Ubuntu16.04安装Oracle11g

安装前准备

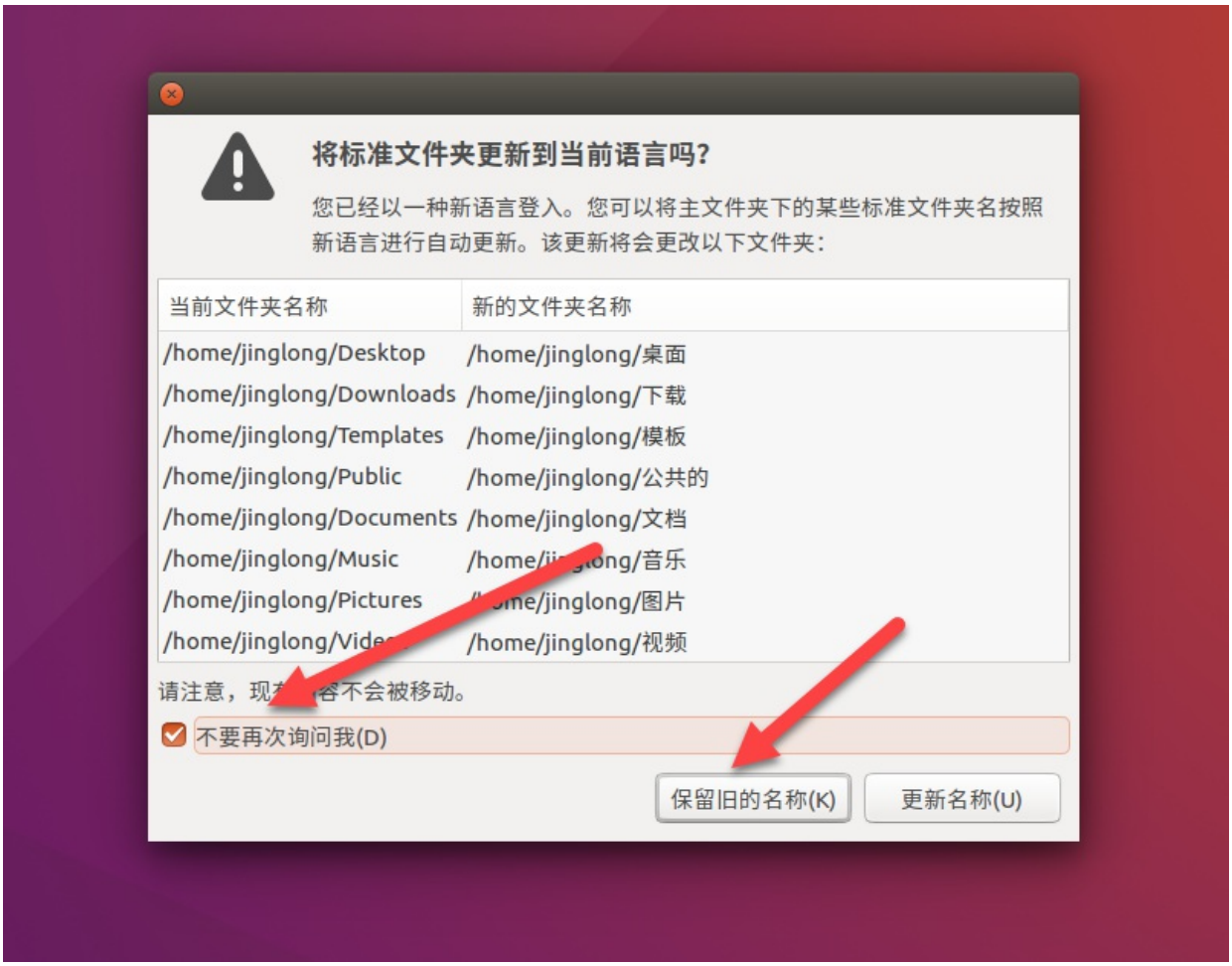
- Ubuntu版本：ubuntu-16.04.3-desktop-amd64
- Oracle版本：linux.x64_11gR2_database
- vmware下安装ubuntu虚拟机时硬盘大小设置为40G
- 虚拟机所在的磁盘剩余空间大小50G
- 安装vim、gedit
- 解决虚拟机和主机之间不能复制粘贴的问题

```
sudo apt-get autoremove open-vm-tools
sudo apt-get install open-vm-tools-desktop
init 6
```

- 设置vim永久显示行号，`tab`键改为4个空格：修改`/etc/vim/vimrc`，在文件末尾新增以下内容

```
set nu
set ts=4
set expandtab
set autoindent
```

- 切换源到阿里云
- 设置系统为中文显示
- 重启系统`init 6`
- 点击“不要再次询问我”，“保留旧的名称”



- 安装`alien`

```
# sudo apt-get install alien
```

安装JDK环境

- `sudo apt-get update`
- `sudo apt-get install openjdk-8-jdk`
- `sudo vim /etc/profile`，在文件尾部加入以下内容

```
export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
export JRE_HOME=${JAVA_HOME}/jre
export CLASSPATH=.:${JAVA_HOME}/lib:${JRE_HOME}/lib
export PATH=${JAVA_HOME}/bin:$PATH
```

```
16      fi
17    fi
18  fi
19
20  if [ -d /etc/profile.d ]; then
21    for i in /etc/profile.d/*.sh; do
22      if [ -r $i ]; then
23        . $i
24      fi
25    done
26    unset i
27  fi
28
29  export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
30
31  export JRE_HOME=${JAVA_HOME}/jre
32
33  export CLASSPATH=.:${JAVA_HOME}/lib:${JRE_HOME}/lib
34
35  export PATH=${JAVA_HOME}/bin:$PATH
36
~
~
```

- 检查JDK环境

`java -version`

```
done.
done.
jinglong@ubuntu:~$ sudo vim /etc/profile
jinglong@ubuntu:~$ java -version
openjdk version "1.8.0_242"
OpenJDK Runtime Environment (build 1.8.0_242-8u242-b08-0ubuntu3~16.04-b08)
OpenJDK 64-Bit Server VM (build 25.242-b08, mixed mode)
```

安装Oracle依赖库

> 在ubuntu16.04安装oracle11g中列出了所有需要安装的依赖库。但是需要注意的是，`Oracle`依赖包有很多，其中有些是32位，有些是64位，需要在安装的过程中切换源。
> 确保所有的依赖库全部正确安装，否则`Oracle`数据库可能会安装失败

- 切换源

```
# sudo su
# cd /etc/apt/sources.list.d
# echo "deb http://old-releases.ubuntu.com/ubuntu/ raring main restricted universe multiverse" > ia32-libs-raring.list
# apt update
```

- 依次安装以下依赖包

```
# sudo apt-get -y install lesstif2 lesstif2-dev
# sudo apt-get install libodbcinstq4-1 libodbcinstq4-1:i386
# sudo apt-get install libpth-dev
# sudo apt-get install libpthread-stubs0
# sudo apt-get install libpthread-stubs0-dev
# sudo apt-get install libstdc++5
# sudo apt-get install lsb-cxx
```

```
# sudo apt-get install make
# sudo apt-get install openssh-server
# sudo apt-get install pdksh
# sudo apt-get install rlwrap
# sudo apt-get install rpm
# sudo apt-get install sysstat
# sudo apt-get install unixodbc
# sudo apt-get install unixodbc-dev
# sudo apt-get install unzip
# sudo apt-get install x11-utils
# sudo apt-get install zlibc
```

- 把源切换回来

```
# rm -rf ia32-libs-raring.list
# apt update
```

- 继续安装剩余依赖包

```
# sudo apt-get install automake
# sudo apt-get install autotools-dev
# sudo apt-get install binutils
# sudo apt-get install bzip2
# sudo apt-get install elfutils
# sudo apt-get install expat
# sudo apt-get install gawk
# sudo apt-get install gcc
# sudo apt-get install gcc-multilib
# sudo apt-get install g++-multilib
# sudo apt-get install ia32-libs
# sudo apt-get install ksh
# sudo apt-get install less
# sudo apt-get install lib32z1
# sudo apt-get install libaio1
# sudo apt-get install libaio-dev
# sudo apt-get install libc6-dev
# sudo apt-get install libc6-dev-i386
# sudo apt-get install libc6-i386
# sudo apt-get install libelf-dev
# sudo apt-get install libltdl-dev
# sudo apt-get install libmotif4
```

注意：必须确保上面所有的依赖包的安装过程没有错误

配置环境

- 执行以下命令查询系统参数

```
/sbin/sysctl -a | grep sem
/sbin/sysctl -a | grep file-max
/sbin/sysctl -a | grep aio-max
/sbin/sysctl -a | grep ip_local_port_range
/sbin/sysctl -a | grep rmem_default
/sbin/sysctl -a | grep rmem_max
/sbin/sysctl -a | grep wmem_default
/sbin/sysctl -a | grep wmem_max
/sbin/sysctl -a | grep shmall
/sbin/sysctl -a | grep shmmax
/sbin/sysctl -a | grep shmmni
```

- 将查询出来的参数写入到`sudo vim /etc/sysctl.conf`文件尾部

```
fs.aio-max-nr = 65536
fs.file-max = 6553600
kernel.shmall = 18446744073692774399
kernel.shmmax = 18446744073692774399
```

```
kernel.shmmni = 4096
kernel.sem = 32000 1024000000 500 32000
net.ipv4.ip_local_port_range = 32768 60999
net.core.rmem_default = 212992
net.core.rmem_max = 212992
net.core.wmem_default = 212992
net.core.wmem_max = 212992
```

```
57 #
58 # Log Martian Packets
59 #net.ipv4.conf.all.log_martians = 1
60 #
61 fs.aio-max-nr = 65536
62 fs.file-max = 6553600
63 kernel.shmall = 18446744073692774399
64 kernel.shmmax = 18446744073692774399
65 kernel.shmmni = 4096
66 kernel.sem = 32000 1024000000 500 32000
67 net.ipv4.ip_local_port_range = 32768 60999
68 net.core.rmem_default = 212992
69 net.core.rmem_max = 212992
70 net.core.wmem_default = 212992
71 net.core.wmem_max = 212992
```

- 更新内核参数

  `sysctl -p`

- 添加用户的内核限制`sudo vim /etc/security/limits.conf`，在文件尾部添加以下内容：

```
jinglong soft nproc 2047
jinglong hard nproc 16384
jinglong soft nofile 1024
jinglong hard nofile 65536
jinglong soft stack 10240
```

```
47 #root            hard    core            100000
48 #*               hard    rss             10000
49 #@student        hard    nproc           20
50 #@faculty        soft    nproc           20
51 #@faculty        hard    nproc           50
52 #ftp             hard    nproc           0
53 #ftp             -       chroot          /ftp
54 #@student        -       maxlogins       4
55
56 jinglong soft nproc 2047
57
58 jinglong hard nproc 16384
59
60 jinglong soft nofile 1024
61
62 jinglong hard nofile 65536
63
64 jinglong soft stack 10240
65
66 # End of file
```

- 创建文件夹

```
# mkdir /home/jinglong/tools
# mkdir /home/jinglong/tools/oracle11g
```

- 配置oracle环境变量`sudo vim /etc/profile`，将如下内容加入到文件最后

```
export ORACLE_BASE=/home/jinglong/app/jinglong
export ORACLE_HOME=$ORACLE_BASE/product/11.2.0/dbhome_1
export ORACLE_SID=orcl
export ORACLE_UNQNAME=orcl
export NLS_LANG=.AL32UTF8
export PATH=${PATH}:${ORACLE_HOME}/bin/:$ORACLE_HOME/lib64
```

```
    fi
  done
  unset i
fi

export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64

export JRE_HOME=${JAVA_HOME}/jre

export CLASSPATH=.:${JAVA_HOME}/lib:${JRE_HOME}/lib

export PATH=${JAVA_HOME}/bin:$PATH

export ORACLE_BASE=/home/jinglong/app/jinglong

export ORACLE_HOME=$ORACLE_BASE/product/11.2.0/dbhome_1

export ORACLE_SID=orcl

export ORACLE_UNQNAME=orcl

export NLS_LANG=.AL32UTF8

export PATH=${PATH}:${ORACLE_HOME}/bin/:$ORACLE_HOME/lib64
```

- 更新参数

  `source /etc/profile`

- 欺骗Oracle的安装设置

```
sudo mkdir /usr/lib64
sudo ln -s /etc /etc/rc.d
sudo ln -s /lib/x86_64-linux-gnu/libgcc_s.so.1 /lib64/
sudo ln -s /usr/bin/awk /bin/awk
sudo ln -s /usr/bin/basename /bin/basename
sudo ln -s /usr/bin/rpm /bin/rpm
sudo ln -s /usr/lib/x86_64-linux-gnu/libc_nonshared.a /usr/lib64/
sudo ln -s /usr/lib/x86_64-linux-gnu/libpthread_nonshared.a /usr/lib64/
sudo ln -s /usr/lib/x86_64-linux-gnu/libstdc++.so.6 /lib64/
sudo ln -s /usr/lib/x86_64-linux-gnu/libstdc++.so.6 /usr/lib64/
```

- 切换到root用户

```
echo 'Red Hat Linux release 5' > /etc/redhat-release
```

- 退出root用户`exit`

- 以上完成了Oracle安装的所有环境准备，接下来开始正式安装Oracle数据库

正式安装Oracle

- 安装`xsftpd`服务Ubuntu18.04下安装配置SSH服务和FTP服务
- 将oracle的安装包放到`~/tools/oracle11g`的目录下

```
    fi
  done
  unset i
fi

export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64

export JRE_HOME=${JAVA_HOME}/jre

export CLASSPATH=.:${JAVA_HOME}/lib:${JRE_HOME}/lib

export PATH=${JAVA_HOME}/bin:$PATH

export ORACLE_BASE=/home/jinglong/app/jinglong

export ORACLE_HOME=$ORACLE_BASE/product/11.2.0/dbhome_1

export ORACLE_SID=orcl

export ORACLE_UNQNAME=orcl

export NLS_LANG=.AL32UTF8

export PATH=${PATH}:${ORACLE_HOME}/bin/:$ORACLE_HOME/lib64
```

- 解压压缩包

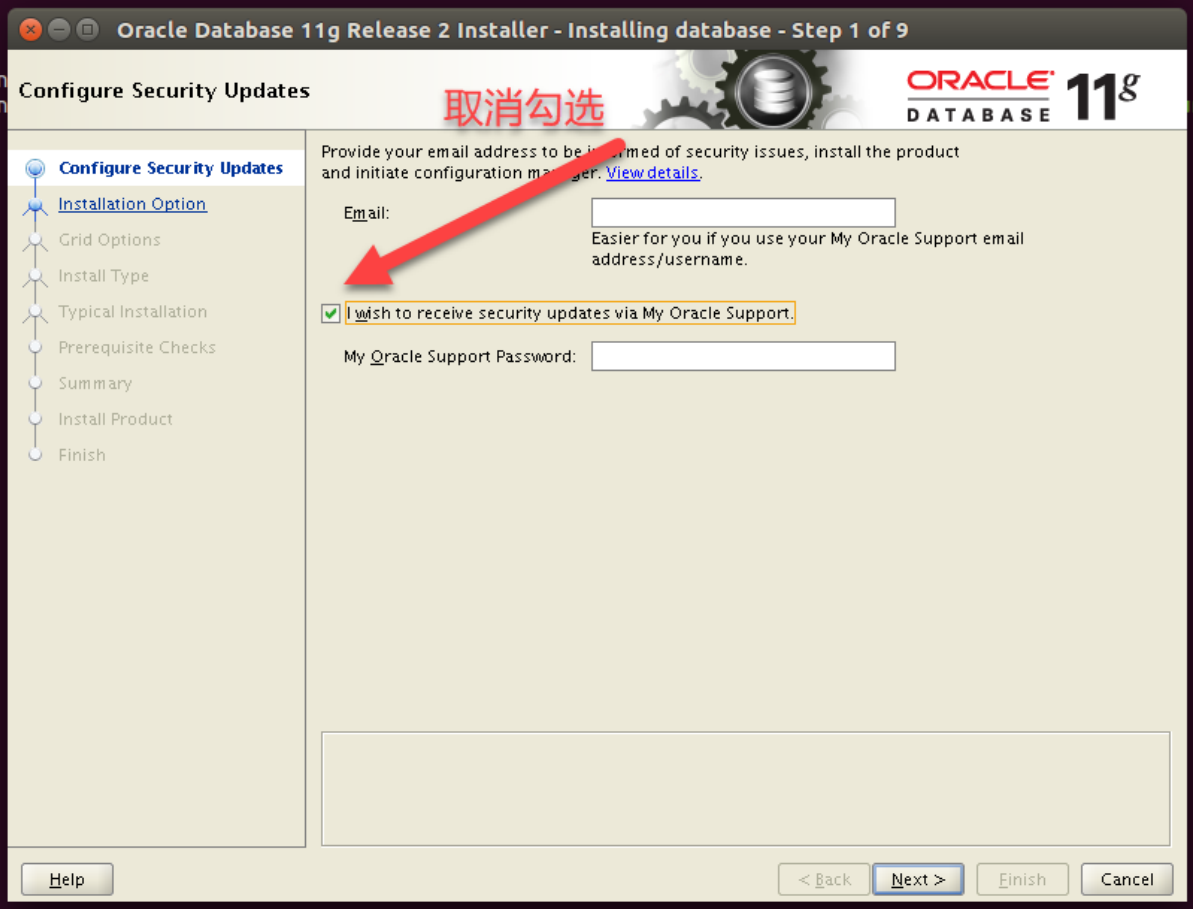
```
sudo unzip linux.x64_11gR2_database_1of2.zip
sudo unzip linux.x64_11gR2_database_2of2.zip
```

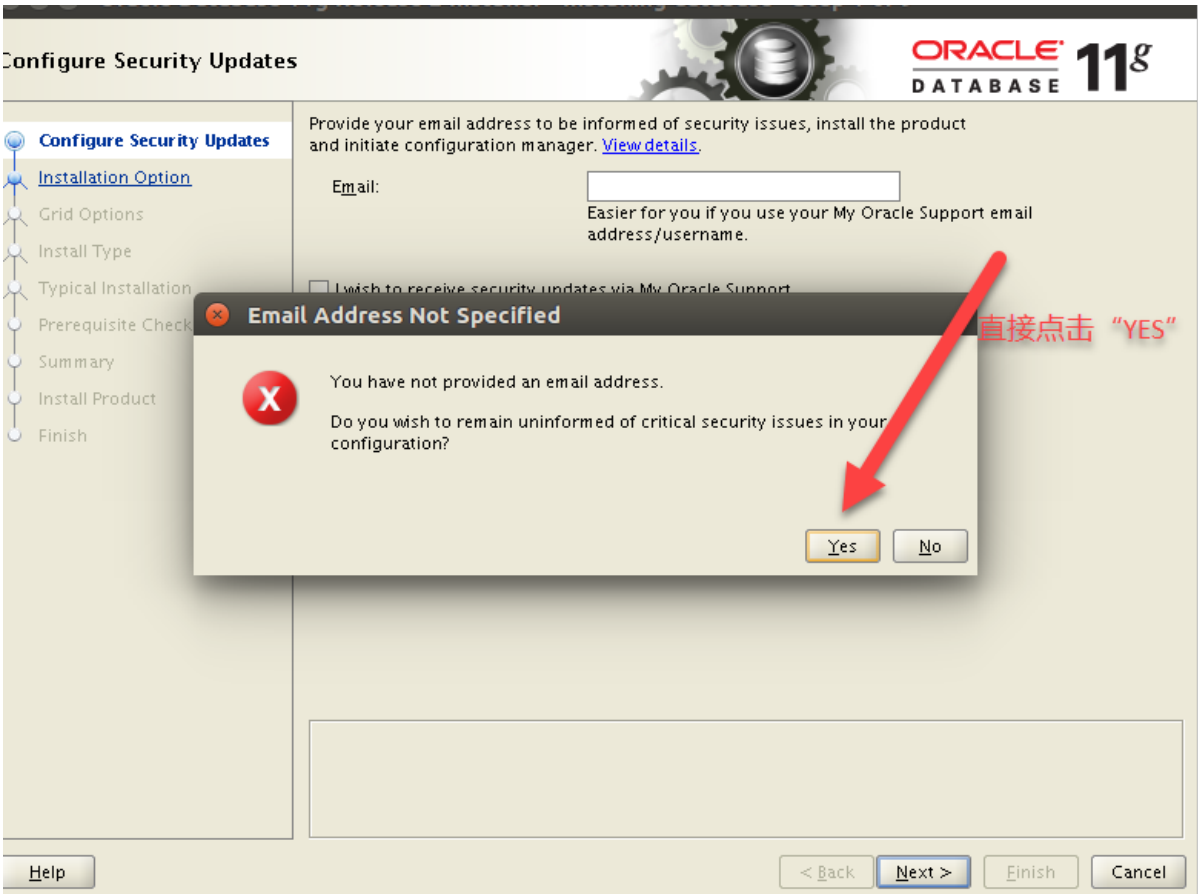
- 进入`cd database`目录
- 执行以下命令，避免安装界面中文乱码

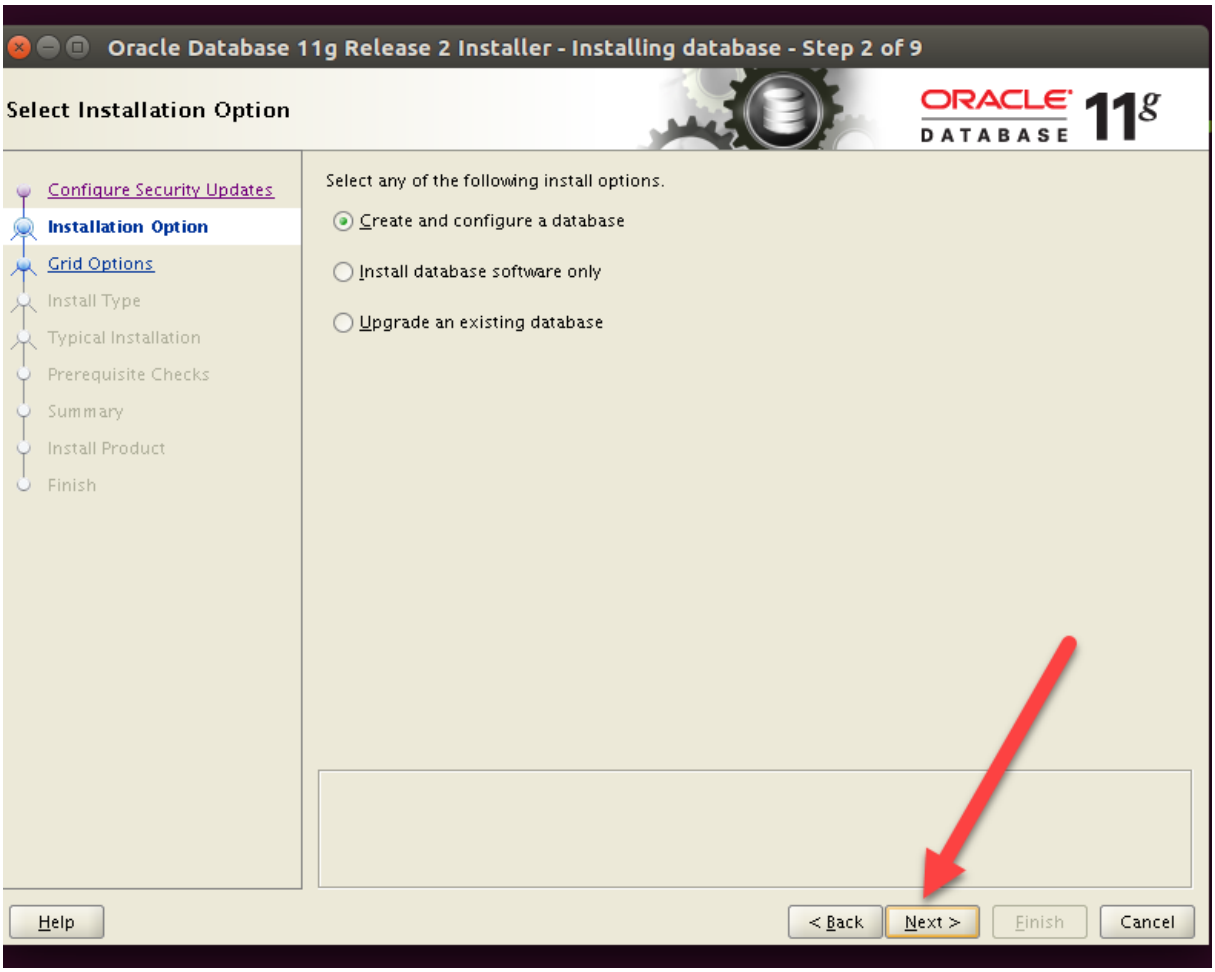
```
export LANG=en_US
```

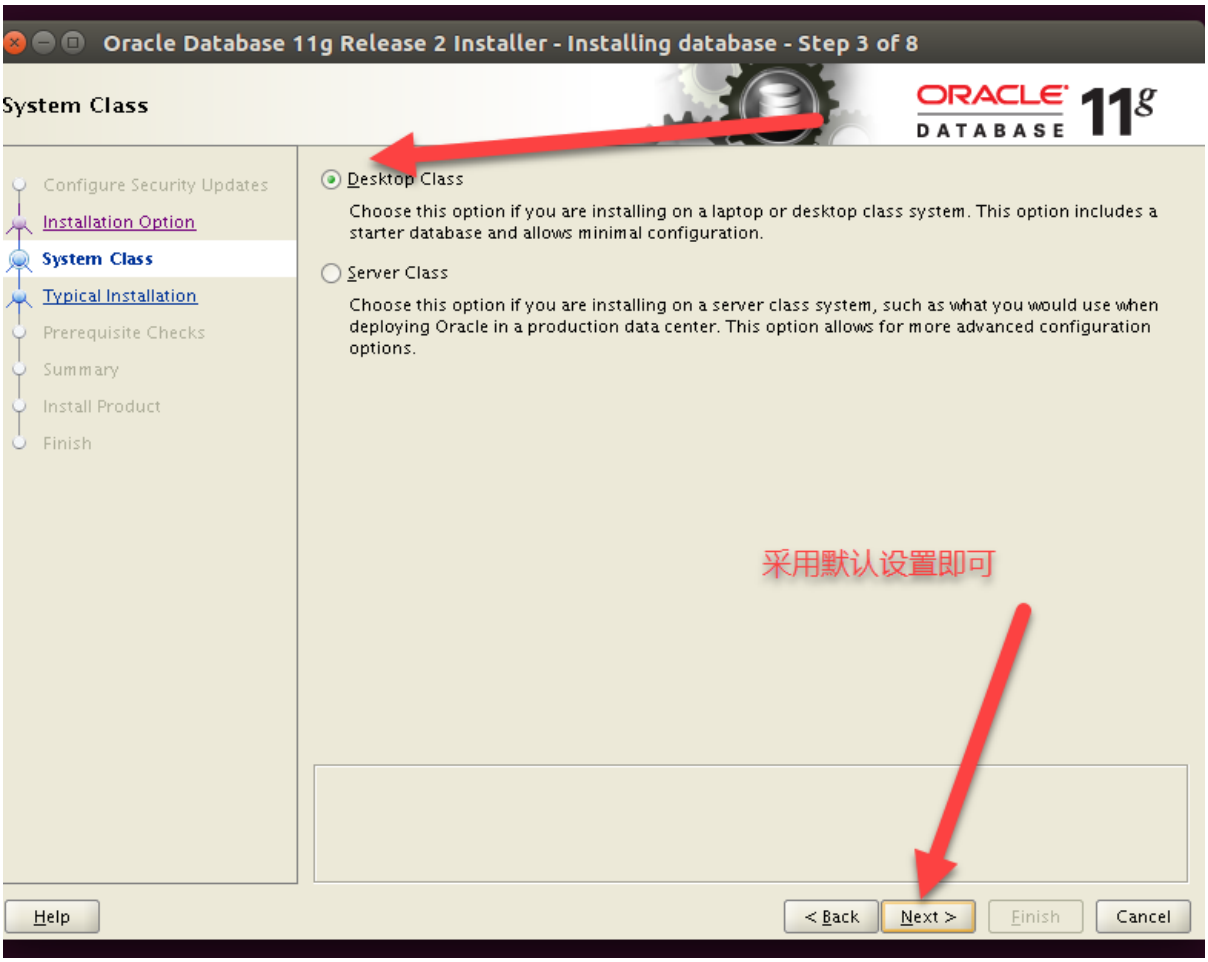
- 执行安装`./runInstaller`

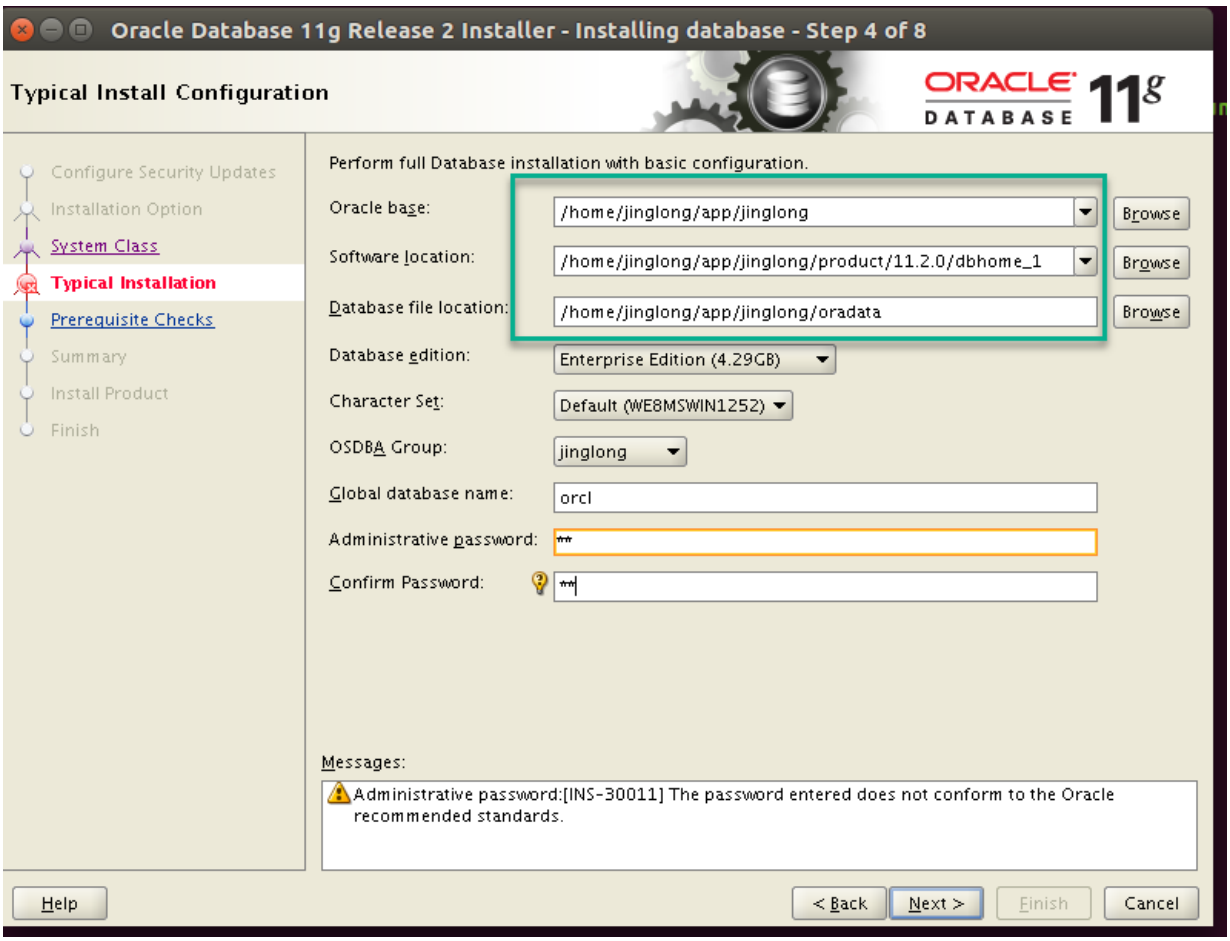
```
/oracle11g/database$ ls
 rpm   runInstaller   sshsetup   stage   welcome.html
/oracle11g/database$ export LANG=en_US
/oracle11g/database$ ./runInstaller
al Installer...
```




Configure Security Updates
ORACLE DATABASE 11g
Configure Security Updates
Installation Option
Grid Options
Install Type
Typical Installation
Prerequisite Check
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
Email Address Not Specified
You have not provided an email address.
Do you wish to remain uninformed of critical security issues in your configuration?
Yes
No
直接点击“YES”
Help
< Back
Next >
Finish
Cancel


Oracle Database 11g Release 2 Installer - Installing database - Step 2 of 9
Select Installation Option
ORACLE DATABASE 11g
Configure Security Updates
Installation Option
Grid Options
Install Type
Typical Installation
Prerequisite Checks
Summary
Install Product
Finish
Select any of the following install options.
Create and configure a database
Install database software only
Upgrade an existing database
Help
< Back
Next >
Finish
Cancel

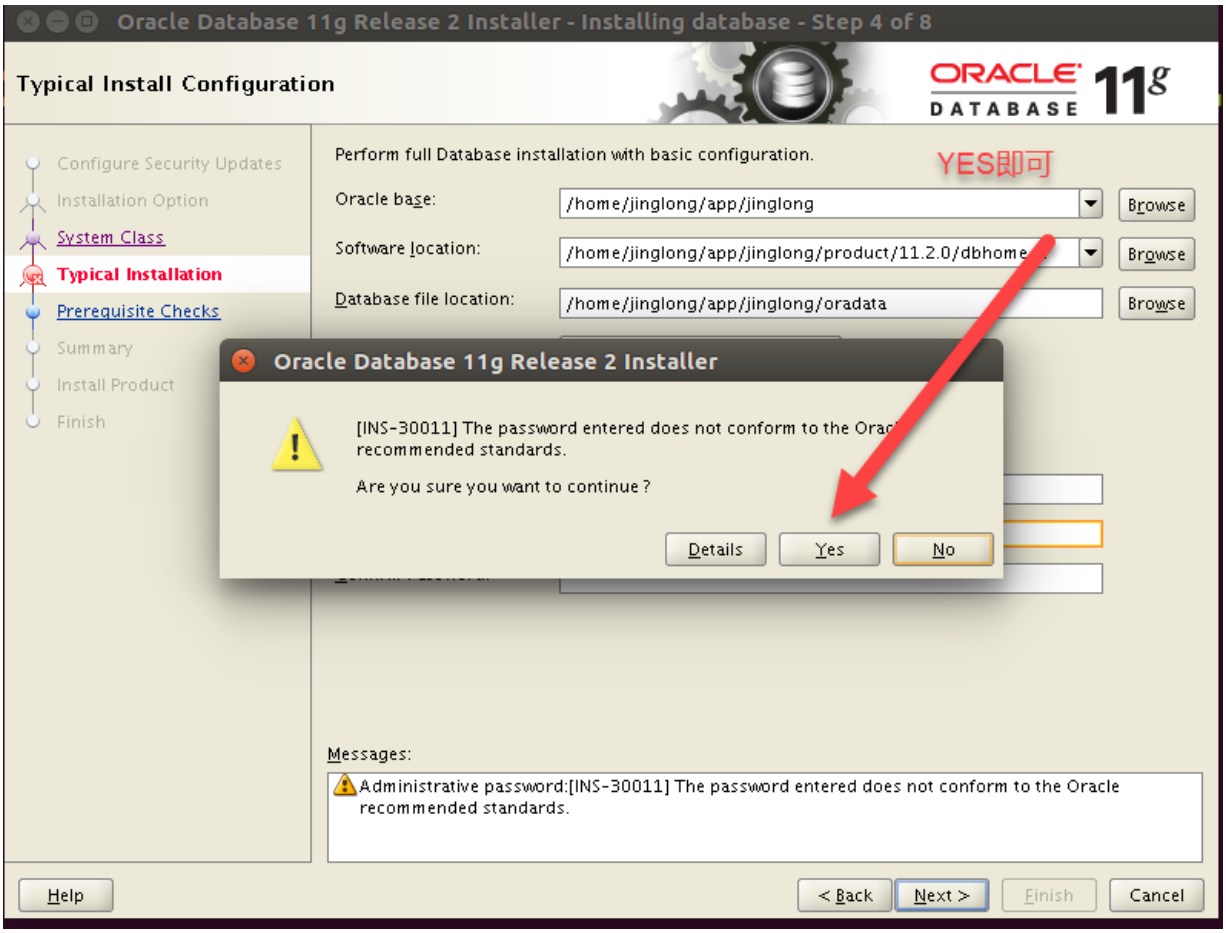


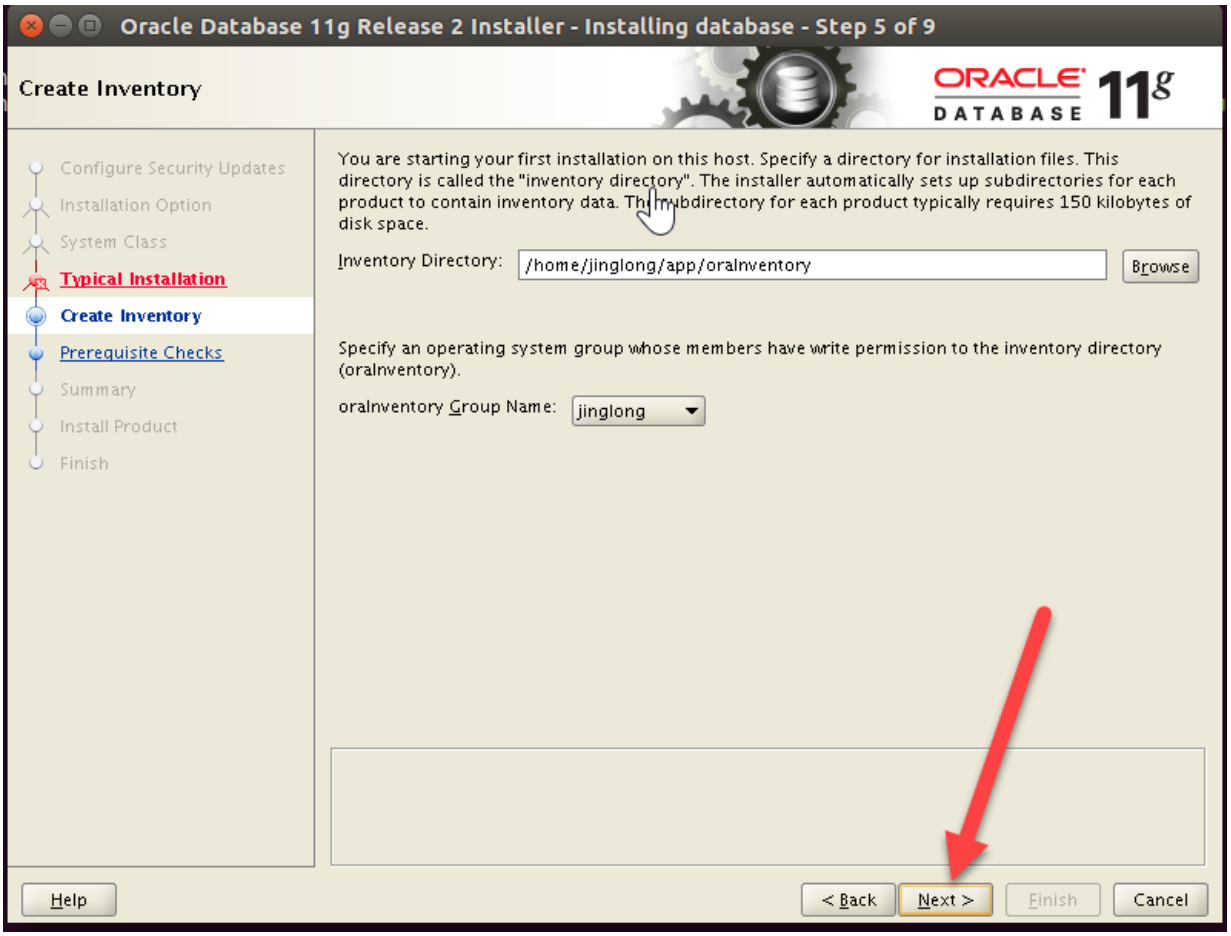


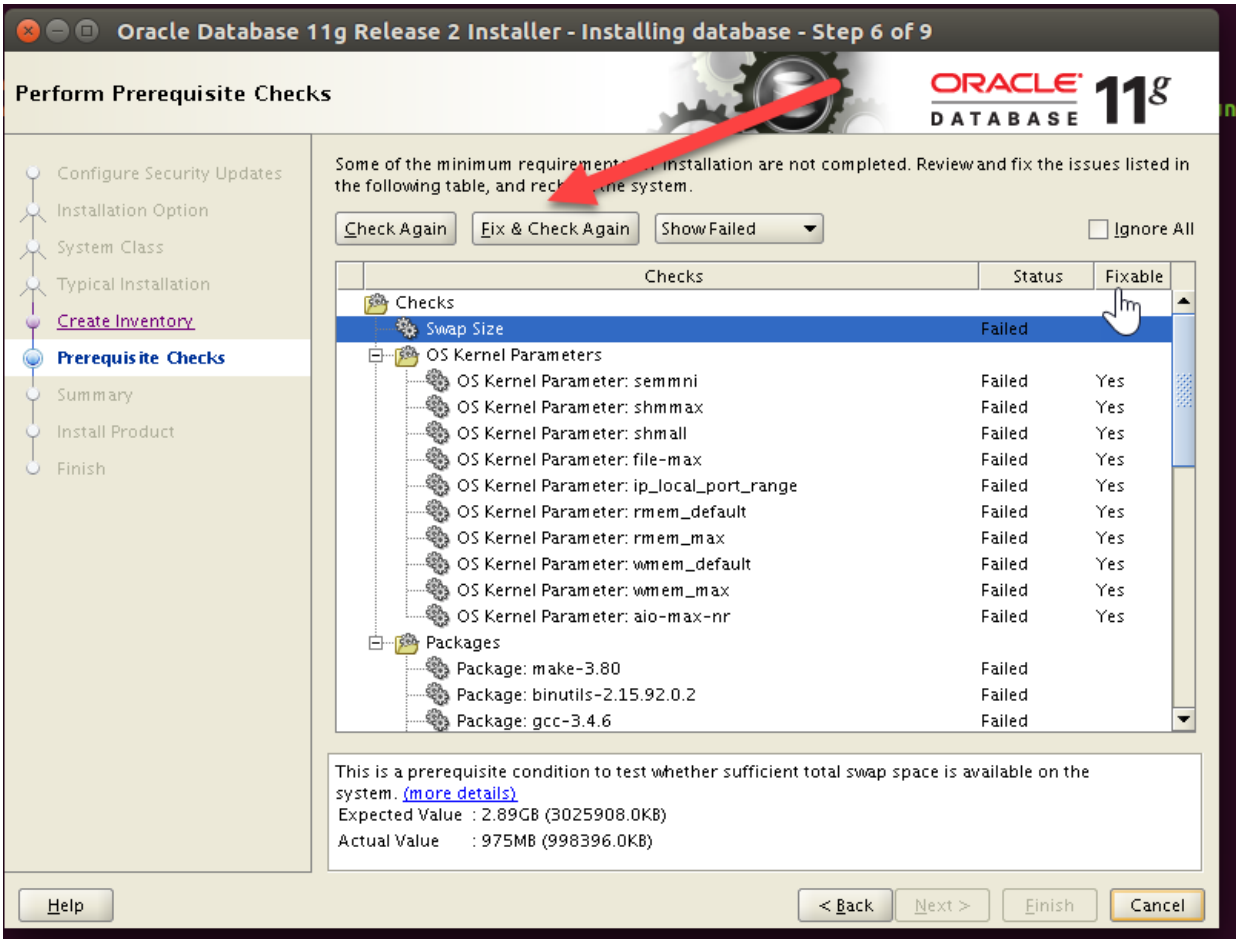
- **注意** `Oracle base`的路径是和`/etc/profile`中`ORACLE_BASE`的路径必须是一样的

- 实际的`/home/jinglong/app`目录是不存在的，但是Oracle安装过程中会自己创建

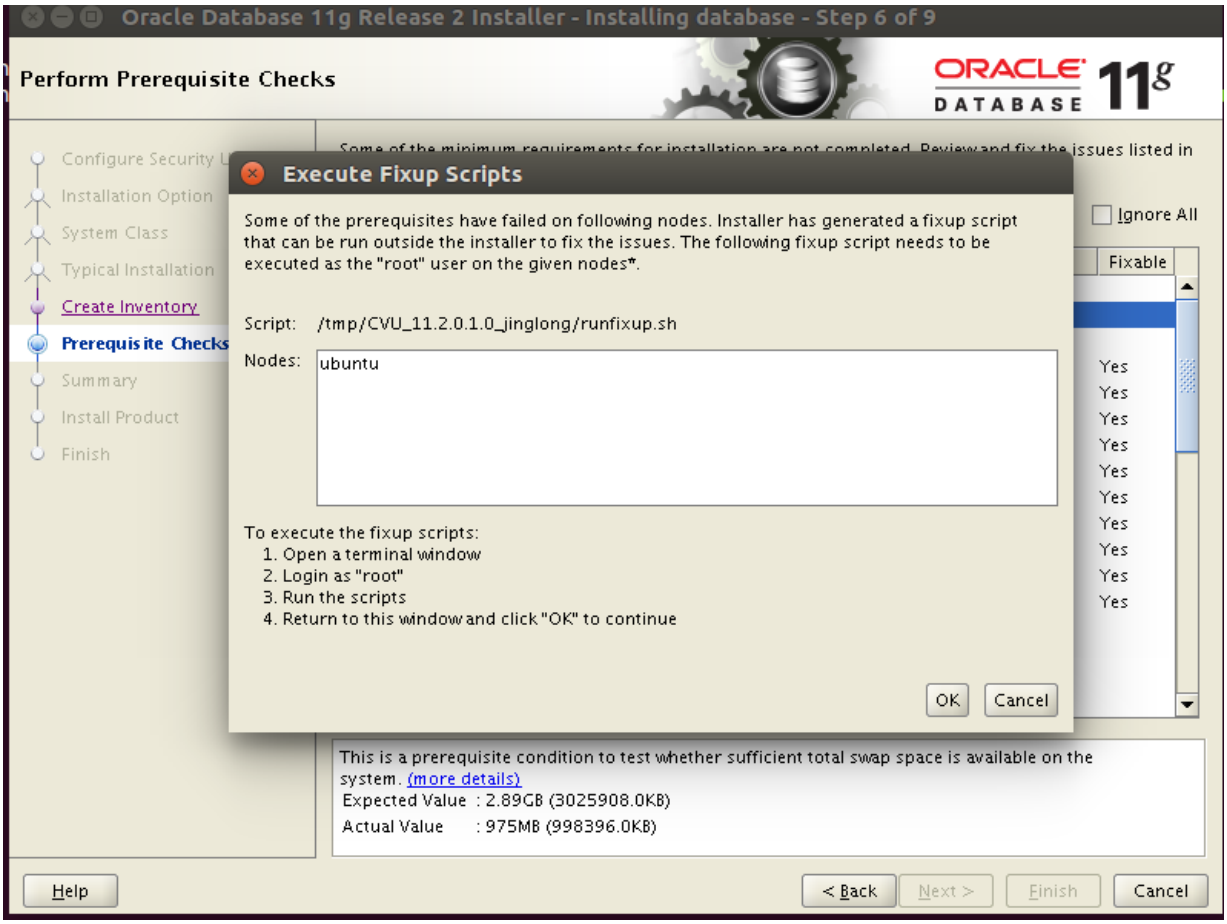
```
    fi
  done
  unset i
fi

export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64

export JRE_HOME=${JAVA_HOME}/jre

export CLASSPATH=.:${JAVA_HOME}/lib:${JRE_HOME}/lib

export PATH=${JAVA_HOME}/bin:$PATH

export ORACLE_BASE=/home/jinglong/app/jinglong

export ORACLE_HOME=$ORACLE_BASE/product/11.2.0/dbhome_1

export ORACLE_SID=orcl

export ORACLE_UNQNAME=orcl

export NLS_LANG=.AL32UTF8

export PATH=${PATH}:${ORACLE_HOME}/bin/:$ORACLE_HOME/lib64
```

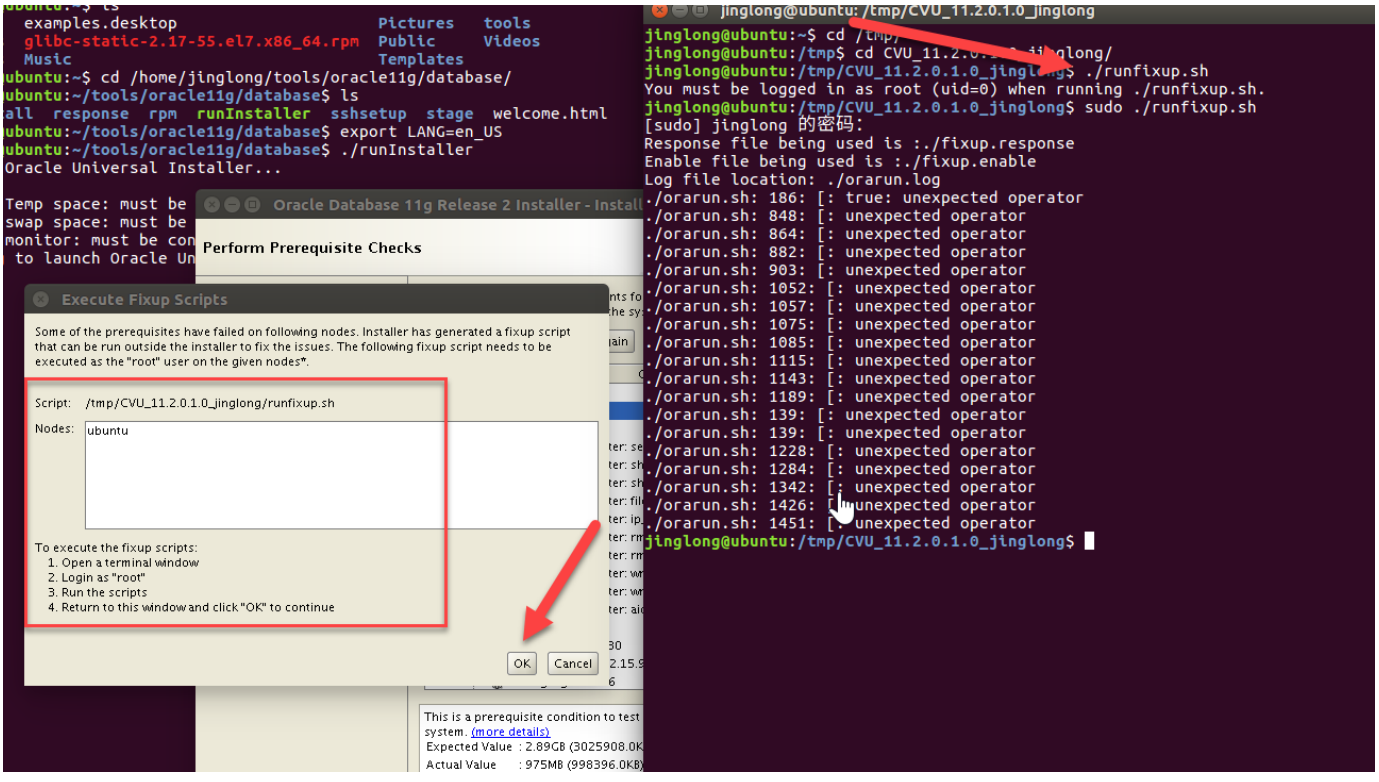
- 

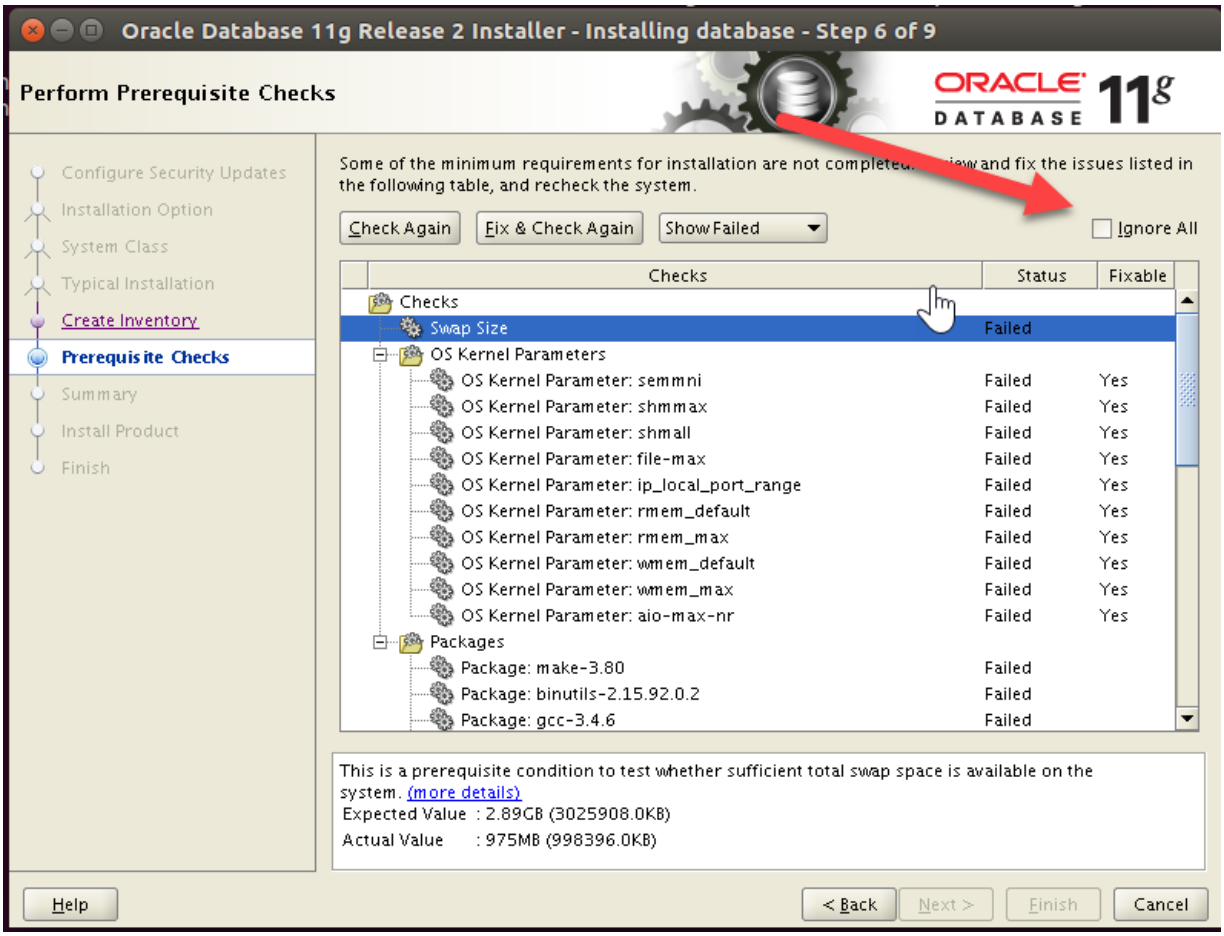


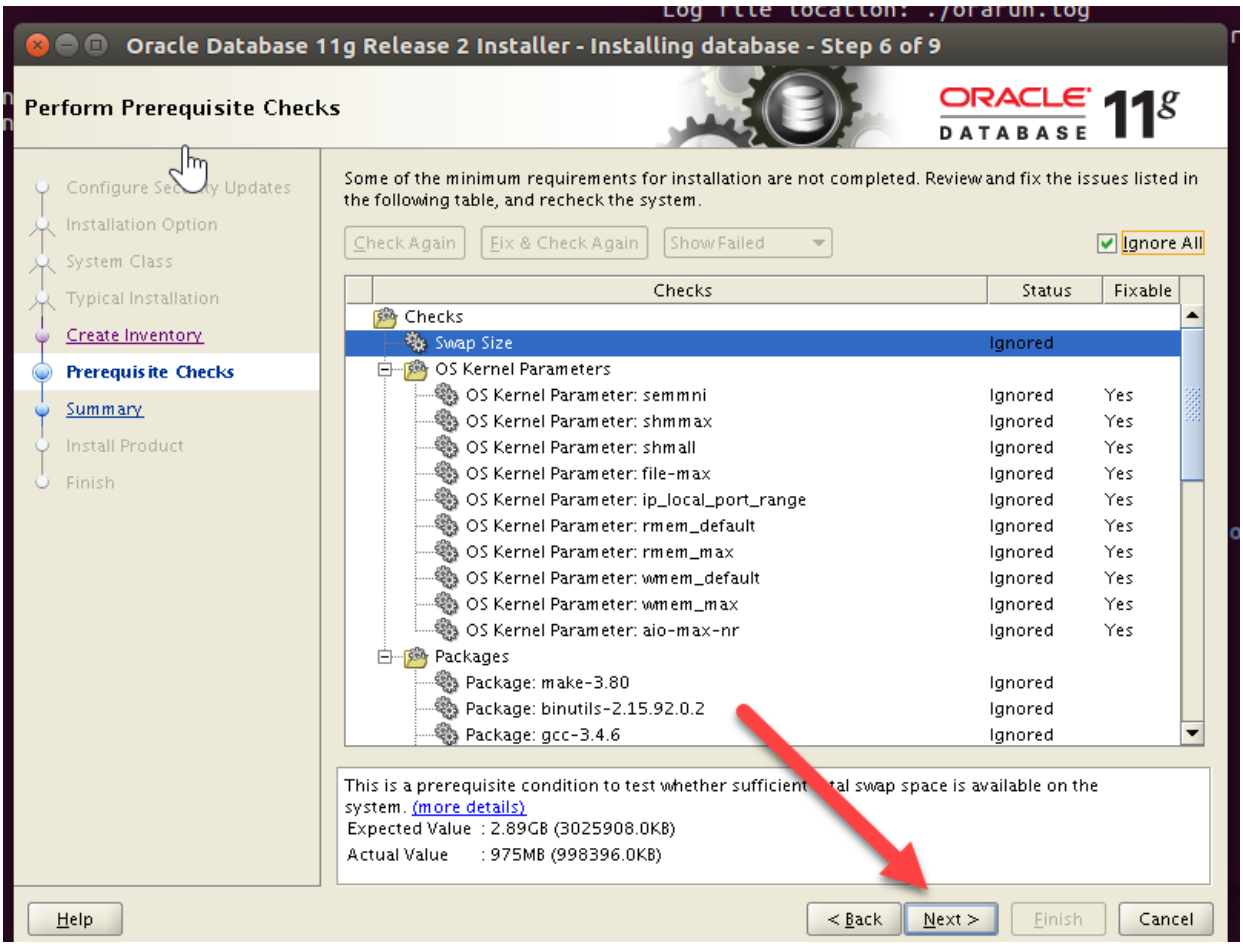


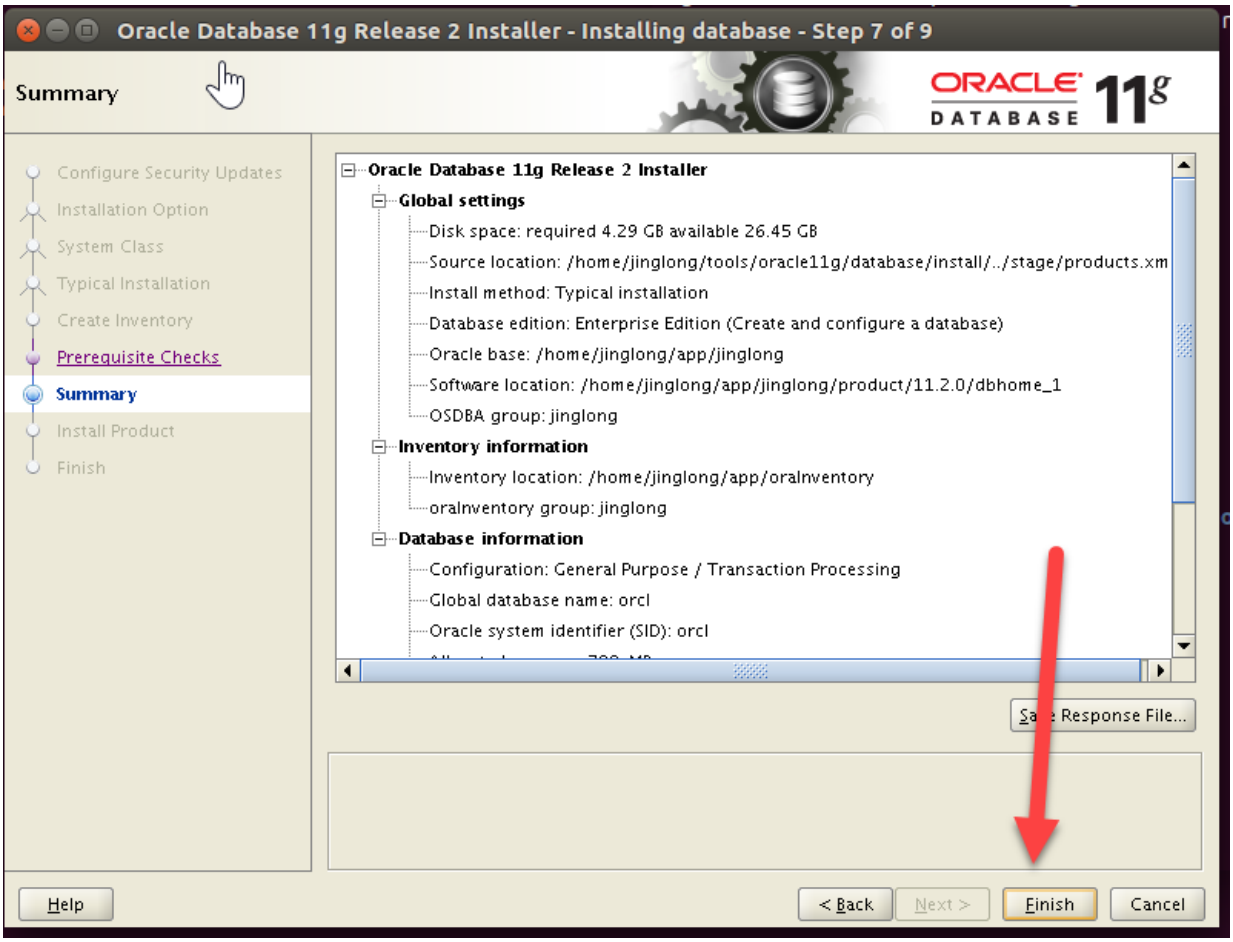
- 这里需要重新打开一个terminal，然后执行脚本，执行完成之后点击OK继续安装


Oracle Database 11g Release 2 Installer - Installing database - Step 6 of 9
Perform Prerequisite Checks
ORACLE 11g DATABASE
Configure Security
Installation Option
System Class
Typical Installation
Create Inventory
Prerequisite Checks
Summary
Install Product
Finish
Execute Fixup Scripts
Some of the prerequisites have failed on following nodes. Installer has generated a fixup script that can be run outside the installer to fix the issues. The following fixup script needs to be executed as the "root" user on the given nodes*.
Script: /tmp/CVU_11.2.0.1.0_jinglong/runfixup.sh
Nodes: ubuntu
To execute the fixup scripts:
1. Open a terminal window
2. Login as "root"
3. Run the scripts
4. Return to this window and click "OK" to continue
OK
Cancel
Ignore All
Fixable
Yes
This is a prerequisite condition to test whether sufficient total swap space is available on the system. (more details)
Expected Value : 2.89GB (3025908.0KB)
Actual Value : 975MB (998396.0KB)
Help
< Back
Next >
Finish
Cancel

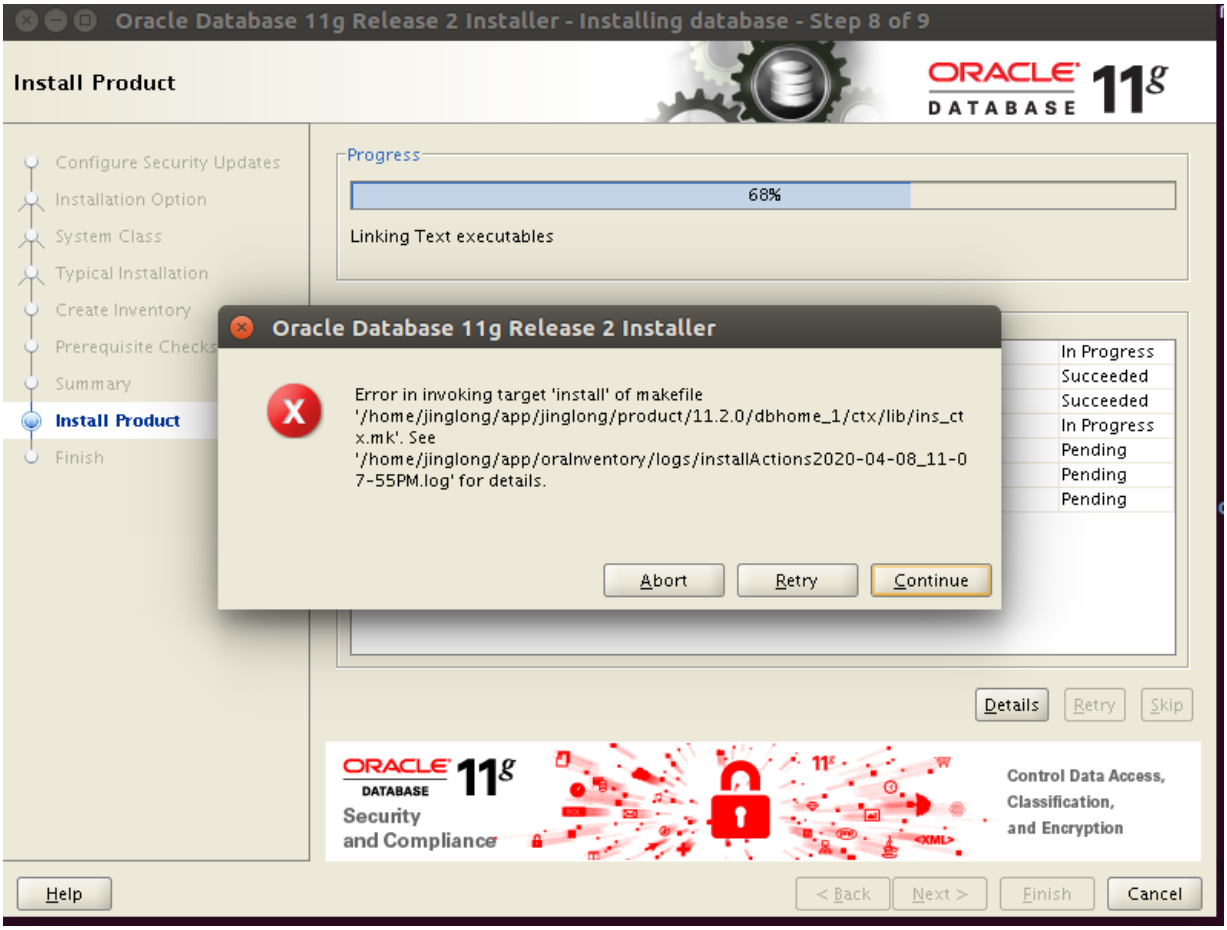

examples.desktop
glibc-static-2.17-55.el7.x86_64.rpm
Music
Pictures
Public
Templates
tools
Videos
ubuntu:~$ cd /home/jinglong/tools/oracle11g/database/
ubuntu:~/tools/oracle11g/database$ ls
all response rpm runInstaller sshsetup stage welcome.html
ubuntu:~/tools/oracle11g/database$ export LANG=en_US
ubuntu:~/tools/oracle11g/database$ ./runInstaller
Oracle Universal Installer...
Temp space: must be
swap space: must be
monitor: must be con
to launch Oracle Un
Oracle Database 11g Release 2 Installer - Install
Perform Prerequisite Checks
Execute Fixup Scripts
Some of the prerequisites have failed on following nodes. Installer has generated a fixup script that can be run outside the installer to fix the issues. The following fixup script needs to be executed as the "root" user on the given nodes*.
Script: /tmp/CVU_11.2.0.1.0_jinglong/runfixup.sh
Nodes: ubuntu
To execute the fixup scripts:
1. Open a terminal window
2. Login as "root"
3. Run the scripts
4. Return to this window and click "OK" to continue
OK
Cancel
jinglong@ubuntu: /tmp/CVU_11.2.0.1.0_jinglong
jinglong@ubuntu:~$ cd /tmp/
jinglong@ubuntu:/tmp$ cd CVU_11.2.0.1.0_jinglong/
jinglong@ubuntu:/tmp/CVU_11.2.0.1.0_jinglong$ ./runfixup.sh
You must be logged in as root (uid=0) when running ./runfixup.sh.
jinglong@ubuntu:/tmp/CVU_11.2.0.1.0_jinglong$ sudo ./runfixup.sh
[sudo] jinglong 的密码:
Response file being used is :./fixup.response
Enable file being used is :./fixup.enable
Log file location: ./orarun.log
./orarun.sh: 186: [: true: unexpected operator
./orarun.sh: 848: [: unexpected operator
./orarun.sh: 864: [: unexpected operator
./orarun.sh: 882: [: unexpected operator
./orarun.sh: 903: [: unexpected operator
./orarun.sh: 1052: [: unexpected operator
./orarun.sh: 1057: [: unexpected operator
./orarun.sh: 1075: [: unexpected operator
./orarun.sh: 1085: [: unexpected operator
./orarun.sh: 1115: [: unexpected operator
./orarun.sh: 1143: [: unexpected operator
./orarun.sh: 1189: [: unexpected operator
./orarun.sh: 139: [: unexpected operator
./orarun.sh: 139: [: unexpected operator
./orarun.sh: 1228: [: unexpected operator
./orarun.sh: 1284: [: unexpected operator
./orarun.sh: 1342: [: unexpected operator
./orarun.sh: 1426: [: unexpected operator
./orarun.sh: 1451: [: unexpected operator
jinglong@ubuntu:/tmp/CVU_11.2.0.1.0_jinglong$


Oracle Database 11g Release 2 Installer - Installing database - Step 6 of 9
Perform Prerequisite Checks
ORACLE DATABASE 11g
Configure Security Updates
Installation Option
System Class
Typical Installation
Create Inventory
Prerequisite Checks
Summary
Install Product
Finish
Some of the minimum requirements for installation are not completed. Review and fix the issues listed in the following table, and recheck the system.
Check Again
Fix & Check Again
Show Failed
Ignore All
Checks
Status
Fixable
Checks
Swap Size Failed
OS Kernel Parameters
OS Kernel Parameter: semmni Failed Yes
OS Kernel Parameter: shmmax Failed Yes
OS Kernel Parameter: shmall Failed Yes
OS Kernel Parameter: file-max Failed Yes
OS Kernel Parameter: ip_local_port_range Failed Yes
OS Kernel Parameter: rmem_default Failed Yes
OS Kernel Parameter: rmem_max Failed Yes
OS Kernel Parameter: wmem_default Failed Yes
OS Kernel Parameter: wmem_max Failed Yes
OS Kernel Parameter: aio-max-nr Failed Yes
Packages
Package: make-3.80 Failed
Package: binutils-2.15.92.0.2 Failed
Package: gcc-3.4.6 Failed
This is a prerequisite condition to test whether sufficient total swap space is available on the system. (more details)
Expected Value : 2.89GB (3025908.0KB)
Actual Value : 975MB (998396.0KB)
Help
< Back
Next >
Finish
Cancel


Log file location: ./oraInstall.log
Oracle Database 11g Release 2 Installer - Installing database - Step 6 of 9
Perform Prerequisite Checks
ORACLE DATABASE 11g
Configure Security Updates
Installation Option
System Class
Typical Installation
Create Inventory
Prerequisite Checks
Summary
Install Product
Finish
Some of the minimum requirements for installation are not completed. Review and fix the issues listed in the following table, and recheck the system.
Check Again
Fix & Check Again
Show Failed
Ignore All
Checks
Status
Fixable
Checks
Swap Size Ignored
OS Kernel Parameters
OS Kernel Parameter: semmni Ignored Yes
OS Kernel Parameter: shmmax Ignored Yes
OS Kernel Parameter: shmall Ignored Yes
OS Kernel Parameter: file-max Ignored Yes
OS Kernel Parameter: ip_local_port_range Ignored Yes
OS Kernel Parameter: rmem_default Ignored Yes
OS Kernel Parameter: rmem_max Ignored Yes
OS Kernel Parameter: wmem_default Ignored Yes
OS Kernel Parameter: wmem_max Ignored Yes
OS Kernel Parameter: aio-max-nr Ignored Yes
Packages
Package: make-3.80 Ignored
Package: binutils-2.15.92.0.2 Ignored
Package: gcc-3.4.6 Ignored
This is a prerequisite condition to test whether sufficient tal swap space is available on the system. (more details)
Expected Value : 2.89GB (3025908.0KB)
Actual Value : 975MB (998396.0KB)
Help
< Back
Next >
Finish
Cancel

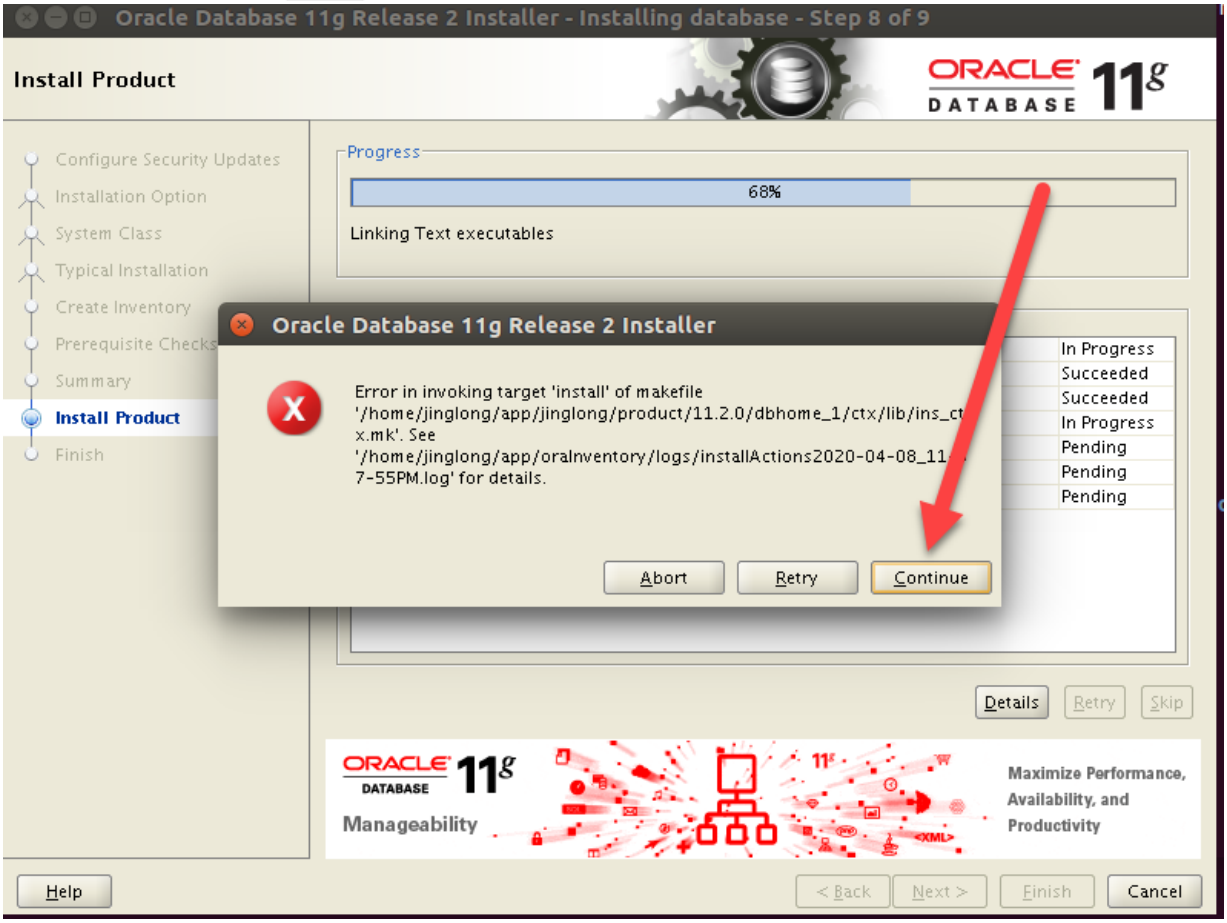


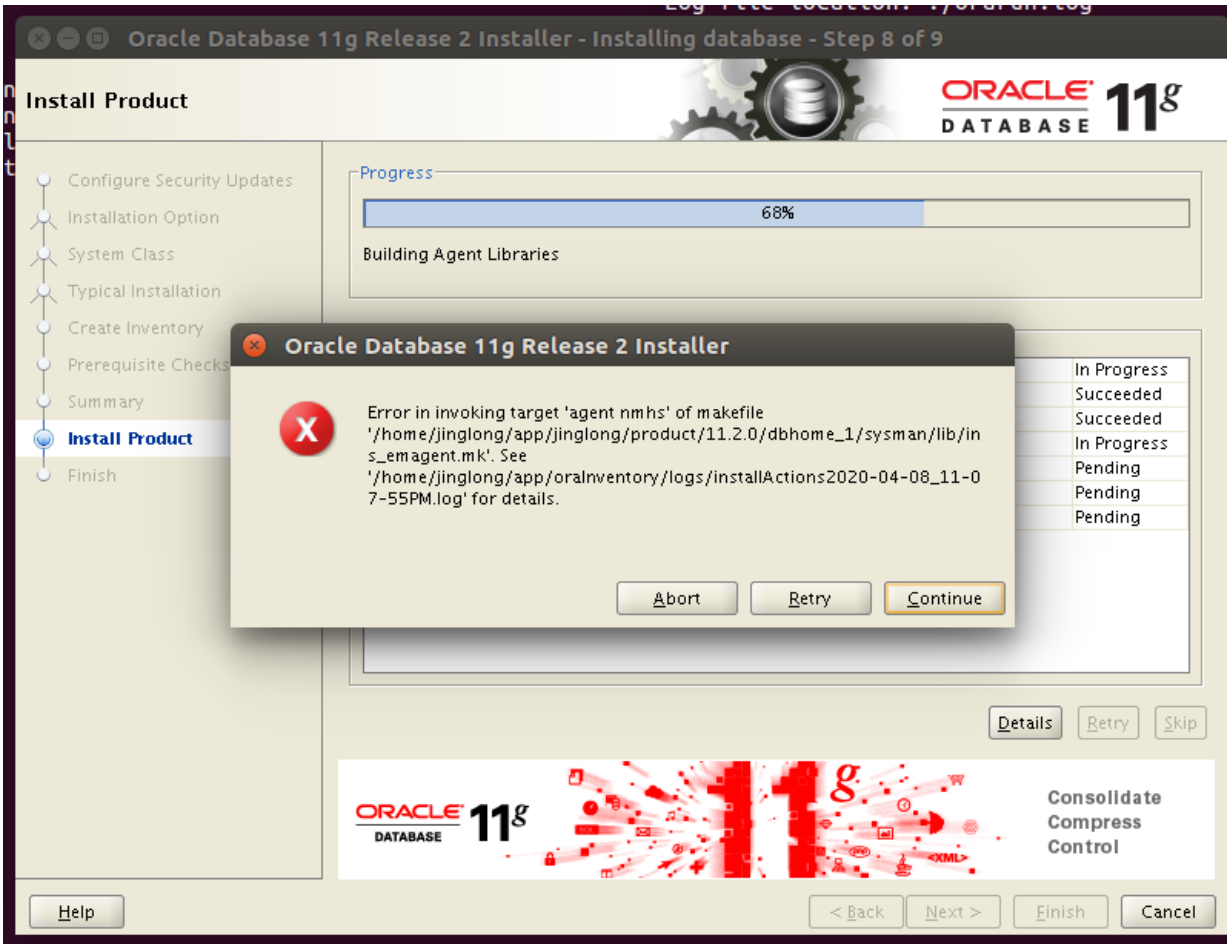
- 使用rpm安装glibc-static-2.17-55.el7.x86_64.rpm，安装即可，然后点击retry，接着往下执行（Ubuntu系统安装rpm包的方法）



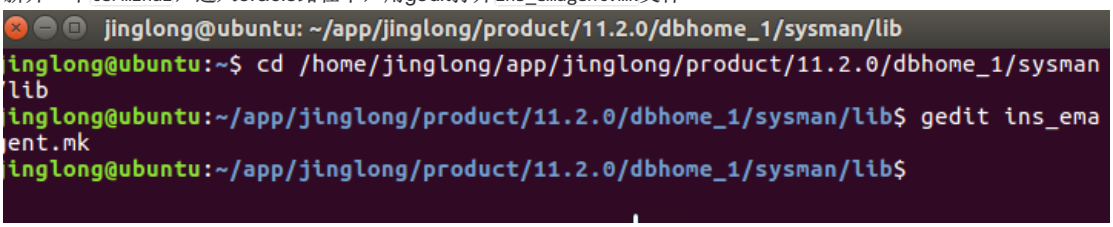
```
        LANG = "en_US"
    are supported and installed on your system.
perl: warning: Falling back to the standard locale ("C").
glibc-static_2.17-56_amd64.deb generated
jinglong@ubuntu:~$ ls
Desktop    Downloads  Pictures  Templates  app              glibc-static-2.17-55.el7.x86_64.rpm  tools
Documents  Music      Public    Videos     examples.desktop  glibc-static_2.17-56_amd64.deb
jinglong@ubuntu:~$ sudo dpkg -i glibc-static_2.17-56_amd64.deb
Selecting previously unselected package glibc-static.
(Reading database ... 190616 files and directories currently installed.)
Preparing to unpack glibc-static_2.17-56_amd64.deb ...
Unpacking glibc-static (2.17-56) ...
Setting up glibc-static (2.17-56) ...
jinglong@ubuntu:~$
```

- 执行仍然不过的话，直接点击`continue`



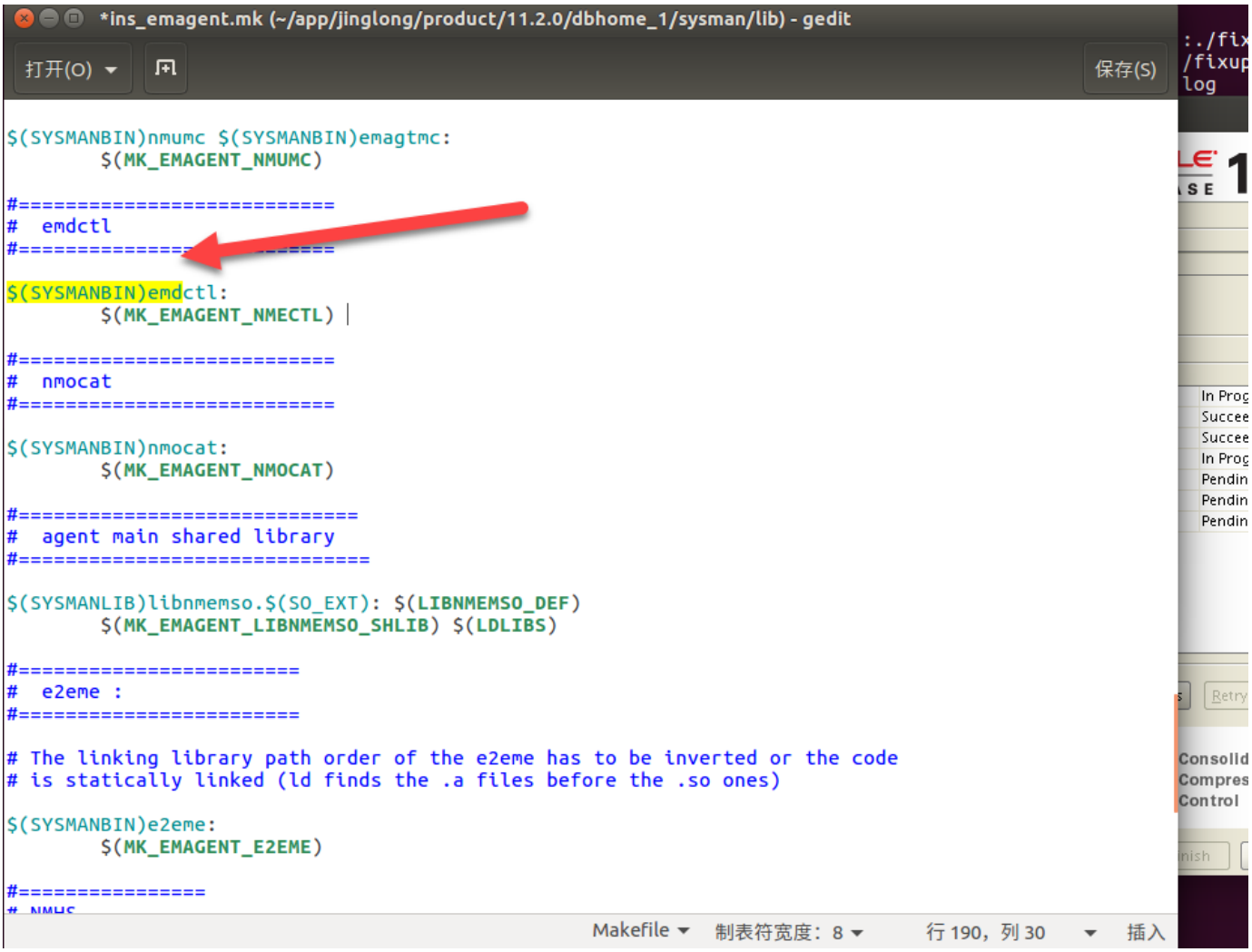


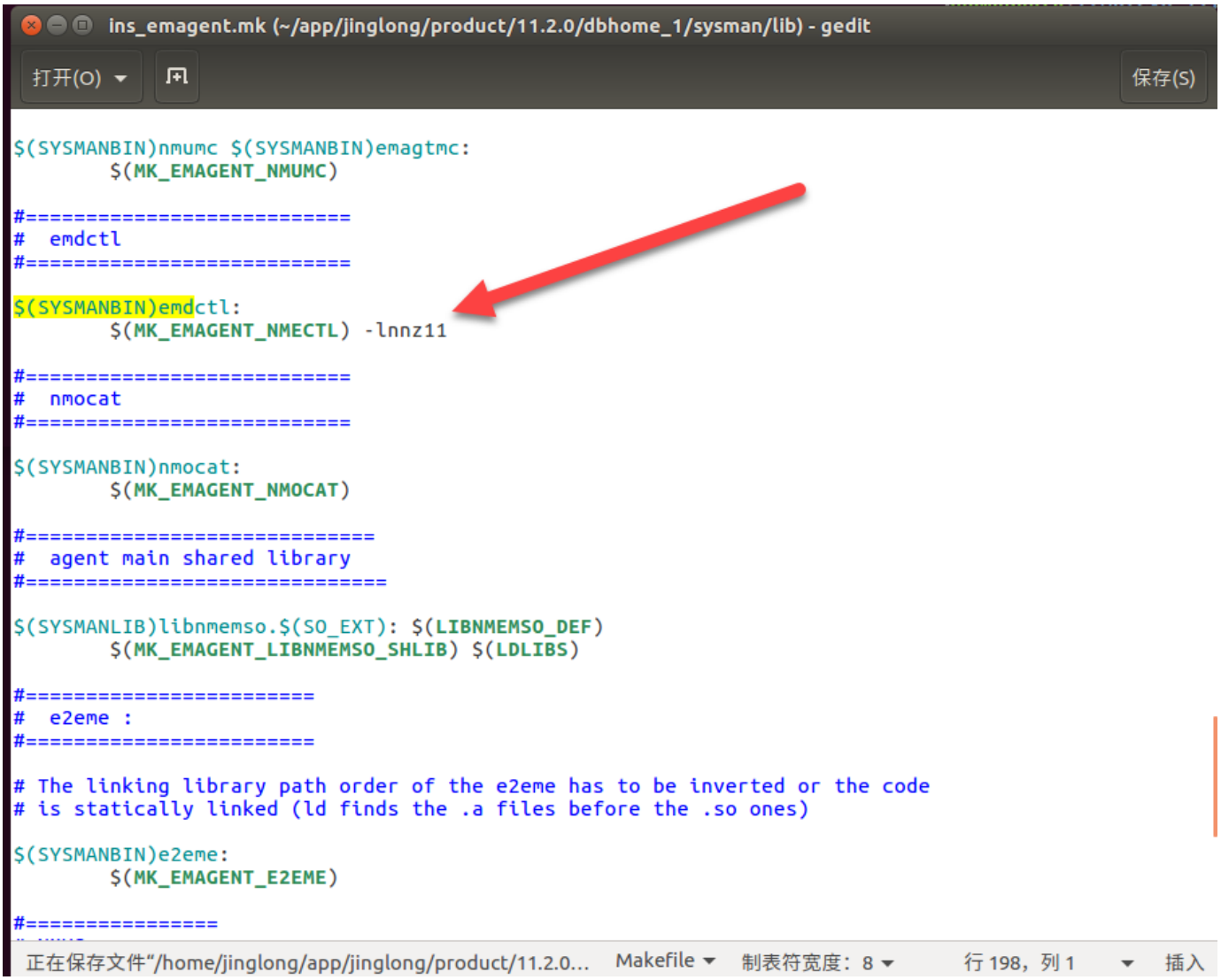
- 新开一个`terminal`，进入oracle路径下，用gedit打开`ins_emagent.mk`文件



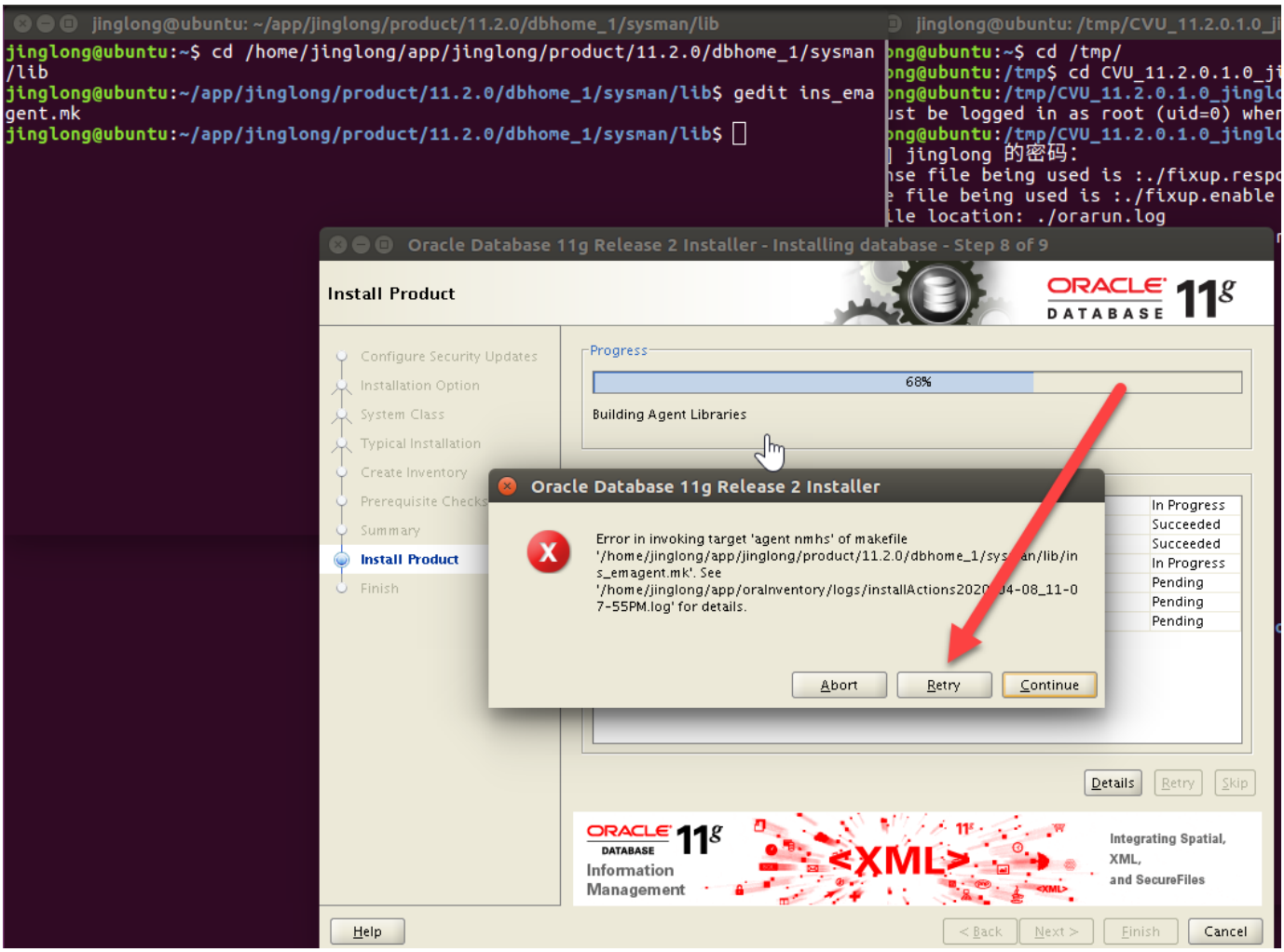
> 注意ORACLE_BASE的路径不能错，不然找不到文件

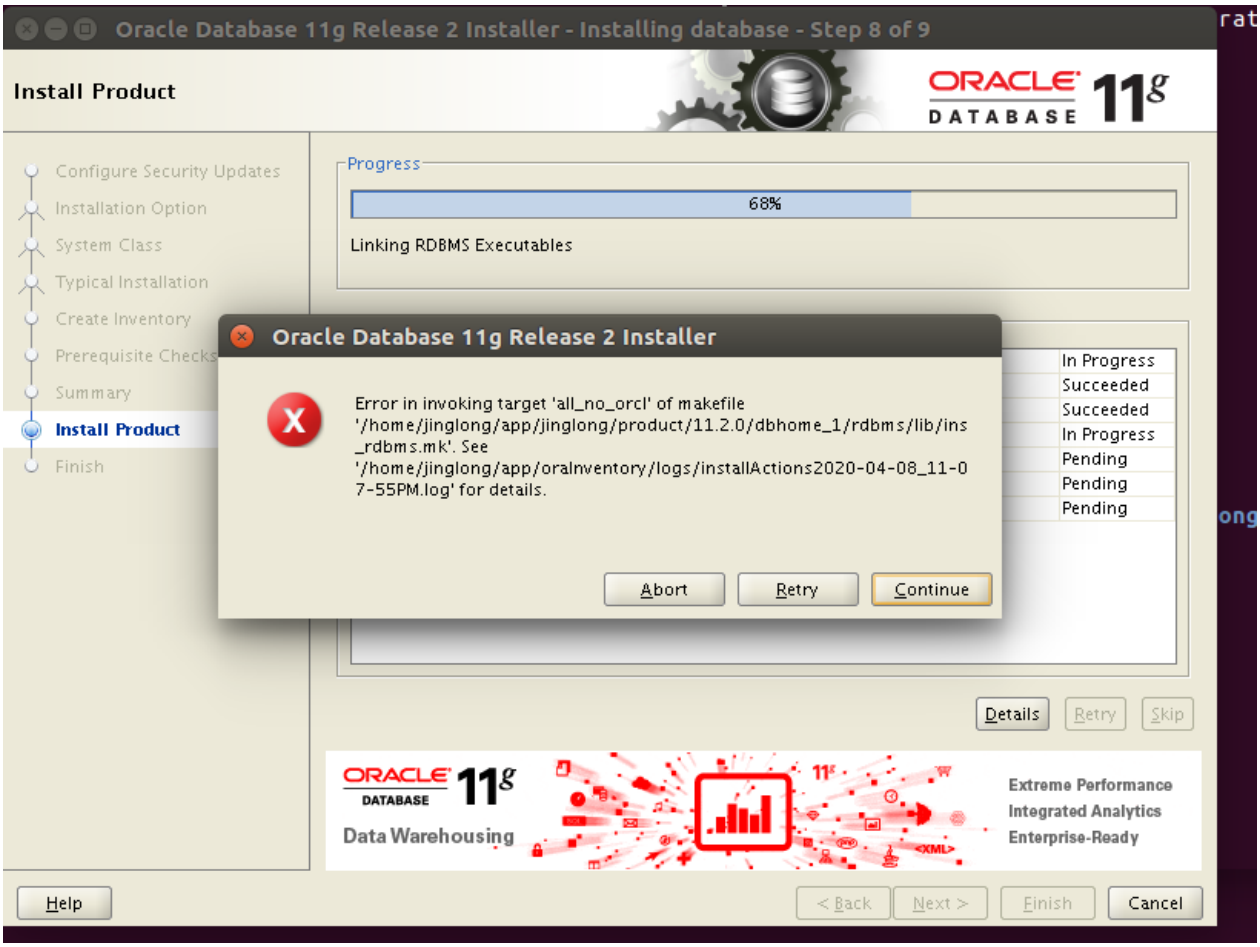
- 找到`$(SYSMANBIN)emd`字段，然后修改


*ins_emagent.mk (~/app/jinglong/product/11.2.0/dbhome_1/sysman/lib) - gedit
打开(O)
保存(S)
$(SYSMANBIN)nmumc $(SYSMANBIN)emagtmc:
$(MK_EMAGENT_NMUMC)
#============================
emdctl
#============================
$(SYSMANBIN)emdctl:
$(MK_EMAGENT_NMECTL)
#============================
nmocat
#============================
$(SYSMANBIN)nmocat:
$(MK_EMAGENT_NMOCAT)
#============================
agent main shared library
#============================
$(SYSMANLIB)libnmemso.$(SO_EXT): $(LIBNMEMSO_DEF)
$(MK_EMAGENT_LIBNMEMSO_SHLIB) $(LDLIBS)
#========================
e2eme :
#========================
The linking library path order of the e2eme has to be inverted or the code
is statically linked (ld finds the .a files before the .so ones)
$(SYSMANBIN)e2eme:
$(MK_EMAGENT_E2EME)
#================
Makefile
制表符宽度：8
行 190，列 30
插入



- 点击Retry继续执行


jinglong@ubuntu: ~/app/jinglong/product/11.2.0/dbhome_1/sysman/lib
jinglong@ubuntu:~$ cd /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/sysman/lib
jinglong@ubuntu:~/app/jinglong/product/11.2.0/dbhome_1/sysman/lib$ gedit ins_emagent.mk
jinglong@ubuntu:~/app/jinglong/product/11.2.0/dbhome_1/sysman/lib$
jinglong@ubuntu: /tmp/CVU_11.2.0.1.0_ji
ong@ubuntu:~$ cd /tmp/
ong@ubuntu:/tmp$ cd CVU_11.2.0.1.0_ji
ong@ubuntu:/tmp/CVU_11.2.0.1.0_jinglo
ust be logged in as root (uid=0) when
ong@ubuntu:/tmp/CVU_11.2.0.1.0_jinglo
] jinglong 的密码:
nse file being used is :./fixup.respo
e file being used is :./fixup.enable
ile location: ./orarun.log
Oracle Database 11g Release 2 Installer - Installing database - Step 8 of 9
Install Product
ORACLE 11g DATABASE
Configure Security Updates
Installation Option
System Class
Typical Installation
Create Inventory
Prerequisite Checks
Summary
Install Product
Finish
Progress
68%
Building Agent Libraries
Oracle Database 11g Release 2 Installer
Error in invoking target 'agent nmhs' of makefile '/home/jinglong/app/jinglong/product/11.2.0/dbhome_1/sysman/lib/ins_emagent.mk'. See '/home/jinglong/app/oraInventory/logs/installActions2020-04-08_11-07-55PM.log' for details.
Abort
Retry
Continue
In Progress
Succeeded
Succeeded
In Progress
Pending
Pending
Pending
Details
Retry
Skip
ORACLE 11g DATABASE
Information Management
<XML>
Integrating Spatial, XML, and SecureFiles
Help
< Back
Next >
Finish
Cancel

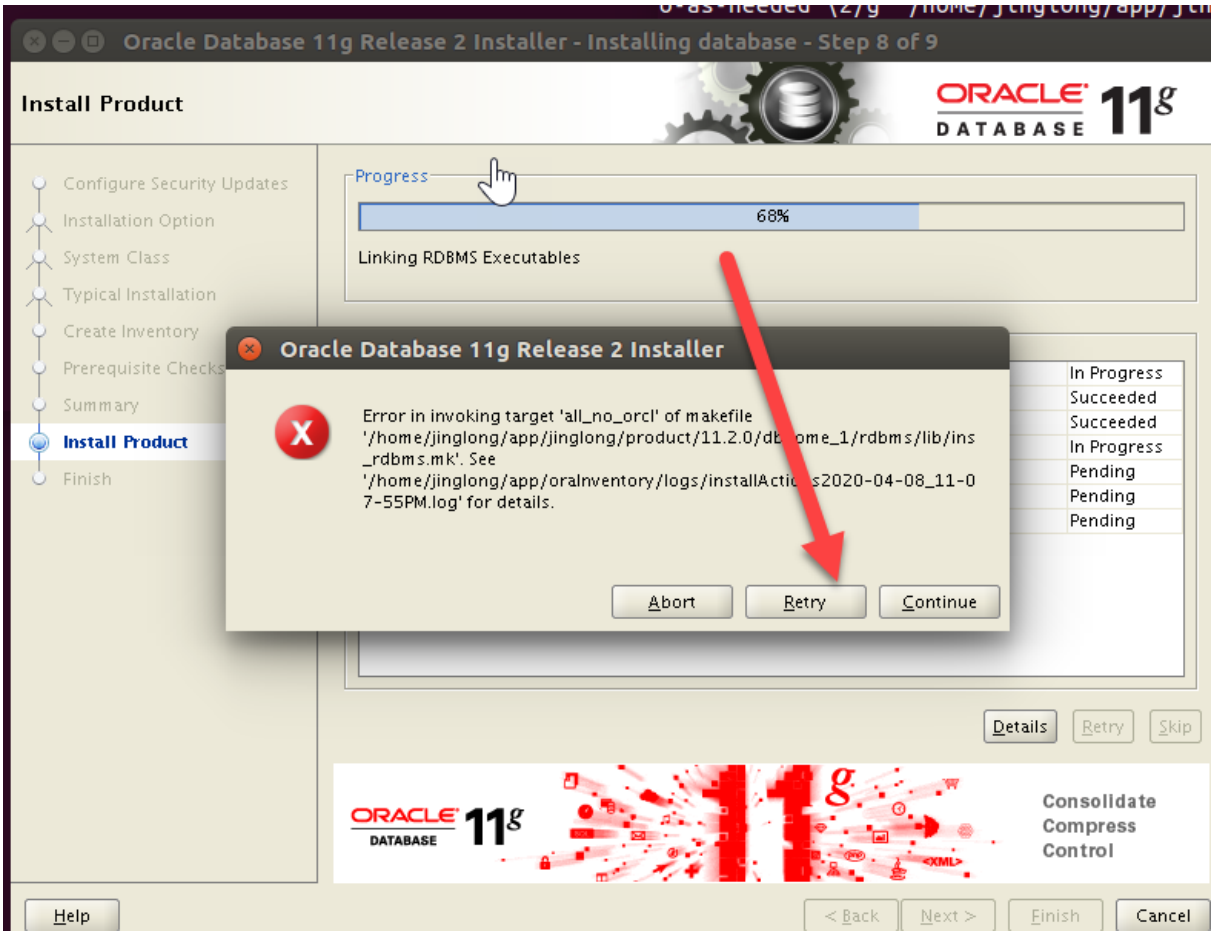


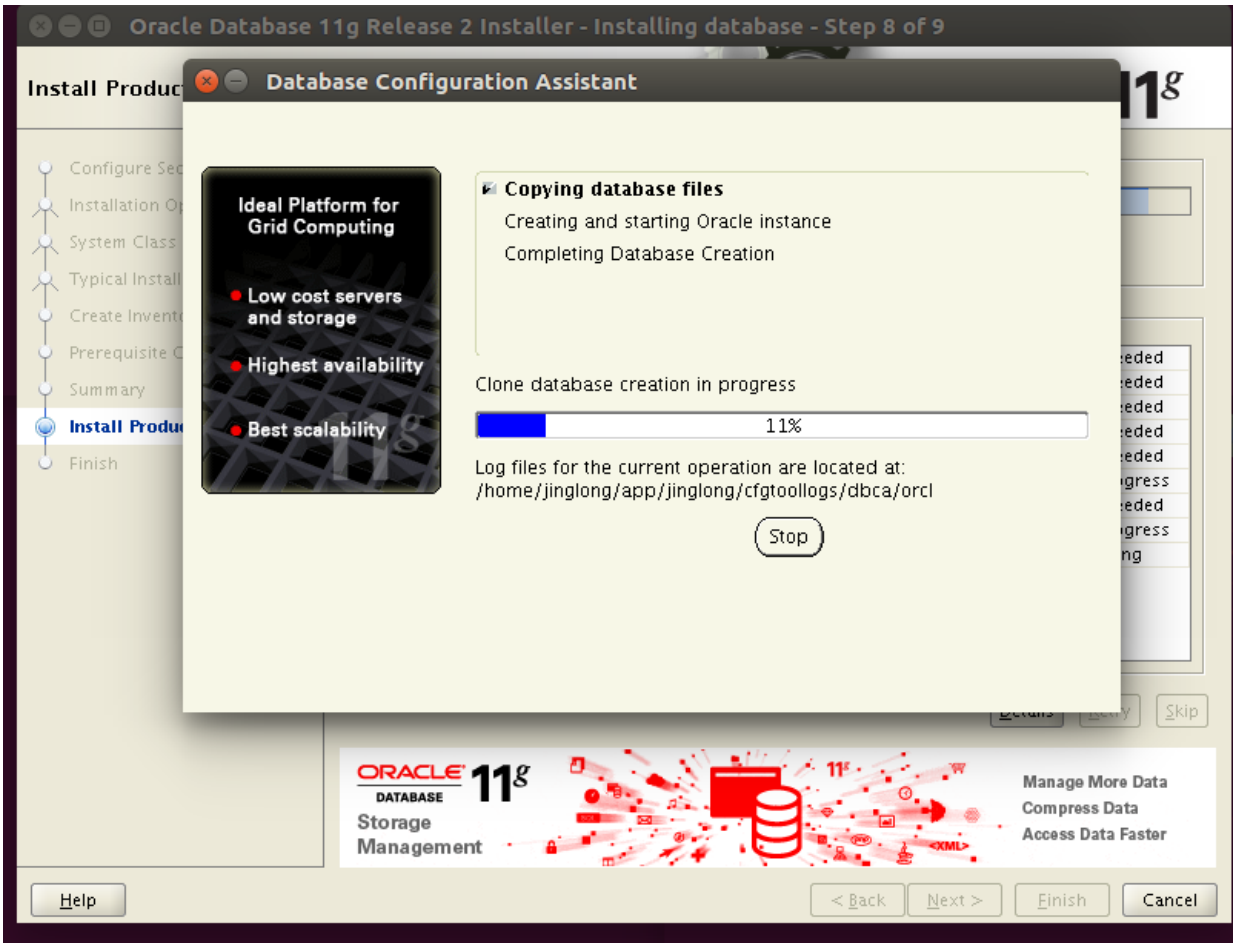
- 新开terminal，执行以下四个命令

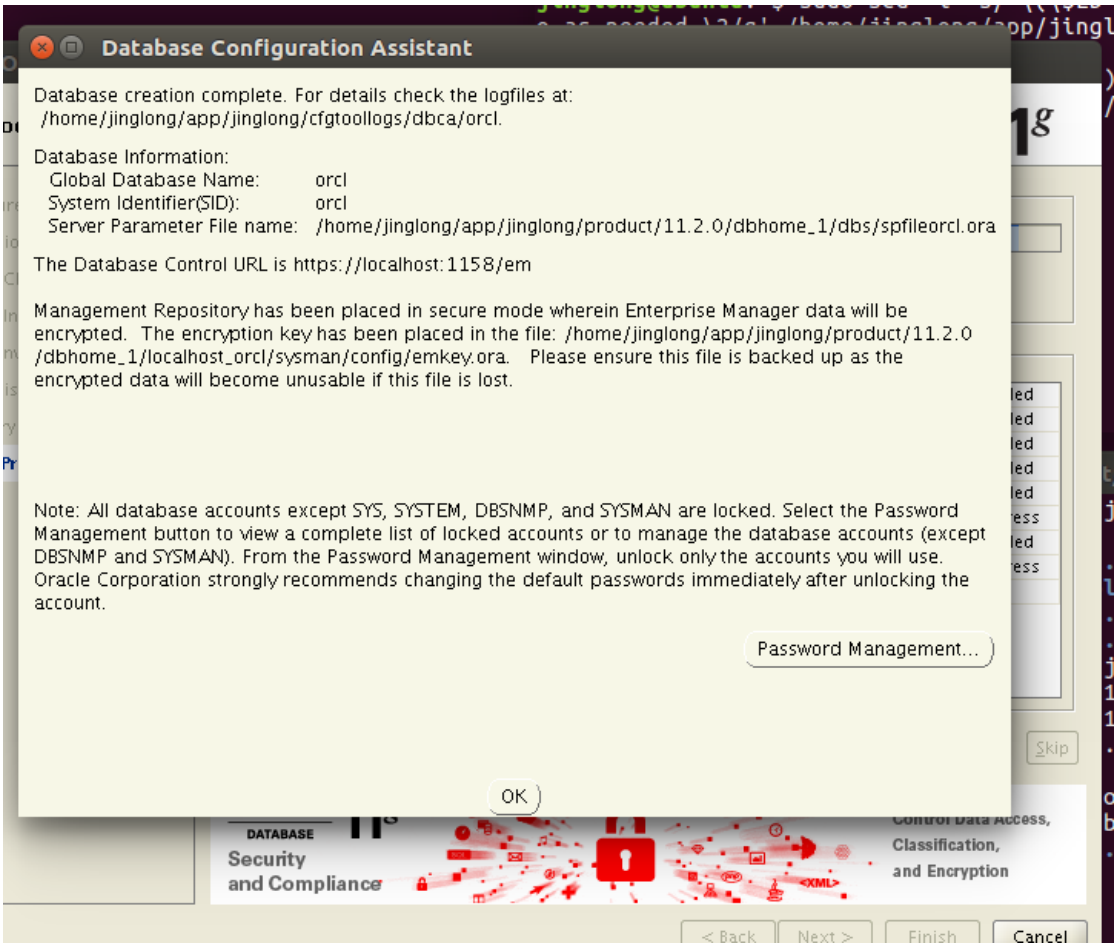
```
# sudo sed -i 's/^\(TNSLSNR_LINKLINE.*\$(TNSLSNR_OFILES)\) \(\$(LINKTTLIBS)\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglon
# sudo sed -i 's/^\(ORACLE_LINKLINE.*\$(ORACLE_LINKER)\) \(\$(PL_FLAGS)\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglong/pr
# sudo sed -i 's/^\(\$LD \$LD_RUNTIME\) \(\$LD_OPT\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglong/product/11.2.0/dbhome_1
# sudo sed -i 's/^\(\s*\)\(\$(OCRLIBS_DEFAULT)\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/srv
```

```
jinglong@ubuntu:~$ sudo sed -i 's/^\(TNSLSNR_LINKLINE.*\$(TNSLSNR_OFILES)\) \(\$(LINKTTLIBS)\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglong/prod
uct/11.2.0/dbhome_1/network/lib/env_network.mk
[sudo] jinglong 的密码:
jinglong@ubuntu:~$ sudo sed -i 's/^\(ORACLE_LINKLINE.*\$(ORACLE_LINKER)\) \(\$(PL_FLAGS)\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglong/product/
11.2.0/dbhome_1/rdbms/lib/env_rdbms.mk
jinglong@ubuntu:~$ sudo sed -i 's/^\(\$LD \$LD_RUNTIME\) \(\$LD_OPT\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/bin/g
enorasdksh
jinglong@ubuntu:~$ sudo sed -i 's/^\(\s*\)\(\$(OCRLIBS_DEFAULT)\)/\1 -Wl,--no-as-needed \2/g' /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/srvm/lib/
ins_srvm.mk
jinglong@ubuntu:~$
```

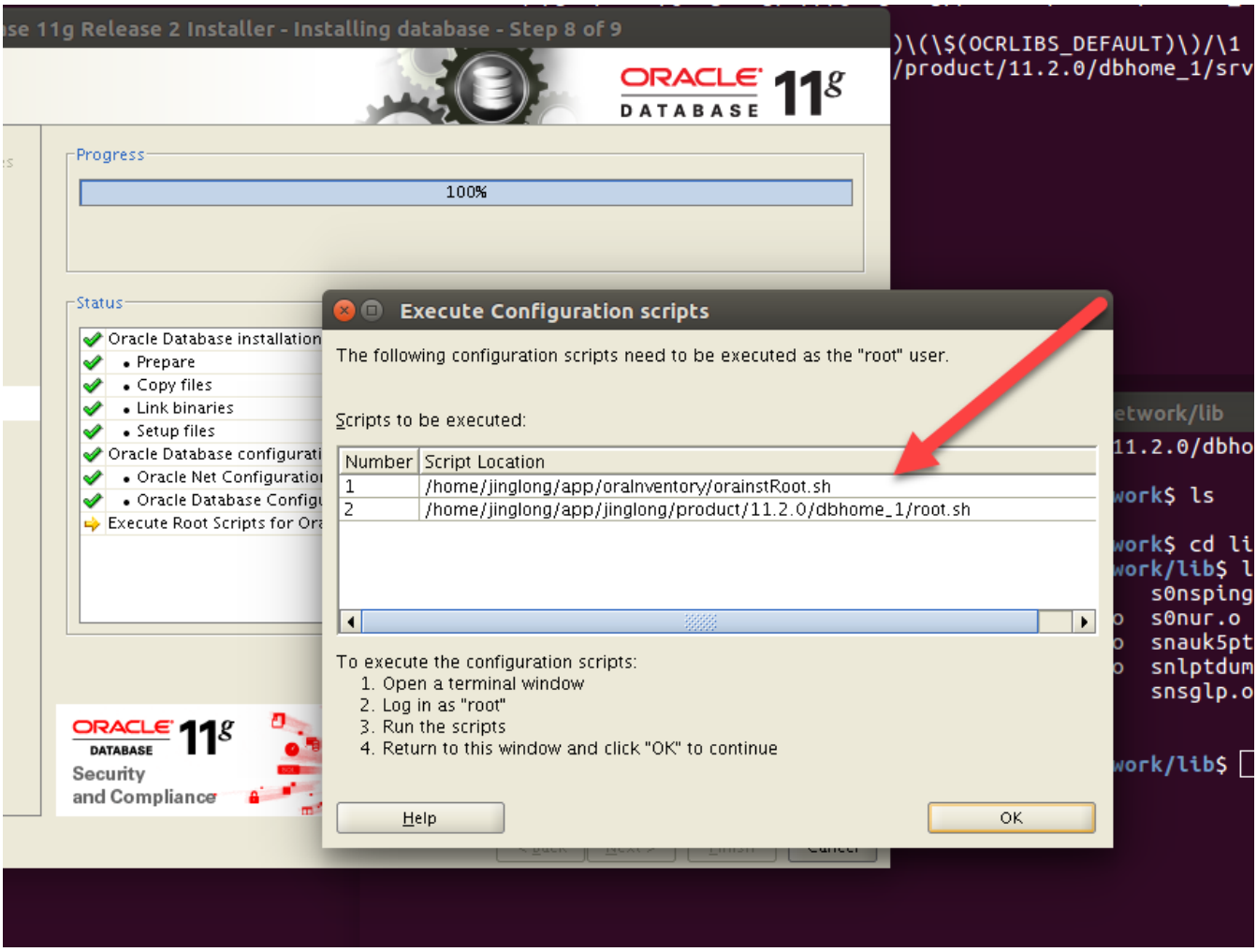
- 点击Retry继续执行

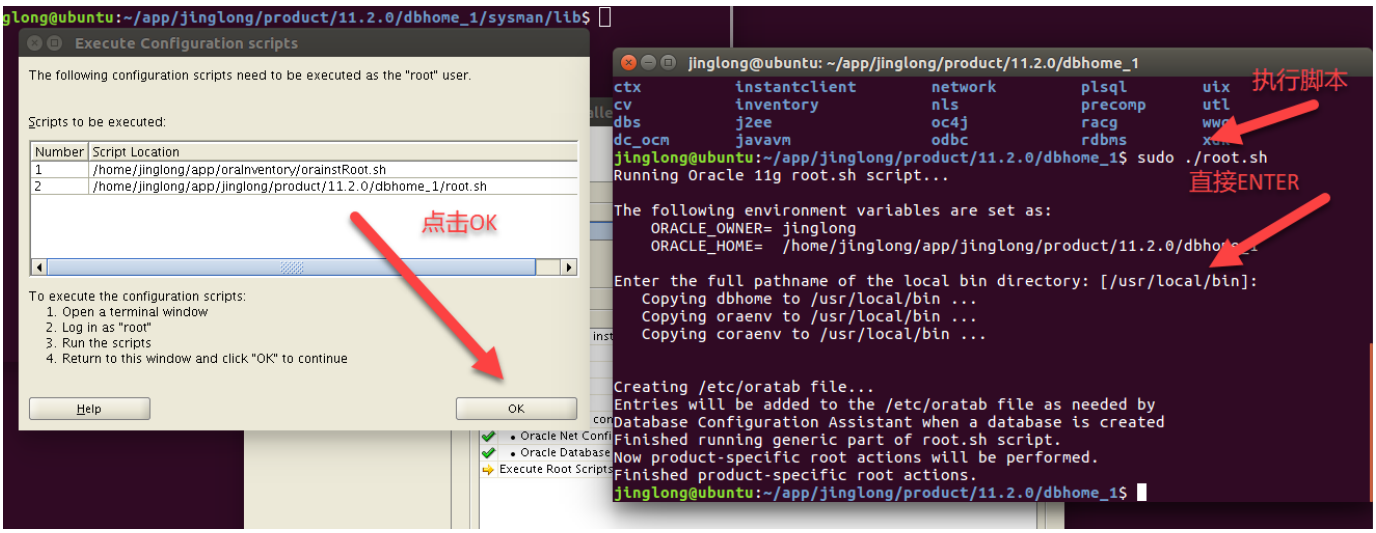

Oracle Database 11g Release 2 Installer - Installing database - Step 8 of 9
Install Product
ORACLE 11g DATABASE
Configure Security Updates
Installation Option
System Class
Typical Installation
Create Inventory
Prerequisite Checks
Summary
Install Product
Finish
Progress
68%
Linking RDBMS Executables
Oracle Database 11g Release 2 Installer
Error in invoking target 'all_no_orcl' of makefile '/home/jinglong/app/jinglong/product/11.2.0/db_home_1/rdbms/lib/ins_rdbms.mk'. See '/home/jinglong/app/oraInventory/logs/installActions2020-04-08_11-07-55PM.log' for details.
Abort
Retry
Continue
In Progress
Succeeded
Succeeded
In Progress
Pending
Pending
Pending
Details
Retry
Skip
Consolidate
Compress
Control
Help
< Back
Next >
Finish
Cancel

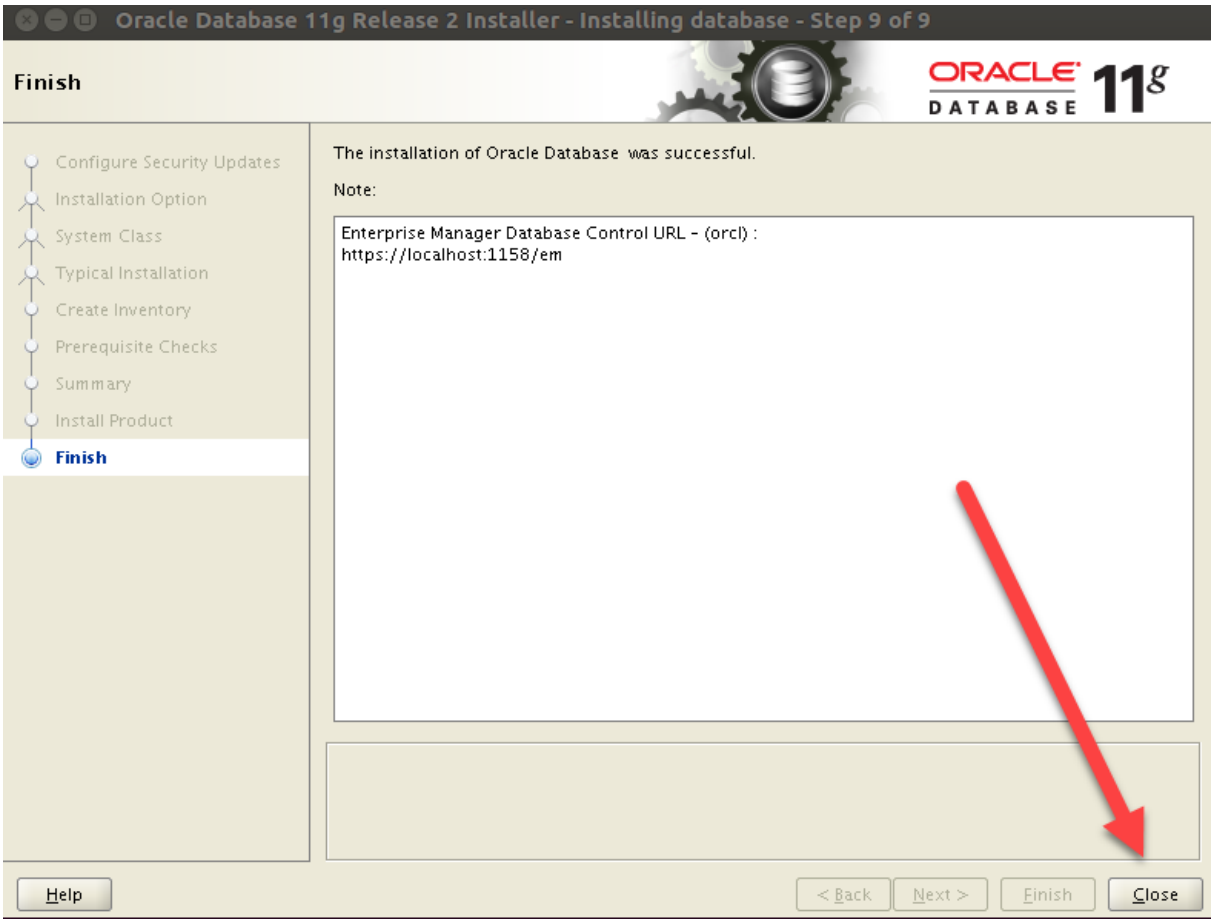

Oracle Database 11g Release 2 Installer - Installing database - Step 8 of 9
Database Configuration Assistant
Ideal Platform for Grid Computing
Low cost servers and storage
Highest availability
Best scalability
Copying database files
Creating and starting Oracle instance
Completing Database Creation
Clone database creation in progress
11%
Log files for the current operation are located at:
/home/jinglong/app/jinglong/cfgtoollogs/dbca/orcl
Stop
ORACLE DATABASE 11g
Storage Management
Manage More Data
Compress Data
Access Data Faster
Help
< Back
Next >
Finish
Cancel



- 新开`terminal`，执行以下两个脚本


se 11g Release 2 Installer - Installing database - Step 8 of 9
ORACLE DATABASE 11g
Progress
100%
Status
Oracle Database installation
Prepare
Copy files
Link binaries
Setup files
Oracle Database configurati
Oracle Net Configuratio
Oracle Database Configu
Execute Root Scripts for Ora
ORACLE 11g DATABASE
Security and Compliance
Execute Configuration scripts
The following configuration scripts need to be executed as the "root" user.
Scripts to be executed:
Number
Script Location
1
/home/jinglong/app/oraInventory/orainstRoot.sh
2
/home/jinglong/app/jinglong/product/11.2.0/dbhome_1/root.sh
To execute the configuration scripts:
1. Open a terminal window
2. Log in as "root"
3. Run the scripts
4. Return to this window and click "OK" to continue
Help
OK
)\(\$(OCRLIBS_DEFAULT)\)/\1
/product/11.2.0/dbhome_1/srv
etwork/lib
11.2.0/dbho
work$ ls
work$ cd li
work/lib$ l
s0nsping
s0nur.o
snauk5pt
snlptdum
snsglp.o
work/lib$


glong@ubuntu:~/app/jinglong/product/11.2.0/dbhome_1/sysman/lib$
Execute Configuration scripts
The following configuration scripts need to be executed as the "root" user.
Scripts to be executed:
Number
Script Location
1
/home/jinglong/app/oraInventory/orainstRoot.sh
2
/home/jinglong/app/jinglong/product/11.2.0/dbhome_1/root.sh
点击OK
To execute the configuration scripts:
1. Open a terminal window
2. Log in as "root"
3. Run the scripts
4. Return to this window and click "OK" to continue
Help
OK
jinglong@ubuntu: ~/app/jinglong/product/11.2.0/dbhome_1
ctx
cv
dbs
dc_ocm
instantclient
inventory
j2ee
javavm
network
nls
oc4j
odbc
plsql
precomp
racg
rdbms
uix
utl
执行脚本
jinglong@ubuntu:~/app/jinglong/product/11.2.0/dbhome_1$ sudo ./root.sh
Running Oracle 11g root.sh script...
直接ENTER
The following environment variables are set as:
ORACLE_OWNER= jinglong
ORACLE_HOME= /home/jinglong/app/jinglong/product/11.2.0/dbhome_1
Enter the full pathname of the local bin directory: [/usr/local/bin]:
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.
Finished product-specific root actions.
jinglong@ubuntu:~/app/jinglong/product/11.2.0/dbhome_1$



- 到这里，所有的Oracle安装全部结束

测试

- 重启虚拟机
- 检查参数

```
echo $ORACLE_BASE
echo $ORACLE_HOEM
echo $PATH
```

- 启动监听

```
lsnrctl start
```

```
jinglong@ubuntu:~$
jinglong@ubuntu:~$ lsnrctl start

LSNRCTL for Linux: Version 11.2.0.1.0 - Production on 09-APR-2020 00:25:36

Copyright (c) 1991, 2009, Oracle.  All rights reserved.

Starting /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/bin/tnslsnr: please wait...

TNSLSNR for Linux: Version 11.2.0.1.0 - Production
System parameter file is /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/network/admin/listener.ora
Log messages written to /home/jinglong/app/jinglong/diag/tnslsnr/ubuntu/listener/alert/log.xml
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1521)))
Listening on: (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=127.0.0.1)(PORT=1521)))

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=IPC)(KEY=EXTPROC1521)))
STATUS of the LISTENER
------------------------
Alias                     LISTENER
Version                   TNSLSNR for Linux: Version 11.2.0.1.0 - Production
Start Date                09-APR-2020 00:25:36
Uptime                    0 days 0 hr. 0 min. 0 sec
Trace Level               off
Security                  ON: Local OS Authentication
SNMP                      OFF
Listener Parameter File   /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/network/admin/listener.ora
Listener Log File         /home/jinglong/app/jinglong/diag/tnslsnr/ubuntu/listener/alert/log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1521)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=127.0.0.1)(PORT=1521)))
The listener supports no services
The command completed successfully
jinglong@ubuntu:~$
```

- 启动服务

```
sqlplus /nolog
conn / as sysdba
startup
```

```
jinglong@ubuntu:~$ sqlplus /nolog

SQL*Plus: Release 11.2.0.1.0 Production on Thu Apr 9 00:26:33 2020

Copyright (c) 1982, 2009, Oracle.  All rights reserved.

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

Total System Global Area  822579200 bytes
Fixed Size                  2217832 bytes
Variable Size             499124376 bytes
Database Buffers          318767104 bytes
Redo Buffers                2469888 bytes
Database mounted.
Database opened.
```

- 测试

```
select 1 from dual;
```

```
SQL> select 1 from dual;

         1
----------
         1

SQL>
```

- 到这里说明Oracle能用了
- 关闭Oracle
- quit退出
- 关闭监听

```
SQL> shutdown immediate
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL> quit
Disconnected from Oracle Database 11g Enterprise Edition Release 11.2.0.1.0 - 64bit Production
With the Partitioning, OLAP, Data Mining and Real Application Testing options
jinglong@ubuntu:~$ lsnrctl stop

LSNRCTL for Linux: Version 11.2.0.1.0 - Production on 09-APR-2020 00:35:10

Copyright (c) 1991, 2009, Oracle.  All rights reserved.

Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=IPC)(KEY=EXTPROC1521)))
The command completed successfully
jinglong@ubuntu:~$
```

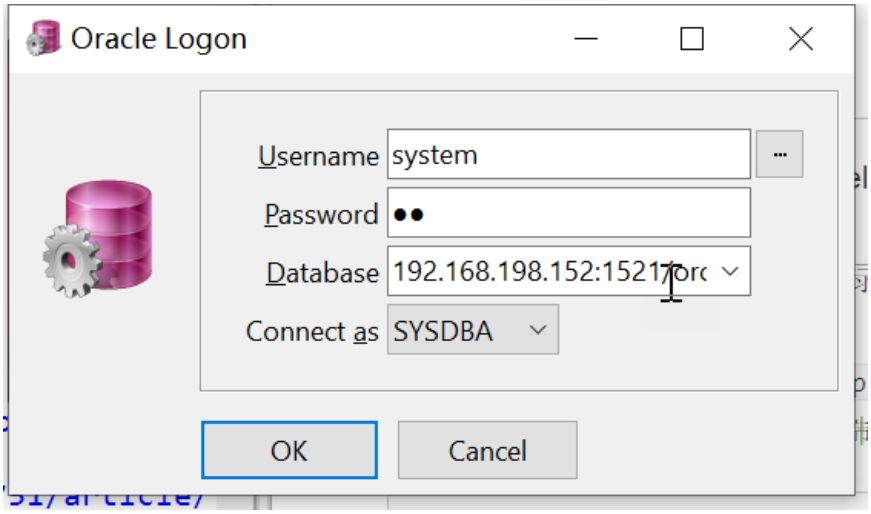
外部主机连接

- 进入目录`cd /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/network/admin`修改`listener.ora`和`tnsnames.ora`两个文件，将`localhost`改为本机的IP地址

```
1  # listener.ora Network Configuration File: /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/
2  # Generated by Oracle configuration tools.
3
4  LISTENER =
5    (DESCRIPTION_LIST =
6      (DESCRIPTION =
7        (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))
8        (ADDRESS = (PROTOCOL = TCP)(HOST = 192.168.198.152)(PORT = 1521))
9      )
10   )
11
12 ADR_BASE_LISTENER = /home/jinglong/app/jinglong
13
```

```
1  # tnsnames.ora Network Configuration File: /home/jinglong/app/jinglong/product/11.2.0/dbhome_1/network
2  # Generated by Oracle configuration tools.
3
4  LISTENER_ORCL =
5    (ADDRESS = (PROTOCOL = TCP)(HOST = 192.168.198.152)(PORT = 1521))
6
7
8  ORCL =
9    (DESCRIPTION =
10     (ADDRESS = (PROTOCOL = TCP)(HOST = 192.168.198.152)(PORT = 1521))
11     (CONNECT_DATA =
12       (SERVER = DEDICATED)
13       (SERVICE_NAME = orcl)
14     )
15   )
16
```

- 经过以上步骤可以在PLSQL developer上使用系统用户`system/tt`登录数据库



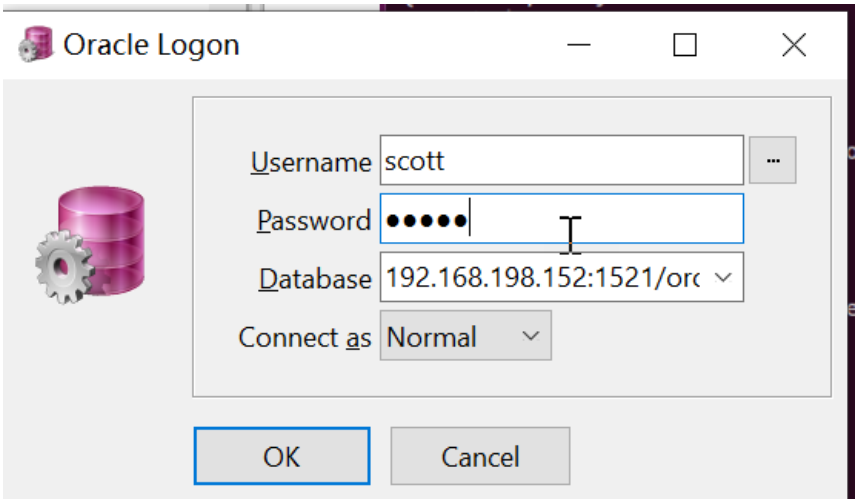
- 如果仍然无法连接，则在命令行下执行以下命令

```
jinglong@ubuntu:~$ sqlplus /nolog

SQL*Plus: Release 11.2.0.1.0 Production on Thu Apr 9 08:08:08 2020

Copyright (c) 1982, 2009, Oracle.  All rights reserved.

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

Total System Global Area  822579200 bytes
Fixed Size                  2217832 bytes
Variable Size             499124376 bytes
Database Buffers          318767104 bytes
Redo Buffers                2469888 bytes
Database mounted.
Database opened.
SQL> select 1 from dual;

         1
----------
         1

SQL> grant sysdba to system;

Grant succeeded.

SQL> conn / as sysdba
Connected.
SQL> alter user scott account unlock;

User altered.

SQL> conn scott/tiger
ERROR:
ORA-28001: the password has expired


Changing password for scott
New password:
Retype new password:
Password changed
Connected.
SQL> shutdown immediate;
```

- 普通用户`scott/tiger`还是无法登录，执行以下命令给用户`scott`解锁，并且修改密码

```
The command completed successfully
jinglong@ubuntu:~/app/jinglong/product/11.2.0/dbhome_1/network/admin$ sqlplus /nolog

SQL*Plus: Release 11.2.0.1.0 Production on Thu Apr 9 22:00:04 2020

Copyright (c) 1982, 2009, Oracle.  All rights reserved.

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

Total System Global Area  822579200 bytes
Fixed Size                  2217832 bytes
Variable Size             507512984 bytes
Database Buffers          310378496 bytes
Redo Buffers                2469888 bytes
Database mounted.
Database opened.
SQL> conn scott/tiger
ERROR:
ORA-28000: the account is locked


Warning: You are no longer connected to ORACLE.
SQL> grant sysdba to system;
SP2-0640: Not connected
SQL> conn /as sysdba
Connected.
SQL> grant sysdba to system;

Grant succeeded.

SQL> alter user scott account unlock;

User altered.

SQL> conn scott/tiger
ERROR:
ORA-28001: the password has expired


Changing password for scott
New password:
Retype new password:
Password changed
Connected.
SQL> show USER
USER is "SCOTT"
SQL>
```

- 这时就可以用`scott/tiger`登录数据库了



参考文档：

Ubuntu安装Oracle手册（简单版）：仅供参考

ubuntu16.04安装oracle11g：仅供参考
Xshell终端主机名和用户名不显示颜色的解决方法
Oracle 中scott 用户的解锁以及修改密码