Oracle linux 11g 安装说明主要包括 4 部分

1 操作系统安装

安装操作系统是 Oracle Linux 6.9

2 Oracle 数据库安装

2.1 linux 创建 software 目录，上传系统文件 Oracle Linux 6.9.iso 和 p13390677_112040_Linux-x86-64_1of7.zip，

p13390677_112040_Linux-x86-64_2of7.zip

2.2 修改机器名称和网络名称

vi /etc/sysconfig/network

NETWORKING=yes

HOSTNAME=testdb3

vi /etc/hosts

127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4

::1 localhost localhost.localdomain localhost6 localhost6.localdomain6

192.168.12.40 testdb3

2.3 光盘挂接

#mount -o loop -t iso9660 /software/*.iso /mnt

#mount /dev/sr0 /mnt

2.4 分区设置

df –h

```
[root@localhost mnt]# df -h
Filesystem            Size  Used Avail Use% Mounted on
/dev/mapper/VolGroup-lv_root
                       50G  8.3G   39G  18% /
tmpfs                 3.8G  140K  3.8G   1% /dev/shm
/dev/vda1             477M   83M  365M  19% /boot
/dev/mapper/VolGroup-lv_home
                      238G   60M  226G   1% /home
/software/Oracle Linux 6.9.iso
                      3.8G  3.8G     0 100% /mnt
You have new mail in /var/spool/mail/root
```

cat /etc/fstab

```
[root@localhost /]# cat /etc/fstab

#
# /etc/fstab
# Created by anaconda on Tue Aug 15 12:44:36 2017
#
# Accessible filesystems, by reference, are maintained under '/dev/disk'
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info
#
/dev/mapper/VolGroup-lv_root /                       ext4    defaults        1 1
UUID=4bb3cef9-fd6e-4478-ab18-614169aa0d41 /boot                   ext4    defaults        1 2
/dev/mapper/VolGroup-lv_home /home                   ext4    defaults        1 2
/dev/mapper/VolGroup-lv_swap swap                    swap    defaults        0 0
tmpfs                   /dev/shm                tmpfs   defaults        0 0
devpts                  /dev/pts                devpts  gid=5,mode=620  0 0
sysfs                   /sys                    sysfs   defaults        0 0
proc                    /proc                   proc    defaults        0 0
You have new mail in /var/spool/mail/root
[root@localhost /]#
```

umount -f /home

vi /etc/fstab

```
#
# /etc/fstab
# Created by anaconda on Tue Aug 15 12:44:36 2017
#
# Accessible filesystems, by reference, are maintained under '/dev/disk'
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info
#
/dev/mapper/VolGroup-lv_root /                       ext4    defaults        1 1
UUID=4bb3cef9-fd6e-4478-ab18-614169aa0d41 /boot                   ext4    defaults        1 2
/dev/mapper/VolGroup-lv_home /u01                ext4    defaults        1 2
/dev/mapper/VolGroup-lv_swap swap                    swap    defaults        0 0
tmpfs                   /dev/shm                tmpfs   defaults        0 0
devpts                  /dev/pts                devpts  gid=5,mode=620  0 0
sysfs                   /sys                    sysfs   defaults        0 0
proc                    /proc                   proc    defaults        0 0
~
~
~
```

mkdir /u01

mount –a

df –h

```
[root@localhost /]# df -h
Filesystem            Size  Used Avail Use% Mounted on
/dev/mapper/VolGroup-lv_root
                       50G  8.3G   39G  18% /
tmpfs                 3.8G  140K  3.8G   1% /dev/shm
/dev/vda1             477M   83M  365M  19% /boot
/software/Oracle Linux 6.9.iso
                      3.8G  3.8G     0 100% /mnt
/dev/mapper/VolGroup-lv_home
                      238G   60M  226G   1% /u01
```

umount -f /u01

lvrename VolGroup lv_home u01

```
[root@localhost /]# lvrename VolGroup lv_home u01
  Renamed "lv_home" to "u01" in volume group "VolGroup"
```

vi /etc/fstab

```
[root@localhost /]# cat /etc/fstab

#
# /etc/fstab
# Created by anaconda on Tue Aug 15 12:44:36 2017
#
# Accessible filesystems, by reference, are maintained under '/dev/disk'
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info
#
/dev/mapper/VolGroup-lv_root /                       ext4    defaults        1 1
UUID=4bb3cef9-fd6e-4478-ab18-614169aa0d41 /boot                   ext4    defaults        1 2
/dev/mapper/VolGroup-u01 /u01               ext4    defaults        1 2
/dev/mapper/VolGroup-lv_swap swap                    swap    defaults        0 0
tmpfs                   /dev/shm                tmpfs   defaults        0 0
devpts                  /dev/pts                devpts  gid=5,mode=620  0 0
sysfs                   /sys                    sysfs   defaults        0 0
proc                    /proc                   proc    defaults        0 0
[root@localhost /]#
```

mount –a

df -h

```
[root@localhost /]# mount -a
[root@localhost /]# df -h
Filesystem            Size  Used Avail Use% Mounted on
/dev/mapper/VolGroup-lv_root
                       50G  8.3G   39G  18% /
tmpfs                 3.8G  140K  3.8G   1% /dev/shm
/dev/vda1             477M   83M  365M  19% /boot
/software/Oracle Linux 6.9.iso
                      3.8G  3.8G     0 100% /mnt
/dev/mapper/VolGroup-u01
                      238G   60M  226G   1% /u01
```

2.5 配置 yum

vi /etc/yum.repos.d/dvd.repo

[Base]

name=Red Hat Enterprise Linux $releasever - $basearch - BASE

baseurl=file:///mnt/

enabled=1

gpgcheck=0

gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release

配置默认使用英文

2.6 检查防火墙是否关闭

chkconfig iptables off

sed -i "s/enforcing/disabled/g" /etc/selinux/config

sed -i "s/UTC/LOCAL/g" /etc/adjtime

2.7 sendmail 服务关闭

chkconfig --level 2345 sendmail off

2.8 时钟检查&配置

安装 oracle 需要的软件包

yum -y install libstdc++-devel kernel-headers glibc-headers compat-db \

glibc-devel gnome-icon-theme dmz-cursor-themes libXcursor-devel \

sgml-common libaio-devel ncurses-devel elfutils-libelf-devel \

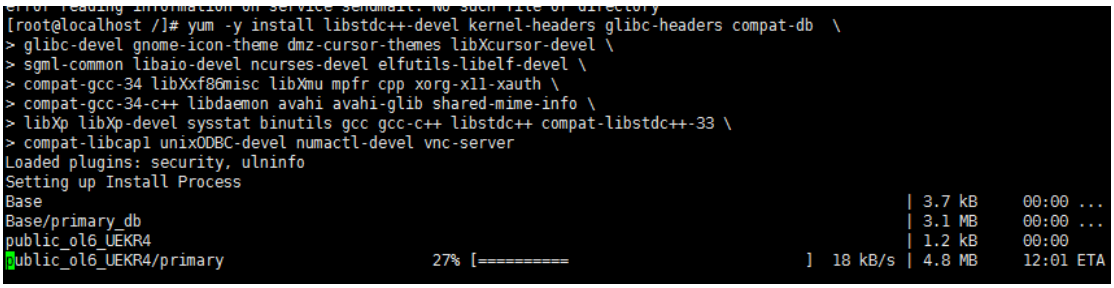
compat-gcc-34 libXxf86misc libXmu mpfr cpp xorg-x11-xauth \

compat-gcc-34-c++ libdaemon avahi avahi-glib shared-mime-info \

libXp libXp-devel sysstat binutils gcc gcc-c++ libstdc++ compat-libstdc++-33 \

compat-libcap1 unixODBC-devel numactl-devel vnc-server

这个过程时间比较久



2.9 安装图形化：

yum -y groupinstall "X Window System"

yum -y groupinstall GNOME Desktop Environment

yum -y groupinstall KDE Desktop Environment

echo "shutting down the NetworkManager...."

service NetworkManager stop

chkconfig NetworkManager off

yum -y remove NetworkManager

2.10 创建用户等信息

groupadd oinstall

groupadd dba

useradd -g oinstall -G dba oracle

mkdir -p /u01/app/oracle/product/11.2.0/db_1

chown -R oracle:oinstall /u01

chmod -R 755 /u01

2.11 编辑 /etc/sysctl.conf 文件

cat << EOF >> /etc/sysctl.conf

kernel.shmmni = 4096

fs.aio-max-nr = 1048576

fs.file-max = 6815744

kernel.sem = 250 32000 100 128

net.ipv4.ip_local_port_range = 9000 65500

net.core.rmem_default = 262144

net.core.rmem_max = 4194304

```
net.core.wmem_default = 262144
net.core.wmem_max = 1048576
net.ipv6.conf.all.disable_ipv6 = 1
EOF

sysctl –p
```

2.12

```
cat << EOF >> /etc/security/limits.conf
oracle              soft    nproc   2047
oracle              hard    nproc   16384
oracle              soft    nofile  1024
oracle              hard    nofile  65536
oracle              soft    stack   10240
EOF
```

2.13

```
cat << EOF >> /etc/pam.d/login
session    required     /lib64/security/pam_limits.so
session    required     pam_limits.so
EOF
```

2.14 修改 vi /etc/profile

```
if [ $USER = "oracle" ]; then
        if [ $SHELL = "/bin/ksh" ]; then
              ulimit -p 16384
              ulimit -n 65536
        else
              ulimit -u 16384 -n 65536
        fi
fi
```

2.15 oracle 环境变量

vi /home/oracle/.bash_profile

```
ORACLE_BASE=/u01/app/oracle
ORACLE_HOME=$ORACLE_BASE/product/11.2.0/db_1
ORACLE_SID=urpdb
ORACLE_TERM=xterm
TMPDIR=/var/tmp
umask 022
NLS_DATE_FORMAT="YYYY/MM/DD hh24:mi:ss"
ORA_NLS33=$ORACLE_HOME/ocommon/nls/admin/data
TNS_ADMIN=$ORACLE_HOME/network/admin
export ORACLE_BASE ORACLE_HOME CRS_HOME ORACLE_SID
export TMPDIR NLS_DATE_FORMAT ORA_NLS33 TNS_ADMIN
LIBPATH=$ORACLE_HOME/lib
export LIBPATH
PATH=$PATH:$ORACLE_HOME/bin:/usr/sbin
export PATH
stty erase ^h
PS1='$ORACLE_SID'":"'$PWD'"@"`hostname`">"
```

3 数据库安装

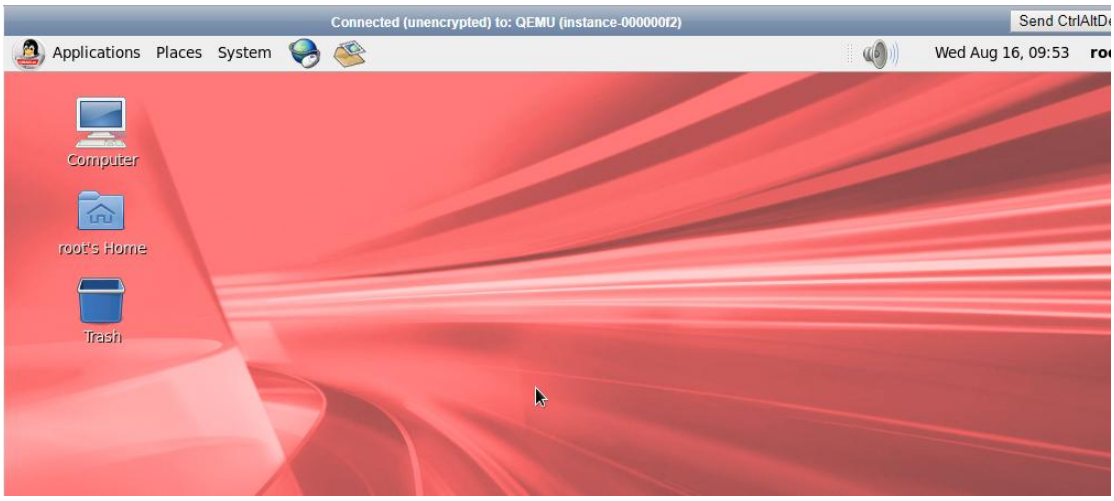
3.1 解压

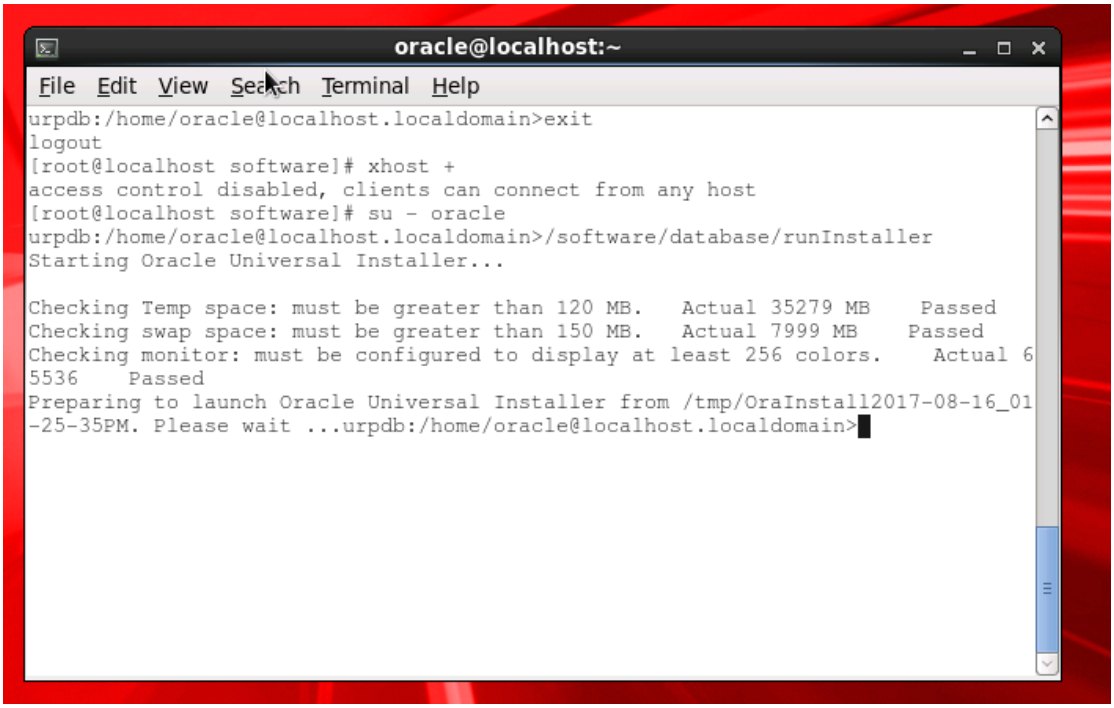
unzip p13390677_112040_Linux-x86-64_1of7.zip

unzip p13390677_112040_Linux-x86-64_2of7.zip

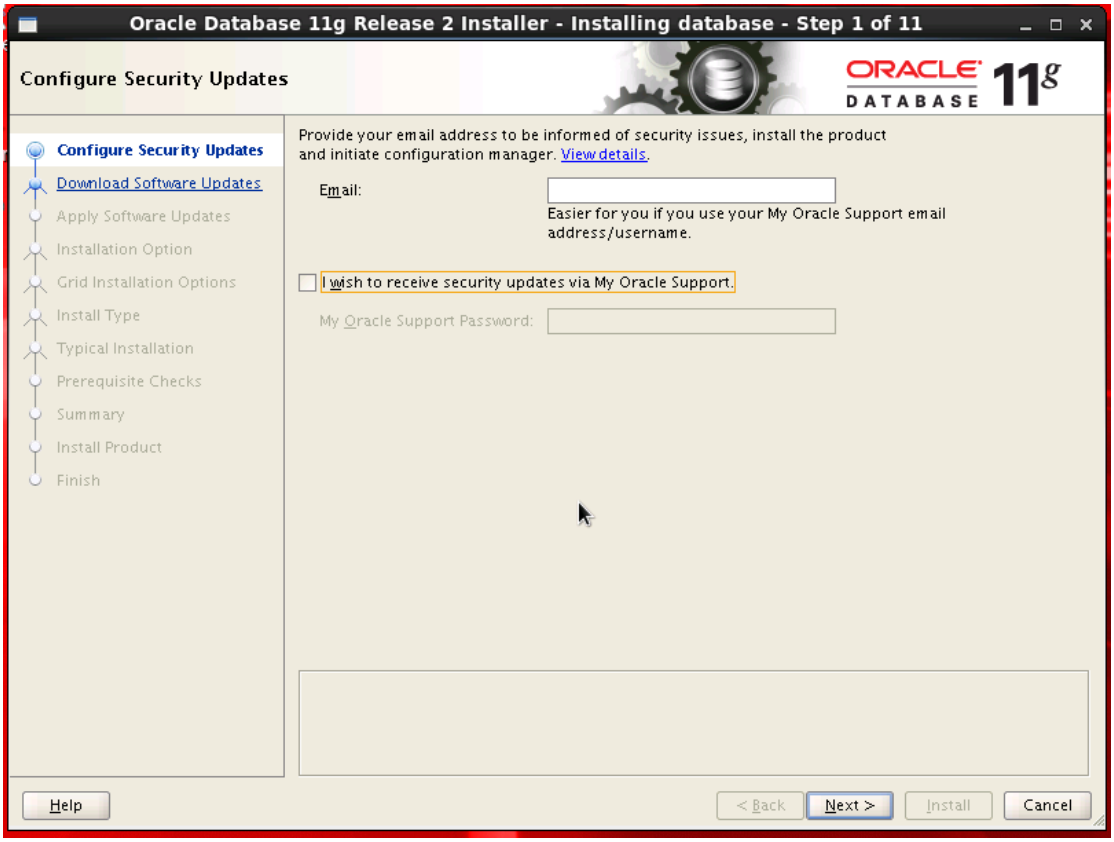
3.2 打开图形界面

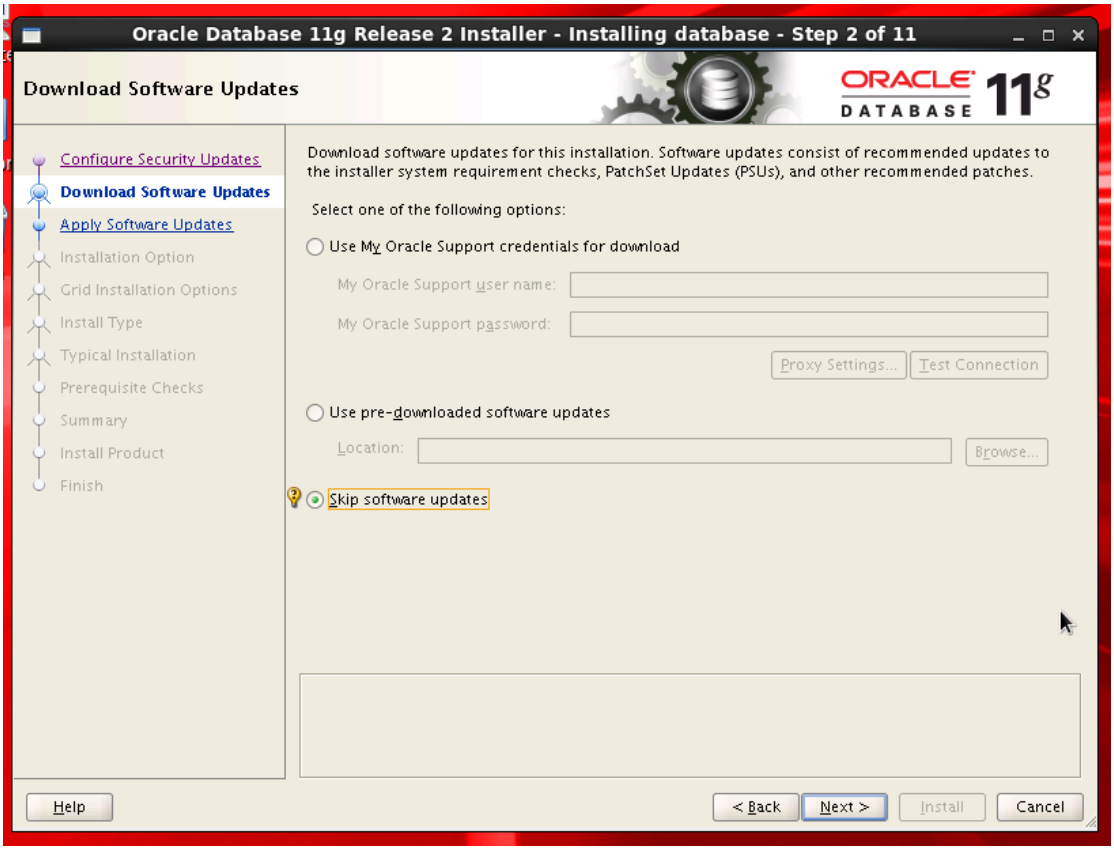
```
Oracle Linux Server release 6.9
Kernel 4.1.12-61.1.28.el6uek.x86_64 on an x86_64

localhost login:

Oracle Linux Server release 6.9
Kernel 4.1.12-61.1.28.el6uek.x86_64 on an x86_64

localhost login: root
Password:
Login incorrect

localhost.localdomain login: root
Password:
Last login: Tue Aug 15 13:02:25 from 172.50.3.28
[root@localhost ~]# startx
```



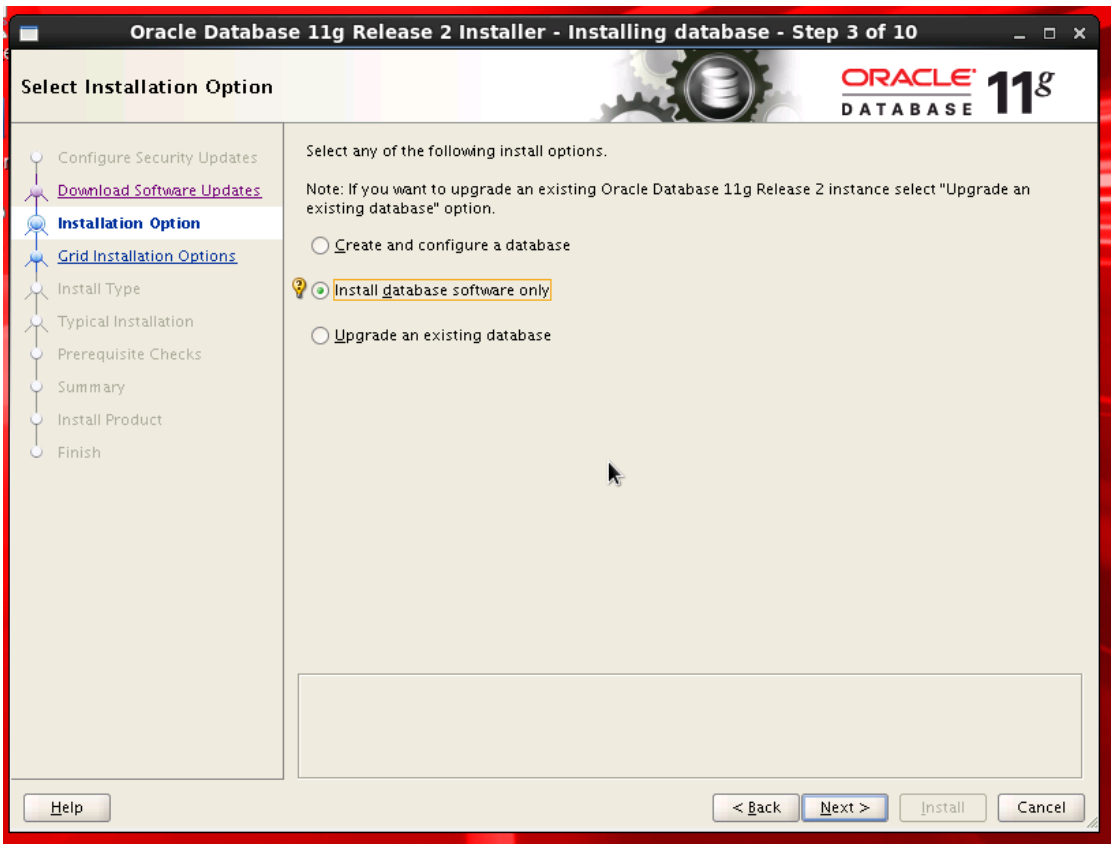

oracle@localhost:~
File Edit View Search Terminal Help
urpdb:/home/oracle@localhost.localdomain>exit
logout
[root@localhost software]# xhost +
access control disabled, clients can connect from any host
[root@localhost software]# su - oracle
urpdb:/home/oracle@localhost.localdomain>/software/database/runInstaller
Starting Oracle Universal Installer...
Checking Temp space: must be greater than 120 MB. Actual 35279 MB Passed
Checking swap space: must be greater than 150 MB. Actual 7999 MB Passed
Checking monitor: must be configured to display at least 256 colors. Actual 6
5536 Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2017-08-16_01
-25-35PM. Please wait ...urpdb:/home/oracle@localhost.localdomain>

3.3

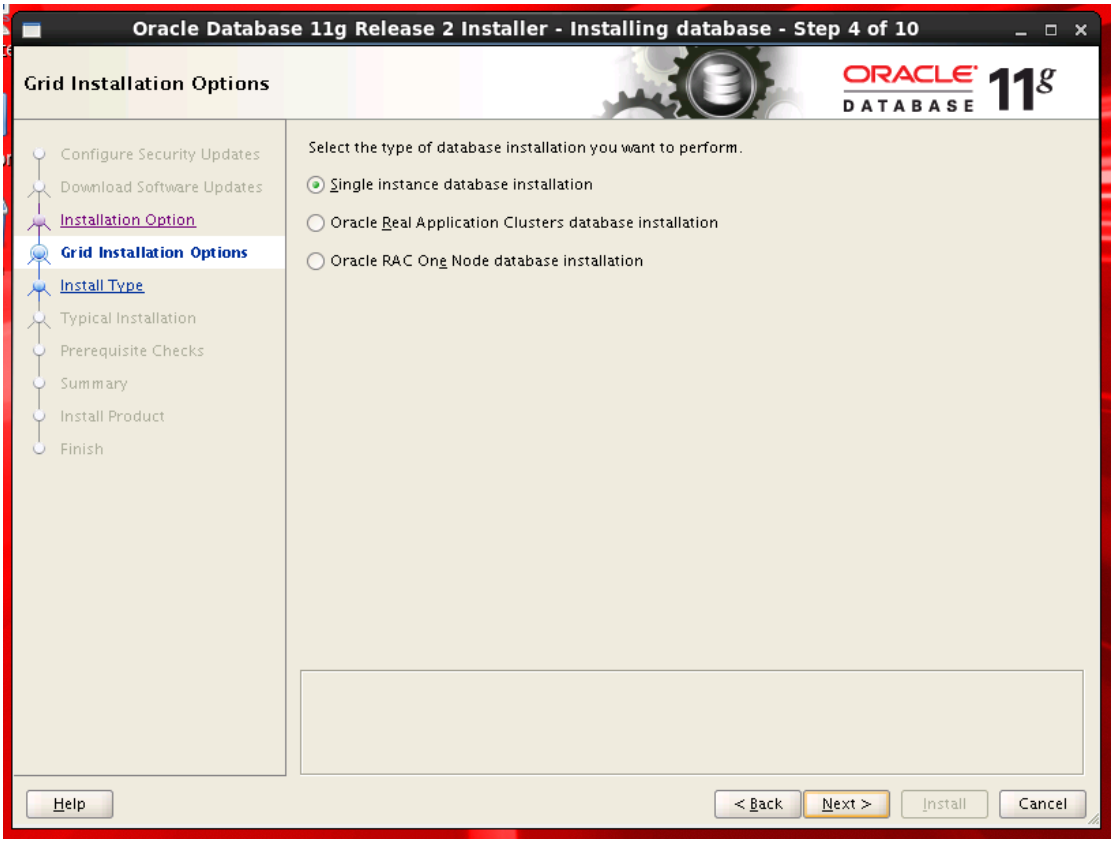

Oracle Database 11g Release 2 Installer - Installing database - Step 1 of 11
Configure Security Updates
ORACLE DATABASE 11g
Configure Security Updates
Download Software Updates
Apply Software Updates
Installation Option
Grid Installation Options
Install Type
Typical Installation
Prerequisite Checks
Summary
Install Product
Finish
Provide your email address to be informed of security issues, install the product and initiate configuration manager. View details.
Email:
Easier for you if you use your My Oracle Support email address/username.
I wish to receive security updates via My Oracle Support.
My Oracle Support Password:
Help
< Back
Next >
Install
Cancel



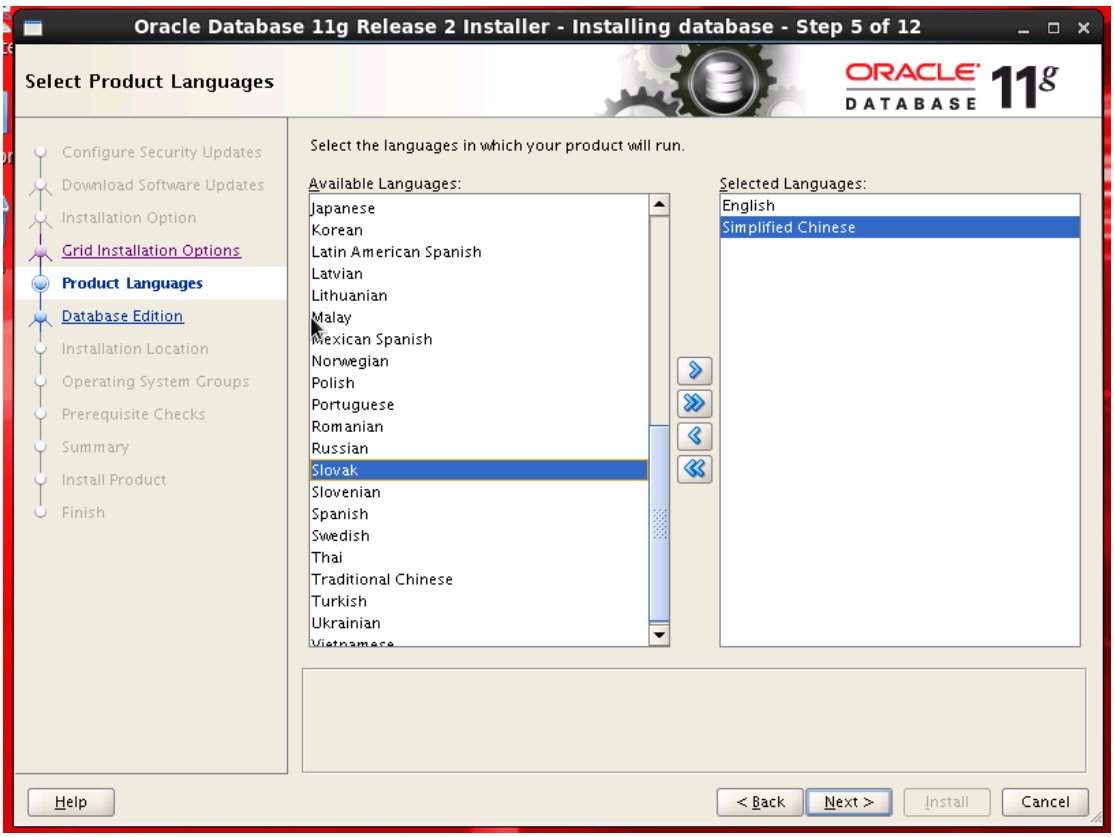
选择只安装数据库实例：



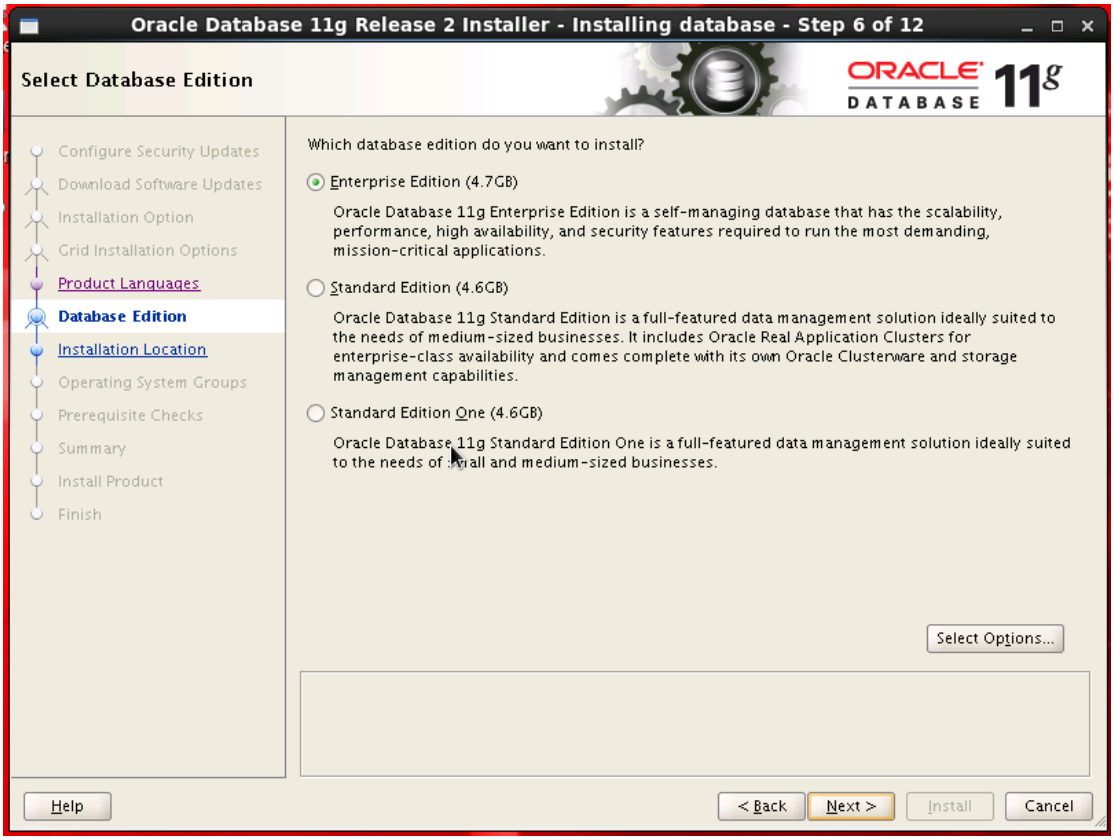
选择 Single instance database installation，点击 Next



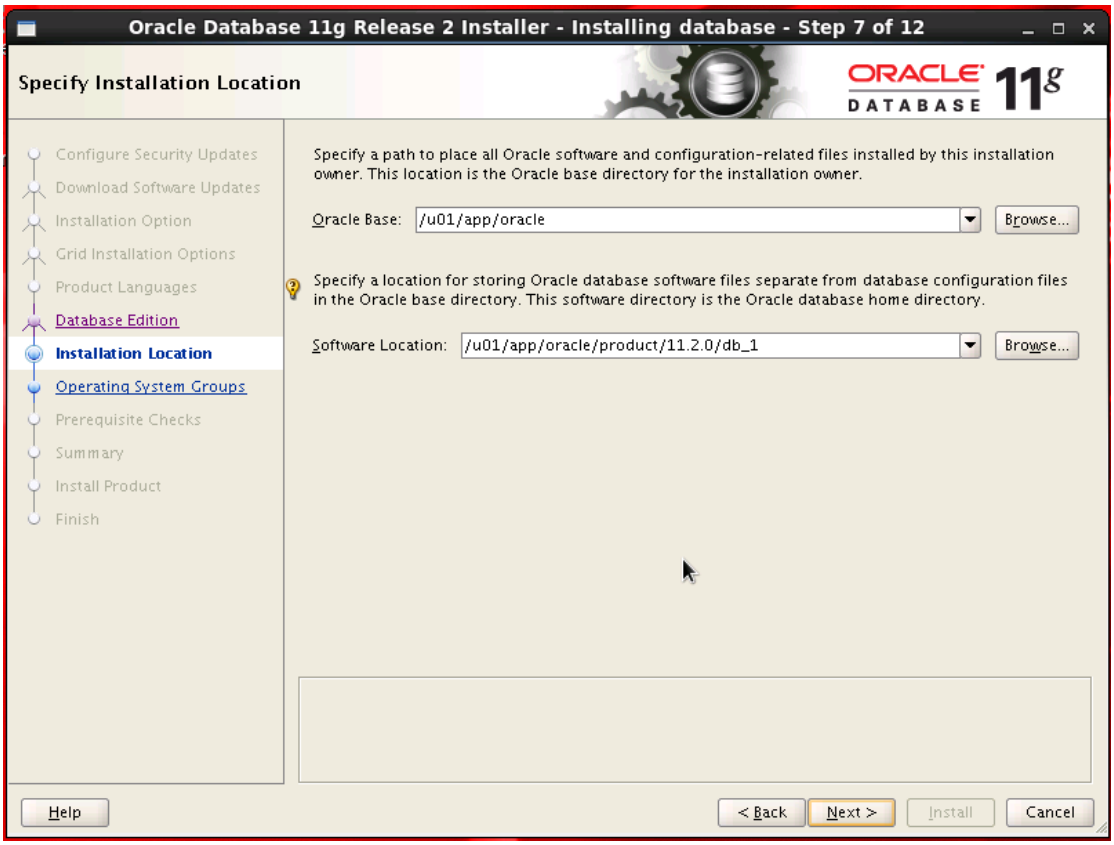
在 Available Languages 中点选 English、Simplified Chinese，点击两个框中间的>，将选中的语言加入到右边的 Selected Languages 中，然后点击 Next。



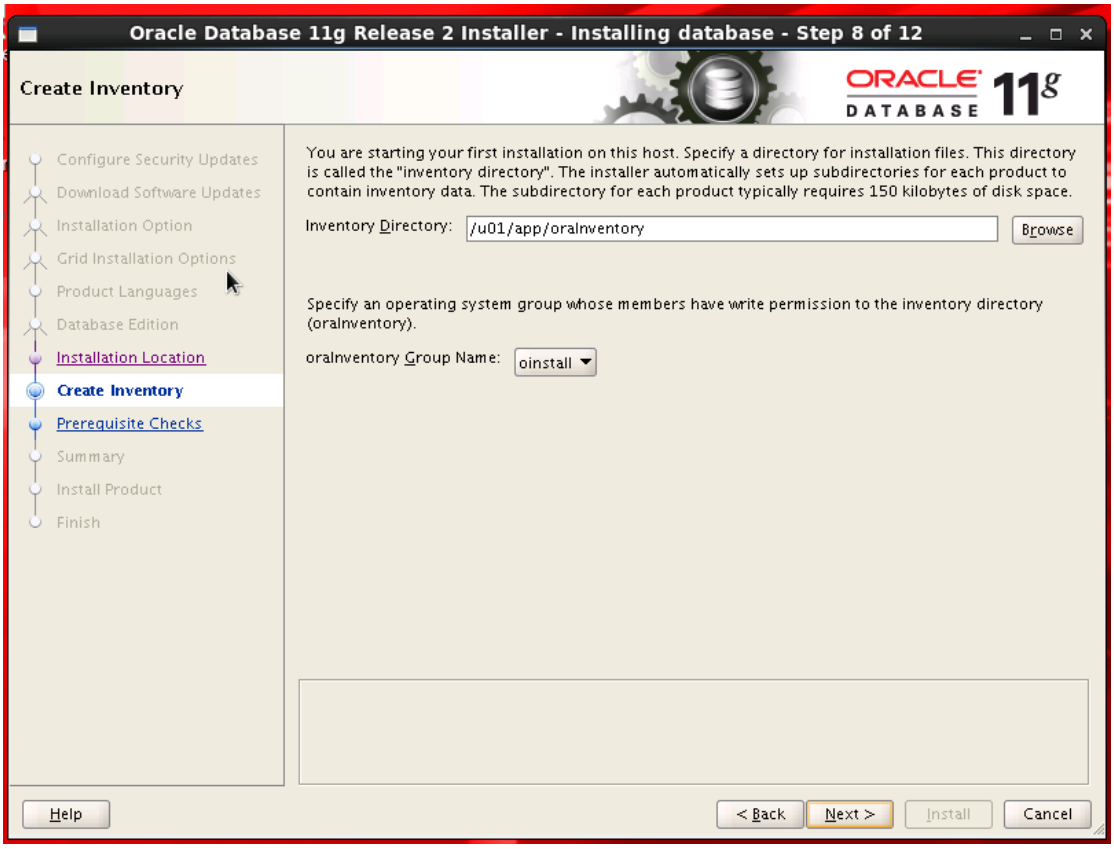
按照实际情况，选择企业版本，如下图



填写 Oracle 的软件路径和基本路径，如下图

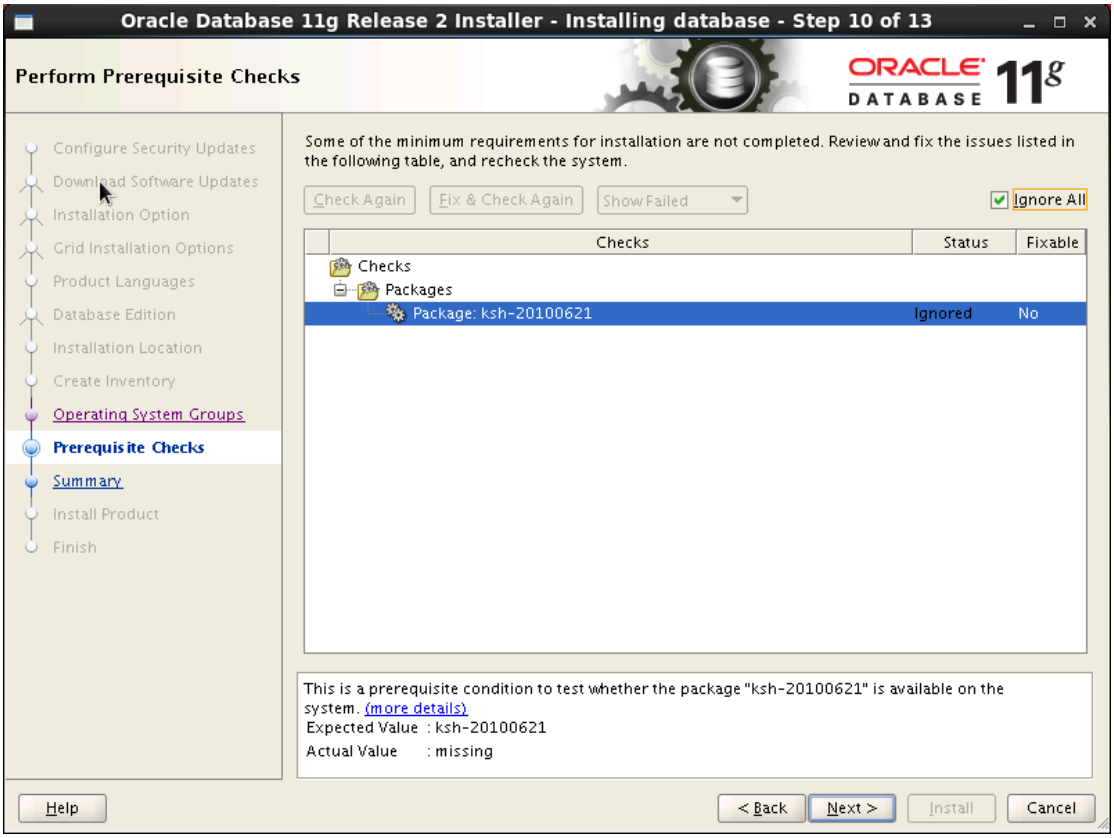


选择安装日志目录，如下图所示：

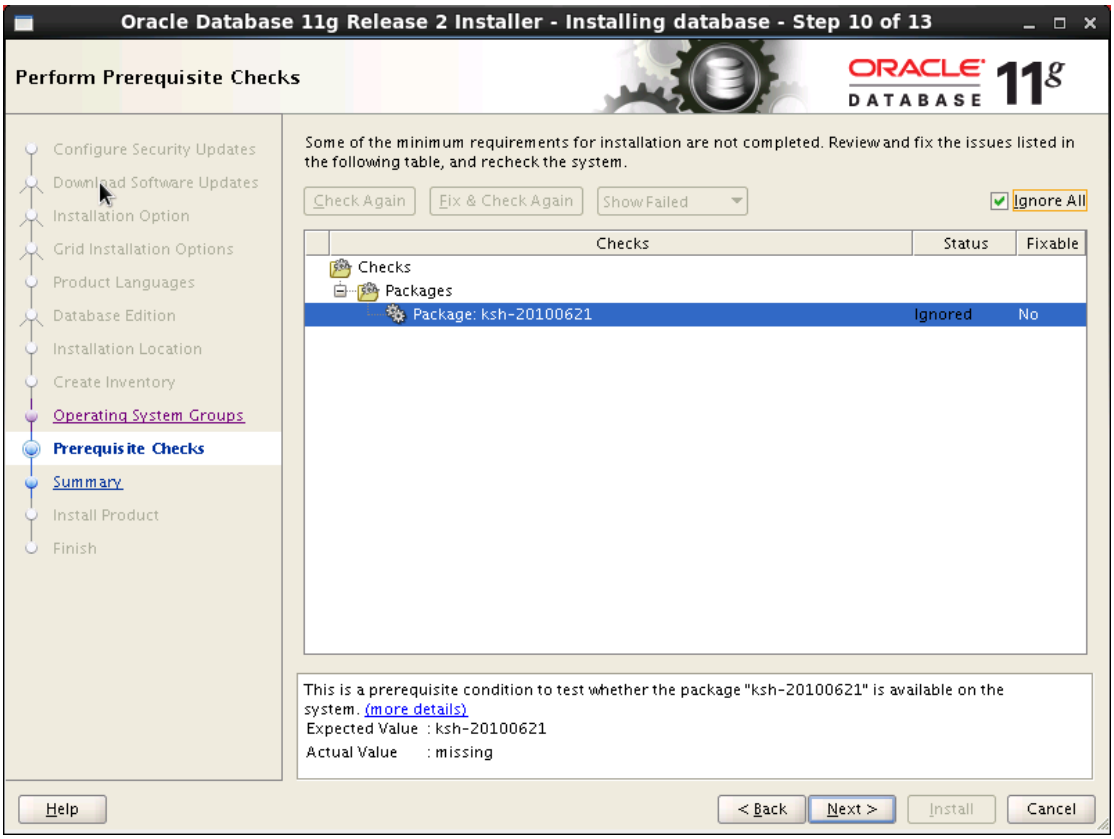


选择 dba 组

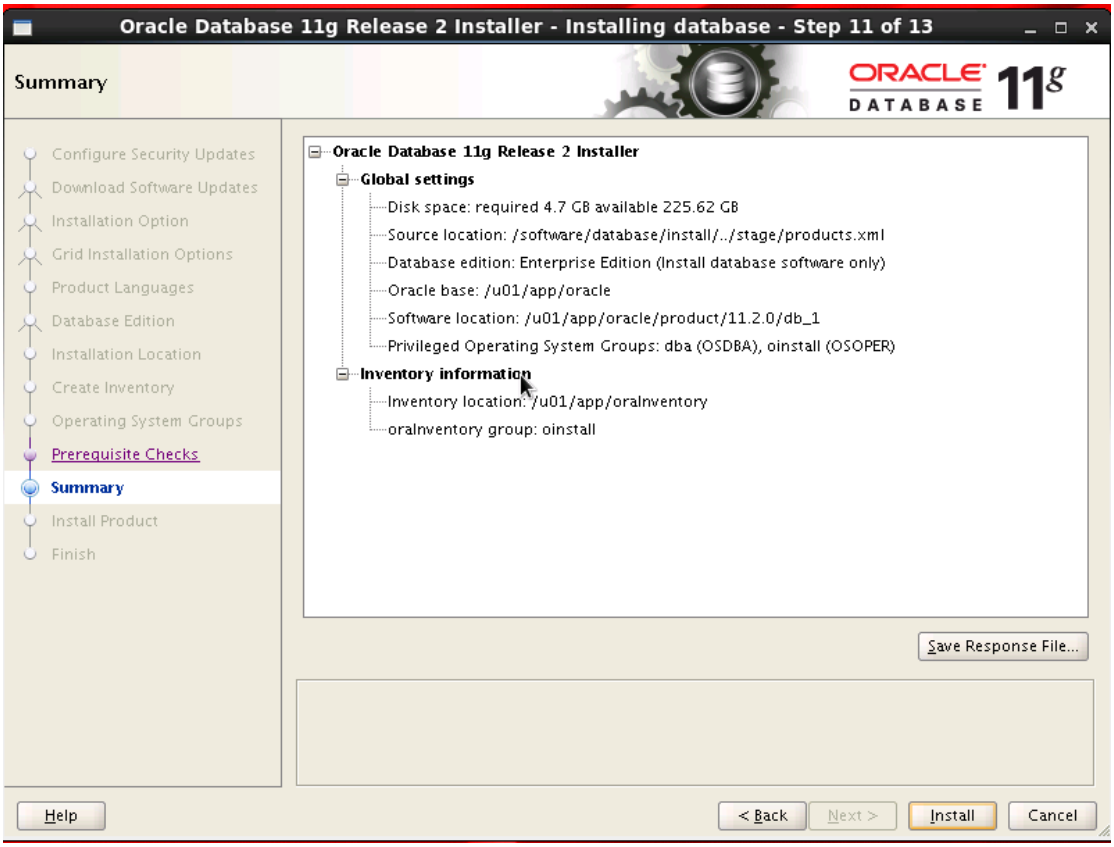
继续下一步安装操作



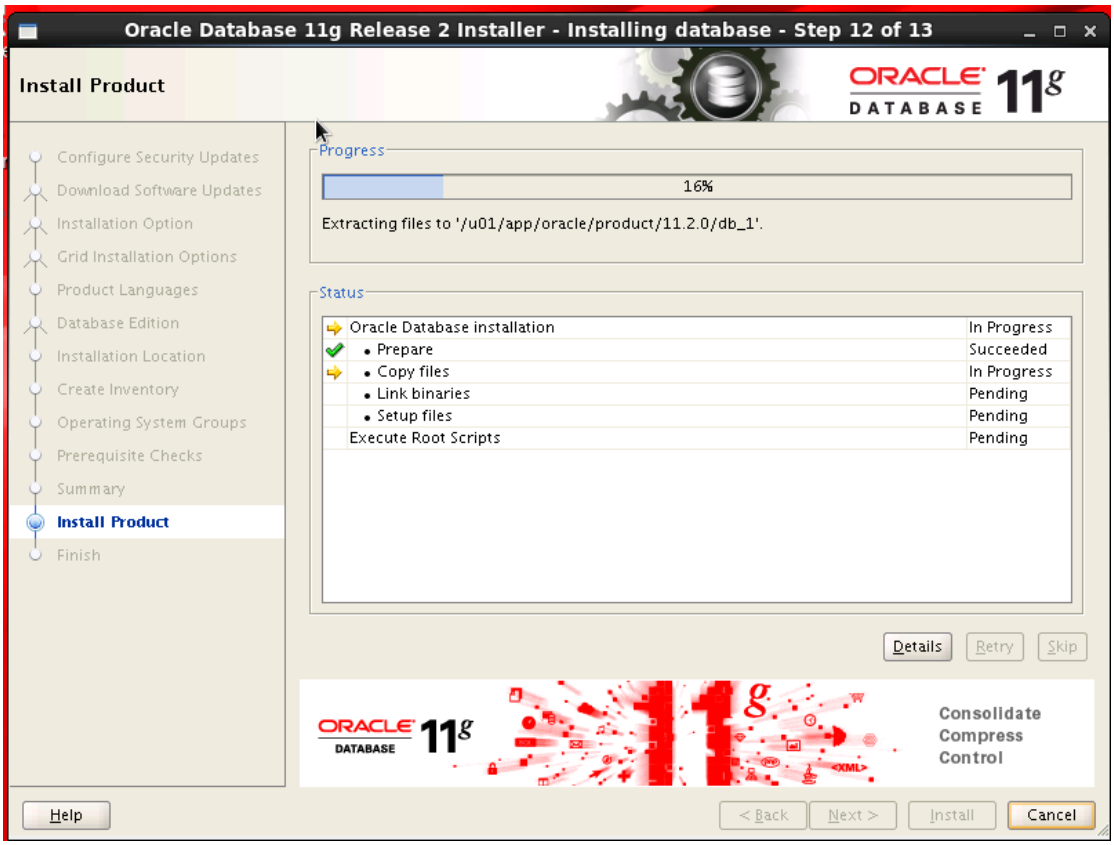
可以忽略，因为 CentOS 版本较高，所以 11g check 的时候不识别高版本 lib 包



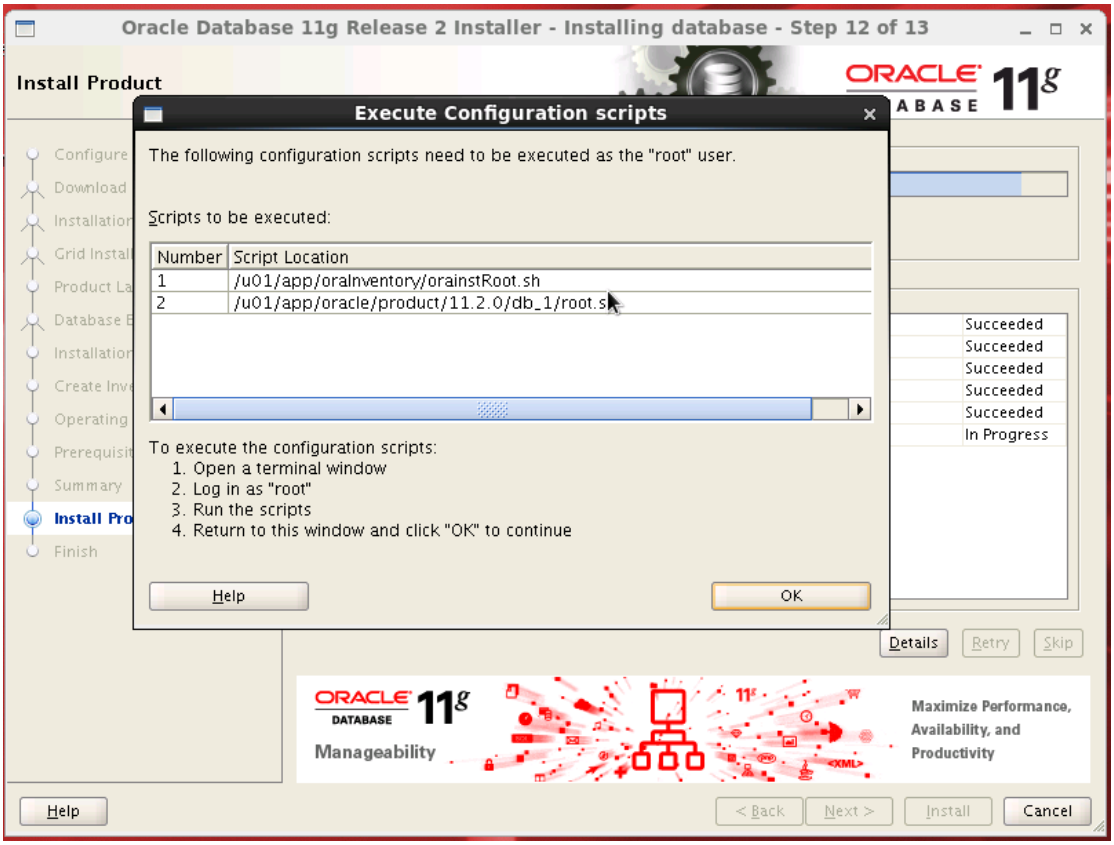
继续安装



安装中，这个时间比较漫长



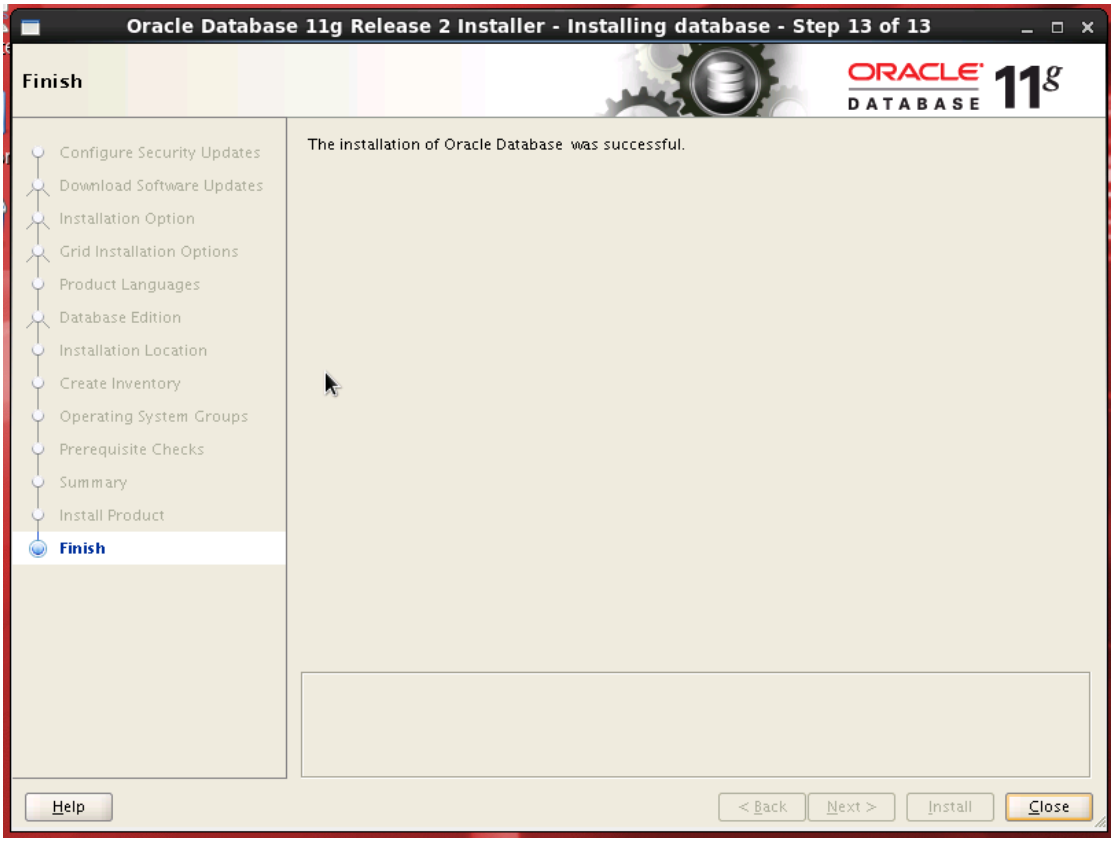
点击 OK，继续



执行 sh 文件

```
[root@testdb3 /]# /u01/app/oraInventory/orainstRoot.sh
Changing permissions of /u01/app/oraInventory.
Adding read,write permissions for group.
Removing read,write,execute permissions for world.

Changing groupname of /u01/app/oraInventory to oinstall.
The execution of the script is complete.
[root@testdb3 /]# /u01/app/oracle/product//11.2.0/db_1/root.sh
Performing root user operation for Oracle 11g

The following environment variables are set as:
    ORACLE_OWNER= oracle
    ORACLE_HOME=  /u01/app/oracle/product/11.2.0/db_1
```

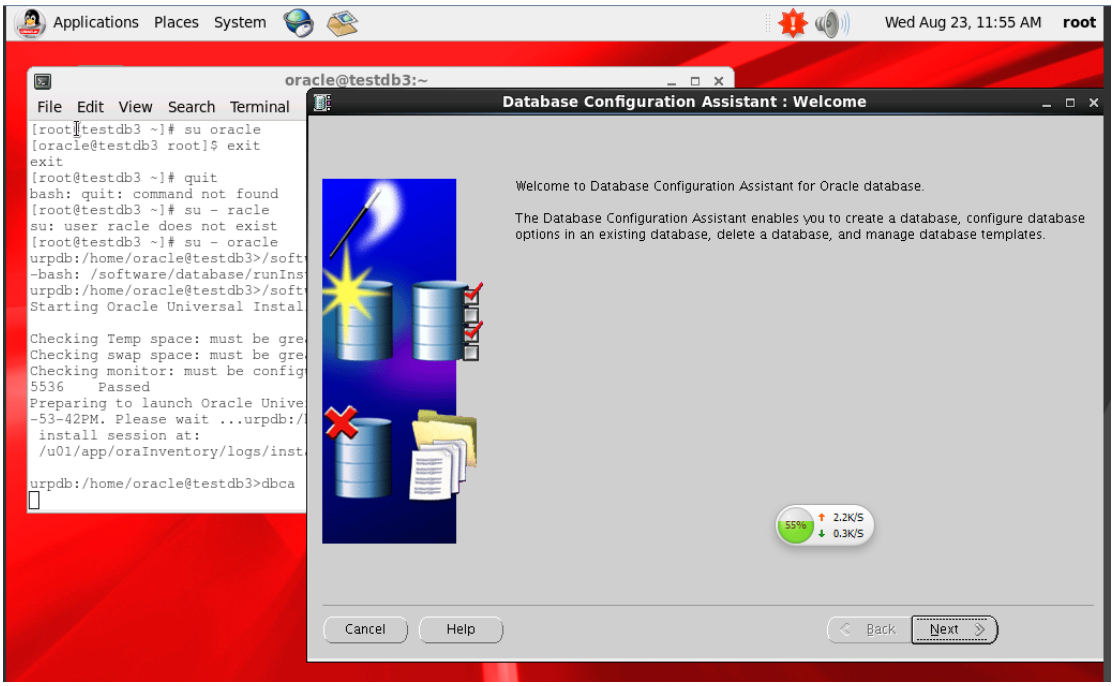
然后点击 close，结束



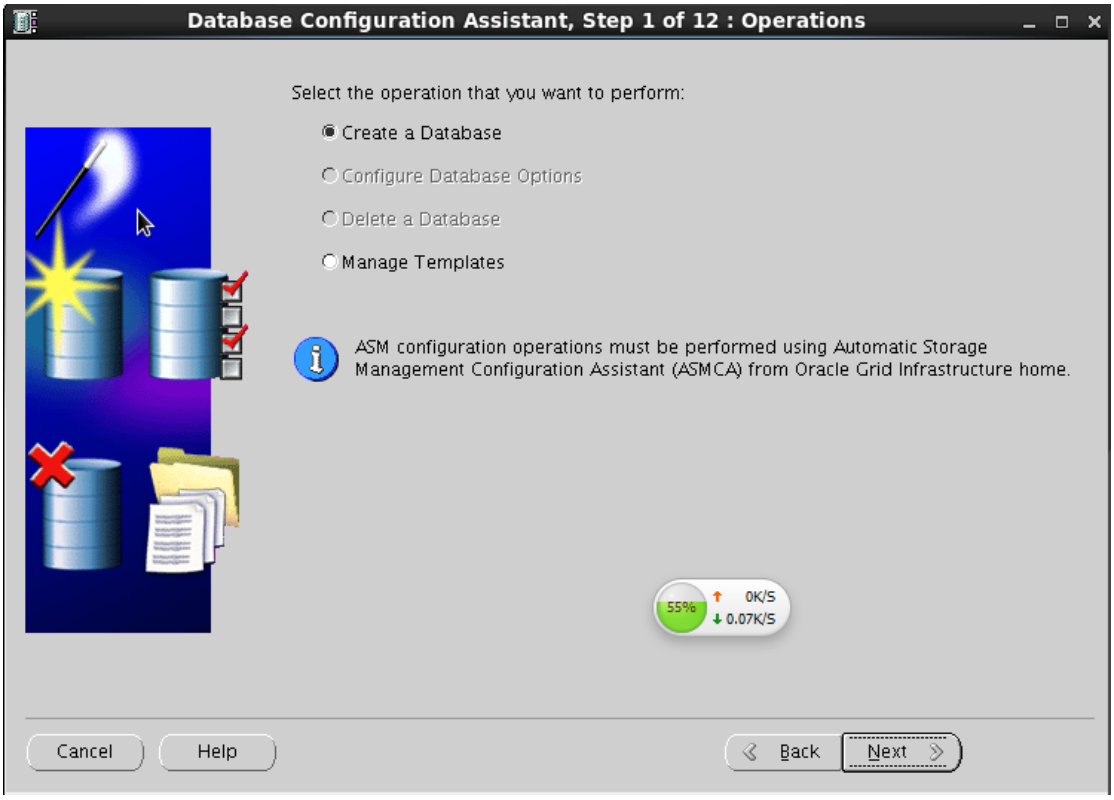
3.3 创建数据库

Dbca

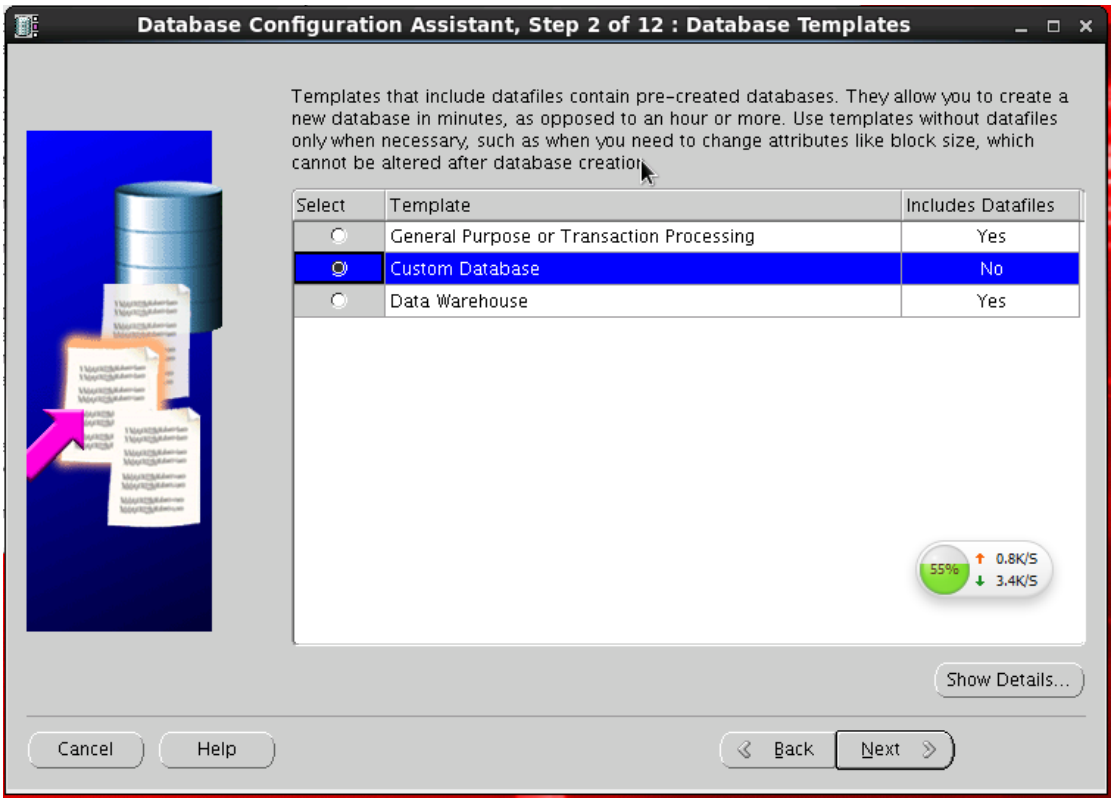
Database Configuration Assistant 图形界面启动。标题同时指明了步骤的编号和步骤的名称。在步骤名称为 Welcome 的欢迎窗口，直接点击 next。



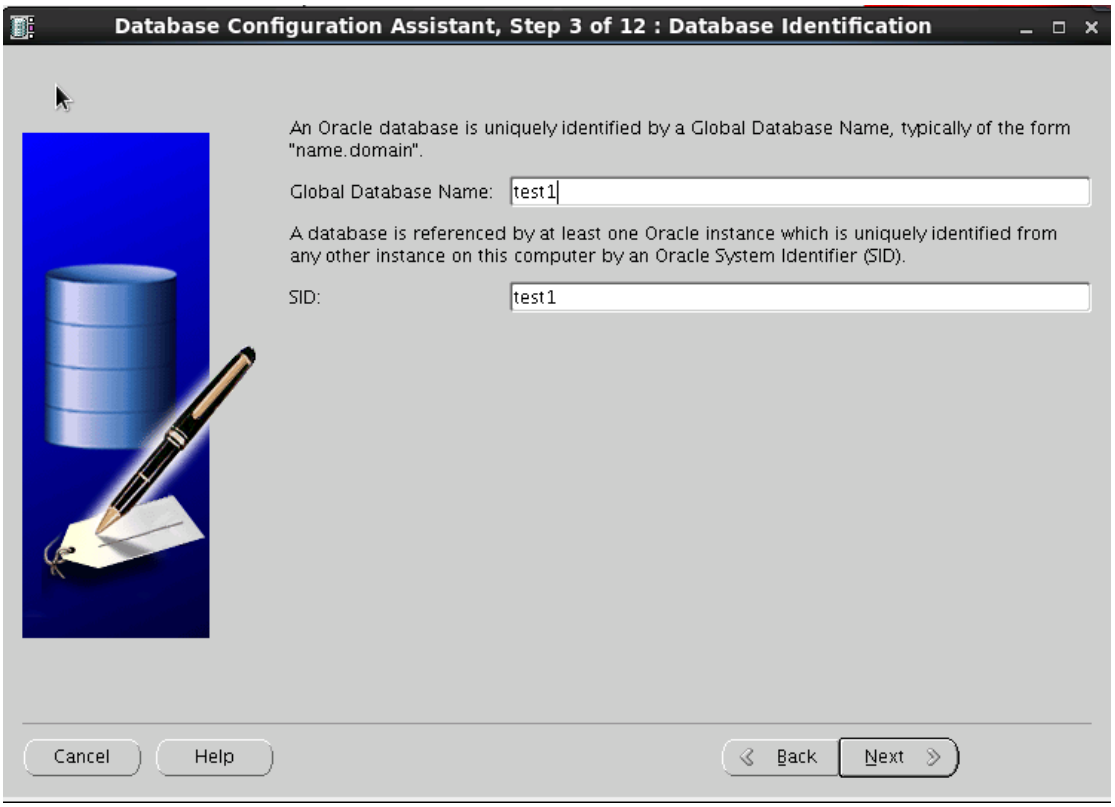
等待下一步 NEXT



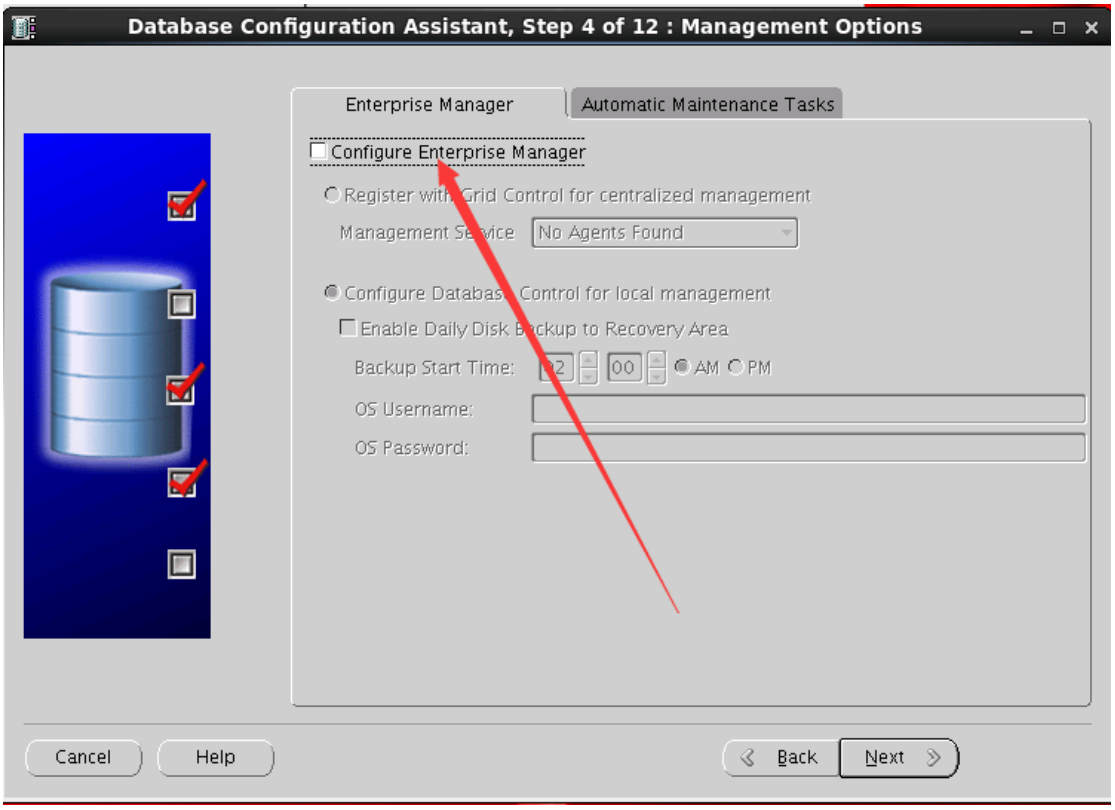
选择 Custom Database



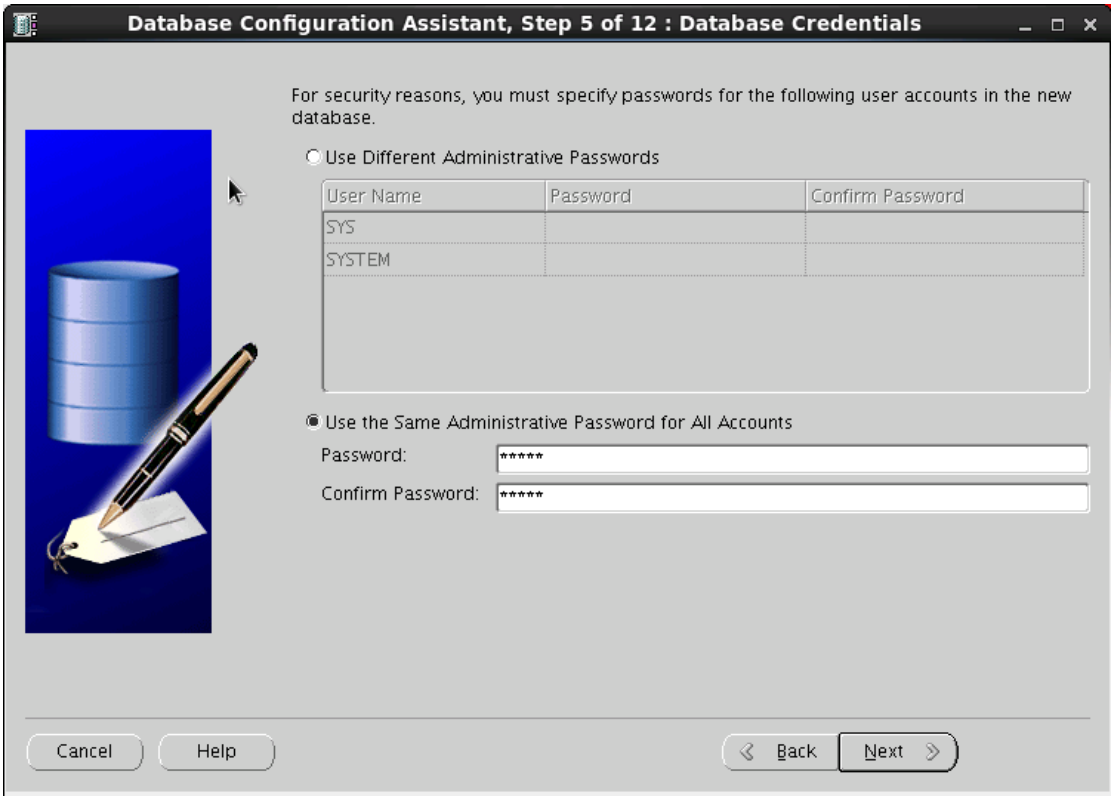
Global Database Name 框：输入前面确定的数据库名 SID 框：自动出现和数据库名相同的内容作为数据库实例名，单实例情况下不作改动

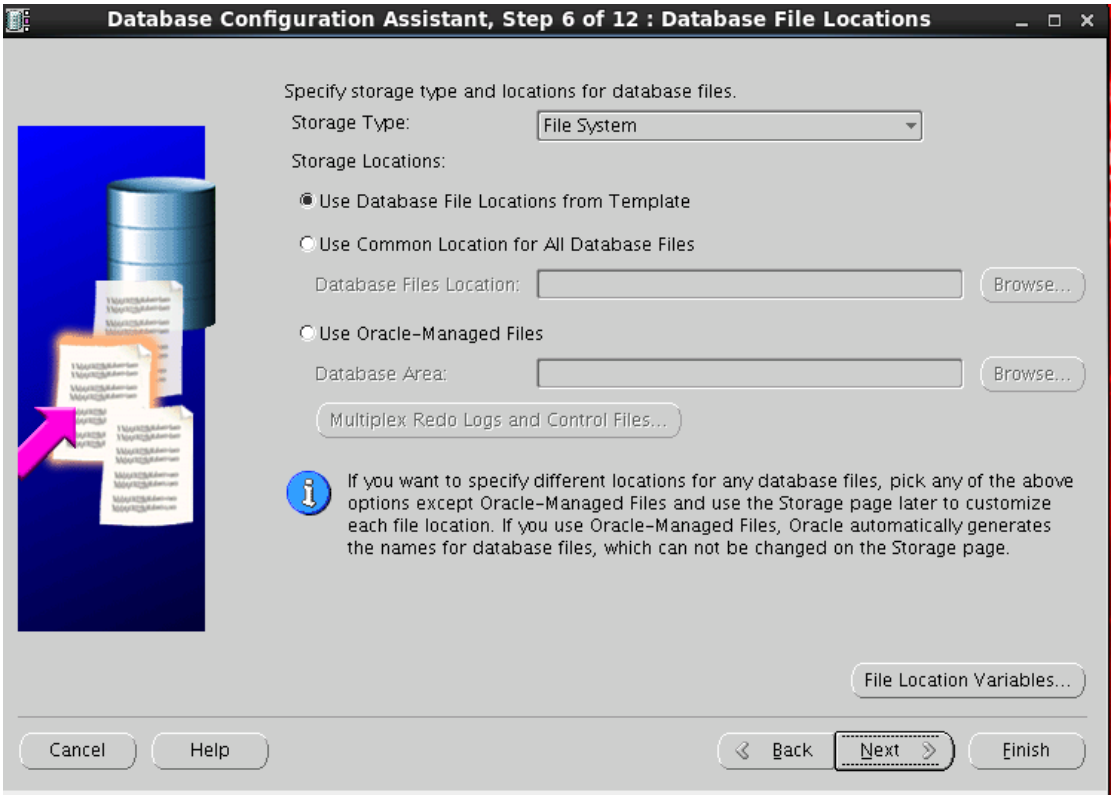


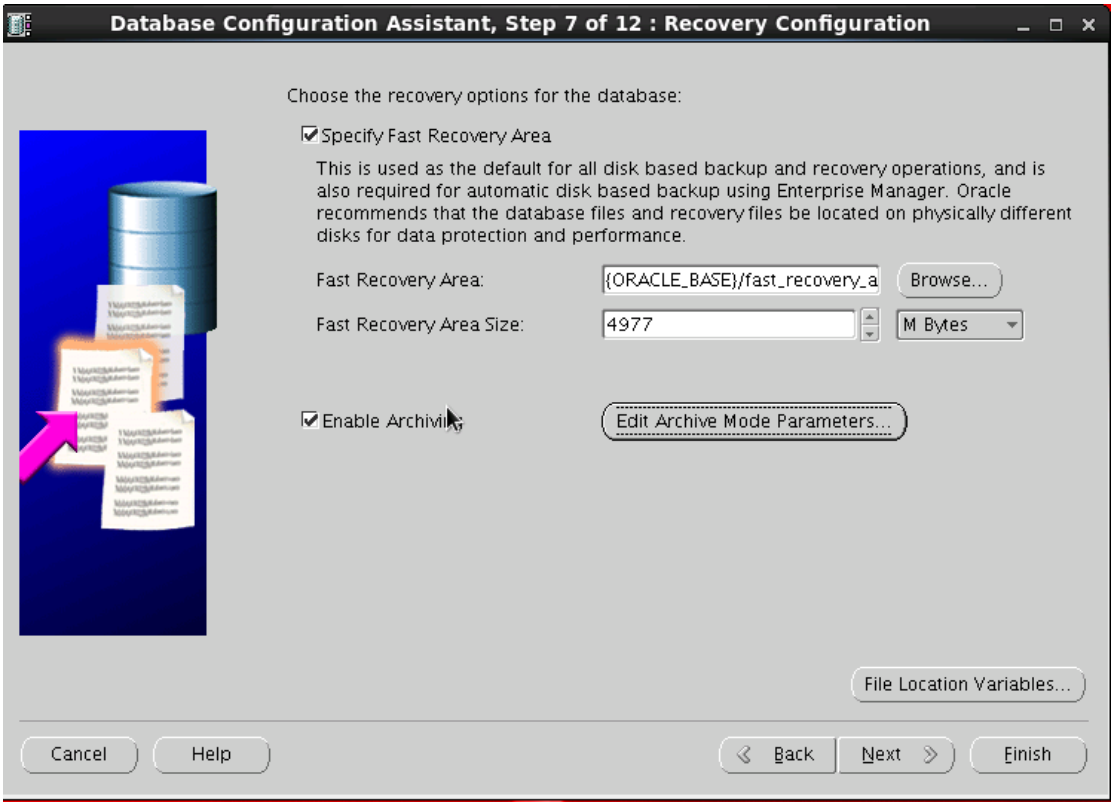
继续 Next（这里注意相关设置修改）

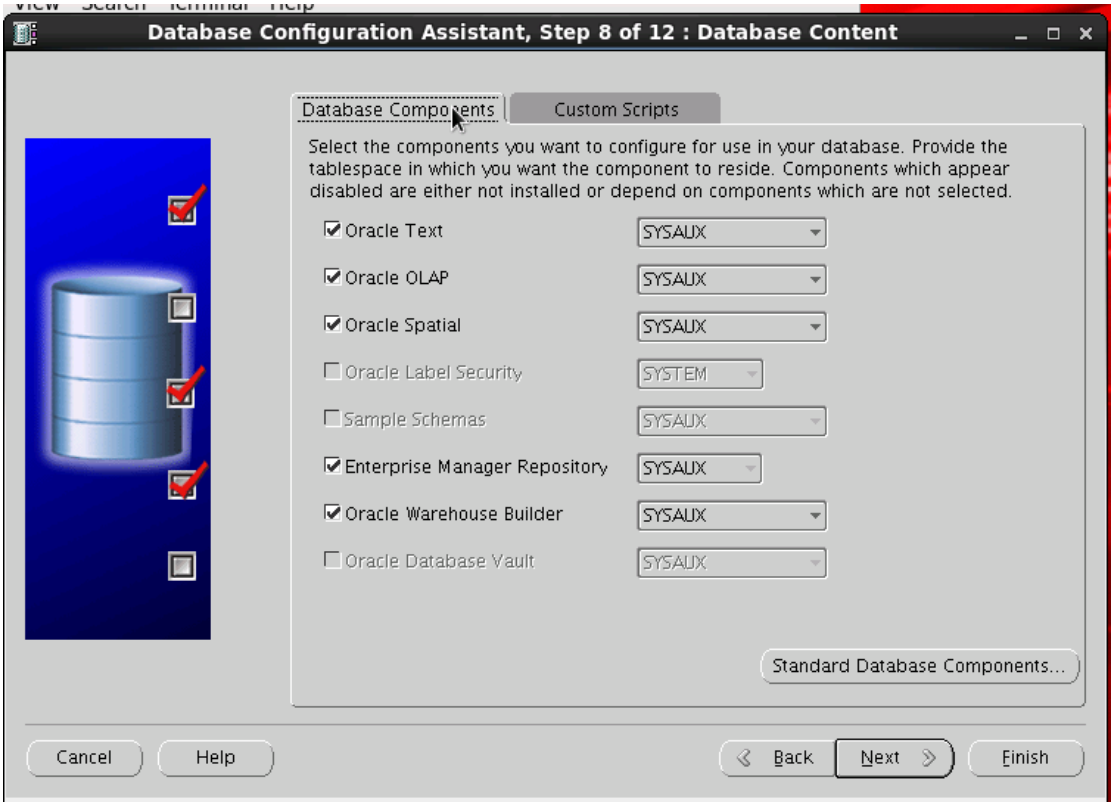


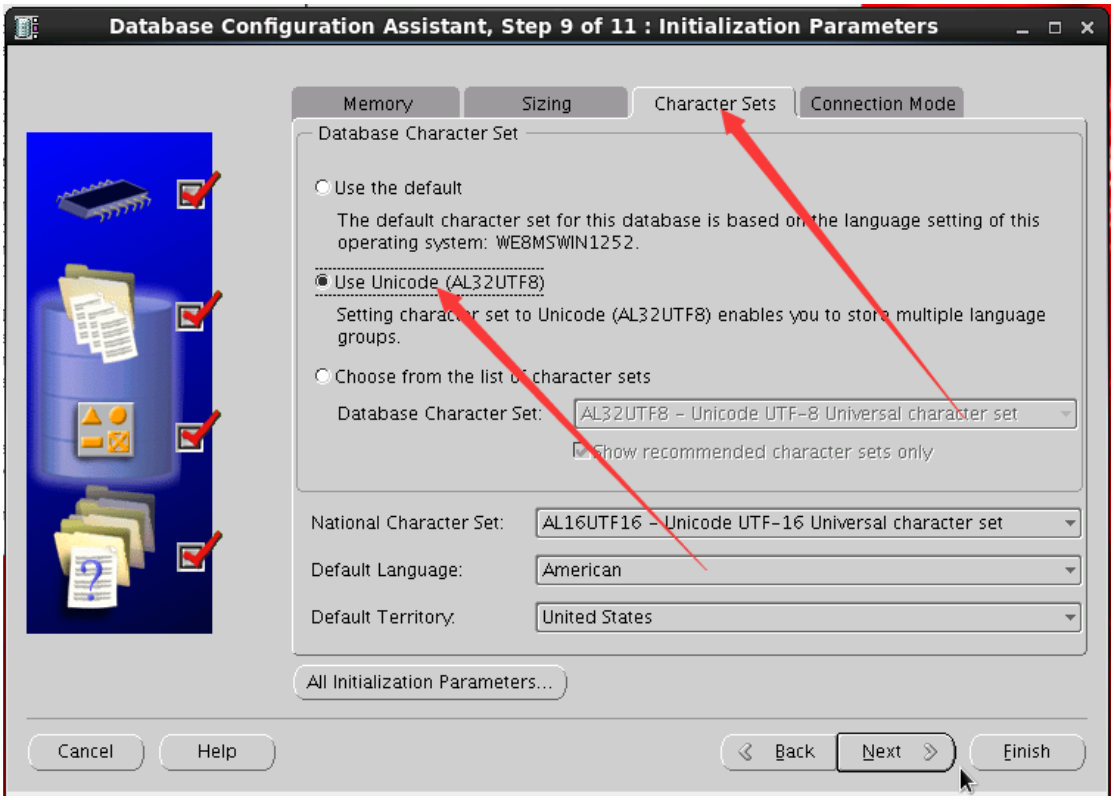
输入密码 test1

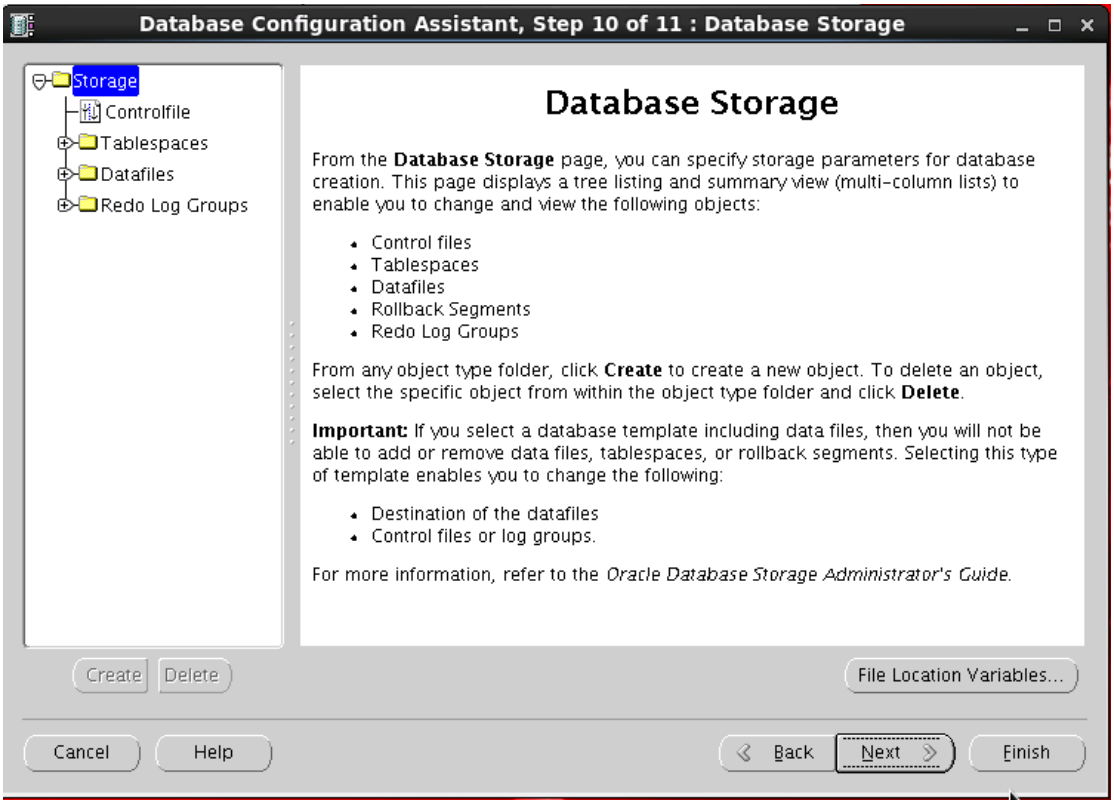

Database Configuration Assistant, Step 5 of 12 : Database Credentials
For security reasons, you must specify passwords for the following user accounts in the new database.
Use Different Administrative Passwords
User Name
Password
Confirm Password
SYS
SYSTEM
Use the Same Administrative Password for All Accounts
Password:
Confirm Password:
Cancel
Help
Back
Next

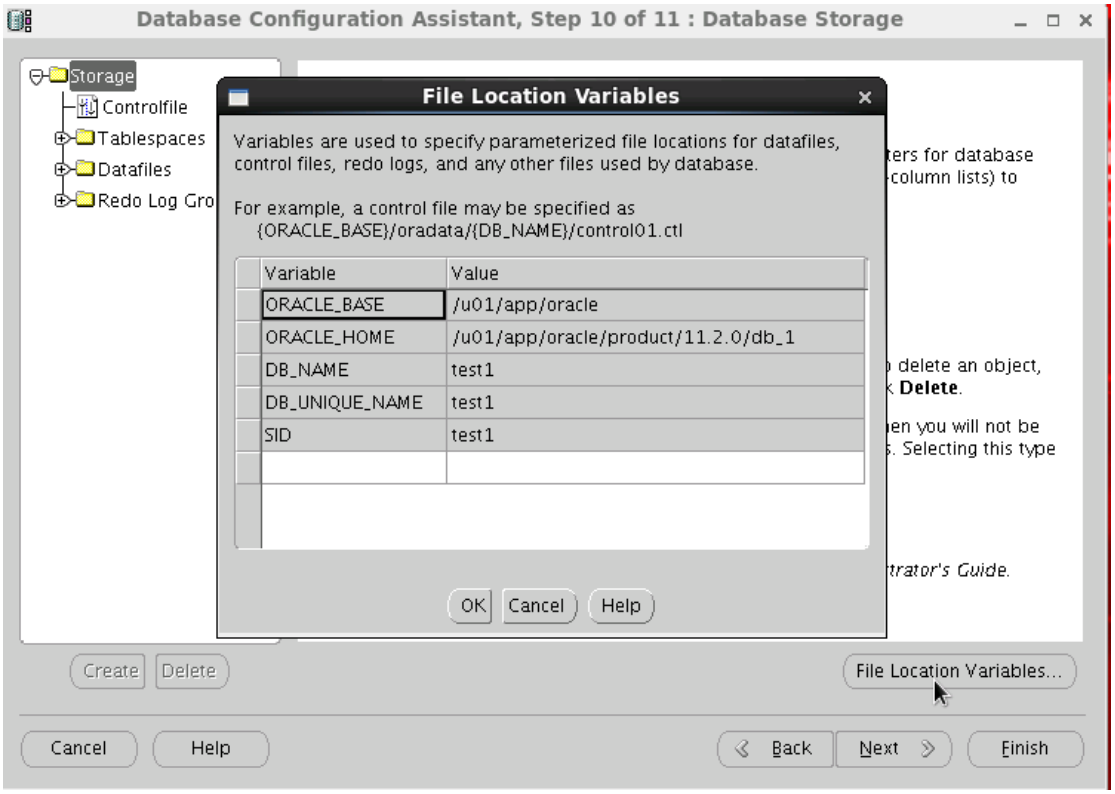

Database Configuration Assistant, Step 6 of 12 : Database File Locations
Specify storage type and locations for database files.
Storage Type:
File System
Storage Locations:
Use Database File Locations from Template
Use Common Location for All Database Files
Database Files Location:
Browse...
Use Oracle-Managed Files
Database Area:
Browse...
Multiplex Redo Logs and Control Files...
If you want to specify different locations for any database files, pick any of the above options except Oracle-Managed Files and use the Storage page later to customize each file location. If you use Oracle-Managed Files, Oracle automatically generates the names for database files, which can not be changed on the Storage page.
File Location Variables...
Cancel
Help
Back
Next
Finish

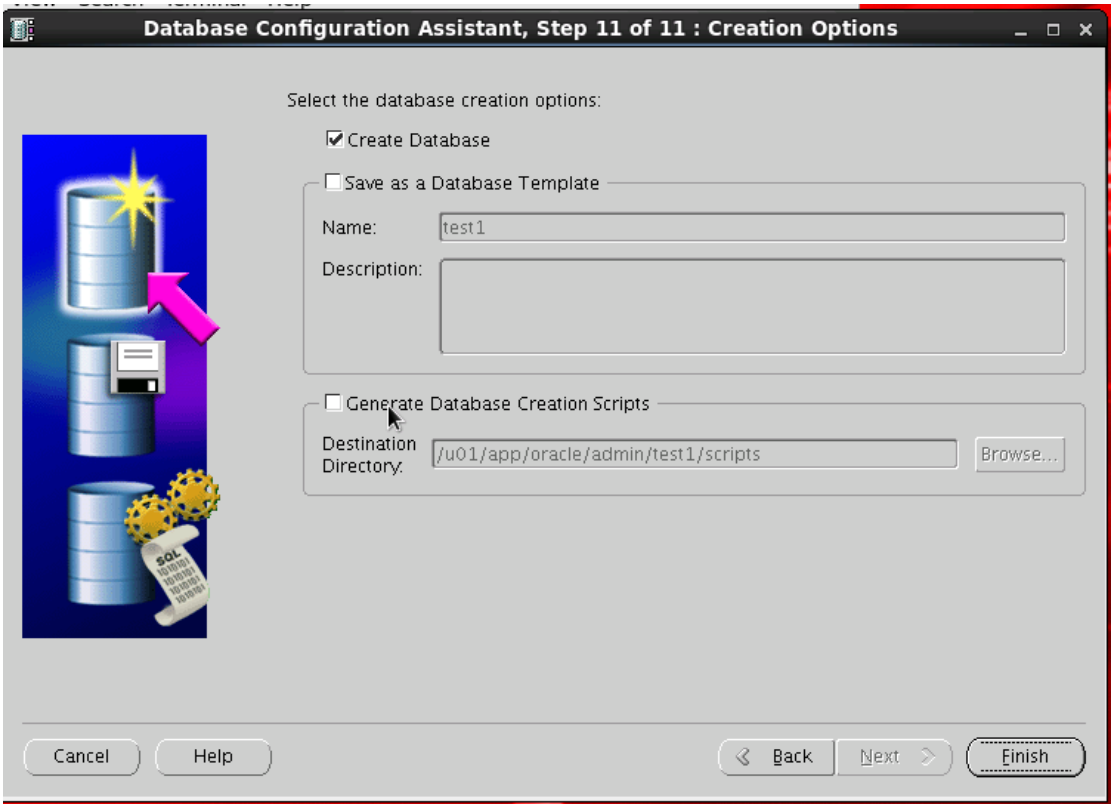

Database Configuration Assistant, Step 7 of 12 : Recovery Configuration
Choose the recovery options for the database:
Specify Fast Recovery Area
This is used as the default for all disk based backup and recovery operations, and is also required for automatic disk based backup using Enterprise Manager. Oracle recommends that the database files and recovery files be located on physically different disks for data protection and performance.
Fast Recovery Area:
{ORACLE_BASE}/fast_recovery_a
Browse...
Fast Recovery Area Size:
4977
M Bytes
Enable Archivi
Edit Archive Mode Parameters...
File Location Variables...
Cancel
Help
Back
Next
Finish

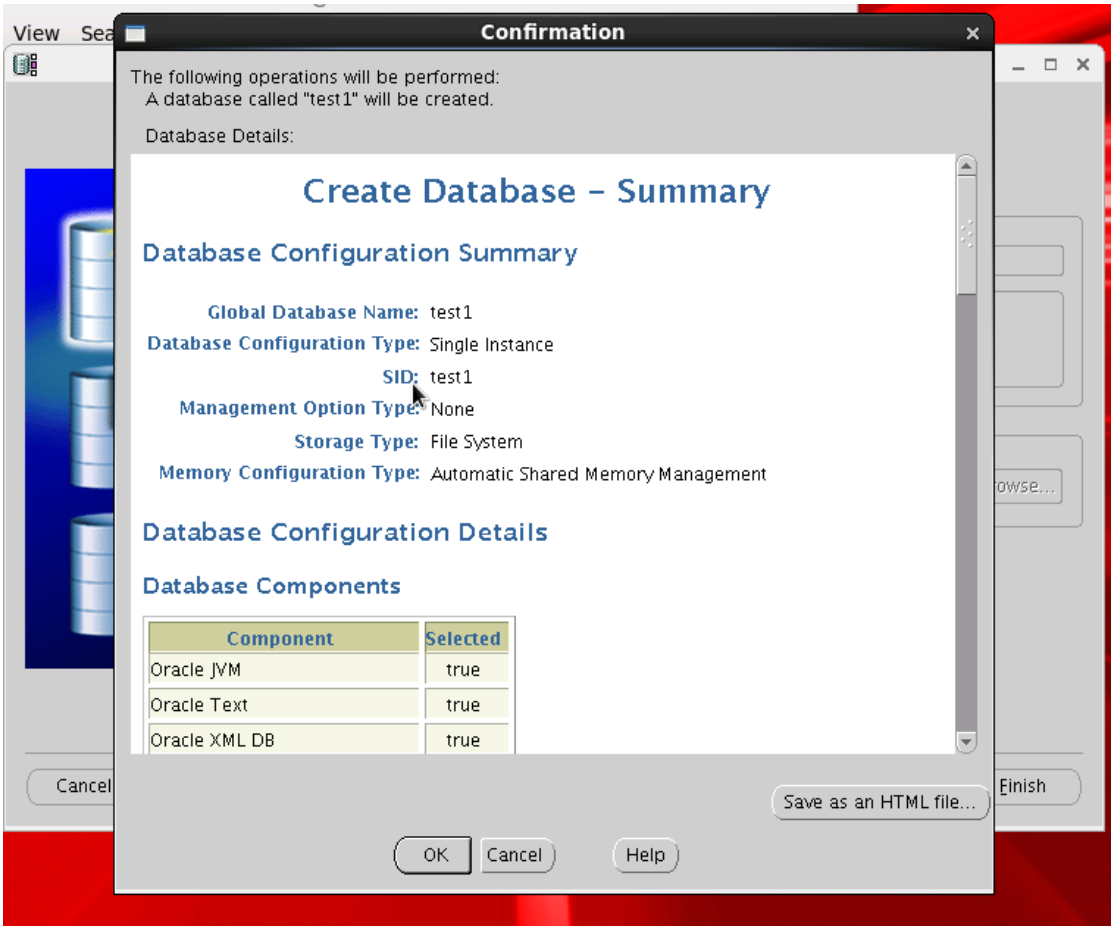

Database Configuration Assistant, Step 8 of 12 : Database Content
Database Components
Custom Scripts
Select the components you want to configure for use in your database. Provide the tablespace in which you want the component to reside. Components which appear disabled are either not installed or depend on components which are not selected.
Oracle Text
SYSAUX
Oracle OLAP
SYSAUX
Oracle Spatial
SYSAUX
Oracle Label Security
SYSTEM
Sample Schemas
SYSAUX
Enterprise Manager Repository
SYSAUX
Oracle Warehouse Builder
SYSAUX
Oracle Database Vault
SYSAUX
Standard Database Components...
Cancel
Help
Back
Next
Finish

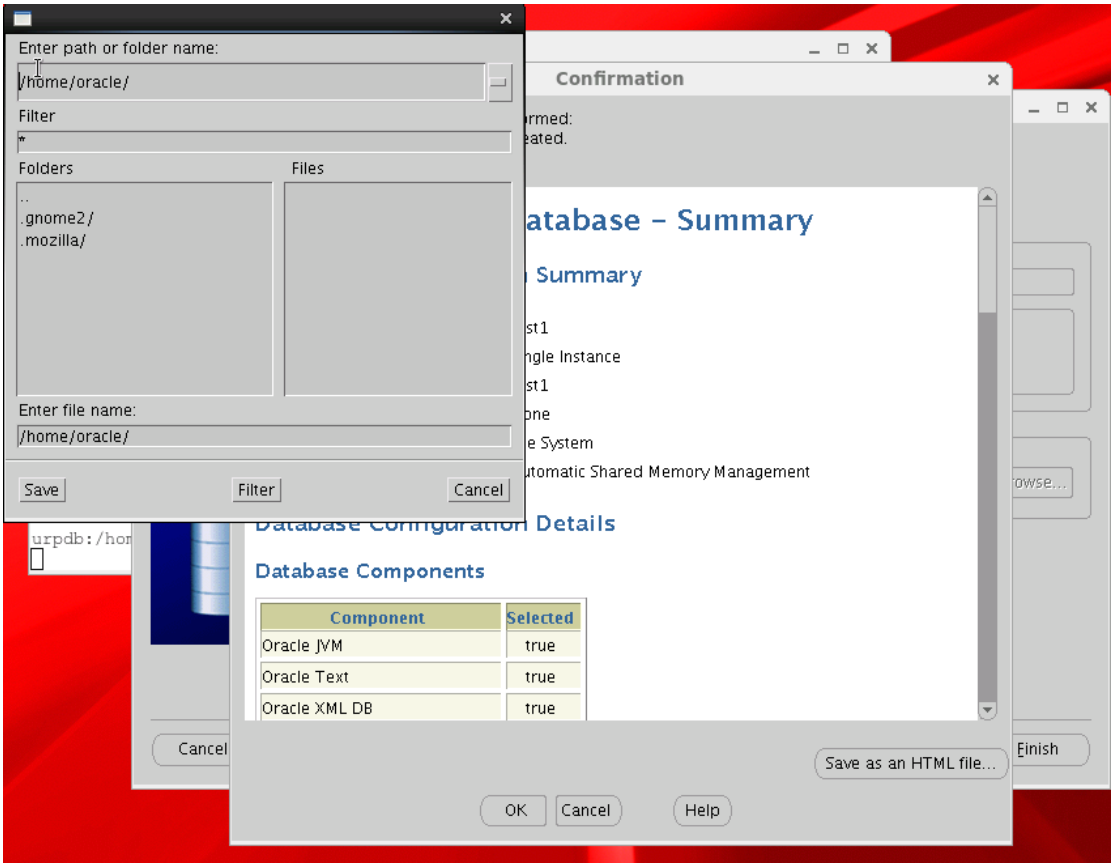

Database Configuration Assistant, Step 9 of 11 : Initialization Parameters
Memory
Sizing
Character Sets
Connection Mode
Database Character Set
Use the default
The default character set for this database is based on the language setting of this operating system: WE8MSWIN1252.
Use Unicode (AL32UTF8)
Setting character set to Unicode (AL32UTF8) enables you to store multiple language groups.
Choose from the list of character sets
Database Character Set:
AL32UTF8 – Unicode UTF-8 Universal character set
Show recommended character sets only
National Character Set:
AL16UTF16 – Unicode UTF-16 Universal character set
Default Language:
American
Default Territory:
United States
All Initialization Parameters...
Cancel
Help
Back
Next
Finish

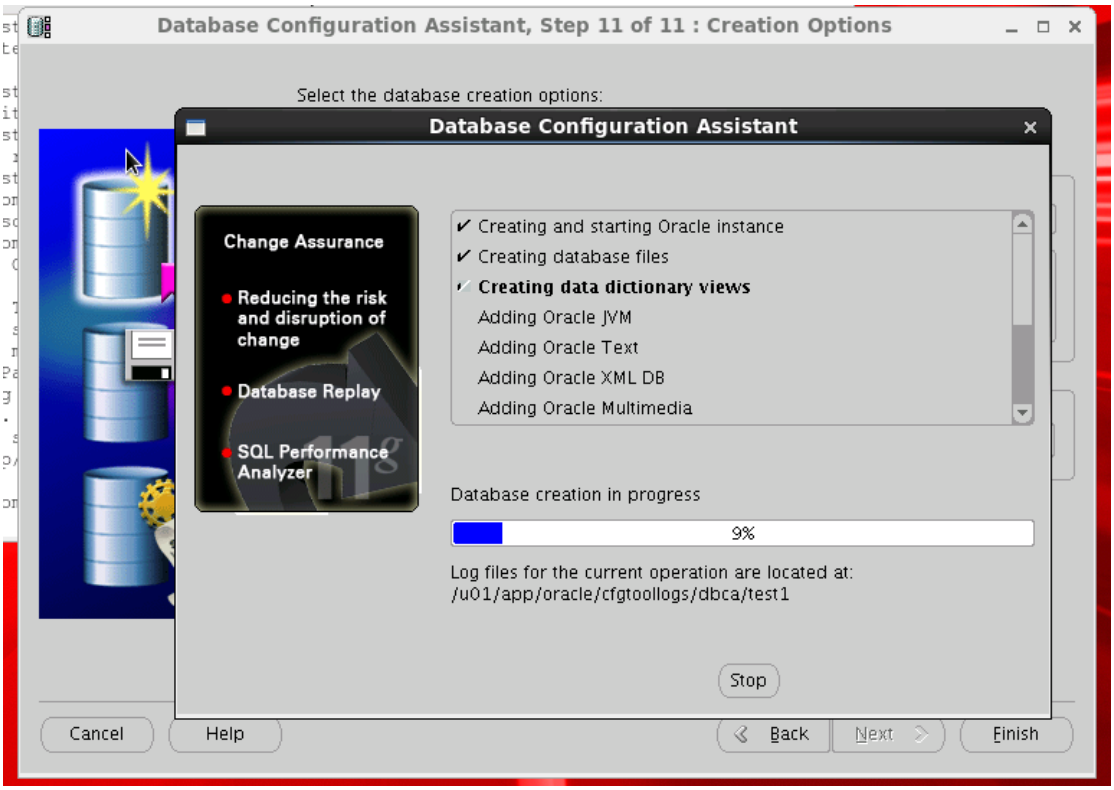

Database Configuration Assistant, Step 10 of 11 : Database Storage
Storage
Controlfile
Tablespaces
Datafiles
Redo Log Groups
Database Storage
From the Database Storage page, you can specify storage parameters for database creation. This page displays a tree listing and summary view (multi-column lists) to enable you to change and view the following objects:
Control files
Tablespaces
Datafiles
Rollback Segments
Redo Log Groups
From any object type folder, click Create to create a new object. To delete an object, select the specific object from within the object type folder and click Delete.
Important: If you select a database template including data files, then you will not be able to add or remove data files, tablespaces, or rollback segments. Selecting this type of template enables you to change the following:
Destination of the datafiles
Control files or log groups.
For more information, refer to the Oracle Database Storage Administrator's Guide.
Create
Delete
File Location Variables...
Cancel
Help
Back
Next
Finish

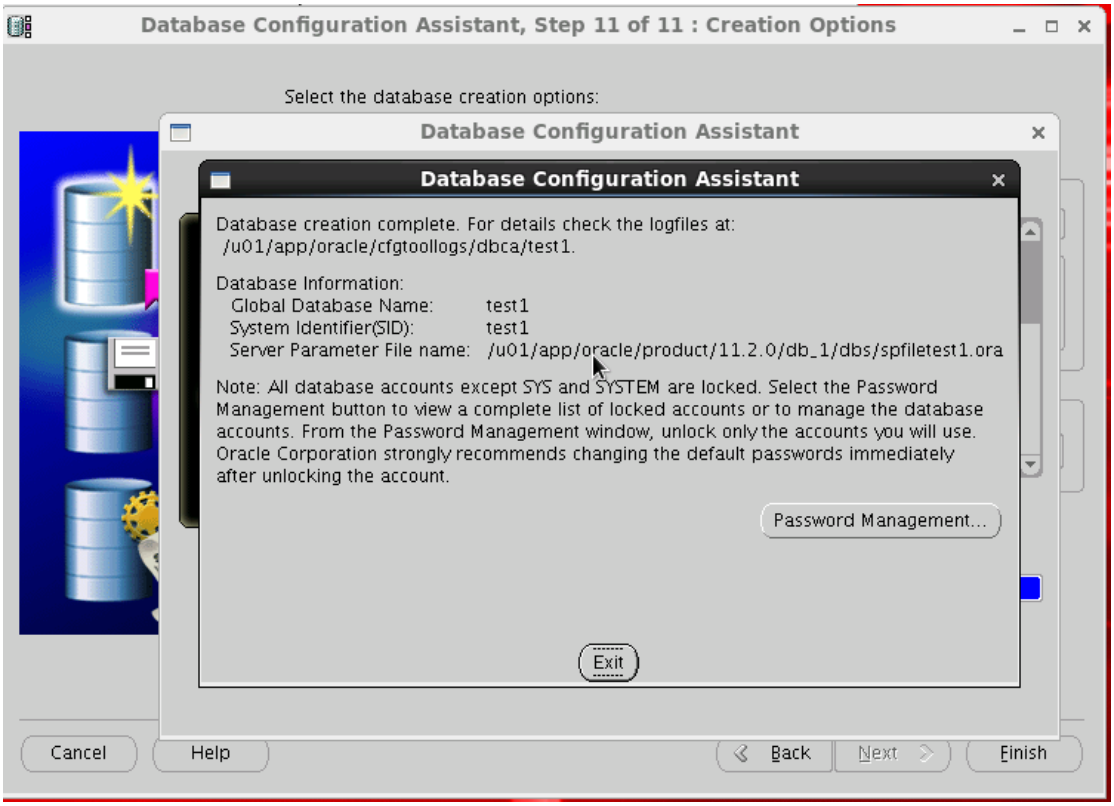

Database Configuration Assistant, Step 10 of 11 : Database Storage
Storage
Controlfile
Tablespaces
Datafiles
Redo Log Gro
File Location Variables
Variables are used to specify parameterized file locations for datafiles, control files, redo logs, and any other files used by database.
For example, a control file may be specified as {ORACLE_BASE}/oradata/{DB_NAME}/control01.ctl
Variable
Value
ORACLE_BASE
/u01/app/oracle
ORACLE_HOME
/u01/app/oracle/product/11.2.0/db_1
DB_NAME
test1
DB_UNIQUE_NAME
test1
SID
test1
OK
Cancel
Help
Create
Delete
File Location Variables...
Cancel
Help
Back
Next
Finish


Database Configuration Assistant, Step 11 of 11 : Creation Options
Select the database creation options:
Create Database
Save as a Database Template
Name:
test1
Description:
Generate Database Creation Scripts
Destination Directory:
/u01/app/oracle/admin/test1/scripts
Browse...
Cancel
Help
Back
Next
Finish


View
Confirmation
The following operations will be performed:
A database called "test1" will be created.
Database Details:
Create Database - Summary
Database Configuration Summary
Global Database Name: test1
Database Configuration Type: Single Instance
SID: test1
Management Option Type: None
Storage Type: File System
Memory Configuration Type: Automatic Shared Memory Management
Database Configuration Details
Database Components
Component
Selected
Oracle JVM
true
Oracle Text
true
Oracle XML DB
true
Save as an HTML file...
OK
Cancel
Help
Cancel
Finish


Enter path or folder name:
/home/oracle/
Filter
*
Folders
Files
..
.gnome2/
.mozilla/
Enter file name:
/home/oracle/
Save
Filter
Cancel
Confirmation
atabase – Summary
Summary
st1
ngle Instance
st1
one
e System
utomatic Shared Memory Management
Database Configuration Details
Database Components
Component
Selected
Oracle JVM
true
Oracle Text
true
Oracle XML DB
true
Cancel
Finish
Save as an HTML file...
OK
Cancel
Help


Database Configuration Assistant, Step 11 of 11 : Creation Options
Select the database creation options:
Database Configuration Assistant
Change Assurance
Reducing the risk and disruption of change
Database Replay
SQL Performance Analyzer
11g
✔ Creating and starting Oracle instance
✔ Creating database files
✔ Creating data dictionary views
Adding Oracle JVM
Adding Oracle Text
Adding Oracle XML DB
Adding Oracle Multimedia
Database creation in progress
9%
Log files for the current operation are located at:
/u01/app/oracle/cfgtoollogs/dbca/test1
Stop
Cancel
Help
Back
Next
Finish




```
Connecting to 192.168.12.40:22...
Connection established.
To escape to local shell, press 'Ctrl+Alt+]'.

Last login: Wed Aug 16 14:55:04 2017 from 172.50.3.28
[root@testdb3 ~]# mkdir /etc/oratab
[root@testdb3 ~]# chown -R oracle.oinstall /etc/oratab
[root@testdb3 ~]# cd /
[root@testdb3 /]# su - oracle
urpdb:/home/oracle@testdb3>sqlplus "/ as sysdba"

SQL*Plus: Release 11.2.0.4.0 Production on Wed Aug 23 13:28:53 2017

Copyright (c) 1982, 2013, Oracle.  All rights reserved.

Connected to an idle instance.

SQL>
```

继续参考

http://www.linuxidc.com/Linux/2015-02/113222p5.htm

4 监听配置

运行 Net Configuration Assistant，配置监听程序

Oracle Net Configuration Assistant：欢迎使用

Oracle Net Configuration Assistant：欢迎使用 勾选监听程序配置，单击下一步

Oracle Net Configuration Assistant：监听程序配置，监听程序

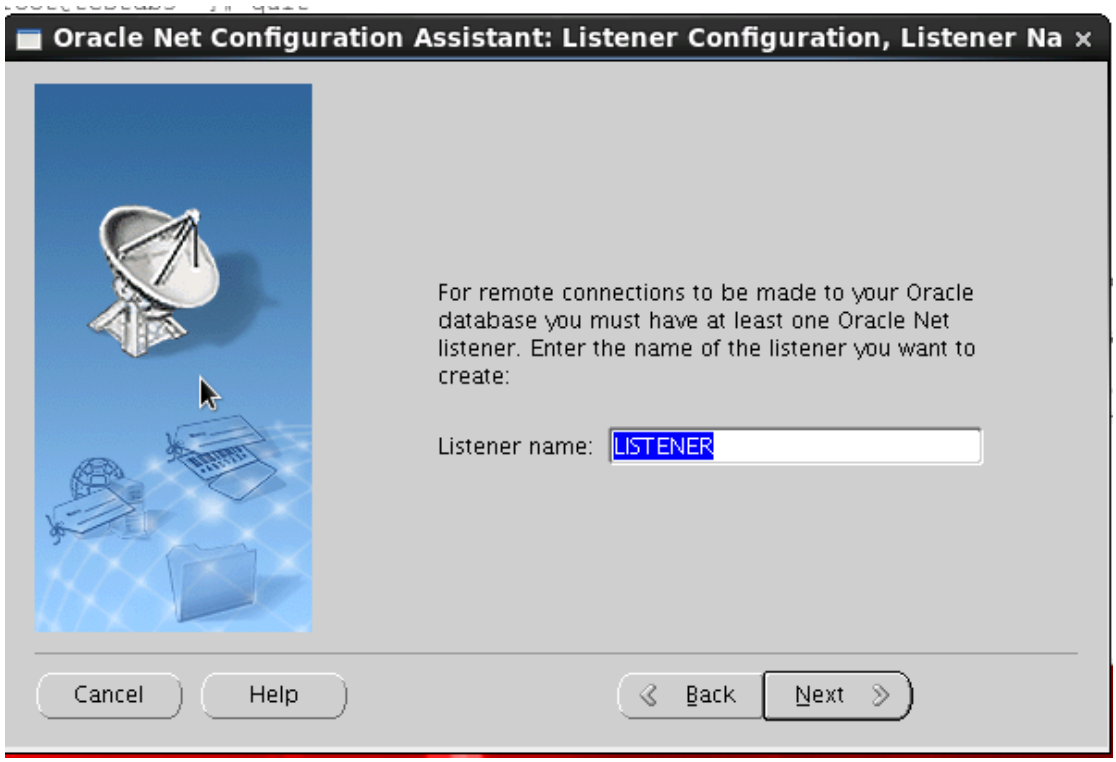
可以添加、重新设置、重命名或删除监听程序。重命名或删除监听程序前，先停止监听程序。

这里选择添加，单击下一步

Oracle Net Configuration Assistant：监听程序配置，监听程序名

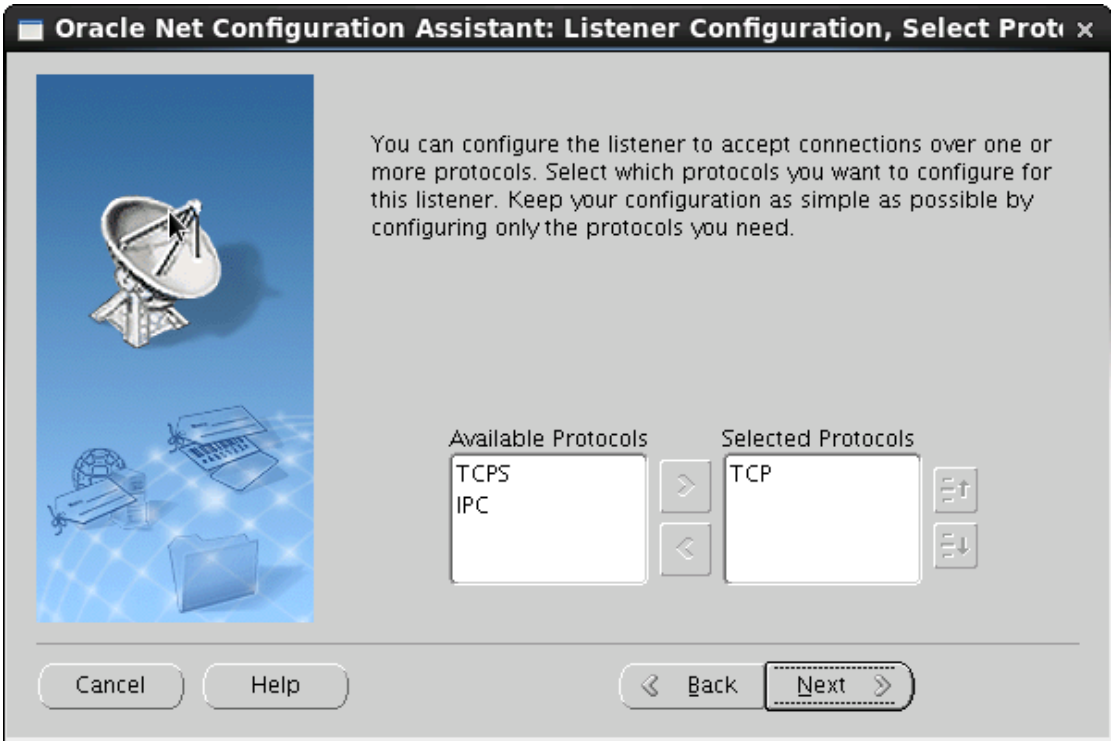
输入监听程序的名称。每个监听程序由唯一的名称标识。LISTENER 是第一个监听程序的默认名称。

这里默认为 LISTENER，单击下一步



Oracle Net Configuration Assistant：监听程序配置，选择协议

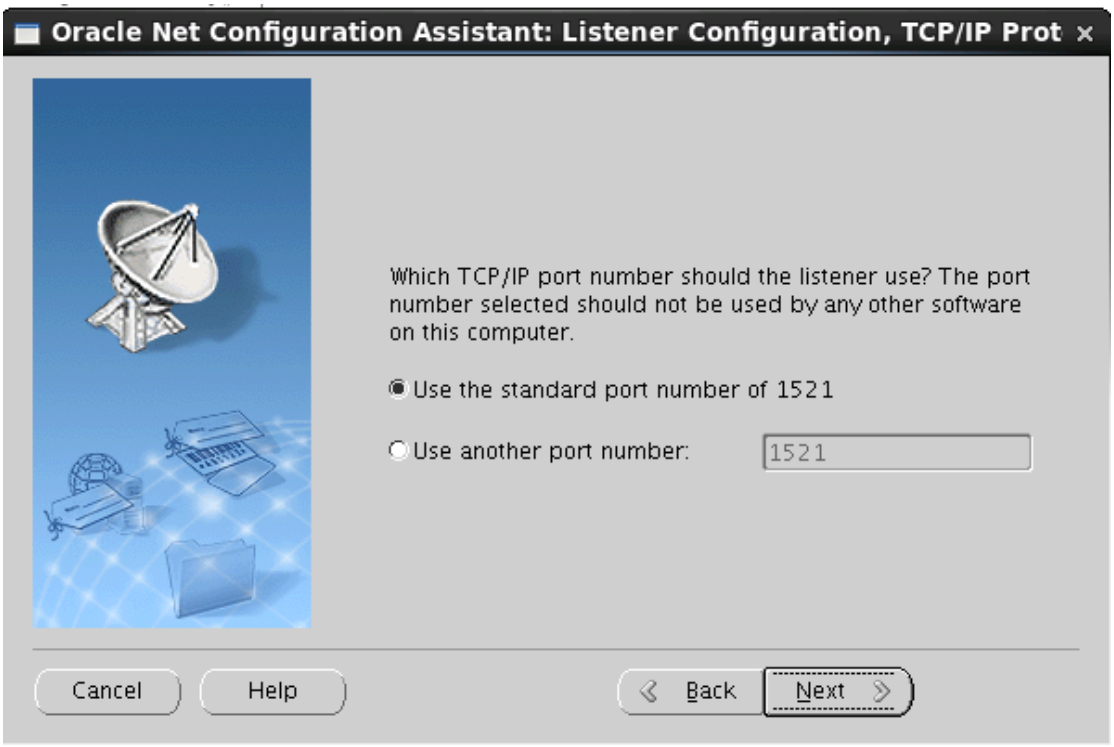
从可用协议列表中选择协议 TCP，然后选择右箭头按钮,将其移到选定的协议列表中，单击下一步



Oracle Net Configuration Assistant：监听程序配置，TCP/IP 协议

配置监听程序的 TCP/IP 端口号，有两个选项可供选择：使用标准端口号 1521 和请使用另一个端口号；

这里勾选使用标准端口号 1521，单击下一步



Oracle Net Configuration Assistant：监听程序配置，更多的监听程序？

指定是否为此节点配置另一个监听程序。 否不再配置另一个监听程序。 是配置另一个监听程序。

勾选否，单击下一步

Oracle Net Configuration Assistant：监听程序配置完成

```
urpdb:/home/oracle@testdb3>export ORACLE_SID=test1
test1:/home/oracle@testdb3>rman target /

Recovery Manager: Release 11.2.0.4.0 - Production on Wed Aug 23 16:12:52 2017

Copyright (c) 1982, 2011, Oracle and/or its affiliates.  All rights reserved.

connected to target database (not started)

RMAN> startup

Oracle instance started
database mounted
database opened

Total System Global Area    2421825536 bytes

Fixed Size                     2255632 bytes
Variable Size                603981040 bytes
Database Buffers            1795162112 bytes
Redo Buffers                  20426752 bytes

RMAN> shutdown immediate;

using target database control file instead of recovery catalog
database closed
database dismounted
Oracle instance shut down

RMAN>
```

```
[root@testdb3 ~]# service iptables stop
[root@testdb3 ~]# su - oracle
urpdb:/home/oracle@testdb3>lsnrctl start

LSNRCTL for Linux: Version 11.2.0.4.0 - Production on 24-AUG-2017 11:58:09

Copyright (c) 1991, 2013, Oracle.  All rights reserved.

Starting /u01/app/oracle/product/11.2.0/db_1/bin/tnslsnr: please wait...

TNSLSNR for Linux: Version 11.2.0.4.0 - Production
System parameter file is /u01/app/oracle/product/11.2.0/db_1/network/admin/listener.ora
Log messages written to /u01/app/oracle/diag/tnslsnr/testdb3/listener/alert/log.xml
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=testdb3)(PORT=1521)))
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1521)))

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=testdb3)(PORT=1521)))
STATUS of the LISTENER
------------------------
Alias                     LISTENER
Version                   TNSLSNR for Linux: Version 11.2.0.4.0 - Production
Start Date                24-AUG-2017 11:58:10
Uptime                    0 days 0 hr. 0 min. 0 sec
Trace Level               off
Security                  ON: Local OS Authentication
SNMP                      OFF
Listener Parameter File   /u01/app/oracle/product/11.2.0/db_1/network/admin/listener.ora
Listener Log File         /u01/app/oracle/diag/tnslsnr/testdb3/listener/alert/log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=testdb3)(PORT=1521)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1521)))
The listener supports no services
The command completed successfully
urpdb:/home/oracle@testdb3>
```

```
RMAN> show all;

RMAN configuration parameters for database with db_unique_name TEST1 are:
CONFIGURE RETENTION POLICY TO REDUNDANCY 1; # default
CONFIGURE BACKUP OPTIMIZATION OFF; # default
CONFIGURE DEFAULT DEVICE TYPE TO DISK; # default
CONFIGURE CONTROLFILE AUTOBACKUP OFF; # default
CONFIGURE CONTROLFILE AUTOBACKUP FORMAT FOR DEVICE TYPE DISK TO '%F'; # default
CONFIGURE DEVICE TYPE DISK PARALLELISM 1 BACKUP TYPE TO BACKUPSET; # default
CONFIGURE DATAFILE BACKUP COPIES FOR DEVICE TYPE DISK TO 1; # default
CONFIGURE ARCHIVELOG BACKUP COPIES FOR DEVICE TYPE DISK TO 1; # default
CONFIGURE MAXSETSIZE TO UNLIMITED; # default
CONFIGURE ENCRYPTION FOR DATABASE OFF; # default
CONFIGURE ENCRYPTION ALGORITHM 'AES128'; # default
CONFIGURE COMPRESSION ALGORITHM 'BASIC' AS OF RELEASE 'DEFAULT' OPTIMIZE FOR LOAD TRUE ; # default
CONFIGURE ARCHIVELOG DELETION POLICY TO NONE; # default
CONFIGURE SNAPSHOT CONTROLFILE NAME TO '/u01/app/oracle/product/11.2.0/db_1/dbs/snapcf_test1.f'; # default
```

```
test1:/home/oracle@testdb3>sqlplus /nolog

SQL*Plus: Release 11.2.0.4.0 Production on Wed Aug 23 14:09:22 2017

Copyright (c) 1982, 2013, Oracle.  All rights reserved.

SQL> connect / as sysdba ;
Connected.
SQL> startup;
ORA-01081: cannot start already-running ORACLE - shut it down first
SQL> shutdown immediate
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL> startup
ORACLE instance started.

Total System Global Area 2421825536 bytes
Fixed Size                  2255632 bytes
Variable Size             603981040 bytes
Database Buffers         1795162112 bytes
Redo Buffers               20426752 bytes
Database mounted.
Database opened.
SQL>
```

```
[root@testdb3 dbs]# su - oracle
urpdb:/home/oracle@testdb3>lsnrctl startus

LSNRCTL for Linux: Version 11.2.0.4.0 - Production on 23-AUG-2017 16:14:42

Copyright (c) 1991, 2013, Oracle.  All rights reserved.

NL-00853: undefined command "startus".  Try "help"
urpdb:/home/oracle@testdb3>
```

1.[root@localhost ~]# su - root

2.[root@localhost ~]# su - oracle

3.[oracle@localhost ~]$ sqlplus /nolog

4.SQL> conn sys/test1 as sysdba

5.SQL> startup

输入以上指令后出现：

SQL> startup

ORACLE instance started.

Total System Global Area 2421825536 bytes

Fixed Size 2255632 bytes

Variable Size 603981040 bytes

Database Buffers 1795162112 bytes

Redo Buffers 20426752 bytes

Database mounted.

Database opened.

说明数据库正常

6 数据库关闭 SQL> shutdown immediate;

SQL> quit

```
Connecting to 192.168.12.40:22...
Connection established.
To escape to local shell, press 'Ctrl+Alt+]'.

Last login: Thu Aug 24 15:01:15 2017 from 172.50.3.28
[root@testdb3 ~]# service iptables stop
[root@testdb3 ~]# su - oracle
urpdb:/home/oracle@testdb3>sqlplus /nolog

SQL*Plus: Release 11.2.0.4.0 Production on Thu Aug 24 15:09:15 2017

Copyright (c) 1982, 2013, Oracle.  All rights reserved.

SQL> conn sys/test1 as sysdba
Connected to an idle instance.
SQL> startup
ORA-01078: failure in processing system parameters
LRM-00109: could not open parameter file '/u01/app/oracle/product/11.2.0/db_1/dbs/initurpdb.ora'
SQL> exit
Disconnected
urpdb:/home/oracle@testdb3>export ORACLE_SID=test1
test1:/home/oracle@testdb3>sqlplus /nolog

SQL*Plus: Release 11.2.0.4.0 Production on Thu Aug 24 15:13:31 2017

Copyright (c) 1982, 2013, Oracle.  All rights reserved.

SQL> conn sys/test1 as sysdba
Connected to an idle instance.
SQL> startup
ORACLE instance started.

Total System Global Area 2421825536 bytes
Fixed Size                  2255632 bytes
Variable Size             603981040 bytes
Database Buffers         1795162112 bytes
Redo Buffers               20426752 bytes
Database mounted.
Database opened.
SQL>
```

注意：

服务器端关闭防火墙 service iptables stop

A.lsnrctl start

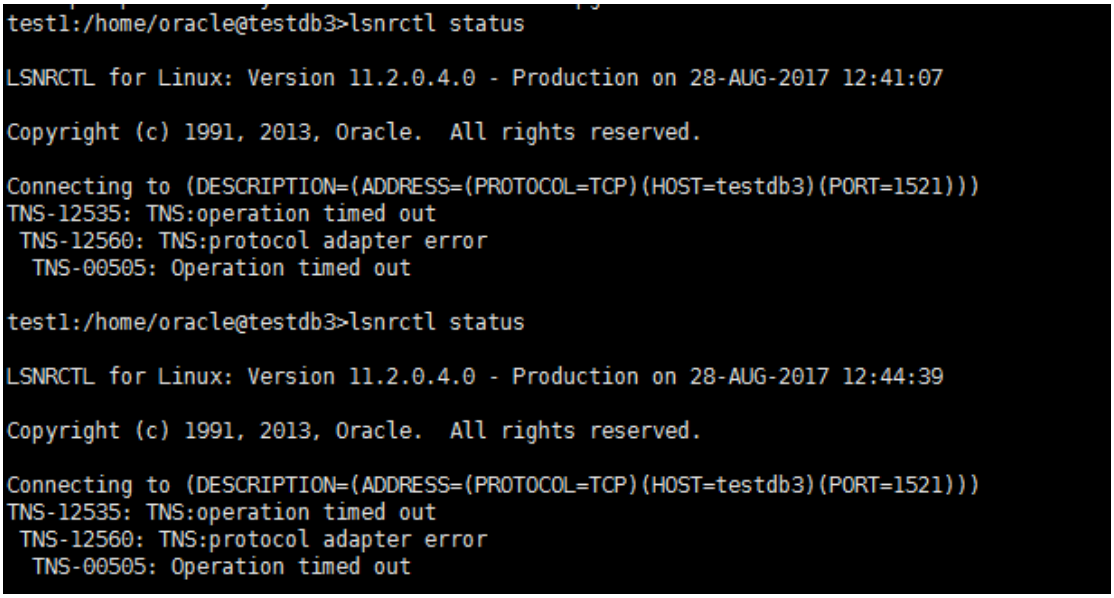
会看到启动成功的界面;

B.lsnrctl stop

停止监听器命令.

C.lsnrctl status

查看监听器命令.



5 客户端连接测试

参考 http://blog.csdn.net/u013107634/article/details/52741591

服务器端防火墙设置

1) 重启后生效

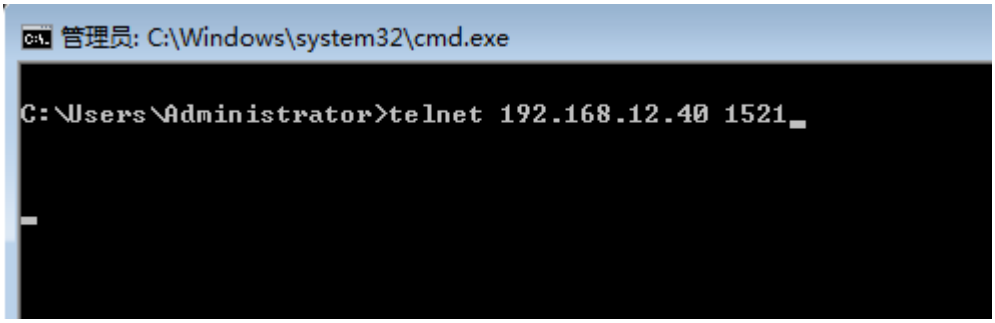
开启： chkconfig iptables on

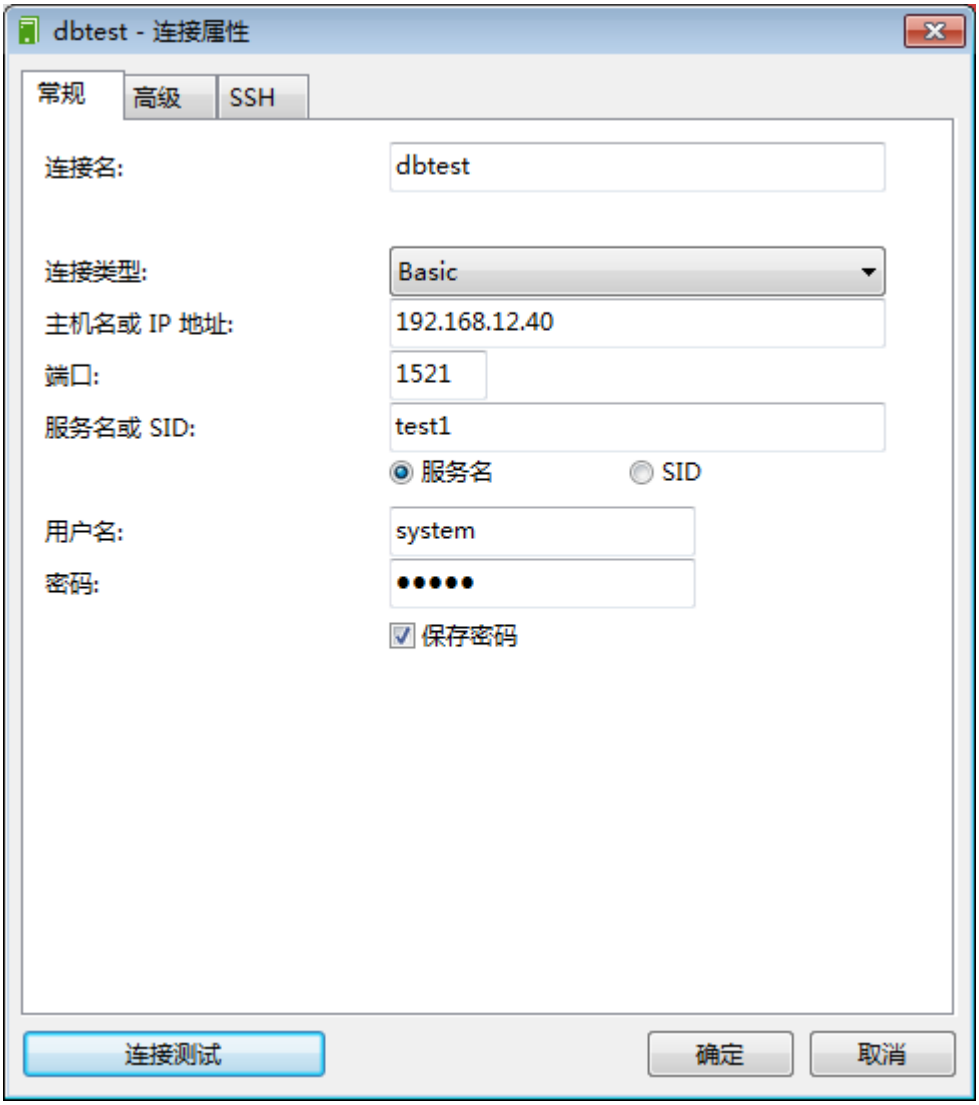
关闭： chkconfig iptables off

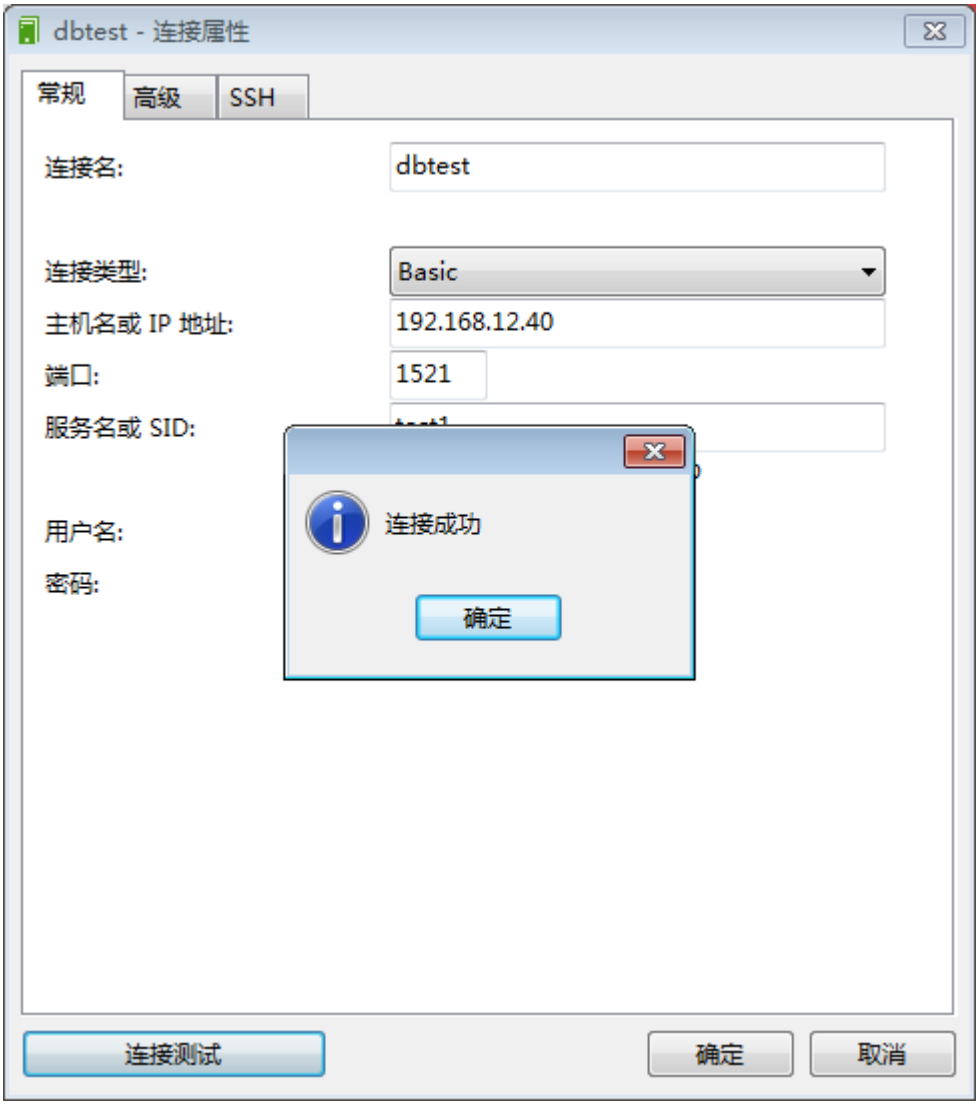
2) 即时生效，重启后失效

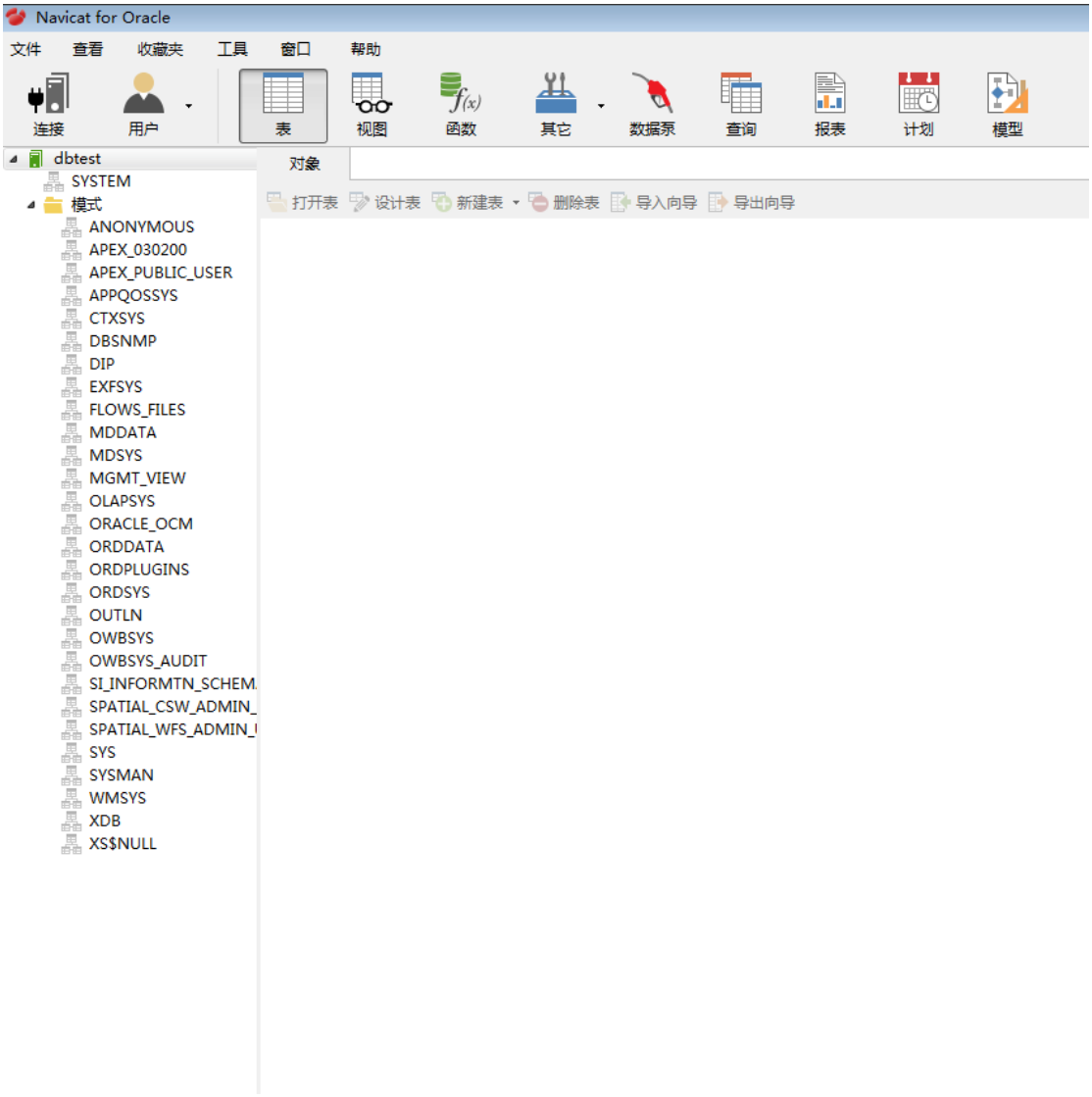
开启： service iptables start

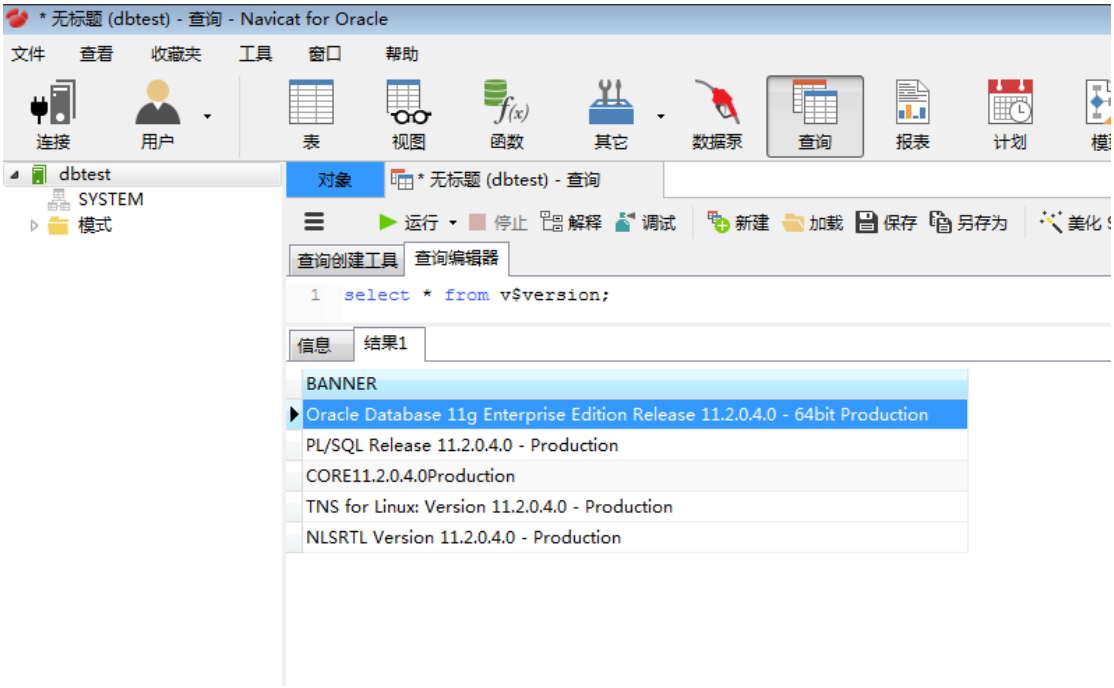
关闭： service iptables stop






dbtest - 连接属性
常规
高级
SSH
连接名:
dbtest
连接类型:
Basic
主机名或 IP 地址:
192.168.12.40
端口:
1521
服务名或 SID:
用户名:
密码:
连接成功
确定
连接测试
确定
取消


Navicat for Oracle
文件
查看
收藏夹
工具
窗口
帮助
连接
用户
表
视图
函数
其它
数据泵
查询
报表
计划
模型
dbtest
SYSTEM
模式
ANONYMOUS
APEX_030200
APEX_PUBLIC_USER
APPQOSSYS
CTXSYS
DBSNMP
DIP
EXFSYS
FLOWS_FILES
MDDATA
MDSYS
MGMT_VIEW
OLAPSYS
ORACLE_OCM
ORDDATA
ORDPLUGINS
ORDSYS
OUTLN
OWBSYS
OWBSYS_AUDIT
SI_INFORMTN_SCHEM
SPATIAL_CSW_ADMIN_
SPATIAL_WFS_ADMIN_
SYS
SYSMAN
WMSYS
XDB
XS$NULL
对象
打开表
设计表
新建表
删除表
导入向导
导出向导



6 Oracle 11g 如何创建 scott 用户

http://blog.csdn.net/btt2013/article/details/52554514

create user scott identified by tiger;

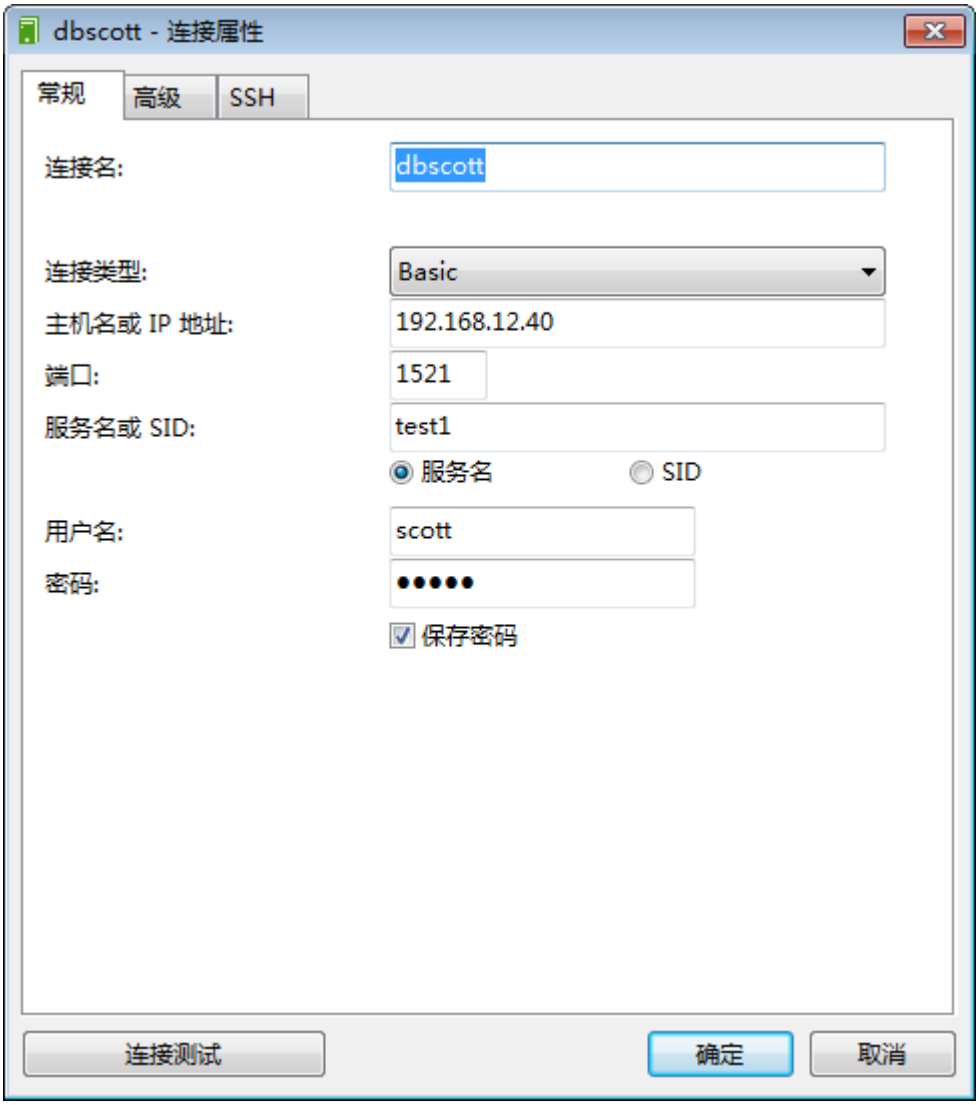
grant connect,resource,unlimited tablespace to scott;

alter user scott default tablespace users;

alter user scott temporary tablespace temp;

connect scott/tiger

show user




```
CREATE TABLE DEPT
      (DEPTNO NUMBER(2) CONSTRAINT PK_DEPT PRIMARY KEY,
   DNAME VARCHAR2(14) ,
   LOC VARCHAR2(13) ) ;

CREATE TABLE EMP
      (EMPNO NUMBER(4) CONSTRAINT PK_EMP PRIMARY KEY,
   ENAME VARCHAR2(10),
   JOB VARCHAR2(9),
   MGR NUMBER(4),
```

```
    HIREDATE DATE,
    SAL NUMBER(7,2),
    COMM NUMBER(7,2),
    DEPTNO NUMBER(2) CONSTRAINT FK_DEPTNO REFERENCES DEPT);
INSERT INTO DEPT VALUES
    (10,'ACCOUNTING','NEW YORK');
INSERT INTO DEPT VALUES (20,'RESEARCH','DALLAS');
INSERT INTO DEPT VALUES
    (30,'SALES','CHICAGO');
INSERT INTO DEPT VALUES
    (40,'OPERATIONS','BOSTON');
INSERT INTO EMP VALUES
(7369,'SMITH','CLERK',7902,to_date('17-12-1980','dd-mm-yyyy'),800,NULL,20);
INSERT INTO EMP VALUES
(7499,'ALLEN','SALESMAN',7698,to_date('20-2-1981','dd-mm-yyyy'),1600,300,30);
INSERT INTO EMP VALUES
(7521,'WARD','SALESMAN',7698,to_date('22-2-1981','dd-mm-yyyy'),1250,500,30);
INSERT INTO EMP VALUES
(7566,'JONES','MANAGER',7839,to_date('2-4-1981','dd-mm-yyyy'),2975,NULL,20);
INSERT INTO EMP VALUES
(7654,'MARTIN','SALESMAN',7698,to_date('28-9-1981','dd-mm-
yyyy'),1250,1400,30);
INSERT INTO EMP VALUES
(7698,'BLAKE','MANAGER',7839,to_date('1-5-1981','dd-mm-yyyy'),2850,NULL,30);
INSERT INTO EMP VALUES
(7782,'CLARK','MANAGER',7839,to_date('9-6-1981','dd-mm-yyyy'),2450,NULL,10);
INSERT INTO EMP VALUES
(7788,'SCOTT','ANALYST',7566,to_date('13-JUL-87')-85,3000,NULL,20);
INSERT INTO EMP VALUES
(7839,'KING','PRESIDENT',NULL,to_date('17-11-1981','dd-mm-
```

```
yyyy'),5000,NULL,10);
INSERT INTO EMP VALUES
(7844,'TURNER','SALESMAN',7698,to_date('8-9-1981','dd-mm-yyyy'),1500,0,30);
INSERT INTO EMP VALUES
(7876,'ADAMS','CLERK',7788,to_date('13-JUL-87')-51,1100,NULL,20);
INSERT INTO EMP VALUES
(7900,'JAMES','CLERK',7698,to_date('3-12-1981','dd-mm-yyyy'),950,NULL,30);
INSERT INTO EMP VALUES
(7902,'FORD','ANALYST',7566,to_date('3-12-1981','dd-mm-yyyy'),3000,NULL,20);
INSERT INTO EMP VALUES
(7934,'MILLER','CLERK',7782,to_date('23-1-1982','dd-mm-yyyy'),1300,NULL,10);

CREATE TABLE BONUS
   (
   ENAME VARCHAR2(10)  ,
   JOB VARCHAR2(9)  ,
   SAL NUMBER,
   COMM NUMBER
   ) ;

CREATE TABLE SALGRADE
     ( GRADE NUMBER,
   LOSAL NUMBER,
   HISAL NUMBER );
INSERT INTO SALGRADE VALUES (1,700,1200);
INSERT INTO SALGRADE VALUES (2,1201,1400);
INSERT INTO SALGRADE VALUES (3,1401,2000);
INSERT INTO SALGRADE VALUES (4,2001,3000);
INSERT INTO SALGRADE VALUES (5,3001,9999);
```

```
COMMIT;
```

将 sysdba 权限授予普通用户

```
SQL> show user;
USER is "SYS"
SQL> grant sysdba to scott;

Grant succeeded.

SQL> select * from V$PWFILE_USERS;

USERNAME                       SYSDB SYSOP SYSAS
------------------------------ ----- ----- -----
SYS                            TRUE  TRUE  FALSE
SCOTT                          TRUE  FALSE FALSE

SQL> revoke sysdba from scott;

Revoke succeeded.

SQL> select * from V$PWFILE_USERS;

USERNAME                       SYSDB SYSOP SYSAS
------------------------------ ----- ----- -----
SYS                            TRUE  TRUE  FALSE

SQL>
```

7 Oracle 11g 安全架构

http://www.cnblogs.com/lijiaman/p/6915694.html?utm_source=debugrun&utm_medium=referral

7.1 防火墙(系统级防护)

http://blog.csdn.net/jemlee2002/article/details/7042991/

/etc/sysconfig/iptables

```
# Firewall configuration written by system-config-firewall
# Manual customization of this file is not recommended.
*filter
:INPUT ACCEPT [0:0]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [0:0]
-A INPUT -m state --state ESTABLISHED,RELATED -j ACCEPT
-A INPUT -p icmp -j ACCEPT
-A INPUT -i lo -j ACCEPT
-A INPUT -m state --state NEW -m tcp -p tcp --dport 22 -j ACCEPT
-A INPUT -j REJECT --reject-with icmp-host-prohibited
-A FORWARD -j REJECT --reject-with icmp-host-prohibited
COMMIT
```

修改为

```
Last login: Mon Aug 28 09:47:24 from 172.50.3.28
[root@testdb3 ~]# cd /
[root@testdb3 /]# iptables -P INPUT DROP
[root@testdb3 /]# iptables -P OUTPUT ACCEPT
[root@testdb3 /]# iptables -P FORWARD DROP
[root@testdb3 /]# iptables -A INPUT -p tcp --dport 22 -j ACCEPT
[root@testdb3 /]# iptables -A OUTPUT -p tcp --dport 22 -j ACCEPT
[root@testdb3 /]# iptables -A INPUT -p tcp --dport 1521 -j ACCEPT
[root@testdb3 /]# iptables -A OUTPUT -p tcp --dport 1521 -j ACCEPT
[root@testdb3 /]# /etc/rc.d/init.d/iptables save
iptables: Saving firewall rules to /etc/sysconfig/iptables:[  OK  ]
[root@testdb3 /]# service iptables restart
iptables: Setting chains to policy ACCEPT: filter          [  OK  ]
iptables: Flushing firewall rules:                         [  OK  ]
iptables: Unloading modules:                               [  OK  ]
iptables: Applying firewall rules:                         [  OK  ]
[root@testdb3 /]#
```

iptables -P INPUT DROP

iptables -P OUTPUT ACCEPT

iptables -P FORWARD DROP

iptables -A INPUT -p tcp --dport 22 -j ACCEPT

iptables -A OUTPUT -p tcp --dport 22 -j ACCEPT

iptables -A INPUT -p tcp --dport 1521 -j ACCEPT

iptables -A OUTPUT -p tcp --dport 1521 -j ACCEPT

/etc/rc.d/init.d/iptables save

service iptables save

service iptables restart

```
[root@testdb3 ~]# service   iptables status
Table: filter
Chain INPUT (policy DROP)
num  target     prot opt source               destination
1    ACCEPT     tcp  --  0.0.0.0/0            0.0.0.0/0           tcp dpt:22
2    ACCEPT     tcp  --  0.0.0.0/0            0.0.0.0/0           tcp dpt:1521

Chain FORWARD (policy DROP)
num  target     prot opt source               destination

Chain OUTPUT (policy ACCEPT)
num  target     prot opt source               destination
1    ACCEPT     tcp  --  0.0.0.0/0            0.0.0.0/0           tcp dpt:1521
2    ACCEPT     tcp  --  0.0.0.0/0            0.0.0.0/0           tcp dpt:22
```

http://blog.sina.com.cn/s/blog_8f02ae760101438p.html

重启以后没有生效

Centos 6.5 下防火墙设置

总结

http://www.jb51.net/article/52239.htm

Centos 6.5 防火墙总结

```
chmod +x iptables.sh
./iptables.sh
```

设置 iptables 开机自动启动：

```
chkconfig --level 345 iptables on
```

完整 Shell：

```
#!/bin/bash
 PATH=/bin:/sbin:/usr/bin:/usr/sbin:/usr/local/bin:/usr/local/sbin:~/bin
 export PATH
 function support_distro(){
 if [ -z "`egrep -i "centos" /etc/issue`" ];then
 echo "Sorry,iptables script only support centos system now."
 exit 1
 fi
 }
 support_distro
 echo "============================iptables
configure============================================="
 # Only support CentOS system
 # 获取 SSH 端口
if grep "^Port" /etc/ssh/sshd_config>/dev/null;then
 sshdport=`grep "^Port" /etc/ssh/sshd_config | sed "s/Port\s//g" `
 else
 sshdport=22
 fi
 # 获取 DNS 服务器 IP
 if [ -s /etc/resolv.conf ];then
 nameserver1=`cat /etc/resolv.conf |grep nameserver |awk 'NR==1{print $2 }'`
 nameserver2=`cat /etc/resolv.conf |grep nameserver |awk 'NR==2{print $2 }'`
 fi
 IPT="/sbin/iptables"
 # 删除已有规则
$IPT --delete-chain
```

```
$IPT --flush
# 禁止进,允许出,允许回环网卡
$IPT -P INPUT DROP
$IPT -P FORWARD DROP
$IPT -P OUTPUT ACCEPT
$IPT -A INPUT -i lo -j ACCEPT
# 允许已建立的或相关连接的通行
$IPT -A INPUT -m state --state RELATED,ESTABLISHED -j ACCEPT
$IPT -A OUTPUT -m state --state RELATED,ESTABLISHED -j ACCEPT
# 限制 80 端口单个 IP 的最大连接数为 10
$IPT -I INPUT -p tcp --dport 80 -m connlimit --connlimit-above 10 -j DROP
# 允许 80(HTTP)/873(RSYNC)/443(HTTPS)/20,21(FTP)/25(SMTP)端口的连接
$IPT -A INPUT -p tcp -m tcp --dport 80 -j ACCEPT
$IPT -A INPUT -p tcp -m tcp --dport 873 -j ACCEPT
$IPT -A INPUT -p tcp -m tcp --dport 443 -j ACCEPT
$IPT -A INPUT -p tcp -m tcp --dport 20 -j ACCEPT
$IPT -A INPUT -p tcp -m tcp --dport 21 -j ACCEPT
$IPT -A INPUT -p tcp -m tcp --dport 25 -j ACCEPT
# 允许 SSH 端口的连接,脚本自动侦测目前的 SSH 端口,否则默认为 22 端口
$IPT -A INPUT -p tcp -m tcp --dport $sshdport -j ACCEPT
# 允许 ping
$IPT -A INPUT -p icmp -m icmp --icmp-type 8 -j ACCEPT
$IPT -A INPUT -p icmp -m icmp --icmp-type 11 -j ACCEPT
# 允许 DNS
[ ! -z "$nameserver1" ] && $IPT -A OUTPUT -p udp -m udp -d $nameserver1 --
dport 53 -j ACCEPT
[ ! -z "$nameserver2" ] && $IPT -A OUTPUT -p udp -m udp -d $nameserver2 --
dport 53 -j ACCEPT
```

```
# 保存规则并重启 IPTABLES

service iptables save

service iptables restart

echo "============================iptables configure completed=========================================="
```