

This guideline illustrates the installation of the C-MOR Video Surveillance Virtual Machine with the free Virtualization Software VirtualBox from Oracle. The free VM version of C-MOR is here available: <u>http://www.c-mor.com/download-vm.php</u>.

The first step of the installation is the download of Oracle's VirtualBox. This package is freely available under <u>http://www.virtualbox.org</u>.

If another virtualization software like VMware, Xen, HyperV or other is already in use then this can be used instead, if the installation process is known. VirtualBox is available for Windows and for Linux.

Once VirtualBox is installed it will start by clicking on the program icon. Click on "New" in the VirtualBox to start the installation of the new C-MOR VM.







VirtualBox collects some information about the installation now:

? ×
Create New Virtual Machine
Welcome to the New Virtual Machine Wizard!
This wizard will guide you through the steps that are necessary to create a new virtual machine for VirtualBox.
Use the <b>Next</b> button to go to the next page of the wizard and the <b>Back</b> button to return to the previous page. You can also press <b>Cancel</b> if you want to cancel the execution of this wizard.
<u>N</u> ext Cancel

G Create New Virt	ual Machine
VM Name and	ОЅ Туре
Enter a name for the install onto the virtual The name of the virtu by all VirtualBox comp Name	new virtual machine and select the type of the guest operating system you plan to machine. al machine usually indicates its software and hardware configuration. It will be used onents to identify your virtual machine.
C-MOR Virtual Mad	hine
OS <u>T</u> ype	
Operating <u>S</u> ystem: <u>V</u> ersion:	Linux   Cother Linux (64-bit)
	<u>N</u> ext Cancel



Afterwards you reach the settings where you have to assign memory for your virtual machine. Attention! The size shouldn't be too big. We suggest to assign 1024MB virtual memory. C-MOR just with one camera is able to work with 512MB virtual memory. This depends on the size of the total memory you have in your system left.

	8	x
G Create New Virtual Machine		
Memory		
Select the amount of base memory (RAM) The recommended base memory size is 25	in megabytes to be allocated to the virtual machine. 6 MB.	
Base Memory Size	512	MB
4 MB	1500 MB	
	Next Cance	1

After	setting	up	the	main	memory	the	hard	disk	space	is	set
								? <mark>x</mark>			
0	Create New V	irtual Ma	chine								
Vir	tual Hard [	Disk									
Sele	ect a hard disk in hard disk using	mage to b the <b>New</b>	e used as i button or	the boot hard select an exi	l disk of the virtual sting hard disk imag Media Manager diak	machine. ) ge from the	′ou can eithe e drop-down	r create a list or by			
If yo	ou need a more	complicat	ted hard di	sk setup, you	i can also skip this s	step and a	ttach hard di	sks later			
usin The	g the VM Setting recommended s	gs dialog. size of the	e boot har	d disk is <b>819</b> 2	2 MB.						
	Boot Hard <u>D</u> is	k									
	Create new h	hard disk									
C	Use existing	hard disk									
	C-MOR VM	hda.vdi ()	Normal, 3,0	00 GB)				•			
						Ne	ext	Cancel			



ि <mark>×</mark>
Create New Virtual Disk
Welcome to the Create New Virtual Disk Wizard!
This wizard will help you to create a new virtual hard disk for your virtual machine.
Use the <b>Next</b> button to go to the next page of the wizard and the <b>Back</b> button to return to the previous page. You can also press <b>Cancel</b> if you want to cancel the execution of this wizard.
<u>N</u> ext Cancel

? ×
Create New Virtual Disk
Hard Disk Storage Type
Select the type of virtual hard disk you want to create.
A <b>dynamically expanding storage</b> initially occupies a very small amount of space on your physical hard disk. It will grow dynamically (up to the size specified) as the Guest OS daims disk space.
A <b>fixed-size storage</b> does not grow. It is stored in a file of approximately the same size as the size of the virtual hard disk. The creation of a fixed-size storage may take a long time depending on the storage size and the write performance of your harddisk.
Storage Type
Optimically expanding storage
Eixed-size storage
<u>N</u> ext Cancel



Also the hard disk space which C-MOR will use later should be selected well. To install the operating system the virtual machine feature space. Now you are able to choose the space you need. **Attention!** The space limit of C-MOR is 2TB! Now you have to decide for a virtual disk space. If you want to do the installation automatically it isn't necessary to remember the space later. But if you want to do your own partitioning you have to remember the space you choose for the installation later. For simple tests the total space of 3 Gigabytes will be enough. Experts may change the disk space later. Please read the steps to increase the disk space on a virtual C-MOR in the forum: <u>http://www.c-mor.com/video-surveillance/forum</u>.

	8 ×
Create New Virtual	Disk
Virtual Disk Locat	ion and Size
Press the <b>Select</b> button the entry field.	to select the location of a file to store the hard disk data or type a file name in
- <u>L</u> ocation	
C-MOR Virtual Machine	
Select the size of the virt maximum size of this hard - <u>Si</u> ze	ual hard disk in megabytes. This size will be reported to the Guest OS as the d disk.
4 00 MR	
1,00 HD	2,00 10
	Next Cancel

	<u> २</u> ×
Create New Virtual Disk	
Virtual Disk Location and Size	
Press the <b>Select</b> button to select the location of a file to store the hard of the entry field.	disk data or type a file name in
_Location	
C-MOR Virtual Machine	
Select the size of the virtual hard disk in megabytes. This size will be repo maximum size of this hard disk. Size	rted to the Guest OS as the
	3,00 GB
4,00 MB	2,00 TB
(	Next Cancel

8 <mark>×</mark>
Create New Virtual Machine
Summary
You are going to create a new virtual machine with the following parameters:
Name: C-MOR Virtual Machine OS Type: Other Linux Base Memory: 512 MB Boot Hard Disk: C-MOR Virtual Machine .vdi (Normal, 3,00 GB)
If the above is correct press the Finish button. Once you press it, a new virtual machine will be created.
Note that you can alter these and all other setting of the created virtual machine at any time using the <b>Settings</b> dialog accessible through the menu of the main window.
<u>Einish</u> Cancel

C-MOR

...and you see more!



Before the just created virtual C-MOR can be started two settings need to be set that the installation runs fine later. Select the just created VM and click on "Settings".





🧐 C-	MOR Virtual Mach	nine - Settings
	General	General
	System Display Storage Audio Network Serial Ports USB Shared Folders	Basic       Advanced       Description         Name:       C-MOR Virtual Machine         Operating System:       Linux         Version:       Other Linux
		Select a settings category from the list on the left-hand side and move the mouse over a settings item to get more information.
		OK Cancel <u>H</u> elp



Select "Network" in the left menu and set "Bridged Adapter" for the "Adapter 1" as the "Attached to:" value. This is required to make C-MOR available from the attached network later.

C-MOR Virtual Machine	- Settings 💡 🗙
<ul> <li>C-MOR Virtual Machine</li> <li>General</li> <li>System</li> <li>Display</li> <li>Storage</li> <li>Audio</li> <li>Network</li> <li>Serial Ports</li> <li>USB</li> <li>Shared Folders</li> </ul>	- Settings  etwork  dapter 1 Adapter 2 Adapter 3 Adapter 4  Enable Network Adapter  Attached to: NAT  Nat attached NAT  Advanced Bridged Adapter Internal Network Host-only Adapte Bridged Adapter
Seite	elect a settings category from the list on the left-hand side and move the mouse over a settings em to get more information.



🔅 C-MOR Virtual I	Machine - Settings
General System Display Storage	Network         Adapter 1       Adapter 2       Adapter 3       Adapter 4         Image: Construction of the second
<ul> <li>Network</li> <li>Serial Ports</li> <li>USB</li> <li>Shared Folder</li> </ul>	<u>A</u> ttached to: <u>Broadcom NetXtreme 57xx-Gigabit-Controller</u> ▼ <u>Name:</u> <u>Broadcom NetXtreme 57xx-Gigabit-Controller</u> ▼ A <u>d</u> vanced
	Select a settings category from the list on the left-hand side and move the mouse over a settings item to get more information.
	<u>O</u> K Cancel <u>H</u> elp

The second change which needs to be made prior starting the VM is the mounting of the ISO image which covers the C-MOR VM. Select "Storaça" in the left menu and change the "IDE Controller" "CD/DVD Device" by clicking on the folder symbol:

😳 C-MOR Virtual Ma	chine - Settings		8 ×
General	Storage		
<ul><li>System</li><li>Display</li></ul>	Storage Tree	Attributes	
<ul> <li>Storage</li> <li>Audio</li> </ul>	C-MOR Virtual Machine .vdi	<u>C</u> D/DVD Device:	Empty
Network Serial Ports	Empty	Information	<u>P</u> assthrough
🖉 USB		Size:	
Shared Folders		Attached To:	-
	🤤 🖨 🍘		
	Select a settings category from the list on th item to get more information.	e left-hand side and mo	ove the mouse over a settings
		<u>O</u> K	Cancel <u>H</u> elp



Select "Add" in the opening menu and add the ISO Image which was downloaded from the C-MOR web.

Actions	
	<b>S</b>
New Add Remove Release	Refresh
Add (Ins) Hard Disks C. CD/DVD Images	E Floppy Images
Name	^

#### Select the file in the menu:



Virtual Media Manager	? <mark>x</mark>
Actions	
Image: New Add     Image: Second	
Hard Disks 😧 CD/DVD Images	
Name	Size
c-mor-free-video-vm-xxxxxxxxxx.iso	345,78 MB
Location: C:\Users\michaelr\Desktop\c-mor-free-video-vm-xxxxxxxx.iso Attached to: <i>Not Attached</i>	
Select Cancel	] <u>H</u> elp



🔅 C-MOR Virtual Ma	chine - Settings	? <mark>×</mark>
General	Storage	
Display	Storage Tree	Attributes
Storage	DE Controller	Slot: IDE Secondary Master 👻
🖗 Audio	C-MOR Virtual Machine .vdi	CD/DVD Device: c-mor-free-video-vm-x 🗸
Network	c-mor-free-video-vm-xxxxxxxx	Passthrough
🔊 Serial Ports		Information
🖉 USB		Size: 345,78 MB
G Shared Folders		Location: C:\Users\michaelr\Desktop\c-m
		Attached To:
	🤤 🖨 🏟	
	Select a settings category from the list on th item to get more information.	e left-hand side and move the mouse over a settings
		OK Cancel <u>H</u> elp

After the correct selection the storage menu looks like following:

Has the virtual C-MOR been configured the software has to be installed as next step. The C-MOR VM has to be started now by selecting the "C-MOR Virtual Machine" and clicking on the "Start" Button on the left top:



🜍 Oracle VM VirtualBox		
File Machine Help		
🝅 🍪 🔶 🕓	Details Snapshots Description	tion
New Settings Start Discard	Beneral Name: OS Type:	C-MOR Virtual Machine Other Linux
Orevered Off     Orevered Off     Overed Off     Overed Off since 06:48     Session Closed	System Base Memory: Processor(s): Boot Order: VT-x/AMD-V: Nested Paging: Display Video Memory: 3D Acceleration:	512 MB 1 Floppy, CD/DVD-ROM, Hard Disk Enabled 12 MB Disabled
	2D Video Acceleration: Remote Display Server: Storage IDE Controller IDE Primary Master: IDE Secondary Master (CD/DVD):	Disabled Disabled C-MOR Virtual Machine .vdi (Normal, 3,00 GB) c-mor-free-video-vm-xxxxxxxxx.iso (345,78 MB)
	Audio Host Driver: Controller:  Network Adapter 1:	Windows DirectSound ICH AC97 PCnet-FAST III (Bridged adapter, Broadcom NetXtreme 57xx-Giaabit-Controller)
	<ul> <li>Serial Ports Disabled</li> <li>USB Device Filters:</li> <li>Shared Folders</li> </ul>	0 (0 active)
	I	4



The virtual C-MOR starts with the following start screen you simply needs the Enter key to start the installation program:



Right after that the installation menu appears. Select "Automatically" to install the C-MOR VM:



If you want to install C-MOR with your own partition, you have to change now the manual. From this step you should use the documentary <u>http://www.c-mor.com/pdf/c-mor-expert-installation.pdf</u>.



The installation progress is shown:





The C-MOR Virtual Machine is installed now. Move on by pressing the Enter key:



Before the installation finishes with the command "exit" the CDROM must be unmounted (ejected) through the Devices menu on top left:





After the CDROM was unmounted the command "exit" finishes the installation. The new C-MOR VM reboots first time now:



The installation has almost finished. The C-MOR VM starts now and show following start screen after booting once automatically:





After the automatic reboot the standard IP address is set to 192.168.1.2 with the netmask 255.255.255.0:

C-MOR Console M	enu: ====	
The current Net	work Settings c	of this C-MOR are:
IP Address: Gateway:	192.168.1.2 192.168.1.1	Network Mask: 255.255.255.0 DNS1: 8.8.8.8 DNS2: 172.20.1.1
MAC Address:	00:15:5d:01:b2	2:22
<ol> <li>Print Interf</li> <li>Change IP Se</li> <li>Reboot C-MOR</li> <li>Shutdown C-M</li> <li>Reset Networ</li> <li>Set Default</li> </ol>	ace Settings ttings OR k Settings and Language	Reboot
Menu selection:		

Now select menu number 2 to change the IP to fit to your network: You are asked for the admin password. The default password of C-MOR is "admin".

1. Print Interface Settings 2. Change IP Settings 3. Reboot C–MOR 4. Shutdown C–MOR 5. Reset Network Settings and Reboot 6. Set Default Language
Menu selection: 2
Enter the C-MOR admin password:
Menu 2 selected
Enter new IP address (no validation check): 172.20.1.234
Enter new netmask (use 255.0.0.0 if not sure): 255.255.255.0
Enter new gateway address (no validation check): 172.20.1.1
The Name Servers are set to: 8.8.8.8, 172.20.1.1.



Enter new netmask (use 255.0.0.0 if not sure): 255.255.255.0 Enter new gateway address (no validation check): 172.20.1.1 The Name Servers are set to: 8.8.8.8, 172.20.1.1. Do you want to change the Name Servers? This is optionally! (y/N) y Enter first DNS Server (use 8.8.8.8 if not sure): 8.8.8.8 Enter second DNS Server (use 8.8.4.4 if not sure): 172.20.1.1 New IP address: 172.20.1.234 New Netmask: 255.255.255.0 New Gateway: 172.20.1.1 New DNS Server 1: 8.8.8.8 New DNS Server 2: 172.20.1.1 Is this correct? (y/N) y\_

The just made settings are displayed on the console.





After setting up the IP information correctly the C-MOR will be available through the web. In this example simply type <u>http://172.20.1.234</u> (or whatever you did set up) and use the username "admin" with password "admin" to log in.

First of all a disclaimer is displayed. You have to accept the disclaimer to use C-MOR:

#### Disclaimer

1- Limitation of Liability. NOTWITHSTANDING ANYTHING ELSE IN THIS AGREEMENT OR OTHERWISE, C-MOR WILL IN NO EVENT BE LIABLE WITH RESPECT TO ANY SUBJECT MATTER UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL, CONTRACTUAL OR EQUITABLE THEORY FOR: (I) ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED AND WHETHER OR NOT ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES; OR (II) DAMAGES FOR LOST PROFITS OR LOST DATA; OR (III) COST OF PROCUREMENT OF SUBSTITUTE GOODS, TECHNOLOGY OR SERVICES. NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY OR THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITATION OF LIABILITY OR LIMITED REMEDY, C-MOR'S ENTIRE AGGREGATE LIABILITY ARISING FROM OR RELATING TO THIS AGREEMENT OR THE SUBJECT MATTER HEREOF, UNDER ANY LEGAL THEORY, WHETHER IN CONTRACT, TORT, INDEMNITY OR OTHERWISE, SHALL BE LIMITED TO THE AMOUNTS RECEIVED BY C-MOR UNDER THIS AGREEMENT WITH RESPECT TO THE PARTICULAR TRANSACTION GIVING RISE TO THE CLAIM REDUCED BY 1/24 OF THE PRICE PAID BY RESELLER FOR EACH MONTH SUCH APPLICABLE END USER HAS HAD THE PRODUCT.

2- C-MOR does not warrant that the use or operation of this product will be error free, nor does it warrant that any data stored on the product will remain accessible or uncorrupted. To protect against accidental data loss, back up your data frequently to multiple types of storage media.



After clicking "Accept Disclaimer" the start screen of C-MOR shows up:



C-MOR was successfully installed now. Now move to the menu "System Administration" and configure your cameras.



More Information for the configuration of C-MOR you can find on **"User Manual for C-MOR IP V4 Video Surveillance**".

The Note "License Installation" just appears at the free version of C-MOR. If you have a licensed version yet, this note will not appear anymore.