

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:

<u>୧</u> 🗾	
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 Next button to go to the next page of the wizard and the Back button to return to the previou page. You can also press Cancel if you want to cancel the execution of this wizard.	s
Next Cancel	

😋 Create New Virt	ual Machine
VM Name and	ОЅ Туре
install onto the virtual The name of the virtu	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>Type</u>	
Operating <u>S</u> ystem: <u>V</u> ersion:	
	<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.

		? <mark>X</mark>
Create New Virtual	Machine	
Memory		
The recommended base r	e memory (RAM) in megabytes to be allocated to the virtual machine memory size is 256 MB.	<u>.</u>
Base <u>M</u> emory Size		512 MB
4 MB	1500 MB	
	Next	Cancel

After	setting	up	the	main	memory	the	hard	disk	space	is	set
								? <mark>x</mark>			
3	Create New Vi	irtual Ma	achine								
Virt	tual Hard D	Disk	_								
new	hard disk using	the New	button or	select an exi	d disk of the virtual sting hard disk ima	ge from the					
	2				Media Manager dial I can also skip this :	27	ttach hard di	sks later			
using	the VM Setting	gs dialog.									
	Boot Hard <u>D</u> is		2 DOUT HAIT								
	Create new h	nard disk									
0	Use existing	hard disk									
	C-MOR VM	nda.vdi ()	Normal, 3,0	00 GB)				▼ 🐼			
						Ne	ext	Cancel			



ନ <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 Next button to go to the next page of the wizard and the Back button to return to the previous page. You can also press Cancel 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 dynamically expanding storage 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 fixed-size storage 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
Oynamically 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>.

	2 ×
G Create New Virtual	Disk
Virtual Disk Locat	ion and Size
Press the Select 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	
maximum size of this hard Size	
4,00 MB	2,00 TB
	Next Cancel

	? ×
Create New Virtual Disk	
Virtual Disk Location and Size	
Press the Select button to select the location of a file to store the hard disk data or typ the entry field.	e a file name in
Location	
C-MOR Virtual Machine	
Select the size of the virtual hard disk in megabytes. This size will be reported to the Gue maximum size of this hard disk.	est OS as the
4,00 MB 2,00 TB	3,00 GB
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 Settings dialog accessible through the menu of the main window.
Einish 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	Machine - Settings
General System Display Storage Audio Network	Machine - Settings General Basic Advanced Description Name: C-MOR Virtual Machine Operating System: Linux Version: Other Linux
 Serial Ports USB Shared Fold 	lers
	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 Mach	nine - Settings
 C-MOR Virtual Mach General System Display Storage Audio Network Serial Ports USB Shared Folders 	Network Adapter 1 Adapter 2 Adapter 3 Adapter 4 Image: Not attached Name: Not attached Name: Name: Name: Nat Internal Network Host-only Adapte Bridged Adapter
	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



🔅 C-MOR Virtual I	Machine - Settings
General System Display Storage	Network Adapter 1 Adapter 2 Adapter 3 Adapter 4 Image:
 Network Serial Ports USB Shared Folder 	Name: Broadcom NetXtreme 57xx-Gigabit-Controller
	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		
System	Storage Tree	Attributes	
Storage	C-MOR Virtual Machine .vdi	<u>C</u> D/DVD Device:	IDE Secondary Master 🔹
Network Serial Ports	Empty	Information	Passthrough
USB		Size: Location:	
Shared Folders		Attached To:	-
	Select a settings category from the list on the item to get more information.	e left-hand side and m	ove the mouse over a settings
		<u></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	
	8
New Add Remove Release	Refresh
Add (Ins) Hard Disks CD/DVD Images	Eloppy Images
	L Hoppy 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-xxxxxxxxxxiiso	345,78 MB
Location: C:\Users\michaelr\Desktop\c-mor-free-video-vm-xxxxxxxx.iso Attached to: <i>Not Attached</i>	
<u>S</u> elect Cancel	<u>H</u> elp



🔅 C-MOR Virtual Ma	chine - Settings	? <mark>×</mark>
General	Storage	
System	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		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:



le Machine Help		
) 🔅 🔶 🖑	Details Snapshots Des	scription
New Settings Start Discard	📃 General	
-	Name:	C-MOR Virtual Machine
C-MOR Virtual Machine	OS Type:	Other Linux
Operation Off	System	
C-MOR Virtual Ma	Base Memory:	512 MB
Powered Off since (Processor(s):	1
Session Closed	Boot Order:	Floppy, CD/DVD-ROM, Hard Disk
Session closed	VT-x/AMD-V:	Enabled Enabled
	Nested Paging:	Enabled
	Display	
	Video Memory:	12 MB
	3D Acceleration:	Disabled
	2D Video Acceleration:	Disabled Disabled
	Remote Display Server:	Disabled
	Storage	
	IDE Controller	
	IDE Primary Master:	C-MOR Virtual Machine .vdi (Normal, 3,00 GB)
	IDE Secondary Master (CD/DVD):	c-mor-free-video-vm-xxxxxxxxxx.iso (345,78 MB)
	Host Driver:	Windows DirectSound
	Controller:	ICH AC97
	Network	
	Adapter 1:	PCnet-FAST III (Bridged adapter, Broadcom
		NetXtreme 57xx-Gigabit-Controller)
	Serial Ports	
	Disabled	
	Ø USB	
	Device Filters:	0 (0 active)
	Shared Folders	



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:
		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
 Print Interf Change IP Se Reboot C-MOR Shutdown C-M Reset Networ Set Default 	ttings OR k Settings and	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. Do you want to change the Name Servers? This is optionally! (y/N) y_



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: 255.255.25.0 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.