ORACLE DATABASE CREATION : NON-RAC DATABASE INSTANCE

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INTRODUCTION

This part of the document will explain the procedure for creating non-RAC database instance. We are using Oracle ASM storage for storing all datafiles and then will convert this Non-RAC instance to RAC instance using Oracle rconfig utility.

Please Note that I am using single Oracle Home for both ASM and Database instance while in production environment, it is recommended to have separate Oracle Home for ASM as well as all other Database instances. This will allow to apply patches or any maintenance without affecting other application.

DATABASE CREATION INSTALLATION STEPS

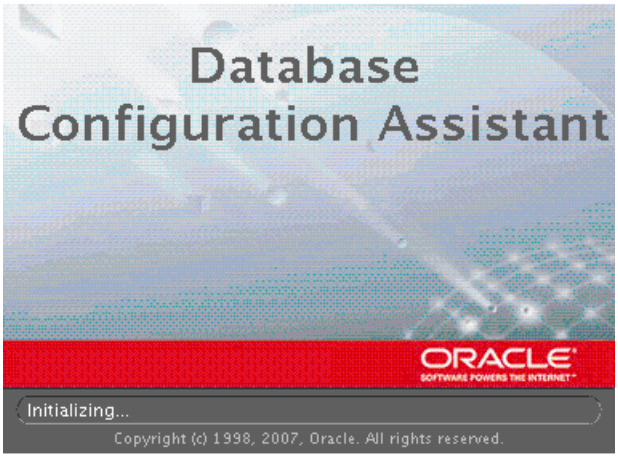
STEP 1: INVOKE DATABASE CONFIGURATION ASSISTANT AS AN ORACLE USER.

Make sure to set the following environmental variables

ORACLE_BASE=/home/oracle/app
ORACLE_HOME=$ORACLE_BASE/product/11.1/db_1
ORA_CRS_HOME=/home/oracle/crs/product/11.1/crs_1
LD_LIBRARY_PATH=$ORACLE_HOME/lib
TNS_ADMIN=$ORACLE_HOME/network/admin
PATH=$ORACLE_HOME/bin:$PATH
ORACLE_SID=test11g

Step 1 : Invoke Database Configuration Assistant

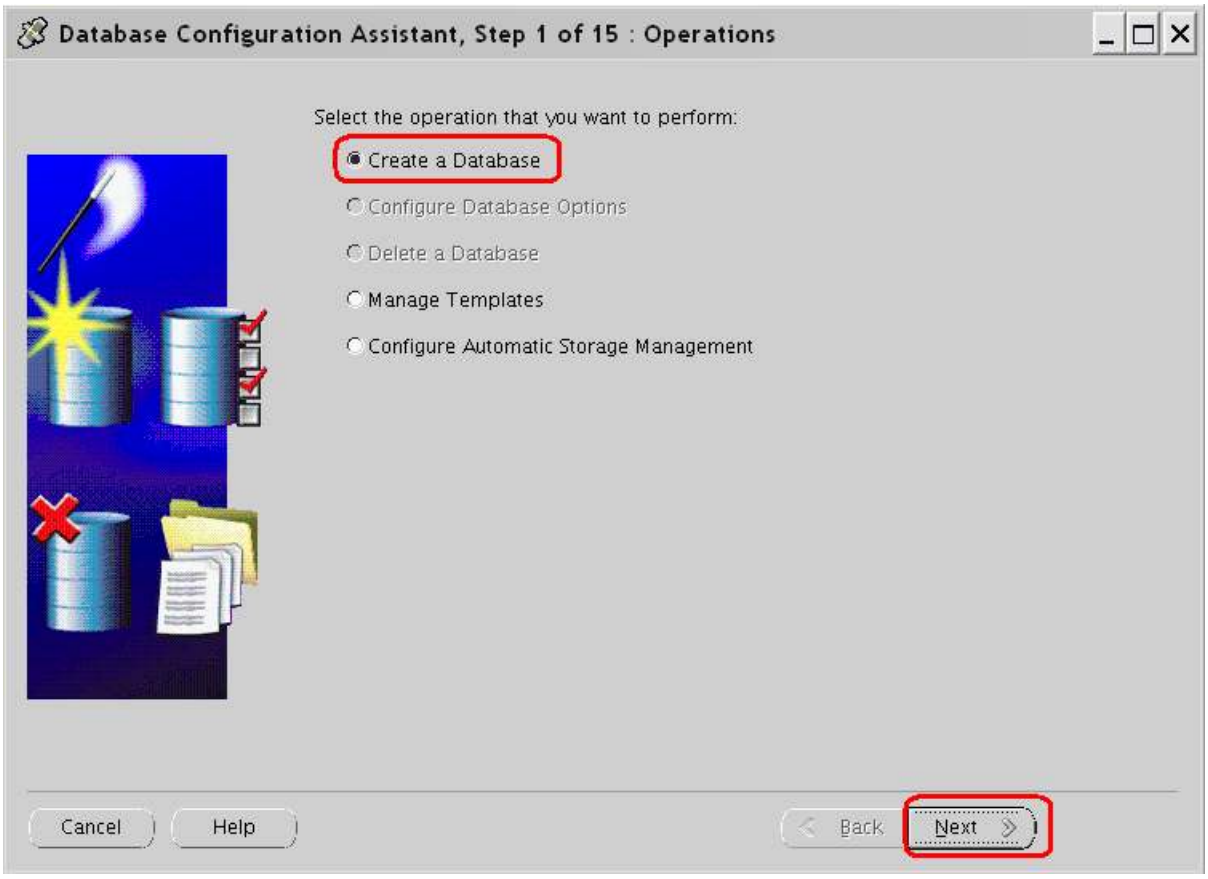
db02pn:"/home/oracle"> dbca



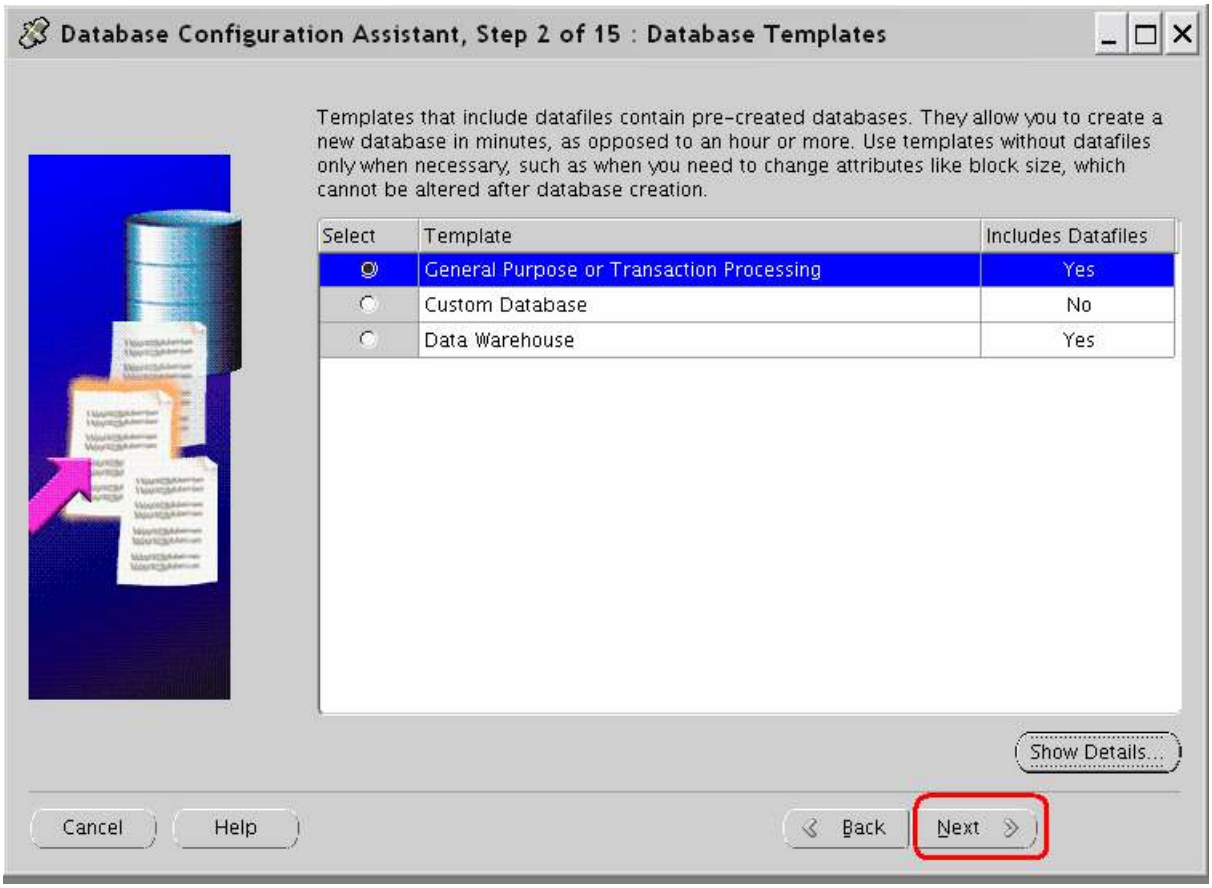
Step 2 : Select Oracle single Instance Database radio button

Click Next to Continue….

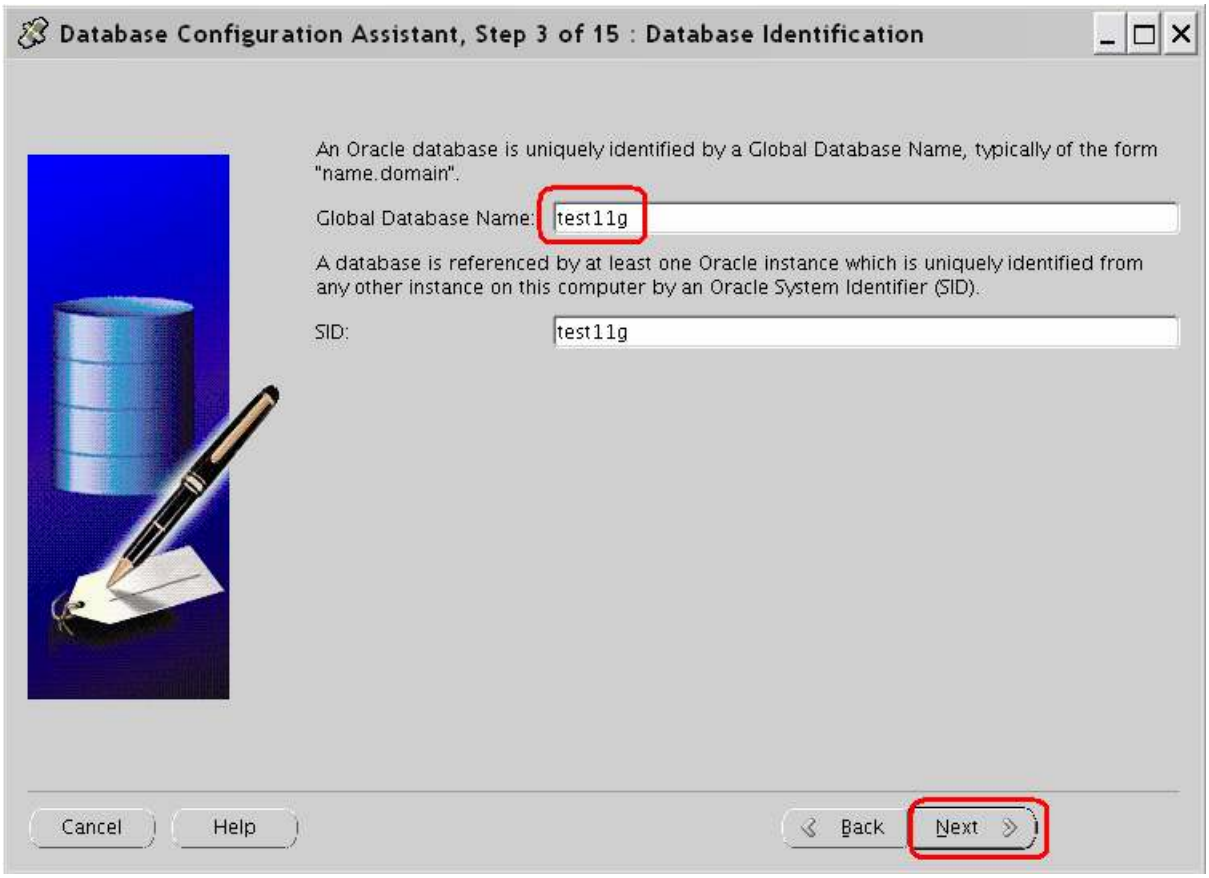
STEP 3 : CREATE A DATABASE. SELECT "CREATE A DATABASE" AND NEXT TO CONTINUE



STEP 4 : DATABASE TEMPLATE. SELECT THE TEMPLATE OF YOUR CHOICE AND CLICK NEXT TO CONTINUE

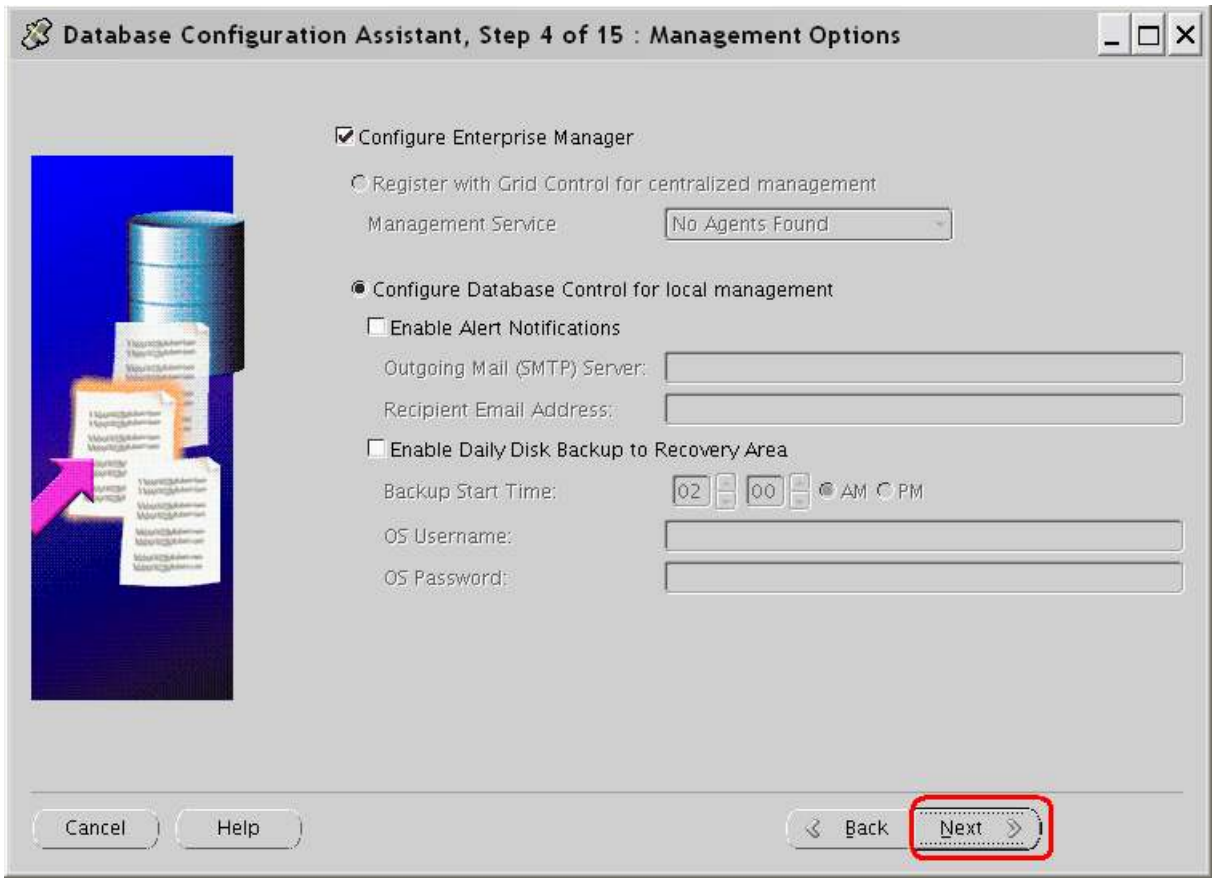


STEP 6 : DATABASE IDENTIFICATION. SPECIFY THE DATABASE NAME AND CLICK NEXT TO CONTINUE



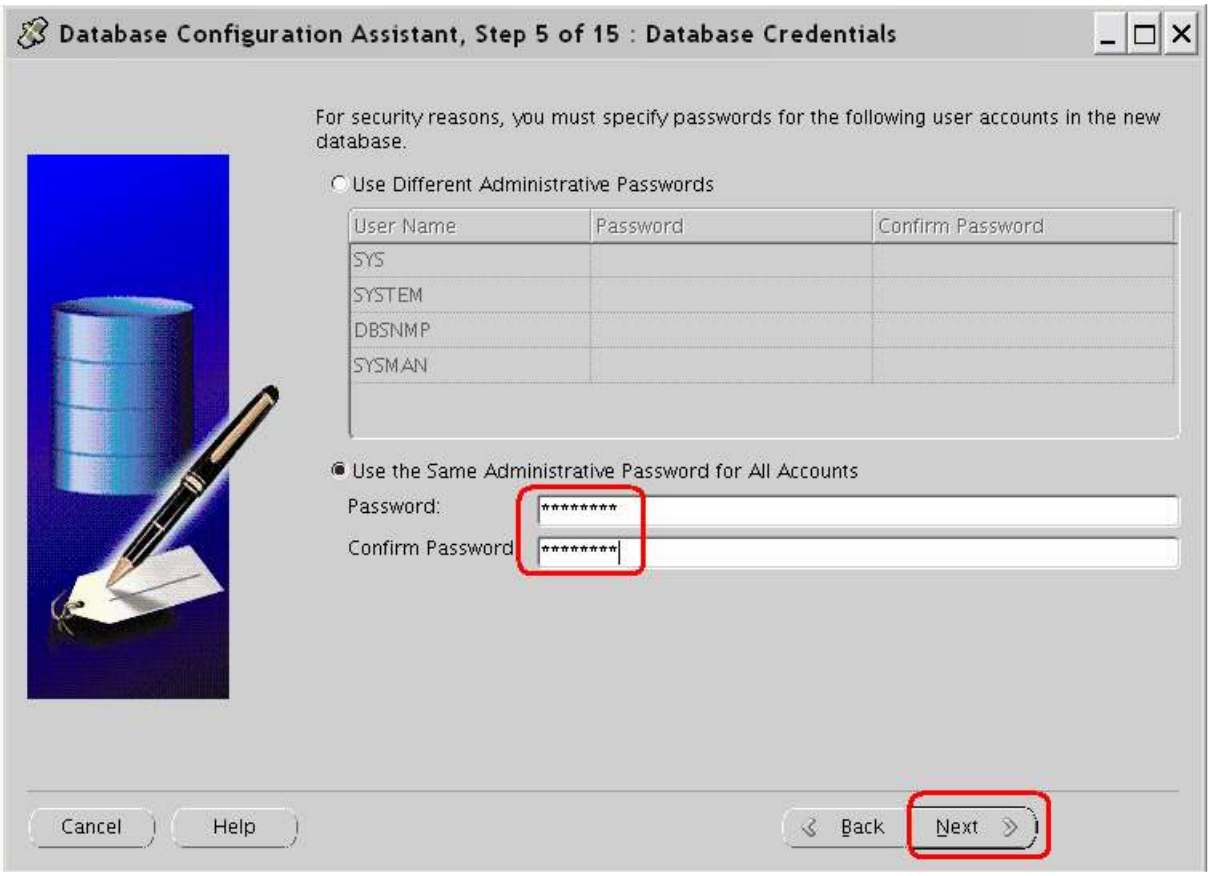
STEP 7 : MANAGEMENT OPTIONS

You can configure Daily Backup, Management Console and Email notification on this screen or can do it later on using EM. click **NEXT** to Continue



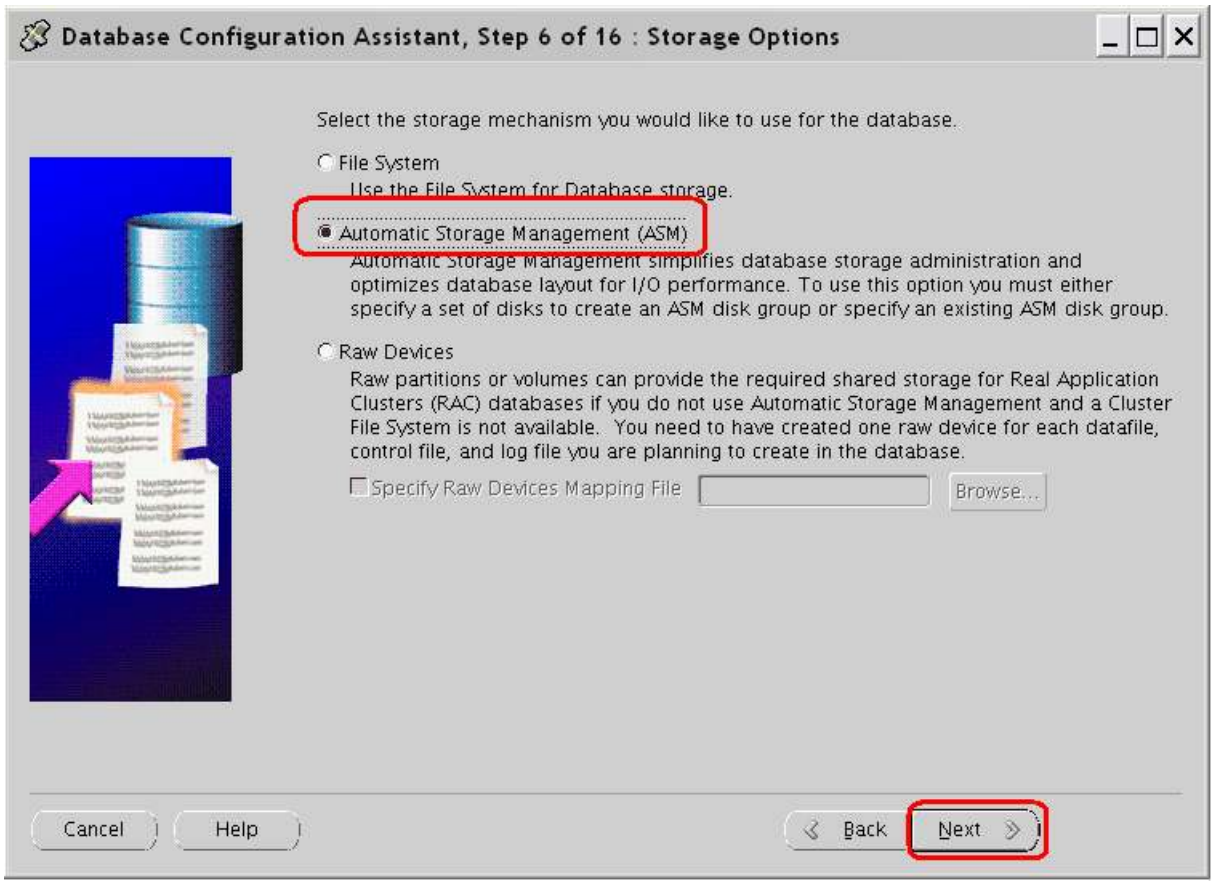
STEP 8 : DATABASE CREDENTIAL

Assign a single temporary password for all SYS/SYSTEM/DBSNMP/SYSMAN. click **NEXT** to Continue



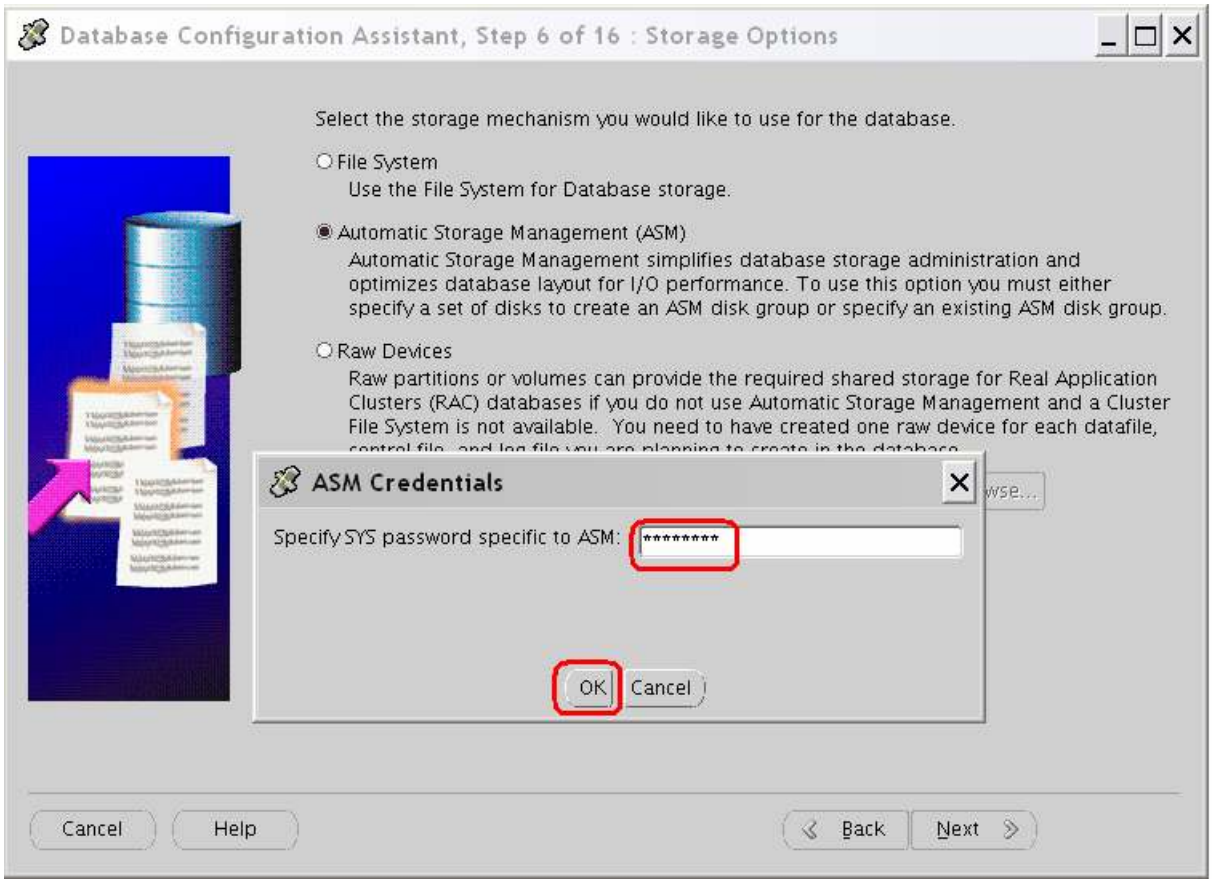
STEP 9 : STORAGE OPTIONS

As we are using ASM for storage and so we will select ASM so as to create an ASM instance and click **NEXT** to Continue



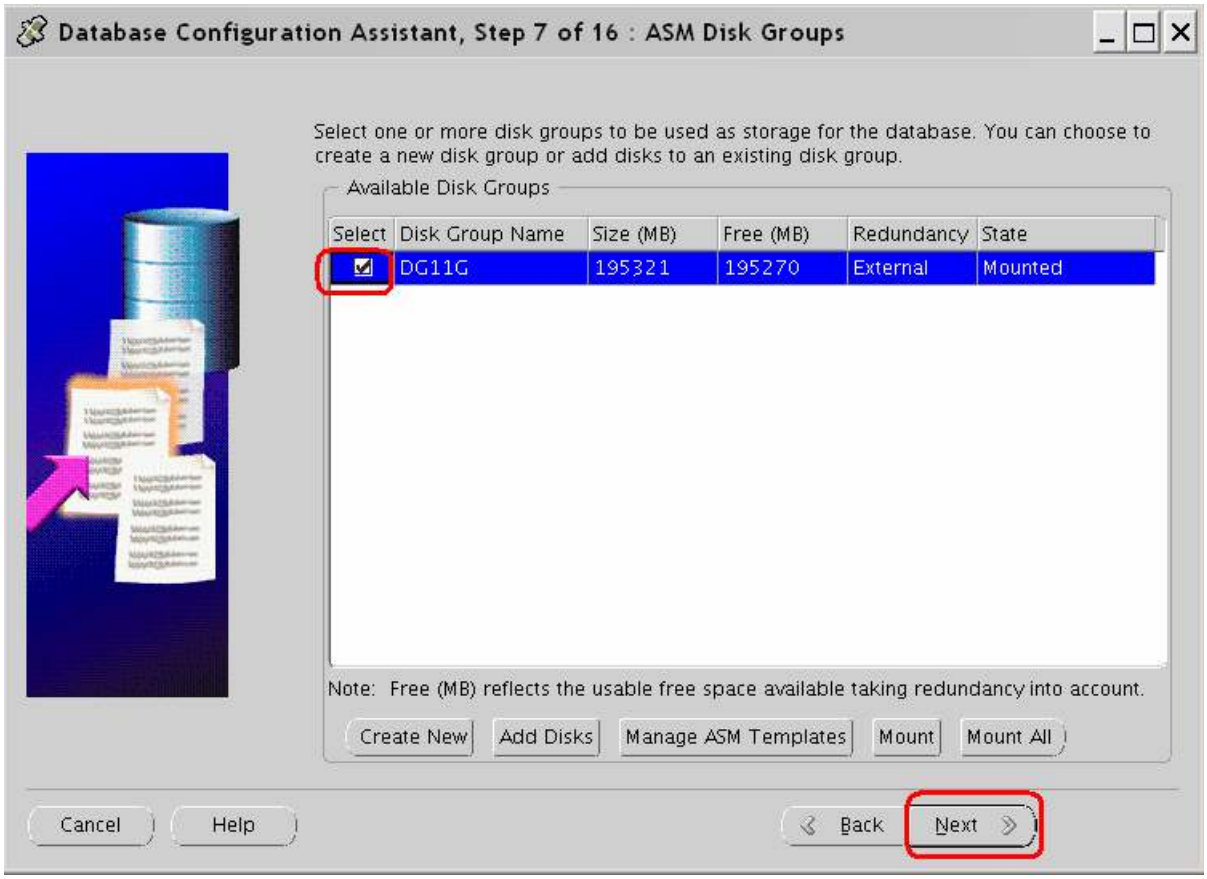
STEP 9(I) : ASM INSTANCE CREDENTIALS

Specify SYS password and click **OK** to connect to ASM instance



STEP 11 : CREATE AN ASM DISK GROUPS

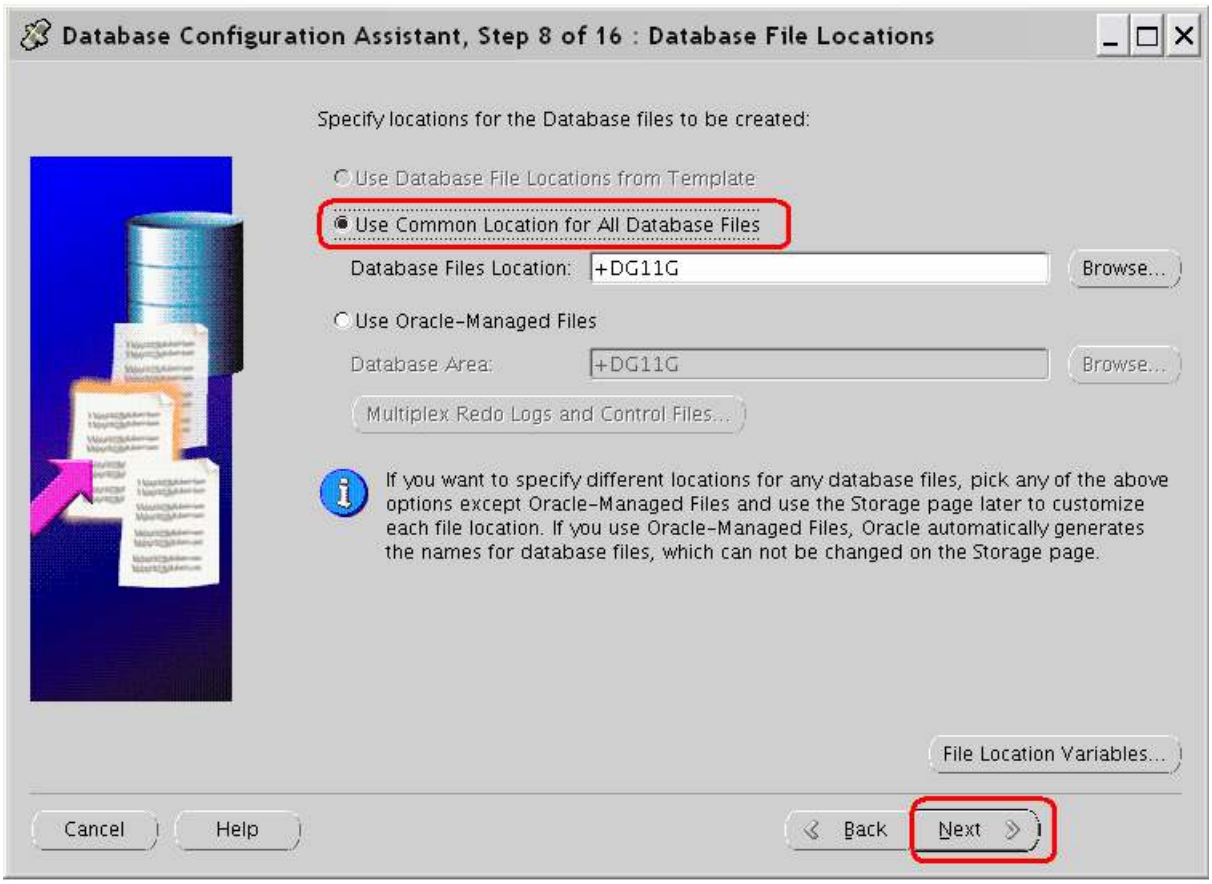
Select the Disk Group named DG11G and click **NEXT** to Continue



STEP 12(I) : DATABASE FILES LOCATIONS

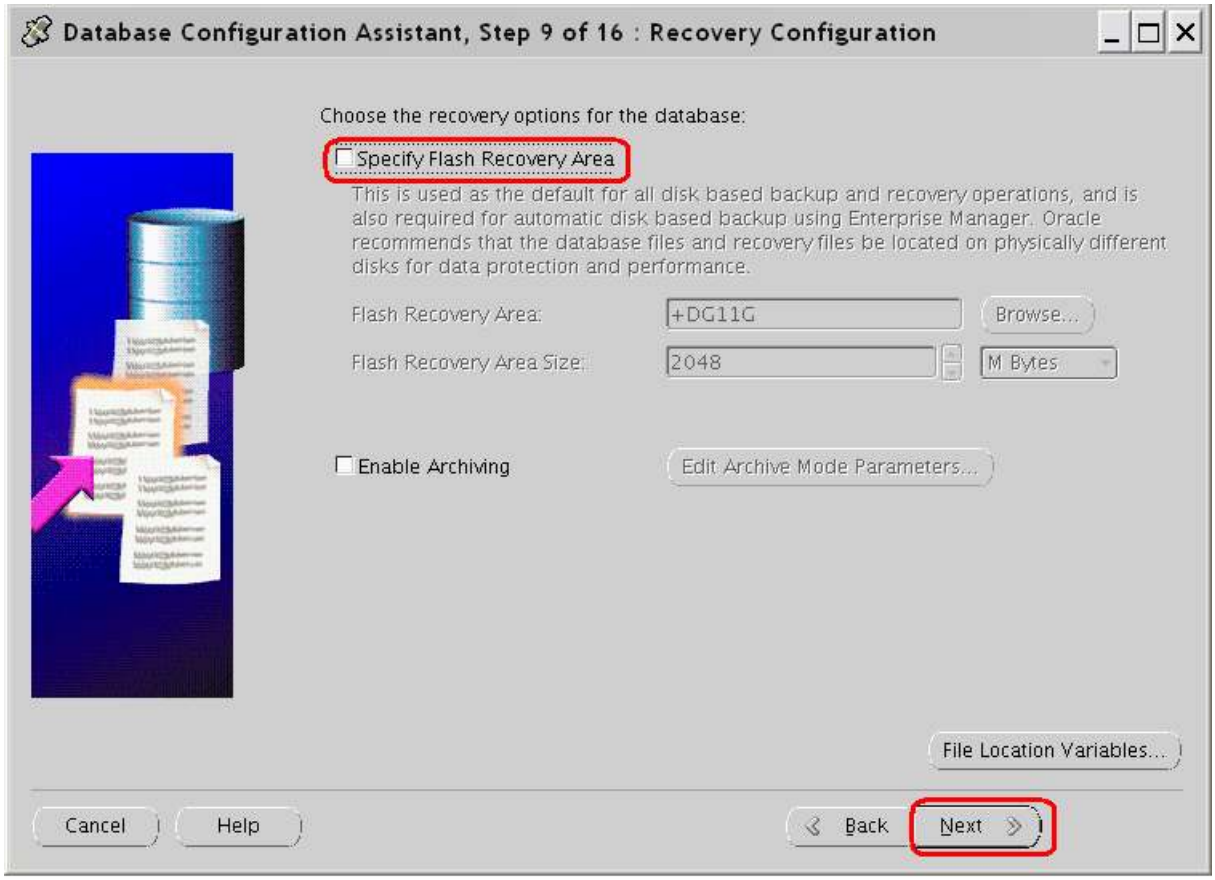
Specify **Database File Locations**

Select **Common Location for all Database Files** and click **Next** to Continue



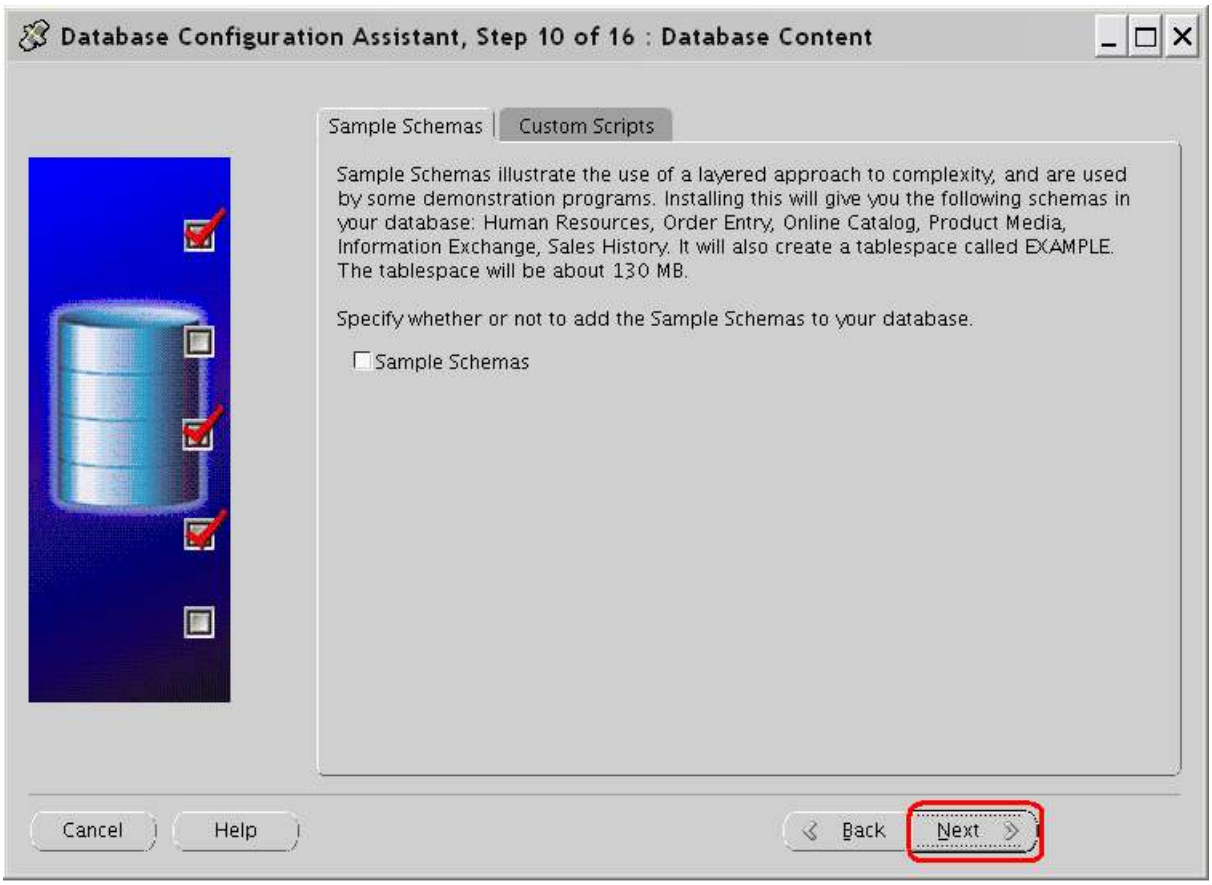
STEP 13 : RECOVER CONFIGURATGION

Specify **Flashback Recovery Area** and **Enable Archiving**. We are not specifying at this moment and will add it later on. Click **Next** to Continue



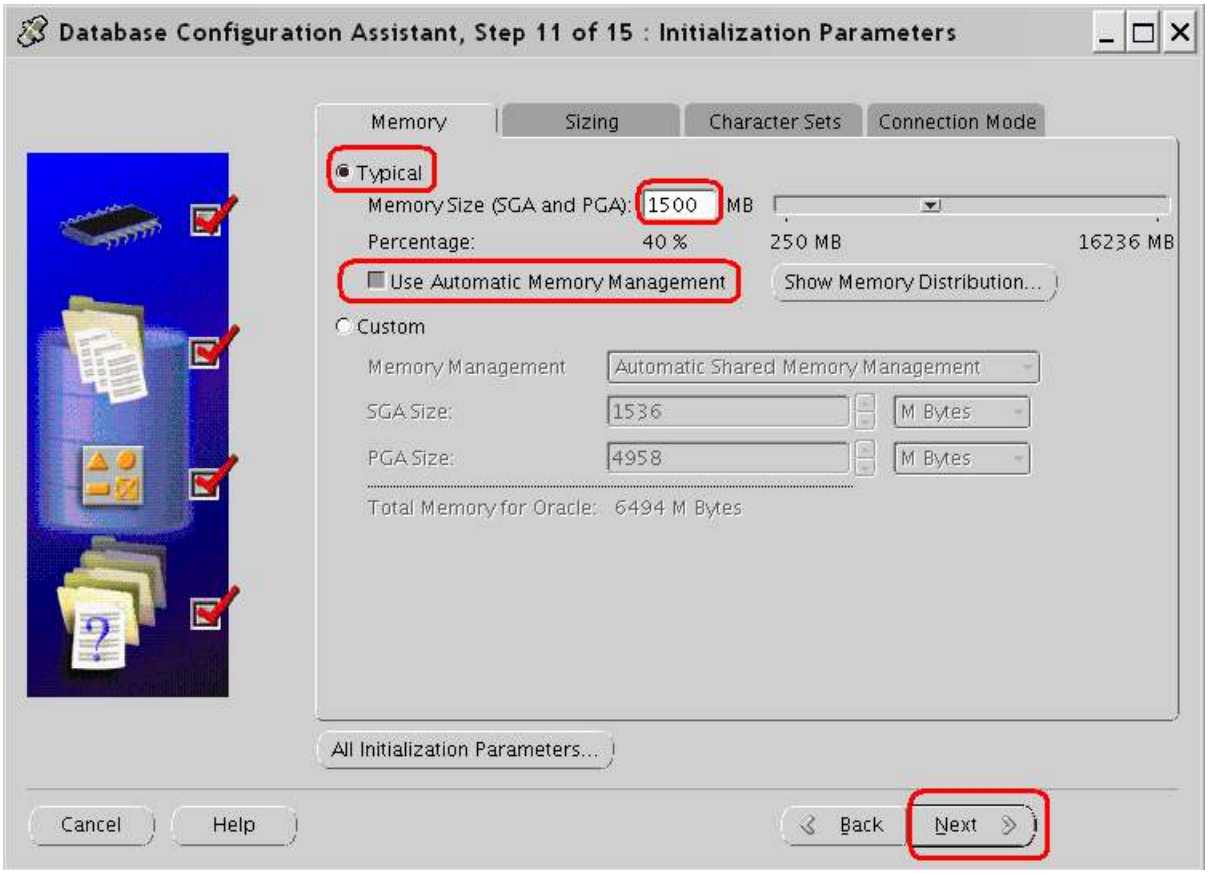
STEP 14 : DATABASE CONTENT

Specify **Sample Schema** and **Custom Scripts**. We are not creating any Sample schema and Click **Next** to Continue



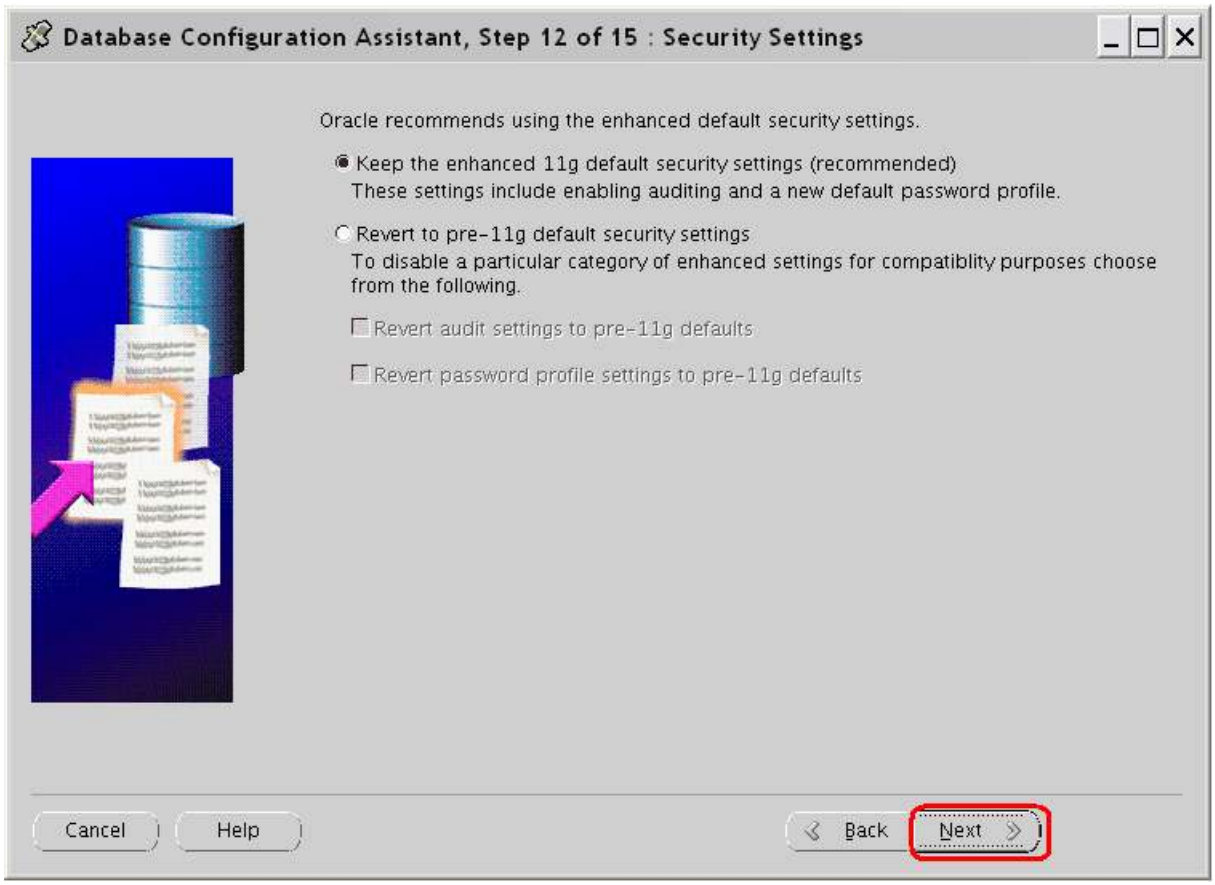
STEP 15 : MEMORY SIZING

Oracle 11G new features for Automatic Memory Management. Click **Next** to Continue



STEP 16 :SECURITY SETTING

Oracle 11g new Security Setting to enable Auditing and Security Profile. Click **NEXT** to Continue

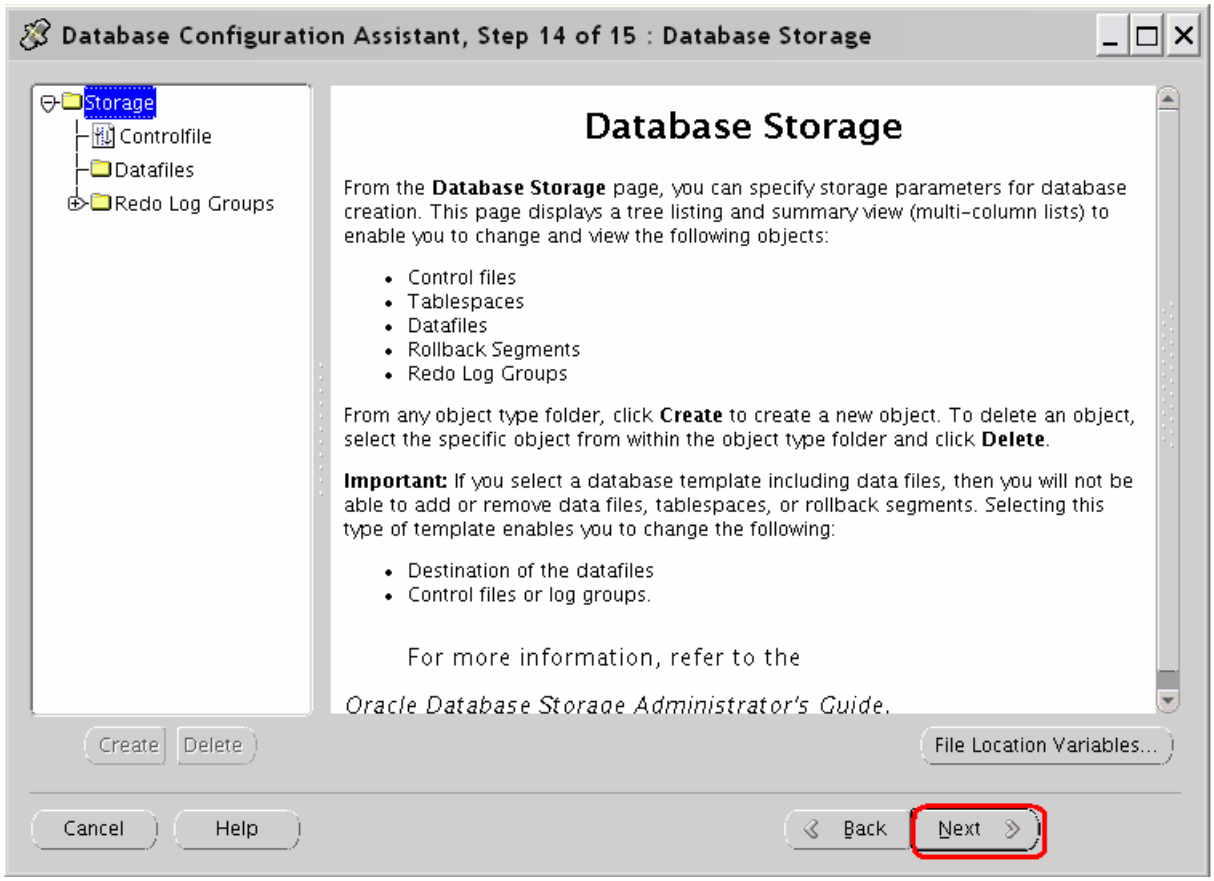


STEP 17 : AUTOMATIC MAINTENANCE TASKS

Oracle 11g new Screen to allow you to enable automatic maintenance tasks which are by default enabled in 10g. Click **NEXT** to Continue

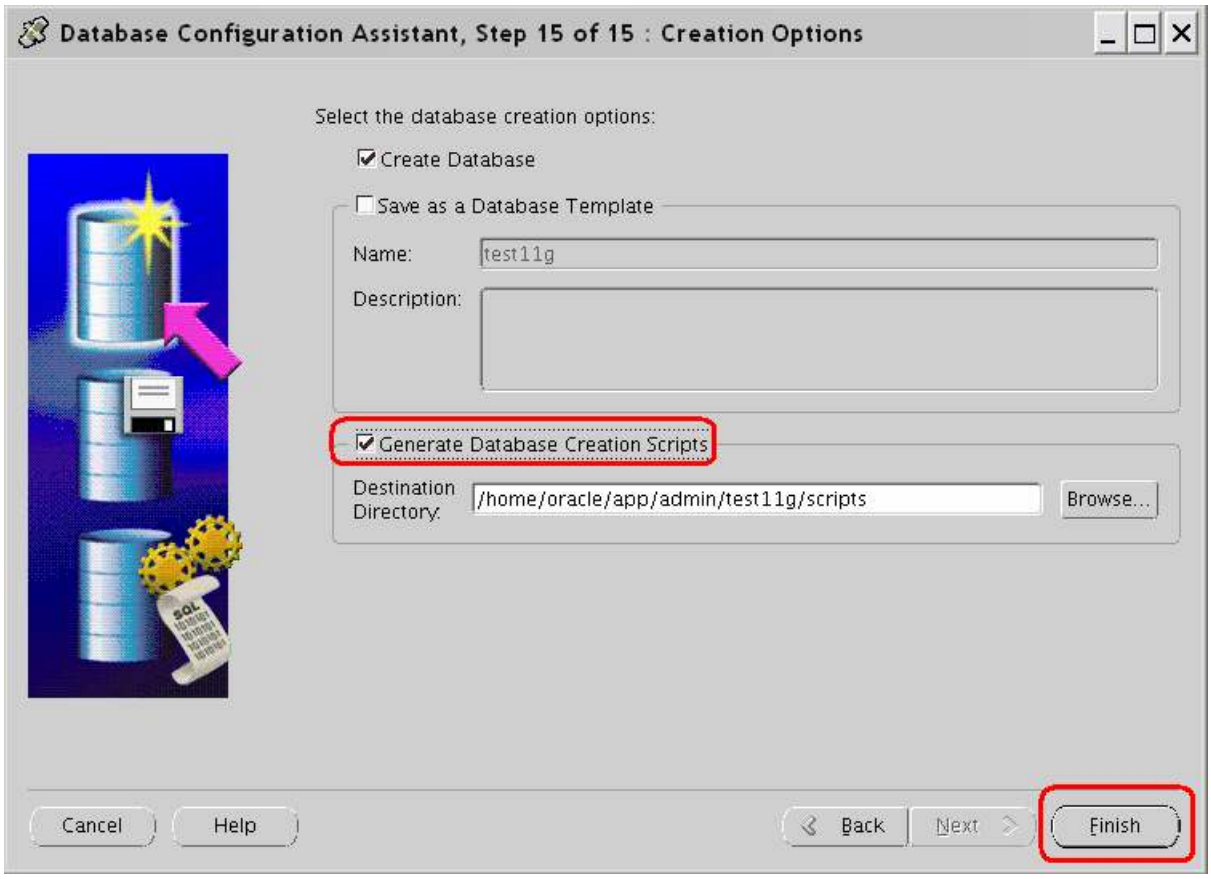
STEP 18 :DATABASE STORAGE

Check or Modify **Database File Locations and Sizes**. Click **Next** to Continue



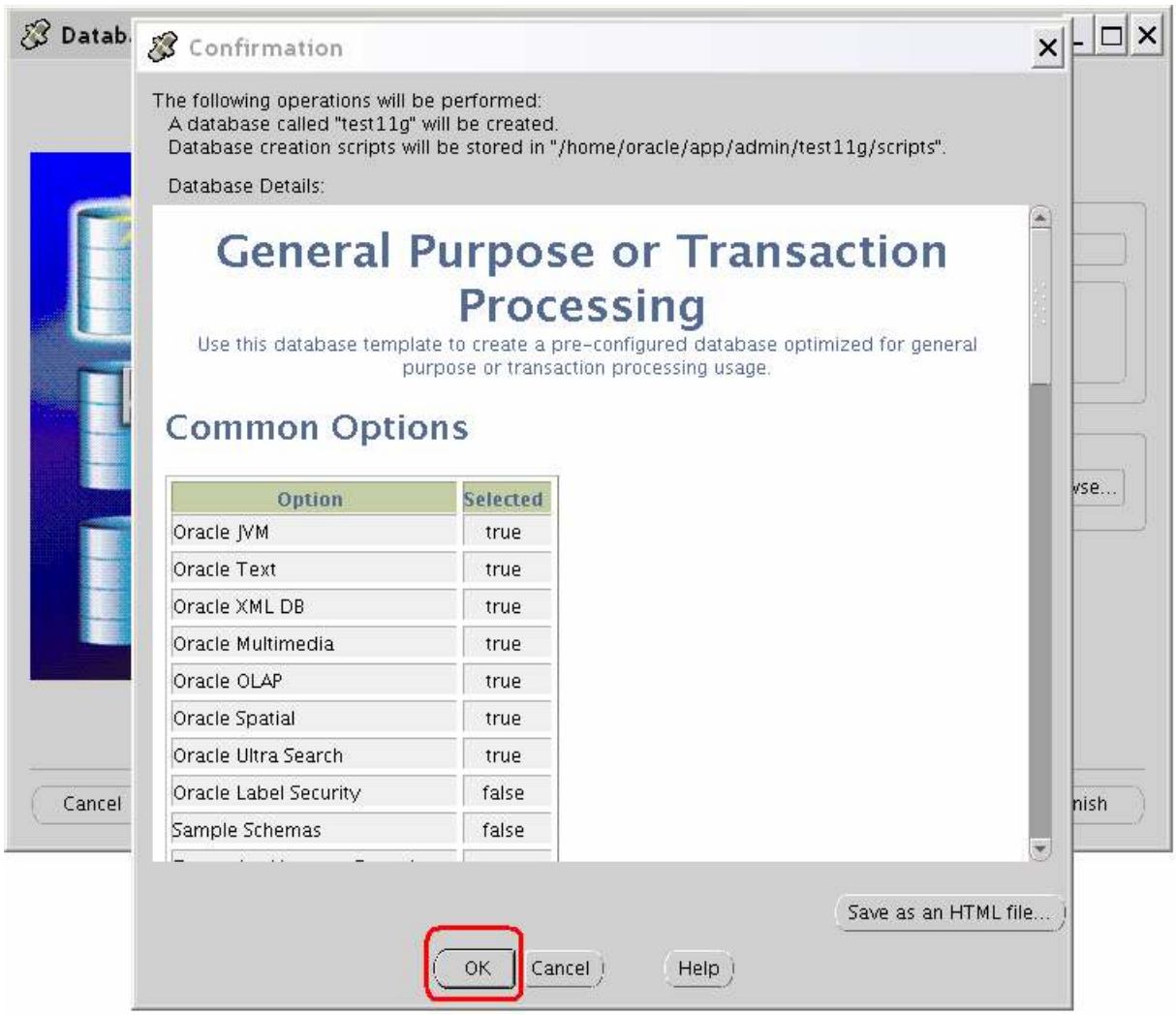
STEP 19 :DATABASE CREATION OPTIONS

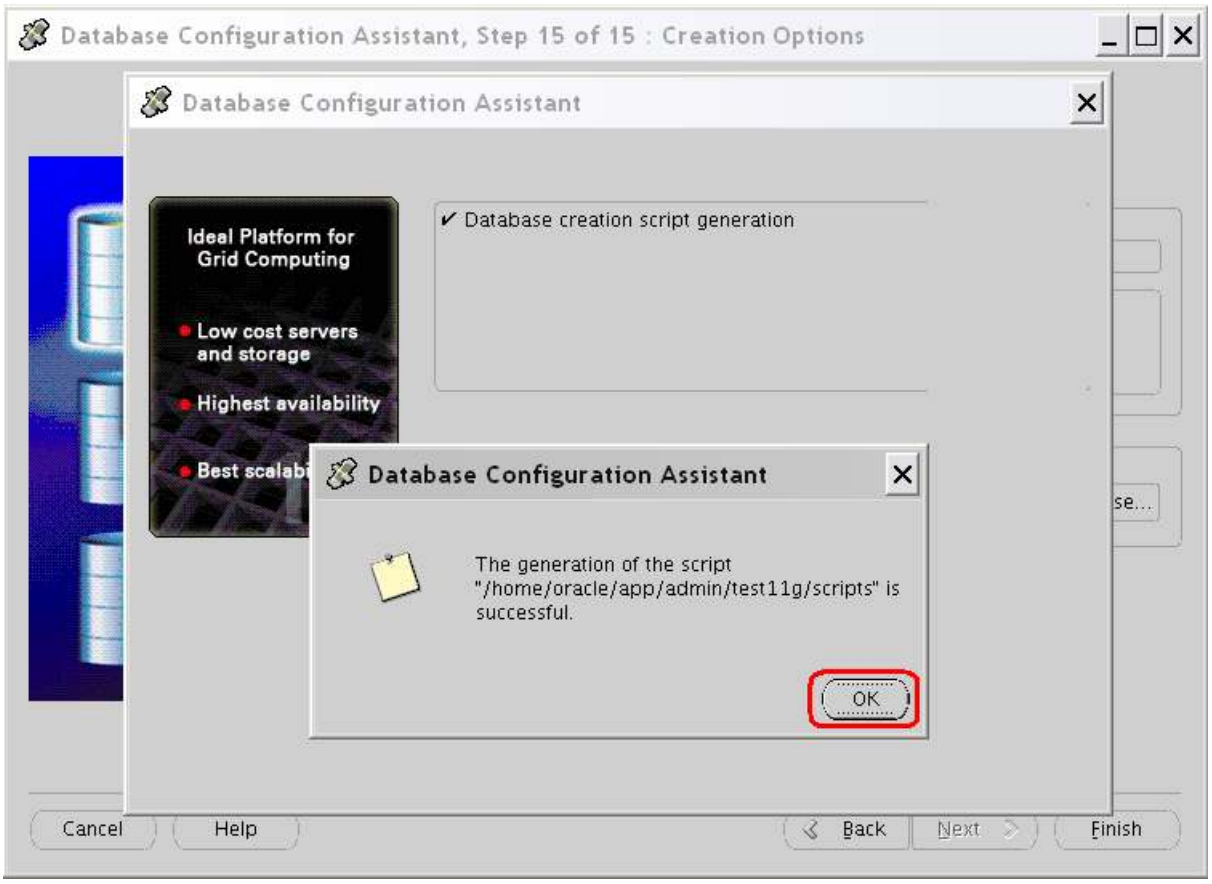
Click **Finish Sizes** to start the Database creation



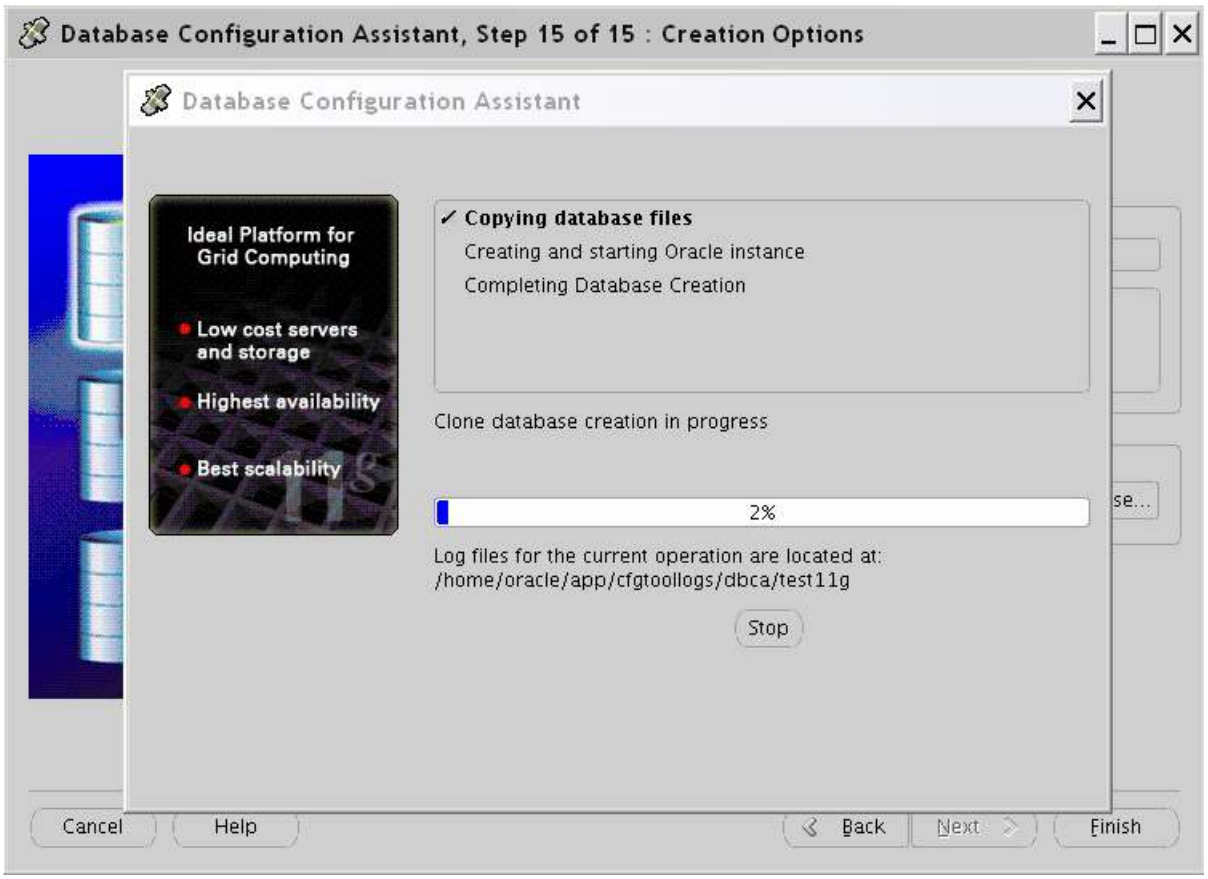
STEP 20 :CREATION OPTIONS

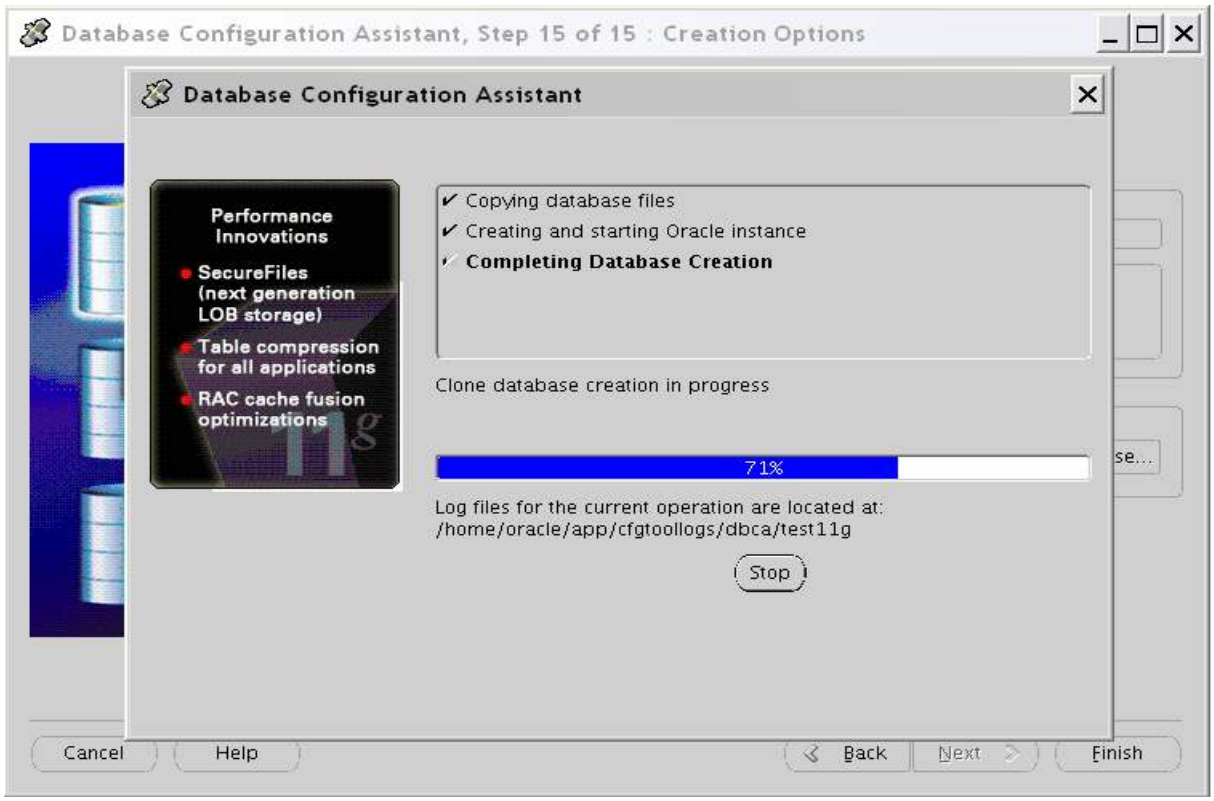
Check the Summary and can save as an HTML file for your reference and Click **OK** to Continue

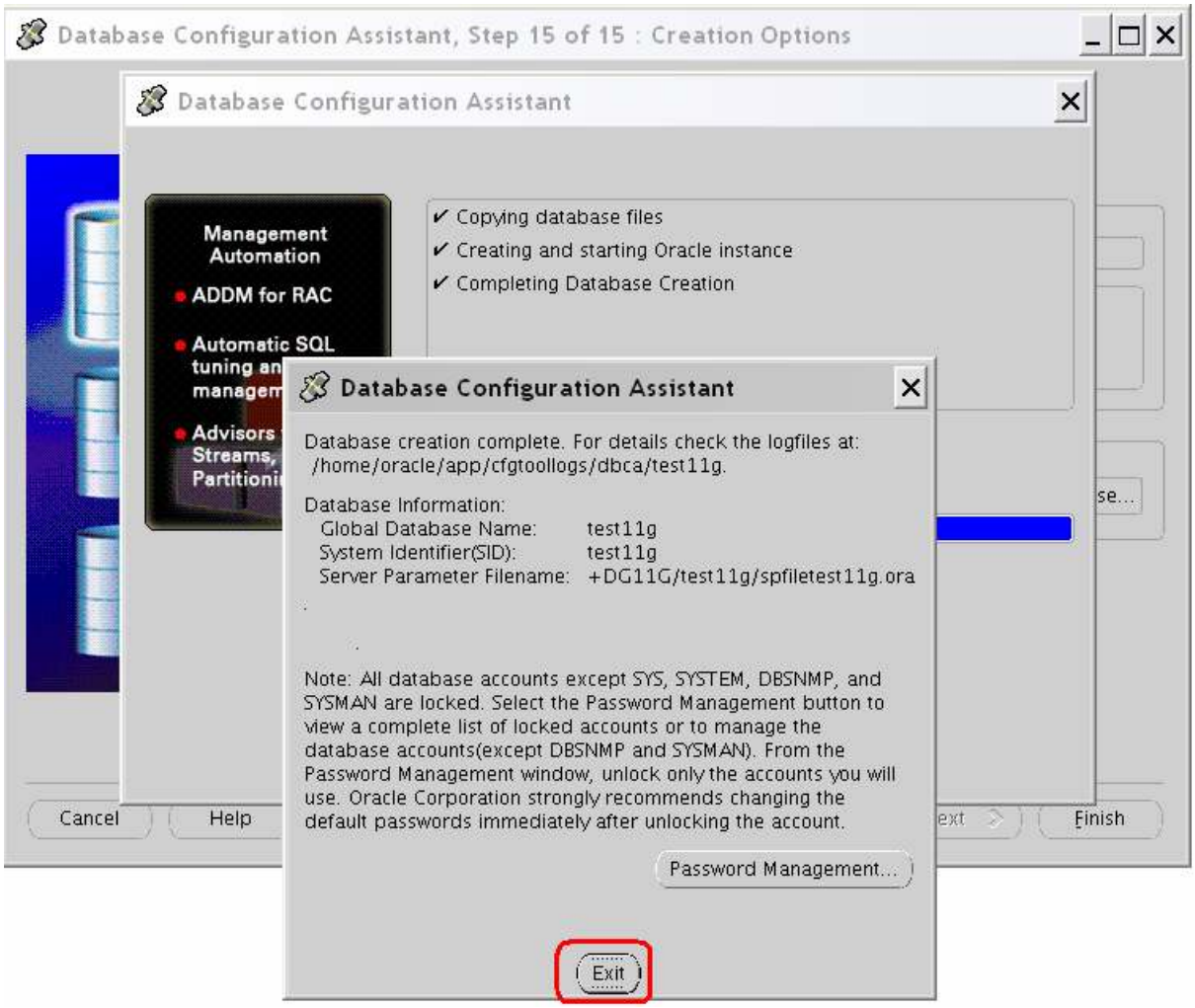



Database Configuration Assistant, Step 15 of 15 : Creation Options
Database Configuration Assistant
Ideal Platform for Grid Computing
Low cost servers and storage
Highest availability
Best scalabi
✔ Database creation script generation
Database Configuration Assistant
The generation of the script "/home/oracle/app/admin/test11g/scripts" is successful.
OK
Cancel
Help
Back
Next
Finish

STEP 21 :CREATION OPTIONS - DATABASE CREATION PROCESS IS STARTED




Database Configuration Assistant, Step 15 of 15 : Creation Options
Database Configuration Assistant
Performance Innovations
SecureFiles (next generation LOB storage)
Table compression for all applications
RAC cache fusion optimizations
11g
✔ Copying database files
✔ Creating and starting Oracle instance
✔ Completing Database Creation
Clone database creation in progress
71%
Log files for the current operation are located at:
/home/oracle/app/cfgtoollogs/dbca/test11g
Stop
Cancel
Help
Back
Next
Finish

STEP 22 :CREATION OPTIONS

Database is created and Click **EXIT** to complete the Installation