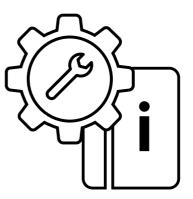
Installation Guide





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www.lancom-systems.com Wuerselen, November 2022



Introduction

Thank you for purchasing a LANCOM vFirewall.

The LANCOM vFirewall is a software-based Unified Threat Management (UTM) firewall, which is operated on a virtual machine. And yet, it offers the same functionality as a real, appliance-based LANCOM R&S[®]Unified Firewall. This installation guide describes the setup of the LANCOM vFirewall under VMware ESXi-Server, Oracle Virtual Box, and Microsoft Hyper-V Server.



Installation of the LANCOM vFirewall on a VMware ESXi server

Below, the prerequisites and single steps for a successful installation of the LANCOM vFirewall on a VMware ESXi server are described.

vFirewall files

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Prerequisites

The following prerequisites are mandatory for a successful installation of the LANCOM vFirewall on a VMware ESXi server:

- \rightarrow The LANCOM vFirewall software has to be available as an ISO image file
- → The VMware ESXI version ESXI 6.0.0 (VM version 11) or higher has to be installed on a server with an Intel processor.

The virtual machine has to meet the following minimum requirements:

- → 1×86 CPU (64 bit) processor
- \rightarrow 4 GB RAM
- → 30 GB free harddisk space
- → 2 network interfaces



Creating and configuring the LANCOM vFirewall on a VMware ESXI server

Below, the necessary steps are described to put the LANCOM vFirewall into operation on a VMware ESXi server.

Start VMware ESXi, login and create a new virtual machine.

→ Select creation type - Create a new virtual machine

🔁 New virtual machine				
1 Select creation type 2 Select a name and guest OS	Select creation type			
3 Select storage	How would you like to create a Virtual Machine?			
4 Customize settings 5 Ready to complete	Create a new virtual machine	This option guides you through creating a new virtual machine. You will be able to customize processors,		
	Deploy a virtual machine from an OVF or OVA file Register an existing virtual machine	memory, network connections, and storage. You will need to install a guest operating system after creation.		
vm ware [®]				
		Back Next Finish Cancel		



Create a name for the virtual machine

 \rightarrow Select a name and quest OS

Select creation type Select a name and guest OS Select storage	Select a name and guest OS Specify a unique name and OS		
Customize settings Ready to complete	Name Unified Firewall Virtual machine names can contain up to 80 character Identifying the quest operating system here allows the	s and they must be unique within each ESXI instance.	na svste
	installation. Compatibility Guest OS family	ESXi 6.0 virtual machine	•
	Guest OS version	Debian GNU/Linux 8 (64-bit)	٠
vm ware [.]			

In the shown example, the name "Unified Firewall" has been chosen. Further, please configure

- → Compability: ESXI 6.0 virtual machine
- → Guest OS family: Linux
- → Guest OS version: Debian Linux 8 (64 bit)



Select the storage location for the virtual machine

✓ 1 Select creation type ✓ 2 Select a name and guest OS ✓ Select torage Select the datastore in which to store the configuration and disk files.								
4 Customize settings 5 Ready to complete	The following datastores are accessible from the destination resource that you selected. Select the destination datastore for the virtual machine configuration files and all of the virtual disks.							
	Name	~	Capacity ~	Free ~	Туре ~	Thin pro \curlyvee	Access	~
	BAREOS		10.83 TB	2.75 TB	NFS	Supported	Single	
	DATA		5.46 TB	1.12 TB	VMFS5	Supported	Single	
	OS		110.75 GB	109.34 GB	VMFS6	Supported	Single	
							3 it	em

→ Select storage

Modify your settings

\rightarrow Customize settings

野 New virtual machine - Unified Firewall (ESXI 6.0 virtual machine)

 ✓ 1 Select creation type ✓ 2 Select a name and guest OS ✓ 3 Select storage ✓ 4 Customize settings 5 Ready to complete 	Customize settings Configure the virtual machine hardware an Virtual Hardware VM Options				
	Add hard disk 🛤 Add network adapter 🔮 Add other device				
	F 🔲 CPU	1 •	L		
	Memory	4096 MB V	L		
	Hard disk 1	32 GB 🔻 🛞	L		
	SCSI Controller 0	VMware Paravirtual 🔻 🛞	L		
	SATA Controller 0	0	1		
	 Network Adapter 1 	Testnet 🔻 🛞			
	Status	Connect at power on			
	Adapter Type	VMXNET 3			
vm ware [®]	MAC Address	Automatic T 00:00:00:00:00			
		Back Next Finish Cancel	٦		



Configure as follows:

- → CPU: at least 1
- → Memory: at least 4096 MB
- → Hard disk 1: at least 32 GB
- → Adapter type: VMXNET 3

Select the ISO image file via the "Browse" button.

🔁 New virtual machine - Unified Firewall (ESXi 6.0 virtual machine

1 Select creation type	Customize settings		
2 Select a name and guest OS		e and virtual machine additional options	
3 Select storage			
4 Customize settings			
5 Ready to complete	SCSI Controller 0	VMware Paravirtual	0
	SATA Controller 0		8
	Network Adapter 1	Testnet 🔻	\otimes
	New Network Adapter	Testnet 🔻	\otimes
	▼ 🗐 CD/DVD Drive 1	Datastore ISO file	\otimes
	Status	Connect at power on	
	CD/DVD Media	[DATA] RSCS_ISO/rsuf_iso_10_2_1.iso	
		Browse	
	Virtual Device Node	SATA controller 0	
vm ware	▶ 🛄 Video Card	Specify custom settings	
		Back Next Finish	Cance



Check your configuration.

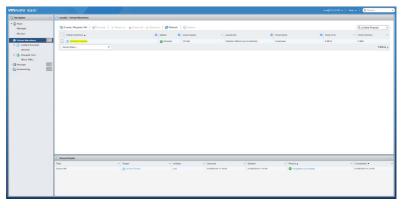
New virtual machine - Unified Fire	wall (ESXi 6.0 virtual machine)	
1 Select creation type	Ready to complete	
 2 Select a name and guest OS 3 Select storage 	Review your settings selection before	finishing the wizard
4 Customize settings		
5 Ready to complete	Name	Unified Firewall
	Datastore	DATA
	Guest OS name	Debian GNU/Linux 8 (64-bit)
	Compatibility	ESXi 6.0 virtual machine
	vCPUs	1
	Memory	4096 MB
	Network adapters	2
	Network adapter 1 network	Testnet
	Network adapter 1 type	VMXNET 3
	Network adapter 2 network	Testnet
	Network adapter 2 type	VMXNET 3
	IDE controller 0	IDE 0
	IDE controller 1	IDE 1
	SCSI controller 0	VMware Paravirtual
vm ware	SATA controller 0	New SATA controller
	Hard disk 1	

Confirm the checked configuration using the "Finish" button. Afterwards you can see your created virtual machine.



Starting the LANCOM vFirewall on a VMware ESXi server

Enter the name of the virtual machine in the search field, e.g. "Unified Firewall".



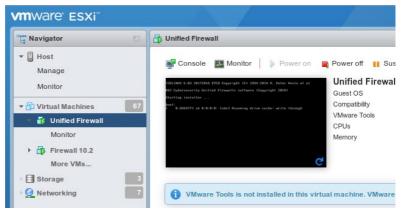
After selecting "Unified Firewall" you will see the following overview:



Select "Power on" in the upper menu bar.



Select "Console" in the upper menu bar, and in the following window "Open browser console".



The further configuration of the LANCOM vFirewall via console is described in the chapter "Final installation of the LANCOM vFirewall on the console" on page 39.



The installation of the LANCOM vFirewall under Oracle VirtualBox

Below, the prerequisites and single steps for a successful installation of the LANCOM vFirewall under Oracle VirtualBox are described.

vFirewall files

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Prerequisites

The following prerequisites are mandatory for a successful installation of the LANCOM vFirewall in the Oracle VM VirtualBox Manager:

- \rightarrow The LANCOM vFirewall software has to be available as an ISO image file
- → Oracle VM VirtualBox Manager 5.0 or higher has to be installed on a server with an Intel processor.

The virtual machine has to meet the following minimum requirements:

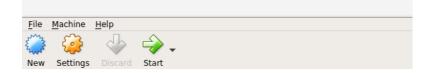
- → 1×86 CPU (64 bit) processor
- \rightarrow 4 GB RAM
- → 30 GB free hard disk space
- → 2 network interfaces



Creating and configuring the LANCOM vFirewall in the Oracle VirtualBox Manager

Below, the necessary steps are described to put the LANCOM vFirewall into operation in the Oracle Virtual Box Manager.

Start the Oracle VM Virtual Box Manager and select the "New" button in the upper menu bar to create a new virtual machine.





In the upcoming window "Name and operating system" allocate a name for the virtual machine.

In the shown example, the name "Unified Firewall" has been chosen.

	Create Virtual Machine	×
	Name and operating system	
_	Please choose a descriptive name for the new virte machine and select the type of operating system y intend to install on it. The name you choose will be throughout VirtualBox to identify this machine.	/ou
	Name: Unified Firewall	
	Type: Linux	
	<u>V</u> ersion: Debian (64-bit) -)
	Expert Mode < Back Next > Car	ncel

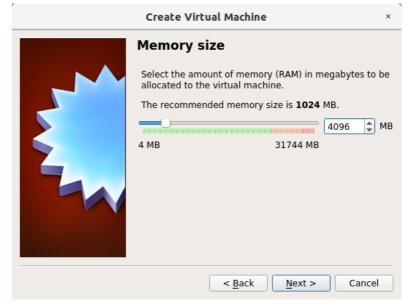
Further, please configure:

- → Type: Linux
- \rightarrow Version: Debian (64-bit)

Click on "Next".



In the window "Memory size" you configure the allocated memory for the virtual machine.



Select 4096 MB as a minimum for full UTM and confirm with "Next".



cip gs
2

In the window "Hard disk" you configure the virtual harddisk.

Select "Create a virtual hard disk now" and confirm with "Create".



In the next step "Hard disk file type" you define the file type of the virtual harddisk.



Select "VDI (Virtual Box Disk Image)" and confirm with "Next".



In the next window "Storage on physical hard disk" you select the option to allocate memory for the virtual harddisk dynamically.



Select "Dynamically allocated" and confirm with "Next".



In the next step "File location and size" you configure the name of the virtual harddisk, its storage location, and its minimum size.

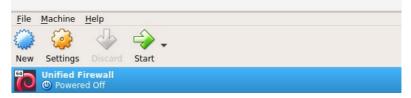
Create Virtual Hard Disk	×
File location and size	
Please type the name of the new virtual hard disk file below or click on the folder icon to select a different t the file in.	
Unified Firewall	
Select the size of the virtual hard disk in megabytes. limit on the amount of file data that a virtual machine store on the hard disk.	
-	32,00 GB
4,00 MB 2,00 T	В
< <u>B</u> ack Create	Cancel

Select a minimum size of 32 GB and proceed with "Create".



Now, the entry for your previously created virtual machine appears in the main window of the Oracle VM Virtual Box Manager.

Select the virtual machine by a single click and choose "Settings" in the upper menu bar.



In the "System" section, check the settings on the tab "Motherboard", and adjust them according to the following screenshot.

	Unified Firewall - Settings			
	General	System		
	System	Motherboard Processor Acceleration		
	Display	Base Memory:	4096 MB	
\bigcirc	Storage	4 MB 31744 M		
	Audio	Boot Order: ♥ ♥ ₩ Hard Disk		
₽	Network	✓ 🧭 Hard Disk 🖤		
	Serial Ports	Event Network		
Ø	USB	Chipset: ICH9 🔻		
	Shared Folders	Pointing Device: USB Tablet		
:	User Interface	Extended Features: ✔ Enable J/O APIC		
		Enable <u>E</u> FI (special OSes only)		
		✓ Hardware Clock in <u>U</u> TC Time		
			K X Cancel	



Activate the option "Enable PAE/NX" on the tab "Processor".

	Unified Firewall - Settings				
	General	System	٦		
	System	Motherboard Processor Acceleration			
	Display	Processor(s):	•		
\bigcirc	Storage	1 CPU 8 CPUs			
	Audio	Execution Cap:	•		
₽	Network	Extended Features: 🗸 Enable PAE/NX			
	Serial Ports				
Ø	USB				
	Shared Folders				
	User Interface				
		Cance 🖉 OK	el		

Select "Storage" from the left menu bar and click on the disc icon under "Attributes" to select "Virtual optical disk file".

Unified Firewall - Settings				
🣃 General	Storage			
🛒 System	Storage Devices	Attributes		
Display	谷 Controller: IDE	Optical <u>D</u> rive:	IDE Secondary Mast 👻 🧕	
 Storage Audio Network Serial Ports USB Shared Folders User Interface 	 rsuf_iso_10_2_2.iso Controller: SATA Unified Firewall.vdi 	Size:	Live CD/DVD Image 553,00 MB /srv/Download/rsuf_iso_10 	
	🕹 🖨 📑			
			🖉 OK 🛛 🗶 Cancel	



r

In the menu"Audio", untag "Enable Audio".

		Unified	Firewall - Settings		×
	General	Audio			
	System	Enable <u>A</u> udio			
	Display	Host Audio <u>D</u> river:	PulseAudio		
\mathbf{S}	Storage	Audio <u>C</u> ontroller:	ICH AC97		
Þ	Audio	Extended Features:	✓ Enable Audio Output		
₽	Network		Enable Audio <u>I</u> nput		
	Serial Ports				
Ø	USB				
	Shared Folders				
•	User Interface				
				¢₽ОК	🗶 Cancel



		Unified F	irewall - Setti	ings		×
	General	Network				
	System	Adapter <u>1</u> Adapter <u>2</u>	Adapter <u>3</u>	Adapter <u>4</u>		
	Display	✓ Enable Network Adapt	er			
\bigcirc	Storage	<u>A</u> ttached to:	Bridged Adapte	r 👻		
	Audio	<u>N</u> ame:	vlan1106			•
₽	Network	✓ A <u>d</u> vanced				
	Serial Ports		Paravirtualized	Network (virtio-ne	et)	•
Ø	USB	-	Deny			•
	Shared Folders		0800275032B0			
	User Interface		Cable Connect Port Forward			
					∉ОК	🗶 Cancel

In the menu "network", select "Enable Network Adapter" and configure as shown:

- → Attached to: user specific, e.g. "Bridged Adapter"
- → Name: user specific; if "Bridged Adapter" has been selected, please choose the appropriate interface.
- → Adapter Type: Paravirtualized Network (virtio-net)
- → Promiscous Mode: Deny
- → Cable Connected: enabled

The MAC address is automatically determined and filled in.

In the tab "Adapter 2" choose a name different from adapter 1 for "Attached to". The remaining entries are configured identically.



		Unified Firewall - Settings	×
	General	Serial Ports	٦
	System	Port 1 Port 2 Port 3 Port 4	
	Display	Enable Serial Port	
\bigcirc	Storage	Port Number: COM1 IRQ: 4 I/O Port: 0x3F8	
	Audio	Port Mode: Disconnected -	
₽	Network	✓ Connect to existing pipe/socket	
	Serial Ports	Path/Address:	
Ø	USB		
	Shared Folders		
:	User Interface		
		🥏 OK 🛛 🗶 Cancel	

In the menu "Serial Ports", disable any serial interfaces.

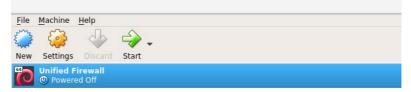
In the menus "USB", "Shared Folders", and "User Interface" confirm the preselected default values.

Select "OK" to apply the modified settings.



Start of the LANCOM vFirewall in the Oracle VirtualBox Manager

Start your virtual machine in the Oracle VM Virtual Box Manager by selecting the green "Start" arrow icon.



The further configuration of the LANCOM vFirewall via console is described in the chapter "Final installation of the LANCOM vFirewall on the console" on page 39.



Installation of the LANCOM vFirewall in Microsoft Hyper-V

Below, the prerequisites and single steps for a successful installation of the LANCOM vFirewall in Microsoft Hyper-V are described.

vFirewall files

To get the ISO file for installation please contact us via sales@lancom.de or by telephone at +49 2405 49936 122

Prerequisites

The following prerequisites are mandatory for a successful installation of the LANCOM vFirewall under Microsoft Hyper-V:

- \rightarrow The LANCOM vFirewall software has to be available as an ISO image file.
- → Microsoft Hyper-V Manager 10.0 or higher has to be installed on a server with Intel processor.

The virtual machine has to meet the following minimum requirements:

- → 1×86 CPU (64 bit) processor
- \rightarrow 4 GB RAM
- → 30 GB free harddisk space
- → 2 network interfaces



Creating and configuring the LANCOM vFirewall in the Microsoft Hyper-V Manager

Start the Microsoft Hyper-V Manager. On the right side of the screen in the "Actions" area, first select "New", then "Virtual Machine".





The "New Virtual Machine Wizard" is started. A new window "Before you begin" opens.

🖳 New Virtual Machine Wizar		×
Before You B	egin	
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	This wixard helps you create a virtual machine. You can use virtual machines in place of physical computers for a variety of uses. You can use this wizard to configure the virtual machine now, and you can change the configuration later using Hyper-V Manager. To create a virtual machine, do one of the following: Click Finish to create a virtual machine that is configured with default values. Click Next to create a virtual machine with a custom configuration. Do not show this page again	
	< Previous Next > Finish Cancel	

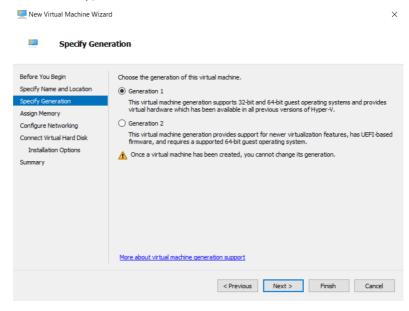


Click on "Next" and choose a name for the virtual machine, e.g. "Unified Firewall". Confirm with "Next".

🖳 New Virtual Machine Wizar	d	×
💷 Specify Name	e and Location	
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options	Choose a name and location for this virtual machine. The name is displayed in Hyper-V Manager. We recommend that you use a name that helps you ear identify this virtual machine, such as the name of the guest operating system or workload. Name: Unlifed Firewall You can create a folder or use an existing folder to store the virtual machine. If you don't select a folder, the virtual machine is stored in the default folder configured for this server. Control of the virtual machine in a different location	
Summary	Location: C:\ProgramData\Microsoft\Windows\Hyper-V\ Browse	
	If you plan to take checkpoints of this virtual machine, select a location that has enough free space. Checkpoints include virtual machine data and may require a large amount of space.	
	< Previous Next > Finish Cance	a



In the next step, select "Generation 1" and confirm with "Next".





In the window "Assign Memory", specify a value of at least 4096 MB as "Startup memory", and activate "Use Dynamic Memory for this virtual machine". Confirm with "Next".

🖳 New Virtual Machine Wizar		\times
💷 🛛 Assign Memo	ry	
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 3 MB through 12582912 MB. To improve performance, specify more than the minimum amount recommended for the operating system. Startup memory: 409d MB Use Dynamic Memory for this virtual machine. (1) When you decide how much memory to assign to a virtual machine, consider how you intend to use the virtual machine and the operating system that it will run.	
	< Previous Next > Finish Cancel	



In the next step "Configure Networking", specify the value "Standardswitch" for "Connection". Confirm with "Next".

wew virtual Machine Wizard	a	×
Configure Ne	etworking	
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	Each new virtual machine includes a network adapter. You can configure the net virtual switch, or it can remain disconnected. Connection: Standardswitch	work adapter to use a
	< Previous Next > Finis	h Cancel



Under "Connect Virtual Hard Disk", select the option "Create a virtual hard disk" and a size of 32 GB. Confirm with "Next".

🖳 New Virtual Machine Wizar	1	×
Connect Virte	ial Hard Disk	
Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties.	
	< <u>Previous</u> <u>Next</u> > Einish Cance	al



In the window "Installation Options", activate the option "Install an operating system from a bootable CD/DVD-ROM" as well as the option "Image file (.iso)". Select or confirm the path to the vFirewall image file and confirm with "Next".

Before You Begin Specify Name and Location Specify Generation Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	You can install an operating system now if you have access to the setup media, or you can install it later. Install an operating system later Install an operating system from a bootable CD/DVD-ROM Media Physical CD/DVD drive: Install an operating system from a bootable floppy disk Media Virtual floppy disk (.vfd): Drowse Install an operating system from a network-based installation server
--	---



The final page completes the wizard by displaying an overview of the so far configured parameters. Confirm with "Finish".

🖳 New Virtual Machine Wiza	rd >	<
Completing	the New Virtual Machine Wizard	
Before You Begin Specify Name and Location Specify Generation	You have successfully completed the New Virtual Machine Wizard. You are about to create the following virtual machine. Description:	1
Assign Memory Configure Networking Connect Virtual Hard Disk Installation Options Summary	Name: Unified Frewall Generation: Generation 1 Memory: 4096 MB Network: Standardswitch Hard Disk: C:\Users\Public\Documents\Hyper-V\Virtual Hard Disks\Unified Firewall.vhdx (VHD) Operating System: Will be installed from C:\Users\fits\Desktop\rsuf_iso_10_2_2.lso	
	To create the virtual machine and close the wizard, dick Finish.	
	< Previous Next > Finish Cancel	

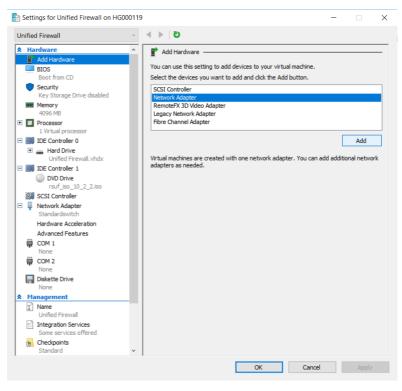


The virtual machine is now created and has to be configured subsequently. For this, select "Settings" in the "Actions" area of the Hyper-V Manager under "Unified Firewall".

	Virtual Machines								Actions	
	Name	State	CPU Usage	Assigned Memory	United	Status	Configuratio.		HG000119	
	Unifed Frewall	01	cro usaje	76signed Melliory	opune	318745	83		Quick Create	
									New	
									🖏 Import Virtual Machine	
									Hyper-V Settings	
									Strual Switch Manager	
									2. Virtual SAN Manager	
									🖬 Edit Disk	
									Inspect Disk.	
									Stop Service	
	Checkpoints							۲	× Remove Server	
		The selected vitual nachine has no checkpoints.							O Refresh	
	The selected witual machine has no checkparits.						View			
1								Help		
									Unified Firewall	
									Connect.	
									Settings.	
									Start	
									Deckpoint	
									Move.	
	Unified Firewall								Deport.	
									Rename	
		sated: injuration Version	1/16/2019 2.27.4	9 PM		a	istered: No		E Delete.	
		ingeration version	1						Help	
		es:	Norw							
	Summary Memory P									



The "Settings" window opens. In the left area under "Hardware", select the item "Add Hardware". Then, in the right area, select "Network Adapter". Confirm with "Add".





In the next window under "Virtual Switch", select the item "Standardswitch". A second network adapter shows up in the left area of the window. Confirm with "OK".

Jnified Firewall	v ● ► 0	
Add Hardware BIOS Boot from CD Security	Network Adapter Specify the configuration of the network adapter Virtual switch:	er or remove the network adapter.
Key Storage Drive disabled Memory	Standardswitch	~
4096 MB Processor 1 Virtual processor	VLAN ID Enable virtual LAN identification	
Initial processor Initial processor Initial processor Initial processor Initial processor Initial processor Initial processor	The VLAN identifier specifies the virtual LAN in network communications through this network	
IDE Controller 1 OVD Drive	Bandwidth Management	
rsuf_iso_10_2_2.iso SCSI Controller Network Adapter	Enable bandwidth management Specify how this network adapter utilizes net Bandwidth and Maximum Bandwidth are mea	
Standardswitch Hardware Acceleration		Mbps
Advanced Features	Maximum bandwidth: 0	Mbps
Standardswitch Hardware Acceleration	To leave the minimum or maximum unres	stricted, specify 0 as the value.
Advanced Features	To remove the network adapter from this virtua	al machine, click Remove.
COM 1 None		Remove
COM 2 None Diskette Drive	 Use a legacy network adapter instead of the network-based installation of the guest op services are not installed in the guest oper 	erating system or when integration
None		
Management Name Unified Firewall	-	
Integration Services	~	



Starting the LANCOM vFirewall in the Microsoft Hyper-V Manager

In the main window of the Microsoft Hyper-V Manager, under "Actions / Unified Firewall", select the item "Start", and then "Connect".

← → 2 m 2 m Hyper-V Manager								Actions	
	Virtual Machines							HG000119	
	Name	State	CPU Usage	Assigned Memory	Uptime	Status	Configuratio	Quick Create	*
	United Firewall	OH					8.3	New	
								🖏 Import Virtu	al Machine.
								Hyper-V Set	
								St Virtual Switz	
								🔬 Virtual SAN	
								🚅 Edit Disk	
								inspect Disk	L
								Stop Service	
	Checkpoints							Remove Ser	rver
		The selected virtual machine has no checkpoints.					O Refresh		
		The selected virtual machine has no checkpoints.				View			
							👔 Help		
							Unified Firewall		
							- Connect.		
							Settings		
								Start	
								B Checkpoint	
								Move	
	Unified Firewall							Deport.	
	Great		1/16/2019 2:27.45				stered: No	🖷 Rename	
		iguration Version		2 F.M.		O.	sterez no	Bx Delete	
		eration:	1					🛛 Help	
	Note	s i	None						
								11	

A separate console window pops up. Continue with the installation of the LANCOM vFirewall on the console as described in the next chapter.



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Final installation of the LANCOM vFirewall on the console

The following menu navigation on the console is basically valid for all virtual environments described in this installation guide. Variations between these systems are marked by separate screenshots.

After the start of the console the following window appears:

R&S Unified Firewalls 10.2.0 (14)	35)
Choose your keyboard layout	Danish (DK)
	Dutch (NL)
	English (UK)
	English (US)
	Finnish (SE)
	French (FR)
	German (DE)
	Italian (IT)
	Spanish (ES)
	Swedish (SE)
INSTALLATION	[Abort] < Prev Next >

Language selection

Choose your keyboard language and click on "Next".



License agreement

R&S Unified Firewalls 10.2.0 (1435)	
rLicense agreement	
German version further down / Deutsche Version weiter unten	î
Rohde & Schwarz Cybersecurity End User License Agreement ("EULA")	
The installation and use of the R&S Unified Firewalls described below is	
the subject matter of this agreement, which represents a legal licensing	
agreement between Rohde & Schwarz Cybersecurity GmbH or its subsidiaries	
(collectively "R&S Cybersecurity") and an individual or entity as a	
contractual party (collectively "User" or "you"). By installing or using	
the R&S Unified Firewalls, you agree to be bound by the terms of this	
EULA.	
1. Software Description	
(1) The R&S Unified Firewalls consist of the following two modules	
(collectively "R&S Unified Firewalls"):	
a. Server Software I (Linux operating system with basic firewall	
functionality)	
b. Server Software II (firewall specific modules developed by Rohde &	
Schwarz Cybersecurity)	
	Ţ

INSTALLATION

[Abort] < Prev | Next

Confirm the license agreement with "Next" and the following dialog with "Yes".

License agreem German version Rohde & Schwar The installati	n further down / Deutscl rz Cybersecurity End Uso ion and use of the R&S U		below is icensing idiaries
contractual the R&S Unif EULA. ■ 1. Softwar	Do you accept the	license agreement?	s a or using this
a. Server Soft functionality)) tware II (firewall spec	"): g system with basic firewall ific modules developed by Rol	es hde å
INSTALLATION		[Abort] < P	rev i Next >



Overview of the detected hardware

→ VMware ESXi:

R&S Unified Firewalls 10.2.0 (1404)
Detected hardware Hard disks	SCSI: Virtual disk (32768 MB)
CB-ROM	SCSI: NECUMHar!UMware SATA CD00
Network interface cards	eth8: UMware UMXNET3 Ethernet Controller eth1: UMware UMXNET3 Ethernet Controller
INSTALLATION	[Abort] < Prev Next \d

→ Oracle VirtualBox



→ Microsoft Hyper-V



Respectively, confirm with "Next".



Selection of the installation type



Confirm "New Installation" with "Next".

Configuration of the network interfaces

The default IP addresses are allocated to the network interfaces by pressing F12. The following screenshot appears:

→ VMware ESXi





→ Oracle VirtualBox



→ Microsoft Hyper-V



Respectively, confirm with "Next".



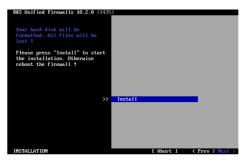
Input dialog for host- and domain name Configure as follows:

- → Hostname: UF100
- → Domain name: lancom
- → Password: freely selectable

R&S Unified Firewalls 10.2.0 (1435	
Configuration completed successfully.	
Enter the hostname and the domain name of the firewall	Hostname UF100
	Domain name Lancom
Choose a password	Password
	Confirm
INSTALLATION	[Abort] < Prev Next >

Click on "Next" to confirm your input.

Start of the installation



Confirm with "Next".





Confirm formatting of the virtual harddisk

Confirm the question to format the virtual harddisk with "Yes".

Proceeding the installation

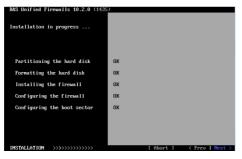
The installation is now executed and can take some time (up to 10 minutes), typically only a few minutes.





Finishing the installation

After successful installation you will notice the following screen:



Confirm with "Next" to get to the next screen.

Restart request



Confirm the restart request with "Reboot".



Completing the LANCOM vFirewall installation

After the restart the following screen occurs:

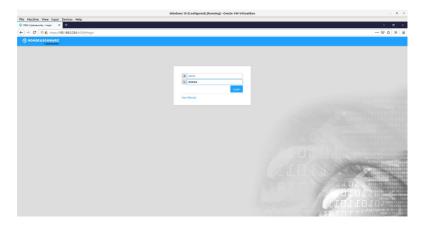


The installation has now completed. A console login is not necessary. Follow the information according the user login in the browser via the predefined interfaces, as shown in the screenshot.



Logging in to the LANCOM vFirewall via web interface

Start a web browser on a computer which is located in the subnet of the vFirewall and invoke the LANCOM vFirewall web interface as follows: For connecting to the network interface eth0 please enter: https://192.168.0.254:3438 or for network interface eth1: https://192.168.1.254:3438 The login window of your LANCOM vFirewall appears. Enter **admin** both for username and password.





You are asked to create a new password.

Windows 1	0 (Configured) [Running] - Oracle VM VirtualBox	- B ×
File Machine View Input Devices Help		
🗞 RBS Cybersecurity - Login 🛛 🗙 🕇		- a ×
(←) → C ² (0) € https://192.168.0.254/3436/#/login		🖂 🌣 🗏
ROHDE&SCHWARZ		
Cybersecurby		
Con Con	win password needs to be changed, sole password needs to be changed.	
	one Agreement was not accepted.	

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	Shew Parmord	
	w Cansole Paseword	
	Show Pearward	
	Ry logging in you accept the License	
	Agreement.	
	Cancel Accept & Login	E THE PRODUCTION OF THE PARTY
		and the second second second second
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		Street and the reserve
		And a la la la briridativorrana

After creating the new password you are automatically logged in and the web interface of your LANCOM vFirewall shows up. Now you can continue with either the Setup Wizard or a manual setup.

Setup tutorials

Here are some helpful videos and tutorials to help you set up your LANCOM vFirewall:

https://www.lancom-systems.com/uf-tutorials

Alternatively, you can scan this QR code to view it on your smartphone:





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