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OmniVista 2500 NMS Enterprise 4.2.1.R01 (Maintenance Release 1) Installation Guide

This document details the OmniVista 2500 NMS Enterprise 4.2.1.R01 Maintenance Release 1 (MR 1) (OV 2500 NMS-E 4.2.1.R01 (MR1)) installation/upgrade process. OV 2500 NMS-E 4.2.1.R01 MR 1 can be installed as a <u>fresh installation</u> from a download file available on the Customer Support website; or you can <u>upgrade from OV 2500 NMS-E 4.2.1.R01 GA</u> using the OmniVista 2500 NMS Software Repository. If you are upgrading from an earlier release (3.5.7 – 4.1.2.R03), you must first upgrade to 4.2.1.R01 GA. See the *OmniVista 2500 NMS-E 4.2.1.R01 Installation Guide (Rev. D)* for details.

This guide is specific to installing/upgrading to OV 2500 NMS-E 4.2.1.R01 (MR1). For information on VA Menu options, and procedures for upgrading from an Evaluation License, see the *OmniVista 2500 NMS-E 4.2.1.R01 Installation Guide (Rev. D)*. Specific platform support and recommended system configuration information are available in the *OmniVista 2500 NMS-E 4.2.1.R01 Release Notes (Rev. C)*.

For information on getting started with OmniVista 2500 NMS after installation (e.g., using the Web GUI, discovering network devices) see the *Getting Started Guide* in the OmniVista 2500 NMS on-line help (accessed from Help link at the top of the main OmniVista 2500 NMS Screen).

Installing OV 2500 NMS-E 4.2.1.R01 (MR1)

OV 2500 NMS-E 4.2.1.R01 (MR 1) is distributed as a Virtual Appliance only. It is run as a service using VirtualBox. There are no other standalone installers (e.g., Windows/Linux). OV 2500 NMS-E 4.2.1.R01 (MR 1) is installed as a Virtual Appliance, and can be deployed on the following hypervisors: VMware ESXi, VirtualBox, Hyper-V:

- VMware ESXi: 5.5 and 6.0
- VirtualBox: 5.0.10
- MS Hyper-V: 2012 R2 and 2016.

The sections below detail each of the steps required to deploy OV 2500 NMS-E 4.2.1.R01 (MR 1) as Virtual Appliance on <u>VMware</u>, <u>VirtualBox</u>, and <u>Hyper-V</u>. If you are upgrading from OV 2500 NMS-E 4.2.1.R01 GA, see <u>Upgrading from OV 2500 NMS-E 4.2.1.R01 GA</u>.

Note: If you are deploying OV 2500 NMS-E 4.2.1.R01 on a standalone Windows or Linux machine, you must first install Virtual Box on the machine. Virtual Box is available as a free download. See <u>Appendix A</u> for details.

Deploying the Virtual Appliance in VMware ESXi

Note that in the instructions below, vCenter is used for demonstration purposes.

1. Download and unzip the OVF package.

2. Log into vCenter and open the vSphere client.

3. Select the Host on which you want to install OV 2500 NMS-E 4.2.1.R01 (MR 1), click on **File - Deploy OVF Template**. The Deploy OVF Template Wizard appears.

🕝 Deploy OVF Template	
Source Select the source location.	
Source OVF Template Details Name and Location Storage Disk Format Ready to Complete	Deploy from a file or URL D: Users to brewst \Desktop \OVNMS-E_4.2.1_Build85_ovf\Dvrvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv
Help	< Back Next > Cancel

4. Click on the **Browse** button and locate the OV 2500 NMS-E 4.2.1.R01 (MR 1) Application file in the unzipped OVF folder (e.g., ovnmse-4.2.1.R01-85.0.ovf).

5. Select the file and click **Open** (or double click on the file). The file will appear in the "Deploy from a file or URL" field. Click **Next**. The OVF Template Details Screen appears.

Deploy OVF Template			x
OVF Template Details Verify OVF template details.			
Source OVF Template Details End User License Agreement Name and Location Storage Disk Format Network Mapping Ready to Complete	Product: Version: Vendor: Publisher: Download size: Size on disk: Description:	Omnivista 2500 NMS-E 4.2.1.R01-85.0 Alcatel-Lucent Enterprise No certificate present Unknown Unknown (thin provisioned) 306.0 GB (thick provisioned) Alcatel-Lucent Enterprise OmniVista 2500 NMS-E	
Help		< Back Next > Cancel	

6. Review the OVF details and click **Next**. The End User License Agreement Screen appears.

Deploy OVF Template		X
End User License Agreement Accept the end user license a	: greements.	
Source OVF Template Details End User License Agreemv Name and Location Storage Disk Format Network Mapping Ready to Complete	ALE USA INC. SOFTWARE LICENSE AGREEMENT IMPORTANT Please read the terms and conditions of this license agreement carefully before installing or downloading this software. The installation and use of the software is subject to these terms and conditions (Agreement). In this Agreement: "Licensee" or You, Your and Yourself, means: the legal person or entity that by its authorized agents or representatives installs and/or uses, the Software. "Software" (as defined in Section 1 below) for its own use and not for resale or distribution. Ticensee" ar You, Your and Yourself, means: the legal person or entity that by its authorized agents or representatives installs and/or uses, the Software. "Software" (as defined in Section 1 below) for its own use and not for resale or distribution. Ticenser" means ALE USA Inc. or one of its Affiliated Companies or authorized distributors entitie to distribute the Software. "Affiliated Companies" means any entity Controlling, Controlled by or under common Control, directly or indirectly, with ALE USA, Inc., "Control" means the ability to determine the management policies of a company or other entity through ownership of a majority of shares, by control of the board of management, by agreement or otherwise Provided that You accept the terms and conditions of this Software shall be governed by, this Agreement, except to the extent that a separate valid license agreement has been previously entered into between Licensee and Licensor that sets forth the terms and conditions for the uses and license of the Software for the number of users for which, and on the platform on which Licensee is installing it, on terms and conditions equivalent to this Agreement ("Separate Agreement, the Software is licensed subject to the terms and conditions of the Separate Agreement, the Software shall be contrary herein, if Licensee has entered into a Separate Agreement, and the provisions of the Separate Agreement shall supersede and replace any and al Accept	d t t
Help	< Back Next > Ca	ncel

7. Review the License Agreement, click **Accept**, then click **Next**. The Name and Location Screen appears.

Deploy OVF Template	
Name and Location Specify a name and locatio	n for the deployed template
Source OVF Template Details End User License Agreement Name and Location Storage Disk Format Network Mapping Ready to Complete	Name: Omnivista 2500 NMS-E421R01.88\$ The name can contain up to 80 characters and it must be unique within the inventory folder. Inventory Location: Image: NMS vCenter Image: Discovered virtual machine
Help	< Back Next > Cancel

8. Specify a Name and Inventory Location for the deployed template (e.g., Omnivista 2500 NMS-E421R01.B85), then click **Next**.

9. If you have configured a Resource Pool, the Resource Pool Screen (below) appears. Select the host server and click **Next**.

Deploy OVF Template	
Resource Pool Select a resource pool.	
Source OVF Template Details End User License Agreement Name and Location Resource Pool	Select the resource pool within which you wish to deploy this template. Resource pools allow hierarchical management of computing resources within a host or cluster. Virtual machines and child pools share the resources of their parent pool.
<u>Disk Format</u> Network Mapping Ready to Complete	□ ↓ 135.254.163.245 ○ Pool1

If a host server only has storage configured, the Disk Format Screen will appear. If you have multiple storage locations configured, the Storage Screen (below) appears. Select the destination storage where the template is to be deployed, then click **Next**.

blorage								
Where do you want to sto	re the v	irtual machine files?	,					
	4							
<u>Source</u> DVF Template Details	Select	a destination stora	age for the virtu	al machine files:				
End User License Agreement	VM St	orage Profile:			<u> </u>			
me and Location	Nan	1e	Drive Type	Capacity	Provisioned	Free	Туре	Thin F
orage k Format	8	datastore1 (1)	Non-SSD	460.75 GB	529.05 GB	446.31 GB	VMFS3	Supp
twork Mapping		ov-nfs-datasto	Unknown	911.06 GB	179.94 GB	731.12 GB	NF5	Supp
ady to Complete		ov-qnap-datas	Unknown	7.16 TB	15.90 TB	2.90 TB	NFS	Supp
	•			III				
	,							
	-							
	Π.	Disable Storage DR:	S for this virtual	machine				
	C (Disable Storage DR: tt a datastore:	S for this virtual	machine				
	Selec	Disable Storage DR: ct a datastore: ne	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin Pr
	Selec	Disable Storage DR: :t a datastore: ne	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Selec	Disable Storage DR: a datastore: ne	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Selec	Disable Storage DR: :t a datastore: ne	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Selec	Disable Storage DR: at a datastore:	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Select Nam	Disable Storage DR: tt a datastore: ne	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Select Nam	Disable Storage DR: ct a datastore: ne	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Selec	Disable Storage DR: ct a datastore: te	S for this virtual	machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Select Nam	Disable Storage DR: ct a datastore: 1e	S for this virtual	Machine Capacity Pr	ovisioned	Free	Туре	Thin P
	Select Nam	Disable Storage DR: :t a datastore: ne	S for this virtual	Machine Capacity Pr	ovisioned	Free	Туре	Thin Pi
	Nan	Disable Storage DR: tt a datastore: ne	S for this virtual	Capacity Pr	ovisioned	Free	Туре	Thin P

Part No. 060444-10, Rev. E

The Disk Format Screen appears.

Deploy OVF Template				- • ×
Disk Format In which format do you war	nt to store the virtual disks?			
Source OVF Template Details End User License Agreement Name and Location Storage Disk Format Network Mapping Ready to Complete	Datastore: Available space (GB): C Thick Provision Lazy Zeroer C Thick Provision Eager Zeroer C Thin Provision	datastore 1 (1) 446.3		
Help		_	< Back Next >	Cancel

10. Select Thin Provision, then click Next. The Network Mapping Screen appears.

Deploy OVF Template			
Network Mapping What networks should the	deployed template use?		
Source OVF Template Details End User License Agreement Name and Location	Map the networks used in this OVF	template to networks in your inventory Destination Networks	
Storage	NAT	CA	
Disk Format			
Network Mapping			
Ready to Complete			
	Description:		
	Logical network used by this applia	nce.	A
			-
	1		
1			
Help		< Back Next	> Cancel
			//

11. Select network that the deployed OVF template will use, then click **Next**. The Ready to Complete Screen appears.

Deploy OVF Template		
Ready to Complete Are these the options you	want to use?	
Source OVF Template Details End User License Agreement Name and Location Storage Disk Format Network Mapping Ready to Complete	When you dick Finish, the deployme Deployment settings: OVF file: Download size: Size on disk: Name: Folde: Host/Cluster: Datastore: Disk provisioning: Network Mapping: Power on after deployment	nt task will be started. D:\USers\jobrewst\Desktop\OVNM5-E_4.2.1_Build85_ovf Unknown Omnivista 2500 NM5-E421R01.B85 NM5 vCenter 10.255.221.83 datastore1 (1) Thin Provision "NAT" to "CA"
Help		< Back Finish Cancel

12. Review the configuration and click **Finish**. (You can select the "Power on after deployment" option to automatically power on the VA when deployment is complete.) A status window appears and displays the progress of the deployment. If you select the "Close this dialog when completed" option, the progress window will automatically close when the deployment is complete. If not, click **Close** at the completion of the deployment to close the window.



13. If the new Virtual Appliance was not powered on via the deployment wizard, power on the VM now. Right-click on the VM in the Navigation Tree and select **Power - Power On**.

Once the Virtual Appliance is powered on, go to <u>Completing the OmniVista 2500 NMS-E</u> <u>4.2.1.R01 Installation</u> to complete the installation.

Deploying the Virtual Appliance in VirtualBox

Note that in the instructions below, VirtualBox 5.0.10 in Windows 7 is used for demonstration purposes.

Note: If you are deploying OV 2500 NMS-E 4.2.1.R01 on a standalone Windows or Linux machine, you must first install Virtual Box on the machine. Virtual Box is available as a free download. See <u>Appendix A</u> for details.

- **1.** Download and unzip the OVF package.
- 2. Log into Windows 7 and open the Oracle VM VirtualBox tool.

Oracle VM VirtualBox Manager			
File Machine Help			
New Settings Discard Show		🤪 Details	Snapshots
wnmse_b33_fresh (ov_fresh_b33)			
ovnmse_fresh_b37	Current State		
ovnmse_b38_fresh Image: Constraint of the second			
	•		

3. Click File > Import Appliance.

1 0	racle VM VirtualBox Manager				
<u>F</u> ile	<u>M</u> achine <u>H</u> elp				
Þ	Preferences	Ctrl+G		🔗 Details	Snapshots
9 0	Import Appliance Export Appliance	Ctrl+I Ctrl+E			
	<u>V</u> irtual Media Manager <u>N</u> etwork Operations Manager C <u>h</u> eck for Updates <u>R</u> eset All Warnings	Ctrl+D	■ Sign (Signed) Signed (Signed) -		
$\overline{}$	Exit	Ctrl+Q			

4. Click **browse** icon then select the **folder** which you extracted at step 1 above, then click **Next**.

😚 Oracle VM VirtualBo	x Manager
File Machine Help	
New Settings Discard	P X ais D Snapshots
ovnmse_b33_ Powered Off	Appliance to import
ovnmse_fresh	VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.
evnmse_b38_ ⇔ Running	V-E R4.2 . 1 - 2016\OV builds\OVNIMS-E_4.2.1_Build38_ovf\pvnmse-4.2.1.R01-38.0.ovf
	Expert Mode Next Cancel
	1

5. Review the configuration and click Import.

Oracle VM VirtualBox	Manager	No. alter and	
File Machine Help			
New Settings Discard	G Import Virtual Appliance	5 ×	ails 💽 <u>S</u> napshots
ovnmse_b33_f	Appliance settings]
ovnmse_fresh	These are the virtual machines con imported VirtualBox machines. You clicking on the items and disable of	tained in the appliance and the suggested settings of the can change many of the properties shown by double- berg up the check boxes below.	
ovnmse_b38_f	Description	Configuration	
	Virtual System 1	=	
	😪 Name	ovnmse	
	Product	Omnivista 2500 NMS-E	
	Product-URL	http://enterprise.alcatel-lucent.com/?product	
	Vendor	Alcatel-Lucent Enterprise	
	Vendor-URL	http://enterprise.alcatel-lucent.com	
	Version	4.2.1.R01-38.0 *	
	Reinitialize the MAC address of	all network cards	
		Restore Defaults Import Cancel	
			-

6. The Software License Agreement window displays, click on Agree.

Oracle VM VirtualBox	Manager
File Machine Help	
New Settings Discard	Import Virtual Appliance
ovnmse_b33_f	Applia Software License Agreement
ovnmse_fresh	The virtual system "ovnmse" requires that you agree to These a the terms and conditions of the software license hgs of the importer agreement shown below. puble-
ovnmse_b38_1	Click Agree to continue or dick Disagree to cancel the import. Descript ALE USA INC. Virtual SOFTWARE LICENSE AGREEMENT
	IMPORTANT Please read the terms and conditions of this license
	agreement carefully before installing or downloading this software. The installation and use of the software is subject to these terms and conditions (Agreement). In this Agreement:
	 Licensee* or You, Your and Yourself, means: the legal person or entity that by its authorized agents or representatives installs and/or uses, the Software.
	Reinil Agree Disagree Print Save
	Restore Derautis import Cancel

7. A status window appears and displays the progress of the deployment.

Appliance se	ettings
These are the vir imported VirtualB clicking on the ite	rtual machines contained in the appliance and the suggested settings of the 30x machines. You can change many of the properties shown by double- ems and disable others using the check boxes below.
😗 Importing Appli	iance: Importing appliance 'D:\OV-E R4.2 .1 - 2016\OV b
	Importing virtual disk image 'ovnmse-4.2.1.R01-38.0-disk1.vmdk' (2/3) 2% X 3 minutes remaining
Image: Constraint of the second sec	Importing virtual disk image 'ovnmse-4.2.1.R01-38.0-disk1.vmdk' (2/3) 2% X 3 minutes remaining -URL http://enterprise.alcatel-lucent.com
Vendor- Version	Importing virtual disk image 'ovnmse-4.2.1.R01-38.0-disk1.vmdk' (2/3) 2% X 3 minutes remaining -URL http://enterprise.alcatel-lucent.com 4.2.1.R01-38.0

8. After the process is completed, right-click on the VM in the Navigation Panel and select **Start** - **Normal Start**.

File Machine Help	
New Settings Discard Start	Snapshots
ovnmse_b33_fresh (ov_fresh_b33) Image: Constraint of the system of the	
evnmse_fresh_b37 @ Powered Off	
ovnmse_b38_fresh ⇔ Running	
even ovnmse	
Ctrl+S	
G Clone Ctrl+O	
🙀 Remove Ctrl+R	
🛃 Group Ctrl+U	
🗇 Start 🕨 🧼 Normal Start	
👔 Pause Ctrl+P 🤣 Headless Start	
Reset Ctrl+T Detachable Start	
Close +	
🕹 Discard Saved State Ctrl+J	
🛱 Show Log Ctrl+L	
Refresh	
III Show in Explorer	
Start selected vi 🔁 Create Shortcut on Desktop	.41

9. Configure the Network Adapter. Right-click on the VA and select Settings.

🐧 Ora	cle VM V	irtual	Box Manager		
File	Machine	H	elp		
New	Settings	Disc	ard Start		设 Details 💿 Snapshots
64	ovnms	e-b6	3	📃 Gener	al 📃 Preview 🔶
	O Pov	۲	Settings	Ctrl+S	ovnmse-b63
64	ovnms	Ģ	Clone	Ctrl+O	tem: Red Hat (64-bit)
	i Run	8	Remove	Ctrl+R	
		2	Group	Ctrl+U	16384 MB ovnmse-b63
		4	Start	•	Floppy, Optical, Hard Disk
			Pause	Ctrl+P	VT-x/AMD-V, Nested Paging, PAE/NX, KVM
		\odot	Reset	Ctrl+T	Paravirtualization
		\bigtriangledown	Close	Þ	
		\$	Discard Saved State	Ctrl+J	: 12 MB
		<u>5</u>	Show Log	Ctrl+L	pp Server: Disabled ; Disabled
		G	Refresh		
			Show in Explorer		E Controller
		5	Create Shortcut on Desk	top	Master: ovnmse-4.2.1.R01-63.0-disk1.vmdk (Normal, 50.00 GB) Slave: ovnmse-4.2.1.R01-63.0-disk2.vmdk (Normal, 256.00 GB)
		BĴ;	Sort		
		_		Disabled	
				🗗 Netwo	rk
				Adapter 1:	Intel PRO/1000 MT Server (Bridged Adapter, Realtek PCIe GBE Family Controller #2)
Display	the virtu	ual m	achine settings window		

10. Select **Network**, then select the Network Adaptor that you created when you configured VirtualBox.

	🗿 Oracl	e V	'M Virt	ualBox Manager		
	File N	lac	hine	Help		
	~~~~	6	🗿 ovn	mse-b63 - Setting	js Reate	
	New S	l		General	Network	
1	64			System	Adapter 1 Adapter 2 Adapter 3 Adapter 4	Î
	64			Display	Enable Network Adapter	
		1	$\bigcirc$	Storage	Attached to: Bridged Adapter  Not attached Konstroller #2	
				Audio	NAT Network NAT Network Bridged Adapter	
	_		₽	Network	Internal Network Host-only Adapter	Ξ
				Serial Ports	Generic Driver	
	_		Ø	USB		
				Shared Folders		
			=	User Interface		
	_					
					OK Cancel Help	
1		1			Disabled	
					Network	
					Adapter 1: Intel PRO/1000 MT Server (Bridged Adapter, Realtek PCIe GBE Family Controller #2)	-
l		_	_			111

Once the Virtual Appliance is powered on, go to <u>Completing the OmniVista 2500 NMS-E</u> <u>4.2.1.R01 Installation</u> to complete the installation.

## Deploying the Virtual Appliance in Hyper-V

Note that in the instructions below, Hyper-V in Windows 2012 is used for demonstration purposes.

- 1. Download and unzip the OVF Hyper-V package.
- 2. Log into Windows 2012 and open the Hyper-V tool.



**3.** Select the Host on which you want to install OmniVista 2500 NMS, click on **Actions > Import Virtual Machine**.

ii a		Нур	er-V Manager						x
File Action View Help									
🗢 🄿 🙍 🖬 🚺			_						
🔡 Hyper-V Manager			-					Actions	
WIN-LGUI7NV9JGL	Virtual Machines							WIN-LGUI7NV9JGL	<u> </u>
	Name	State	CPU Usage	Assigned Memory	Uptime	Status		New	•
	omnivistacapexb34	Running	0 %	16384 MB	00:29:10		rt	Import Virtual Mac	1
	Windows 7	Running	0 %	5000 MB	17:34:38		- 4	Lines V Sattings	1
								Hyper-V Settings	
								Virtual Switch Man	
								🪽 Virtual SAN Manag	_
	4						>	💋 Edit Disk	
							-	📇 Inspect Disk	
	Checkpoints						٢	Stop Service	
		The selected vitu	al machine has no	chackpointe				🗙 Remove Server	
		The addeed with		checkpoints.				Refresh	=
								View	•
								Help	
									_
	II.I.							omnivistacanevh34	

4. The Import Virtual Machine Wizard appears.

2	Import Virtual Machine	x
Before You F	Begin	
Before You Begin Locate Folder Select Virtual Machine Choose Import Type Summary	This wizard helps you import a virtual machine from a set of configuration files. It guides you throug resolving configuration problems to prepare the virtual machine for use on this computer.	gh
	< Previous Next > Finish Cance	I

5. Click Next to go to the Locate Folder Screen, select the Folder that you extracted in Step 1, then click Next.

2	Import Virtual Machine	x
Locate Folder	r	
Before You Begin	Specify the folder containing the virtual machine to import.	_
Select Virtual Machine	Folder: C:\OVBuilds\OVNMS-E_4.2.1_Build36_hyperv\hyperv\Virtual Machines\ Browse	
Choose Import Type		
Summary		
	< Previous Next > Finish Cancel	

6. Select the Virtual Machine to import (Default = OmniVista-2500 NMS-E-4.2.1.R01), then click Next.

2	Import Virtual Machine	x
Select Virtual	Machine	
Before You Begin	Select the virtual machine to import:	
Locate Folder	Name	Date Created
Select Virtual Machine	OmniVista-2500 NM5-E-4.2.1-R01	4/6/2016 7:53:27 PM
Choose Import Type		
Summary		
	< Previous Next >	Finish Cancel

7. Select the default Import Type: Copy the virtual machine (create a new unique ID), then click Next.

i i	Hyper-V Manager	_ □
File     Action     View     Help       Image: Constraint of the second seco		
Hyper-V Manager	V 🛤 Import Virtual Machine	Actions WIN-LGUI7NV9JGL
	Choose Import Type	New  Import Virtual Mac
	Before You Begin         Choose the type of import to perform:           Locate Folder         O Register the virtual machine in-place (use the existing unique ID)	Virtual SAN Manag
	Select Virtual Machine  Choose Import Type Coose Import Type C Summary	Edit Disk      Inspect Disk      Stan Sanira
		Remove Server
		View 🕨
		omnivistacanevh34

**8.** Specify folders to store the Virtual Machine files (or accept the default folders), then click **Next**.

2	Import Virtual Machine	X
Choose Fold	lers for Virtual Machine Files	
Before You Begin Locate Folder Select Virtual Machine Choose Import Type Choose Destination	You can specify new or existing folders to store the virtual machine files. Otherwise, the imports the files to default Hyper-V folders on this computer, or to folders specified in th machine configuration.  Store the virtual machine in a different location Virtual machine configuration folder:	e wizard e virtual
Choose Storage Folders Summary	C:\ProgramData\Microsoft\Windows\Hyper-V\ Checkpoint store: C:\ProgramData\Microsoft\Windows\Hyper-V\ Smart Paning folder:	Browse
	C:\ProgramData\Microsoft\Windows\Hyper-V\	Browse
	< Previous Next > Finish	Cancel

9. Choose folders to store the Virtual Hard Disks or accept the default location and click Next.

₽ <b>ï</b>	Import Virtual Machine
Choose Folde	ers to Store Virtual Hard Disks
Before You Begin Locate Folder Select Virtual Machine Choose Import Type Choose Destination Choose Storage Folders Summary	Where do you want to store the imported virtual hard disks for this virtual machine?         Location:       C:\Users\Public\Documents\Hyper=V\Virtual Hard Disks\         Browse
	< Previous Next > Finish Cancel

**10.** Review the import configuration and click **Finish**. (Click **Previous** to return to a screen and make changes.)

**11.** Configure the Network Adapter. Right-click on the VA and select **Settings**.

ame	•	State	CPU Usage	Assigned Memory	Uptime	Sta
Win7 - An 9	1.38-performance-OV412R03	Off				
OmniVista 4	Connect	Off	0%	16384 MB	46 07:32:34	
Oninimio	Settings		070	10004110	40.01.02.04	
	Start	-				
	Checkpoint	-				
	Move					
	Export					
	Rename					
	Delete					
	Enable Replication					
	Help					
	Help					

**12.** Select **Network Adapter**, then select the Virtual Switch that you created when you configured Hyper-V.

Settings for	OmniVista 421R01EA-b50-An on WIN-LGUI7NV9JGL
OmniVista 421R01EA-b50-An	✓ 4 ► Q.
<ul> <li>★ Hardware</li> <li>★ Add Hardware</li> <li>★ BIOS Boot from CD</li> <li>■ Memory</li> <li>16384 MB</li> <li>■ Processor</li> <li>8 Virtual processors</li> <li>■ IDE Controller 0</li> <li>● Hard Drive ovmse-4.2.1.R01-50.0-di</li> <li>■ IDE Controller 1</li> <li>● DVD Drive None</li> <li>■ SCSI Controller</li> <li>● Mard Drive ovmse-4.2.1.R01-50.0-di</li> <li>■ Mard Drive None</li> <li>● Mard Drive ovmse-4.2.1.R01-50.0-di</li> <li>● Mard Drive Ovmse-4.2.1.R01-50.0-di</li> <li>● Network Adapter Broadcom NetXtreme Gigabit Et</li> <li>♥ COM 1 None</li> </ul>	Network Adapter Specify the configuration of the network adapter or remove the network adapter. Virtual switch: Broadcom MetXtreme Gigabit Ethernet #2 - Virtual Switch Not connected Broadcom MetXtreme Gigabit Ethernet #2 - Virtual Switch Connected Broadcom MetXtreme Gigabit Ethernet #2 - Virtual Switch In the VLAN identifier specifies the virtual LAN that this virtual machine will use for all network communications through this network adapter. Z Bandwidth Management Specify how this network adapter utilizes network bandwidth. Both Minimum Bandwidth are measured in Megabits per second. Minimum bandwidth: M Mbps
COM 2 None Diskette Drive None Management Name OmniVista 421R01EA-b50-An Integration Services Some services offered Checkpoint File Location C:\ProgramData\Microsoft\Win C:\ProgramData\Microsoft\Win	To leave the minimum or maximum unrestricted, specify 0 as the value.      To remove the network adapter from this virtual machine, click Remove.      Remove     Use a legacy network adapter instead of this network adapter to perform a network-based installation of the guest operating system or when integration services are not installed in the guest operating system.
	OK Cancel Apply

After the process is completed, right-click on the VM in the Navigation Panel and select **Start**. Once the Virtual Appliance is powered on, go to <u>Completing the OmniVista 2500 NMS-E</u> <u>4.2.1.R01 (MR 1) Installation</u> to complete the installation.

# Completing the OmniVista 2500 NMS-E 4.2.1.R01 (MR 1) Installation

Follow the steps in the following sections to complete the OV 2500 NMS-E 4.2.1.R01 (MR 1) installation.

**1.** Launch the Console for the new VM. (In vCenter, this can be done by right-clicking on the VM in the Navigation Tree and selecting **Open Console**.) The password prompt appears.



**2.** Specify a new administrative password, then re-enter to confirm the new password. Press **Enter** to configure System IP.

**Note:** Follow the guidelines on the screen when creating the password. Be sure to store the password in a secure place. Users will be prompted for the password at the end of the installation. Lost passwords cannot be retrieved.



- 3. Enter an IPv4 address.
- 4. Enter the IPv4 network mask.
- 5. Press y and Enter to confirm, then press Enter to continue.
- 6. The Memory Configuration Based on Network Size option is displayed.

(*************************************	-
Memory Configuration Based on Network Size	э
(*************************************	жж
Choose the number of devices:	
11 Low (lower than 500)	
21 Medium (500-2000)	
E31 High (2000-5000)	
4] Very High (5000-10000)	
(*) Type your option:	

Select the number of devices OV 2500 NMS-E 4.2.1.R01 (MR 1) will manage. To select a range, enter its corresponding number at the command prompt (e.g., enter 2 for Medium). Ranges include:

- Low (fewer than 500 devices)
- Medium (500 to 2,000 devices)
- High (2,000 to 5,000 devices)
- Very High (5,000 to 10,000 devices).

Press **y** and **Enter** to confirm, then press **Enter** to display the Configure the Virtual Appliance Main Menu.

7. The Configure The Virtual Appliance Main Menu is displayed.

***************************************	*********
* Configure The Virtual Appliance	а
***************************************	********
* [1] Help	a
* [2] Display Current Configuration	8
* [3] Configure IP	8
* [4] Configure Ports	8
* [5] Configure Default Gateway	8
* [6] Configure Hostname	8
* [7] Configure DNS Server	3
* [8] Configure Timezone	3
* [9] Configure Route	-
* [10] Configure Network Size	3
* [11] Configure Keyboard Layout	3
* [12] Update SSL Certificate	3
* [13] Configure NTP Client	3
* [14] Configure Proxy	3
* [15] Import JRE CA Certificate	3
× [0] Exit	-
***************************************	********

8. Enter 2 and press Enter to display the current configuration.



The current OV appliance configuration is displayed. You can go to the Configure The Virtual Appliance Menu to configure additional settings (e.g., Default Gateway, Proxy, DNS) that may be required to access OV 2500 NMS-E 4.2.1.R01 (MR 1) and perform upgrades. Please configure other settings as required. See the *OmniVista 2500 NMS-E 4.2.1.R01 Installation Guide (Rev. D) for VA Menu information.* 

**Note:** OV 2500 NMS-E 4.2.1.R01 (MR 1) makes an HTTPS connection to the OmniVista 2500 NMS External Repository for upgrade software, Application Visibility Signature Files, and ProActive Lifecycle Management. If the OmniVista 2500 NMS Server has a direct connection to the Internet, a Proxy is not required. Otherwise, a Proxy should be configured to enable OV 2500 NMS-E 4.2.1.R01 (MR 1) to connect to the OmniVista 2500 NMS External Repository.

9. Press Enter. The Virtual Appliance Menu is displayed again.

**10.** After completing all required settings (and after all services are running), enter *https://<OVServerIPaddress>* in a supported browser to launch OV 2500 NMS-E 4.2.1.R01 (MR 1).

**Note:** If you changed the default HTTPs port (443) during VA configuration, you must enter the port after the IP address (e.g., *https://<OVServerIPaddress>:<HTTPsPort>*).

# Upgrading From OV 2500 NMS-E 4.2.1.R01 GA

Follow the steps below to use the "Upgrade/Restore" option in the Virtual Appliance Menu to upgrade from OV 2500 NMS-E 4.2.1.R01 GA to OV 2500 NMS-E 4.2.1.R01 (MR 1). Remember, if you are upgrading from an older version (3.5.7 or 4.1.2.R03), you must first upgrade to 4.2.1.R01 GA before upgrading to 4.2.1.R01 (MR 1). See the *OmniVista 2500 NMS-E 4.2.1.R01 Installation Guide (Rev. D) for details*. It is recommended that you perform a VM backup prior to the upgrade.

Note: OV 2500 NMS-E 4.2.1.R01 makes an HTTPS connection to the OmniVista 2500 NMS External Repository for software upgrades. If the OmniVista 2500 NMS Server has a direct connection to the Internet, a Proxy is not required. If a Proxy has not been configured, select **2** - Configure The Virtual Appliance on the Virtual Appliance Menu, then select **14** – Configure Proxy.

1. Open a Console on the OV 2500 NMS-E 4.2.1.R01 GA Virtual Appliance.

***************************************	******
* The Virtual Appliance Menu	×
***************************************	******
* [1] Help	*
* [2] Configure The Virtual Appliance	×
* [3] Run Watchdog Command	×
* [4] Upgrade/Restore VA	×
* [5] Change Password	×
* [6] Logging	×
* [7] Login Authentication Server	×
* [8] Power Off	×
* [9] Reboot	×
* [10] Advanced Mode	×
* [0] Log Out	×
***************************************	******
(*) Type your option: _	

2. On the Virtual Appliance Menu, select option 4 - Upgrade/Restore VA.

***************************************	жж
* Upgrade VA	×
***************************************	××
* [1] Help	×
* [2] 4.2.1.R01 (Current Release)	×
* [3] Enable Repository (Selected - ALE Central Repo)	×
* [4] Configure Custom Repositories	×
* [5] Configure "Update Check Interval" (Selected – Disabled)	×
* [6] Restore OV2500 NMS Data	×
* [0] Exit	×
***************************************	××
(*) Type your option:	

**3.** On the Upgrade VA Menu, select option **2 - 4.2.1.R01 (Current Release)**. Information on the current installation is displayed and OmniVista checks the OV Repository for the latest upgrade packages.

***************************************
(*) Type your option: 2
Current version of Virtual Appliance
Product Name: Alcatel-Lucent Enterprise OmniVista 2500 NMS 4.2.1.R01 GA
Build Number: 70
Patch Number: 0
Checking available packages for 4.2.1.R01 operation is in progress
Upgrade information for 4.2.1.R01
Available Packages
Name : ovinmse
Arch : x86_64
Version : 4.2.1.R01
Release : 84.0.el7
Size : 381 M
Repo : CustomRepo1 4.2.1.R01
Summary : Alcatel-Lucent Enterprise OmniVista 2500 NMS-E
URL : http://enterprise.alcatel-lucent.com/?product=OmniVista2500NetworkManagementSystem&
; page=overview
License : ALE USA Inc.
Description : Alcatel-Lucent Enterprise OmniVista 2500 NMS-E
Would you like to upgrade the package [y n] (n):

In the example above, the current Build Number is 70 (shown in the "Current Version" section at the top of the screen). The available upgrade is Build 84 (shown in the "Available Packages" section - Release: 84.0.e17).

**Note:** If you are unable to connect to the ALE Central Repository, you will receive the following error message instead of the screen above: "Please check the connectivity of your repository configuration". Configure the Proxy and/or DNS Settings and try again. Proxy and DNS configuration is available in the Configure The Virtual Appliance Menu (from the Virtual Appliance Menu, select **2** - **Configure The Virtual Appliance** to access the menu).

**4.** At the "Would you like to upgrade the package" prompt, type **y** and press **Enter**. You will be reminded to perform a backup before proceeding with the upgrade.

```
Would you like to upgrade the package [y|n] (n): y
This operation can result in data loss or corruption. We advise taking a VM snapshot prior to this.
Are you ready to proceed [y|n] (n): _
```

**5.** Type **y** and press **Enter** to begin the upgrade. The upgrade may take 30 - 45 minutes. When the upgrade is complete, a "Completion" message will appear and the VM will automatically reboot.

6. When the reboot is complete, log into the VM. You can verify the upgrade by going to the Virtual Appliance Menu and selecting option 4 - **Upgrade/Restore VA**, then selecting option 2 - 4.2.1.R01 (Current Release). The current OmniVista Release information is displayed (e.g., Build Number: 84).

```
Current version of Virtual Appliance
Product Name: Alcatel-Lucent Enterprise OmniVista 2500 NMS 4.2.1.R01 MR
Build Number: 84
Patch Number: 0
Checking available packages for 4.2.1.R01 operation is in progress...
No package available for 4.2.1.R01
Press [Enter] to continue
```

# Appendix A – Installing Virtual Box

If you are deploying OV 2500 NMS-E 4.2.1.R01 on a standalone Windows or Linux machine, you must first install Virtual Box on the machine. Virtual Box is available as a free download.

Go to <u>https://www.virtualbox.org/wiki/Download_Old_Builds_5_0_pre18</u>. Scroll down to **Virtual Box 5.0.10** and click on the applicable download link (e.g., Windows Hosts, Linux Hosts). The sections below provide procedures for installing Virtual Box on <u>Windows</u> or <u>Linux</u> Hosts. See the Oracle VM Virtual Box documentation for additional information.

# **Supported Hosts**

Virtual Box runs on the following host operating systems:

- Windows Hosts:
  - Windows Vista SP1 and later (32-bit and 64-bit).
  - Windows Server 2008 (64-bit)
  - Windows Server 2008 R2 (64-bit)
  - Windows 7 (32-bit and 64-bit)
  - Windows 8 (32-bit and 64-bit)
  - Windows 8.1 (32-bit and 64-bit)
  - Windows 10 RTM build 10240 (32-bit and 64-bit)
  - Windows Server 2012 (64-bit)
  - Windows Server 2012 R2 (64-bit).
- Linux Hosts (32-bit and 64-bit):
  - Ubuntu 10.04 to 15.04
  - Debian GNU/Linux 6.0 ("Squeeze") and 8.0 ("Jessie")
  - Oracle Enterprise Linux 5, Oracle Linux 6 and 7
  - Redhat Enterprise Linux 5, 6 and 7
  - Fedora Core / Fedora 6 to 22
  - Gentoo Linux
  - openSUSE 11.4, 12.1, 12.2, 13.1
  - Mandriva 2011.

# **Installing Virtual Box on Windows Hosts**

The Virtual Box installation can be started by double-clicking on the downloaded executable file (contains both 32- and 64-bit architectures), **or** by entering:

#### VirtualBox.exe -extract

on the command line. This will extract both installers into a temporary directory in which you will find the usual .MSI files. You can then perform the installation by entering:

msiexec /i Virtual Box-<version>-MultiArch_<x86|amd64>.msi

In either case, this will display the installation welcome dialog and allow you to choose where to install Virtual Box to and which components to install. In addition to the Virtual Box application, the following components are available:

- USB Support:
  - This package contains special drivers for your Windows host that Virtual Box requires to fully support USB devices inside your virtual machines.
- Networking
  - This package contains extra networking drivers for your Windows host that Virtual Box needs to support Bridged Networking (to make your VM's virtual network cards accessible from other machines on your physical network).
- Python Support
  - This package contains Python scripting support for the Virtual Box API. For this to work, an working Windows Python installation on the system is required.

The Virtual Box 5.0.10 Setup Wizard will guide you through the installation. Depending on your Windows configuration, you may see warnings about "unsigned drivers", etc. Please allow these installations as otherwise Virtual Box might not function correctly after installation.

With standard settings, Virtual Box will be installed for all users on the local system; and the installer will create a "Virtual Box" group in the Windows "Start" menu which allows you to launch the application and access its documentation.

# **Installing Virtual Box on Linux Hosts**

Virtual Box is available in a number of package formats native to various common Linux distributions. In addition, there is an alternative generic installer (.run) which should work on most Linux distributions.

**Note:** If you want to run the Virtual Box graphical user interfaces, the following packages must be installed before starting the Virtual Box installation (some systems will do this for you automatically when you install Virtual Box):

- Qt 4.8.0 or higher;
- SDL 1.2.7 or higher (this graphics library is typically called libsdl or similar).

Specifically, Virtual Box, the graphical Virtual Box manager, requires both Qt and SDL. VBoxSDL, our simplified GUI, requires only SDL. If you only want to run VBoxHeadless, neither Qt nor SDL are required.

# Installing Virtual Box From a Debian/Ubuntu Package

Download the appropriate package for your distribution. The following examples assume that you are installing to a 32-bit Ubuntu Raring system. Use dpkg to install the Debian package:

sudo dpkg -i virtualbox-5.0_5.0.10_Ubuntu_raring_i386.deb

You will be asked to accept the Virtual Box Personal Use and Evaluation License. Unless you answer "yes" here, the installation will be aborted.

The installer will also search for a Virtual Box kernel module suitable for your kernel. The package includes pre-compiled modules for the most common kernel configurations. If no suitable kernel module is found, the installation script tries to build a module itself. If the build process is not successful, a warning is displayed and the package will be left unconfigured. In this case, check /var/log/vbox-install.log to find out why the compilation failed. You may have to install the appropriate Linux kernel headers.

After correcting any problems, enter sudo rcvboxdrv setup to start a second attempt to build the module. If a suitable kernel module was found in the package or the module was successfully built, the installation script will attempt to load that module.

Once Virtual Box has been successfully installed and configured, you can start it by selecting "Virtual Box" in your start menu or from the command line.

# Using the Alternative Installer (VirtualBox.run)

The alternative installer performs the following steps:

- It unpacks the application files to the target directory, /opt/Virtual  ${\tt Box}/,$  which cannot be changed.
- It builds the Virtual Box kernel modules (vboxdrv, vboxnetflt and vboxnetadp) and installs them.
- It creates /sbin/rcvboxdrv, an init script to start the Virtual Box kernel module.
- It creates a new system group called vboxusers.
- It creates symbolic links in /usr/bin to the a shell script (/opt/Virtual Box/VBox) which does some sanity checks and dispatches to the actual executables, Virtual Box, VBoxSDL, VBoxVRDP, VBoxHeadless and VboxManage.
- It creates /etc/udev/rules.d/60-vboxdrv.rules, a description file for udev, if that is present, which makes the USB devices accessible to all users in the vboxusers group.
- It writes the installation directory to /etc/vbox/vbox.cfg.

The installer must be executed as root with either install or uninstall as the first parameter.

sudo ./VirtualBox.run install

If you do not have the "sudo" command available, run the following as root instead:

./VirtualBox.run install

Then put every user requiring access to USB devices from Virtual Box guests into the group vboxusers, either through the GUI user management tools or by running the following command as root:

sudo usermod -a -G vboxusers username

**Note:** The usermod command of some older Linux distributions does not support the -a option (which adds the user to the given group without affecting membership of other groups). In this case, determine the current group memberships using the groups command and add these groups in a comma-separated list to the command line after the -G option (e.g., usermod -G group1,group2,vboxusers username.)

# Performing a Manual Installation

If, for any reason, you cannot use the shell script installer described previously, you can also perform a manual installation. Invoke the installer by entering:

./VirtualBox.run --keep --noexec

This will unpack all the files needed for installation in the install directory under the current directory. The Virtual Box application files are contained in VirtualBox.tar.bz2 which you can unpack to any directory on your system. For example:

```
sudo mkdir /opt/Virtual Box
sudo tar jxf ./install/VirtualBox.tar.bz2 -C /opt/Virtual Box
```

or as root:

mkdir /opt/Virtual Box
tar jxf ./install/VirtualBox.tar.bz2 -C /opt/Virtual Box

The sources for VirtualBox's kernel module are provided in the src directory. To build the module, change to the directory and issue the following command:

make

If everything builds correctly, issue the following command to install the module to the appropriate module directory:

```
sudo make install
```

If you do not have sudo, switch the user account to root and enter:

make install

The Virtual Box kernel module needs a device node to operate. The above make command will tell you how to create the device node, depending on your Linux system. The procedure is slightly different for a classical Linux setup with a /dev directory, a system with the now deprecated devfs and a modern Linux system with udev.

On certain Linux distributions, you might experience difficulties building the module. You will have to analyze the error messages from the build system to diagnose the cause of the problems. In general, make sure that the correct Linux kernel sources are used for the build process. Note that the /dev/vboxdrv kernel module device node must be owned by root:root and must be read/writable only for the user.

Next, you will have to install the system initialization script for the kernel module:

```
cp /opt/Virtual Box/vboxdrv.sh /sbin/rcvboxdrv
```

(assuming you installed Virtual Box to the /opt/Virtual Box directory) and activate the initialization script using the right method for your distribution, you should create VirtualBox's configuration file:

```
mkdir /etc/vbox
echo INSTALL_DIR=/opt/Virtual Box > /etc/vbox/vbox.cfg
```

and, for convenience, create the following symbolic links:

```
ln -sf /opt/Virtual Box/VBox.sh /usr/bin/Virtual Box
ln -sf /opt/Virtual Box/VBox.sh /usr/bin/VBoxManage
ln -sf /opt/Virtual Box/VBox.sh /usr/bin/VBoxHeadless
ln -sf /opt/Virtual Box/VBox.sh /usr/bin/VBoxSDL
```