

linux 安装 oracle 全过程

目录

第一部分：安装 oracle linux 5 操作系统及配置环境.....	2
一、 安装 linux 操作系统.....	2
二、 安装要用的补丁包：	5
三、 修改 linux 内核参数.....	6
第二部分：安装 oracle 数据库.....	9
第三部分：安装数据库补丁.....	14
第四部分：创建数据库实例.....	17
第五部分：安装数据库监听.....	25

第一部分：安装 oracle_linux 5 操作系统及配置环境

一、安装 linux 操作系统

1. Desktop Environments

GNOME Desktop Environment



2. Applications

Editors

Graphical Internet

Text-based Internet



3. Development

- Development Libraries
- Development Tools
- Legacy Software Development



4. Servers

- Server Configuration Tools



5. Base System

- Administration Tools
- Base
- Java
- Legacy Software Support
- System Tools
- X Window System



注： system tools 这里很关键，安装了 Oracle 自己的几个模块，单击 Details。除了默认选中的程序包外，再选择以下程序包：

- 1) ocfs-2-2.6.9-42.0.0.1EL (UP 内核驱动程序)，或者选择 ocfs-2-2.6.9-42.0.0.1ELsmp (SMP 内核驱动程序)。
- 2) ocfs2-tools
- 3) ocfs2console
- 4) oracle oracleasm-2.6.9-42.0.0.1EL (UP 内核驱动程序) 或选择 oracleasm-2.6.9-42.0.0.1ELsmp (SMP 内核驱动程序)
- 5) sysstat。

-这样安装好的 Linux，只有 libaio 和 openmotif21 没安装（这两个是装 10G 必须的。）

6.开始进行安装



7.关闭防火墙



8.禁用 selinux



9.不启用 kdump 前进后安装。



二、安装要用的补丁包:

安装文件在安装光盘中, SERVER 文件夹下

```
rpm -ivh kernel-headers-2.6.18-194.el5.x86_64.rpm  
rpm -ivh glibc-headers-2.5-49.x86_64.rpm  
rpm -ivh glibc-devel-2.5-49.x86_64.rpm  
rpm -ivh libstdc++-devel-4.1.2-48.el5.x86_64.rpm  
rpm -ivh compat-db-4.2.52-5.1.x86_64.rpm  
rpm -ivh libgomp-4.4.0-6.el5.x86_64.rpm  
rpm -ivh gcc-4.1.2-48.el5.x86_64.rpm
```

```
rpm -ivh gcc-c++-4.1.2-48.el5.x86_64.rpm
rpm -ivh sysstat-7.0.2-3.el5.x86_64.rpm
rpm -ivh unixODBC-2.2.11-7.1.x86_64.rpm
rpm -ivh unixODBC-devel-2.2.11-7.1.x86_64.rpm
rpm -ivh libXp-1.0.0-8.1.el5.i386.rpm
rpm -ivh libstdc++-devel-4.1.2-48.el5.i386.rpm
rpm -ivh unixODBC-2.2.11-7.1.i386.rpm
rpm -ivh unixODBC-devel-2.2.11-7.1.i386.rpm
rpm -ivh libaio-devel-0.3.106-5.x86_64.rpm
rpm -ivh elfutils-libelf-devel-static-0.137-3.el5.x86_64.rpm
rpm -ivh elfutils-libelf-devel-0.137-3.el5.x86_64.rpm
rpm -ivh compat-gcc-34-3.4.6-4.x86_64.rpm
rpm -ivh compat-gcc-34-c++-3.4.6-4.x86_64.rpm
rpm -ivh gdb-7.0.1-23.el5.x86_64.rpm
rpm -ivh libtermcap-devel-2.0.8-46.1.x86_64.rpm
rpm -ivh readline-devel-5.1-3.el5.x86_64.rpm
rpm -ivh glibc-devel-2.5-49.i386.rpm
rpm -ivh libaio-devel-0.3.106-5.i386.rpm
rpm -ivh oracle-validated-1.0.0-22.el5.x86_64.rpm
(打完补丁后， oracle 用户自动创建好了)
```

三、修改 linux 内核参数

要进行这些更改，以 **root** 用户身份运行以下命令：

1.在 **/etc/security/limits.conf** 文件中添加以下几行代码：

```
[root@racnode1 ~]# cat >> /etc/security/limits.conf <<EOF
oracle soft nproc 2047
oracle hard nproc 16384
oracle soft nofile 1024 4096
oracle hard nofile 65536
EOF
```

2.在 **/etc/pam.d/login** 文件中添加或编辑下面一行内容（如果不存在此行）：

```
[root@racnode1 ~]# cat >> /etc/pam.d/login <<EOF
session    required    pam_limits.so
EOF
```

根据您的 shell 环境，对默认的 shell 启动文件进行以下更改，以便更改所有 Oracle 安装所有者的 ulimit 设置（注意这里的示例显示 oracle 和 grid 用户）：

3.对于 **Bourne、Bash 或 Korn shell**，通过运行以下命令将以下行添加到 **/etc/profile** 文件：

```
[root@racnode1 ~]# cat >> /etc/profile <<EOF
if [ \${USER} = "oracle" ] || [ \${USER} = "grid" ]; then
    if [ \${SHELL} = "/bin/ksh" ]; then
        ulimit -p 16384
        ulimit -n 65536
    else
```

```
ulimit -u 16384 -n 65536
fi
umask 022
fi
EOF
```

下面这个要执行，就这个有问题!!!

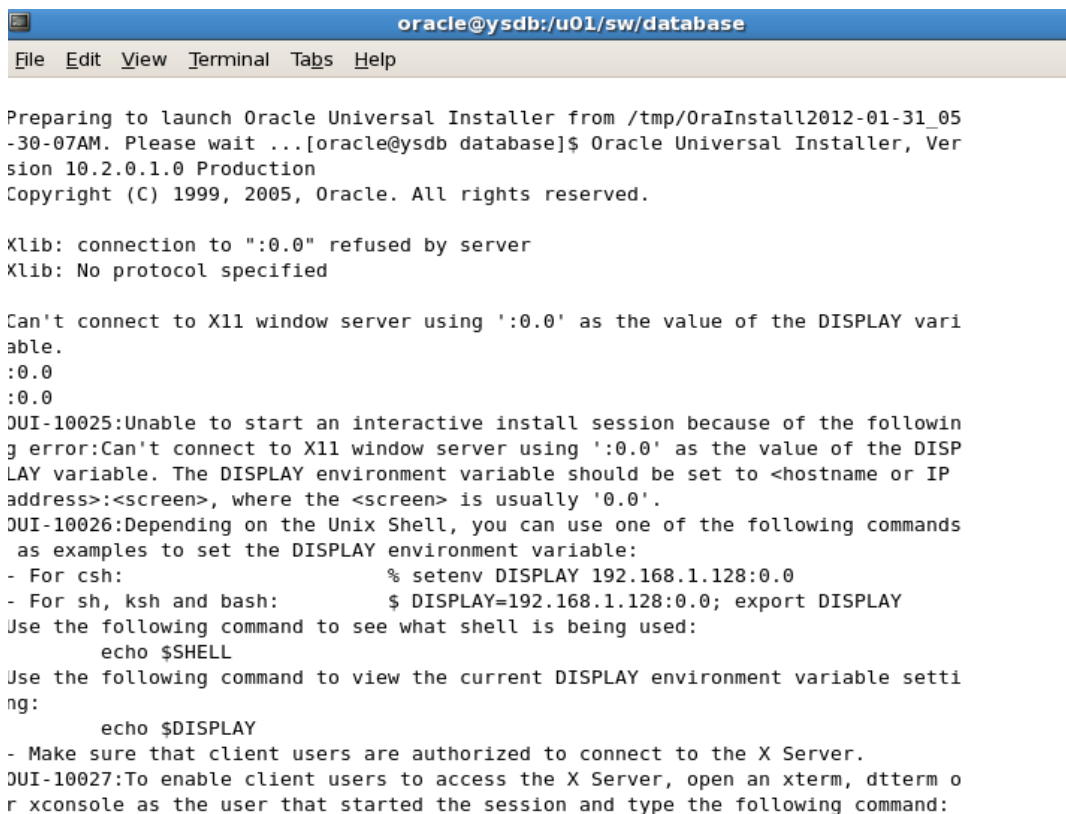
```
修改 /etc/sysctl.conf
net.core.rmem_default=1048576
```

```
修改 /etc/hosts 如:
127.0.0.1 localhost.localdomain localhost
192.168.1.3 主机名
```

4.使用 VNC 登录远程系统（为远程图形界面做准备）

```
[root@racnode1 ~]# su - ORACLE
[grid@racnode1 ~]$ DISPLAY=127.0.0.1:0
[grid@racnode1 ~]$ export DISPLAY
[grid@racnode1 ~]$ #xhost +
```

如果出现如下错误提示:



```
oracle@ysdb:/u01/sw/database
File Edit View Terminal Tabs Help

Preparing to launch Oracle Universal Installer from /tmp/OraInstall2012-01-31_05
-30-07AM. Please wait ...[oracle@ysdb database]$ Oracle Universal Installer, Ver
sion 10.2.0.1.0 Production
Copyright (C) 1999, 2005, Oracle. All rights reserved.

Xlib: connection to ":0.0" refused by server
Xlib: No protocol specified

Can't connect to X11 window server using ':0.0' as the value of the DISPLAY vari
able.
:0.0
:0.0
OUI-10025:Unable to start an interactive install session because of the followin
g error:Can't connect to X11 window server using ':0.0' as the value of the DISP
LAY variable. The DISPLAY environment variable should be set to <hostname or IP
address>:<screen>, where the <screen> is usually '0.0'.
OUI-10026:Depending on the Unix Shell, you can use one of the following commands
as examples to set the DISPLAY environment variable:
- For csh:                % setenv DISPLAY 192.168.1.128:0.0
- For sh, ksh and bash:   $ DISPLAY=192.168.1.128:0.0; export DISPLAY
Use the following command to see what shell is being used:
    echo $SHELL
Use the following command to view the current DISPLAY environment variable setti
ng:
    echo $DISPLAY
- Make sure that client users are authorized to connect to the X Server.
OUI-10027:To enable client users to access the X Server, open an xterm, dtterm o
r xconsole as the user that started the session and type the following command:
```

在 root 身份执行如下操作

```
[root@ysdb ~]# xhost +
access control disabled, clients can connect from any host
[root@ysdb ~]# su - oracle
-bash: /home/oracle: is a directory
[oracle@ysdb ~]$ xclock
```

当出现下图图标即可执行安装程序



配置 oracle 用户信息

以 **oracle** 身份登录后在 **home** 下修改 **.bash_profile** 文件，标黄部分需要修改
为 oracle 用户帐户创建登录脚本

```
if [ -f ~/.bashrc ]; then
    . ~/.bashrc
fi
```

```
alias ls="ls -FA"
ORACLE_SID=xxx; export ORACLE_SID
JAVA_HOME=/usr/local/java; export JAVA_HOME
ORACLE_BASE=/u01/app/oracle; export ORACLE_BASE
ORACLE_HOME=$ORACLE_BASE/product/10.2.0/dbhome_1; export ORACLE_HOME
ORACLE_PATH=/u01/app/common/oracle/sql; export ORACLE_PATH
ORACLE_TERM=xterm; export ORACLE_TERM
NLS_DATE_FORMAT="DD-MON-YYYY HH24:MI:SS"; export NLS_DATE_FORMAT
TNS_ADMIN=$ORACLE_HOME/network/admin; export TNS_ADMIN
ORA_NLS11=$ORACLE_HOME/nls/data; export ORA_NLS11
PATH=.:${JAVA_HOME}/bin:${PATH}:${HOME}/bin:$ORACLE_HOME/bin
PATH=${PATH}:/usr/bin:/bin:/usr/bin/X11:/usr/local/bin
PATH=${PATH}:/u01/app/common/oracle/bin
export PATH
LD_LIBRARY_PATH=$ORACLE_HOME/lib
LD_LIBRARY_PATH=${LD_LIBRARY_PATH}:$ORACLE_HOME/oracm/lib
LD_LIBRARY_PATH=${LD_LIBRARY_PATH}:/lib:/usr/lib:/usr/local/lib
export LD_LIBRARY_PATH
CLASSPATH=$ORACLE_HOME/JRE
CLASSPATH=${CLASSPATH}:$ORACLE_HOME/jlib
CLASSPATH=${CLASSPATH}:$ORACLE_HOME/rdbms/jlib
CLASSPATH=${CLASSPATH}:$ORACLE_HOME/network/jlib
export CLASSPATH
THREADS_FLAG=native; export THREADS_FLAG
export TEMP=/tmp
export TMPDIR=/tmp
umask 022
```


创建 Oracle 基目录路径 用 root 身份

最后一步是配置 Oracle 基路径，要遵循最佳灵活体系结构 (OFA) 的结构及正确的权限。需要以 root 用户身份在集群的两个 Oracle RAC 节点上完成此任务。

本指南假设在根文件系统中创建 /u01 目录。请注意，这样做是为了简便起见，不建议将其作为通用做法。通常会将 /u01 目录作为配置了硬件或软件镜像功能的单独文件系统供应。

```
[root@racnode1 ~]# mkdir -p /u01/app/oracle
[root@racnode1 ~]# chown -R oracle:oinstall /u01
[root@racnode1 ~]# chmod -R 775 /u01
```

第二部分：安装 oracle 数据库

复制 10201_database_linux_x86_64.cpio.gz 到目标机器，修改权限
解压：

```
gunzip 10201_database_linux_x86_64.cpio.gz
cpio -idcmv < 10201_database_linux_x86_64.cpio
```

开始安装：（跳过系统版本检查）

```
./runInstaller -ignoreSysPreReqs
```

安装如图



Oracle Universal Installer: Specify Inventory directory and credentials

Window Menu

Specify Inventory directory and credentials

You are starting your first installation on this host. As part of this install, you need to specify a directory for installer files. This is called the "inventory directory". Within the inventory directory, the installer automatically sets up subdirectories for each product to contain inventory data and will consume typically 150 Kilobytes per product.

Enter the full path of the inventory directory:

You can specify an Operating System group that has write permission to the above inventory directory. You can leave the field blank if you want to perform the above operations as a Superuser.

Specify Operating System group name:

ORACLE

Oracle Universal Installer: Select Installation Type

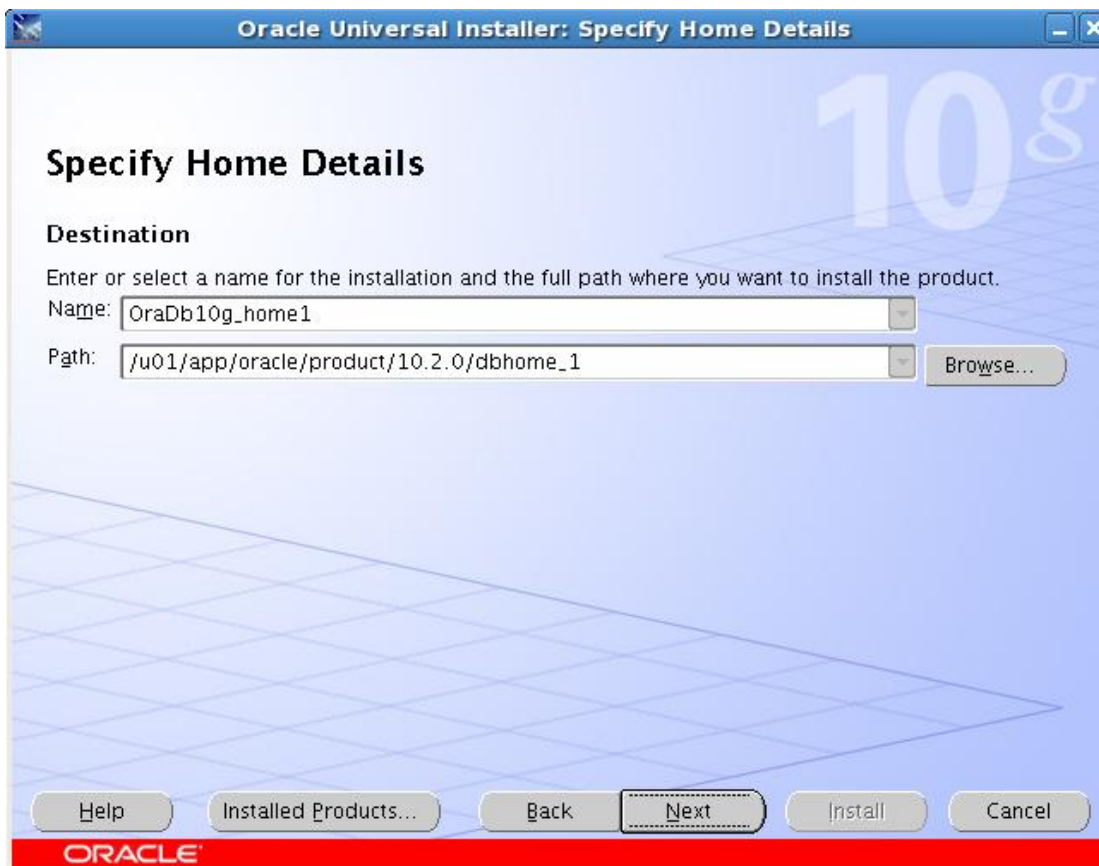
Select Installation Type

Oracle Database 10g 10.2.0.1.0

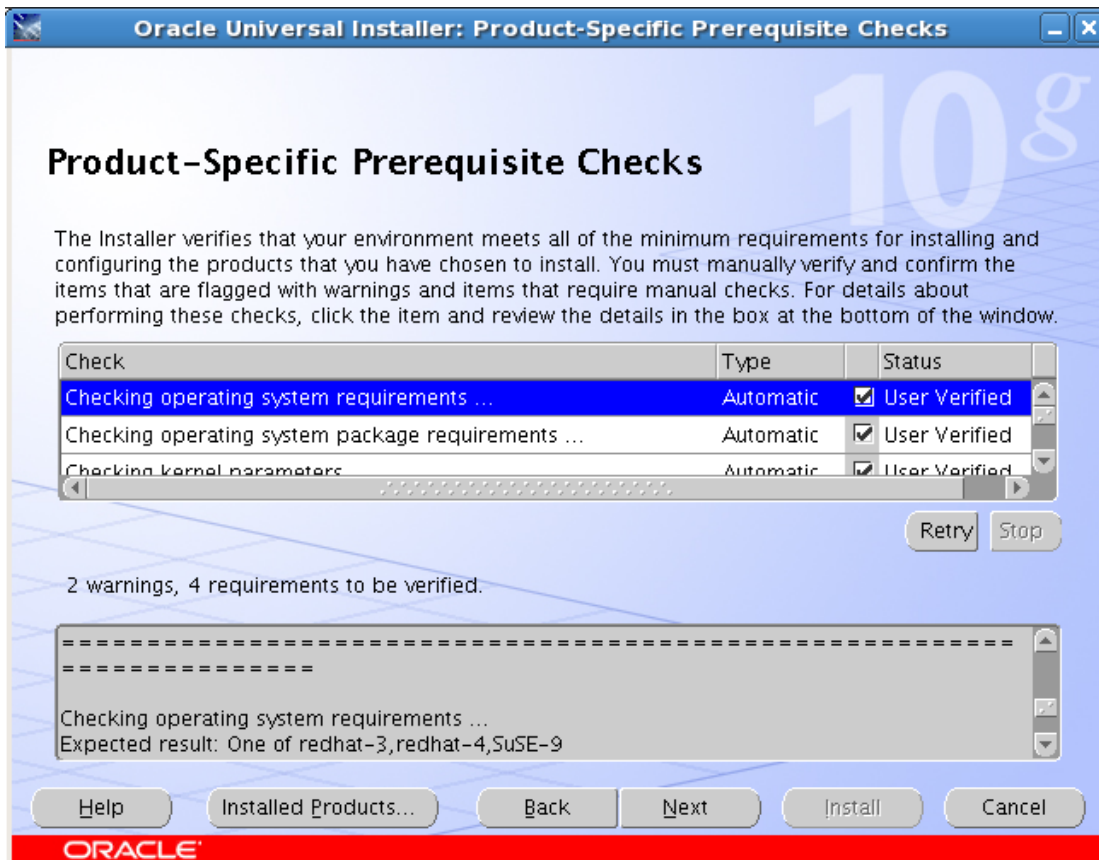
What type of installation do you want?

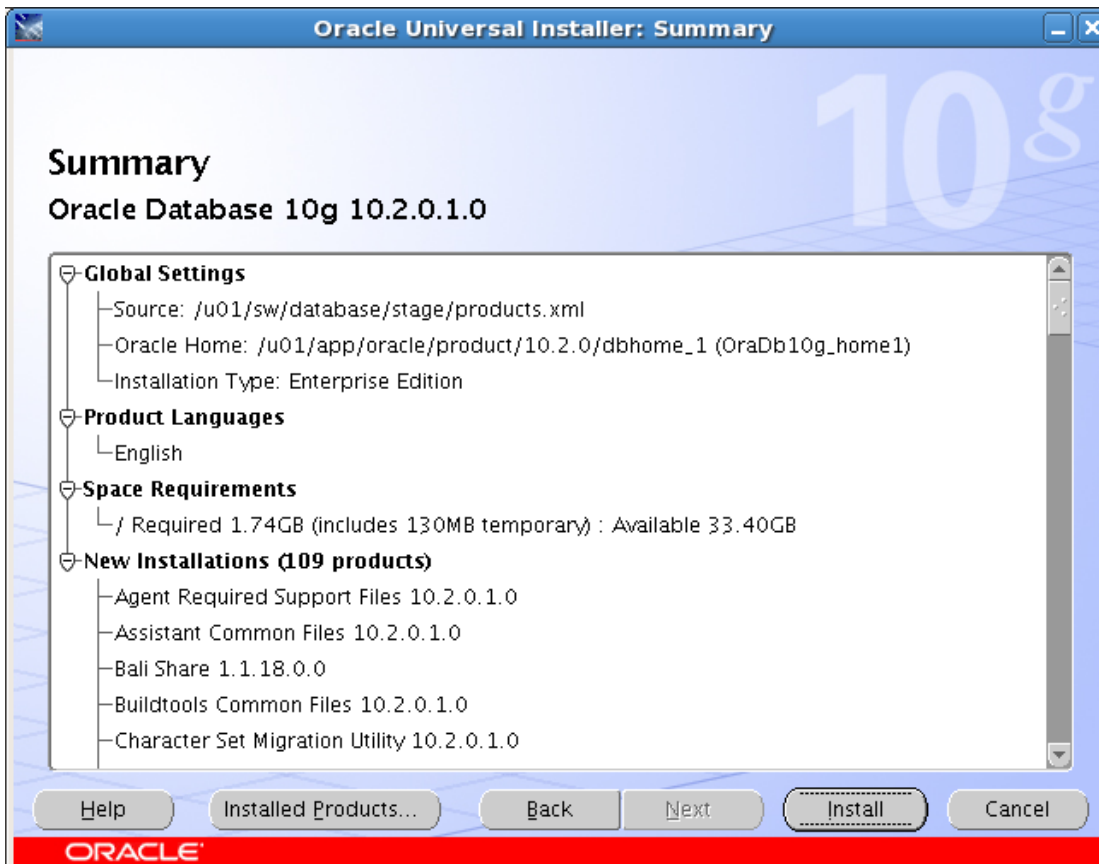
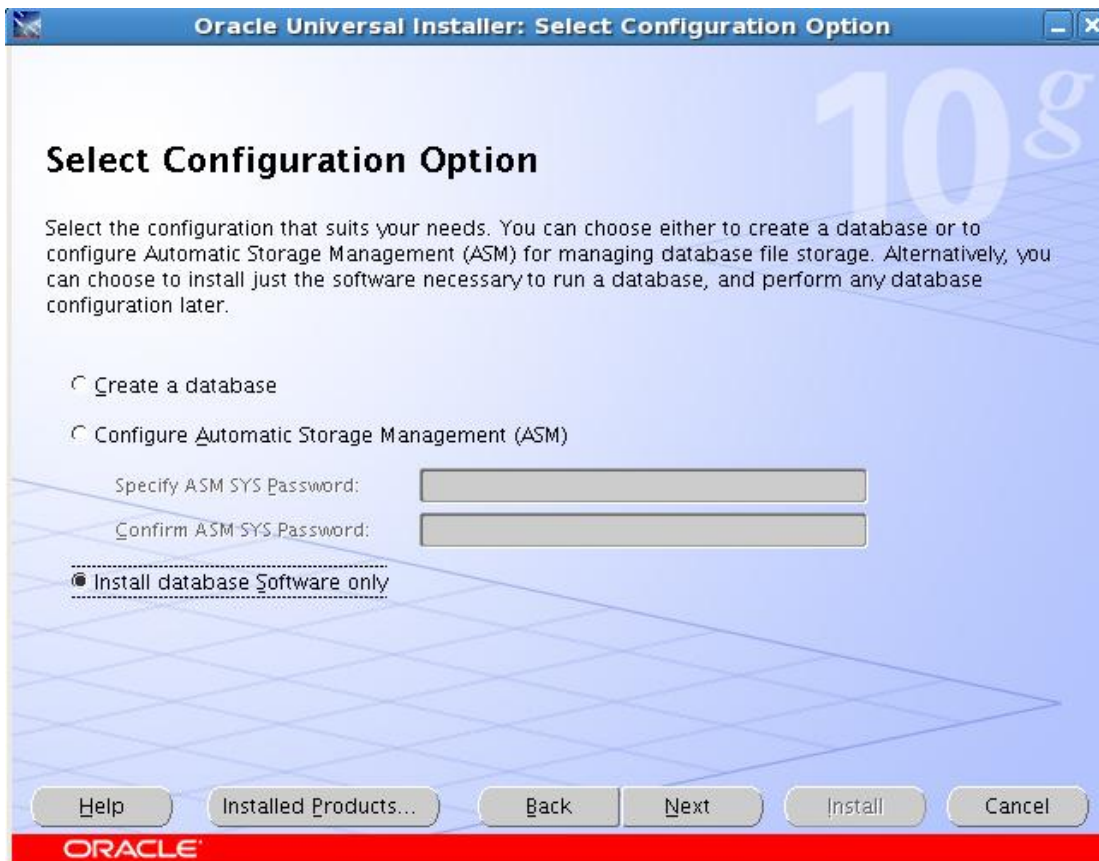
- Enterprise Edition (1.60GB)
Oracle Database 10g Enterprise Edition, the first database designed for the grid, is a self-managing database that has the scalability, performance, high availability and security features required to run the most demanding, mission critical applications.
- Standard Edition (1.60GB)
Oracle Database 10g Standard Edition is ideal for workgroups, departments and small-to-medium sized businesses looking for a lower-cost offering.
- Custom
Enables you to choose individual components to install.

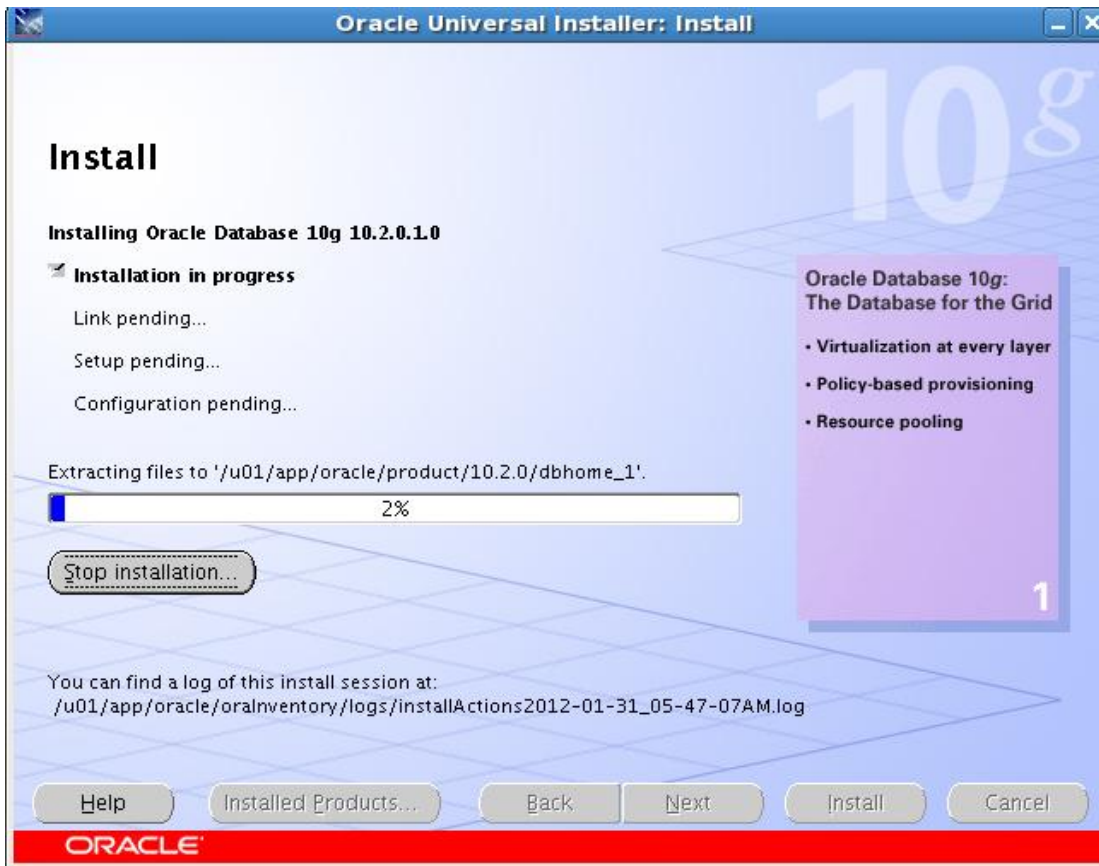
ORACLE



跳过部分警告继续：（不安装数据库实例）







安装完成后在 root 下运行 2 个脚本:

```
[root@YHF etc]# /u01/app/oracle/orainventory/orainstRoot.sh
```

```
[root@ysdb ~]# /u01/app/oracle/oraInventory/orainstRoot.sh
Changing permissions of /u01/app/oracle/oraInventory to 770.
Changing groupname of /u01/app/oracle/oraInventory to oinstall.
The execution of the script is complete
```

```
[root@YHF etc]# /u01/app/oracle/product/10.2.0/dbhome_1/root.sh
```

```
[root@ysdb ~]# /u01/app/oracle/product/10.2.0/dbhome_1/root.sh
Running Oracle10 root.sh script...

The following environment variables are set as:
  ORACLE_OWNER= oracle
  ORACLE_HOME=  /u01/app/oracle/product/10.2.0/dbhome_1
Enter the full pathname of the local bin directory: [/usr/local/bin]:
```

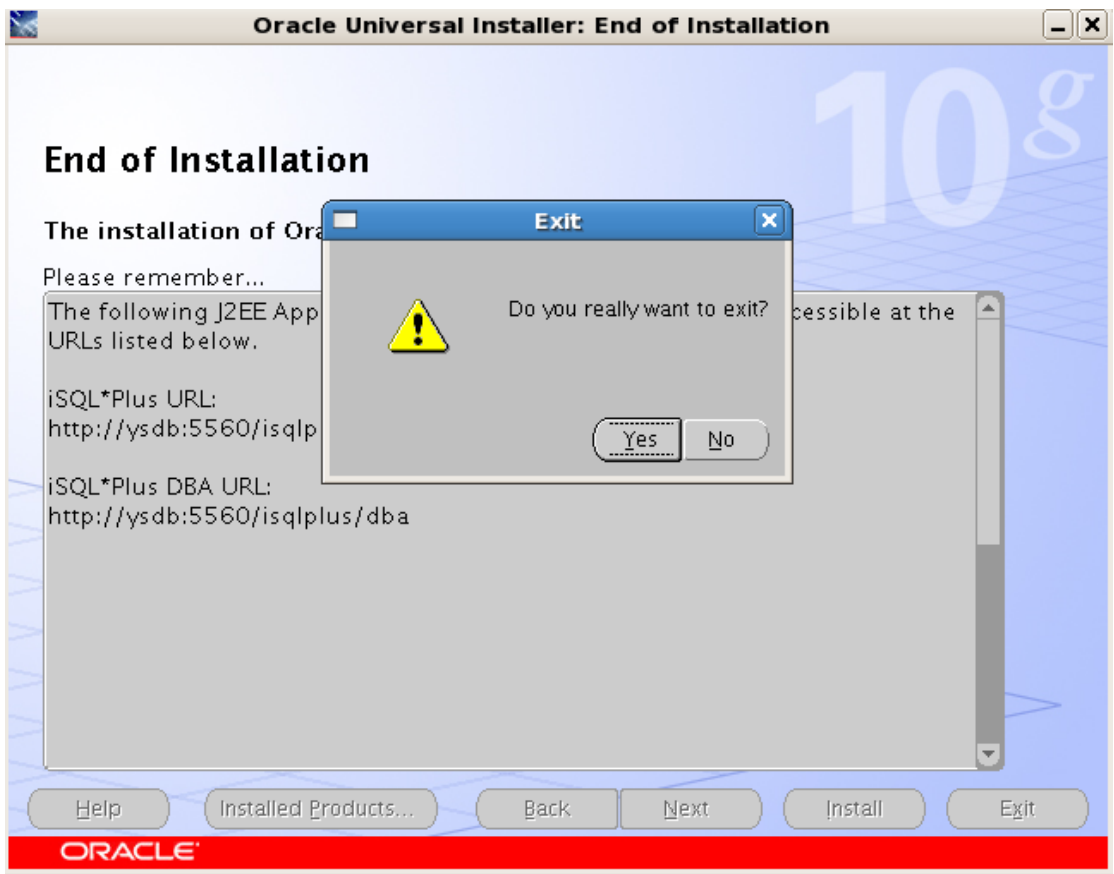
按回车后

输出如下信息

```
Copying dbhome to /usr/local/bin ...
Copying oraenv to /usr/local/bin ...
Copying coraenv to /usr/local/bin ...

creating /etc/oratab file...
Entries will be added to the /etc/oratab file as needed by
Database Configuration Assistant when a database is created

Finished running generic part of root.sh script.
Now product-specific root actions will be performed.
```



至此 oracle 的

软件安装完成。

第三部分：安装数据库补丁

升级数据库软件到 10.2.0.4

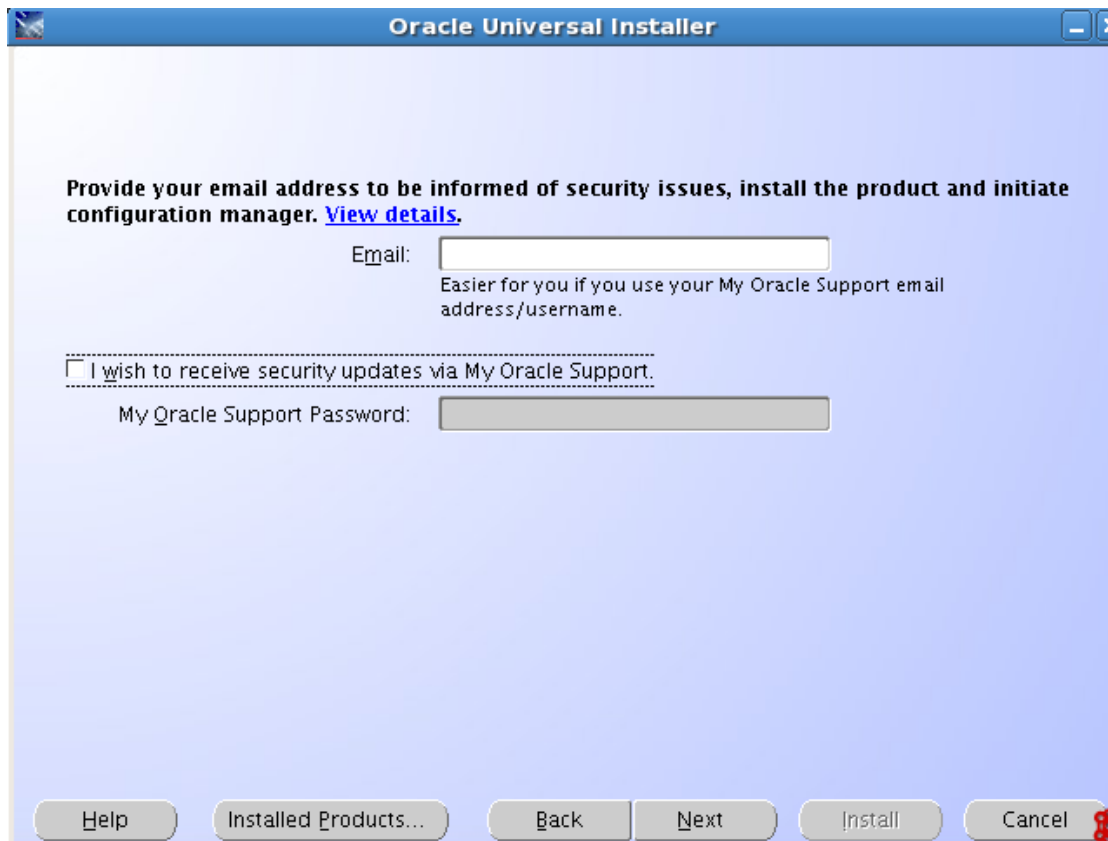
复制 p6810189_10204_Linux-x86-64.zip 到目标机器

unzip p6810189_10204_Linux-x86-64.zip 解压文件
修改权限，解压软件包。

```
% cd patchset_directory/Disk1
```

```
% ./runInstaller
```

重点说明：取消上面的√



The screenshot shows the Oracle Universal Installer window. The title bar reads "Oracle Universal Installer". The main content area has a blue gradient background and contains the following text:

Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details.](#)

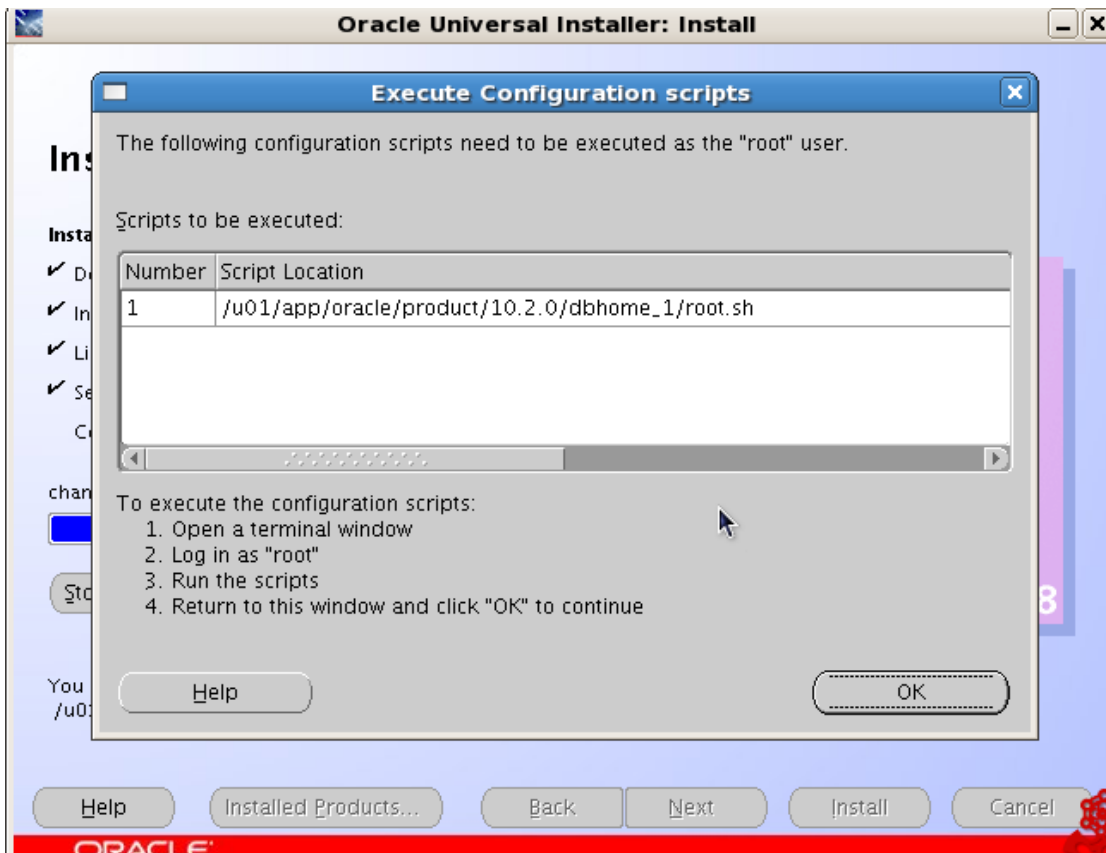
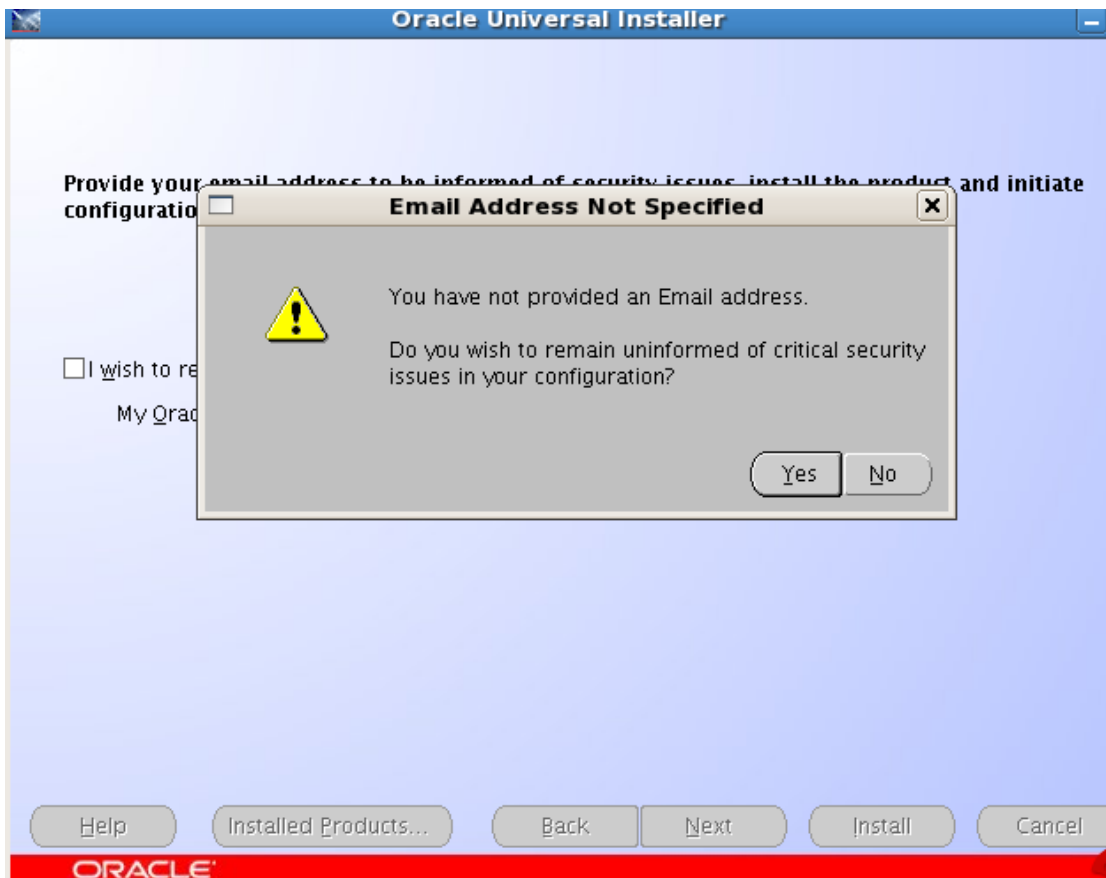
Email:

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:

At the bottom of the window, there are several buttons: Help, Installed Products..., Back, Next, Install, and Cancel.



完成后运行脚

本:

```
[root@YHF orasoft]#
```

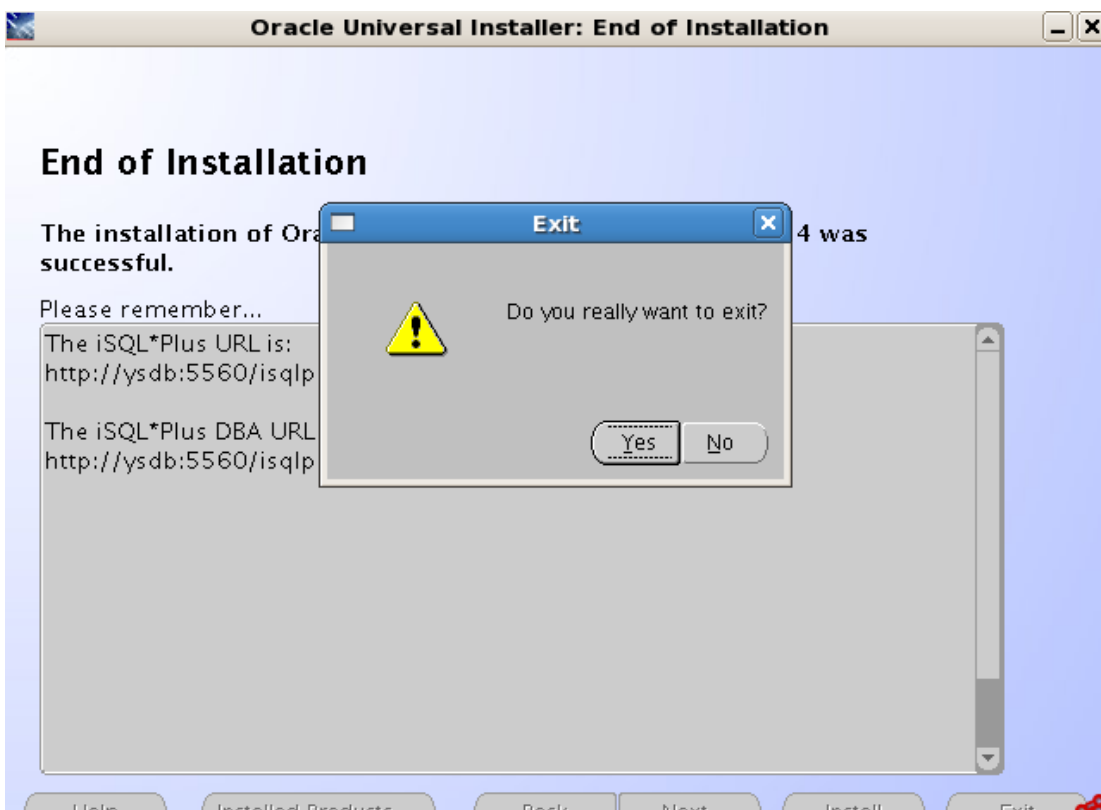

/u01/app/oracle/product/10.2.0/dbhome_1/root.sh

```
[root@ysdb ~]# /u01/app/oracle/product/10.2.0/dbhome_1/root.sh
Running Oracle 10g root.sh script...

The following environment variables are set as:
  ORACLE_OWNER= oracle
  ORACLE_HOME= /u01/app/oracle/product/10.2.0/dbhome_1

Enter the full pathname of the local bin directory: [/usr/local/bin]:
The file "dbhome" already exists in /usr/local/bin.  overwrite it? (y/n)
[n]:
The file "oraenv" already exists in /usr/local/bin.  overwrite it? (y/n)
[n]:
The file "coraenv" already exists in /usr/local/bin.  overwrite it? (y/n)
[n]:

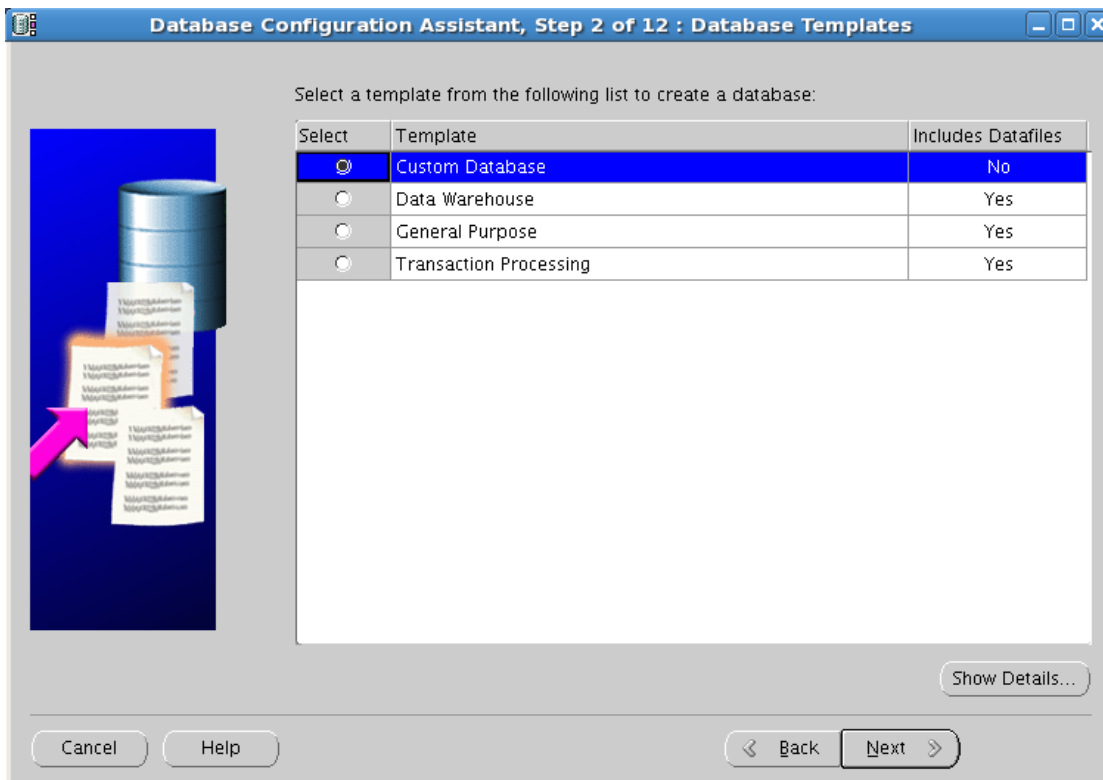
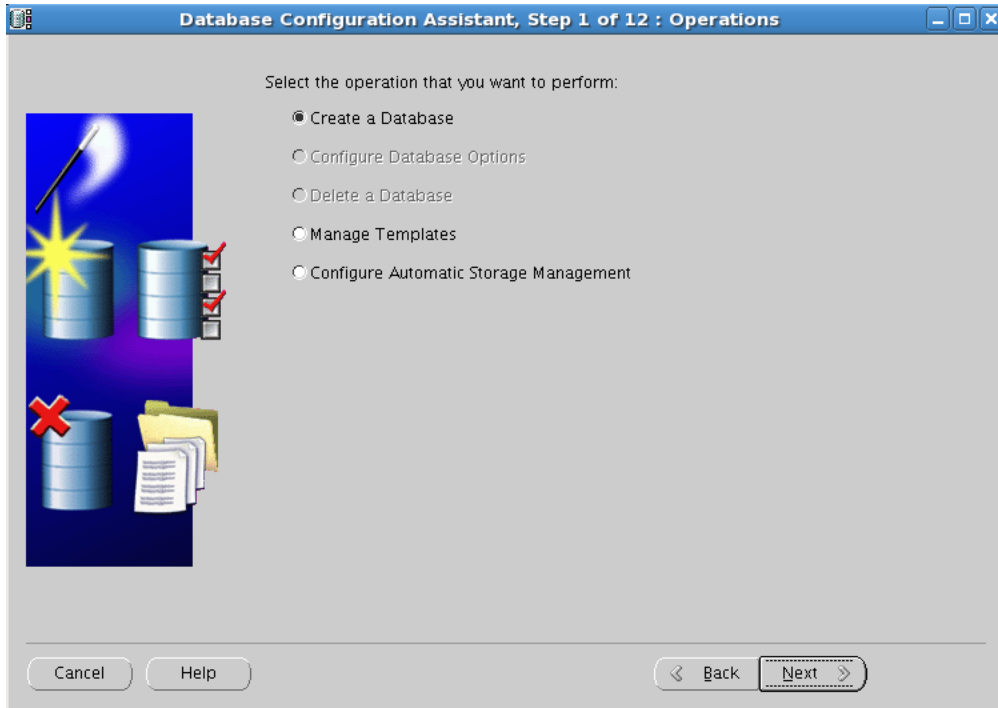
Entries will be added to the /etc/oratab file as needed by
Database Configuration Assistant when a database is created
Finished running generic part of root.sh script.
Now product-specific root actions will be performed.
```

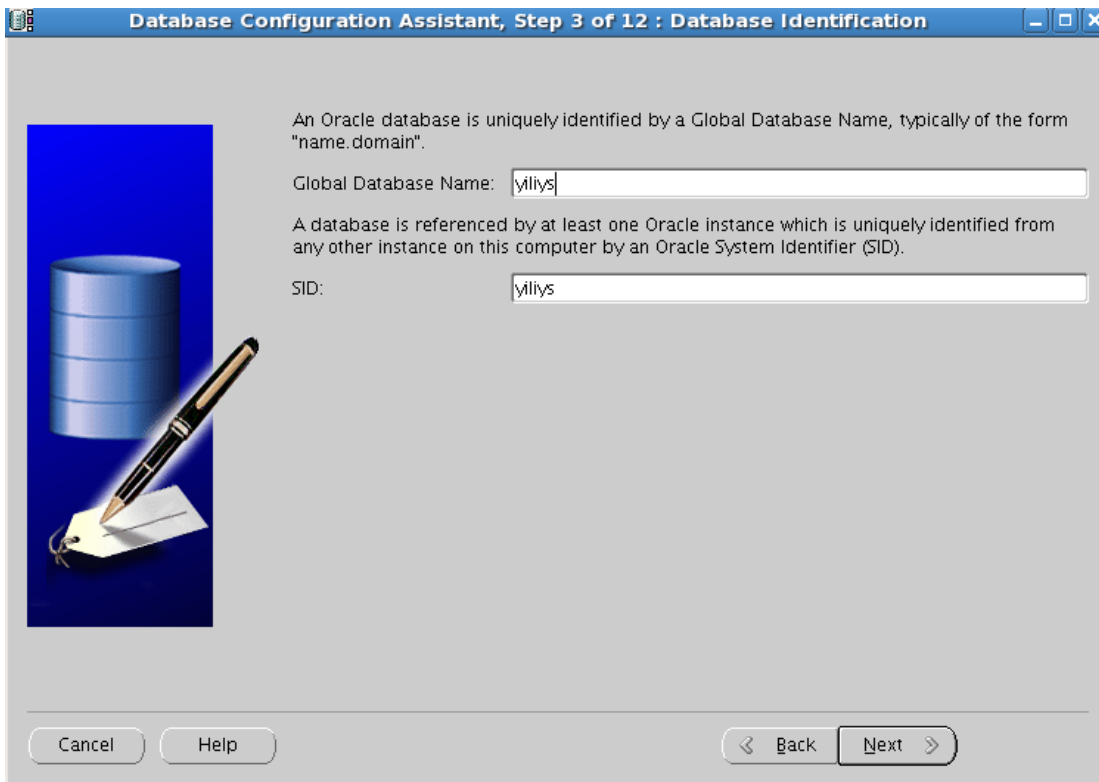


到此 oracle 全部安装完成

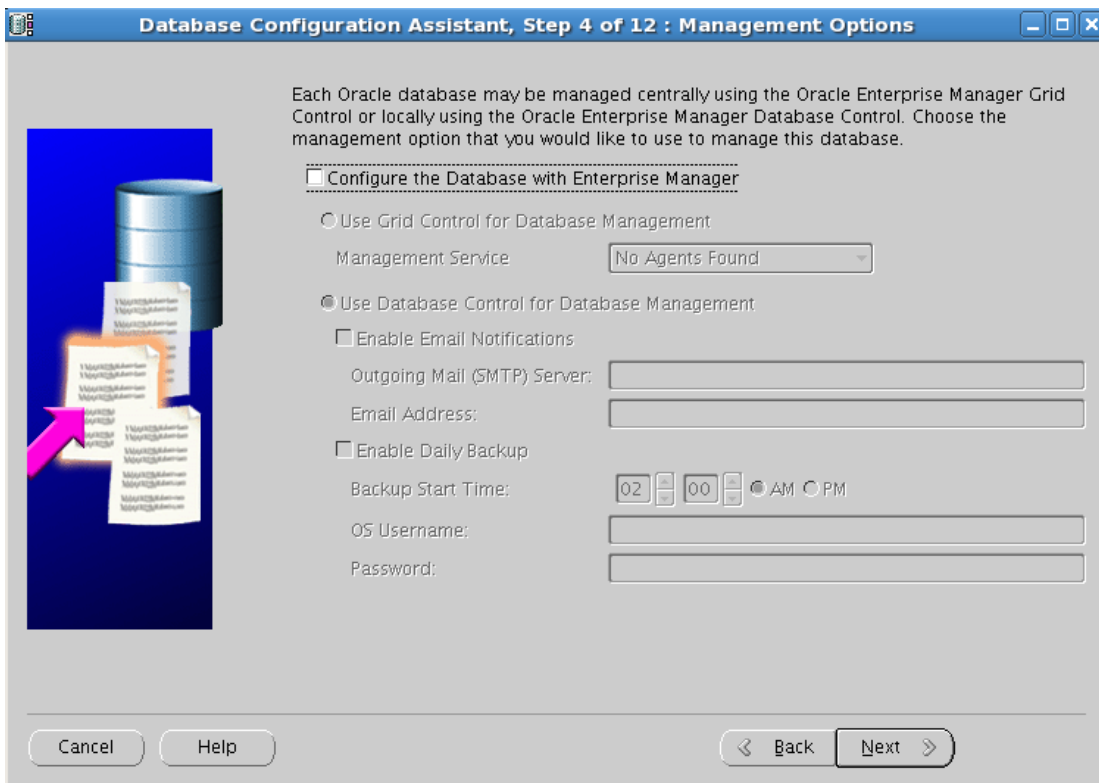
第四部分：创建数据库实例

在 oracle 账户下，执行 dbca

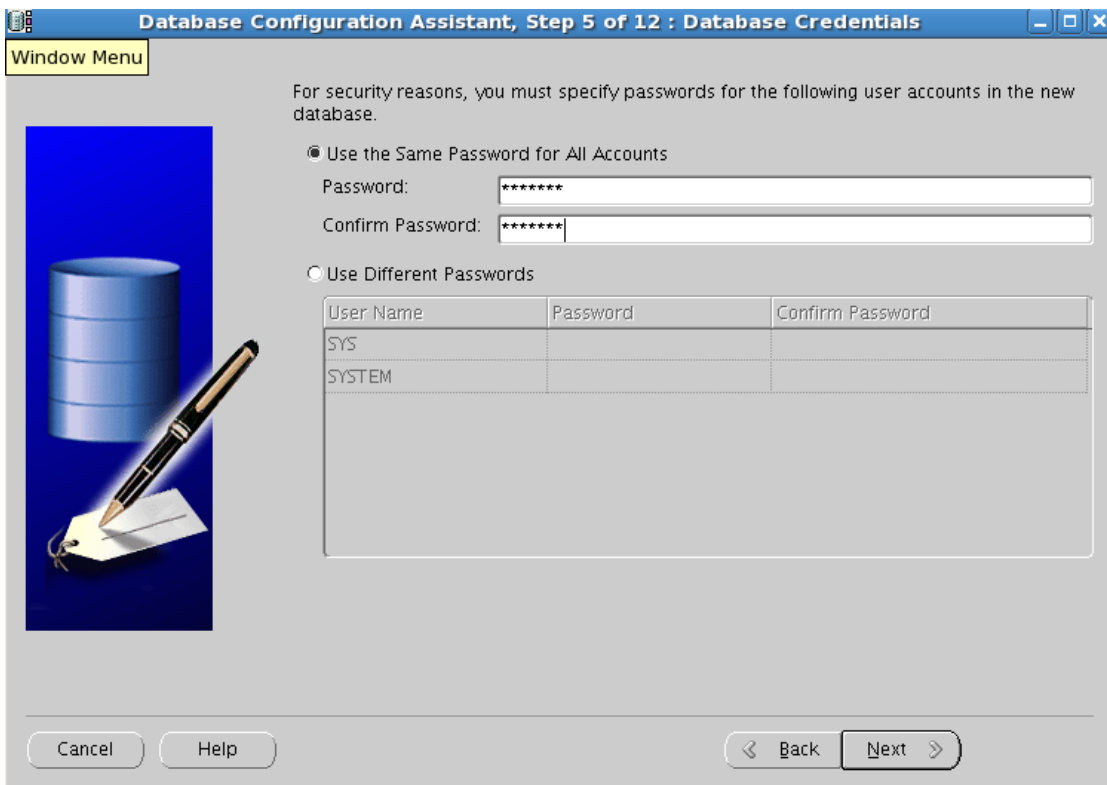




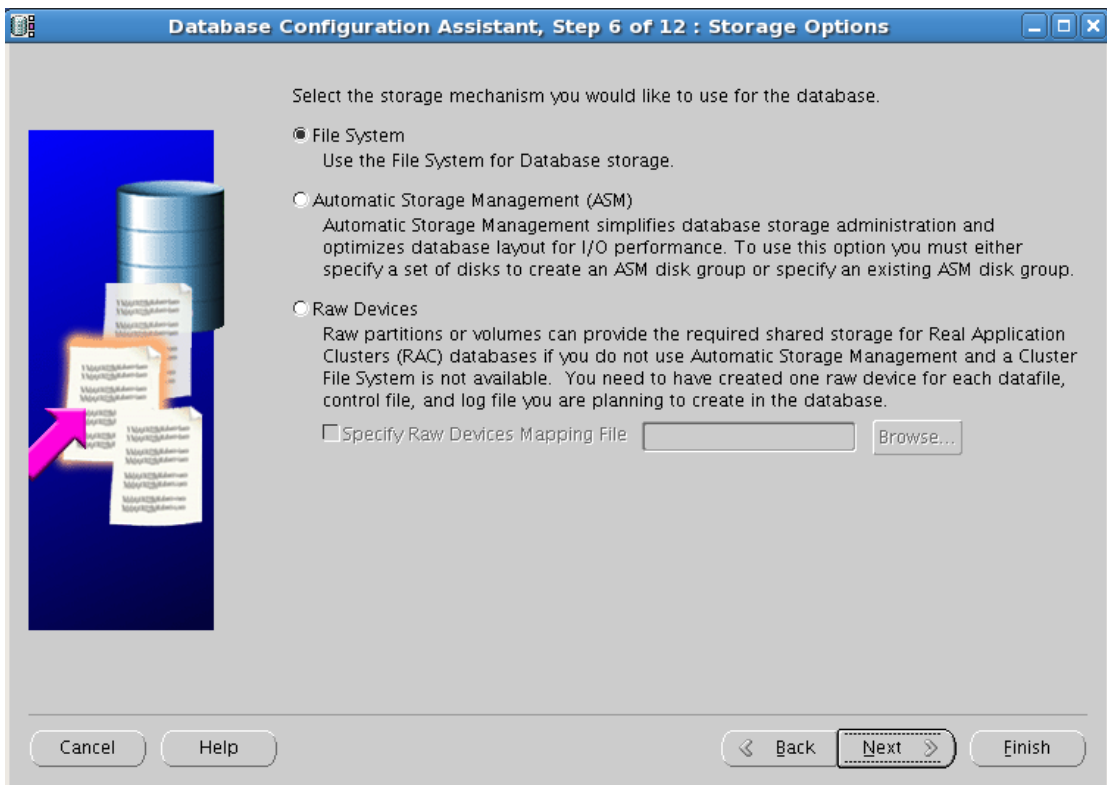
输入 ORACLE_SID

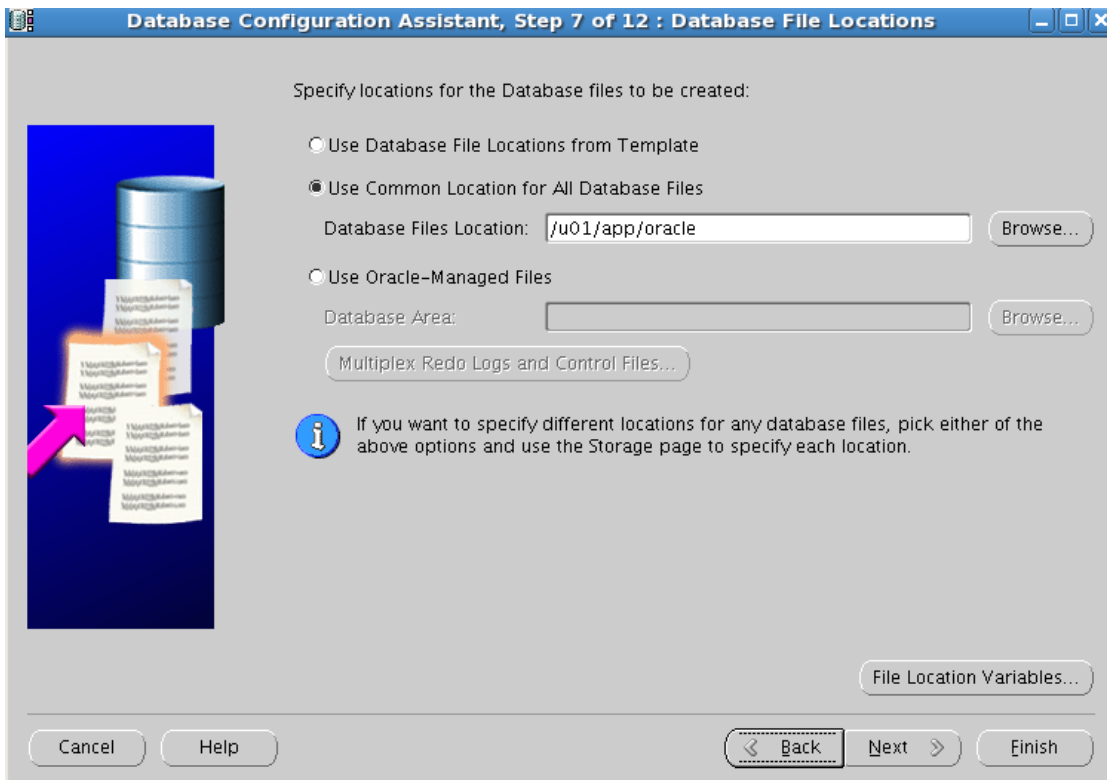


不选择"Configure the database with Enterprise Manger", 点击"Next"继续



输入用户口令: ttjsxdl next 继续

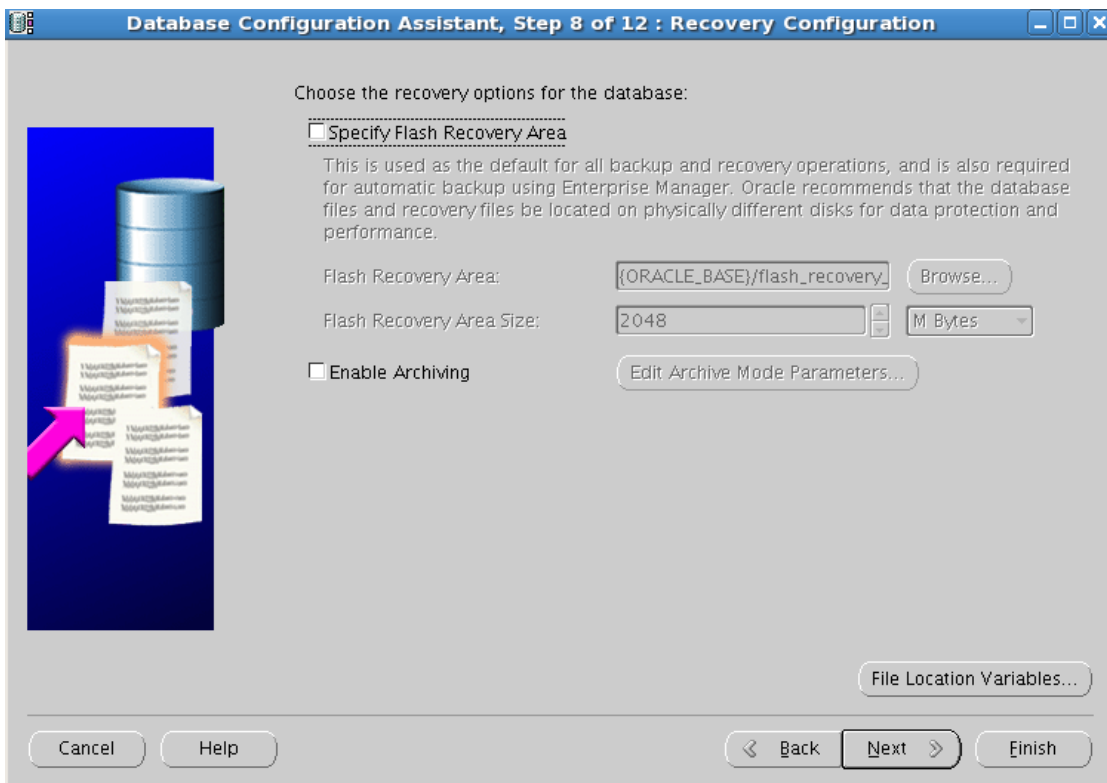




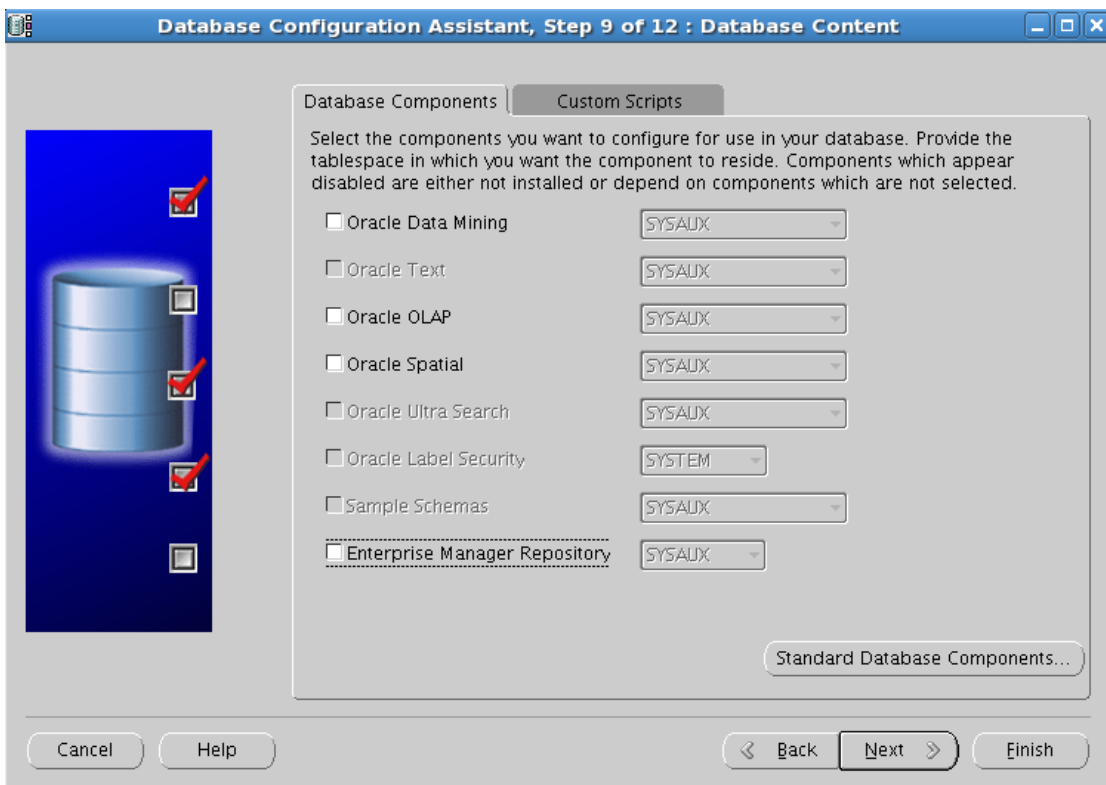
选择实例安装位置

选择” Use Common Location for All Database Files”， 点击”Next”继续

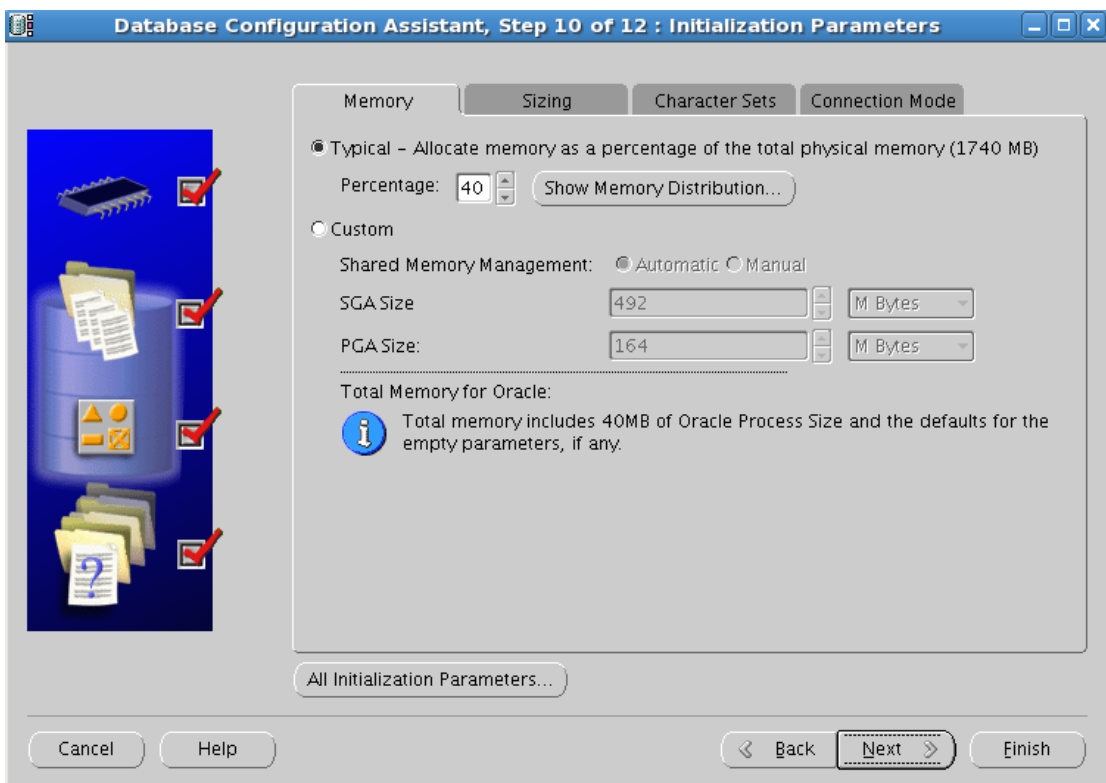
Database files location:\$ORACLE_BASE



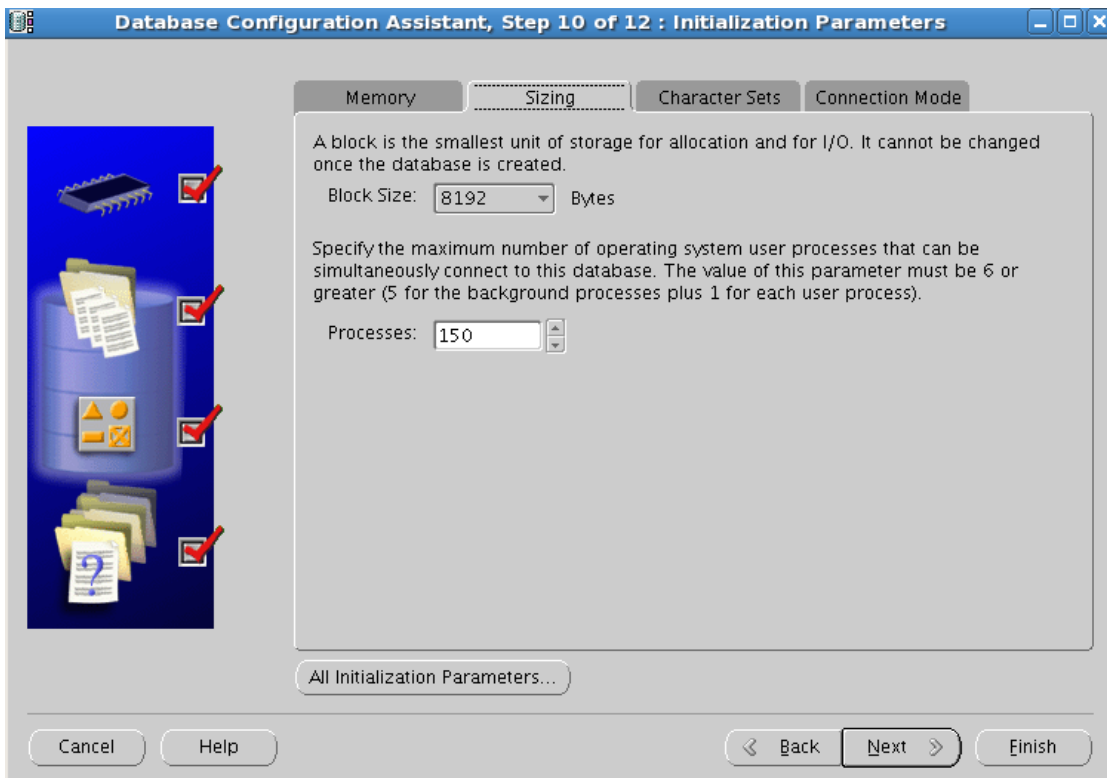
不使用 Flash Recovery Area， 点击”Next”继续



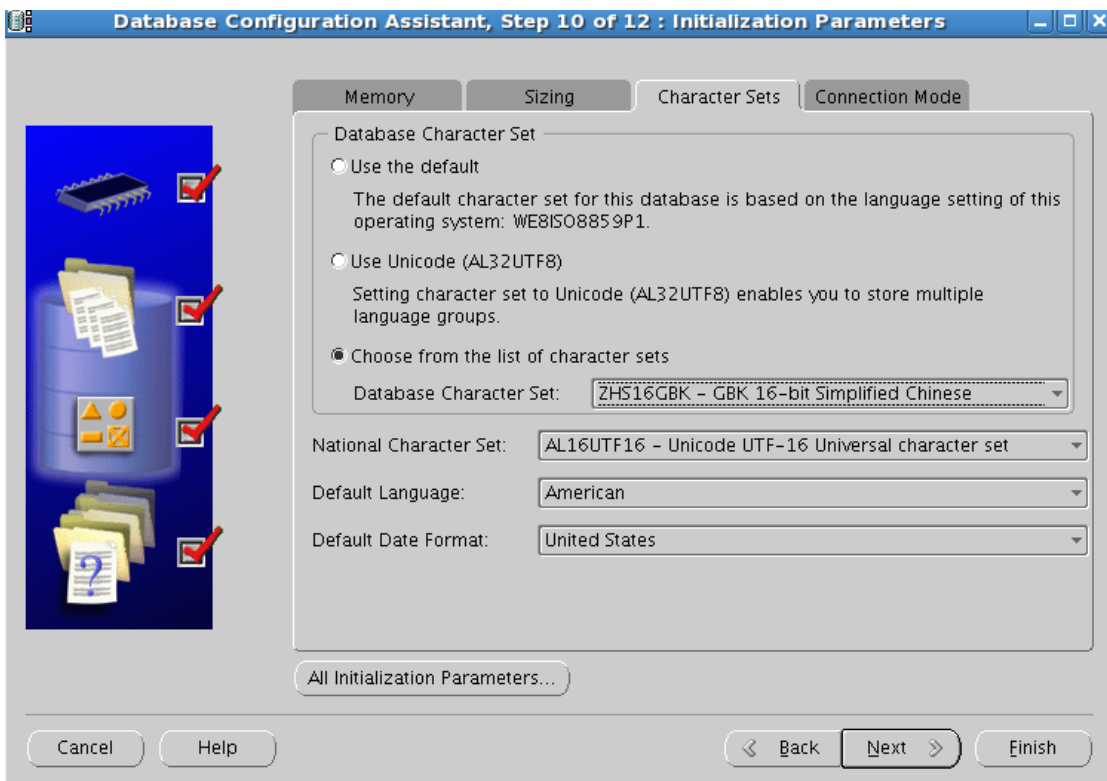
取消不需要的组件



设置内存，此处可以默认，安装完成后根据实际情况或根据设计调整。



Block Size 大小需根据实际需求或根据详细设计指定，processes 可在实例创建后调整。



字符集应根据应用需求或根据详细设计方案选取，不建议实例创建后修改字符集。

Database Configuration Assistant, Step 10 of 12 : Initialization Parameters

Memory Sizing Character Sets **Connection Mode**

Select the mode in which you want your database to operate by default:

- Dedicated Server Mode**
For each client connection the database will allocate a resource dedicated to serving only that client. Use this mode when the number of total client connections is expected to be small or when clients will be making persistent, long-running requests to the database.
- Shared Server Mode**
Several client connections share a database-allocated pool of resources. Use this mode when a large number of users need to connect to the database simultaneously while efficiently utilizing system resources. The Oracle shared server feature will be enabled.
Shared Servers specifies the number of server processes that you want to create when an instance is started up.
Shared Server:
[Edit Shared Server Parameters...](#)

[All Initialization Parameters...](#)

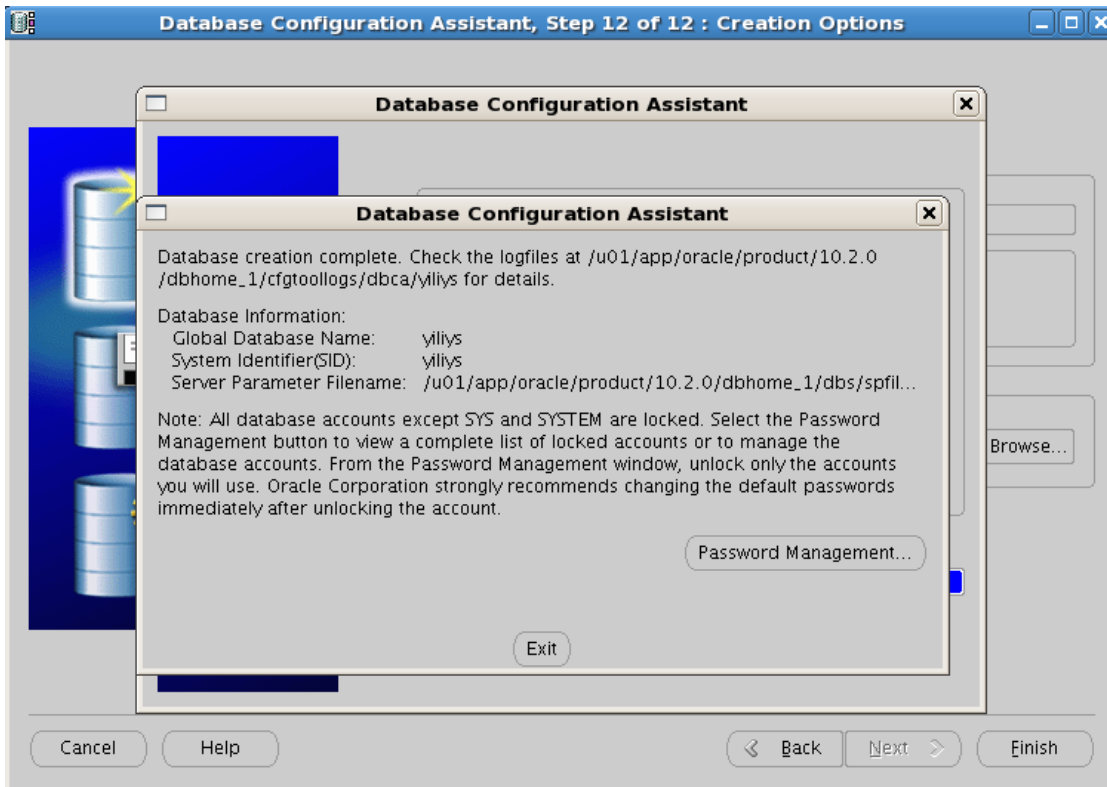
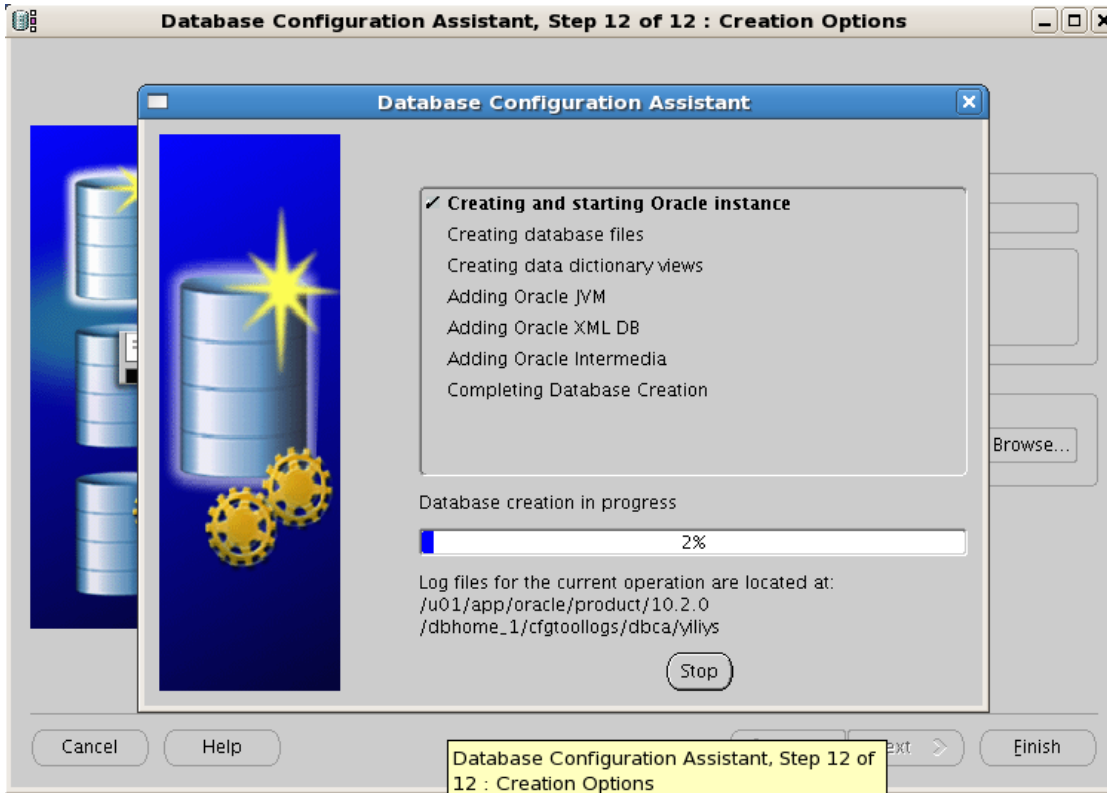
Cancel Help < Back Next > Finish

Database Configuration Assistant, Step 12 of 12 : Creation Options

Select the database creation options:

- Create Database**
- Save as a Database Template**
Name:
Description:
- Generate Database Creation Scripts**
Destination Directory: [Browse...](#)

Cancel Help < Back Next > Finish



第五部分：安装数据库监听

Oracle 账户下执行 netca



Oracle Net Configuration Assistant: Listener Configuration, Listener



For remote connections to be made to your Oracle database you must have at least one Oracle Net listener. Enter the name of the listener you want to create:

Listener name:

Cancel

Help

< Back

Next >

Oracle Net Configuration Assistant: Listener Configuration, Select P



You can configure the listener to accept connections over one or more protocols. Select which protocols you want to configure for this listener. Keep your configuration as simple as possible by configuring only the protocols you need.

Available Protocols

TCPS
IPC



Selected Protocols

TCP



Cancel

Help

< Back

Next >

Oracle Net Configuration Assistant: Listener Configuration, TCP/IP



Which TCP/IP port number should the listener use? The port number selected should not be used by any other software on this computer.

Use the standard port number of 1521

Use another port number:

Cancel Help

Back Next

Oracle Net Configuration Assistant: Listener Configuration, More Li



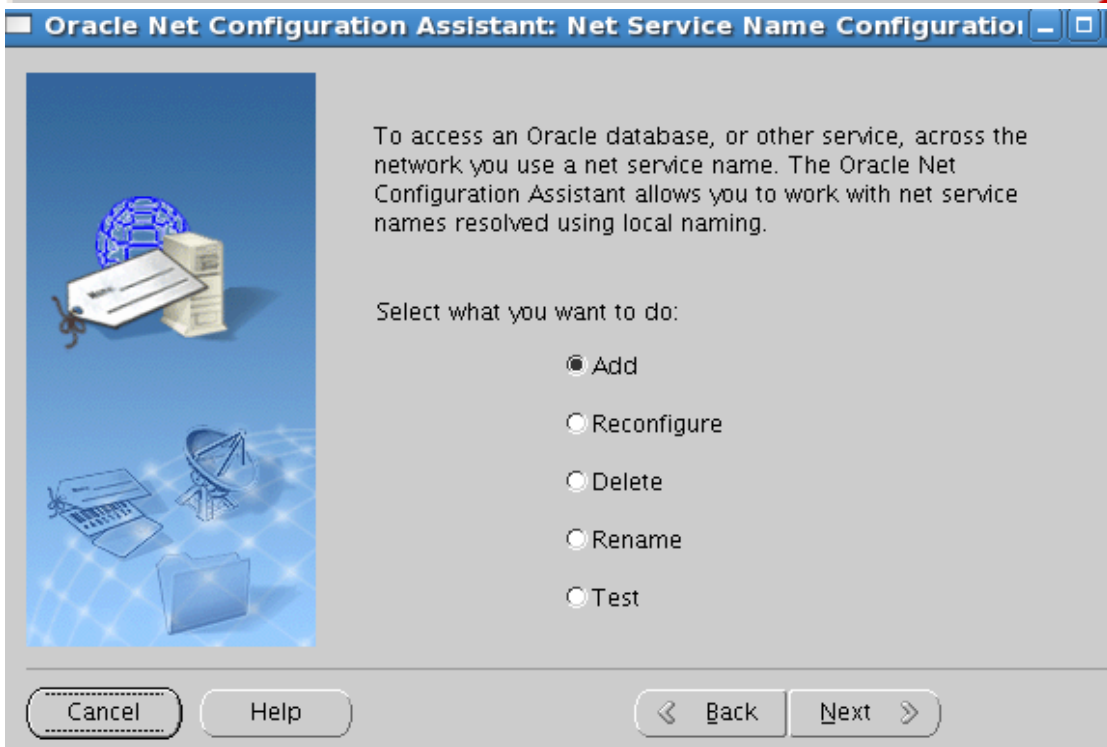
Would you like to configure another listener?

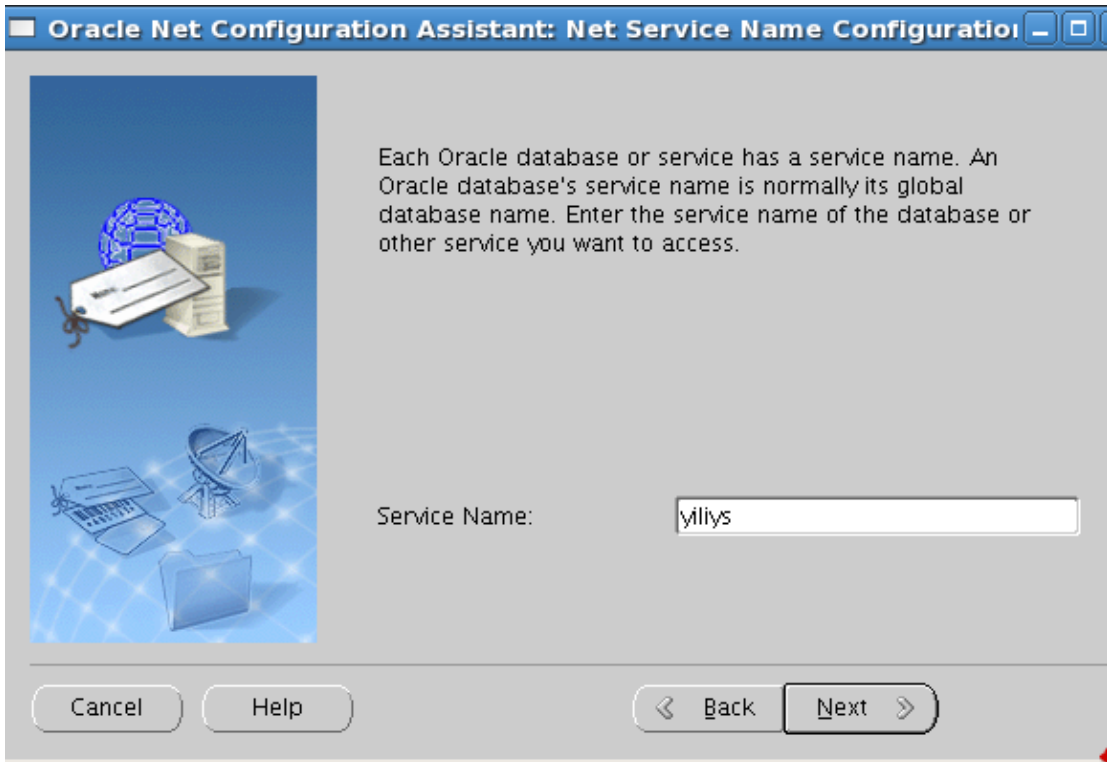
No

Yes

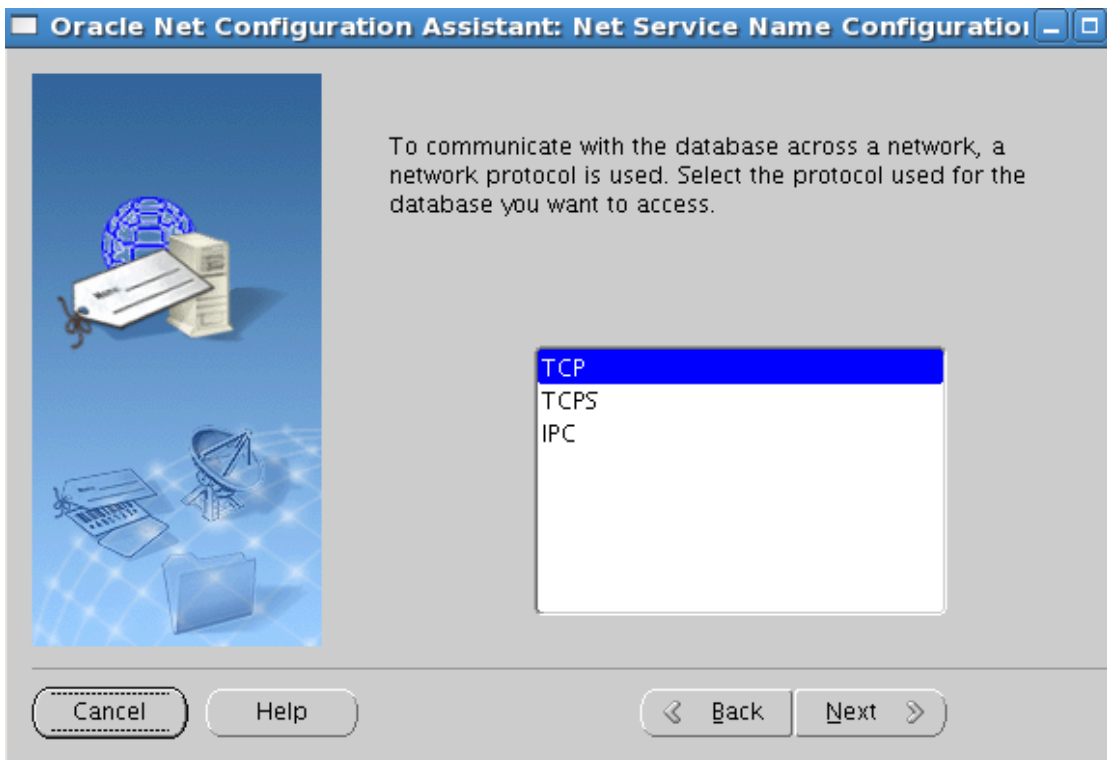
Cancel Help

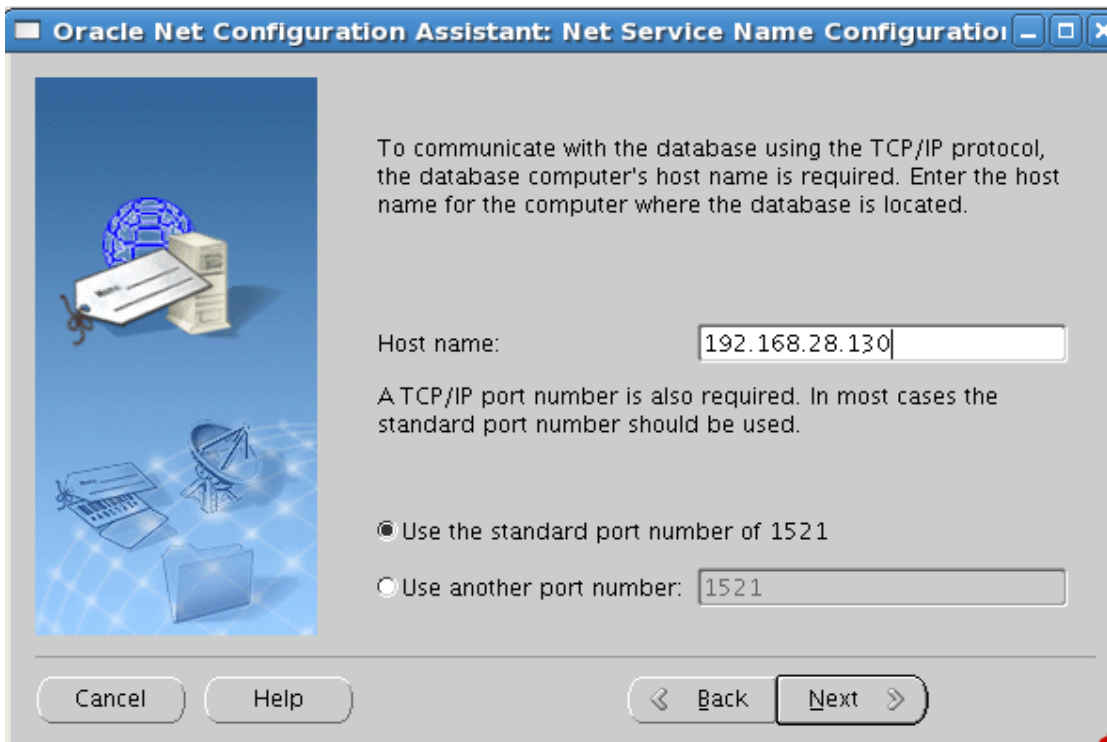
Back Next



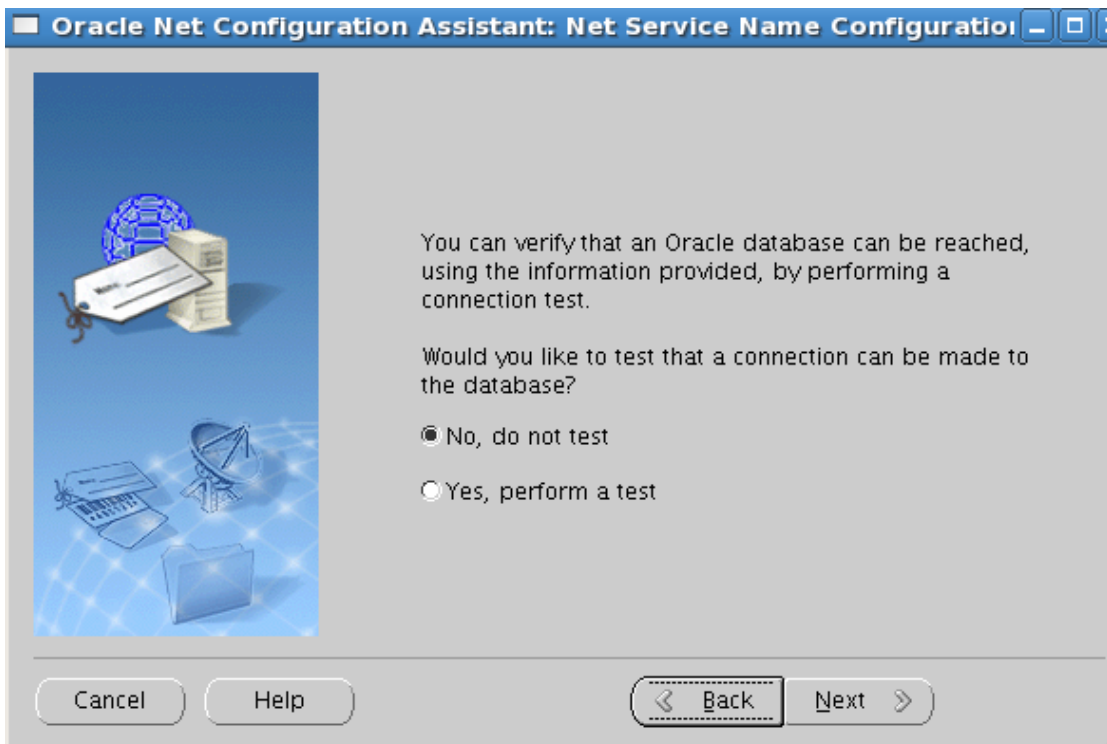


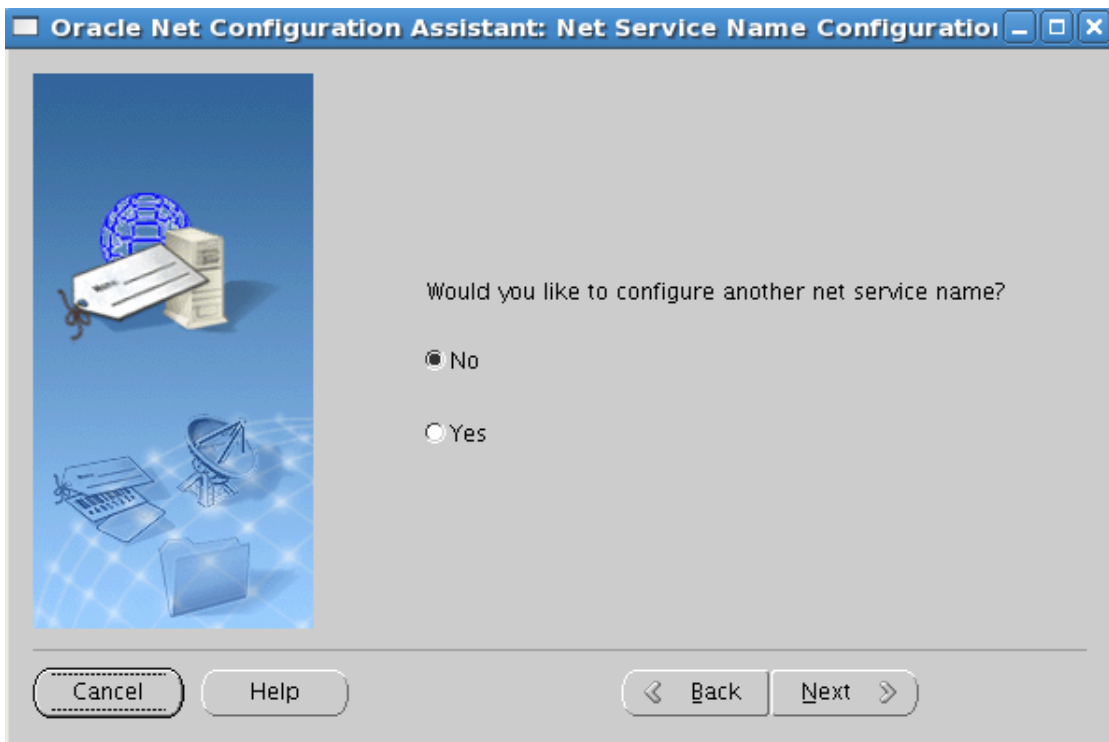
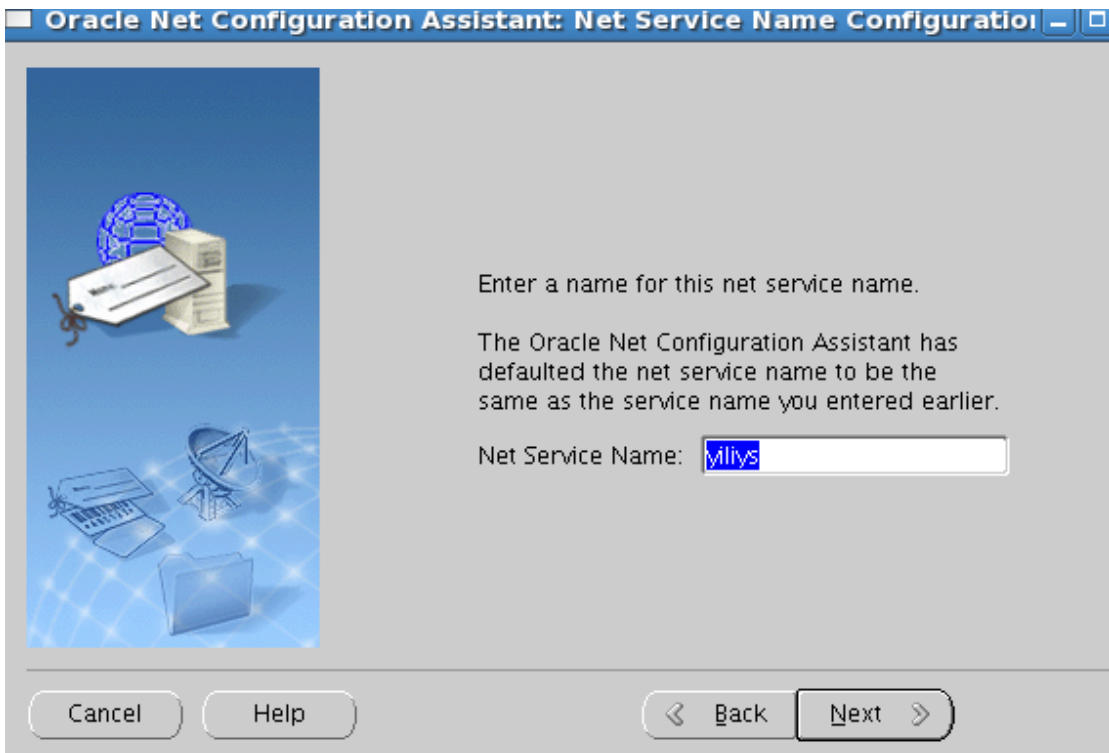
通常设置与 SID 名相同





尽量用计算机名来记录







点击完成即可