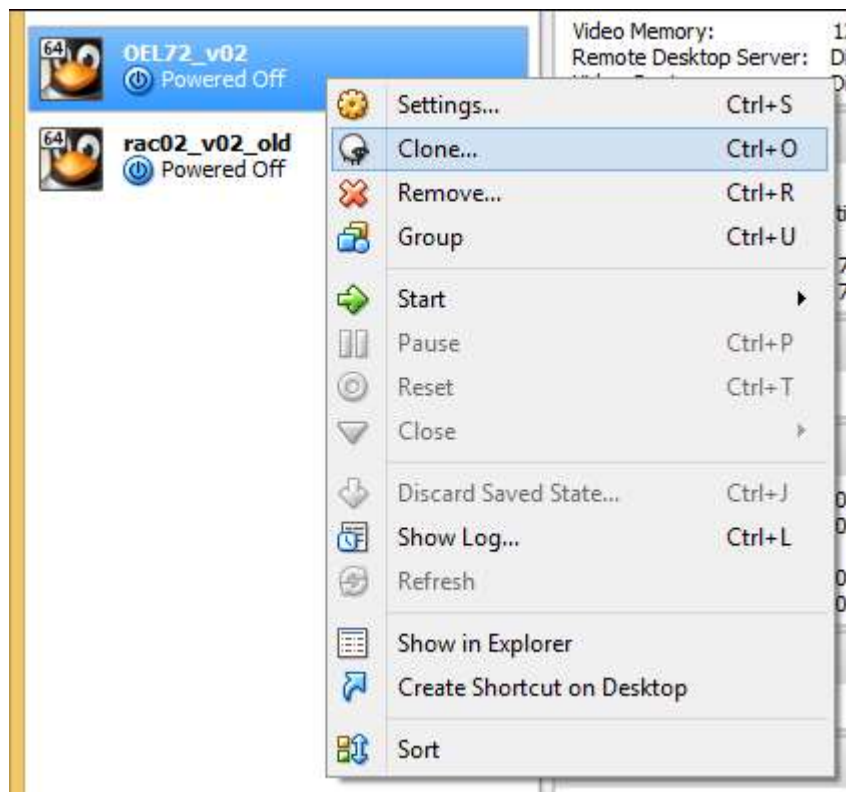# CONFIGURATION
of
Oracle Enterprise Linux 7.2.0.0.0 (OEL 72)
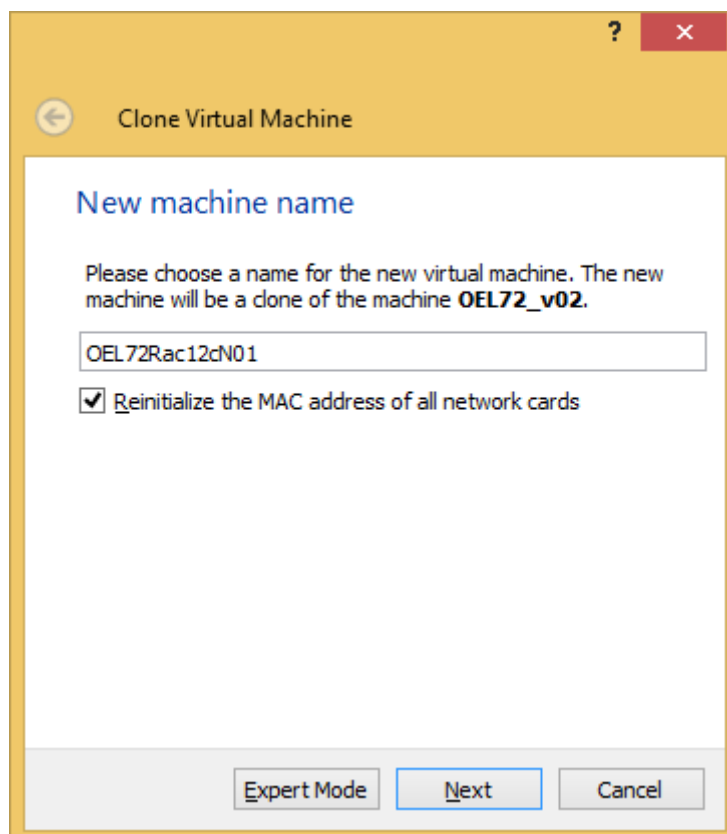
Table of contents

1 Create a Clone of the VM

1.1 Right-Click on the current VM

1.2 Enter the new Hostname

1.3 Full Clone
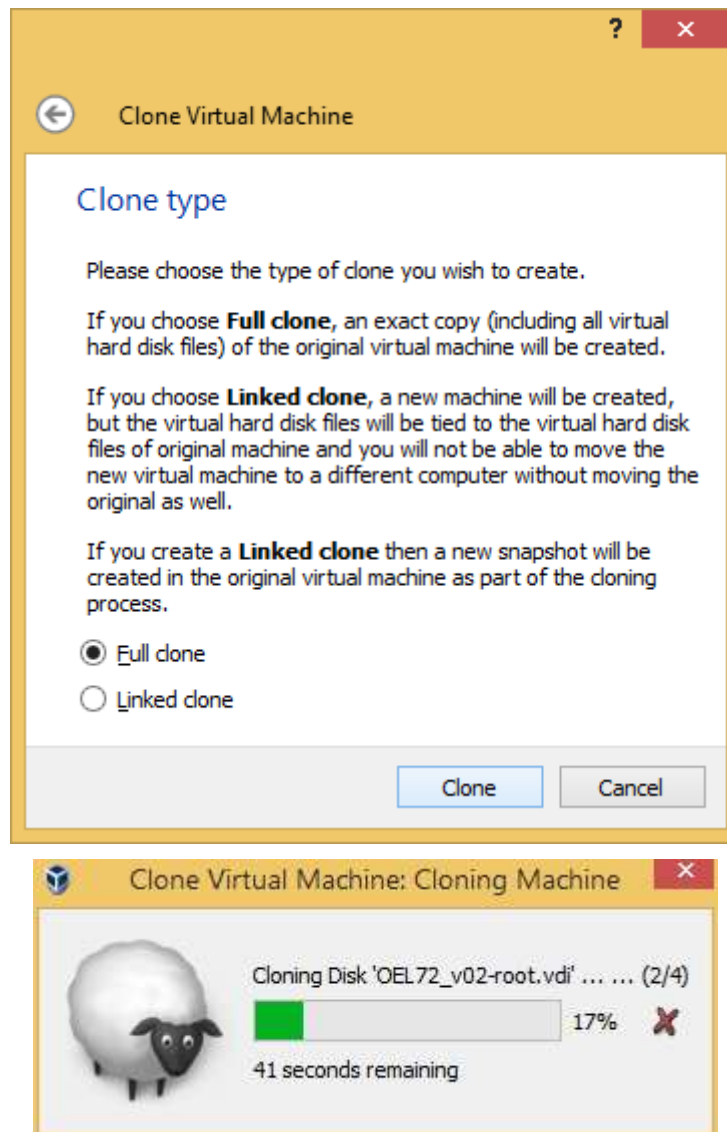
1.4 Exit the VirtualBox Graphical User Interface (VBox-GUI)

1.5 Edit file "OEL72Rac12cN01.vbox"

Search for "-disk1.vdi" and replace it with "-root.vdi"

Search for "-disk2.vdi" and replace it with "-u00.vdi"

Save the file and exit your Editor

1.6 Rename the Files

Inside the folder of "OEL72Rac12cN01" you can find the two files ending with "-disk1.vdi" and ending with "-disk2.vdi".

Rename this two files accordingly to 1.5 to

a) "OEL72Rac12cN01-disk1.vdi" to "OEL72Rac12cN01-root.vdi" and
b) "OEL72Rac12cN01-disk2.vdi" to "OEL72Rac12cN01-u00.vdi".

1.7 Try to start to the VBox-GUI

If you will not see any error or warning message everything is fine and you can add ASM Devices.

1.8 Checking the new Filenames

After starting VBox GUI you click on File -> Virtual Media Manager to see al files of all VM. E.g you can see Screenshots like those:
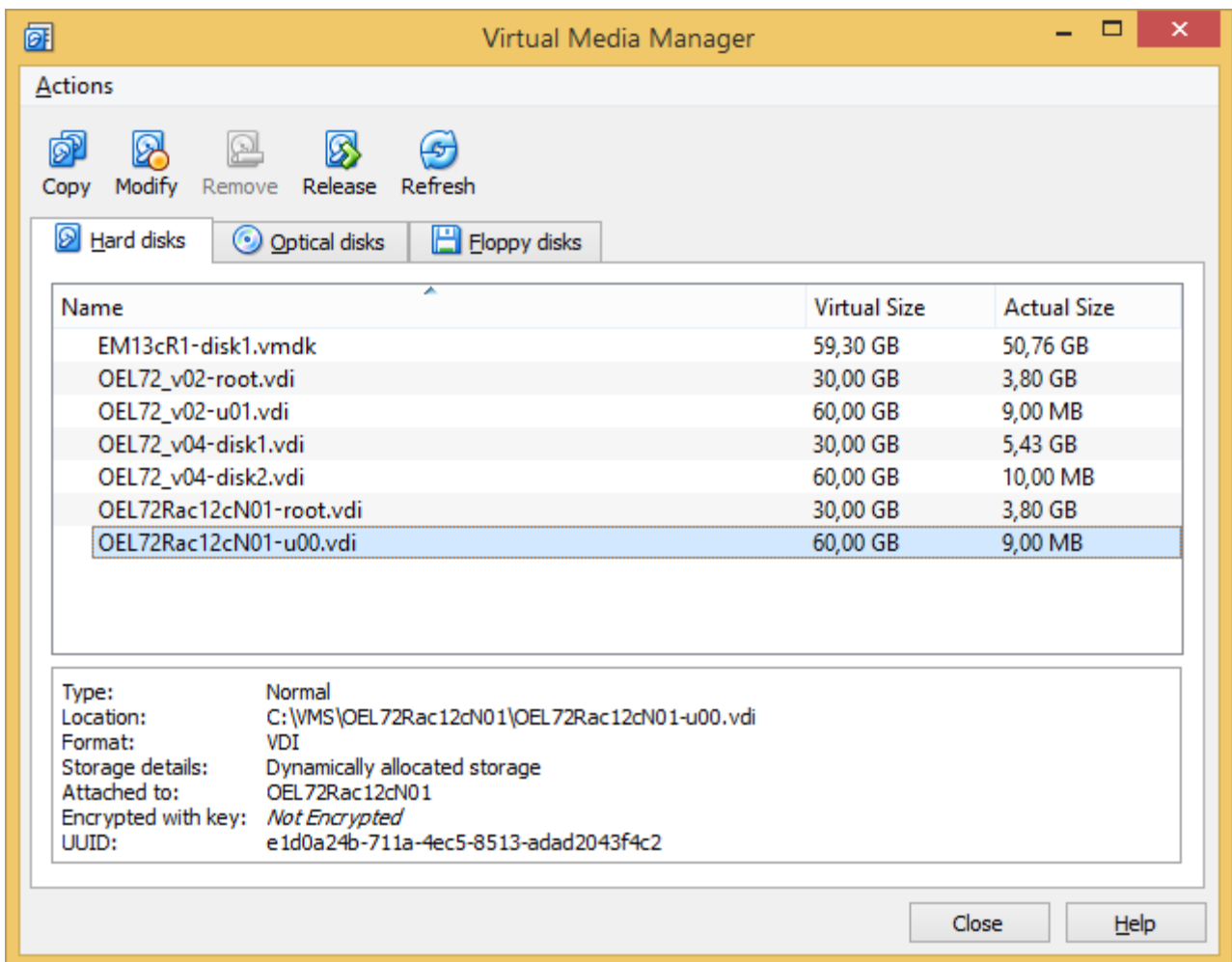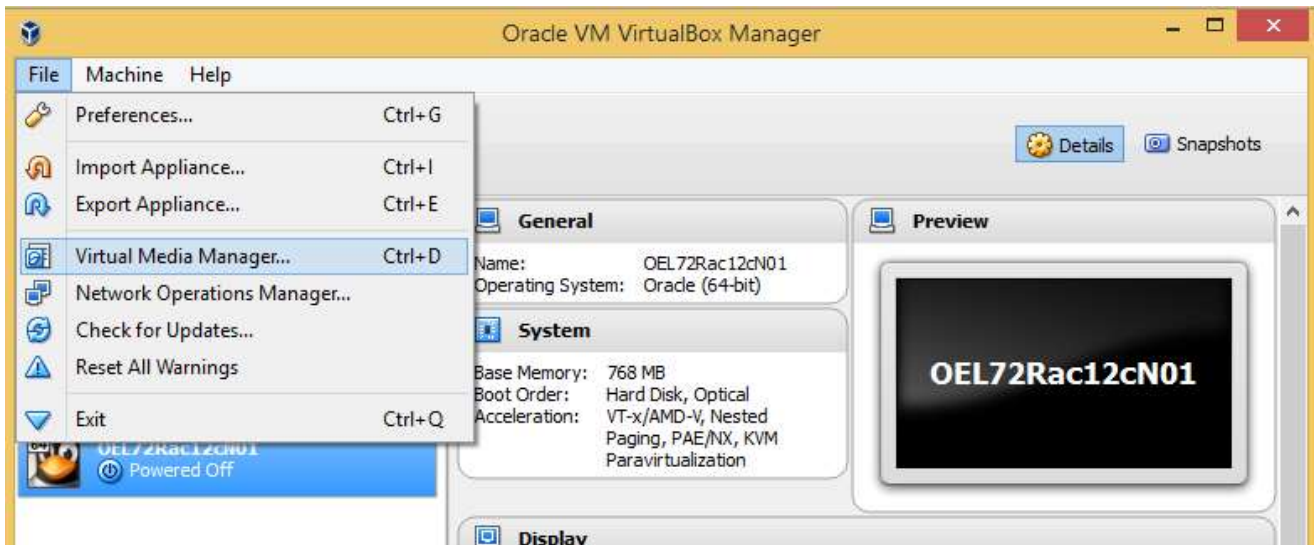
2 Add ASM Devices to the RAC VM

2.1 Execute the following script

Below you will find a script to create 8 ASM Disks to the VM. It is written in DOS Shell and can be easily either to Linux or to your specific Paths. You simply need to check / adapt the first 4 lines:

2.1.1 Variables used in this Script

- VBM is the complete path to the program "VBoxManage.exe" to execute all operations to the VM
- BDIR is the BASEDIR to the location of all VM. Alle VM will be automatically created below the folder BDIR
- VM is Name of the Virtual Machine we are working with
- VMDIR is the path to the ASM Disks – should not be changed

2.1.2 Before running this Script

You can change the Size of the ASM Disks. But remember, do not change the first 3 ASM Disks smaller than 6G as they will be used to setup the first ASM Disk Group holding the _MGMT Database including voting Disk and Cluster Registry. During Installation Oracle Installer will check the Size of the DG. It must be at least 5.8 G

You can change the number of ASM Disks, but all the scripts need at least three for the first ASM Disk Group. Later, before creating the database, you can create additional ASM Disks.

2.1.3 Script to execute

```
set VBM="C:\Program Files\Oracle\VirtualBox\VBoxManage.exe"
set BDIR=C:\VMS
set VM= OEL72Rac12cN01
set VMDIR="%BDIR%\%VM%"


cd /D %VMDIR%


%VBM% createhd --filename %VMDIR%\asm01.vdi --size 10240 --format VDI --variant Fixed
%VBM% createhd --filename %VMDIR%\asm02.vdi --size 10240 --format VDI --variant Fixed
%VBM% createhd --filename %VMDIR%\asm03.vdi --size 10240 --format VDI --variant Fixed
%VBM% createhd --filename %VMDIR%\asm04.vdi --size 10240 --format VDI --variant Fixed
%VBM% createhd --filename %VMDIR%\asm05.vdi --size 10240 --format VDI --variant Fixed
%VBM% createhd --filename %VMDIR%\asm06.vdi --size 10240 --format VDI --variant Fixed
%VBM% createhd --filename %VMDIR%\asm07.vdi --size 10240 --format VDI --variant Fixed
%VBM% createhd --filename %VMDIR%\asm08.vdi --size 10240 --format VDI --variant Fixed


%VBM% storageattach %VM% --storagectl "SATA" --port 2 --device 0 --type hdd --medium %VMDIR%\asm01.vdi --mtype
shareable
%VBM% storageattach %VM% --storagectl "SATA" --port 3 --device 0 --type hdd --medium %VMDIR%\asm02.vdi --mtype
shareable
%VBM% storageattach %VM% --storagectl "SATA" --port 4 --device 0 --type hdd --medium %VMDIR%\asm03.vdi --mtype
shareable
%VBM% storageattach %VM% --storagectl "SATA" --port 5 --device 0 --type hdd --medium %VMDIR%\asm04.vdi --mtype
shareable
%VBM% storageattach %VM% --storagectl "SATA" --port 6 --device 0 --type hdd --medium %VMDIR%\asm05.vdi --mtype
shareable
%VBM% storageattach %VM% --storagectl "SATA" --port 7 --device 0 --type hdd --medium %VMDIR%\asm06.vdi --mtype
shareable
%VBM% storageattach %VM% --storagectl "SATA" --port 8 --device 0 --type hdd --medium %VMDIR%\asm07.vdi --mtype
shareable
%VBM% storageattach %VM% --storagectl "SATA" --port 9 --device 0 --type hdd --medium %VMDIR%\asm08.vdi --mtype
shareable
```

2.1.4 First Part executed

```
Verzeichnis von C:\VMS\OEL72Rac12cN01

04.05.2016  18:16    <DIR>          .
04.05.2016  18:16    <DIR>          ..
04.05.2016  17:49     4.076.863.488 OEL72Rac12cN01-root.vdi
04.05.2016  17:49         9.437.184 OEL72Rac12cN01-u00.vdi
04.05.2016  18:09            13.176 OEL72Rac12cN01.vbox
04.05.2016  17:49            13.166 OEL72Rac12cN01.vbox-prev
               4 Datei(en),  4.086.327.014 Bytes
               2 Verzeichnis(se), 140.669.083.648 Bytes frei

C:\VMS\OEL72Rac12cN01>set VBM="C:\Program Files\Oracle\VirtualBox\VBoxManage.exe"

C:\VMS\OEL72Rac12cN01>set BDIR=C:\VMS

C:\VMS\OEL72Rac12cN01>set VM=OEL72Rac12cN01

C:\VMS\OEL72Rac12cN01>set VMDIR="%BDIR%\%VM%"

C:\VMS\OEL72Rac12cN01>
C:\VMS\OEL72Rac12cN01>cd /D %VMDIR%

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm01.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: cc834014-060d-4e41-afc9-9ba7b8374a2b

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm02.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: ec6a2f19-e6ca-4ee8-af5f-34bea0e1126e

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm03.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: 75cc7234-f051-4c35-92b0-e47f37d2e709

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm04.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: 7032769d-f4e9-4a53-8339-f0bd6c1d41cc

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm05.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: d479b40d-8619-49c8-a182-416c3de34d08

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm06.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: 9dafd706-7c62-4518-8fc2-46d06650f4f1

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm07.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: ccb64d33-04e7-4b09-8fd0-b28b2e2f3af2

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm08.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: defdad22-f96f-492d-8a19-c382ee4e306f

C:\VMS\OEL72Rac12cN01>
```

2.1.5 Second Part executed

```
Medium created. UUID: ccb64d33-04e7-4b09-8fd0-b28b2e2f3af2

C:\VMS\OEL72Rac12cN01>%VBM% createhd --filename %VMDIR%\asm08.vdi --size 10240 --format VDI --variant Fixed
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: defdad22-f96f-492d-8a19-c382ee4e306f

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 2 --device 0 --type hdd --medium %VMDIR%\asm01.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 3 --device 0 --type hdd --medium %VMDIR%\asm02.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 4 --device 0 --type hdd --medium %VMDIR%\asm03.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 5 --device 0 --type hdd --medium %VMDIR%\asm04.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 6 --device 0 --type hdd --medium %VMDIR%\asm05.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 7 --device 0 --type hdd --medium %VMDIR%\asm06.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 8 --device 0 --type hdd --medium %VMDIR%\asm07.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>%VBM% storageattach %VM% --storagectl "SATA" --port 9 --device 0 --type hdd --medium %VMDIR%\asm08.vdi --mtype shareable

C:\VMS\OEL72Rac12cN01>
C:\VMS\OEL72Rac12cN01>
```

2.1.6 In the VBox GUI
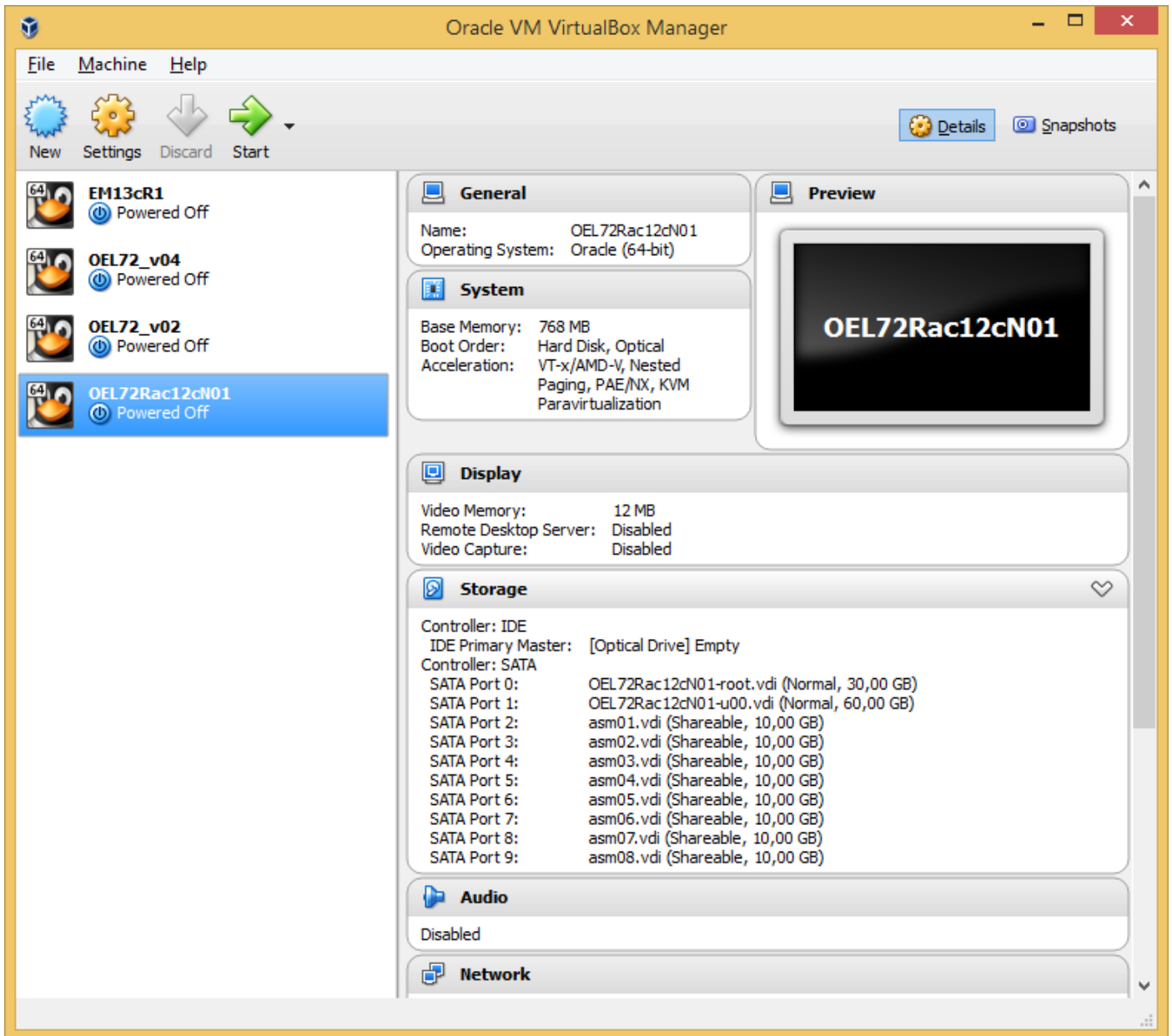
Now, you can see the Storage Section below the former renamed "`root`" and "`u01`" Disk the created ASM Disks, marked as Shareable.

2.1.7 Shared Folder
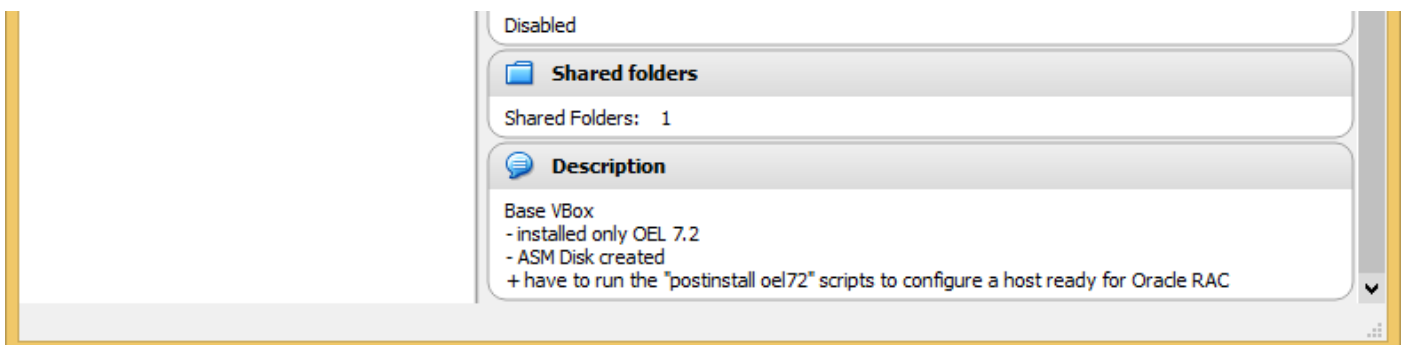
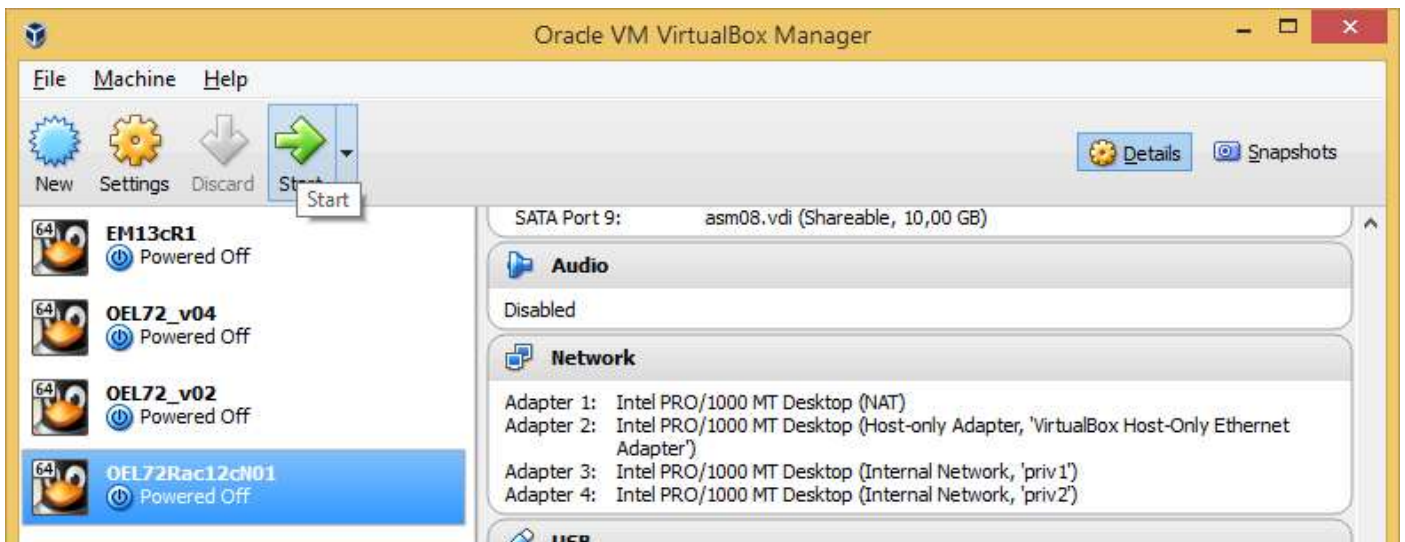You can easily configure a shared folder in order to copy the scripts to your system.

3 Start the new VM "OEL72Rac12cN01"

Mark the new VM "OEL72Rac12cN01" and click on the Start Icon
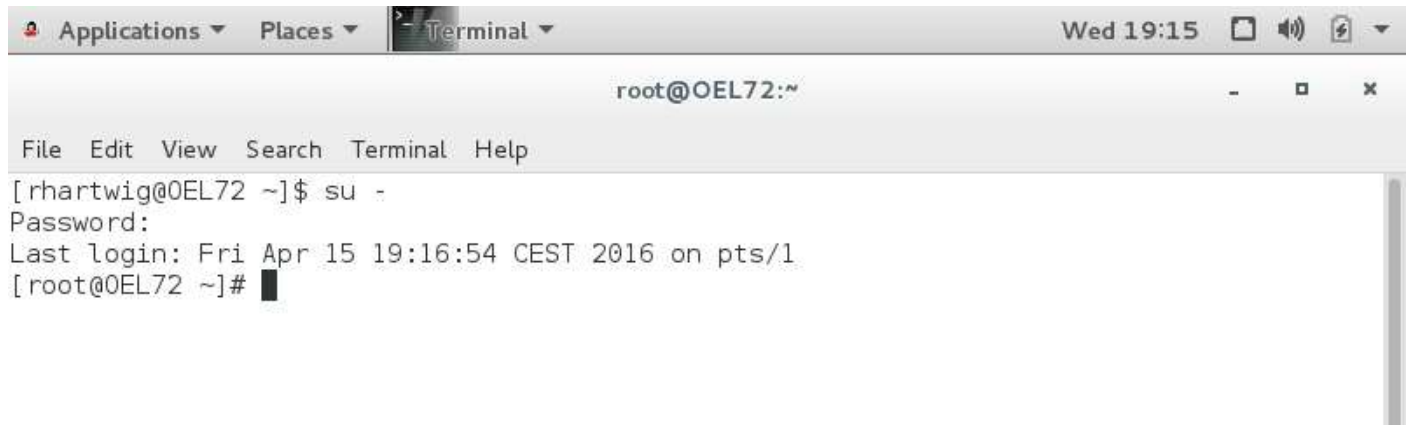
3.1 Connect to VM

As user "Rainer Hartwig" you can connect to the VM. Thereafter you will a screen like this:

3.2   Open a terminal

Click on Application -> Terminal and execute "su –" to switch the user to become "root"
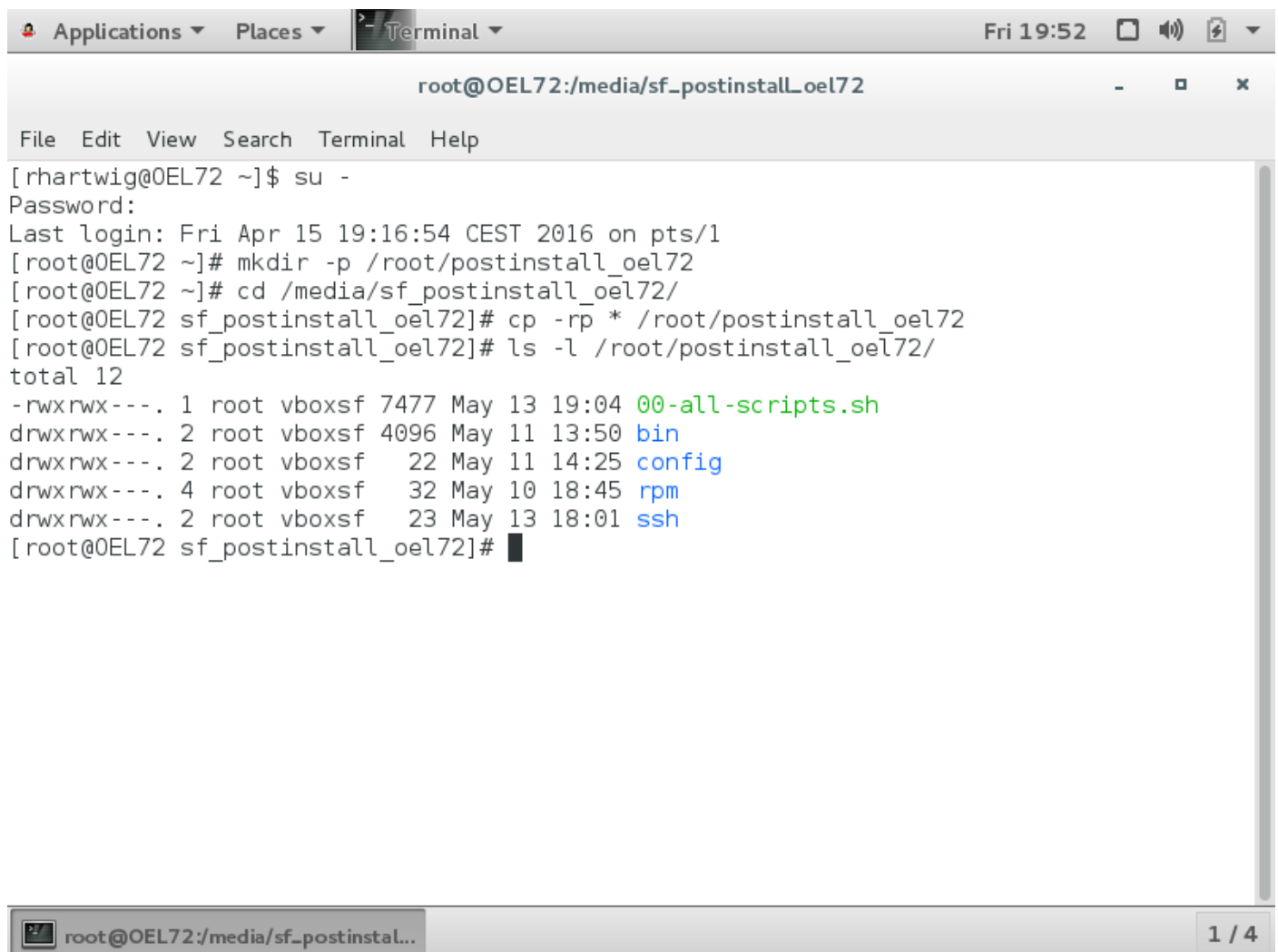
```
 Applications ▼    Places ▼    Terminal ▼                          Wed 19:15  □ ◀)) ⚡ ▼

                              root@OEL72:~                            _    □    ✕

File  Edit  View  Search  Terminal  Help
[rhartwig@OEL72 ~]$ su -
Password:
Last login: Fri Apr 15 19:16:54 CEST 2016 on pts/1
[root@OEL72 ~]# █
```

3.3   Copy the files from Shared Folder

Execute the following commands

1) mkdir –p /root/postinstall_oel72
2) cd /media/sf_postinstall_oel72
3) cp –rp * /root/postinstall_oel72

```
 Applications ▼    Places ▼    Terminal ▼                          Fri 19:52  □ ◀)) ⚡ ▼

                      root@OEL72:/media/sf_postinstall_oel72           _    □    ✕

File  Edit  View  Search  Terminal  Help
[rhartwig@OEL72 ~]$ su -
Password:
Last login: Fri Apr 15 19:16:54 CEST 2016 on pts/1
[root@OEL72 ~]# mkdir -p /root/postinstall_oel72
[root@OEL72 ~]# cd /media/sf_postinstall_oel72/
[root@OEL72 sf_postinstall_oel72]# cp -rp * /root/postinstall_oel72
[root@OEL72 sf_postinstall_oel72]# ls -l /root/postinstall_oel72/
total 12
-rwxrwx---. 1 root vboxsf 7477 May 13 19:04 00-all-scripts.sh
drwxrwx---. 2 root vboxsf 4096 May 11 13:50 bin
drwxrwx---. 2 root vboxsf   22 May 11 14:25 config
drwxrwx---. 4 root vboxsf   32 May 10 18:45 rpm
drwxrwx---. 2 root vboxsf   23 May 13 18:01 ssh
[root@OEL72 sf_postinstall_oel72]# █
```

```
🖳 root@OEL72:/media/sf_postinstal...                                        1 / 4
```

4   Configuration of the OEL 7.2

4.1   First important Step: Modify the setup.cfg

The most important step is to modify / verify the file "`./config/setup.cfg`" before you execute any script. Below a large section of some functions often used, you will find the variables to specify your ips, hostnames, domainname, etc.

The variable "`HOSTGW`" and "`DNS3`" should have the IP of your Router, NTP-Server and DNS-Server internal to your intranet, if they have all the IP. If they have different IP, you can modify this in the Section "`Settings – other var names`"

4.1.1 Example of setup.cfg

The Section to set the Hostnames and IP may has the following content:

```
## DOMAIN - Name
##
DOMAIN="scons.de"

## Router, NTP-Server, etc.
##
HOSTGW="192.172.10.1"
DNSPORT=53
SSHPORT=22
LOCALHOST="127.0.0.1"

## public IP and Hostnames
##
HOSTBASE="OEL72Rac12c"
NODE1="${HOSTBASE}N01"
NODE2="${HOSTBASE}N02"
HOSTNAME1="${NODE1}"
FQDN="yes"
IP_NODE1="192.168.78.61"
HOSTNAME2="${NODE2}"
IP_NODE2="192.168.78.62"

## VIP - IP and Hostnames
##
VIP_HOSTNAME1="${NODE1}-vip"
IP_VIP_NODE1="192.168.78.101"
VIP_HOSTNAME2="${NODE2}-vip"
IP_VIP_NODE2="192.168.78.102"

## PRIV - IP and Hostnames
##
PRIV1_HOSTNAME1="${NODE1}-priv1"
IP_PRIV1_NODE1="10.2.0.61"
PRIV1_HOSTNAME2="${NODE2}-priv1"
IP_PRIV1_NODE2="10.2.0.62"
PRIV2_HOSTNAME1="${NODE1}-priv2"
IP_PRIV2_NODE1="10.3.0.61"
PRIV2_HOSTNAME2="${NODE2}-priv2"
IP_PRIV2_NODE2="10.3.0.62"

## SCAN - Addresses
##
SCANNAME="${HOSTBASE}-scan"
IP_SCAN1="192.168.78.151"
IP_SCAN2="192.168.78.152"
IP_SCAN3="192.168.78.153"

## DNS Server
##
DNS1="${IP_NODE1}"
DNS2="${IP_NODE2}"
DNS3="192.172.10.1"

## NETWORK
##
DEVENAMEPREFIX="enp0s"
DEVICESUFFIX="3 8 9 10"
DEVICETYPES="NAT HO INT INT"

####
# Settings
# other var names ...
#
HOSTNAME="${HOSTNAME1}"
IPADDR="${IP_NODE1}"
NTPSERVER="${HOSTGW}"
DNSSERVER="${NTPSERVER}"
DNS="$DNSSERVER"
```

4.2　Second important Step: execute the Main-Script

After modifying the "`setup.cfg`" file you can start the main script located at
„**/root/postinstall_oel72/00-all-scripts.sh** ".

This Script has three parameters and one option you can specify. There parameter are exclusive, while you specify the option as you wish. The option "`-v`" will enable Shell-Script – Debugging. It should only used to find an error.

The parameters you can specify are:

Param	Meaning
-s	SHOW all settings made in setup.cfg
-c	CHECKING To check, if all files called by the main script are present
-t	TESTING will log everything what will happen, but do not execute any command that will change anything
-e	EXECUTE the script will log every step but execute any command and change the system.

4.2.1 No Parameter

If you will start the main-Script without any parameter you will get the following message:

```
*** ERROR:
*** You must specify one parameter -s, -t, -c or -e

usage:
        /root/postinstall_oel72/00-all-scripts.sh <param> [option]

  param:
    -s  : SHOW all settings in setup.cfg
    -c  : CHECK existence of all files
          will only show which scripts will be executed
          and an error, if the file does not exists.
    -t  : TEST all steps in all files
          will only display the steps, but do
          execute any command.
    -e  : EXECute all steps in this files.


  option:
    -v  : VERBOSE: to debug all steps in all files.
          Using -v will show you all statements step by step
          and will waste the output.

REMEMBER:
  - you can specify only one paramater -t, -c or -e at the same time.
  - all the output will be spooled in files automatically.
```

4.2.2 Parameter -? or –h for help

In this case you will get the same output as in 4.2.1

4.2.3 Showing the setting in setup.cfg with -s

Run the Main-Script with the parameter "**-s**" - you will get an output like this:

```
###############################################
#            DOMAIN = scons.de                #
#             NODE1 = OEL72Rac12cN01          #
#             NODE2 = OEL72Rac12cN02          #
#         HOSTNAME1 = OEL72Rac12cN01          #
#          IP_NODE1 = 192.168.78.61           #
#         HOSTNAME2 = OEL72Rac12cN02          #
#          IP_NODE2 = 192.168.78.62           #
#     VIP_HOSTNAME1 = OEL72Rac12cN01-vip      #
#      IP_VIP_NODE1 = 192.168.78.101          #
#     VIP_HOSTNAME2 = OEL72Rac12cN02-vip      #
#      IP_VIP_NODE2 = 192.168.78.102          #
#   PRIV1_HOSTNAME1 = OEL72Rac12cN01-priv1    #
#     IP_PRIV1_NODE1 = 10.2.0.61              #
#   PRIV1_HOSTNAME2 = OEL72Rac12cN02-priv1    #
#     IP_PRIV1_NODE2 = 10.2.0.62              #
#   PRIV2_HOSTNAME1 = OEL72Rac12cN01-priv2    #
#     IP_PRIV2_NODE1 = 10.3.0.61              #
#   PRIV2_HOSTNAME2 = OEL72Rac12cN02-priv2    #
#     IP_PRIV2_NODE2 = 10.3.0.62              #
#          SCANNAME = OEL72Rac12c-scan        #
#           IP_SCAN1 = 192.168.78.151         #
#           IP_SCAN2 = 192.168.78.152         #
#           IP_SCAN3 = 192.168.78.153         #
#              DNS1 = 192.168.78.61           #
#              DNS2 = 192.168.78.62           #
#              DNS3 = 192.172.10.1            #
#    DEVENAMEPREFIX = enp0s                   #
#      DEVICESUFFIX = 3 8 9 10                #
#       DEVICETYPES = NAT HO INT INT          #
#          HOSTNAME = OEL72Rac12cN01          #
#            IPADDR = 192.168.78.61           #
#         NTPSERVER = 192.172.10.1            #
#         DNSSERVER = 192.172.10.1            #
#               DNS = 192.172.10.1            #
###############################################
```

Please, verify all variables

4.2.4 **Checking if all scripts exists with -c**

Run the Main-Script with the parameter "**-c**" - you will get an output like this:

```
##### ALL OUTPUT is spooled to /tmp/config/00-all-scripts.sh.20160513-185639.log #####
 + some checks ...
 + load config file ...
 + check connection to internet ...
 + ### ALL OUTPUT is spooled to /root/config-SYSTEM-OEL72-20160513-185639.log ###
 + Start Postinstall SYSTEM ...
 + + would exec [01_]001="/root/postinstall_oel72/bin/01_00-postinstall-system.sh" ...
 + + + would exec [01_]002="/root/postinstall_oel72/bin/01_01-save.sh" ...
 + + + would exec [01_]003="/root/postinstall_oel72/bin/01_02-stop-services.sh" ...
 + + + would exec [01_]004="/root/postinstall_oel72/bin/01_03-packages.sh" ...
 + + + would exec [01_]005="/root/postinstall_oel72/bin/01_04-configfiles.sh" ...
 + + + would exec [01_]006="/root/postinstall_oel72/bin/01_05-hostname.sh" ...
 + + + would exec [01_]007="/root/postinstall_oel72/bin/01_06-networking.sh" ...
 + + + would exec [01_]008="/root/postinstall_oel72/bin/01_07-sudo.sh" ...
 + + + would exec [01_]009="/root/postinstall_oel72/bin/01_08-ssh.sh" ...
 + + + would exec [01_]010="/root/postinstall_oel72/bin/01_10-dns.sh" ...
 + + + would exec [01_]011="/root/postinstall_oel72/bin/01_11-sysctl.sh" ...
 + + + would exec [01_]012="/root/postinstall_oel72/bin/01_12-pamd.sh" ...
 + + + would exec [01_]013="/root/postinstall_oel72/bin/01_13-selinux.sh" ...
 + + + would exec [01_]014="/root/postinstall_oel72/bin/01_14-limitsconf.sh" ...
 + + + would exec [01_]015="/root/postinstall_oel72/bin/01_15-nprocconf.sh" ...
 + + + would exec [01_]016="/root/postinstall_oel72/bin/01_20-mkdir-system.sh" ...
 + + + would exec [01_]017="/root/postinstall_oel72/bin/01_30-start-services.sh" ...
 + + + would exec [01_]018="/root/postinstall_oel72/bin/01_31-settime.sh" ...
 + ### ALL OUTPUT was spooled to /root/config-SYSTEM-OEL72-20160513-185639.log ###
 + ### ALL OUTPUT is spooled to /root/config-ORACLE-OEL72-20160513-185639.log ###
 + Start Postinstall ORACLE ...
 + + would exec [02_]001="/root/postinstall_oel72/bin/02_00-postinstall-oracle.sh" ...
 + + + would exec [02_]002="/root/postinstall_oel72/bin/02_01-create-user.sh" ...
 + + + would exec [02_]003="/root/postinstall_oel72/bin/02_02-create-dirs.sh" ...
 + + + would exec [02_]004="/root/postinstall_oel72/bin/02_03-create-sshkeys.sh" ...
 + + + would exec [02_]005="/root/postinstall_oel72/bin/02_04-create-profile.sh" ...
 + ### ALL OUTPUT was spooled to /root/config-ORACLE-OEL72-20160513-185639.log ###
 + ### ALL OUTPUT is spooled to /root/config-ASM-OEL72-20160513-185639.log ###
 + Start Postinstall ASM ...
 + + would exec [03_]001="/root/postinstall_oel72/bin/03_00-postinstall-asm.sh" ...
 + + + would exec [03_]002="/root/postinstall_oel72/bin/03_01-asm-prepare-disks.sh" ...
 + + + would exec [03_]003="/root/postinstall_oel72/bin/03_02-asm-set_permissions.sh" ...
 + ### ALL OUTPUT was spooled to /root/config-ASM-OEL72-20160513-185639.log ###
 ##### ALL OUTPUT was spooled to /tmp/config/00-all-scripts.sh.20160513-185639.log #####
```

4.2.4.1 Error

I you hit the following error:

```
##### ALL OUTPUT is spooled to /tmp/config/00-all-scripts.sh.20160511-141547.log
#####
 + some checks ...
 + load config file ...
 + check connection to internet ...
*** ERROR ****
*** No connection to internet RC=2 - exit
```

Please add you a new extra line to /etc/resolv.conf with "nameserver $HOSTGW" where $HOSTGW is the IP Address of your DNS-Server in your intranet.

4.2.4.2 Logging of the Outout

As the Main-Script will call three Major-Scripts, the output of each will be logged in three different log file in /root/config-*

Moreover the complete output will be logged /tmp/root/config/00-all-scripts.sh.$DATUM-$UHR-ZEIT.log

4.2.5 Testing what the scripts will do with -t

In the case you will give the parameter "**-t**" to the Main Script all scripts will be executed and all logs, but no command will be executed. You may get an Output like this one:

```
##### ALL OUTPUT is spooled to /tmp/config/00-all-scripts.sh.20160513-185808.log #####
 + some checks ...
 + load config file ...
 + check connection to internet ...
 + ### ALL OUTPUT is spooled to /root/config-SYSTEM-OEL72-20160513-185808.log ###
 + Start Postinstall SYSTEM ...
 + starting file "00-postinstall-system" ...
 + + starting file "01-save" ...
 + + + copy /etc to /root/factory.20160513-185808 ...
 + + starting file "02-stop-services" ...
 + + + Stop some services ...
 + + + + dnsmasq: stop & disable ...
 + + + + named: stop ...
 + + + + sshd: stop ...
 + + + + firewalld: stop & disable ...
 + + + + cups: stop & disable ...
 + + + + smartd: stop & disable ...
 + + + + atd: stop & disable ...
 + + + + ypbind: stop & disable ...
 + + + + fprintd: stop & disable ...
 + + starting file "03-packages" ...
 + + + YUM: load additional packages ...
 + + + + install some packages ...
 + + + + update all ...
 + + + RPM: install some rpms ...
 + + + + to customize GRUB ...
 + + + + addon for oracle RAC ...
 + + starting file "04-configfiles" ...
 + + + Change some config files ...
 + + + + Remove all config file of firewalld & iptables ...
 + + + + named IPv4 only ...
 + + + + sshd IPv4 only ...
 + + + + configure SCSI devices as trusted ...
 + + starting file "05-hostname" ...
 + + + set hostname ...
 + + + + hostname = OEL72Rac12cN01.scons.de ...
 + + + modify /etc/sysconfig/network ...
 + + + modify /etc/hosts ...
 + + starting file "06-networking" ...
 + + + do all network changes ...
 + + + + set new /etc/resolv.conf ...
 + + + + modify /etc/sysconfig/network ...
 + + + + modify all interface in /etc/.../ifcfg-enp0s<x> ...
 + + + + + set Interface enp0s3 of type NAT ...
 + + + + + set Interface enp0s8 of type HO ...
 + + + + + set Interface enp0s9 of type INT ...
 + + + + + set Interface enp0s10 of type INT ...
 + + + + + set Interface enp0s10 of type INT ...
 + + starting file "07-sudo" ...
 + + + Modify /etc/sudoers ...
 + + starting file "08-ssh" ...
 + + + modify SSH configuration ...
 + + + + create all server keys ...
 + + + + + first: remove the old keys ...
 + + + + + second: generate the new keys ...
 + + + + config the ssh Daemon ...
 + + + + generate the key of root ...
 + + + + + first: remove the old ...
 + + + + + second: generate the new key ...
 + + starting file "10-dns" ...
 + + + modify all DNS config files ...
 + + + + stop named service ...
 + + + + create all named related files ...
 + + + + + create dir /var/named/zones/scons.de ...
 + + + + + remove /var/named/zones ...
 + + + + + remove /var/named/data ...
 + + + + + remove /var/named/dynamic ...
 + + + + + create /var/named/zones/scons.de ...
 + + + + + create ./data ...
 + + + + + create ./dynamic ...
 + + + + + create file /var/log/dnsquery.log ...
 + + + + + set permission of /var/log/dnsquery.log ...
 + + + + + create file /etc/named.conf ...
 + + + + + create file /var/named/dynamic/managed-keys.bind ...
 + + + + + create file /var/named/zones/scons.de.named.rfc1912.zones ...
 + + + + + create file /var/named/zones/scons.de/named.root.key ...
 + + + + + create file /var/named/zones/scons.de/rndc.key ...
 + + + + + create file /var/named/zones/scons.de/scons.de ...
 + + + + + create file /var/named/zones/scons.de/0.0.127.in-addr.arpa ...
 + + + + + create file /var/named/zones/scons.de/in-addr.arpa ...
 + + + + + create file /var/named/zones/scons.de/named.ca ...
 + + + + + create file /var/named/zones/scons.de/named.empty ...
 + + + + + create file /var/named/zones/scons.de/named.localhost ...
 + + + + + create file /var/named/zones/scons.de/named.loopback ...
```

```
+ + + + + set permission ...
+ + + + + + to /var/named ...
+ + + + + + to /etc/named.conf ...
+ + + + + start service named ...
+ + starting file "11-sysctl" ...
+ + + disable IPv6 ...
+ + + set tuned profile oracle ...
+ + starting file "12-pamd" ...
+ + + modify /etc/pam.d/login ...
+ + starting file "13-selinux" ...
+ + + set SELINUX to disabled ...
+ + starting file "14-limitsconf" ...
+ + + add lines to /etc/security/limits.conf ...
+ + starting file "15-nprocconf" ...
+ + + modify /etc/security/limits.d/20-nproc.conf ...
+ + starting file "20-mkdir-system" ...
+ + + create some dirs in ...
+ + + + in /usr/local ...
+ + + + in /var/log ...
+ + + + in /tmp ...
+ + + create some dirs for nfs ...
+ + + + in /var/opt/data ...
+ + + + in /opt ...
+ + + + in /media ...
+ + starting file "30-start-services" ...
+ + + start some services ... ...
+ + + + restart network ...
+ + + + restart & enable named ...
+ + + + start & enable sshd ...
+ + starting file "31-settime" ...
+ + + adjust time to NTP Server 192.172.10.1 ...
+ ### ALL OUTPUT was spooled to /root/config-SYSTEM-OEL72-20160513-185808.log ###
+ ### ALL OUTPUT is spooled to /root/config-ORACLE-OEL72-20160513-185808.log ###
+ Start Postinstall ORACLE ...
+ starting file "00-postinstall-oracle" ...
+ + starting file "01-create-user" ...
+ + + create all groups and user grid ...
+ + + + create the groups ...
+ + + + + group oper ...
+ + + + + group backupdba ...
+ + + + + group asmdba ...
+ + + + + group dgdba ...
+ + + + + group kmdba ...
+ + + + + group asmadmin ...
+ + + + + group asmoper ...
+ + + + create user grid ...
+ + + + modify groups of user oracle ...
+ + + modify expiredate and inactive of user grid & oracle ...
+ + + + user rhartwig ...
+ + + + user oracle ...
+ + + + user grid ...
+ + starting file "02-create-dirs" ...
+ + + create dirs in /u01 ...
+ + + + create /u01/app/12.1.0.2.0/grid ...
+ + + + create /u01/app/oracle/product/12.1.0.2.0/db_1 ...
+ + + set permission & owner ...
+ + + + set owner oracle for /u01 ...
+ + + + set owner grid for /u01/app/12.1.0.2.0 ...
+ + + + set permission for /u01 ...
+ + starting file "03-create-sshkeys" ...
+ + + Create SSH-Key for user Oracle and grid ...
+ + + + user oracle ...
+ + + + + remove /home/oracle/.ssh ...
+ + + + + create new dir /home/oracle/.ssh ...
+ + + + + set permission to /home/oracle/.ssh ...
+ + + + + create /home/oracle/.ssh/authorized_keys ...
+ + + + + remove id_rsa* files ...
+ + + + + generate new rsa key pair ...
+ + + + + add id_rsa.pub to /home/oracle/.ssh/authorized_keys ...
+ + + + + set owner to of /home/oracle/.ssh ...
+ + + + user grid ...
+ + + + + remove /home/grid/.ssh ...
+ + + + + create new dir /home/grid/.ssh ...
+ + + + + set permission to /home/grid/.ssh ...
+ + + + + create /home/grid/.ssh/authorized_keys ...
+ + + + + remove id_rsa* files ...
+ + + + + generate new rsa key pair ...
+ + + + + add id_rsa.pub to /home/grid/.ssh/authorized_keys ...
+ + + + + set owner to of /home/grid/.ssh ...
+ + + + Create SSH-Key for rhartwig and root ...
+ + + + user rhartwig ...
+ + + + + remove /home/rhartwig/.ssh ...
+ + + + + create new dir /home/rhartwig/.ssh ...
+ + + + + set permission to /home/rhartwig/.ssh ...
+ + + + + create /home/rhartwig/.ssh/authorized_keys ...
+ + + + + remove id_rsa* files ...
+ + + + + generate new rsa key pair ...
+ + + + + add id_rsa.pub to /home/rhartwig/.ssh/authorized_keys ...
+ + + + + set owner to of /home/rhartwig/.ssh ...
+ + + + user root ...
+ + + + + remove /root/.ssh ...
+ + + + + create new dir /root/.ssh ...
+ + + + + set permission to /root/.ssh ...
+ + + + + create /root/.ssh/authorized_keys ...
```

```
+ + + + + remove id_rsa* files ...
+ + + + + generate new rsa key pair ...
+ + + + + add id_rsa.pub to /root/.ssh/authorized_keys ...
+ + + + + set owner to of /root/.ssh ...
+ + + Add all public SSH-Keys to the others ...
+ + + create .Xauthority for all users ...
+ + starting file "04-create-profile" ...
+ + + create .bash_profile for user oracle & grid ...
+ + + + for user = oracle ...
+ + + + for user = grid ...
+ + + set owner ...
+ + + + set owner oracle for /home/oracle/.bash_profile ...
+ + + + set owner grid for /home/grid/.bash_profile ...
+ + + set permissions ...
+ + + + for /home/oracle/.bash_profile ...
+ + + + for /home/grid/.bash_profile ...
+ ### ALL OUTPUT was spooled to /root/config-ORACLE-OEL72-20160513-185808.log ###
+ ### ALL OUTPUT is spooled to /root/config-ASM-OEL72-20160513-185808.log ###
+ Start Postinstall ASM ...
+ starting file "00-postinstall-asm" ...
+ + starting file "01-asm-prepare-disks" ...
+ + + do all changes for the ASM Devices ...
+ + + found 8 devices ...
+ + + for - loop to prepare all ASM devices ...
+ + + + prepare /dev/sdc ...
+ + + + create partition on /dev/sdc ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + + prepare /dev/sdd ...
+ + + + create partition on /dev/sdd ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + + prepare /dev/sde ...
+ + + + create partition on /dev/sde ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + + prepare /dev/sdf ...
+ + + + create partition on /dev/sdf ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + + prepare /dev/sdg ...
+ + + + create partition on /dev/sdg ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + + prepare /dev/sdh ...
+ + + + create partition on /dev/sdh ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + + prepare /dev/sdi ...
+ + + + create partition on /dev/sdi ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + + prepare /dev/sdj ...
+ + + + create partition on /dev/sdj ...
+ + + + + remove existing partitions ...
+ + + + + create only one partition ...
+ + + + + empty header of ASM disk ...
+ + + for-loop finished ...
+ + + all changes on partitions for ASM devices done ...
+ + starting file "02-asm-set_permissions" ...
+ + + do all changes for the ASM Devices ...
+ + + found 8 devices ...
+ + + set a sym link to /usr/lib/udev/scsi_id ...
+ + + define all parameters to call /usr/lib/udev/scsi_id ...
+ + + remove symlinks /dev/asm-disk ...
+ + + remove all UUID - symlinks ...
+ + + remove all rules for asm disks ...
+ + + for - loop to prepare all ASM devices ...
+ + + + prepare /dev/sdc ...
+ + + + set rule for disk no 0 = /dev/sdc ...
+ + + + load updated block device partition tables for /dev/sdc ...
+ + + + test the rule for /block/sdc/sdc1 ...
+ + + + prepare /dev/sdd ...
+ + + + set rule for disk no 1 = /dev/sdd ...
+ + + + load updated block device partition tables for /dev/sdd ...
+ + + + test the rule for /block/sdd/sdd1 ...
+ + + + prepare /dev/sde ...
+ + + + set rule for disk no 2 = /dev/sde ...
+ + + + load updated block device partition tables for /dev/sde ...
+ + + + test the rule for /block/sde/sde1 ...
+ + + + prepare /dev/sdf ...
+ + + + set rule for disk no 3 = /dev/sdf ...
+ + + + load updated block device partition tables for /dev/sdf ...
+ + + + test the rule for /block/sdf/sdf1 ...
+ + + + prepare /dev/sdg ...
+ + + + set rule for disk no 4 = /dev/sdg ...
+ + + + load updated block device partition tables for /dev/sdg ...
```

```
+ + + + test the rule for /block/sdg/sdg1 ...
+ + + + prepare /dev/sdh ...
+ + + + set rule for disk no 5 = /dev/sdh ...
+ + + + load updated block device partition tables for /dev/sdh ...
+ + + + test the rule for /block/sdh/sdh1 ...
+ + + + prepare /dev/sdi ...
+ + + + set rule for disk no 6 = /dev/sdi ...
+ + + + load updated block device partition tables for /dev/sdi ...
+ + + + test the rule for /block/sdi/sdi1 ...
+ + + + prepare /dev/sdj ...
+ + + + set rule for disk no 7 = /dev/sdj ...
+ + + + load updated block device partition tables for /dev/sdj ...
+ + + + test the rule for /block/sdj/sdj1 ...
+ + + for-loop finished ...
+ + + all changes for ASM devices done ...
+ ### ALL OUTPUT was spooled to /root/config-ASM-OEL72-20160513-185808.log ###
##### ALL OUTPUT was spooled to /tmp/config/00-all-scripts.sh.20160513-185808.log #####
```

4.3 Run the Main Script – with -e

Running the Main-Script with the parameter "**-e**" – will do all the changes by the main-script. You may get an output like this:

```
[2016-05-13 19:57:03] ##### ALL OUTPUT is spooled to /tmp/config/00-all-scripts.sh.20160513-
195703.log #####
[2016-05-13 19:57:03] + some checks ...
[2016-05-13 19:57:03] + load config file ...
[2016-05-13 19:57:03] + check connection to internet ...
[2016-05-13 19:57:09] + ### ALL OUTPUT is spooled to /root/config-SYSTEM-OEL72-20160513-195703.log
###
[2016-05-13 19:57:09] + Start Postinstall SYSTEM ...
[2016-05-13 19:57:09] + starting file "00-postinstall-system" ...
[2016-05-13 19:57:09] + + starting file "01-save" ...
[2016-05-13 19:57:09] + + + copy /etc to /root/factory.20160513-195703 ...
[2016-05-13 19:57:10] + + starting file "02-stop-services" ...
[2016-05-13 19:57:10] + + + Stop some services ...
[2016-05-13 19:57:10] + + + + dnsmasq: stop & disable ...
[2016-05-13 19:57:12] + + + + named: stop ...
[2016-05-13 19:57:13] + + + + sshd: stop ...
[2016-05-13 19:57:13] + + + + firewalld: stop & disable ...
[2016-05-13 19:57:17] + + + + cups: stop & disable ...
[2016-05-13 19:57:19] + + + + smartd: stop & disable ...
[2016-05-13 19:57:19] + + + + atd: stop & disable ...
[2016-05-13 19:57:21] + + + + ypbind: stop & disable ...
[2016-05-13 19:57:22] + + + + fprintd: stop & disable ...
[2016-05-13 19:57:23] + + starting file "03-packages" ...
[2016-05-13 19:57:23] + + + YUM: load additional packages ...
[2016-05-13 19:57:23] + + + + install some packages ...
Package strace-4.8-11.el7.x86_64 already installed and latest version
No Presto metadata available for ol7_latest
Public key for dos2unix-6.0.3-4.el7.x86_64.rpm is not installed
warning: /etc/chrony.keys saved as /etc/chrony.keys.rpmsave
[2016-05-13 19:58:53] + + + + update all ...
[2016-05-13 20:08:40] + + + RPM: install some rpms ...
[2016-05-13 20:08:40] + + + + to customize GRUB ...
[2016-05-13 20:08:40] + + + + addon for oracle RAC ...
Using default group oinstall to install package
[2016-05-13 20:08:41] + + starting file "04-configfiles" ...
[2016-05-13 20:08:41] + + + Change some config files ...
[2016-05-13 20:08:41] + + + + Remove all config file of firewalld & iptables ...
[2016-05-13 20:08:41] + + + + named IPv4 only ...
[2016-05-13 20:08:41] + + + + sshd IPv4 only ...
[2016-05-13 20:08:41] + + + + configure SCSI devices as trusted ...
[2016-05-13 20:08:41] + + starting file "05-hostname" ...
[2016-05-13 20:08:41] + + + set hostname ...
[2016-05-13 20:08:41] + + + + hostname = OEL72Rac12cN01.scons.de ...
[2016-05-13 20:08:41] + + + modify /etc/sysconfig/network ...
[2016-05-13 20:08:41] + + + modify /etc/hosts ...
[2016-05-13 20:08:41] + + starting file "06-networking" ...
[2016-05-13 20:08:41] + + + do all network changes ...
[2016-05-13 20:08:41] + + + + set new /etc/resolv.conf ...
[2016-05-13 20:08:41] + + + + modify /etc/sysconfig/network ...
[2016-05-13 20:08:43] + + + + modify all interface in /etc/.../ifcfg-enp0s<x> ...
[2016-05-13 20:08:43] + + + + + set Interface enp0s3 of type NAT ...
[2016-05-13 20:08:43] + + + + + set Interface enp0s8 of type HO ...
[2016-05-13 20:08:43] + + + + + set Interface enp0s9 of type INT ...
[2016-05-13 20:08:43] + + + + + set Interface enp0s10 of type INT ...
[2016-05-13 20:08:45] + + + + + set Interface enp0s10 of type INT ...
[2016-05-13 20:08:55] + + starting file "07-sudo" ...
[2016-05-13 20:08:55] + + + Modify /etc/sudoers ...
[2016-05-13 20:08:55] + + starting file "08-ssh" ...
[2016-05-13 20:08:55] + + + modify SSH configuration ...
[2016-05-13 20:08:55] + + + + create all server keys ...
[2016-05-13 20:08:55] + + + + + first: remove the old keys ...
[2016-05-13 20:08:55] + + + + + second: generate the new keys ...
[2016-05-13 20:08:57] + + + + config the ssh Daemon ...
[2016-05-13 20:08:57] + + + generate the key of root ...
[2016-05-13 20:08:57] + + + + first: remove the old ...
[2016-05-13 20:08:57] + + + + + second: generate the new key ...
[2016-05-13 20:09:04] + + starting file "10-dns" ...
[2016-05-13 20:09:04] + + + modify all DNS config files ...
[2016-05-13 20:09:04] + + + + stop named service ...
[2016-05-13 20:09:04] + + + + create all named related files ...
[2016-05-13 20:09:04] + + + + + create dir /var/named/zones/scons.de ...
[2016-05-13 20:09:04] + + + + + remove /var/named/zones ...
[2016-05-13 20:09:04] + + + + + remove /var/named/data ...
[2016-05-13 20:09:04] + + + + + remove /var/named/dynamic ...
[2016-05-13 20:09:04] + + + + + create /var/named/zones/scons.de ...
[2016-05-13 20:09:04] + + + + + create ./data ...
[2016-05-13 20:09:04] + + + + + create ./dynamic ...
[2016-05-13 20:09:04] + + + + + create file /var/log/dnsquery.log ...
[2016-05-13 20:09:04] + + + + + set permission of /var/log/dnsquery.log ...
[2016-05-13 20:09:04] + + + + + create file /etc/named.conf ...
[2016-05-13 20:09:04] + + + + + create file /var/named/dynamic/managed-keys.bind ...
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/named.rfc1912.zones ...
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/named.root.key ...
```

```
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/rndc.key ...
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/scons.de ...
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/0.0.127.in-addr.arpa ...
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/in-addr.arpa ...
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/named.ca ...
[2016-05-13 20:09:04] + + + + + create file /var/named/zones/scons.de/named.empty ...
[2016-05-13 20:09:05] + + + + + create file /var/named/zones/scons.de/named.localhost ...
[2016-05-13 20:09:05] + + + + + create file /var/named/zones/scons.de/named.loopback ...
[2016-05-13 20:09:05] + + + + + set permission ...
[2016-05-13 20:09:05] + + + + + + to /var/named ...
[2016-05-13 20:09:05] + + + + + + to /etc/named.conf ...
[2016-05-13 20:09:05] + + + + start service named ...
[2016-05-13 20:09:05] + + starting file "11-sysctl" ...
[2016-05-13 20:09:05] + + + disable IPv6 ...
[2016-05-13 20:09:05] + + + set tuned profile oracle ...
[2016-05-13 20:09:06] + + + + tuned-adm: Current active profile: oracle ...
[2016-05-13 20:09:06] + + starting file "12-pamd" ...
[2016-05-13 20:09:06] + + + modify /etc/pam.d/login ...
[2016-05-13 20:09:06] + + starting file "13-selinux" ...
[2016-05-13 20:09:06] + + + set SELINUX to disabled ...
[2016-05-13 20:09:06] + + starting file "14-limitsconf" ...
[2016-05-13 20:09:06] + + + add lines to /etc/security/limits.conf ...
[2016-05-13 20:09:06] + + starting file "15-nprocconf" ...
[2016-05-13 20:09:06] + + + modify /etc/security/limits.d/20-nproc.conf ...
[2016-05-13 20:09:06] + + starting file "20-mkdir-system" ...
[2016-05-13 20:09:06] + + + create some dirs in ...
[2016-05-13 20:09:06] + + + + in /usr/local ...
[2016-05-13 20:09:06] + + + + in /var/log ...
[2016-05-13 20:09:06] + + + + in /tmp ...
[2016-05-13 20:09:06] + + + create some dirs for nfs ...
[2016-05-13 20:09:06] + + + + in /var/opt/data ...
[2016-05-13 20:09:07] + + + + in /opt ...
[2016-05-13 20:09:07] + + + + in /media ...
[2016-05-13 20:09:07] + + starting file "30-start-services" ...
[2016-05-13 20:09:07] + + + start some services ... ...
[2016-05-13 20:09:07] + + + restart network ...
[2016-05-13 20:09:17] + + + restart & enable named ...
[2016-05-13 20:09:20] + + + start & enable sshd ...
[2016-05-13 20:09:27] + + starting file "31-settime" ...
[2016-05-13 20:09:27] + + + adjust time to NTP Server 192.172.10.1 ...
[2016-05-13 20:09:38] + ### ALL OUTPUT was spooled to /root/config-SYSTEM-OEL72-20160513-195703.log
###
[2016-05-13 20:09:38] + ### ALL OUTPUT is spooled to /root/config-ORACLE-OEL72-20160513-195703.log
###
[2016-05-13 20:09:38] + Start Postinstall ORACLE ...
[2016-05-13 20:09:38] + starting file "00-postinstall-oracle" ...
[2016-05-13 20:09:38] + + starting file "01-create-user" ...
[2016-05-13 20:09:38] + + + create all groups and user grid ...
[2016-05-13 20:09:38] + + + + create the groups ...
[2016-05-13 20:09:38] + + + + + group oper ...
[2016-05-13 20:09:38] + + + + + group backupdba ...
[2016-05-13 20:09:38] + + + + + group asmdba ...
[2016-05-13 20:09:38] + + + + + group dgdba ...
[2016-05-13 20:09:38] + + + + + group kmdba ...
[2016-05-13 20:09:38] + + + + + group asmadmin ...
[2016-05-13 20:09:38] + + + + + group asmoper ...
[2016-05-13 20:09:38] + + + + create user grid ...
[2016-05-13 20:09:38] + + + + modify groups of user oracle ...
[2016-05-13 20:09:38] + + + modify expiredate and inactive of user grid & oracle ...
[2016-05-13 20:09:38] + + + + user rhartwig ...
[2016-05-13 20:09:38] + + + + user oracle ...
[2016-05-13 20:09:38] + + + + user grid ...
[2016-05-13 20:09:38] + + starting file "02-create-dirs" ...
[2016-05-13 20:09:38] + + + create dirs in /u01 ...
[2016-05-13 20:09:38] + + + + create /u01/app/12.1.0.2.0/grid ...
[2016-05-13 20:09:38] + + + + create /u01/app/oracle/product/12.1.0.2.0/db_1 ...
[2016-05-13 20:09:38] + + + set permission & owner ...
[2016-05-13 20:09:38] + + + + set owner oracle for /u01 ...
[2016-05-13 20:09:38] + + + + set owner grid for /u01/app/12.1.0.2.0 ...
[2016-05-13 20:09:38] + + + + set permission for /u01 ...
[2016-05-13 20:09:38] + + starting file "03-create-sshkeys" ...
[2016-05-13 20:09:38] + + + Create SSH-Key for user Oracle and grid ...
[2016-05-13 20:09:38] + + + + user oracle ...
[2016-05-13 20:09:38] + + + + + remove /home/oracle/.ssh ...
[2016-05-13 20:09:38] + + + + + create new dir /home/oracle/.ssh ...
[2016-05-13 20:09:38] + + + + + set permission to /home/oracle/.ssh ...
[2016-05-13 20:09:38] + + + + + create /home/oracle/.ssh/authorized_keys ...
[2016-05-13 20:09:38] + + + + + remove id_rsa* files ...
[2016-05-13 20:09:38] + + + + + generate new rsa key pair ...
[2016-05-13 20:09:39] + + + + + add id_rsa.pub to /home/oracle/.ssh/authorized_keys ...
[2016-05-13 20:09:39] + + + + + set owner to of /home/oracle/.ssh ...
[2016-05-13 20:09:39] + + + + user grid ...
[2016-05-13 20:09:39] + + + + + remove /home/grid/.ssh ...
[2016-05-13 20:09:39] + + + + + create new dir /home/grid/.ssh ...
[2016-05-13 20:09:39] + + + + + set permission to /home/grid/.ssh ...
[2016-05-13 20:09:39] + + + + + create /home/grid/.ssh/authorized_keys ...
[2016-05-13 20:09:39] + + + + + remove id_rsa* files ...
[2016-05-13 20:09:39] + + + + + generate new rsa key pair ...
[2016-05-13 20:09:42] + + + + + add id_rsa.pub to /home/grid/.ssh/authorized_keys ...
[2016-05-13 20:09:42] + + + + + set owner to of /home/grid/.ssh ...
[2016-05-13 20:09:42] + + + + Create SSH-Key for rhartwig and root ...
[2016-05-13 20:09:42] + + + + user rhartwig ...
[2016-05-13 20:09:42] + + + + + remove /home/rhartwig/.ssh ...
[2016-05-13 20:09:42] + + + + + create new dir /home/rhartwig/.ssh ...
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[2016-05-13 20:09:42] + + + + + set permission to /home/rhartwig/.ssh ...
[2016-05-13 20:09:42] + + + + + create /home/rhartwig/.ssh/authorized_keys ...
[2016-05-13 20:09:42] + + + + + remove id_rsa* files ...
[2016-05-13 20:09:42] + + + + + generate new rsa key pair ...
[2016-05-13 20:09:42] + + + + + add id_rsa.pub to /home/rhartwig/.ssh/authorized_keys ...
[2016-05-13 20:09:42] + + + + + set owner to of /home/rhartwig/.ssh ...
[2016-05-13 20:09:42] + + + + user root ...
[2016-05-13 20:09:42] + + + + + remove /root/.ssh ...
[2016-05-13 20:09:42] + + + + + create new dir /root/.ssh ...
[2016-05-13 20:09:42] + + + + + set permission to /root/.ssh ...
[2016-05-13 20:09:42] + + + + + create /root/.ssh/authorized_keys ...
[2016-05-13 20:09:42] + + + + + remove id_rsa* files ...
[2016-05-13 20:09:42] + + + + + generate new rsa key pair ...
[2016-05-13 20:09:43] + + + + + add id_rsa.pub to /root/.ssh/authorized_keys ...
[2016-05-13 20:09:43] + + + + + set owner to of /root/.ssh ...
[2016-05-13 20:09:43] + + + Add all public SSH-Keys to the others ...
[2016-05-13 20:09:43] + + + + User root ...
[2016-05-13 20:09:43] + + + + User rhartwig ...
[2016-05-13 20:09:43] + + + + User oracle ...
[2016-05-13 20:09:43] + + + + User grid ...
[2016-05-13 20:09:43] + + + create .Xauthority for all users ...
[2016-05-13 20:09:43] + + starting file "04-create-profile" ...
[2016-05-13 20:09:43] + + + create .bash_profile for user oracle & grid ...
[2016-05-13 20:09:43] + + + + for user = oracle ...
[2016-05-13 20:09:43] + + + + for user = grid ...
[2016-05-13 20:09:43] + + + set owner ...
[2016-05-13 20:09:43] + + + + set owner oracle for /home/oracle/.bash_profile ...
[2016-05-13 20:09:43] + + + + set owner grid for /home/grid/.bash_profile ...
[2016-05-13 20:09:43] + + + set permissions ...
[2016-05-13 20:09:43] + + + + for /home/oracle/.bash_profile ...
[2016-05-13 20:09:43] + + + + for /home/grid/.bash_profile ...
[2016-05-13 20:09:43] + ### ALL OUTPUT was spooled to /root/config-ORACLE-OEL72-20160513-195703.log
###
[2016-05-13 20:09:43] + ### ALL OUTPUT is spooled to /root/config-ASM-OEL72-20160513-195703.log ###
[2016-05-13 20:09:43] + Start Postinstall ASM ...
[2016-05-13 20:09:43] + starting file "00-postinstall-asm" ...
[2016-05-13 20:09:43] + + starting file "01-asm-prepare-disks" ...
[2016-05-13 20:09:43] + + + do all changes for the ASM Devices ...
[2016-05-13 20:09:43] + + + found 8 devices ...
[2016-05-13 20:09:43] + + + for - loop to prepare all ASM devices ...
[2016-05-13 20:09:43] + + + + prepare /dev/sdc ...
[2016-05-13 20:09:43] + + + + create partition on /dev/sdc ...
[2016-05-13 20:09:43] + + + + + remove existing partitions ...
[2016-05-13 20:09:44] + + + + + create only one partition ...
[2016-05-13 20:09:44] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:44] + + + + prepare /dev/sdd ...
[2016-05-13 20:09:44] + + + + create partition on /dev/sdd ...
[2016-05-13 20:09:44] + + + + + remove existing partitions ...
[2016-05-13 20:09:44] + + + + + create only one partition ...
[2016-05-13 20:09:44] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:44] + + + + prepare /dev/sde ...
[2016-05-13 20:09:44] + + + + create partition on /dev/sde ...
[2016-05-13 20:09:44] + + + + + remove existing partitions ...
[2016-05-13 20:09:44] + + + + + create only one partition ...
[2016-05-13 20:09:44] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:44] + + + + prepare /dev/sdf ...
[2016-05-13 20:09:44] + + + + create partition on /dev/sdf ...
[2016-05-13 20:09:44] + + + + + remove existing partitions ...
[2016-05-13 20:09:45] + + + + + create only one partition ...
[2016-05-13 20:09:45] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:45] + + + + prepare /dev/sdg ...
[2016-05-13 20:09:45] + + + + create partition on /dev/sdg ...
[2016-05-13 20:09:45] + + + + + remove existing partitions ...
[2016-05-13 20:09:45] + + + + + create only one partition ...
[2016-05-13 20:09:45] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:45] + + + + prepare /dev/sdh ...
[2016-05-13 20:09:45] + + + + create partition on /dev/sdh ...
[2016-05-13 20:09:45] + + + + + remove existing partitions ...
[2016-05-13 20:09:45] + + + + + create only one partition ...
[2016-05-13 20:09:45] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:45] + + + + prepare /dev/sdi ...
[2016-05-13 20:09:45] + + + + create partition on /dev/sdi ...
[2016-05-13 20:09:45] + + + + + remove existing partitions ...
[2016-05-13 20:09:46] + + + + + create only one partition ...
[2016-05-13 20:09:46] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:46] + + + + prepare /dev/sdj ...
[2016-05-13 20:09:46] + + + + create partition on /dev/sdj ...
[2016-05-13 20:09:46] + + + + + remove existing partitions ...
[2016-05-13 20:09:46] + + + + + create only one partition ...
[2016-05-13 20:09:46] + + + + + empty header of ASM disk ...
[2016-05-13 20:09:46] + + + for-loop finished ...
[2016-05-13 20:09:46] + + + all changes on partitions for ASM devices done ...
[2016-05-13 20:09:46] + + starting file "02-asm-set_permissions" ...
[2016-05-13 20:09:46] + + + do all changes for the ASM Devices ...
[2016-05-13 20:09:46] + + + found 8 devices ...
[2016-05-13 20:09:46] + + + set a sym link to /usr/lib/udev/scsi_id ...
[2016-05-13 20:09:46] + + + define all parameters to call /usr/lib/udev/scsi_id ...
[2016-05-13 20:09:46] + + + remove symlinks /dev/asm-disk ...
[2016-05-13 20:09:46] + + + remove all UUID - symlinks ...
[2016-05-13 20:09:46] + + + remove all rules for asm disks ...
[2016-05-13 20:09:46] + + + for - loop to prepare all ASM devices ...
[2016-05-13 20:09:46] + + + + prepare /dev/sdc ...
[2016-05-13 20:09:46] + + + + set rule for disk no 0 = /dev/sdc ...
[2016-05-13 20:09:46] + + + + load updated block device partition tables for /dev/sdc ...
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[2016-05-13 20:09:46] + + + + test the rule for /block/sdc/sdc1 ...
[2016-05-13 20:09:46] + + + + prepare /dev/sdd ...
[2016-05-13 20:09:46] + + + + set rule for disk no 1 = /dev/sdd ...
[2016-05-13 20:09:46] + + + + load updated block device partition tables for /dev/sdd ...
[2016-05-13 20:09:46] + + + + test the rule for /block/sdd/sdd1 ...
[2016-05-13 20:09:46] + + + + prepare /dev/sde ...
[2016-05-13 20:09:46] + + + + set rule for disk no 2 = /dev/sde ...
[2016-05-13 20:09:46] + + + + load updated block device partition tables for /dev/sde ...
[2016-05-13 20:09:46] + + + + test the rule for /block/sde/sde1 ...
[2016-05-13 20:09:46] + + + + prepare /dev/sdf ...
[2016-05-13 20:09:46] + + + + set rule for disk no 3 = /dev/sdf ...
[2016-05-13 20:09:46] + + + + load updated block device partition tables for /dev/sdf ...
[2016-05-13 20:09:46] + + + + test the rule for /block/sdf/sdf1 ...
[2016-05-13 20:09:46] + + + + prepare /dev/sdg ...
[2016-05-13 20:09:46] + + + + set rule for disk no 4 = /dev/sdg ...
[2016-05-13 20:09:46] + + + + load updated block device partition tables for /dev/sdg ...
[2016-05-13 20:09:46] + + + + test the rule for /block/sdg/sdg1 ...
[2016-05-13 20:09:47] + + + + prepare /dev/sdh ...
[2016-05-13 20:09:47] + + + + set rule for disk no 5 = /dev/sdh ...
[2016-05-13 20:09:47] + + + + load updated block device partition tables for /dev/sdh ...
[2016-05-13 20:09:47] + + + + test the rule for /block/sdh/sdh1 ...
[2016-05-13 20:09:47] + + + + prepare /dev/sdi ...
[2016-05-13 20:09:47] + + + + set rule for disk no 6 = /dev/sdi ...
[2016-05-13 20:09:47] + + + + load updated block device partition tables for /dev/sdi ...
[2016-05-13 20:09:47] + + + + test the rule for /block/sdi/sdi1 ...
[2016-05-13 20:09:47] + + + + prepare /dev/sdj ...
[2016-05-13 20:09:47] + + + + set rule for disk no 7 = /dev/sdj ...
[2016-05-13 20:09:47] + + + + load updated block device partition tables for /dev/sdj ...
[2016-05-13 20:09:47] + + + + test the rule for /block/sdj/sdj1 ...
[2016-05-13 20:09:47] + + + for-loop finished ...
[2016-05-13 20:09:47] + + + all changes for ASM devices done ...
[2016-05-13 20:09:47] + ### ALL OUTPUT was spooled to /root/config-ASM-OEL72-20160513-195703.log ###
[2016-05-13 20:09:47]
[2016-05-13 20:09:47] ##################################
[2016-05-13 20:09:47] you need to reboot now ...
[2016-05-13 20:09:47] in order that all changes take effect ...
[2016-05-13 20:09:47] ##################################
[2016-05-13 20:09:47]
[2016-05-13 20:09:47] ##### ALL OUTPUT was spooled to /tmp/config/00-all-scripts.sh.20160513-
195703.log #####
```

5 Reboot

At the last step you should reboot the VM so that all changes take effect.