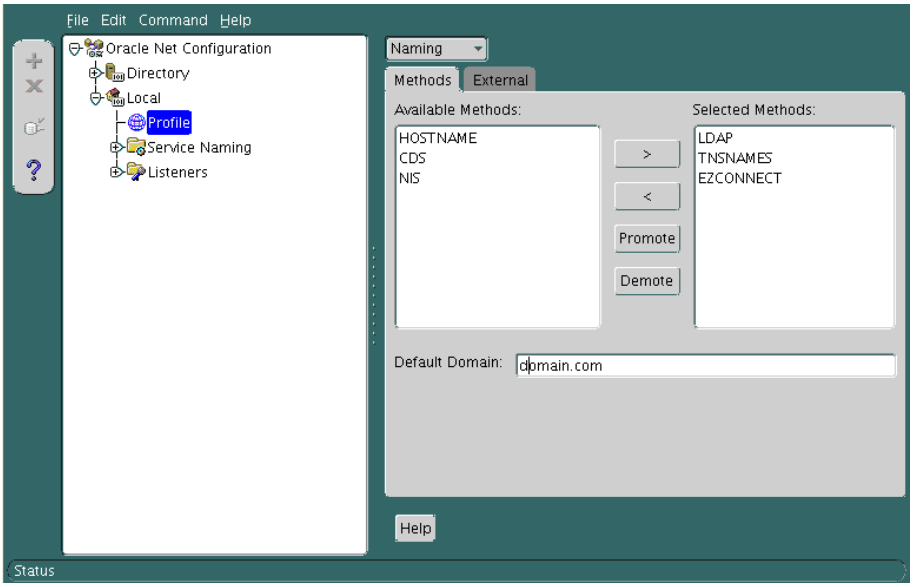
10. Net service name configuration complete. Click on Next and then on Finish to quit.



11. Start the Oracle Net Manager

    Start menu->Programs->Oracle-ORA111->Configuration and Migration Tools->Net Manager

12. Expand view for Local and click on Profile.



13. Enter your domain name in the field Default Domain.
14. Save the configuration by File->Save Network Configuration from the main menu and exit the Net Manager by click on File->Exit.
15. Test the database connection.

```
sqlplus system@plm61/<SYSTEM password>
```

Chapter 5

Modify the Oracle Database

Create a Database User and Role

You will need to create the Agile e6.1 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.

Using SQL to Create a Role

1. Check if the plm role exists – open sqlplus session, connect as 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;
```

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

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

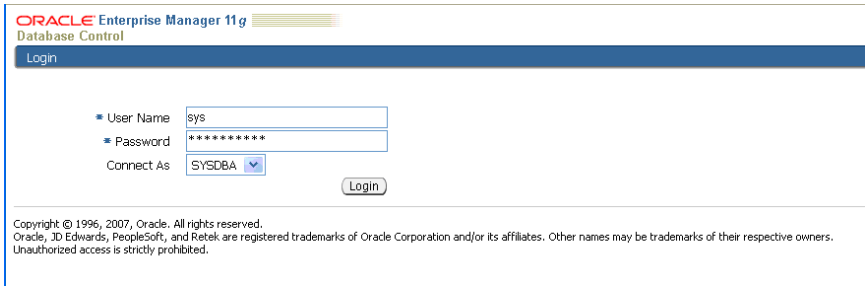
Username (e.g. PLM) and password have to be provided.

Using Enterprise Manager Database Control to Create a User

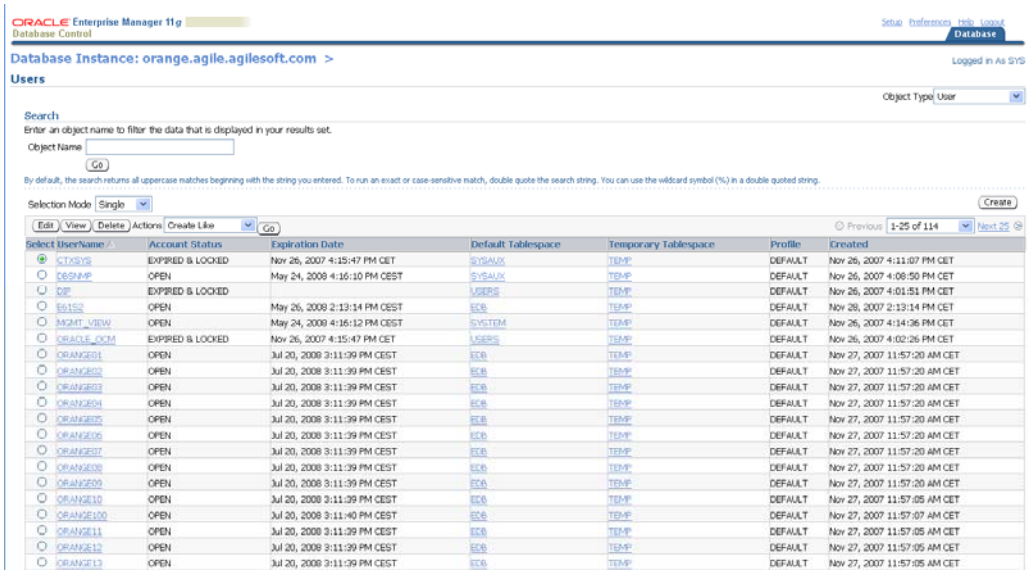
1. Start the Enterprise Manager Database Control.

   By default it can be invoked on https://localhost.localdomain:5501/em/console, but it can be configured manually to use another port.

2. Click on Login.



3. Click on 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

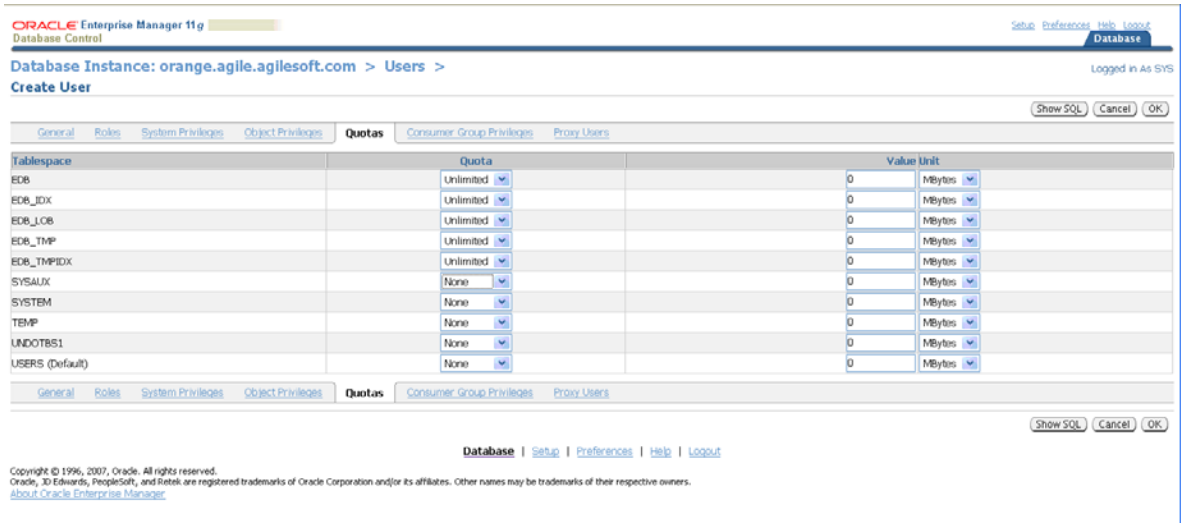
temporary table space.

6. In the Roles tab click Edit List.
7. Select role AGILE_E_ROLE from the list with available roles and click Move.

   The role is moved to the Selected Roles.
8. Click OK.

Role AGILE_E_ROLE should have been created in the previous step.

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



10. Click OK to finish the database user creation.

Import the Database Dump

Import the Agile e6.1 dump using the following commands, and then check the log file for errors. Make sure that a correct value is set for the environment variable NLS_LANG (value from the file csh_ORA11.1 - AMERICAN_AMERICA.WE8MSWIN1252).

```
imp plm/plm@plm61 file=plm61.dmp log=plm61.log buffer=500000 commit=y
statistics=none full=y
```

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

Create Directories for Oracle Data Pump Utility

1. Create directory object which will be used for 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 addon/db/sql directory

   ```
   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 on the second directory to user PLM.

Compile All Invalid Objects in Schema PLM

After importing the Agile e6.1 dump some objects might be invalid. This could be verified by the following way:

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

   ```
   sqlplus system/<system password>
   SQL>select * 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, you have to run the script compile_all.sql which is located in addon/db/sql directory.

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

   Note Parameter = SQL user; e.g. PLM. The parameter has to be entered in upper case only.
3. Verify once again that there are no invalid objects:

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

Gather Statistics

In Oracle 11g 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. Agile highly recommends creating statistics in order to avoid performance loss. This should be done after the dump import and has to be repeated periodically.

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

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

2. 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);
```

3. 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.

4. 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);
```

5. Calculate statistics on tables t_master_dat and their indexes in db schema PLM_ENTW with 10% of the rows:

```
SQL> exec sys.dbms_stats.gather_table_stats(ownname=> 'PLM_ENTW',
tabname=> '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 e.g. average width of the row and number of rows.

Uninstall Oracle for Windows

If you have an improper Oracle installation, a second installation will fail. You have to uninstall Oracle and then try from beginning. The automatic Oracle installation performed by Agile e6.1 or axalant setup is only possible if Oracle is not installed on the system.

1. If you want to uninstall Windows Service entries for databases, use oradim (`oradim -delete -SID plm61`)
2. Shutdown all Oracle Services.
3. Start Oracle Installer.
4. Select all packs except the Oracle Installer itself.
5. Press Remove.
6. Drop Oracle folders

   (Oracle Home: d:\oracle\product\11.1\database, Oracle Installer: C:\Program Files\Oracle)
7. Drop the registry leave HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE.
8. If Windows services still exists, drop the special registry sections in HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Oracle*.
9. Reboot the computer.

Oracle Installation/Database creation on Windows Failed

If the software is installed (d:\oracle\product\11.1\database*) and registry entries are created (HKEY_LOCAL_MACHINE\SOFTWARE\ORACLE), the creation of the database may fail due to the following reasons:

- Insufficient memory (Oracle parameters to high, small RAM size)
- Incorrect internal password
- No administrative rights on the machine
- Wrong path definition
- Not enough disk space for data files

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

- Database creation logs: %ORACLE_BASE%\cfgtools\dbca\plm61
- Instance Parameter file: %ORACLE_BASE%\admin\plm61\pfile\init.ora
- Instance SPFILE: %ORACLE_HOME%\database\spfileplm61.ora
- Diagnostics: %ORACLE_BASE%\diag\rdbms\plm61\plm61
- Network configuration: %ORACLE_HOME%\network\admin*.ora

Chapter 6

Appendix

The most significant parameters of the predefined Database Configuration Assistant templates are referenced in the following.

Template "plm_demo"

Parameter/Setting	Value
db_block_size	8 k
memory_target	400 MB
db_file_multiblock_read_count	8
open_cursors	600
processes	80
Table spaces	locally managed
EDB	500 MB
EDB_IDX	500 MB
EDB_LOB	150 MB
EDB_TMP	150 MB
EDB_TMP_IDX	150 MB
Redolog file size	5 MB
archiveLogMode	FALSE

Template "plm_prod_small" 40 Users Max

Parameter/Setting	Value
db_block_size	8 k
memory_target	600 MB
db_file_multiblock_read_count	8
open_cursors	600
processes	100
Table spaces	locally managed
EDB	2000 MB
EDB_IDX	2000 MB
EDB_LOB	500 MB
EDB_TMP	500 MB

EDB_TMP_IDX	500 MB
Redolog file size	10 MB
archiveLogMode	TRUE

Template "plm_prod_medium" 80 Users Max

Parameter/Setting	Value
db_block_size	8 k
memory_target	1050 MB
db_file_multiblock_read_count	8
open_cursors	600
processes	180
Table spaces	locally managed
EDB	5000 MB
EDB_IDX	5000 MB
EDB_LOB	1000 MB
EDB_TMP	1000 MB
EDB_TMP_IDX	1000 MB
Redolog file size	10 MB
archiveLogMode	TRUE

Template "plm_prod_large" 120 User Max

Parameter/Setting	Value
db_block_size	8 k
memory_target	1600 MB
db_file_multiblock_read_count	8
open_cursors	600
processes	260
Table spaces	locally managed
EDB	10000 MB
EDB_IDX	10000 MB
EDB_LOB	2000 MB
EDB_TMP	2000 MB
EDB_TMP_IDX	2000 MB
Redolog file size	10 MB
archiveLogMode	TRUE

Template "plm_prod_Xlarge" 150 Users and More

Parameter/Setting	Value
db_block_size	8 k
memory_target	2000 MB
db_file_multiblock_read_count	8
open_cursors	600
processes	320
Table spaces	locally managed
EDB	20000 MB
EDB_IDX	20000 MB
EDB_LOB	5000 MB
EDB_TMP	5000 MB
EDB_TMP_IDX	5000 MB
Redolog file size	10 MB
archiveLogMode	TRUE