# VMware Linux部署Weblogic 及Oracle PART2

## 安装ORACLE

### 安装前准备

文件准备

Oracle

p10404530\_112030\_Linux-x86-64\_1of7.zip

p10404530\_112030\_Linux-x86-64\_2of7.zip

p10404530\_112030\_Linux-x86-64\_3of7.zip

Oracle依赖库

compat-libstdc++-33-3.2.3-61.x86\_64.rpm

elfutils-libelf-devel-0.125-3.el5.x86\_64.rpm

libaio-devel-0.3.106-3.2.x86\_64.rpm

sysstat-7.0.2-1.el5.x86\_64.rpm

文件路径 /home/software

### 安装依赖库（rpm）

首先检查必要的包  
# rpm -q binutils   
compat-libstdc++   
elfutils-libelf   
elfutils-libelf-devel   
elfutils-libelf-devel-static   
gcc   
gcc-c++   
glibc   
glibc-common   
glibc-devel   
glibc-headers   
kernel-headers   
ksh   
libaio   
libaio-devel   
libgcc   
libgomp   
libstdc++   
libstdc++-devel   
make   
numactl-devel   
sysstat   
unixODBC   
unixODBC-devel   
pdksh   
  
--网上说unixODBC和unixODBC-devel需要X64和i386版本都安装

但是我实验证明只需要安装x64  
--如果包没有安装，用rpm -ivh安装

有用的命令： rpm –qa |grep 包名关键字查询

安装rmp包，以上内容并不是所有的都需要安装

# rpm -ivh compat-libstdc++-33-3.2.3-61.x86\_64.rpm

# rpm -ivh libaio-devel-0.3.106-3.2.x86\_64.rpm

# rpm -ivh sysstat-7.0.2-1.el5.x86\_64.rpm

### **创建相关用户和组，作为软件安装和支持组的拥有者**

* 1. #**修改操作系统核心参数**
     1. **修改用户的SHELL的限制，修改/etc/security/limits.conf文件**

# vi **/etc/security/limits.conf**

加入以下内容

oracle   soft    nproc    2047  
oracle   hard    nproc    16384  
oracle   soft    nofile     1024  
oracle   hard    nofile    65536

* + 1. **修改/etc/pam.d/login 文件**

# vi /etc/pam.d/login

加入以下内容

session   required    /lib/security/pam\_limits.so   
session   required    pam\_limits.so

* + 1. **修改linux内核**

**修改**/etc/sysctl.conf文件

加入以下内容：

#Add for oracle

fs.file-max = 6815744

fs.aio-max-nr = 1048576

kernel.shmall = 2097152

kernel.shmmax = 2147483648

kernel.shmmni = 4096

kernel.sem = 250 32000 100 128

net.ipv4.ip\_local\_port\_range = 9000 65500

net.core.rmem\_default = 4194304

net.core.rmem\_max = 4194304

net.core.wmem\_default = 262144

net.core.wmem\_max = 1048576

保存文件，使 /etc/sysctl.conf 更改立即生效

# sysctl -p

* + 1. **编辑 /etc/profile**

# vi /etc/profile

加入以下内容

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

fi

编辑 ／etc/profile，增加以下内容

# Add for oracle

umask 022

export NLS\_LANG=AMERICAN\_AMERICA.UTF8  
export LANG=en\_US.UTF-8

export ORACLE\_BASE=/home/oracle

export ORACLE\_HOME=/home/oracle/product/11g

export ORACLE\_SID=orcl

export PATH=$PATH:$HOME/bin:$ORACLE\_HOME/bin

export LD\_LIBRARY\_PATH=$ORACLE\_HOME/lib:/usr/lib

* + 1. **创建相关用户和组，作为软件安装和支持组的拥有者**

# groupadd oinstall

# groupadd dba

# useradd -g oinstall -g dba -m oracle ;新增用户oracle，并加入oinstall和dba组；

# id oracle ;确认组添加是否成功，发现只添加到了dba

uid=501(oracle) gid=502(dba) groups=502(dba) context=root:system\_r:unconfined\_t:SystemLow-SystemHigh

# usermod -G oinstall oracle ;单独添加oracle到oinstall组

# id oracle ;再次确认OK

uid=501(oracle) gid=502(dba) groups=502(dba),501(oinstall) context=root:system\_r:unconfined\_t:SystemLow-SystemHigh

# passwd oracle

输入oracle用户的密码

* + 1. **创建数据库软件目录和数据文件存放目录，目录的位置**

**根据自己的情况来定，注意磁盘空间即可，这里我把其放到oracle用户下,例如：**

# mkdir /usr/local/oracle

# mkdir /home/oracle/product/oracle ; ORACLE\_BASE, Oracle目录结构的根

# mkdir /home/oracle/oradata ; Oracle数据库文件缺省存储该目录下,即$ORACLE\_BASE/$ORACLE\_SID/oradata,主要包括数据库的控制文件、数据文件、重做日志文件

# mkdir /home/oracle/response ; ORACLE\_HOME, Oracle安装目录

* + 1. **更改目录属主为Oracle用户所有**

**# chown -R oracle:oinstall /usr/local/oracle/**

首先，切换到新创建的oracle用户下,并新建两个目录

**# su – oracle**

$ mkdir /usr/local/oracle/oraInventory ;Oracle Inventory, which is a catalog of all Oracle software installed on the system

**安装前目录树形结构如下：**

**/usr/local/oracle/**

**|-- product**

**| |-- 11g**

**| -- oraInventory**

**| -- oradata**

**|-- response**

* 1. 安装过程
     1. **准备安装文件**

将准备好的安装文件转换成用户oracle和组oinstall，转换到oracle用户

# su - oracle

$ unzip p10404530\_112030\_Linux-x86-64\_1of7.zip

$ unzip p10404530\_112030\_Linux-x86-64\_2of7.zip

$ unzip p10404530\_112030\_Linux-x86-64\_3of7.zip

解压完成后 进入其解压后的目录database

$ cd database/

* + 1. **修改响应文件**

**Oracle为不同产品、安装方式及配置工具，提供了response文件的模板。供参考的response文件在解压的database/response目录下，有三个文件：**

| **Response文件** | **説明** |
| --- | --- |
| db\_install.rsp | Oracle Database 11g 的静默安装，安装Oracle数据库软件 |
| dbca.rsp | Database Configuration Assistant的静默安装，配置监听程序 |
| netca.rsp | Oracle Net Configuration Assistant的静默安装，创建数据库 |

**将以上三个文件拷贝到建立的response目录中**

**$ cp response/\*rsp ~/response/**

**$ cd ~/response/**

**编辑db\_install.rsp，修改以下内容**

oracle.install.option=INSTALL\_DB\_SWONLY

UNIX\_GROUP\_NAME=oinstall

INVENTORY\_LOCATION=/home/oracle/app/oraInventory

SELECTED\_LANGUAGES=en

ORACLE\_HOME=/home/oracle/product/11g

ORACLE\_BASE=/home/oracle

oracle.install.db.InstallEdition=EE

oracle.install.db.DBA\_GROUP=dba

oracle.install.db.OPER\_GROUP=dba

DECLINE\_SECURITY\_UPDATES=true

* + 1. **安装**

在安装文件解压完的database目录下

$ ./runInstaller -silent -responseFile '/usr/local/oracle/response/db\_install.rsp' -noconfig -ignoreSysPrereqs -ignorePrereq

等待安装成功

运行如下命令确认安装成功

$ lsnrctl start #启动lisener

$ sqlplus /nolog

安装oracle监听器  
  
cp database/response/netca.rsp ~/  
  
[oracle@test1 ~]$ netca -help  
Usage: netca [-silent] {<command> <options>}  
  
Perform network configuration by specifying the following arguments:  
    [-silent]  
        -responsefile <Response file name>]  
        [-local {Perform configuration on only local node}]  
    -instype <typical|custom>  
        [-listener <Listener name (only for custom install)>]  
        [-lisport <TCP/IP port number>]  
        [-lps <Starting TCP/IP port number (only for typical install)>]  
        [-lpe <Ending TCP/IP port number (only for typical install)>]  
        [-netnum <Network resource number (only for RAC)>]  
        [-nostartlsnr {Do not start listener}]  
    [-crsupgrade {Upgrade default listener from lower version database home to Grid Infrastructure home (only for RAC)}]  
    [-inscomp <Comma separated list of installed components>]  
    [-insprtcl <Comma separated list of installed protocols>]  
    [-orahome <Oracle home>]  
    [-orahnam <Oracle home name>]  
    [-log <Log file name>]  
    [-h|-help {Print usage}]  
[oracle@test1 ~]$   
  
netca -silent -responsefile  /usr/local/oracle/response/netca.rsp   
  
[oracle@test1 ~]$ netca -silent -responsefile  /usr/local/oracle/response/netca.rsp   
\*\*\*\*DISPLAY environment variable not set!  
    Oracle Net Configuration Assistant is a GUI tool  
    which requires that DISPLAY specify a location  
    where GUI tools can display.  
    Set and export DISPLAY, then re-run.  
  
export DISPLAY=10.101.5.66:0.0  
  
重新运行一下，过程很快。完了以后验证一下  
  
  
lsnrctl start;lsnrctl status;  
  
监听创建完毕，下一步建库。  
  
  
3.3 建库  
  
cp database/response/dbca.rsp ~/  
  
  
最终编辑如下：  
  
  
[GENERAL]  
RESPONSEFILE\_VERSION = "11.2.0"  
OPERATION\_TYPE = "createDatabase"  
[CREATEDATABASE]  
GDBNAME = "mydb.mytest.com"  
SID = "mydb"  
#TEMPLATENAME = "General\_Purpose.dbc"  
TEMPLATENAME = "custom\_mydb.dbt"  
SYSPASSWORD = "111111"  
SYSTEMPASSWORD = "111111"  
SMTPSERVER = "10.101.0.16"  
EMAILADDRESS = "aaa@aaa.com"  
DATAFILEDESTINATION = "/u01/oradata"  
RECOVERYAREADESTINATION= "/u01/flash\_recovery\_area"  
CHARACTERSET = "AL32UTF8"  
MEMORYPERCENTAGE = "50"  
DATABASETYPE = "OLTP"  
TOTALMEMORY = "800"  
  
  
  
  
[oracle@test1 ~]$ dbca -silent -responsefile /usr/local/oracle/response/dbca.rsp  
Creating and starting Oracle instance  
1% complete  
3% complete  
Creating database files  
4% complete  
7% complete  
Creating data dictionary views  
8% complete  
9% complete  
10% complete  
11% complete  
12% complete  
13% complete  
14% complete  
16% complete  
17% complete  
18% complete  
19% complete  
Adding Oracle JVM  
25% complete  
30% complete  
36% complete  
38% complete  
Adding Oracle Text  
40% complete  
41% complete  
Adding Oracle XML DB  
43% complete  
44% complete  
45% complete  
49% complete  
Adding Oracle Multimedia  
50% complete  
60% complete  
Adding Oracle OLAP  
61% complete  
62% complete  
63% complete  
64% complete  
Adding Oracle Spatial  
65% complete  
66% complete  
67% complete  
71% complete  
Adding Enterprise Manager Repository  
73% complete  
75% complete  
Adding Oracle Application Express  
78% complete  
82% complete  
Adding Oracle Warehouse Builder  
86% complete  
90% complete  
Completing Database Creation  
91% complete  
92% complete  
93% complete  
96% complete  
100% complete  
Look at the log file "/u01/app/oracle/cfgtoollogs/dbca/mydb/mydb.log" for further details.  
[oracle@test1 ~]$