INSTALLATION OF ORACLE DATABASE SOFTWARE 19C

After the complete installation of OEL (Oracle Enterprise Linux) 7.9

Go to 'Devices' and select 'Insert Guest Additions CD images'



Click on 'Run'



Wait for the process to end and hit Enter.

Applications Places VirtualBox Guest Additions i	Sat			
VBox_GAs_6.1.30 : sh - Konsole				
File Edit View Bookmarks Settings Help				
Verifying archive integrity All good. Uncompressing VirtualBox 6.1.30 Guest Additions for Linux VirtualBox Guest Additions installer Copying additional installer modules Installing additional modules				
VBox_GAs_6.1.30 : sh				

Again, go to the 'Devices' menu and:

- Choose 'bidirectional' option in 'drag and drop' segment.
- Choose 'bidirectional' option in 'shared clipboard' segment.





Now open a terminal and restart your machine.

init 6 – For rebooting your VM

init 0 – For Shutting down your VM



[sha@localhost ~]\$ [sha@localhost ~]\$ init 6

🗗 🔚 sha@localhost:~		

Now login to your machine and:

Get to the 'Devices' menu again

• Choose 'Shared folders settings' in the 'Shared Folders' option.





o ×

Now click on '+folder' Icon.

Select the software from the location and check on AUTOMOUNT & MAKE PERMANENT

🕑 SH.	A - Settings			?		\times
	General	Shared Folders				
	System	Shared Folders				
	Display	Name Path Machine Folders	Access	Auto Mount	At	
$\mathbf{\mathfrak{P}}$	Storage	Transient Foldar				
	Audio	Folder Path:C:\Userc\10ani_kton\Softwares\0racle 19c				
Þ	Network	Folder Name: Oracle_19c				
	Serial Ports	Read-only				
ÿ	USB	Auto-mount				
	Shared Folders	Mount point:				
	User Interface					
		OK Cancel				
				ОК	Cance	el

Enable the wired for internet connectivity.

🐸 SHA [Running] - Oracle VM VirtualBox	- 0	\times
File Machine View Input Devices Help		
Applications Places Terminal	Sat 15:10	•• 🔒
sha@locathost:-		
File Edit View Search Terminal Help	€	
<pre>[sha@localhost ~]\$ ifconfig enp03: flags=4163-UP,BR0ADCAST,RUNNING,MULTICAST> mtu 1500 ether 08:00:27:10:10:83 txqueuelen 1000 (Ethernet) RX packets 191 bytes 15720 (15.3 KiB) RX errors 0 dropped 0 overruns 0 frame 0 TX packets 0 bytes 0 (0.0 B) TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0</pre>	* Wred Off 1:19 Remaining (55 %) SHA * Off	
<pre>lo: flags=73<up,loopback,running> mtu 65536 inet 127.0.0.1 netmask 255.0.0.0 inet6 ::1 prefixlen 128 scopeid 0x10<host></host></up,loopback,running></pre>		

Login with "root" user.

Now check the connection by using 'ping google.com'

Open the link given below and find the command as shown below

https://oracle-base.com/articles/19c/oracle-db-19c-installation-on-oracle-linux-7

[root@localhost ~]# ping google.com PING google.com (142.251.42.78) 56(84) bytes of data. 64 bytes from bom12s21-in-f14.1e100.net (142.251.42.78): icmp_seq=1 ttl=112 time=92.6 ms 64 bytes from bom12s21-in-f14.1e100.net (142.251.42.78): icmp_seq=2 ttl=112 time=103 ms ^C --- google.com ping statistics ---2 packets transmitted, 2 received, 0% packet loss, time 1000ms rtt min/avg/max/mdev = 92.671/98.177/103.683/5.506 ms [root@localhost ~]# yum install -y oracle-database-preinstall-19c

Set the password for the "oracle" user .

Set secure Linux to "permissive" by editing the "/etc/selinux/config " file, making sure the SELINUX flag isset as follows.

```
[root@localhost ~]# passwd oracle
Changing password for user oracle.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# vi /etc/selinux/config
```

🕎 SHA [Running] - Oracle VM VirtualBox File Machine View Input Devices Help Applications Places Terminal root@localhost:~ File Edit View Search Terminal Help # This file controls the state of SELinux on the system. # SELINUX= can take one of these three values: # enforcing - SELinux security policy is enforced. # permissive - SELinux prints warnings instead of enforcing. # disabled - No SELinux policy is loaded.
SELINUX=permissive # SELINUXTYPE= can take one of three values: targeted - Targeted processes are protected, # minimum - Modification of targeted policy. Only selected processes are protected. mls - Multi Level Security protection. # SELINUXTYPE=targeted

~

Find the commands from the above link and execute them as follows:

[root@localhost ~]# systemctl stop firewalld [root@localhost ~]# systemctl disable firewalld Removed symlink /etc/systemd/system/multi-user.target.wants/firewalld.service. Removed symlink /etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service. [root@localhost ~]# [root@localhost ~]# mkdir -p /u01/app/oracle/product/19.0.0/dbhome_1 [root@localhost ~]# mkdir -p /u02/oradata [root@localhost ~]# chown -R oracle:oinstall /u01 /u02 [root@localhost ~]# chmod -R 775 /u01 /u02

Use command to select the location of the software: ' df -h '

```
[oracle@localhost ~]$ su - root
Password:
Last login: Sat Jan 1 15:54:56 IST 2022 on pts/0
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# df -h
Filesystem
                      Size Used Avail Use% Mounted on
devtmpfs
                      2.2G
                                0 2.2G
                                          0% /dev
tmpfs
                      2.2G
                                0
                                   2.2G
                                           0% /dev/shm
tmpfs
                      2.2G
                            9.5M
                                   2.2G
                                           1% /run
                      2.2G
                                   2.2G
                                          0% /sys/fs/cgroup
tmpfs
                                0
                            7.0G
/dev/mapper/ol-root
                       36G
                                    29G 20% /
/dev/sdal
                     1014M
                            234M 781M 24% /boot
Oracle 19c
                      477G
                             276G 201G 58% /media/sf Oracle 19c
                      445M
tmpfs
                              48K
                                   445M
                                           1% /run/user/54321
                              59M
/dev/sr0
                       59M
                                      0 100% /run/media/oracle/VBox GAs 6.1.30
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# cd /media/sf Oracle 19c/
[root@localhost sf Oracle 19c]#
[root@localhost sf Oracle 19c]# ll
total 5948992
drwxrwx---. 1 root vboxsf
                                 12288 Dec 11 13:44 LINUX.X64 193000 db home
-rwxrwx---. 1 root vboxsf 3059705302 Jan 26 2020 LINUX.X64_193000_db_home.zip
-rwxrwx---. 1 root vboxsf 1048576000 Dec 11 11:40 Oracle_DB_19c.zip.001
-rwxrwx---. 1 root vboxsf 1048576000 Dec 11 11:36 Oracle_DB_19c.zip.002
-rwxrwx---. 1 root vboxsf 934893282 Dec 11 11:45 Oracle_DB_19c.zip.003
[root@localhost sf Oracle 19c]#
```

- Copy the LINUX.X64_193999_db_home.zip file to the destined location as given below.
- As well as change the ownership and mod for directory '/u01' and '/u02'.

```
[root@localhost sf_Oracle_19c]# pwd
/media/sf_Oracle_19c
[root@localhost sf_Oracle_19c]# cp -v *.zip /u01/app/oracle/product/19.0.0/dbhome_1
'LINUX.X64_193000_db_home.zip' -> '/u01/app/oracle/product/19.0.0/dbhome_1/LINUX.X64_193000_db_home.zip'
[root@localhost sf_Oracle_19c]#
[root@localhost sf_Oracle_19c]#
[root@localhost sf_Oracle_19c]# chown -R oracle:oinstall /u01 /u02
[root@localhost sf_Oracle_19c]# chomod -R 775 /u01 /u02
```

Now switch the user from 'root' to 'oracle' and unzip the .zip file that is

copied in the new location.

.

```
[root@localhost ~]# su - oracle
Last login: Sat Jan 1 16:05:24 IST 2022 on pts/0
[oracle@localhost ~]$ cd /u01/app/oracle/product/19.0.0/dbhome_1
[oracle@localhost dbhome_1]$
[oracle@localhost dbhome_1]$ ls -ltrh
total 2.9G
-rwxrwxr-x. 1 oracle oinstall 2.9G Jan 1 16:05 LINUX.X64_193000_db_home.zip
[oracle@localhost dbhome_1]$
[oracle@localhost dbhome_1]$ unzip LINUX.X64_193000_db_home.zip
```

Now run the Run Installer file : " ./runInstaller "

ing offacte batabase setup wizard		
	Select Configuration Opt	ISIN Database
	Configuration Option Database Installation Option Install Type Typical Installation Prerequisite Checks Summary Install Product Finish	Select any of the following install options.

Select on: 'Setup software only'. Click Next

	Oracle Database 19c Installer - Step 1 of 9 _ 🗖 🗙
Select Configuration Opt	ion 19° DRACLE. Database
Configuration Option Database Installation Options Install Type Typical Installation Root script execution Prerequisite Checks Summary Install Product Finish	Select any of the following install options. ○ Create and configure a single instance database. This option creates a starter database. ⑦ ● Set Up Software Only Note 1: For RAC install, do 'Set Up Software Only' and then execute DBCA (Database Configuration Assistant) from the oracle home. Note 2: To upgrade an Oracle Database, do 'Set Up Software Only' and then execute DBUA (Database Upgrade Assistant) from the oracle home.
Help	< Back Next > Install Cancel

Select "Single instance database installation" option and click Next.

Oracle Database 19c Installer - Step 2 of 9					×
Select Database Installati	on Option	19	C OR/ Databa	Se	€.
Configuration Option Database Installation Opt Install Type Typical Installation Root script execution Prerequisite Checks Summary Install Product Finish	Select the type of database installation you want to perform.				
Help	< <u>B</u> ack	ext >	Install	Canc	el

Select 'Enterprise Edition' & Click on Next.

	Oracle Database 19c Installer - Step 3 of 11	n x
Select Database Edition	19° Databa	Se
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory Operating System Groups Root script execution Prerequisite Checks Summary Install Product Finish	 Which database edition do you want to install? Enterprise Edition Oracle Database 19c Enterprise Edition is a self-managing database that has the scala performance, high availability, and security features required to run the most demandir mission-critical applications. Standard Edition 2 Oracle Database 19c Standard Edition 2 is a full-featured data management solution id suited to the needs of medium-sized businesses. 	bility. 19. eally
Help	< Back Next >	Cancel

Click on Next.

	Oracle Database 19c Installer - Step 4 of 11	×
Specify Installation Locati	ion 19° ORACL	Е.
Configuration Option	Specify a path to place all Oracle software and configuration-related files installed by this installation owner. This location is the Oracle base directory for the installation owner.	
 <u>Database Edition</u> 	Oracle base: /u01/app/oracle	
Installation Location		
 <u>Create Inventory</u> 	This software directory is the Oracle Database home directory.	
Operating System Groups	Software location: /u01/app/oracle/product/19.0.0/dbhome_1	
Root script execution		
Prerequisite Checks		
Summary		
o Install Product		
o Finish		
Help	< Back Next > Install Cance	

Click on Next again.

	Oracle Database 19c Installer - Step 5 of 11 ×
Create Inventory	19° DRACLE Database
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory Operating System Groups Root script execution Prerequisite Checks Summary Install Product Finish	You are starting your first installation on this host. Specify a directory for installation metadata files (for example, install log 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/oralnventory Browse Specify an operating system group whose members have write permission to the inventory directory (oralnventory). oralnventory Group Name: oinstall
Help	< <u>B</u> ack <u>N</u> ext > Install Cancel

<u>Click on Next again.</u>

Oracle Database 19c Installer - Step 6 of 11 _ D					
Privileged Operating Sys	tem groups	19° ORACLE. Database			
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory Operating System Groups	SYS privileges are required to create a database using operati Membership in OS Groups grants the corresponding SYS privil grants the SYSDBA privilege. Database Administrator (OSDBA) group: Database Operator (OSOPER) group (Optional): Database Ba <u>c</u> kup and Recovery (OSBACKUPDBA) group:	ing system (OS) authentication. lege, eg. membership in OSDBA dba oper backupdba			
Root script execution Prerequisite Checks Summary Install Product Finish	Data <u>G</u> uard administrative (OSDGDBA) group: Encryption <u>K</u> ey Management administrative (OSKMDBA) group: <u>R</u> eal Application Cluster administrative (OSRACDBA) group:	dgdba v kmdba v racdba v			
Help	< <u>B</u> ack	<u>N</u> ext > Install Cancel			

<u>Check 'Automatically run configuration scripts' and provide the</u> password for 'root' user .Click Next.

	_ 0 ×		
Root script execution co	nfiguration	19	C ORACLE. Database
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory	During the software conf can choose to have the i one of the options below additional prerequisite ch e Automatically run conf () Use "root" user <u>c</u> r	iguration, certain operations have to be performed a nstaller perform these operations automatically by sp . The input specified will also be used by the installer necks. iguration scripts redential	s "root" user. You pecifying inputs for r to perform
Operating System Groups	Pass <u>w</u> ord :	•••••]
Root script execution	💡 🔾 Use <u>s</u> udo		
Prerequisite Checks	Pro <u>g</u> ram path :	/usr/bin/sudo	B <u>r</u> owse
O Install Product	<u>U</u> ser name :	oracle]
0 Finish	Passw <u>o</u> rd :]
I			
Help		< <u>B</u> ack <u>N</u> ext >	Install Cancel

Check IGNORE ALL & Click on Next.

	Oracle Database 19c Installer - Step 8 of 11	×
Perform Prerequisite Che	ecks 19° DRACL Database	.€`
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory	Verification Result Some of the minimum requirements for installation are not completed. Review and fix the issue listed in the following table, and recheck the system. Check Again Eix & Check Again Show Failed Ignore Checks Status	s
Operating System Groups Root script execution Prerequisite Checks Summary Install Product Class	By Checks Ignored No	
C rinan		
▲ ►	This is a prerequisite condition to test whether sufficient total swap space is available on the system. (more details). Expected Value : 4.337GB (4547680.0KB) Actual Value : 4.0703GB (4268028.0KB) < Back Next > Install Cancel	el

Click on 'Yes'.

	Oracle Database 19c Installer - Step 8 of 11		– • ×
Perform Prerequisite Che	ecks 1		RACLE [®]
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory	Verification Result Some of the minimum requirements for installation are not completed. For installation in the following table, and recheck the system. Check Again Eix & Check Again Show Failed Checks	Review and fi Status	x the issues ✓ Ignore All Fixable
Operating System	Oracle Database 19c Installer	× ored	No
Root script executi Prerequisite Che Summary Install Product Finish	[INS-13016] You have chosen to ignore some of the prerequisites for this installation. This may impact product configuration. Are you sure you want to continue ? Yes No Details		
<	This is a prerequisite condition to test whether sufficient total swap space system. (<u>more details</u>) Expected Value : 4.337GB (4547680.0KB) Actual Value : 4.0703GB (4268028.0KB)	:e is availabl	e on the
Help	< Back Next >	Install	Cancel

Click INSTALL.

	Oracle Database 19c Installer - Step 9 of 11 ×
Summary	19° ORACLE Database
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory Operating System Groups Root script execution Prerequisite Checks Summary Install Product Finish	Oracle Database 19c Installer Global settings Database edition: Enterprise Edition (Set Up Software Only) [Edit] Oracle base: /u01/app/oracle [Edit] Software location: /u01/app/oracle/product/19.0.0/dbhome_1 Privileged Operating System groups: dba (OSDBA), oper (OSOPER), backupdba (OSBACK Root script execution configuration: Root user credential [Edit] Inventory information Inventory location: /u01/app/oralnventory [Edit] oralnventory group: oinstall [Edit]
	Save Response File
Help	< Back Next > Install Cancel

Now the following screen will appear & it will take time to install the software.

	Oracle Database 19c Installer - Step 10 of 11	_ 0 ×
Install Product	19	Database
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory	Progress 10% Loading dialogs for Precompiler Required Support Files	
 Operating System Groups Root script execution Prerequisite Checks Summary Install Product Finish 	Configure Local Node • Prepare • Link binaries • Setup Setup Oracle Base Execute Root Scripts	Pending Pending Pending Pending Pending Pending
	Details Revert All Rever 19° ORACLE' Database	rt <u>R</u> etry <u>S</u> kip
< <u>H</u> elp	Satabase < Back Next >	nstall Cancel

Click on 'Yes'.

	Oracle Database 19c Installer - Step 10 of 11	_ 🗆 ×	
Install Product	19°	ORACLE [®] Database	
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory	Progress 63% Saving inventory Status		
Operating System	Oracle Database 19c Installer ×	Succeeded	
Root script execution Prerequisite Check Summary Install Product Finish	Configuration scripts generated by the Installer need to be run as a privileged user (root). Installer will run these scripts using the privileged user credentials provided earlier. Are you sure you want to continue ?	Succeeded Succeeded Succeeded Succeeded In Progress Pending	
Details Revert All Revert Retry			
<	19° ORACLE [®] Database		
Help	< <u>B</u> ack <u>N</u> ext > <u>I</u> n	stall Cancel	

Now select 'CLOSE'.

	Oracle Database 19c Installer - Step 1	1 of 11		-		×
Finish			19 °	Datab	ACL ase	. E .
Configuration Option Database Installation Options Database Edition Installation Location Create Inventory Operating System Groups Root script execution Prerequisite Checks Summary Install Product Finish	The registration of Oracle Database was success	ful.				
Help		< <u>B</u> ack	<u>N</u> ext > <u>I</u>	nstall	<u>C</u> los	е

Run the following highlighted scripts as shown below .

- Open a New Terminal
- Login as ROOT user
- Run the scripts

[oracle@localhost dbhome 1]\$ su - root Password: Last login: Sat Jan 1 16:23:38 IST 2022 on pts/3 [root@localhost ~]# [root@localhost ~]# /u01/app/oraInventory/orainstRoot.sh Changing permissions of /u01/app/oraInventory. Adding read, write permissions for group. Removing read, write, execute permissions for world. Changing groupname of /u01/app/oraInventory to oinstall. The execution of the script is complete. [root@localhost ~]# [root@localhost ~]# /u01/app/oracle/product/19.0.0/dbhome 1/root.sh Performing root user operation. The following environment variables are set as: ORACLE OWNER= oracle ORACLE_HOME= /u01/app/oracle/product/19.0.0/dbhome_1 Copying dbhome to /usr/local/bin ... Copying oraenv to /usr/local/bin ... 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 script. Now product-specific root actions will be performed.

[root@localhost ~]#