Tutorial Target	Installing Oracle Linux 6.7 on Virtualbox
Version / Date	1.0 / Jan-2016
Required Software	 Virtual Software like Oracle VirtualBox or VMWare Workstation. This tutorial tested on Oracle VirtualBox 5.0.12 Oracle Linux 6 Installation Media. This tutorial was performed on Oracle Linux 6.7
Required Hardware	Memory to run the VM machine: 4 GB
	Storage to hold the VM machine: 9 GB

Tutorial Target and Description

This tutorial describes how to install Oracle Linux 6.7 on a VM machine that can then be used as a seed to install Oracle software products, like Oracle Database, Clusterware, Enterprise Manager, Weblogic.. etc.

Tutorial Procedure Layout

- A. Download Oracle Linux ISO image from Oracle
- B. Create a new VM Machine, Mount the ISO image in a VM
- C. Start the installer and install the OS
- D. Make some configuration on the installed Linux

Tutorial Procedure

A. Download Oracle Linux ISO image from Oracle

Download Oracle Linux ISO image from Oracle eDelivery: <u>https://edelivery.oracle.com/</u>



products that you do not have a current valid license to use.

-	Search	
🔲 ia64		
x86 32 bit		
🖉 x86 64 bit		

Click Continue

Click on Select Alternative Release

1	Available Release	
	Oracle Linux 7.2.0.0.0 for x86 64 bit, 5 files Select Alternate Release	

Select Linux 6.7 and click Continue

Accept the Terms and Download.

B. Create a new VM Machine, Mount the ISO image in a VM and start the installer

Define in the default location of your new VM machine in the settings:

🌽 VirtualBox - Pre	ferences			?	×
🣃 General	General				
🧼 Input	Default Machine Folder:	\oracle vm			~
🚱 Update	VRDP Authentication Library:	BoxAuth			~
Language					
Display					
Network					
Extensions					
Proxy					
		ОК	Cancel	He	elp

Create a new VM in an Expert Mode:

						?	×
Create Vir	tual Machine						
Name and o	operating system						
Name: 0)rade Linux 6.7 s	eed					
Type: L	inux					•	64
Version: C	Drade (64-bit)					•	
Memory size	e						
						4096	♠ MB
4 MB					16384 M	в	
the states							
Hard disk	- 44						
Do not	add a virtual hard	a aisk					
	evisting victual b	ard disk file					
Orada	E Rusinosa Suita		1.2 dialet	mdk (Normal	200 00 CP)	_	
Uracie	-E-Dusiness-Suite	-APPO-HER-12,	1.0-UISK1.	muk (Normal,	300.00 GBJ		163
			_				
			G	uided Mode	Create	Ca	ancel
							?
							?
Create V	irtual Hard Disl	k					?
Create V	irtual Hard Disl	k					?
Create V	irtual Hard Disl	k					?
Create V File locatio Oracle Lii	irtual Hard Disl on nux 6.7 seed	k					?
Create V File locatio Oracle Lii	irtual Hard Disl on nux 6.7 seed	k					?
Create V File locatio Oracle Lii File size	irtual Hard Disl on nux 6.7 seed	k					?
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Make some changes on the settings:

O QCOW (QEMU Copy-On-Write)

0 🎯	racle Linux 6.7 - Se	ettings ? ×
	General	System
	System	Motherboard Processor Acceleration
	Display	Processor(s):
\mathbf{S}	Storage	1 CPU 8 CPUs
	Audio	196 100%
7	Network	Extended Features: 🗹 Enable PAE/NX
	Serial Ports	
Ø	USB	
	Shared Folders	
	User Interface	
		OK Cancel Help

Guided Mode Create

Cancel

🥝 o	racle Linux 6.7 - S	ettings		
	General	Storage		
	System	Storage Tree	Attributes	
	Display	🔶 Controller: IDE 🛛 🚱 🔂	Name:	IDE
	Storage	Empty	Type:	PIIX4
	Storage	😤 Controller: SATA		Use Host I/O Cache
	Audio	Oracle Linux 6.7.vdi		
₽	Network			
	Serial Ports			
Ø	USB			
	Shared Folders			
	User Interface			

Select the ISO file.

V77195-01.iso 11-Jan-16 1:28 AM WinRAR archive 3,150,162 KB V77196-01.iso 11-Jan-16 1:35 AM WinRAR archive 2,345,536 KB V77197-01.iso 11-Jan-16 1:46 AM WinRAR archive 3,822,592 KB V77198-01.iso 11-Jan-16 1:46 AM WinRAR archive 238,592 KB	^ Na	ame	^	Date modified	Туре	Size
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V77198-01.iso 11-Jan-16 1:46 AM WinRAR archive 238,592 KB		V77197-01.iso		11-Jan-16 1:46 AM	WinRAR archive	3,822,592 KB
		V77198-01.iso		11-Jan-16 1:46 AM	WinRAR archive	238,592 KB
V77199-01.iso 11-Jan-16 1:47 AM WinRAR archive 247,808 KB		V77199-01.iso		11-Jan-16 1:47 AM	WinRAR archive	247,808 KB

Click Start

C. start the installer and install the OS

Tip: right CTL to release mouse from the VM



Select Language Next

Basic Storage Next

Click Discard Any Data button

Please name hostname id network.	e this computer. The dentifies the computer on a domain]	
			Editing System eth0
Net	twork Connections		Connection name: System eth0
Name Vired System eth0	Last Used	Add	Connect automatically Available to all users Wired 802.1x Security Pv4 Settings IPv6 Settings
		dur	Method: Automatic (DHCP)
		Close	DNS servers: Search domains: DHCP client ID: Require IPv4 addressing for this connection to complete Routes
Configure Network	(Cancel Apply

4 - - -

Select the region

Enter root password

Which type of installation would you like? **Use All Space** Removes all partitions on the selected device(s). This includes partitions created by other operating systems. ۲ M Tip: This option will remove data from the selected device(s). Make sure you have backups. Replace Existing Linux System(s) Removes only Linux partitions (created from a previous Linux installation). This does not remove other partitions you may have on your storage device(s) (such as VFAT or FAT32). 05 0 Tip: This option will remove data from the selected device(s). Make sure you have backups. Shrink Current System 0 Shrinks existing partitions to create free space for the default layout. Use Free Space Retains your current data and partitions and uses only the unpartitioned space on the selected device (s), assuming you have enough free space available. os 0 0 ? **Create Custom Layout** Manually create your own custom layout on the selected device(s) using our partitioning tool. Encrypt system Review and modify partitioning layout **Back** Next

		Plea	se Select A Dev
Size (MB)	Mount Point/ RAID/Volume	Тур	be Format
101896			
93896	1	ext4	\checkmark
8000		swap	\checkmark
500	/boot	ext4	\checkmark
101899	vg_srv1	physical vo	ume (LVM) 🗸
	Size (MB) 101896 93896 8000 500 101899	Size Mount Point/ (MB) RAID/Volume 101896 93896 / 8000 500 /boot 101899 vg_srv1	Size Mount Point/ Type (MB) RAID/Volume Type 101896 93896 / ext4 8000 swap 500 /boot ext4 101899 yg srv1 physical vol



Click Next

The default installation of Oracle Linux Server is a basic server install. You can optionally select a different set of software now.
Basic Server
O Database Server
O Web Server
O Identity Management Server
O Virtualization Host
O Desktop
 Software Development Workstation
O Minimal
Please select any additional repositories that you want to use for software installation.
High Availability
Load Balancer
✓ Oracle Linux Server
+ Add additional software repositories Modify repository
You can further customize the software selection now, or after install via the software management application. Customize later
Back Next

Servers Web Services Databases System Management Virtualization Desktops Applications Development UEK3 kernel repo Languages	 Base Compatibility libraries Console internet tools Debugging Tools Dial-up Networking Support Directory Client FCoE Storage Client FCoE Storage Client Hardware monitoring utilities Infiniband Support Java Platform Large Systems Performance Legacy UNIX compatibility Mainframe Access Network file system client Networking Tools
Tools for configuring and analyzing computer networks.	© ♥ Performance Tools © ♥ Perl Support Optional packages selected: 2 of 17
	Back Ne:
Base System	Backup Server
Base System Servers	
Base System Servers Web Services	Backup Server CIFS file server Directory Server
Base System Servers Web Services Databases	Backup Server Backup Server CIFS file server Directory Server Server B = E-mail server
Base System Servers Web Services Databases System Management	Backup Server CIFS file server Directory Server E-mail server FTP server
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Base System	👸 🗹 Desktop
Servers	🔉 🗆 Desktop Debugging and Performance Tools
Web Services	🔯 🗆 Desktop Platform
Databases	C Fonts
System Management	👸 🗆 General Purpose Desktop
Virtualization	🔽 🛛 Graphical Administration Tools
Desktops	🚔 🗆 Input Methods
Applications	KDE Desktop
Development	📃 🗆 Legacy X Window System compatibility
UEK3 kernel repo	🔯 🗆 Remote Desktop Clients
Languages	📃 🗆 X Window System





Congratulations, your Oracle Linux Server installation is complete.

Please reboot to use the installed system. Note that updates may be available to ensure the proper functioning of your system and installation of these updates is recommended after the reboot.

k

Reboot

Back

After reboot, Click on Forward

srv1.localdomain
oracle
Other
srv1.localdomain
Other
Userna <mark>me: root</mark>
Cancel Log In
srv1.localdomain
Other
Password:
Cancel Log In

Tip: to turn the auto-scale windows of the VM machine on and off, use the hotkey hostKey+ C.

D. Make some configuration on the installed Linux

Check oracle user is there:



Set secure Linux to permissive

edit /etc/selinux/config file and set SELINUX = permissive

To apply changes, restart the server or execute the following command:

setenforce permissive

Disable firewall

service iptables stop chkconfig iptables off

Create oracle base directory:

mkdir -p /u01/app/oracle/product chown -R oracle:oinstall /u01 chmod -R 775 /u01

Create a user and grant it privileges (optional)

useradd -m -n orauser passwd orauser

Let's make that user also belong to "dba" group:

```
usermod -g users -G dba orauser
```

allow users belongs to "dba" group switching to an oracle account (this will open vi for you): visudo

add the following line to make dba group members execute any command by any user: %dba ALL=(ALL) ALL

to allow it to switch to oracle only, add the following instead: %dba ALL = /bin/su - oracle, !/bin/su *root*

To test that: sudo su - oracle

Install Guest Additions in the VM machine

Guest Additions won't work if you install it immediately after performing the steps above. It requires "kernel source".

To install it through yum, perform the following:

wget http://public-yum.oracle.com/public-yum-ol6.repo

the following installed 277MB in my test and took about 15 minutes to finish:

yum update

this will actually be installed by the "yum update" command. I just run it to confirm it is there: yum install kernel-uek-devel

IF all went good with you, mount the Guest Additions CD image to start installing them, as shown below:



0	VBOXADDITIONS_5.0.12_104815 ×
ССС	You have just inserted a medium with software intended to be automatically started. Choose what application to launch.
	Select how to open "VBOXADDITIONS_5.0.12_104815" and whether to perform this action in the future for other media of type "UNIX software".
	♦ Open Autorun Prompt 🗘
	Always perform this action
Eject	Cancel OK
0	VBOXADDITIONS_5.0.12_104815 ×
•	VBOXADDITIONS_5.0.12_104815 × This medium contains software intended to be automatically started. Would you like to run it?
•	VBOXADDITIONS_5.0.12_104815 × This medium contains software intended to be automatically started. Would you like to run it? × The software will run directly from the medium "VBOXADDITIONS_5.0.12_104815". You should never run software that you don't trust. ×
	VBOXADDITIONS_5.0.12_104815×This medium contains software intended to be automatically started. Would you like to run it?The software will run directly from the medium "VBOXADDITIONS_5.0.12_104815". You should never run software that you don't trust.If in doubt, press Cancel.

After installation, restart the box.

You will notice that the mouse pointer will be captured by the VM machine once you hover the pointer anywhere inside the VM window. You don't have click inside it.

Also, these Additions will allow you to share files between your host machine and VM machine.