

# Install Oracle Enterprise Manager 11gR1 on Oracle VM

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This paper is the third in a series describing how-to install Oracle VM Server and several Oracle VM guests. In this paper I will describe how-to install Oracle Enterprise Manager Grid Control 11g (OEM11g) on an Oracle Virtual Machine.

The steps described in this paper will be:

- Create a virtual machine using virt-install and a kickstart file
- Install Oracle 11g RDBMS Software
- Create Oracle 11g database
- Install java jdk
- Install Weblogic Server
- Install Oracle Enterprise Manager 11gR1
- Patch database, Enterprise Manager and Agent

The installation will take place on a virtual machine with 4GB of memory. For production systems a minimum of 8GB is recommended.

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## **1. Create Virtual Machine**

To install OEM11g we first must create a virtual machine. On this virtual machine I will install OEL5.5 64-bit. The DVD ISO can be downloaded from here: <u>http://edelivery.oracle.com/linux</u>.

I like to use a kickstart file for installing Linux. Using a kickstart file will really make your installation easier and much quicker. Also, with just a few modifications, a kickstart file is reusable for other installations.

What will be present after installing using the kickstart file?

- OEL 5.5 64-bit with the selected packages
- a /u01 and /u02 filesystem
- an Oracle user
- a generic oracle profile

Create the kickstart file:

```
[root@oraovs01::/software/kickstart]# vi /software/kickstart/OEL5u5 x86 64 OEM.cfg
##START of kickstart file
install
reboot
text
lang en US.UTF-8
keyboard us
network --device eth0 --bootproto static --ip 192.168.0.202 --netmask 255.255.255.0
--gateway 192.168.0.1 --nameserver 192.168.0.1 --hostname oraoem01.example --noipv6
rootpw --iscrypted $1$wGAh8J7a$s3VZ07TWA8EcAUQG7esZt0
firewall --disabled
authconfig --enableshadow --enablemd5
selinux --disable
timezone Europe/Amsterdam
bootloader --location=mbr --driveorder=xvda
zerombr yes
clearpart --initlabel
part /boot --fstype ext3 --size=100 --ondisk=xvda
part pv.100000 --size=38912 --grow --ondisk=xvda
part pv.100001 --size=100000 --grow --ondisk=xvdb
part pv.100002 --size=100000 --grow --ondisk=xvdc
volgroup systemvg --pesize=32768 pv.100000
volgroup u01vg --pesize=32768 pv.100001
volgroup u02vg --pesize=32768 pv.100002
logvol / --fstype ext3 --name=rootlv --vgname=systemvg --size=4096
logvol swap --fstype swap --name=swaplv --vgname=systemvg --size=8192
logvol /usr --fstype ext3 --name=usrlv --vgname=systemvg --size=8192
loqvol /var --fstype ext3 --name=varlv --vgname=systemvg --size=8192
loqvol /tmp --fstype ext3 --name=tmplv --vqname=systemvq --size=8192
logvol /home --fstype ext3 --name=homelv --vgname=systemvg --size=2048
logvol /u01 --fstype ext3 --name=u01lv --vgname=u01vg --size=102399
logvol /u02 --fstype ext3 --name=u02lv --vgname=u02vg --size=102399
services --disabled sendmail, xfs, bluetooth, cups, ip6tables, iptables
%packages
@base
@core
fipscheck
squashfs-tools
device-mapper-multipath
sgpio
e4fsprogs
oracle-validated
```

```
createrepo
audit
sysstat
# For 11g release 2
libaio-devel
unixODBC
unixODBC-devel
compat-libstdc++-296-2.96-138
%post --log=/root/ks-post.log
# Delete obsolete groups and users
/usr/sbin/userdel -r oracle
/usr/sbin/groupdel dba
/usr/sbin/groupdel oinstall
#rm -rf /home/oracle
# create group
/usr/sbin/groupadd -g 501 dba
#oracle password is oracle
/usr/sbin/useradd -c "npa" -u 500 -p '$1$wGAh8J7a$s3VZ07TWA8EcAUQG7esZt0' -g dba
oracle
# Setup oracle profile
cat > /etc/profile.d/oracle_profile.sh << EOF</pre>
# .bash profile
#
if [ \ user = "oracle" ]; then
 if [ \$SHELL = "/bin/ksh" ]; then
   ulimit -u 16384
   ulimit -n 65536
  else
   ulimit -u 16384 -n 65536
  fi
fi
######extend search path
export PATH=\$PATH:\$HOME/bin
export PATH=/usr/java/default/bin:\$PATH
export LD LIBRARY PATH=/usr/lib:/lib
####### Set some linux variables
umask 022
trap 2 3
if tty -s
 then
 set -o vi
 export EDITOR=vi
 export TERM=vt100
  stty erase ^?
  [ -s "\$MAIL" ] && echo "\$MAILMSG"
fi
####### Environment variables for Oracle
export ORACLE BASE=/u01/app/oracle
export ORACLE TERM=vt100
export NLS LANG=AMERICAN AMERICA.UTF8
export NLS_DATE_FORMAT='DD-MM-YYYY:HH24:MI:SS'
export NLS_SORT=Binary
export ORAADMIN=\$ORACLE BASE/admin
export TNS ADMIN=\$ORAADMIN/network/admin
```

```
###### if interactive session
if tty -s
then
   alias l="ls -al"
   alias ob="cd \${ORACLE BASE}"
  alias oh="cd "\\\${ORACLE HOME}""
   alias oa="cd \${ORAADMIN}"
   alias sid="cat /etc/oratab |grep -v \"#\" |sort"
   alias up="ps -ef|grep pm[0]n|awk '{print substr(\\\$NF,10)}'|sort"
   alias oracle="sudo su - oracle"
   alias root="sudo su -"
  alias sqlplus="rlwrap sqlplus"
  alias dgmgrl="rlwrap dgmgrl"
  alias rman="rlwrap rman"
   alias lsnrctl="rlwrap lsnrctl"
   alias asmcmd="rlwrap asmcmd"
   alias adrci="rlwrap adrci"
   alias impdp="rlwrap impdp"
   alias expdp="rlwrap expdp"
fi
####### Set unix prompt
USER=\${USER:-\$LOGNAME}
if tty -s
then
 export PS1="\${USER}@\`hostname -s\`:\\\${ORACLE SID}:\\\${PWD}
$ "
fi
if tty -s
then
  #create aliases for all ORACLE SIDs
  echo -n aliases:
   for LINE in \`cat /etc/oratab| sort | grep -v "^*" | grep -v "^#" | grep -vE "^[
]*$" | cut -f 1 -d :\`
   do
    sid=\`echo \$LINE|cut -f 1 -d :\`
    alias \${sid}="ORAENV_ASK=NO; ORACLE_SID=\${sid}; . oraenv;unset ORAENV_ASK"
    echo -n \ "
   done
   echo
fi
####### End .profile
EOF
# Setup sudo for oracle
cat > /etc/sudoers << EOF</pre>
%rootmembers ALL=NOPASSWD: /bin/su -
%oraclemembers,%rootmembers ALL=NOPASSWD: /bin/su - oracle
               ALL=(ALL)
                               NOPASSWD: ALL
oracle
root
               ALL=(ALL)
                               ALL
EOF
# Setup hosts file
cat > /etc/hosts << EOF</pre>
# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1 localhost.localdomain localhost
192.168.0.202 oracem01.example.com oracem01
EOF
mkdir -p /u01/app/oracle/admin/network/admin
chown -R oracle:dba /u01
chown -R oracle:dba /u02
```

```
chmod -R 775 /u01
chmod -R 775 /u02
} 1>/root/ks-post.log 2>&1
##END of kickstart file
```

We are ready to create the virtual machine. We will use virt-install to create this virtual machine .

To prevent you get an error that the kickstart file could not be found during installation, you must first stop the firewall. This can be done by stopping the *iptables* service:

```
[root@oraovs01 /]# service iptables stop
Flushing firewall rules:
```

Now create a directory to store the files for the virtual machine:

```
[root@oraovs01 /] # mkdir /OVS/running_pool/oraoem01
```

I use NFS to share my software and kickstart files with my other servers. I described this while installing Oracle VM Manager. This paper can be found here: Install Oracle VM Manager 2.2.

Now you can create the virtual machine with virt-install:

```
virt-install \
-f /OVS/running_pool/oraoem01/system.img \
-s 40 \
-f /OVS/running_pool/oraoem01/u01disk01.img \
-s 100 \
-f /OVS/running_pool/oraoem01/u02disk01.img \
-s 100 \
-n oraoem01 \
-r 4096 \
-nographics \
-p \
-1 nfs:192.168.0.200:/mount/OEL5u5_x86_64 \
-x "ks=nfs:192.168.0.200:/software/kickstart/OEL5u5 x86 64 OEM.cfg"
```

The used options of virt-install are the following:

-f	Sets the file to use as the disk image.
-8	Sets the size of the disk image in Gigabytes
-n	Sets the name of the guest instance.
-r	Sets the memory to allocate for a guest
	instance in Megabytes
nographics	Do not use a graphical console for the guest.
-p	Sets the guest as being a paravirtualized guest.
-1	Sets the installation source for a
	paravirtualized guest
-X	Any additional arguments to pass to the
	installer with a paravirtualized guest.

An unattended installation will start immediately. A console will be opened automatically so you can see the progress of the installation. Unfortunately the installation ends with an error. **This error can be ignored**. (see Metalink note **466563.1**).

```
Guest installation complete... restarting guest.
libvir: Xen Daemon error : internal error domain information incomplete, missing kernel
Entity: line 25: parser error : Opening and ending tag mismatch: os line 5 and domain
</domain>
```

```
Entity: line 26: parser error : Premature end of data in tag domain line 1
^
libvir: Xen Daemon error : internal error domain information incomplete, missing kernel
Entity: line 25: parser error : Opening and ending tag mismatch: os line 5 and domain
</domain>
^
```

Entity: line 26: parser error : Premature end of data in tag domain line 1

After this error the virtual machine is restarted. To check this you can use the xm command:

<pre>[root@oraovs01::/root]# xm list</pre>					
Name	ID	Mem	VCPUs	State	Time(s)
Domain-0	0	564	8	r	4232.7
oraoem01	15	4096	1	-b	13.2
oraovm01	1	2048	1	-b	862.1

To open a console for the new virtual machine:

[root@oraovs01 /]# xm console oraoem01

Now you can login as root (and password oracle, as set in the kickstart file).

```
[root@oraovs01::/root]# xm console oraoem01
Enterprise Linux Enterprise Linux Server release 5.5 (Carthage)
Kernel 2.6.18-194.el5xen on an x86_64
oraoem01 login: root
Password:
Last login: Wed Jan 26 19:51:02 on xvc0
aliases:cat: /etc/oratab: No such file or directory
[root@oraoem01::/root]#
```

I really like the command line wrapper *rlwrap*. With this tool it is possible to track back previous commands in command line tools like sqlplus, rman and so on. Download rlwrap from here: <u>rlwrap</u>.

First mount the software for installation. I use my Oracle VM Machine as a software repository.

## 2. OS Requirements:

There are some requirements to meet when preparing OEL 5.5 to run the database and OEM software correctly.

These requirements are already in place, because we installed the oracle-validated rpm package and specified other needed packaged in the kickstart file, which makes all the preparations for us. But I will quickly discuss the requirements for the case you don't want to install using the kickstart file or the oracle-validated rpm.

Check the existence of the following lines in file /etc/sysctl.conf:

```
/etc/sysctl.conf:
kernel.shmmni = 4096
kernel.sem = 250 32000 100 128
fs.file-max = 6815744
fs.aio-max-nr = 3145728
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
```

Check the existence of the following lines in file /etc/security/limits.conf:

```
/etc/security/limits.conf:
oracle soft nofile 131072
oracle hard nofile 131072
oracle soft nproc 131072
oracle hard nproc 131072
oracle soft core unlimited
oracle hard core unlimited
oracle soft memlock 50000000
oracle hard memlock 50000000
```

Check the existence of the following lines in file /etc/profile.d/oracle\_profile.sh:

```
/etc/profile.d/oracle_profile.sh:
if [ $USER = "oracle" ]; then
    if [ $SHELL = "/bin/ksh" ]; then
        ulimit -u 16384
        ulimit -n 65536
    else
        ulimit -u 16384 -n 65536
    fi
fi
```

Check if the following OS packages are installed:

```
root@oraovm01::/root
$ rpm -aq binutils compat-db compat-libstdc++-296 gcc glibc glibc-common libaio
libstdc++ libstdc++-devel make rng-utils setarch sysstat
glibc-2.5-49
glibc-2.5-49
libstdc++-4.1.2-48.e15
gcc-4.1.2-48.e15
gcc-4.1.2-48.e15
glibc-common-2.5-49
binutils-2.17.50.0.6-14.e15
libaio-0.3.106-5
setarch-2.0-1.1
compat-libstdc++-296-2.96-138
libstdc++-4.1.2-48.e15
```

make-3.81-3.el5 compat-db-4.2.52-5.1 libaio-0.3.106-5 libstdc++-devel-4.1.2-48.el5 rng-utils-2.0-1.14.1.fc6

## 3. Install Oracle 11gR2 RDBMS software

We are now ready to continue with the installation of the Oracle 11g RDBMS software so we can create a repository database. We will use Oracle RDBMS version 11.2.0.2. The software can be downloaded from <u>support.oracle.com</u>. The patchset number for 11.2.0.2 is 10098816.

After downloading the RDBMS software, copy the software to the server, I use WinSCP for this. When the software id copied to your server unzip it:

```
oracle@oraoem01::/software/Database/11.2.0.2
$ unzip p10098816_112020_Linux-x86-64_1of7.zip
$ unzip p10098816_112020_Linux-x86-64_2of7.zip
```

To install the RDBMS software you have to start a X-server like Reflexion or, what I use, Xming.

Start a telnet session and login as user oracle. Oracle will be the software owner.

```
[oracle@oraoem01::/home/oracle]# cd /software/Database/11.2.0.2/database
```

Set the DISPLAY variable and then start the installer:

```
[oracle@oraoem01::/home/oracle]# export DISPLAY=192.168.0.128:0.0
[oracle@oraoem01::/home/oracle]# ./runInstaller
```

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

#### Action:

Deselect I wish to receive security updates via My Oracle Support and click Next.



Confirm by clicking Yes.

Download Software Update		
<u>Configure Security Updates</u>	Download software updates for this installation. Software updates include patch updates available after initial release that are important for completing a successful installation. They may consist of updates to	
Download Software Updates	the installer system requirement checks, patchset updates (PSUs), and other patches. Be aware that may not include all patch undates to the software	
Apply Software Updates		
Installation Option	Select one of the following options:	
Grid Installation Options	Use My Oracle Support credentials for download	
install Type	My Oracle Support <u>u</u> ser name:	
C Typical Installation	My Oracle Support password:	
Prerequisite Checks	Provy Settings Test Connection	
Summary		
Install Product	○ Use pre- <u>d</u> ownloaded software updates	
- Finish	Location: Browse	
Help	<back next=""> Install Cance</back>	

#### Action:

Select Skip software updates and click Next.



Select Install database software only and click Next.

🗙 Oracle Database 11g Release 2 Installer - Installing database - Step 4 of 10				
Grid Installation Options				
<ul> <li>Configure Security Updates</li> </ul>	Select the type of database installation you want to perform.			
Download Software Updates	<ul> <li>Single instance database installation</li> </ul>			
Installation Option	Oracle Real Application Clusters database installation			
Grid Installation Options	Oracle RAC One Node database installation			
🗼 Install Type				
Y Typical Installation				
Prerequisite Checks				
Summary				
Install Product     Tinich				
O Pinish				
Help	< Back Next > Install Cancel			

#### Action:

Select Single instance database installation and click Next.



Select the language of your choice and click Next.

🔀 Oracle Database 11g Releas	se 2 Installer - Installing database - Step 6 of 12
Select Database Edition	
Configure Security Updates Download Software Updates Installation Option Crid Installation Options Product Languages Database Edition Installation Location Operating System Groups Prerequisite Checks Summary Install Product Finish	<ul> <li>Which database edition do you want to install?</li> <li> interprise Edition (4.35C8) Oracle Database 11g Enterprise Edition 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 (4.22C8) Oracle Database 11g Standard Edition is a full-featured data management solution ideally suited to the needs of medium-sized businesses. It includes Oracle Real Application Clusters for enterprise-class availability and comes complete with its own clusterware and storage management capabilities. Standard Edition Qne (4.22C8) Oracle Database 11g Standard Edition One is a full-featured data management solution ideally suited to the needs of small and medium-sized businesses. Standard Edition Qne (4.22C8) Oracle Database 11g Standard Edition One is a full-featured data management solution ideally suited to the needs of small and medium-sized businesses. Stendard Edition ideally Standard Edition One is a full-featured data management solution ideally suited to the needs of small and medium-sized businesses. Stendard Edition ideally Standard Edition One is a full-featured data management solution ideally suited to the needs of small and medium-sized businesses. Stendard Edition ideally suited to the needs of small and medium-sized businesses. Stendard Edition ideally suited to the needs of small and medium-sized businesses. Stendard Edition ideally suited to the needs of small and medium-sized businesses.</li></ul>
Help	< <u>Back</u> <u>N</u> ext>[Install]Cancel

#### Action:

Click button Select Options ...

K Choose Components	
Component Name	
Oracle Partitioning	
Oracle OLAP	
Oracle Label Security	
Oracle Data Mining RDBMS Files	
Oracle Database Vault option	
Oracle Real Application Testing	
<u>R</u> eset Defaults <u>Select All</u> <u>D</u> e-Select All	elect All <u>O</u> K Cancel

Only select component Oracle Partitioning and click OK.



#### Action:

Specify the Oracle Base and Software Location. I use the following locations:Oracle Base/u01/app/oracleSoftware Location/u01/app/oracle/product/11.2.0.2/db\_000

Click Next.

🗙 Oracle Database 11g Release 2 Installer - Installing database - Step 8 of 12				
Create Inventory				
Configure Security Updates Download Software Updates Installation Option Grid Installation Options Product Languages Database Edition	You are starting your first installation on this host. Specify a directory for installation files. This directory is called the "inventory directory". The installer automatically sets up subdirectories for each product to contain inventory data. The subdirectory for each product typically requires 150 kilobytes of disk space. Inventory Directory // u01/app/oracle/oralnventory Browse Specify an operating system group whose members have write permission to the inventory directory (oralnventory).			
Installation Location	oralnventory <u>G</u> roup Name: dba			
Prerequisite Checks Summary Install Product Finish				
Help	<back next=""> Install Cancel</back>			

Specify the Inventory Directory and oraInventory Group Name.Inventory Directory/u01/app/oracle/oraInventoryoraInventory Group Namedba

#### Click Next.

🔀 Oracle 🛛	Database 11g Release 2 Installer	
<u> </u>	[INS-32055] The Central Inventory is located in the Oracle base. Are you sure you want to continue ? <u>Y</u> es <u>No</u> <u>D</u> etails	

## Action:

Confirm by clicking **Yes**.

🔀 Oracle Database 11g Release 2 Installer - Installing database - Step 9 of 13					
Privileged Operating Syste					
Configure Security Updates Download Software Updates Installation Option Grid Installation Options Product Languages Database Edition Installation Location <u>Create Inventory</u> Operating System Groups Prerequisite Checks Summary Install Product Finish	SYSDBA and SYSOPER privileges are required to create a database using operating system (OS) authentication. Membership in OSDBA grants the SYSDBA privilege, and membership in OSOPER grants the SYSOPER privilege, which is a subset of SYSDBA privileges. Select the name of the OSDBA group to grant the SYSDBA privilege. The user account you are using to run this install must be a member of this group. Database Administrator (OSDBA) Group: dba Database Qperator (OSOPER) Group (Optional)? the second				
Help	< <u>Back</u> Next> Install Cancel				

Specify the **Priviliged Operating System Groups** for OSDBA and OSOPER. I use group **dba** as OS group for both.

🗙 Oracle Database 11g Relea	se 2 Installer - Installing database - Step 11 of 13
Summary	
Configure Security Updates Download Software Updates Installation Option Grid Installation Options Product Languages Database Edition Installation Location Create Inventory Operating System Groups Prereguisite Checks Summary Install Product Finish	Oracle Database 11g Release 2 Installer Global settings — Disk space: required 4.35 CB available 91.65 CB — Source location: /software/Database/11.2.0.2/database/install//stage/products.xml — Database edition: Enterprise Edition (Install database software only) — Oracle base: /u01/app/oracle — Software location: /u01/app/oracle/product/11.2.0.2/db_000 — Privileged Operating System Groups: dba (OSDBA), dba (OSOPER) — Inventory information — Inventory location: /u01/app/oracle/oralnventory — oralnventory group: dba
	Save Response File
Help	< <u>Back</u> <u>Mext</u> > <u>Install</u> Cancel

#### Action:

Check if all settings are correct. I you are satisfied click **Install** to start installing the RDBMS software.



Wait a while until the installation is completed.



#### Action:

Follow the instructions on the screen by executing the 2 scripts as user root.

[root@oraoem01::/root]# /u01/app/oracle/oraInventory/orainstRoot.sh
Changing permissions of /u01/app/oracle/oraInventory.
Adding read,write permissions for group.
Removing read,write,execute permissions for world.

Changing groupname of /u01/app/oracle/oraInventory to dba. The execution of the script is complete.

<pre>[root@oraoem01::/root]# /u01/app/oracle/product/11.2.0.2/db_000/root.sh Running Oracle 11g root script</pre>
The following environment variables are set as: ORACLE_OWNER= oracle ORACLE_HOME= /u01/app/oracle/product/11.2.0.2/db_000
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 script. Now product-specific root actions will be performed. Finished product-specific root actions.

After executing the scripts click **OK**.

Finish       Configure Security Updates         Download Software Updates       Installation Options         Product Languages       Database Edition         Installation Location       Create Inventory         Operating System Groups       Prerequisite Checks         Summary       Install Product         Install       Install	X Oracle Database 11g Relea	se 2 Installer - Installing database - Step 13 of 13
Configure Security Updates Download Software Updates Installation Option Crid Installation Options Product Languages Database Edition Installation Location Create Inventory Operating System Groups Prerequisite Checks Summary Install Product Finish	Finish	
Finish	Configure Security Updates Download Software Updates Installation Option Grid Installation Options Product Languages Database Edition Installation Location Create Inventory Operating System Groups Prerequisite Checks Summary Install Product	The installation of Oracle Database was successful.
	Finish	



Click Close.

## 4. Install Oracle 11gR2 RDBMS patches

I recommend downloading and installing at least the following patches:

Opatch	p6880880_112000_Linux-x86-64.zip
PSU 11.2.0.2.1	p10248523_112020_Linux-x86-64.zip

#### First refresh OPatch

```
[oracle@oraoem01::/home/oracle]# cd /software/OPatch/
[oracle@oraoem01::/home/oracle]# unzip p6880880_112000_Linux-x86-64.zip -d
/u01/app/oracle/product/11.2.0.2/db 000
Archive: p6880880 112000 Linux-x86-64.zip
extracting: /u01/app/oracle/product/11.2.0.2/db 000/OPatch/ocm/ocm.zip
.....
replace /u01/app/oracle/product/11.2.0.2/db_000/OPatch/ocm/ocm_platforms.txt? [y]es, [n]o,
[A]ll, [N]one, [r]ename: A
inflating: /u01/app/oracle/product/11.2.0.2/db_000/OPatch/ocm/ocm platforms.txt
extracting: /u01/app/oracle/product/11.2.0.2/db_000/OPatch/ocm/ocm platforms.txt
inflating: /u01/app/oracle/product/11.2.0.2/db_000/OPatch/ocm/ocm platforms.txt
inflating: /u01/app/oracle/product/11.2.0.2/db_000/OPatch/crs/log/dummy
```

Now install latest database PSU

```
[oracle@oraoem01::/home/oracle]# cd
/software/Database/11.2.0.2/Patches/Database/11.2.0.2/10248523
[oracle@oraoem01::/home/oracle]# /u01/app/oracle/product/11.2.0.2/db_000/OPatch/opatch apply
Invoking OPatch 11.2.0.1.4
Oracle Interim Patch Installer version 11.2.0.1.4
Copyright (c) 2010, Oracle Corporation. All rights reserved.
Oracle Home : /u01/app/oracle/product/11.2.0.2/db_000
Central Inventory : /u01/app/oracle/oraInventory
                : /etc/oraInst.loc
  from
OPatch version
                 : 11.2.0.1.4
             : 11.2.0.2.0
: /u01/app/oracle/product/11.2.0.2/db_000/oui
OUI version
OUI location
Log file location : /u01/app/oracle/product/11.2.0.2/db 000/cfgtoollogs/opatch/opatch2011-01-
28 09-59-31AM.log
Patch history file:
/u01/app/oracle/product/11.2.0.2/db 000/cfgtoollogs/opatch/opatch history.txt
ApplySession applying interim patch '10248523' to OH '/u01/app/oracle/product/11.2.0.2/db 000'
Running prerequisite checks ...
Provide your email address to be informed of security issues, install and
initiate Oracle Configuration Manager. Easier for you if you use your My
Oracle Support Email address/User Name.
Visit http://www.oracle.com/support/policies.html for details.
Email address/User Name:
You have not provided an email address for notification of security issues.
Do you wish to remain uninformed of security issues ([Y]es, [N]o) [N]: Y
OPatch detected non-cluster Oracle Home from the inventory and will patch the local system
only.
Please shutdown Oracle instances running out of this ORACLE HOME on the local system.
(Oracle Home = '/u01/app/oracle/product/11.2.0.2/db 000')
Is the local system ready for patching? [y|n]
У
User Responded with: Y
```

Backing up files and inventory (not for auto-rollback) for the Oracle Home Backing up files affected by the patch '10248523' for restore. This might take a while... Backing up files affected by the patch '10248523' for rollback. This might take a while... Patching component oracle.rdbms.rsf, 11.2.0.2.0... Updating archive file "/u01/app/oracle/product/11.2.0.2/db\_000/lib/libgeneric11.a" with "lib/libgeneric11.a/kgl2.o" Copying file to "/u01/app/oracle/product/11.2.0.2/db 000/rdbms/mesg/oraus.msb" Copying file to "/u01/app/oracle/product/11.2.0.2/db 000/rdbms/mesg/oraus.msg" Patching component oracle.rdbms, 11.2.0.2.0... Updating archive file "/u01/app/oracle/product/11.2.0.2/db 000/lib/libserver11.a" with "lib/libserver11.a/kfc.o" Updating archive file "/u01/app/oracle/product/11.2.0.2/db 000/lib/libasmclntsh11.a" with "lib/libasmclntsh11.a/kgfdputl.o" Copying file to "/u01/app/oracle/product/11.2.0.2/db 000/rdbms/admin/bundledata PSU.xml" Copying file to "/u01/app/oracle/product/11.2.0.2/db\_000/psu/11.2.0.2.1/catpsu.sql" Copying file to "/u01/app/oracle/product/11.2.0.2/db\_000/psu/11.2.0.2.1/catpsu\_rollback.sql" Running make for target client sharedlib Running make for target client sharedlib Running make for target ioracle ApplySession adding interim patch '10248523' to inventory Verifying the update... Inventory check OK: Patch ID 10248523 is registered in Oracle Home inventory with proper metadata. Files check OK: Files from Patch ID 10248523 are present in Oracle Home. The local system has been patched and can be restarted. OPatch succeeded.

## 5. Create OEM Repository database

Now we can create a database for the OEM repository. To create the OEM repository database we will use DBCA utility.

Set the DISPLAY variable and then start DBCA:

```
[oracle@oraoem01::/home/oracle]# export DISPLAY=192.168.0.128:0.0
[oracle@oraoem01::/home/oracle]# cd /u01/app/oracle/product/11.2.0.2/db_000/bin
[oracle@oraoem01::/home/oracle]# ./dbca
```



Action: Click Next.

Database Configuration	Assistant, Step 1 of 12 : Operations
	Select the operation that you want to perform:
	@ Create a Database
	O Configure Database Options
	O Delete a Database
	C Manage Templates
	ASM configuration operations must be performed using Automatic Storage Management Configuration Assistant (ASMCA) from Oracle Grid Infrastructure home.
Cancel Help	( ∉Back <u>N</u> ext ≫)

#### Action: Select Create a Database and click Next.

Database Configuration	Assistant,	Step 2 of 12 : Database Templates	
	Template new datal only wher cannot be	s that include datafiles contain pre-created databases. They base in minutes, as opposed to an hour or more. Use templat i necessary, such as when you need to change attributes like b e altered after database creation.	allow you to create a es without datafiles plock size, which
	Select	Template	Includes Datafiles
	9	General Purpose or Transaction Processing	Yes
	0	Custom Database	No
1 Martinadamian 1 Martinadamian	0	Data Warehouse	Yes
And			
			Show Details
		Sex Nex	<u>t »</u> )

## Action:

Select the template General Purpose or Transaction Processing and click Next.

Database Configuration	Assistant, Step 3 of 12 :	Database Identification
	An Oracle database is un "name.domain". Global Database Name: A database is referenced any other instance on this	iquely identified by a Global Database Name, typically of the form OEMREP I by at least one Oracle instance which is uniquely identified from s computer by an Oracle System Identifier (SID).
	SID:	OEMREP
Cancel Help		🔇 Back Next >>

Specify the **Global Database Name** and **SID** for the OEM repository database. Click **Next**.

Database Configuration As	ssistant, Step 4 of 12 : Ma	anagement Options
ſ	Enterprise Manager	Automatic Maintenance Tasks
	Configure Enterprise Ma	inager
	C Register with Grid Cor Management Service	troi for centralizeo management No Agents Found
	Configure Database C	ontrol for local management
	Enable Daily Disk Ba Backup Start Time:	ckup to Recovery Area
	OS Username: OS Password:	
Cancel Help		🔇 Back Next >>

#### Action:

Because this will be our OEM repository database we don't need dbconsole. Unfortunately this doesn't prevent the installation of even just a small part of some sysman object. I a later step we will remove these object.

Deselect Configure Enterprise Manager and click Next.

	🔿 Use Different Admi	nistrative Passwords		
	User Name	Password	Confirm Password	
	SYS			
	SYSTEM			
	Confirm Password:	****		
K				

Set the **Database Credentials**. I use the same password for the SYS and SYSTEM accounts. Click **Next**.

Database Configuration A	Assistant, Step 6 of 12 : Da	atabase File Locations 📃 🗖 💌
	Specify storage type and loc Storage Type: Storage Locations: C Use Database File Locat C Use Common Location f Database Files Location: Use Oracle-Managed Fi Database Area: Multiplex Redo Logs a If you want to specif options except Orac each file location. If the names for database	ations for database files.         File System         tions from Template         or All Database Files
Cancel Help		🔇 Back 🛛 Next 📎 🔤 Einish

#### Action:

If you recall I have specified multiple disks in the kickstart file and the virt-install command. One of these files is used to create a /u02 filesystem. On this filesystem I want to store my database files. To store the files on this filesystem select **Use Oracle-Managed Files**. Specify the **Database Area** as /u02/oradata.

Specify the **Database Area** as /u02/oradata. Click Next.

Database Configuration A	ssistant, Step 7 of 12 : Recovery	y Configuration	
Hungkanin Hungkan Hung	Choose the recovery options for the ✓ Specify Fast Recovery Area This is used as the default for a also required for automatic disl recommends that the database disks for data protection and p Fast Recovery Area: Fast Recovery Area Size: ✓ Enable Archiving	e database: all disk based backup and recovery operations, and is k based backup using Enterprise Manager. Oracle files and recovery files be located on physically different erformance. /u02/fast_recovery_area Browse) 4032 Browse) M Bytes * Edit Archive Mode Parameters)	t
		File Location Variables	2
Cancel Help		Sack Next ≫ Einish	D

Specify the **Fast Recovery Area** as **/u02/fast\_recovery\_area**.

Select **Enable Archiving** if you want to enable archiving (useful if you want to create online backups).

Click Next.

Database Configuration A	ssistant, Step 8 of 12 : Database Content	
	Sample Schemas Custom Scripts Sample Schemas illustrate the use of a layered approach to comp by some demonstration programs. Installing this will give you the your database: Human Resources, Order Entry, Online Catalog, F Information Exchange, Sales History. It will also create a tablespa The tablespace will be about 130 MB. Specify whether or not to add the Sample Schemas to your datab Sample Schemas	plexity, and are used following schemas in roduct Media, ce called EXAMPLE. ase.
Cancel Help	G Back	Next >> Einish

#### Action:

No sample schemas or custom scripts are needed. Click **Next**.

Database Configuration A	ssistant, Step 9 of 11 : Initi	alization Parame	eters 📃	
	Memory Siz	ing Char	acter Sets Connection Mode	
	Typical			
manufacture E	Memory Size (SGA and F	PGA): 512 MB		
	Percentage:	13 %	250 MB	4096 MB
	Use Automatic Memor	y Management	Show Memory Distribution	
	O Custom			
	Memory Management	Automatic Shar	ed Memory Management 🚽	
	SGA Size:	1228	M Bytes 👻	
	PGA Size:	409	M Bytes 👻	
	Total Memory for Oracle	: 1638 M Bytes		
	All Initialization Parameters.	.)		
Cancel Help			🔇 Back Next 📎	Einish

Specify the following memory settings:Memory Size (SGA and PGA)512MBSelect Automatic Memory ManagementClick tab Character Sets.

Database Configuration A	Assistant, Step 9 of 11 : Initialization Parameters
	Memory Sizing Character Sets Connection Mode
	OUse 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.
	C Choose from the list of character sets Database Character Set: AL32UTF8 - Unicode UTF-8 Universal character set
	Show recommended character sets only
	Default Language: American v
	Default Territory.         United States           All Initialization Parameters         •
Cancel Help	( Back Next > Einish

### Action:

As **Database Character Set** select **Use Unicode (AL32UTF8)**. As **National Character Set** select **UTF8**. Click **Next**.

Database Configuration A	ssistant, Step 10 of 11 : Database Storage
Database Configuration A	<ul> <li>Sustant, Step 10 of 11: Database Storage</li> <li>Database Storage</li> <li>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: <ul> <li>Control files</li> <li>Tablespaces</li> <li>Datafiles</li> <li>Rollback Segments</li> <li>Redo Log Groups</li> </ul> </li> <li>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.</li> <li>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: <ul> <li>Destination of the datafiles</li> <li>Control files or log groups.</li> </ul> </li> <li>For more information, refer to the Oracle Database Storage Administrator's Guide.</li> </ul>
Create Delete	File Location Variables)
Cancel Help	🔇 Back Next 📎 Einish

No changes are made to the default Database Storage. Click **Next**.

Database Configuration Ass	sistant, Step 11 of 11 : Creation Options	
Second seco	elect the database creation options:  Create Database Save as a Database Template Name: Description:  CGenerate Database Creation Scripts Destination Directory:  /u01/app/oracle/admin/OEMREP/scripts	Browse
Cancel Help	🔇 Васк Пех	t >) <u>Einish</u>

### Action:

I'm always curious about the scripts generated by the dbca utility. So I select **Generate Database Creation Scripts**.

To start creating the database click **Finish**.

X Confirmation	
The following operations will be performed: A database called "OEMREP" will be created. Database creation scripts will be stored in "/u01/app/oracle/admin/OEMRE	P/scripts".
Database Details:	
Create Database – Summary	
Database Configuration Summary	
Global Database Name: OEMREP	
Database Configuration Type: Single Instance	
SID: OEMREP	
Management Option Type: None	
Storage Type: File System	
Memory Configuration Type: Automatic Memory Management	
Database Configuration Details	
Database Components	
Component Selected	
Oracle JVM true	
Oracle Text true	
Oracle XML DB true	
Oracla Multimadia trua	
(	Save as an HTML file)
OK Cancel Help	

View the Database Configuration Summary. If the configuration is correct click **OK**.

🔀 Database	Configuration Assistant 📃 🗖 🗮
	The generation of the script "/u01/app/oracle/admin/OEMREP/scripts" is successful.
	ОК

### Action:

The scripts are generated first. Click **OK** to continue creating the database.



Wait while the database is being created.



Action: The repository database is now created. Click Exit

## 5.1. Loading Modified SQL Files into the Database

In chapter 4 Install Oracle 11gR2 RDBMS patches we installed the latest PSU. To load the modified SQL files in the database follow the next steps:

```
oracle@oraoem01::/home/oracle
$ . oraenv
ORACLE_SID = [oracle] ? OEMREP
ORACLE_HOME = [/home/oracle] ? /u01/app/oracle/product/11.2.0.2/db_000
The Oracle base for ORACLE_HOME=/u01/app/oracle/product/11.2.0.2/db_000 is
/u01/app/oracle
[oracle@oraoem01::/home/oracle]# cd $ORACLE_HOME/rdbms/admin/
[oracle@oraoem01::/home/oracle]# sqlplus / as sysdba
SQL*Plus: Release 11.2.0.2.0 Production on Sat Jan 29 20:29:21 2011
Copyright (c) 1982, 2010, Oracle. All rights reserved.
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.2.0 - 64bit Production
With the Partitioning option
SQL> @catbundle psu apply
SQL> exit
```

## 6. Listener and Local Net Service Name configuration

To be able to connect to the repository database using SQL\*Net a listener and the local name resolving must be configured. The easiest way to do this is by using net NETCA utility.

Set the DISPLAY variable and then start DBCA:

```
[oracle@oraoem01::/home/oracle]# export DISPLAY=192.168.0.128:0.0
[oracle@oraoem01::/home/oracle]# cd /u01/app/oracle/product/11.2.0.2/db_000/bin
[oracle@oraoem01::/home/oracle]# ./netca
```

X Oracle Net Configuration As	sistant: Welcome
	Welcome to the Oracle Net Configuration Assistant. This tool will take you through the common configuration steps, listed below. Choose the configuration you would like to do: © Listener configuration © Naming Methods configuration © Local Net Service Name configuration © Directory Usage Configuration
Cancel Help	Seck Vext >>

#### Action:

Select Listener configuration and click Next.



#### Action: Click Next.

X Oracle Net Configuration Ass	istant: 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: LISTENER
Cancel Help	<u> ⊗</u> Back Next ≫

### Action:

Specify the Listener name. I use the default name LISTENER. Click 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 Selected Protocols	
Cancel Help	) <u>&amp; Back Next &gt;</u>	

Select **TCP** as protocol for the listener and click **Next**.

X 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 C Use another port number: 1521
Cancel Help	S Back Next S

#### Action:

I use the **standard port number** of **1521** for the listener. Click **Next**.

X Oracle Net Configuration	Assistant: Listener Configuration, More Li 💶 💷 🗮
	Would you like to configure another listener? No Yes
Cancel Help	S Back Next S

Select No and click Next.

X Oracle Net Configuration As	ssistant: Listener Configuration Done 📃 🗖 🗮 🏹
Lis	tener configuration complete!
Cancel Help	<u> </u>

Action: Click Next.



Select Local Net Service Name configuration and click Next.

🗙 Oracle Net Configuration Assistant: Net Service Name Configuration 🗔 💷 🗮 🗮	
	To access an Oracle database, or other service, across the network you use a net service name. The Oracle Net Configuration Assistant allows you to work with net service names resolved using local naming.
	Select what you want to do:
,	Add
<b>e</b> 1	C Reconfigure
	C Delete
	C Rename
	OTest
Cancel Help	) ( <u> Back Next »</u> )

Action: Click Next.

🗙 Oracle Net Configuration Assistant: Net Service Name Configuratio 😑 💷 🗾	
	Each Oracle database or service has a service name. An Oracle database's service name is normally its global database name. Enter the service name of the database or other service you want to access.
	Service Name: OEMREP
Cancel Help	) <u>S</u> ack <u>N</u> ext S

Specify the Service Name as OEMREP. Click Next.

X Oracle Net Configuration Assistant: Net Service Name Configuratio 😑 💷 🔀	
	To communicate with the database across a network, a network protocol is used. Select the protocol used for the database you want to access. TCP TCPS IPC
Cancel Help	) ( <u>3 Back Next »</u> )

## Action:

Specify **TCP** as network protocol. Click **Next**.
X Oracle Net Configuration Assistant: Net Service Name Configuratio 🗖 🗖 🗮 🗙			
To communicate with the database using the TCP/IP protocol, the database computer's host name is required. Enter the host name for the computer where the database is located.			
	Host name:	oraoem01	
	A TCP/IP port number is also standard port number should	required. In most cases the be used.	
	• Use the standard port number of 1521		
	C Use another port number:	1521	
Cancel Help	(3	Back Next >	

Specify the **Host name** where the database is running. I this case it is a local database running on the host **oraoem01**. Use the **standard port number** of **1521** for the TCP/IP communication. Click **Next**.

🗙 Oracle Net Configuration Assistant: Net Service Name Configuratio 💷 💷 🗾		
	You can verify that an Oracle database can be reached, using the information provided, by performing a connection test. Would you like to test that a connection can be made to the database? © No, do not test Yes, perform a test	
Cancel Help		

### Action:

To perform a quick test to check if the net service if configured correctly select **Yes, perform a test**. Click **Next**.



The netca utility uses the default password of user system the perform a check. If you specified another password the check will fail.

Click **Change Login** to change the login credentials.

X Chang X
Change Login
Username: system
Password: ********
OK Cancel

### Action:

Specify the correct credentials you specified when creating the database. Click **OK**.



Now the test succeeded. Click **Next**.

X Oracle Net Configuration Assistant: Net Service Name Configuratio 💻 💷 🗮 🏹			
	Enter a name for this net service name. The Oracle Net Configuration Assistant has defaulted the net service name to be the same as the service name you entered earlier. Net Service Name: OEMREP		
Cancel Help	🔇 Back Next >>		

## Action:

Specify **OEMREP** ad the **Net Service Name** and click **Next**.

🔀 Oracle Net Configuration Assistant: Net Service Name Configuratio 📼 💷 🗮 🌉		
	Would you like to configure another net service name? No Yes	
Cancel Help	<u> </u>	

Select No and click Next.

X Oracle Net Configuration Assistant: Net Service Name Configuratio		
	Net service name Configuration Complete!	
Cancel Help	S Back Next S	

# Action:

The net service name configuration is now finished. Click **Next**.



#### Action: Click Finish.

The previous actions resulted in the creation of 2 files in the \$TNS\_ADMIN directory, the listener.ora and tnsnames.ora:

```
[oracle@oraoem01::/home/oracle]# cat $TNS_ADMIN/listener.ora
# listener.ora Network Configuration File:
/u01/app/oracle/admin/network/admin/listener.ora
# Generated by Oracle configuration tools.
LISTENER =
  (DESCRIPTION_LIST =
    (ADDRESS = (PROTOCOL = TCP)(HOST = oraoem01)(PORT = 1521))
    (ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))
  )
  )
```

ADR\_BASE\_LISTENER = /u01/app/oracle

```
[oracle@oraoem01::/home/oracle]# cat $TNS_ADMIN/tnsnames.ora
# tnsnames.ora Network Configuration File:
/u01/app/oracle/admin/network/admin/tnsnames.ora
# Generated by Oracle configuration tools.
OEMREP =
  (DESCRIPTION =
    (ADDRESS_LIST =
        (ADDRESS = (PROTOCOL = TCP)(HOST = oraoem01)(PORT = 1521))
    )
    (CONNECT_DATA =
        (SERVICE_NAME = OEMREP)
    )
}
```

Check is the listener is created successfully and that the databases is registered at the listener:

```
[oracle@oracem01::/home/oracle]# export
ORACLE HOME=/u01/app/oracle/product/11.2.0.2/db 000
[oracle@oraoem01::/home/oracle]# ./lsnrctl status
LSNRCTL for Linux: Version 11.2.0.2.0 - Production on 29-JAN-2011 20:22:42
Copyright (c) 1991, 2010, Oracle. All rights reserved.
Connecting to (DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)(HOST=oraoem01)(PORT=1521)))
STATUS of the LISTENER
    ------
Alias
                          LISTENER
Version
                          TNSLSNR for Linux: Version 11.2.0.2.0 - Production
Start Date
                          29-JAN-2011 20:18:19
                          0 days 0 hr. 4 min. 23 sec
Uptime
Trace Level
                          off
                          ON: Local OS Authentication
Security
SNMP
                          OFF
Listener Parameter File /u01/app/oracle/admin/network/admin/listener.ora
Listener Log File
/u01/app/oracle/diag/tnslsnr/oraoem01/listener/alert/log.xml
Listening Endpoints Summary...
  (DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)(HOST=oraoem01)(PORT=1521)))
  (DESCRIPTION=(ADDRESS=(PROTOCOL=ipc)(KEY=EXTPROC1521)))
Services Summary...
Service "OEMREP" has 1 instance(s).
Instance "OEMREP", status READY, has 1 handler(s) for this service...
Service "OEMREPXDB" has 1 instance(s).
 Instance "OEMREP", status READY, has 1 handler(s) for this service...
The command completed successfully
```

This looks good!

Let's try to connect to the database using the Net Service name we have just created:

```
oracle@oracem01::/home/oracle
$ . oraenv
ORACLE_SID = [oracle] ? OEMREP
ORACLE HOME = [/home/oracle] ? /u01/app/oracle/product/11.2.0.2/db 000
The Oracle base for ORACLE HOME=/u01/app/oracle/product/11.2.0.2/db 000 is
/u01/app/oracle
[oracle@oraoem01::/home/oracle]# sqlplus system@oemrep
SQL*Plus: Release 11.2.0.2.0 Production on Fri Jan 28 11:27:59 2011
Copyright (c) 1982, 2010, Oracle. All rights reserved.
Enter password:
Connected to:
Oracle Database 11g Enterprise Edition Release 11.2.0.2.0 - 64bit Production
With the Partitioning option
SOL> exit
Disconnected from Oracle Database 11g Enterprise Edition Release 11.2.0.2.0 - 64bit
Production
With the Partitioning option
```

This looks great! We can now continue with installing Oracle Enterprise Manager Grid Control and its components.

# 7. Database requirements

No that the database is created there are still some requirements to meet for the database before we can use this database to create the OEM repository in it.

Check that the UNDO- and TEMP tablespaces are autoextensible in the database. It is recommended to start with a UNDO tablespace of at least 256MB.

```
SQL> select tablespace name, file name, bytes/1024/1024 as SIZE MB, autoextensible
from dba data files
union
select tablespace name, file name, bytes/1024/1024 as SIZE MB, autoextensible from
dba temp files;
TABLESPACE NAME FILE NAME
                                                                       SIZE MB
                                                                                 AUTOEXTEN
  _____ ___
                                       _____
                                                                       -----
         /u02/oradata/OEMREP/datafile/o1 mf sysaux 6n52xo2k .dbf
                                                                                  510 YES
SYSAUX
              /u02/oradata/OEMREP/datafile/o1 mf system 6n52xo1v .dbf
SYSTEM
                                                                                  700 YES
              /u02/oradata/OEMREP/datafile/o1 mf temp 6n530dz0 .tmp
TEMP
                                                                                   29 YES
UNDOTBS1
              /u02/oradata/OEMREP/datafile/o1_mf_undotbs1_6n52xo4k_.dbf
/u02/oradata/OEMREP/datafile/o1_mf_users_6n52xo62_.dbf
                                                                                  128 YES
USERS
                                                                                    5 YES
```

All datafiles are autoextensible but the datafile of the undo tablespace is too small. Resize this datafile:

```
SQL> alter database datafile
'/u02/oradata/OEMREP/datafile/o1_mf_undotbs1_6n52xo4k_.dbf' resize 256M;
```

There are also some database parameters to be set:

```
SQL> alter system set job_queue_processes=30 scope=spfile sid='*';
SQL> alter system set session_cached_cursors=200 scope=spfile sid='*';
SQL> alter system set log_buffer=10485760 scope=spfile sid='*';
SQL> alter system set processes=500 scope=spfile sid='*';
SQL> alter system set nls_length_semantics=BYTE scope=spfile sid='*';
```

The databases must now be restarted to activate the modified parameters:

```
SQL> shutdown immediate
Database closed.
Database dismounted.
ORACLE instance shut down.
SQL> startup
ORACLE instance started.
Total System Global Area 534462464 bytes
Variable Size
                          2228200 bytes
                        364904472 bytes
Database Buffers
                       155189248 bytes
Redo Buffers
                         12140544 bytes
Database mounted.
Database opened.
SQL> exit
```

Although we explicitly specified NOT to configure the database with Enterprise Manager (which results in the installation of dbconsole) this doesn't prevent the installation of even just a small part of some sysman object. Before we can use this databases as a OEM repository database we have to remove these objects.

```
[oracle@oraoem01::/home/oracle]# cd /u01/app/oracle/product/11.2.0.2/db_000/bin
[oracle@oraoem01::/home/oracle]# ./emca -deconfig dbcontrol db -repos drop
STARTED EMCA at Jan 28, 2011 11:46:04 AM
```

EM Configuration Assistant, Version 11.2.0.0.2 Production Copyright (c) 2003, 2005, Oracle. All rights reserved. Enter the following information: Database SID: OEMREP Listener port number: 1521 Password for SYS user: xxxx Password for SYSMAN user: xxxx WARNING : While repository is dropped the database will be put in quiesce mode. Do you wish to continue? [yes(Y)/no(N)]: y Jan 28, 2011 11:46:30 AM oracle.sysman.emcp.EMConfig perform INFO: This operation is being logged at /u01/app/oracle/cfgtoollogs/emca/OEMREP/emca 2011 01 28 11 46 04.log. Jan 28, 2011 11:46:31 AM oracle.sysman.emcp.util.GeneralUtil initSQLEngineLoacly WARNING: ORA-28000: the account is locked Jan 28, 2011 11:46:31 AM oracle.sysman.emcp.ParamsManager checkListenerStatusForDBControl WARNING: Error initializing SQL connection. SQL operations cannot be performed Jan 28, 2011 11:46:31 AM oracle.sysman.emcp.EMDBPreConfig performDeconfiguration WARNING: EM is not configured for this database. No EM-specific actions can be performed. Some of the possible reasons may be: 1) EM is configured with different hostname then physical host. Set environment variable ORACLE HOSTNAME = < hostname > and re-run EMCA script 2) ORACLE HOSTNAME is set. Unset it and re-run EMCA script Jan 28, 2011 11:46:31 AM oracle.sysman.emcp.EMReposConfig invoke INFO: Dropping the EM repository (this may take a while) ... Jan 28, 2011 11:47:34 AM oracle.sysman.emcp.EMReposConfig invoke INFO: Repository successfully dropped Enterprise Manager configuration completed successfully FINISHED EMCA at Jan 28, 2011 11:47:34 AM

# 8. Automating Database/Listener Startup and Shutdown

Automating database startup and shutdown can be done by using the *dbstart* and *dbshut* scripts. These scripts start/stop database available in the */etc/oratab*.

Once the instance is created, edit the /etc/oratab file setting the restart flag for each instance to 'Y':

OEMREP:/u01/app/oracle/product/11.2.0.2/db\_000:Y

Now, as OS user root, create a file called /etc/init.d/dbora with the following contents:

```
#!/bin/sh
# chkconfig: 345 80 20
#
 description: Oracle auto start-stop script.
#
# Change the value of ORACLE HOME to specify the correct Oracle home
# directory for your installation.
ORACLE HOME=/u01/app/oracle/product/11.2.0.2/db 000
# Change the value of ORACLE to the login name of the
# oracle owner at your site.
#
ORA OWNER=oracle
PATH=${PATH}:$ORACLE HOME/bin
HOST=`hostname`
PLATFORM=`uname`
export ORACLE HOME PATH
#
case $1 in
'start')
        su - $ORA OWNER -c "$ORACLE HOME/bin/dbstart $ORACLE HOME"
        ;;
'stop')
        su - $ORA OWNER -c "$ORACLE HOME/bin/dbshut $ORACLE HOME"
        rm -f touch /var/lock/subsys/dbora
        ;;
*)
        echo "usage: $0 {start|stop}"
        exit
        ;;
esac
#
exit
```

Change the permissions of the /etc/init.d/dbora file:

[root@oraoem01::/root]# chgrp dba /etc/init.d/dbora [root@oraoem01::/root]# chmod 750 /etc/init.d/dbora

Add a new service to start/stop the database automatically:

[root@oraoem01::/root]# chkconfig --add dbora

Check if the new service is created correctly:

# 9. Installation JDK

The Java SE Development Kit 6u18 or higher for Linux x64 is required in order to install WebLogic 10.3.2 on a 64-bit Linux server.

You can download the Java SE Development Kit 6u18 for Linux x64 from here:

http://www.oracle.com/technetwork/java/javase/overview/index.html.

Once downloaded, copy the software to your server, for example with WinSCP. Copy the software to the staging directory.

Make sure the permissions are correct:

```
[root@oraoem01::/root]# cd /software/EM11/JAVA
[root@oraoem01::/software/EM11/JAVA]# chmod u+x jdk-6u18-linux-x64-rpm.bin
```

Now you can install the jdk software:

```
[root@oraoem01::/root]# cd /tmp
[root@oraoem01::/root]# /software/EM11/JAVA/jdk-6u18-linux-x64-rpm.bin
Do you agree to the above license terms? [yes or no]
ves
Unpacking...
Checksumming...
Extracting...
UnZipSFX 5.50 of 17 February 2002, by Info-ZIP (Zip-Bugs@lists.wku.edu).
 inflating: jdk-6u18-linux-amd64.rpm
 inflating: sun-javadb-common-10.5.3-0.2.i386.rpm
 inflating: sun-javadb-core-10.5.3-0.2.i386.rpm
 inflating: sun-javadb-client-10.5.3-0.2.i386.rpm
 inflating: sun-javadb-demo-10.5.3-0.2.i386.rpm
 inflating: sun-javadb-docs-10.5.3-0.2.i386.rpm
 inflating: sun-javadb-javadoc-10.5.3-0.2.i386.rpm
Preparing...
                    1:jdk
                     Unpacking JAR files...
     rt.jar...
      jsse.jar..
     charsets.jar...
     tools.jar...
     localedata.jar...
     plugin.jar...
      javaws.jar...
      deploy.jar...
Installing JavaDB
                    Preparing...
 1:sun-javadb-common
                    2:sun-javadb-core
                                                       33%1
  3:sun-javadb-client
                    ****
                                                      Γ
                                                       50%1
  4:sun-javadb-demo
                    5:sun-javadb-docs
                    6:sun-javadb-javadoc
Java(TM) SE Development Kit 6 successfully installed.
Product Registration is FREE and includes many benefits:
* Notification of new versions, patches, and updates
* Special offers on Sun products, services and training
* Access to early releases and documentation
Product and system data will be collected. If your configuration
supports a browser, the Sun Product Registration form for
```

```
the JDK will be presented. If you do not register, none of
this information will be saved. You may also register your
JDK later by opening the register.html file (located in
the JDK installation directory) in a browser.
For more information on what data Registration collects and
how it is managed and used, see:
http://java.sun.com/javase/registration/JDKRegistrationPrivacy.html
Press Enter to continue.....
```

Check if the RPM's are installed:

```
[root@oraoem01::/root]# rpm -qa |grep java
sun-javadb-demo-10.5.3-0.2
sun-javadb-common-10.5.3-0.2
sun-javadb-client-10.5.3-0.2
sun-javadb-docs-10.5.3-0.2
sun-javadb-core-10.5.3-0.2
sun-javadb-javadoc-10.5.3-0.2
```

Delete the extracted java-rpm's:

[root@oraoem01::/root]# rm -f /tmp/\*.rpm

# 10. Installation Oracle WebLogic Server 11gR1 (10.3.2)

After you have installed the necessary java components, you can install the Weblogic Server binaries. In this installation guide we use the latest certified version for OEM11.1. This is version 10.3.2. The software can be downloaded here:

# http://www.oracle.com/technetwork/middleware/weblogic/downloads/wls-main-097127.html

Note: This table includes li question, and links to Web fo use WebLogic Server w platforms, use the WebLog nstallers do not include a Please refer to the <u>Readm</u> nstalling, and configuring	Inte Sto Welcogic Server in Logic Server generic insta ith 64-bit J/M's on Linux a gic Server generic installe J/M/JDK. For instructions e for important information your Oracle Fusion Middle	ent, you may now do' nstallers that include : allers that can be use and Solaris or to use \ r listed under "Additio on using the generic n to help you get start ware software	annoau tins software. 32-bit JVMs for the plat d on any <u>supported pla</u> WLS on other supporte nal Platforms". The gen installers, <u>see this doo</u> ed downloading,	form in t <u>iform</u> . d neric <u>cument</u> .	
	Microsoft Windows (32-bit JVM)	Linux (32-bit JVM)	Solaris (32-bit JVM)	Additional Platforms (See Note Above)	More Info
Dracle WebLogic Server 11gR1 (10.3.4) + Coherence + OEPE - Package Installer	x86: 1 GB <u>File1</u>	x86: 1.1 GB <u>File1</u>			
Dracle WebLogic Server 11gR1 (10.3.4) + Coherence - Package Installer	x86: 796 MB <u>File1</u>	x86: 805 MB <u>File1</u>	SPARC: 748 MB <u>File1</u>	Generic: 1 GB <u>File1</u>	Support for HP-UX is coming soon.
Oracle WebLogic Server 11gR1 (10.3.4) ZIP Distribution	x86: 316 MB <mark>File1</mark>	x86: 316 MB <u>File1</u>		Mac OS X: 316 MB <u>File1</u>	<u>Readme</u>
Dracle WebLogic Server 11gR1 (10.3.4) Supplemental ZIP distribution	x86: 99 MB <u>File1</u>	x86: 99 MB File1		Mac OS X: 99 MB <u>File1</u>	<u>Readme</u>
More Info 🕀					
Oracle WebLogic Server 10.3.3	See all files			h. it	
Oracle WebLogic Server	See all files 🖃				
Oracle WebLogic Server 11gR1 (10.3.2) + OEPE - Package Installer	x86: 815 MB <u>File1</u>	x86: 820 MB <u>File1</u>			
Oracle WebLogic Server 11gR1 (10.3.2) + OEPE - Net Installer	x86: 39 MB <u>File1</u>	x86: 42 MB <u>File1</u>			
Oracle WebLogic Server 11gR1 (10.3.2) - Net Installer	8		SPARC: 65 MB File1	Generic: 12 MB <u>File1</u>	
Oracle WebLogic Server 11gR1 (10.3.2) - Package Installer	x86: 599 MB <u>File1</u>	x86: 604 MB <u>File1</u>	SPARC: 584 MB <u>File1</u>	Generic: 902 MB <u>File1</u>	

Notes:

- Download the 10.3.2 version of WebLogic, not the newer version 10.3.3. At this moment version 10.3.3 is not certified and does not work!
- Download the version under the "Additional Platforms" column and not the Linux 32-bit JVM.

Once downloaded, copy the software to your server, for example with WinSCP. Copy the software to the */tmp* directory. The tmp directory must have 1GB of free space for a successful installation.

Set the DISPLAY variable and then start the installer:



Action: Click Next.

Oracle Installer - WebLogic 10.3.2.0	
Choose Middleware Home Directory Specify the Middleware Home where you wish to install WebLogic 10.3.2.0.	ORACLE <sup>.</sup>
Middleware Home Type Use an existing Middleware Home  Create a new Middleware Home	
Middleware Home Directory /u01/app/oracle/product/11.1.1/middleware <u>B</u> rowse <u>R</u> eset	
E <u>x</u> it	Previous Next

Specify the **Middleware Home Directory** as /u01/app/oracle/product/11.1.1/middleware. Click Next.

🧟 Oracle Installer - WebLogic 10.3.2.0
Register for Security Updates         Provide your email address to be informed of security issues, install the product, and initiate configuration manager. <a href="http://www.oracle.com/support/policies.html">http://www.oracle.com/support/policies.html</a>
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:
Exit Previous Next

### Action:

Deselect I wish to receive security updates via My Oracle Support. Click Next.



# Click Yes.

Oracle Installer - WebLog	jic 10.3.2.0	
Register for Security Upd Provide your email address to be i and initiate configuration manage	<b>ates</b> nformed of security issues, install the product, r. <u>http://www.oracle.com/support/policies.html</u>	ORACLE
Em ail: Ez	sier for you if you use your My Oracle Support en	nail address/username.
☑ I wish to receive security ( My Oracle Support Password:	ipdates via My Oracle Support	
Exit		Previous Next

# Action:

Click 2	Next.
---------	-------

🔂 Ema	ail 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

Action: Click Yes.



Click Yes.

Oracle Installer - WebLogic 10.3.2.0	
Choose Install Type Select the type of installation you wish to perform.	ORACLE <sup>.</sup>
Typical     Install the following product(s) and component(s):	
○ Custom	
Choose software products and components to insta optional configuration.	II and perform
E <u>x</u> it	Previous Next

Action: Select Typical and click Next.

Oracle Installer - WebLogic 10.3.2.0	
JDK Selection JDK(s) chosen for use with this product installation will be i defaults if not deselected will be used in script string-subs	nstalled. Supported ORACLE
	₫ Dis <u>c</u> ard Changes
Bundled JDK:	Approximate installed size*
	All selected bundled JDK's: 0.0 KB
	Total of all selected items: 672.3 MB
	*Installer requires free disk space approximately 2x this total
Local JDK:	
☑ Sun SDK 1.6.0_18 (/usr/java/jdk1.6.0_18)	
<u>B</u> rowse	
E <u>x</u> it	Previous <u>N</u> ext

Check if the Sun SDK is located in directory /usr/java/jdk1.6.0\_18. Click Next.

Oracle Installer - WebLogic 10.3.2.0	
Choose Product Installation Directories Provide the directories where you wish to install WebLogic 10.3.2.0.	ORACLE <sup>®</sup>
	💍 Dis <u>c</u> ard Changes
Middleware Home Directory	
/u01/app/oracle/product/11.1.1/middleware	
Product Installation Directories	
The Product Home might contain shared utilities and any products or comp directories are not set. WebLogic Server:	onents for which unique
/u01/app/oracle/product/11.1.1/middleware/wiserver_10.3	<u>B</u> rowse
, E <u>≾</u> it	Previous Next

## Action:

Accept the default directory and click Next.



#### Action: Click Next.



# Action:

Wait until Weblogic Server gets installed.

🕺 Oracle Installer - WebLogic 10.	3.2.0	
Installation Complete Click the Done button to exit the installer		ORACLE
	Message Congratulations! Installation is complete.	
ORACLE'	☑ Run Quickstart	
E <u>x</u> it		Previous Done

### Action: Deselect the **Run Quickstart** option. Click **Done**.

The Weblogic Server is now installed. We will continue with installing some recommended patches for the Weblogic Server.

Remove the Weblogic binaries from the /tmp directrory:

```
oracle@oraoem01::/tmp
$ rm -f wls1032 generic.jar
```

# **11. WebLogic Server Patch Installation**

Before we can install Oracle Enterprise Manager Grid Control 11g you must first install some Weblogic patches for bugs 8990616, 9100465, and 9221722. These WebLogic patches are applied using the Smart Update Tool found in the \$BEA\_HOME/utils/bsu directory

Set the DISPLAY variable and then start the Smart Update Tool:



Action: Click OK.

🖆 DownI 🗖 🗖 🗙
Downloading Patch Client Update

Oracle Smart Update
Log in to Oracle Smart Update with your Support ID to download patches and Maintenance Packs. Work offline to just manage existing maintenance.
Support ID:
Password:
Remember this
Cancel Help Work Offline Login

Action: Click Work Offline.

Oracle Smart Update	
<u>Eile</u> <u>P</u> atches Maintenance Pack <u>s</u>	Help
Target Installation	Get Patches Manage Patches
E- B WebLogic Platform → Release: 10.3 MP2	Default The default patch profile is the active set of patches unlideted for the selected Broduct Home and
	scoped to the entire installation. To develop custom patch profiles for scoping at domain or server levels use the menu.
	Patch ID Description Product CR/BUG Category Remove
	Downloaded Patches
	Patches available to apply appear here. To apply a patch, select a destination Patch Profile on the Manage Patches tab, and click Apply. Validation is automatic. To change this directory location, open Preferences from the file menu.
	Patch ID Description Product CR/BUG Category Apply

# Action: Click tab Get Patches.

Oracle Sm	art Update 📃 🗆 🗙	
Log in with you repository. Clic	ir Support ID to access the patch ck Cancel to continue working offline.	
Support ID:	xxxx@xxxx.com	
Password:	*****	
Rememb	er this	
Cancel	Help	

# Action:

Specify you're My Oracle Support ID credentials and click Login.

Cracle	Smart Update
Please wait	while your credentials are verified with eSupport
	Cancel

j	🙆 Register for security updates
	Please provide your email address to be informed of the security issues and initiate configuration manager. <u>http://www.oracle.com/support/policies.html</u>
	Email: Easier for you if you use your My Oracle Support email address/u
	✓ I wish to receive security updates via My Oracle Support.
	My Oracle Support password:
	Continue

Deselect I wish to receive security updates via My Oracle Support.



Action: Click Yes.

Register for security updates	ſ
Please provide your email address to be informed of the security issues and initiate configuration manager. <u>http://www.oracle.com/support/policies.html</u>	
Em ail:	
Easier for you if you use your My Oracle Support email address/u	
✓ I wish to receive security updates via My Oracle Support.	
My Oracle Support password:	
Continue	

# Action: Click Continue.

Email Address Not Specified	
Δ	You have not provided an email address. Do you wish to remain uninformed of critical security issues in your configuration?
	Yes No

# Action:

# Click Yes.

	Are	you sure?	
4	Â	Do you wish to bypas: remain uninformed o	s initiation of the configuration manager and f critical security issues in your configuration?
			Yes No

# Action: Yes, I am very sure!! Click **Yes**.

Eatenes Maintenanceracity	7016					
arget Installation	Get Patches	Manage Patches				
BEA Home (/u01/app/ora)  Geographic Platform  Geographic Platform  Geographic Platform  Geographic Platform  Helease: 10.3 MP2	Logged in as:					
	These are the p maintenance lev directory.	atches currently av vel of the selected P	ailable from Supp roduct Home, and	ort, compatible I not already pro	with the installed esent in the patch	components and I download
	Patch ID	Description	Product	CR/BUG	Category	Select
	E Critical					
	- Optional	CPI IIanuary20	Webl ogic Server	10625613	Web App	
	1 R4P6	CPUlulv2010 A	WebLogic Server	BUG9412909	Security	П
	TADU	CPUJanuary20	WebLogic Server	10625676	Core	ā
	WDJ7	Mandatory Pat	WebLogic Server	9438213	Web App	
	1 Y3IR	Feb 2010 sec a	WebLogic Server	9324911	Core	
	La l					Download Selected
	Downloaded Patr	hes				
	Patches available	to apply appear he	re. To apply a pat	ch, select a des	tination Patch Pro	file on the Manage
	Patches tab, and from the file men	click Apply. Validat u.	ion is automatic.	To change this	directory location	n, open Preference
	Patch ID	Description	Product	CR/BUG	Category	Delete

Select patch WDJ7 and click Download Selected.



#### Action: Click OK.

İ	<u>a</u> — 🗆 🗙
	Downloading Patches
	Cancel

arget Installation	Cat Batches	Managa Patehog			
BEA Home (/u01/app/ora	Get Patches	Manage Patches			
E B WebLogic Platform → Release: 10.3 MP2	Logged in as:				
	These are the pa maintenance lev directory.	atches currently available from Sup rel of the selected Product Home, ar	port, compatible id not already pri	with the installed co esent in the patch do	mponents and whiload
	Patch ID	Description Product	CR/BUG	Category	Select
	🖃 Critical				
	Optional				
	FUHJ	CPUJanuary20 WebLogic Serve	r 10625613	Web App	
	1 R4P6	CPUJuly2010 A WebLogic Serve	r BUG9412909	Security	
	TADU	CPUJanuary20 WebLogic Serve	r 10625676	Core	
				1.5708	
				Do	whiload Selected
	Downloaded Patc	hes			
	Downloaded Patc Patches available Patches tab, and from the file men	hes to apply appear here. To apply a p cick Apply. Validation is automatic u.	atch, select a des . To change this	tination Patch Profile directory location, o	e on the Manage pen Preference
	Downloaded Patc Patches available Patches tab, and from the file men Patch ID	hes to apply appear here. To apply a p ick Apply. Validation is automatic u. Description Product	atch, select a des . To change this CR/BUG	tination Patch Profile directory location, o Category	e on the Manage pen Preference Delete
	Downloaded Patc Patches available Patches tab, and from the file men Patch ID 1 4D53	hes to apply appear here. To apply a p click Apply. Validation is automatic u. Description <u>Product</u> weblogic http cl WebLogic Server	atch, select a des To change this CR/BUG 9100465	tination Patch Profile directory location, o Category Web App	e on the Manage pen Preference Delete
	Downloaded Patc Patches available Patches tab, and from the file men Patch ID 1 4D53 1 NIXN	hes to apply appear here. To apply a pr to lick Apply. Validation is automatic u. Description Product weblogic http cl WebLogic Server Connecting to WebLogic Server	atch, select a des To change this <b>CR/BUG</b> 9100465 BUG8990616	tination Patch Profile directory location, o Category Web App Core	e on the Manage pen Preference Delete
	Downloaded Patc Patches available Patches tab, and from the file men Patch ID 4 053 1 NIXN WDJ7	hes to apply appear here. To apply a p ick Apply. Validation is automatic u. Description Product weblogic http cl WebLogic Server Mandatory Patc WebLogic Server	atch, select a des To change this <b>CR/BUG</b> 9100465 BUC8990616 9438213	tination Patch Profil directory location, o Category Web App Core Web App	e on the Manage pen Preference Delete

The patches have been downloaded. Click tab **Manage Patches** to continue patching.

Oracle Smart Update		_ 🗆 🗙
<u>F</u> ile <u>P</u> atches Maintenance Pack <u>s</u>	Help	
Target Installation	Get Patches       Manage Patches         Default	Home and ain or server Remove
	Downloaded Patches           Patches available to apply appear here. To apply a patch, select a destination Patch Profil Patches tab, and click Apply. Validation is automatic. To change this directory location, from the file menu.           Patch ID         Description         Product         CR/BUG         Category	e on the Manage open Preferences Apply
٩	1 4D53       weblogic http cl       WebLogic Server       9100465       Web App         1 NIXN       Connecting to       WebLogic Server       BUG8990616       Core         1 WDJ7       Mandatory Patc       WebLogic Server       9438213       Web App         1 XLXA       Jsp compiler sh       WebLogic Server       9221722       Web App	

# Action:

Click the **Apply** button next to the **WDJ7** patch.

🙆 Oracle Support Notice 📃 🗖 🗮 🗙
Temporary patches for Oracle products provided through this tool are developed by Oracle in response to issues reported when using Oracle products in certain scenarios. Oracle testing of patches is typically limited to validation that the patch addresses the specific issue reported. This scope of testing is more limited than the testing performed on product version releases and maintenance packs. Oracle only recommends the use of patches for resolving specific issues that have been encountered in the user environment, or are likely to be encountered. Oracle recommends that users perform functional testing of their environments after applying temporary patches.
🗹 Do not showthis again.
ОК

Click OK.

🙆 Oracle Smart 🗖 🗖 🗙					
Performing Validation					
No conflicts detected.					
Cancel					

Action: Click OK.

Oracle Smart Update	1.4	_ 🗆 🗙
Eile Patches Maintenance Packs	Help	
Elle Patches Maintenance Packg Logout Iarget Installation → pp/orar Preferences	Help         Get Patches       Manage Patches         Default       The default patch profile is the active set of patches validated for the selected Product scoped to the entire installation. To develop custom patch profiles for scoping at dom levels use the menu.         Patch ID       Description       Product       CR/BUG       Category         1       ADS3       weblogic http c WebLogic Server 9100465       Web App         1       NIXN       Connecting to WebLogic Server 9438213       Web App         1       NIXN       Connecting to WebLogic Server 9438213       Web App         1       XLXA       Jsp compiler sh WebLogic Server 9221722       Web App         1       XLXA       Jsp compiler sh WebLogic Server 9221722       Web App         2       Mandatory Patch WebLogic Server 9221722       Web App         2       XLXA       Jsp compiler sh WebLogic Server 9221722       Web App         2       Mandatory Patches       Patches available to apply appear here. To apply a patch, select a destination Patch Profile Patches available to apply appear here. To apply a patch, select a destination Patch Profile Patches ta, and Citck Apply. Validation is automatic. To change this directory location, from the file menu.         Patche tab. and Citck Apply. Validation is automatic. To change this directory location, from the file menu.       Patche tab       Patche tab       Catego	Home and nain or server Remove
4		

Patches have been successfully applied. You can now **exit** the patch utility.

# 12. Install Enterprise Manager Grid Control 11g

Now that de repository database is created and Weblogic is in place, we can continue with installing the Oracle Enterprise Manager Grid Control components. The software can be downloaded from here:

http://www.oracle.com/technetwork/oem/grid-control/downloads/linuxx8664soft-085949.html.

After downloading the software copy the zipfiles to your server. Unzip the files in the staging area:

```
[root@oraovs01::/software/EM11]# unzip V20515-01_1of3.zip
[root@oraovs01::/software/EM11]# unzip V20515-01_2of3.zip
[root@oraovs01::/software/EM11]# unzip V20515-01_3of3.zip
```

Set the DISPLAY variable and then start the installer as the OS user oracle:

```
[oracle@oracem01::/home/oracle]# export DISPLAY=192.168.0.128:0.0
[oracle@oracem01::/home/oracle]# cd /software/EM11
[oracle@oracem01::/software/EM11]# ./runInstaller
```



#### Action:

Deselect I wish to receive security updates via My Oracle Support. Click Next.



### Action: Click Yes.

0	Oracle Enterprise Manager (	Grid Control 11gR1 Installation - Step 2 of 13	
Ch	eck for updates		
Ÿ	My Oracle Support Details	Choose a method for installing software updates that can be a session Software updates are recommended interim patches, and install undates released by Oracle periodically.	applied during the current installation critical patch updates, prerequisite updates
	Check for updates     Select Installation Type     Check Prerequisites     Specify Install Locations     Create WebLogic Server Domai     Connect to Oracle Database     Configure Oracle Management Ser     Secure Oracle Management Ser     Customize Ports	Download and install updates from My Oracle Support My Oracle Support User name My Oracle Support Password      Install Updates from a staging location Location	ction Proxy Settings
-))	Review Install Progress Finish	⊙ <u>S</u> kip Software Updates	
•	<u>Help</u>	Installed Products	Performance, availability, and security for enterprise-wide Oracle databases <u>Back Next&gt; Install</u> Cancel

Action: Select Skip Software Updates. Click Next.



Select Install a new Enterprise Manager system. Click Next.

Oracle Enterprise Manager (	Grid Control 11gR1 Installation - Step 4 of 13	
Check Prerequisites		PRISE MANAGER <b>11</b> 8
My Oracle Support Details Check for updates Select Installation Type Check Prerequisites	The following prerequisite checks are run to ensure that your environme requirements to result in successful installation and configuration of the installation.	nt meets all the minimum products you have selected for Check Again Ignore All
Create WebLogic Server Domal Connect to Oracle Database Configure Oracle Management Secure Oracle Management Ser Customize Ports Review Install Progress Finish	Checking for the Hostname (more details)	Status Succeeded Succeeded Succeeded Succeeded Succeeded Succeeded Succeeded Succeeded Succeeded
▲ Help	Installed Products	ext >InstallCancel

Action: Click Next.



Accept the default values for the directories. Click **Next**.

Oracle Enterprise Manager (	Grid Control 11gR1 Installa	ation - Step 6 of 13	1.3	
Create WebLogic Server Don	nain			$\frac{\text{CLE}}{\text{Be manager}} 11^{g}$
My Oracle Support Details Check for updates Select Installation Type Check Prerequisites Specify Install Locations	As part of the configuration of domain details. WebLogic Domain Name WebLogic User Name	of Enterprise Manager a ne GCDomain weblogic	w WebLogic domain will	be created. Specify the
Connect to Oracle Database Configure Oracle Management Secure Oracle Management Ser Customize Ports Review Install Progress Finish	A node manager allows you t recommended for application Enterprise Manager a new no Node <u>Manager</u> User Name <u>Node Manager</u> Password	o start, shutdown, and res is with high availability red de manager instance will b nodemanager	tart WebLogic Server ins juirements. As part of ti e configured. Specify th <u>Confirm Password</u>	ettances remotely and is the configuration of the node manager details.
< <u>H</u> elp	ENTERPR Installed Products	ACLE <sup>®</sup> Ise manager <b>11</b> 8	Comprehensive d Performance, av for enterprise-wi <u> </u>	latabase management ailability, and security ide Oracle databases

## Action:

Specify the passwords for the **Weblogic Username** and the **Node Manager User Name**. Click **Next**.

Oracle Enterprise Manager	Grid Control 11gR1 Insta	allation - Step 7 of 13	
Connect to Oracle Database			
My Oracle Support Details	Specify connection details t will be created.	or the existing, certified Oracl	le database where Oracle Management Repository
<ul> <li>Check for updates</li> </ul>			
Select Installation Type	Database H <u>o</u> st Name	oraoem01	
Check Prerequisites	Port	1521	
<ul> <li>Specify Install Locations</li> </ul>	S <u>e</u> rvice/SID	OEMREP	
🖕 <u>Create WebLogic Server Domai</u>	SYS Password	•••••	
Connect to Oracle Database			
<u>Configure Oracle Management</u>			
<ul> <li>Secure Oracle Management Ser</li> </ul>			
Customize Ports			
Q Review			
<ul> <li>Install Progress</li> </ul>			
- Finish			
(		RACLE PRISE MANAGER <b>11</b> 8	Deployment lifecycle management Promote application and schema changes from test to production Integrated with My Oracle Support
Help	Installed Products	)	< <u>Back</u> Next > Install Cancel

Specify the connection details to connect to the repository database, created in a previous step.Database Host Nameoraoem01Port1521Service/SIDOEMREPSYS PasswordThe SYS password you created.Click Next.Click Next.

🖸 Oracle Enterprise Manager Grid Control 11gR1 Installation - Step 8 of 13							
Configure Oracle Management Repository							
My Oracle Support Details Check for updates Select Installation Type Check Prerequisites Specify Install Locations Create WebLogic Server Domail Connect to Oracle Database Configure Oracle Management Secure Oracle Management Ser Customize Ports Review Install Progress Finish	Configuration of Enterprise Manager used in managing your enterprise ma Manager. Specify the password for SY SYSMAN Password Configuration of Enterprise Manager Management Tablespace for targets-r Tablespace for configuration data, an data. Specify the locations for the data Management Tablespace Configuration Data Tablespace IVM Diagnostics Data Tablespace	creates SYSMAN schema that h inager and SYSMAN is the super SMAN user. Confirm Passwo creates three new tablespaces a related monitoring and metrics d JVM Diagnostics Data Tablesp files. /u02/oradata/OEMREP/dataf /u02/oradata/OEMREP/dataf	olds most of the relational data • administrator user for Enterprise ord ••••••••• Ind associated data files: data, Configuration Data ace for JVM-related monitoring ile/mgmt_abf ile/mgmt_ad4j.dbf Restore Default Data File Locations				
A		E 118 Deploym	ent lifecycle management rovisioning of entire tion stack				
Help	Installed <u>P</u> roducts	< <u>B</u> ack	Next > Install Cancel				

Specify a password for the SYSMAN repository user. Accept the defaults path and names for the repository tablespaces. Click **Next**.



### Action:

Specify an Agent Registration Password to let the agents registrate with the OMS.

Only allow secure agents to communicate with the OMS and secure access to the console. Click **Next**.

Oracle Enterprise Manager Grid Control 11gR1 Installation - Step 10 of 13							
Customize Ports							
	Ny Oracle Support Details Check for updates elect Installation Type Check Prerequisites	Configuration of the Enterprise Manager system requires the allocation of several ports to facilitate internal communication between system components as well as to provide access to the console via a browser. The table below contains the ports that will be allocated, along with the recommended port ranges, for each component. By default, the first available port in the specified port range has been chosen.					
	necify Install Locations	Component Name	Recommended Port Range	Port			
	Freate WebLogic Server Domai	Enterprise Manager Upload Http Port	4889-4898 1159 4899-4908	4889			
	onnect to Oracle Database	Enterprise Manager Central Console Http SSL Port	7799-7809	7799			
I		Node Manager Http SSL Port	7401-7500	7403			
Ύ	Configure Oracle Management	Managed Server Http Port	7201-7300	7202			
🖕 <u>s</u>	ecure Oracle Management Ser	Enterprise Manager Central Console Http Port	7788-7798	7788			
	uctomize Bosts	Oracle Management Agent Port	3872,1830-1849	3872			
Ψ ·	customize rorts	Admin Server Http SSL Port	7101-7200	7101			
🍦 E	leview	Managed Server Http SSL Port	7301-7400	7301			
	install Progress						
1			Deployment lifecycle man Rapid provisioning of enti application stack	agement re			
Щ	lp	Installed Products	< <u>Back N</u> ext > Inst	ali Cancel			

Accept the default ports. Click **Next**.



Action: Click Install.



Wait while Oracle Enterprise Manager Grid Control 11gR1 gets installed. This can take quite a while.



### Action:

Follow the instructions on the screen by executing the script as user root.

```
root@oraoem01::/root
$ /u01/app/oracle/product/11.1.1/middleware/oms11g/allroot.sh
Starting to execute allroot.sh .....
Starting to execute /u01/app/oracle/product/11.1.1/middleware/oms11g/root.sh .....
Running Oracle 11g root.sh script...
The following environment variables are set as:
    ORACLE_OWNER= oracle
    ORACLE HOME= /u01/app/oracle/product/11.1.1/middleware/oms11g
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.
Adding entry to /etc/oratab file...
Finished execution of /u01/app/oracle/product/11.1.1/middleware/oms11g/root.sh
. . . . . .
Starting to execute /u01/app/oracle/product/11.1.1/middleware/agent11g/root.sh
Running Oracle 11g root.sh script...
The following environment variables are set as:
   ORACLE OWNER= oracle
    ORACLE HOME= /u01/app/oracle/product/11.1.1/middleware/agent11g
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]: y
   Copying dbhome to /usr/local/bin ...
The file "oraenv" already exists in /usr/local/bin. Overwrite it? (y/n)
[n]: y
   Copying oraenv to /usr/local/bin ...
The file "coraenv" already exists in /usr/local/bin. Overwrite it? (y/n)
[n]: y
   Copying coraenv to /usr/local/bin ...
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.
Adding entry to /etc/oratab file...
Finished execution of /u01/app/oracle/product/11.1.1/middleware/agent11g/root.sh
. . . . . .
```

Click OK.


## Action:

Wait until some configuration assistants have done their works.



### Action:

Click **Close** to finish the installation.

Installation is now complete and Enterprise Manager Grid Control can be accessed using the following URL:

https://oraoem01:7799/em/

The Weblogic console can be accessed using the following URL:

https://oraoem01:7101/console

We will now login to the Enterprise Manager Grid Control console for the first time:



### Action: Click I Accept.

RACLE Enterprise Manager			Home Targets Deployments Alerts	Compliance Jobs Reports My Oracle Supp
				Page Refreshed Jan 29, 2011 10:10:19 PM CET
	1000	Target Search		
	View All Targets	Search All	Go)	
Iverview			_	
otal Monitored Targets 13		Security Delicy Violations		
AT Target's Satis		Critical X 12 Warning & 0 Informational i 0 New in Last 24 Hours 12 Recommended Security Patches		
		Security Recommendations My Oracle Support	Unavailable Credentials Not Set	
All Targets Alerts			Patch Recommendations are not available.	
Critical 3 2			My Oracle Support credentials are required.	
Naming A 1 Errors 16 1		Deployments Summary		
Il Targets Policy Violations		View Database Installations		
Critical 🕴 20		Database Installations /	Taxaata	Installations Batches Applied
Warning 🙆 0		Orado Database 11a 11 2 0 2 0	Targets	Instanations Factores Applied
nformational 🕕 0		orabe balabase rry rizzo.z.o	A.	621.4
I Targets Jobs		Resource Center		
ction Required Executions (last 7 days) V 0 Suspended Executions (last 7 days) V 0		Enterprise Manager Support Workbench Enterprise Manager Command Line Interface Enterprise Manager Release Notes	Oracle Techno	logy Network
yright () 1996, 3023, Oracle antior is alfillanes, Al right nearwed. Is it a registered tablement of Grant Deposition and/or to alfillanes. Oracle Enterprise: Manager - Ba	Home   Targets   Deployments   A	erts i Compliance i Jobs i Reports i My-Oracle-Support i Setup i P	references   Help   Logaut	

### Action:

Click tab **Setup** Tab, then tab **Agents**, then on the agent link oraoem01:3872. There you will see that EMREP database is not configured yet.

Castal Ma		State Destination Hilbert Completions Links Destination
Lonutol 11g	inny   Agente	Home Targets Deproyments Alerts Compliance Jobs Reports My Oracie Sup
procentinger comprision 1 menugement services and repos	mal 1 segments	
ent: bigmama:3872		
		Latest Data Conected From Larger San 29, 2011 10:22:40 PM CEL 20
Seneral		Resource Utilization
∧ Status	Up	CPU Usage (%)
1 Host	bigmama	Virtual Memory Usage (MB) Z23
Availability (%)	100.00	Regular Files Open 54
Number of Restarts (last 24 hours)	(Last 24 Hours)	Threads Created 21
Management Service	bigmama:4900	lieload
Agent to Management Service Response Time (ms)	0	Upload Metric Data
Version	11.1.0.1.0	Secure Upload Ves
Operating System Owner	/u01/app/oracle/oraclust/11.1.1/middleurace/appent11c	Last Successful Upload Jan 29, 2011 10:12:47 PM
Agent State Directory	/u01/app/oracle/product/11.1.1/middleware/agent11g	Data Pending Upload 0 MB in 0 Files
Agent Heartbeat Interval (seconds)	60	Uploaded data (KB past hour) 0.00
onitored Targets		
you want to modify target properties, press the Configure button.	Depending on the target type, you may be able to update credentials, or choose monitoring levels if n	monitoring has been defined for that target type.
		Add Database Instance
Configure Remove		
elect Name /	Туре	
CO OEMPER	and the same	
Contractory of the second seco		
Unconfigured	Database Instance	
Unconfigured     SecFarm GCDomain	Database Instance Oracle Fusion Middleware Farm	
Souries     Sectores     Sectores     Sectores	Database Instance Oracle Fusion Middleware Farm	
Lorofiyad     SecFarm GCDomain	Defabases instance Oracle Fusion Middleware Farm	
Configuration     SecForm GCDomain  derts  Metric Collection Errors	Detabase Indiance Oracle Fusion Modileverse Ferm	
Junefigue     SecFarm GCDomain  SecFarm GCDomain  Aetric Collection Errors  Metric Klame	Defasive Indiance Orade Fusion Middleware Farm	Alert Triggered Value Last Checked
Sundaped     sectarm CCDemain  aerts  Metric Cellection Errors  tetric Name estern Memory. Utilization (NII)	Detables instance Oracle Fusion Moldeware Ferm Severity / Message (a) Agent resident memory utilization in KE in 133,848	Alert Triggered Value         Last Checked           Jan 29, 2011 10:04-52 PM 133948         Jan 29, 2011 10:04-52 PM
vondroef	Detabase indition Orade Fusion Modeware Ferm 10 1 Serverity:/ Message (a) Agent resident memory utilization in KB in 133,848	Alert Triggered Value         Last Checked           Jan 29, 2011 10:04-52 PM 13848         Jan 29, 2011 10:04-52 PM
Justifyeel     Justifyeel     Justifyeel     Justifyeel     Metric Collection Errors      Hetric Litame esident Memory Utilization (H3)  Ind Litals	Detablese Instance Orscide Fusion Middlewere Ferm in 1 Serverity / Message ii) Agent resident memory utilization in X8 in 133,448	Alert Triggered Value         Last Checked           Jan 29, 2011 10:04:42 PM         Jan 29, 2011 10:04:42 PM
sectarm CCDeman     sectarm CCDeman      sectarm CCDeman      sectarm      Metric Collection Errors      tetric Hamae      socient Memory Utilization (NS)      tet Links	Detables Indiance Oracle Fusion Modeware Ferm ing 1 Severity / Message (a) Agent resident memory utilization in KB is 132,448 Agent Regindryinization	Allert Triggereal Value Last Checked Jan 29, 2011 10:04:42 PM 133446 Jan 29, 2011 10:04:42 PM Alert History
Vendeper	Detablese instance Orside Fusion Modeware Ferm Sevenity/ Message Agent resident memory utilization in KB in 133,848 Agent Respectivozzation Biochoots	Alert Triggered Value         Last Checked           Jan 29, 2011 10:04-42 PM 13348         Jan 29, 2011 10:04-42 PM           Alert Linktory         March Settings
Journeysel     Journeysel     Journeysel     Journeysel     Metric Collection Errors     Metric Collection Errors     Metric Rame      Me	Detabase Indiance Oracle Fusion Modilevere Ferm 1 Sevenity /· Message a) Agent resident memory utilization in KB is 133,448 Agent Respectivo/2240m Bioclosids Montonicy Configuration	Alert Trippensi Valen Last Checked Jan 29, 2011 10:04-42 PM 133448 Jan 29, 2011 10:04-42 PM Alert History Metric und Parky Settings Patch coach Software
vondsport	Detablese instance Orside Fusion Modeware Ferm Serverity/ Message Agent resident memory utilization in XE in 133,848 Agent fersident memory utilization in XE in 133,848	Alert Träggered Value Last Checked Jan 29, 2011 10:04-82 PM 133848 Jan 29, 2011 10:04-82 PM Alert Lindtry Menn: ond Fridry Settings Patch Oracle Software

### Action:

To solve this the database must be configured correctly.

The database is monitored in EM using the database account dbsnmp.

Unlock the dbsnmp password in the OEMREP database to be able to configure the OEMREP database.

SQL> alter user dbsnmp identified by xxxx account unlock;

Now in the previous EM screen click button configure.

GRACLE Enterprise Manager		Home Targets Deployments Alerts Compliance Jobs Reports My Oracle Support
Hosts   Databases   Middleware   Web Applications   Services   Systems   Groups   Virtual Servers   All Ta	irgets	
		Cancel Step 1 of S Negt
① Success		
The connection test was successful.		
Configure Database Instance: Properties	Properties Instal Packages Credentails Parameters Review	
comigure bacabase instance. Properties		
Name OEMIKEP		
Group(s) None		
TIP This target is a member of the Group(s) listed above.		
		(Test Connection)
Name	Value	
Oracle home path	/u01/app/oracle/product/11.2.0.2/c	
Monitor Username	dbsnmp	
Monitor Password	•••••	
Role	Normal 👻	
Listener Machine Name	bigmama	
Port	1521	
Database SID	OEMREP	
		×
Preferred Connect String Enter the connection string that OMS should use when connecting to the target database. If blank, the OMS would automatically construct one using the host, port, SID provided above.		
Home   Targets   Deployments	Alerts   Compliance   Jobs   Reports   My Oracle Support   Setup   Pre	(Cancel) Step 1 of 5 [Neg1]

# Action:

Specify the **dbsnmp** password and click button **Test Connection**. If the connection test is successful click **Next**.

GracLE Enterprise Manager		Home Targets Deployments Alerts Compliance lobs Reports My Oracle Support
Hosts   Databases   Middleware   Web Applications   Services   S	Systems   Groups   Virtual Servers   All Targets	
		Cancel Back Step 5 of 5 (Submit)
Configure Database Instance: Review		
Review the changes made below for this database. Select "Submit" when Name OEMREP Properties	you are done, or select 'Back' to edit the changes.	
Name	Value	
Oracle home path	/u01/app/oracle/product/11.2.0.2/db 000	
Monitor Username	dbsnmp	
Monitor Password	*****	
Role	NORMAL	
Listener Machine Name	bigmama	
Port	1521	
Database SID	OEMREP	
Preferred Connect String		
Install Monitor Objects		
Skip these steps. These metrics will remain disabled.		
	Home i <b>Targets</b> i Deployments i Aletta i Compliance i Joba i Beports i My-Oracke-Support i Setup i B	Cancel Back Step 5 of 5

#### Action: Click Submit.

CRACLE Enterprise Manager Grid Carrier 11g Host   Databases   Modeware   Web Applications   Services   Systems   Groups   Virtual Servers   All Targets	Home Targets Deployments Aterts Compliance Jobs Reports Wy Oracle Support
Database Instance Configuration Result	<u>(ок)</u>
Properties for instance OEMREP have been updated. Home   Targets   Deployments   Alerts   Compliance   Jobs   Beports   My Oracle Support   Setup   Prefer	ences   Help   Loggad

#### Action: Click OK.

Now we will perform some check to check the availability of some installed components.

First modify some lines in the /etc/oratab file:

```
Change
*:/u01/app/oracle/product/11.1.1/middleware/oms11g:N
*:/u01/app/oracle/product/11.1.1/middleware/agent11g:N
into
OMS:/u01/app/oracle/product/11.1.1/middleware/oms11g:N
AGENT:/u01/app/oracle/product/11.1.1/middleware/agent11g:N
```

Status check OMS:

```
oracle@oraoem01:OMS:/home/oracle
$ /u01/app/oracle/product/11.1.1/middleware/oms11g/bin/emctl status oms
Oracle Enterprise Manager 11g Release 1 Grid Control
Copyright (c) 1996, 2010 Oracle Corporation. All rights reserved.
WebTier is Up
Oracle Management Server is Up
```

Agent check:

Agent Process ID	: 21956			
Parent Process ID	: 21938			
Agent URL	: https://oraoem01:3872/emd	d/main/		
Repository URL	: https://oraoem01:4900/em,	upload		
Started at	: 2011-02-02 02:00:06			
Started by user	: oracle			
Last Reload	: 2011-02-02 02:07:37			
Last successful up	load	: 2011-02-02	02:10:21	
Total Megabytes of	XML files uploaded so far	: 26.86		
Number of XML file	s pending upload	: 0		
Size of XML files pending upload(MB)		: 0.00		
Available disk spa	ce on upload filesystem	: 81.11%		
Last successful he	artbeat to OMS	: 2011-02-02	02:10:11	
Agent is Running a	nd Ready			

# 13. Enterprise Manager Grid Control Patch Installation

I recommend downloading and installing at least the following patches after the out-of the-box installation:

Patch 6880880	OPatch 11.2
Patch 10270073	11.2.0.2.1 Patch Set Update
Patch 10273607	11.1.0.1.2 Patch Set Update for Oracle Management Agent
Patch 9431704	BROKEN 'FMW WELCOME PAGE APPLICATION' APPLICATION
	DISCOVERED OUT-OF-BOX

First refresh OPatch:

```
[oracle@oracem01::/home/oracle]# cd /software/OPatch/
[oracle@oracem01::/home/oracle]# unzip p6880880_112000_Linux-x86-64.zip -d
/u01/app/oracle/product/11.1.1/middleware/oms11g
Archive: p6880880_112000_Linux-x86-64.zip
extracting: /u01/app/oracle/product/11.1.0/middleware/oms11g/OPatch/ocm/ocm.zip
.....
replace
/u01/app/oracle/product/11.1.0/middleware/oms11g/OPatch/ocm/ocm_platforms.txt?
[y]es, [n]o, [A]ll, [N]one, [r]ename: A
inflating:
/u01/app/oracle/product/11.1.0/middleware/oms11g/OPatch/ocm/ocm_platforms.txt
extracting: /u01/app/oracle/product/11.1.0/middleware/oms11g/OPatch/ocm/ocm_platforms.txt
.....
inflating: /u01/app/oracle/product/11.1.0/middleware/oms11g/OPatch/crs/log/dummy
.....
```

Repeat this for the next ORACLE\_HOME locations:

- /u01/app/oracle/product/11.1.1/middleware/oracle\_common
- /u01/app/oracle/product/11.1.1/middleware/agent11g

Install the latest OMS PSU.

First stop the OMS:

```
oracle@oraoem01:OMS:/home/oracle
$ OMS
The Oracle base for ORACLE_HOME=/u01/app/oracle/product/11.1.1/middleware/oms11g is
/u01/app/oracle
oracle@oraoem01:OMS:/home/oracle
$ emctl stop oms -all
Oracle Enterprise Manager 11g Release 1 Grid Control
Copyright (c) 1996, 2010 Oracle Corporation. All rights reserved.
Stopping WebTier...
WebTier Successfully Stopped
Stopping Oracle Management Server...
Oracle Management Server is Down
```

Now apply the latest PSU:

```
oracle@oraoem01:OMS:/home/oracle
$ cd /software/EM11/PATCHES/OMS/10270073
oracle@oraoem01:OMS:/software/EM11/PATCHES/OMS/10270073
$ /u01/app/oracle/product/11.1.1/middleware/oms11g/OPatch/opatch apply
Invoking OPatch 11.2.0.1.4
Oracle Interim Patch Installer version 11.2.0.1.4
```

Copyright (c) 2010, Oracle Corporation. All rights reserved. Oracle Home : /u01/app/oracle/product/11.1.1/middleware/oms11g Central Inventory : /u01/app/oracle/oraInventory from : /etc/oraInst.loc OPatch version : 11.2.0.1.4 : 11.1.0.8.0 OUI version : /u01/app/oracle/product/11.1.1/middleware/oms11g/oui OUI location Log file location : /u01/app/oracle/product/11.1.1/middleware/oms11g/cfgtoollogs/opatch/opatch2011-02-06 17-40-16PM.log Patch history file: /u01/app/oracle/product/11.1.1/middleware/oms11g/cfgtoollogs/opatch/opatch history. t.xt. OPatch detects the Middleware Home as "/u01/app/oracle/product/11.1.1/middleware" ApplySession applying interim patch '10270073' to OH '/u01/app/oracle/product/11.1.1/middleware/oms11g' Execution of 'sh /software/EM11/PATCHES/OMS/10270073/custom/scripts/init -apply 10270073 ': Return Code = 0Running prerequisite checks... Provide your email address to be informed of security issues, install and initiate Oracle Configuration Manager. Easier for you if you use your My Oracle Support Email address/User Name. Visit http://www.oracle.com/support/policies.html for details. Email address/User Name: You have not provided an email address for notification of security issues. Do you wish to remain uninformed of security issues ([Y]es, [N]o) [N]: Y OPatch detected non-cluster Oracle Home from the inventory and will patch the local system only. Backing up files and inventory (not for auto-rollback) for the Oracle Home Backing up files affected by the patch '10270073' for restore. This might take a while ... Backing up files affected by the patch '10270073' for rollback. This might take a while... Patching component oracle.sysman.oms.core, 11.1.0.1.0... Updating jar file "/u01/app/oracle/product/11.1.1/middleware/oms11g/sysman/jlib/emCORE.jar" with "/sysman/jlib/emCORE.jar/oracle/sysman/eml/ecm/policy/PolicyViolationsController.cl ass" ApplySession adding interim patch '10270073' to inventory Verifying the update... Inventory check OK: Patch ID 10270073 is registered in Oracle Home inventory with proper meta-data. Files check OK: Files from Patch ID 10270073 are present in Oracle Home. Execution of 'sh /software/EM11/PATCHES/OMS/10270073/custom/scripts/post -apply 10270073 ': Return Code = 0OPatch succeeded.

Connect to rcuJDBCEngine as SYS and run the post\_install\_script.sql script as follows:

oracle@oraoem01:OMS:/software/EM11/PATCHES/OMS/10270073
\$ \$ORACLE\_HOME/bin/rcuJDBCEngine sys/<sys\_password>@oraoem01:1521:OEMREP
JDBC SCRIPT post install script.sql \$PWD \$ORACLE HOME

If the previous step runs successfully, then you must run the post\_install\_patch.sql as SYS user:

```
oracle@oraoem01:OMS:/software/EM11/PATCHES/OMS/10270073
$ $ORACLE_HOME/bin/rcuJDBCEngine sys/<sys_password>@oraoem01:1521:OEMREP
JDBC_SCRIPT post_install_patch.sql $PWD $ORACLE_HOME
```

Now install Patch 9431704

```
oracle@oraoem01:OMS:/software/EM11/PATCHES/OMS/10270073
$ export ORACLE HOME=/u01/app/oracle/product/11.1.1/middleware/oracle common
$ cd /software/EM11/PATCHES/OMS/9431704
$ /u01/app/oracle/product/11.1.1/middleware/oracle_common/OPatch/opatch apply
$ Invoking OPatch 11.2.0.1.4
Oracle Interim Patch Installer version 11.2.0.1.4
Copyright (c) 2010, Oracle Corporation. All rights reserved.
                 : /u01/app/oracle/product/11.1.1/middleware/oracle common
Oracle Home
Central Inventory : /u01/app/oracle/oraInventory
                : /etc/oraInst.loc
  from
OPatch version
                 : 11.2.0.1.4
OUI version : 11.1.0.7.0
                 : /u01/app/oracle/product/11.1.1/middleware/oracle common/oui
OUI location
Log file location :
/u01/app/oracle/product/11.1.1/middleware/oracle common/cfgtoollogs/opatch/opatch2
011-02-12 23-04-42PM.log
Patch history file:
/u01/app/oracle/product/11.1.1/middleware/oracle common/cfgtoollogs/opatch/opatch
history.txt
OPatch detects the Middleware Home as "/u01/app/oracle/product/11.1.1/middleware"
ApplySession applying interim patch '9431704' to OH
 /u01/app/oracle/product/11.1.1/middleware/oracle common'
Running prerequisite checks...
Provide your email address to be informed of security issues, install and
initiate Oracle Configuration Manager. Easier for you if you use your My
Oracle Support Email address/User Name.
Visit http://www.oracle.com/support/policies.html for details.
Email address/User Name:
You have not provided an email address for notification of security issues.
Do you wish to remain uninformed of security issues ([Y]es, [N]o) [N]: Y
OPatch detected non-cluster Oracle Home from the inventory and will patch the
local system only.
Please shutdown Oracle instances running out of this ORACLE HOME on the local
system.
(Oracle Home = '/u01/app/oracle/product/11.1.1/middleware/oracle common')
Is the local system ready for patching? [y|n]
```

User Responded with: Y Backing up files and inventory (not for auto-rollback) for the Oracle Home Backing up files affected by the patch '9431704' for restore. This might take a while ... Backing up files affected by the patch '9431704' for rollback. This might take a while... Patching component oracle.jrf.j2ee, 11.1.1.2.0... Copying file to "/u01/app/oracle/product/11.1.1/middleware/oracle common/modules/oracle.wsm.common 11.1.1/wsm-dependencies.jar" ApplySession adding interim patch '9431704' to inventory Verifying the update ... Inventory check OK: Patch ID 9431704 is registered in Oracle Home inventory with proper meta-data. Files check OK: Files from Patch ID 9431704 are present in Oracle Home. The local system has been patched and can be restarted. OPatch succeeded.

Finally start the OMS again:

```
oracle@oraoem01:OMS:/ software/EM11/PATCHES/OMS/9431704
$ OMS
The Oracle base for ORACLE_HOME=/u01/app/oracle/product/11.1.1/middleware/oms11g is
/u01/app/oracle
oracle@oraoem01:OMS:/software/EM11/PATCHES/OMS/9431704
$ emctl start oms
Oracle Enterprise Manager 11g Release 1 Grid Control
Copyright (c) 1996, 2010 Oracle Corporation. All rights reserved.
Starting WebTier...
WebTier Successfully Started
Starting Oracle Management Server...
Oracle Management Server is Up
```

Install the latest AGENT PSU.

First stop the AGENT:

```
oracle@oraoem01::/home/oracle
$ AGENT
The Oracle base for ORACLE_HOME=/u01/app/oracle/product/11.1.1/middleware/agent11g
is /u01/app/oracle
oracle@oraoem01:AGENT:/home/oracle
$ emctl stop agent
Oracle Enterprise Manager 11g Release 1 Grid Control 11.1.0.1.0
Copyright (c) 1996, 2010 Oracle Corporation. All rights reserved.
Stopping agent ... stopped.
```

Now apply the latest PSU:

```
oracle@oraoem01:AGENT:/home/oracle
$ cd /software/EM11/PATCHES/AGENT/10273607
oracle@oraoem01:AGENT:/software/EM11/PATCHES/AGENT/10273607
$ /u01/app/oracle/product/11.1.1/middleware/agent11g/OPatch/opatch apply
Invoking OPatch 11.2.0.1.4
Oracle Interim Patch Installer version 11.2.0.1.4
Copyright (c) 2010, Oracle Corporation. All rights reserved.
```

Oracle Home : /u01/app/oracle/product/11.1.1/middleware/agent11g Central Inventory : /u01/app/oracle/oraInventory : /etc/oraInst.loc from : 11.2.0.1.4 OPatch version OUI version : 11.1.0.8.0 OUI location : /u01/app/oracle/product/11.1.1/middleware/agent11g/oui Log file location : /u01/app/oracle/product/11.1.1/middleware/agent11g/cfgtoollogs/opatch/opatch2011-02-06 18-26-05PM.log Patch history file: /u01/app/oracle/product/11.1.1/middleware/agent11g/cfgtoollogs/opatch/opatch histor v.txt OPatch detects the Middleware Home as "/u01/app/oracle/product/11.1.1/middleware" ApplySession applying interim patch '10273607' to OH '/u01/app/oracle/product/11.1.1/middleware/agent11g' Running prerequisite checks... Provide your email address to be informed of security issues, install and initiate Oracle Configuration Manager. Easier for you if you use your My Oracle Support Email address/User Name. Visit http://www.oracle.com/support/policies.html for details. Email address/User Name: You have not provided an email address for notification of security issues. Do you wish to remain uninformed of security issues ([Y]es, [N]o) [N]: Y OPatch detected non-cluster Oracle Home from the inventory and will patch the local system only. Please shutdown Oracle instances running out of this ORACLE HOME on the local system. (Oracle Home = '/u01/app/oracle/product/11.1.1/middleware/agent11g') Is the local system ready for patching? [y|n] У User Responded with: Y Backing up files and inventory (not for auto-rollback) for the Oracle Home Backing up files affected by the patch '10273607' for restore. This might take a while ... Backing up files affected by the patch '10273607' for rollback. This might take a while ... ApplySession adding interim patch '10273607' to inventory Verifying the update ... Inventory check OK: Patch ID 10273607 is registered in Oracle Home inventory with proper meta-data. Files check OK: Files from Patch ID 10273607 are present in Oracle Home. The local system has been patched and can be restarted. OPatch succeeded.

Finally restart the agent:

```
oracle@oraoem01:AGENT:/software/EM11/PATCHES/AGENT/10273607
$ emctl start agent
```

Update:

I recommend downloading and installing at least the following patches after the out-of the-box installation:

OMS:

Patch 9659466	HACONFIG1_COLLECTION COLLECTION INTERVAL
	INCORRECTLY SET IN 11.1GC
Patch 9738008	UPDATE AGENT DOWNLOAD KIT WITH BUG 9676134 FOR 11.1
	OMS