Fedora 7最新安装Oracle9204手记  
Linux fedora7 2.6.21-1.3194.fc7  
参考资料:  
  1.“oracle9i installation on fedora core 6” <http://jinlibing.javaeye.com/blog/39577>  
  2.“oracle8i-10i install on linux” <http://www.oracle-base.com/articles/linux/ArticlesLinux.php>  
    第二个里基本包含了所有的oracle9i-10i的安装  
一，解压缩Oracle9204的安装文件  
1．        Oracle 9iR2 (9.2.0.4)  
(1)        简化过程（以oracle登录，释放安装文件,使用更少的磁盘空间，速度更快）   
在安装LINUX时最好分一个区/soft,这样一来即使系统坏了,也只是重装系统,而无须重新拷贝数据库安装文件.  
zcat ship\_9204\_linux\_disk1.cpio.gz | cpio –idmv &&  
zcat ship\_9204\_linux\_disk2.cpio.gz | cpio –idmv &&  
zcat ship\_9204\_linux\_disk3.cpio.gz | cpio –idmv  
(2) 解包和解压过程中，自动创建了3个包含安装文件的目录：  
                Disk1  
                Disk2  
                Disk3  
之后就可以安装Oracle9iR2了。  
二，安装前的检查和准备工作；  
1，        查看这些开发包是否已安装；  
安装需要的软件包和补丁包:  
p3238244\_9204\_LINUX.zip 修复agent错误的补丁.  
p2617419\_210\_GENERIC.zip 打3238244补丁所需要的补丁.  
  
compat-libstdc++-33-3.2.3-61  
compat-openldap-2.3.34\_2.2.29-0.fc7  
compat-db-4.3.29-2.fc7  
compat-libgcc-296-2.96-138  
compat-libstdc++-296-2.96-138  
compat-gcc-34-c++-3.4.6-7  
compat-gcc-34-3.4.6-7  
gcc-4.1.2-12  
gcc-c++-4.1.2-12  
libgcc-4.1.2-12  
gnome-libs-1.4.1.2.90-44  
gnome-libs-devel-1.4.1.2.90-44  
libaio-devel-0.3.102-1  
libaio-0.3.102-1  
        make-3.80-5  
xorg-x11-deprecated-libs-6.8.1-23.EL  
compat-libcwait-2.1-1.i386.rpm  
对于fedora 7 有些包要通过上网更新 (        其中还要更新依赖的包)  
compat-libcwait可以在如下网站:  
<http://oss.oracle.com/projects/compat-oracle/files/RedHat/>  
# rpm -qa | grep ‘compat’  
三，创建数据库安装的准备工作；  
1，创建user/group；  
# groupadd dba  
# useradd -g dba oracle   
#passwd oracle   
2，建立oracle安装文件夹；  
# mkdir /opt/oracle  
# mkdir /opt/cwdata  
# chmod 777 /opt/cwdata  
# chown oracle:dba /opt/cwdata  
# chown -R oracle:dba /opt/oracle  
2，        配置环境变量；  
    以root用户登录，设置root用户的环境打开.bash\_profile文件，将如下内容加入：  
export ORACLE\_BASE=/opt/oracle  
export ORACLE\_HOME=/opt/oracle/920  
export PATH=$PATHhttp://bbs.chinaunix.net/images/smilies/default/shy.gifORACLE\_HOME/binhttp://bbs.chinaunix.net/images/smilies/default/shy.gifORACLE\_HOME/Apache/Apache/bin  
export ORACLE\_OWNER=oracle  
export ORACLE\_SID=oradb  
使用Oracle用户登陆:  
#su – oracle  
$vi .bash\_profile  
以下是配置文件的内容（其中红色字体为添加的内容）:  
# .bash\_profile  
  
# Get the aliases and functions  
if [ -f ~/.bashrc ]; then  
        . ~/.bashrc  
fi  
  
# User specific environment and startup programs  
  
PATH=$PATHhttp://bbs.chinaunix.net/images/smilies/default/shy.gifHOME/bin  
#ORACLE\_BASE 可以定位到盘阵上/data  
export ORACLE\_BASE=/opt/oracle   
export ORACLE\_HOME=/opt/oracle/920  
export PATH=$PATHhttp://bbs.chinaunix.net/images/smilies/default/shy.gifORACLE\_HOME/binhttp://bbs.chinaunix.net/images/smilies/default/shy.gifORACLE\_HOME/Apache/Apache/bin  
export ORACLE\_OWNER=oracle  
export ORACLE\_SID=oradb  
export ORACLE\_TERM=xterm  
export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATHhttp://bbs.chinaunix.net/images/smilies/default/shy.gifORACLE\_HOME/lib  
export ORACLE\_OEM\_JAVARUNTIME=/opt/jre1.3.1\_20  
export NLS\_LANG=”American\_america.zhs16gbk”  
# export NLS\_LANG="SIMPLIFIED CHINESE\_CHINA.ZHS16GBK"  
export ORA\_NLS33=$ORACLE\_HOME/ocommon/nls/admin/data  
export DISPLAY=:0  
export LANG=en\_US  
export GDM\_LANG= en\_US  
export LC= en\_US  
export PATH  
unset USERNAME  
  
#cp /etc/sysconfig/i18n /home/oracle/.i18n  
修改LANG=”zh\_CN.GB18030’为LANG=”en\_US.english’  
  
4，        设置系统参数；  
#su – root切换到root用户  
a) 修改#vi /etc/sysctl.conf, 以下是配置文件的内容（其中红色字体为添加的内容）：  
# Kernel sysctl configuration file for Red Hat Linux  
#  
# For binary values, 0 is disabled, 1 is enabled.  See sysctl(http://bbs.chinaunix.net/images/smilies/default/icon_cool.gif and  
# sysctl.conf(5) for more details.  
  
# Controls IP packet forwarding  
net.ipv4.ip\_forward = 0  
  
# Controls source route verification  
net.ipv4.conf.default.rp\_filter = 1  
  
# Controls the System Request debugging functionality of the kernel  
kernel.sysrq = 0  
  
# Controls whether core dumps will append the PID to the core filename.  
# Useful for debugging multi-threaded applications.  
kernel.core\_uses\_pid = 1  
kernel.shmmax = 536870912 / 268435456  
kernel.shmmni = 4096  
kernel.shmall = 2097152  
kernel.sem = 250 32000 100 128  
fs.file-max = 65536  
net.ipv4.ip\_local\_port\_range = 1024 65000  
修改后运行#sysctl –p命令使得内核改变立即生效；  
译者注：一般情况下可以设置最大共享内存为物理内存的一半，如果物理内存是 2G，则可以设置最大共享内存为 1073741824，如上；如物理内存是 1G，则可以设置最大共享内存为 512 \* 1024 \* 1024 = 536870912；以此类推。）   
建议永久地增加 shmmax 设置。  
sem 4个参数依次为SEMMSL(每个用户拥有信号量最大数)；SEMMNS(系统信号量最大数)；SEMOPM(每次semopm系统调用操作数)；SEMMNI(系统辛苦量集数最大数).Shmmax 最大共享内存，官方文档建议是内存的1/2,Shmmni 最小共享内存 4096KB.Shmall 所有内存大小  
  
B) 设置oracle对文件的要求：  
编辑文件：#vi /etc/security/limits.conf 加入以下语句：  
oracle 　　　soft 　　　nofile 　　 65536  
oracle 　　　hard 　　 nofile　　　65536  
oracle 　　　soft 　　　nproc 　　 16384  
oracle 　　　hard 　　 nproc 　　 16384  
  
  
  
5，        安装j2re  
(1) Download the Java Runtime Enviroment (j2re-1\_3\_1\_20-linux-i586.bin) from the Sun website. Keep in mind you need    to download j2re1.3.1\_11 or higher    
注意：下载jre jre1.3.1\_2x 其中x为任意，但前面的版本不可改。  
  
  Login as root and make the the file executable and then execute it. When the JRE is exracted move the    "jre1.3.1\_15" di rectory to "/opt" directory.  
  以root用户的登录执行下面的  
  # chmod +x j2re-1\_3\_1\_20-linux-i586.bin  
  # ./j2re-1\_3\_1\_20-linux-i586.bin  
  # mv jre1.3.1\_20 /opt/  
(2) When all archives were extracted you've got three directories Disk1, Disk2 and Disk3.  
  Edit the Disk1/install/linux/oraparam.ini and modify JRE\_LOCATION variable and set path to our JRE    installation from Step 2.  
  解压后可以得到Disk1, Disk2 and Disk3三个文件夹然后修改Disk1/install/linux/oraparam.ini  
  
  JRE\_LOCATION=/opt/jre1.3.1\_20  
(3)  Initializing Java Virtual Machine from /tmp/OraInstall2006-10-25\_01-43-30PM/jre/bin/java. Please wait... /tmp/OraInstall2006-10-25\_01-43-30PM/jre/bin/i386/native\_threads/java: error while loading shared libraries: libstdc++-libc6.1-1.so.2: cannot open shared object file: No such file or directory - after ./runInstaller execution.  
------------------------------------------------------------------------------------------------------------------------  
Solution:  
#su -  
# cd /usr/lib  
# ln -s libstdc++-3-libc6.2-2-2.10.0.so libstdc++-libc6.1-1.so.2  
四，开始安装oracle9iR2  
（一）开始安装：  
1.以oracle用户登录系统，进行Oracle的安装：  
                $ cd Disk1  
                $ ./runInstaller过一会儿就会出现Oracle的安装界面，如下图所示：  
图片就省略了!  
2.一步一个脚印安装下去就行了  
3.安装完后打补丁：  
#su – root   首先安装 opatch.  
#cd /soft/oracle9i  
#unzip p2617419\_210\_GENERIC.zip  
Archive: p2617419\_210\_GENERIC.zip  
creating: OPatch/  
creating: OPatch/docs/  
inflating: Opatch/docs/FAQ  
......  
inflating: README.txt  
#export PATH=$PATH:/soft/oracle9i/OPatch:/sbin  
(修改PATH时要要包括解压缩出来的Opatch 和 sbin目录)  
# unzip p3238244\_9204\_LINUX.zip  
# cd 3238244  
# opatch apply  
提示信息:  
PERL5LIB=/opt/oracle/920/Apache/perl/lib/5.00503:/soft/oracle9i/OPatch/perl\_modules; export PERL5LIB  
/opt/oracle/920/Apache/perl/bin/perl /soft/oracle9i/OPatch/opatch.pl apply  
  
OPatch Version 1.0.0.0.46  
Perl Version 5.00503  
  
Oracle Home = /opt/oracle/920  
Location of Oracle Inventory = /opt/oracle/oraInventory  
Oracle Universal Installer shared library = /opt/oracle/oui/bin/Linux/liboraInstaller.so  
Path to Java = /opt/oracle/jre/1.3.1/bin/java  
Location of Oracle Inventory Pointer = /etc/oraInst.loc  
Location of Oracle Universal Installer components = /opt/oracle/oui  
Required Jar File under Oracle Universal Installer = lib/OraInstaller.jar  
  
  
Please shut down Oracle instances running out of this ORACLE\_HOME  
(Oracle Home = /opt/oracle/920)  
Is this system ready for updating?  
Please respond Y|N > y  
Patching...  
Updating inventory...  
/soft/oracle9i/OPatch/opatch.pl version: 1.0.0.0.46  
Copyright (c) 2001,2002,2003 Oracle Corporation. All Rights Reserved.  
  
  
OPatch succeeded.  
注意:如果提示HOME变量错误可执行语句：  
export ORACLE\_BASE=/opt/oracle  
export ORACLE\_HOME=/opt/oracle/920  
export ORACLE\_OEM\_JAVARUNTIME=/opt/jre1.3.1\_20   
出现success的提示就全部安装成功.  
  
补丁打完后，还要relinked一个.mk文件，切换到oracle用户窗口  
# cd  $ORACLE\_HOME/network/lib  
# make –f ins\_oemagent.mk install  
之后就可以启动Agent服务了.  
  
4. 最后执行 #dbca  建oracle数据库  
当你执行 dbca 时，会出现错误信息：   
/opt/oracle/jre/1.1.8/bin/../lib/i686/green\_threads/libzip.so: symbol errno, version GLIBC\_2.0 not defined in file libc.so.6 with link time reference (libzip.so)  
Unable to initialize threads: cannot find class java/lang/Thread  
Could not create Java VM  
可以运行：  
#su - oracle  
$cd /opt/oracle/920  
  $rm JRE  
  $ln -s /opt/jre1.3.1\_20 JRE  
  #su -  
  # cd /opt/oracle/920/JRE/bin  
  # ln -s java jre  
  # cd i386/native\_threads  
# ln -s java jre  
  
5.点击OK，然后退出即可,正常登陆并启动数据库的操作。  
  
  
$netca 后  
$oracle\_home/920/network/admin/listener.ora修改如下  
SID只需要SID\_NAME ORACLE\_HOME两个参数  
LISTENER需要修改host为 orasvr 主机名  
--------------------------------------------------------------------------------------------  
SID\_LIST\_LISTENER =  
  (SID\_LIST =  
    (SID\_DESC =  
      (SID\_NAME =orcl)  
      (ORACLE\_HOME = /opt/oracle/920)  
    )  
  )  
LISTENER =  
  (DESCRIPTION\_LIST =  
    (DESCRIPTION =  
      (ADDRESS\_LIST =  
        (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC))  
      )  
      (ADDRESS\_LIST =  
        (ADDRESS = (PROTOCOL = TCP)(HOST = orasvr)(PORT = 1521))  
      )  
    )  
  )  
---------------------------------------------------------------------------------------------  
[oracle@oracle oracle]$ lsnrctl start  
[oracle@oracle oracle]$ sqlplus /nolog  
SQL\*Plus: Release 9.2.0.4.0 - Production on Sat Mar 12 22:58:53 2005  
Copyright (c) 1982, 2002, Oracle Corporation.  All rights reserved.  
SQL> connect / as sysdba  
Connected.  
SQL> shutdown immediate ; 关闭数据库  
Database closed.  
Database dismounted.  
ORACLE instance shut down.  
SQL> startup;   启动数据库  
ORACLE instance started.  
Total System Global Area  236000356 bytes  
Fixed Size                   451684 bytes  
Variable Size             201326592 bytes  
Database Buffers           33554432 bytes  
Redo Buffers                 667648 bytes  
Database mounted.  
Database opened.  
  
6. 数据库创建完成后，修改/etc/oratab，把boss那一行最后的N改成Y，然后执行dbstart启动数据库数据库可能无法启动，报告Can’t find init file …的错误，需要复制一个初始化文件:   
#cp /opt/oracle/admin/oradb/pfile/init.ora.\*  /opt/oracle/920/dbs/initoradb.ora  
重新执行dbstart就可以了。  
为了方便管理，可以写一个启动脚本ora9i：  
以root身份进入，编写以下脚本：  
  
#!/bin/bash  
#start and stop the oracle instance  
# chkconfig –level 35 --add ora9i  
#chkconfig: 345 91 19   
# description: starts the oracle listener and instance  
  
export ORACLE\_HOME="/opt/oracle/920"  
export PATH=$ORACLE\_HOME/binhttp://bbs.chinaunix.net/images/smilies/default/shy.gifORACLE\_HOME/Apache/Apache/binhttp://bbs.chinaunix.net/images/smilies/default/shy.gifPATH  
export ORACLE\_OWNER="oracle"  
export ORACLE\_SID=orcl  
  
if [ ! -f $ORACLE\_HOME/bin/dbstart -o ! -d $ORACLE\_HOME ]  
then   
    echo "oracle startup:cannot start"  
    exit 1  
fi  
  
case "$1" in  
start)  
  #startup the listener and instance  
    echo -n "oracle startup: "  
    su - $ORACLE\_OWNER -c "$ORACLE\_HOME/bin/lsnrctl start"  
    su - $ORACLE\_OWNER -c $ORACLE\_HOME/bin/dbstart  
    touch /var/lock/subsys/oracle  
    echo "finished"  
   ;;  
stop)  
# stop listener, apache and database  
    echo -n "oracle shutdown:"  
    su - $ORACLE\_OWNER -c "$ORACLE\_HOME/bin/lsnrctl stop"  
    su - $ORACLE\_OWNER -c $ORACLE\_HOME/bin/dbshut  
    rm -f /var/lock/subsys/oracle  
    echo "finished"  
;;  
reload|restart)  
    $0 stop  
    $0 start  
;;  
\*)  
   echo "Usage: ora9i [start|stop|reload|restart]"  
   exit 1  
  
esac  
exit 0  
注意:如果 cat –v ora9i 可以看到文件每行结尾有^M  
去除^M的脚本为:  
sed 's/.$//' ora9i >ora9i0  
mv ora9i0 ora9i  
存为ora9i后，然后用chmod a+x ora9,即可在以后以root身份运行/etc/rc.d/init.d/ora9i start |stop 来管理oracle的启动和停止了。如果要将这个脚本加入到系统中使其可开机运行，那么要运行以下命令：chkconfig --level 35 --add ora9i  
或者以root用户执行如下命令:  
#cp /soft/ora9i /etc/rc.d/init.d/  
#chmod a+x /etc/rc.d/init.d /ora9  
#cd /etc/rc.d/rc5.d  
#ln -s /etc/rc.d/init.d/ora9i S99ora9i  
#cd /etc/rc.d/rc0.d  
#ln -s /etc/rc.d/init.d/ora9i K99ora9i  
也可自启动oracle9i!  
或者可在/etc/rc.d/rc.local中加入如下：  
su - oracle -c "/opt/oracle/920/bin/lsnrctl start"  
su - oracle -c "/opt/oracle920/bin/dbstart start"  
  
7.  
关于数据库删除重新安装的问题:  
  把ORACLE安装目录删除及/etc/ora\*.\*删除就行了  
#rm –f  /etc/ora\*.\*  
8.关于在LINUX中运行管理软件  
oemapp console