## How to deploy vRealize Operations for Horizon to 6.2

January 2016 | Cameron Fore, Staff Engineer, VMware EUC

vmware vRealize Operations I	Manager			N ا ک	bout   Help   admir	<b>Q</b> Search	
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Licensing	💠 🖑 🦧 Show: All Solutions 💌						
Credentials	Name	Description	Version	Provided by		Licensing	
<ul> <li>Policies</li> <li>Inventory Explorer</li> </ul>	NWware vRealize Operations for	Solution for managing Publish	ed 6.2.0.3232986	VMware In	ic.	Configure	
	Operating Systems / Remote Ser	The End Point Operations Mar	na 1.0.3030318	VMware In	IC.	Not applicable	
Object Relationships	Wware vSphere	Manages vSphere objects suc	h 6.0.3038034	VMware In	ic.	Not applicable	
Haintenance Schedules	Wware Horizon	Solution for managing VMware	H 6.2.0.3232985	VMware In	ic.	Configure	
Access Control	VMware Horizon Solution Details						
	Adapter Type Adap	ter Instance Name Crede	ntial name	Collector	Collection State	Collection Status	
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Global Settings							

### Disclaimer:

This document is not intended to be an in-depth planning document for installing the vROPs for Horizon solution. This document is focused on providing the necessary steps and order of operations for the deployment process, and for the various components of the solution. Version numbers may differ from what is shown in this document.

### Downloading necessary installation files:

The files required for installation that will be downloaded in this section:

- 1. vRealize Operations for Horizon Adapter (.pak)
- 2. vRealize Operations for Horizon Desktop agent(s). 64-bit or 32-bit (.exe)
- 3. vRealize Operation for Horizon Broker Agent 64-bit (.exe)
- 4. vRealize Operations Manager 6.1.0 Virtual Appliance (.ova)

#### Step 1: Navigate to the

https://my.vmware.com/web/vmware/downloads website, and login with your myvmware site credentials. Step 2: Scroll to the "Desktop & End-User Computing" section, locate the VMware vRealize Operations for Horizon and Published Applications solution and click the Download Product link.

	Desktop & End-User Computing	
	VMware Horizon 6	Download Product   Drivers & Tools   Download Trial   Get Training
	VMware Horizon (with View)	Download Product   Drivers & Tools   Get Training
	VMware Horizon Air	Download Product   Drivers & Tools   Get Training
SHARE	VMware Horizon DaaS	Download Product   Drivers & Tools   Get Training
	VMware Horizon Flex	Download Product   Drivers & Tools   Download Trial   Get Training
2	VMware Horizon Clients	Download Product   Drivers & Tools   Get Training
	Horizon Application Management Bundle	Download Product   Drivers & Tools   Get Training
in	VMware User Environment Manager	Download Product   Drivers & Tools   Download Trial   Get Training
	VMware App Volumes	Download Product   Drivers & Tools   Download Trial
	VMware Identity Manager	Download Product   Drivers & Tools   Download Trial
	VMware Workspace	Download Product   Drivers & Tools   Get Training
	VMware Mirage	Download Product   Drivers & Tools   Download Trial   Get Training
	VMware vRealize Operations for Horizon and Published Applications	Download Product Drivers & Tools
	VMware ThinApp	Download Product   Drivers & Tools   Get Training
	VMware Workstation Pro	Download Product   Drivers & Tools   Download Trial
	VMware Workstation Player	Download Product

Step 3: Locate the VMware vRealize Operations for Horizon 6.2.x solution, and click the Go to Downloads link.

Download VMware wand Published Applic	Product Resources View My Download History Product Info			
Select Version: Customers who have p 6.0  Customers who have p their relevant installation	urchased VMware vRealize Operations for n package from the product download ta	r Horizon can download b below.	Documentation Horizon	
itede more				
Product Downloads	Drivers & Tools Open Source	Custom ISOs		
Product Downloads	Drivers & Tools Open Source	Custom ISOs	ase Date	
Product Downloads Product VMware vRealize Operations for H	Drivers & Tools Open Source	Custom ISOs Rele	-12-08 Go	to Download

Step 4: On the following page, make sure that correct version you want to download is selected. Then click the Download Now button next to the vRealize Operations for Horizon Adapter. If you are not already logged into the My VMware site, you will be required to do so before you able to download the files.



Step 5: Accept the terms and conditions on the VMware End User License Agreement prompt.

	VMWARE END USER I	LICENSE AGREEMENT	
PLEASE NO AGREEMEN REGARDLE	TE THAT THE TERMS T SHALL GOVERN YO SS OF ANY TERMS THA	OF THIS END USER LICEM UR USE OF THE SOFTWA AT MAY APPEAR DURING	NSE RE, HTHE
INSTALLA	TON OF THE SOFTWAR		
OR USING T AGREE TO I	T-READ CAREFULLY: 1 HE SOFTWARE, YOU (TI BE BOUND BY THE TERM	HE INDIVIDUAL OR LEGAL MS OF THIS END USER LICI	ALLING, LENTITY ENSE
I agree to the	erms and conditions outlined in th	ne End User License Agreement	

Step 6: In addition to the Horizon Adapter, you will need to click the Download Now button for the remaining files: vRealize Operations Desktop Agent, vRealize Operations for Horizon Broker Agent, and the vRealize Operations Manager 6.1.0 appliance.

File Information	
vRealize Operations for Horizon Adapter	Download Now
File size: 8.75 MB File type: pak	Download Manager
Read More	
vRealize Operations for Horizon Desktop Agent 64-Bit	Download Now
File size: 80.02 MB File type: .axe	Download Manager
Read More	
vRealize Operations for Horizon Desktop Agent	Download Now
File size: 77.66 MB	Download Manager
Read More	
vRealize Operations for Horizon Broker Agent 64-Bit	Download Now
File size: 73.54 MB	Download Manager
Read More	
vRealize Operations Manager 6.1.0 Virtual Appliance (.ova)	Download Now
File size: 1.773 GB	Download Manager
File type: ova	Somiload Manager
Read More	

### Deploying the vROPs Manager 6.1.0 appliance:

Before proceeding, make sure you have a static IP address and DNS entry for your vROPs Manager appliance. The ova deployment process will ask for this information, and while it is not required, it best to deploy with a static vs DHCP address.

Step 1: Login to your vCenter Server Web Client. Navigate to Hosts and Clusters, right-click on the cluster or host you want to deploy the vROPs appliance, and click Deploy OVF Template.



Step 2: On the Deploy OVF Template dialogue prompt, click Browse to select the vROPs 6.1.x appliance ova, then click Next to continue.

Deploy OVF Template		? H
1 Source	Select source Select the source location	
<ul> <li>Ia Select source</li> <li>1b Review details</li> <li>2 Destination</li> <li>2a Select name and folder</li> <li>2b Select storage</li> <li>3 Ready to complete</li> </ul>	Center a URL to download and install the OVF package from the Internet, or browse to a location accessible from your comput such as a local hard drive, a network share, or a CD/DVD drive. URL Concerning Control of the California Control of the Control of the Control of the Control of the California Co	ər,
	Back Next Finish C	ancel

The ova will then be validated for deployment.

ploy OVF Template		?
1 Source 1a Select source	Select source Select the source location	
1b Review details 2 Destination 2a Select name and folder	Enter a URL to download and install the OVF package from the Internet, or browse to a location accessible from your compute such as a local hard drive, a network share, or a CO/DVD drive.	
2b Select storage 3 Ready to complete	Local file     Browse     GuUtilities WRealize-Operations-Manager-Appliance-6.1.0.3038036_OVF10 ova     Validating	*
	Back Next Finish Ca	ince

Step 3: Review the details of the deployment, and click Next to continue.

Deploy OVF Template						(?) ₩
1 Source ✓ 1a Select source	Review details Verify the OVF tem	plate details				
1b Review details	Product	vRealize Operations Manager Appliance				
1c Accept License Agreements	Version	6.1.0.3038036				
2 Destination	Vendor	Mware Inc.				
2a Select name and folder	Publisher	O Unknown (Trusted certificate)				
2b Select configuration	Download size	1.8 GB				
2c Select storage	Size on disk	1.3 GB (thin provisioned) 274.0 GB (thick provisioned)				
2d Setup networks 2e Customize template	Description	vRealize Operations Manager Appliance				*
3 Ready to complete						
			Back	Next	Finish	Cancel

Step 4: Review the license agreement, click Accept and Next to continue.



Step 5: Name the appliance, or leave the default, select the destination datacenter, and click Next to continue.

Deploy OVF Template		• •
Source     1 Source     1a Select source     1b Review details     1c Accept License     Agreements     2 Destination     2a Select name and folder     2b Select configuration     2c Select storage     2d Setup networks     2e Customize template     3 Ready to complete	Select name and folder         Specify a name and location for the deployed template         Name:       Realize Operations Manager Appliance         Select a folder or datacenter	the entity will be located, and ons to it.
	Back	t Finish Cancel

Step 6: Choose the appliance size based on the number of concurrent sessions being monitored in the Horizon View environment. Click Next to Continue.

Best practice sizing guidelines are available at the following url: <u>http://kb.vmware.com/selfservice/microsites/search.do?language=en\_US&cmd</u> <u>=displayKC&externalId=2098051</u>

Deploy OVF Template		(?) ₩
Deploy OVF Template  Source  Source  Destination  Destination  Calcept License Agreements  Destination  Calcept License Calcep	Select configuration Select a deployment configuration Configuration: Small Use this confic Medium Large Remote Collector (Standard) Remote Collector (Large) Extra Small	? >>
	Back Next Finish Car	ncel

Step 7: Select the datastore the appliance will be deployed to, and click Next.

Deploy OVI Template						?	
1 Source	Select storage Select location to store the	files for the deployed tem	plate				
1b Review details	Select virtual disk format:	Thick Provision Lazy Zer	oed 🔹				
1c Accept License Agreements	VM Storage Policy:	Datastore Default	•	Ð			
2 Destination     2a Select name and folder	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.						
<ul> <li>2b Select configuration</li> </ul>	Name	Capacity	Provisioned	Free	Туре	Storage DRS	
2c Select storage	Replica_LUN	10.00 TB	70.74 GB	9.96 TB	VMFS		
2d Satur patworks	VNX5700_Replica_L	UN 10.00 TB	289.92 GB	9.95 TB	VMFS		
20 Setup networks	AppVoI-04	10.00 TB	61.71 GB	9.94 TB	VMFS		
2e Customize template	AppVoI-03	10.00 TB	99.78 GB	9.94 TB	VMFS		
3 Ready to complete	VNX5700_Vol2	10.00 TB	229.19 GB	9.90 TB	VMFS		
	VNX5700_Vol8	10.00 TB	732.27 GB	9.86 TB	VMFS		
	VNX5700_Vol6	10.00 TB	732.31 GB	9.86 TB	VMFS		
	VNX5700_Vol5	10.00 TB	732.32 GB	9.86 TB	VMFS		
	AppVoI-07	10.00 TB	159.96 GB	9.86 TB	VMFS		
	AppVol-02	10.00 TB	524.48 GB	9.83 TB	VMFS		
	AppVoI-05	10.00 TB	825.71 GB	9.83 TB	VMFS		

Step 8: Select the correct network for the appliance to be deployed to, and click Next.

Deploy OVF Template					C
1 Source	Setup networks Configure the networks the deploy	yed template should use			
<ul> <li>Ta Select source</li> </ul>					
<ul> <li>1b Review details</li> </ul>	Source		Destination		Configuration
<ul> <li>Accept License Agreements</li> </ul>	Network 1	VM Network			0
2 Destination					
<ul> <li>2a Select name and folder</li> </ul>					
<ul> <li>2b Select configuration</li> </ul>					
✓ 2c Select storage	IP protocol: IPv4		IP allocation: Static - Manual	0	
2d Setup networks					
2e Customize template	Source: Network 1 - Description				
3 Ready to complete	The "Network 1" network				
	Destination: VM Network - Protoc	col settings			
	No configuration needed for this r	network			
			Back	Einis	h Canr
			Back	FILIS	Canc

Step 9: Click the Network Properties section to expand the available options that are visible. Fill out the forms with the appropriate network information. Click Next to continue.

Deploy OVF Template		? **
1 Source	Customize template Customize the deployment prop	perties of this software solution
1b Review details	All properties have valid value	ues Show next Collapse all
1c Agreements     2 Destination     2a Select name and folder	Please add the amount of disk space required before v powering up the node. Application	▲ 2 settings
2b Select configuration     2c Select storage     2d Setup networks	Timezone setting	Select the proper timezone setting for this VM or leave default Etc/UTC.           Etc/UTC         •
2e Customize template     3 Ready to complete	IPv6	Prefer IPv6 for DHCP if available
	✓ Networking Properties Default Gateway	4 settings The default gateway address for this VM. Leave blank if DHCP is desired.
	DNS	The domain name servers for this VM (comma separated). Leave blank if DHCP is desired.
	Network 1 IP Address	The IP address for this interface. Leave blank if DHCP is desired.
		Back Next Finish Cancel

Step 10: Review the settings for the deployment. Click Finish to begin the deployment process. Optionally you can click the Power on after deployment option.

De	eploy OVF Template			? H
	1 Source	Ready to complete Review your settings selections be	efore finishing the wizard.	
~	Ta Select source			
~	1b Review details	OVF file	G:\Utilities\vRealize-Operations-Manager-Appliance-6.1.0.3038036_OVF10.ova	
~	1c Accept License	Download size	1.8 GB	
	Agreements	Size on disk	1.3 GB	
	2 Destination	Name	vRealize Operations Manager Appliance	
~	2a Select name and folder	Deployment configuration	Medium	
~	2b Select configuration	Target	Management	
~	2c. Select storage	Datastore	VNX5700_Vol2	
		Folder	RAWC	
~	2d Setup networks	Disk storage	Thin Provision	
~	2e Customize template	Network mapping	Network 1 to VM Network	
~	3 Ready to complete	IP allocation	Static - Manual, IPv4	
		Properties	Timezone setting = Etc/UTC IPv6 = False Default Gateway = DNS = Network 1 IP Address = Network 1 Netmask =	
		Power on after deployment	Back Next Finish	Cancel

Initializing the vROPs appliance:

Step 1: Power on the vROPs appliance, and open the remote console from vCenter.



Step 2: When the initial appliance configuration has completed, verify the web portal IP/URL to continue the configuration process.

vRealize Operations Manager Appliance
VMware, Inc. VMware Virtual Platform
Intel(R) Xeon(R) CPU E5-2690 0 @ 2.90GHz 16GiB Memory
Welcome to the vRealize Operations Manager Appliance
To set up your environment, browse to one of the URLs provided below
and verify that the certificate's SHA1 thumbprint is:
04:09:FA:8B:46:6D:2A:09:07:02:AA:55:8F:D1:6A:E1:59:E4:84:6B
https:// Non-Brackman

Configure the vROPs Appliance:

Step1: Open a web browser and navigate to the vROPs appliance web portal interface by using the IP/DNS name assigned to the appliance. https://yourapplianceipaddress

Click the Express Installation Option when presented with web page. Optionally you can click the New Installation option for a custom deployment.



#### Step 2: On the Getting started page, click Next to continue.



Step 3: Enter and confirm a new "admin" password for the vROPs appliance. Click Next to continue.

1 Getting Started     Set the Administrator account password     Set the Administrator account password for this deployment of vRealize Operations Manager.	
2 Set Authinis and Password	
3 Ready to Complete User name: admin	
New password:	
Re-enter password:	
Passwords must meet the following requirements:	
<ul> <li>Be at least eight characters long</li> <li>Be different from your user name</li> <li>Contain lowercase, uppercase, numeric, and non-alphanumeric characters</li> </ul>	
	_
Back Next Finish Cance	

Step 4: Click Finish to complete the initial setup process.

internet operations manager mitare	iotup		~
<ul> <li>1 Getting Started</li> <li>2 Set Administrator Password</li> <li>3 Ready to Complete</li> </ul>	Next Steps Congratulations! Click Finish to start Startup For a start Set Administrator Password	the cluster and to begin configuration of vRealize Operations Man Product Product Product United States of the state o	ager.
		Back Next Fin	ish Cancel

Step 5: Wait for the appliance to initialized with the new configuration.



Step 6: Login to the vROPs appliance web portal by entering the admin/password account information you created previously. Click Login.

Authentication Source:	Local Users	-	VMware vRealize®Operations Manager®
User name:	admin		
Password:			
		ogin	

### Step 7: On the Welcome page, click Next to continue.



# Step 8: Accept the terms of the EULA, and click Next to continue.

vRealize Operations Manager Configuration								
<b>~</b>	1 Welcome 2 Accept EULA	End User License Agreement Read and agree to the End User License Agreement to continue.						
	3 Enter Product License Key	VMWARE END USER LICENSE AGREEMENT						
	4 Customer Experience Improvement Program	PLEASE NOTE THAT THE TERMS OF THIS END USER LICENSE AGREEMENT SHALL GOVERN YOUR USE OF THE SOFTWARE, REGARDLESS OF ANY TERMS THAT MAY APPEAR DURING THE INSTALLATION OF THE SOFTWARE.						
	5 Ready to Complete	IMPORTANT-READ CAREFULLY: BY DOWNLOADING, INSTALLING, OR USING THE SOFTWARE, YOU (THE INDIVIDUAL OR LEGAL ENTITY) AGREE TO BE BOUND BY THE TERMS OF THIS END USER LICENSE AGREEMENT ("EULA"). IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, YOU MUST NOT DOWNLOAD, INSTALL, OR USE THE SOFTWARE, AND YOU MUST DELETE OR RETURN THE UNUSED SOFTWARE TO THE VENDOR FROM WHICH YOU ACQURED IT WITHIN THIRTY (30) DAYS AND REQUEST A REFUND OF THE LICENSE FEE, IF ANY, THAT YOU PAID FOR THE SOFTWARE.						
	EVALUATION LICENSE. If You are licensing the Software for evaluation purposes, Your use of the Software is only permitted in a non-production environment and for the period limited by the License Key. Notwithstanding any other provision in this EULA, an Evaluation License of the Software is provided "AS-IS" without indemnification, support or warranty of any kind, expressed or implied.							
		1. DEFINITIONS.						
		1.1 "Affiliate" means, with respect to a party at a given time, an entity that then is directly or indirectly controlled by, is under common control with, or controls that party, and here "control" means an ownership, voting or similar interest representing fifty percent (50%) or more of the total interests then outstanding of that entity.						
		1.2 "Documentation" means that documentation that is generally provided to You by VMware with the Software, as revised by VMware from time to time, and which may include end user manuals, operation instructions, installation guides, release notes, and on-line help files regarding the use of the Software.						
		1.3 "Guest Operating Systems" means instances of third-party operating systems licensed by You, installed in a Virtual Machine and run using the Software.						
		1.4 "Intellectual Property Rights" means all worldwide intellectual property rights, including without limitation, copyrights, trademarks, service marks, trade secrets, know how, inventions, patents, patent applications, moral rights and all other proprietary rights, whether registered or unregistered.						
		1.5 "License" means a license granted under Section 2.1 (General License Grant).						
		I accept the terms of this agreement						
		Back Next Finish Cancel						

Step 9: Enter a valid vROPs license key, or leave the product in evaluation mode to enter at a later.

A temporary key will allow full access to the product for a 60-day period. After this period a valid key will need to be entered to continue using the product.



Step 10: Choose whether or not this product will contribute in the Customer Experience Improvement Program, click Next to continue.



### Step 11: Click Finish on the Ready to Complete screen.



### vROPs Appliance configuration summary:

The vROPs appliance is now configured. However, in vROPs for Horizon 6.2 new firewall ports were added to the solution, that the appliance firewall does NOT have configured out-of-the-box. Add the new firewall ports before continuing with the rest of the installation. This process is covered in the "Add new Firewall ports and restart services" section.

### Add new Firewall ports and restart services:

Step 1: Log into the vROPs appliance with your root credentials.

Hit Alt-F1 to make the login prompt appear. Login with the root account, the out-of-box password is blank, and you will be asked to immediately change the password.



Step 2: Navigate to the /opt/vmware/etc directory, and edit the vmware-vcops-firewall.conf file to add the new ports using the "vi" command as seen below.



Step 3: Find the # v4v Adapter specific ports section.

Edit the port range to include the additional ports added in the latest 6.2 release (3099, 3100, 3101). In our example, the port range was adjusted to show the range of 3091:3200, beyond the range required.

To use vi to edit the file, you must hit the "Insert" key to make the necessary changes. When the changes are completed, hit "Esc", then Shift :, and type wq, then hit Enter. Hitting Esc will take vi out of edit mode. Shift : will allow you type the command wq, which stands for write-quit.

# firewall configuration # UDP ports to open up UDPPORTS= # ntp requires 123 UDPPORTS="\$UDPPORTS 123" UDPPORTS="\$UDPPORTS 10000:10010" UDPPORTS="\$UDPPORTS 20000:20010" # TCP ports to open up TCPPORTS= # http and https TCPPORTS="\$TCPPORTS 80 443" # ssh TCPPORTS="\$TCPPORTS 22" # gemfire TCPPORTS="\$TCPPORTS 6061" # XDB TCPPORTS="\$TCPPORTS 1235" # v4V Adapter specific ports TCPPORTS="**\$TCPPORTS 3091:3200**" #Gemfire ports TCPPORTS="**\$TCPPORTS 10000:10010**" #Genfire ports for locator TCPPORTS="\$TCPPORTS 20000:20010" #Cassandra inter-node cluster communication TCPPORTS="\$TCPPORTS 7001" #Cassandra client communication TCPPORTS="\$TCPPORTS 9042" "vmware-vcops-firewall.conf" [readonly] 32L, 694C 5,1 Top

Step 4: Save all changes, and restart the firewall service with the command "service vmware-vcops-firewall restart". Optionally you can restart the entire appliance. Installing the vROPs for Horizon Adapter: Step 1: Login the web portal and navigate to the Administration->Solution section. Under Solutions, click the green + sign to install the Horizon Adapter.

vmware vRealize Operations	Manager			
🛛 🕞 🗹 🐨 🔄 🖏	ᡖ Solutions			
Solutions	🕂 🔐 📥 Show: 🛛 All Solutions	<b>•</b>		
Credentials	Name	Description	Version	
Policies	Operating Systems / Remote Service	The End Point Operations Ma	nageme 1.0.3030318	
Inventory Explorer	VMware vSphere	Manages vSphere objects suc	ch as Cl 6.0.3038034	
Nobject Relationships				
Access Control Muthentication Sources	Occurrent in Such and Demote Service N	levitering Colution Details		
Scluster Management	Operating Systems / Remote Service N	ionitoring Solution Details		
Vertificates	Adapter Type Adapt	er Instance Name C	Credential name	Collector
Audit				

Step 2: Click Browse, and locate the Horizon adapter.pak file downloaded previously. Click Upload to transfer file to server.

Add Solution		?			
1 Select Solution 2 End User License Agreement	Select a Solution to Install Browse your file system to select a PAK file for the solution you want to install.				
3 Install	VMware-vrops-viewadapter-6.2.0-3295266.pak	Browse			
	✓ The selected file is ready to upload and install. Click Upload to continue.				
	Install the PAK file even if it is already installed.				
	Reset predefined content to a newer version provided by this update. User modifications to predefined Alerts, Symptoms, Recommendations, and Policies will be overwritten.				
	Upload 0%				
	Back Next Finish	Cancel			

Step 3: Wait for the file to be uploaded and validated. Click Next to continue.

2 End User License Agreement	Browse your file sy	ystem to select a PAK file for the solution you want to install.
3 Install	Select a PAK fil	e to import Browse
	Install the PA	K file even if it is already installed. ined content to a newer version provided by this update. User modifications to
	Upload	ens, Symptoms, Recommendations, and Policies will be overwritten.
	The PAK file has	s been uploaded and is ready to install.
	PAK filename	VMware-vrops-viewadapter-6.2.0-3295266.pak
	Name	VMware Horizon
	Description	Solution for managing VMware Horizon objects such as View Pods, Pools, Desktops
	Version	6.2.0.3295266
	The PAK file	signature is valid.
	-	

### Step 4: Accept the EULA, and click Next to continue.

Add boldton	
<ul> <li>1 Select Solution</li> <li>2 End User License Agreement</li> </ul>	End User License Agreement Read and agree to the End User License Agreement to continue.
3 Install	<ul> <li>VMWARE END USER LICENSE AGREEMENT</li> <li>PLEASE NOTE THAT THE TERMS OF THIS END USER LICENSE AGREEMENT SHALL GOVERN YOUR USE OF THE SOFTWARE, REGARDLESS OF ANY TERMS THAT MAY APPEAR DURING THE INSTALLATION OF THE SOFTWARE.</li> <li>IMPORTANT-READ CAREFULLY: BY DOWNLOADING, INSTALLING, OR USING THE SOFTWARE, YOU (THE INDIVIDUAL OR LEGAL ENTITY) AGREE TO BE BOUND BY THE TERMS OF THIS END USER LICENSE AGREEMENT ("EULA"). IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, YOU MUST NOT DOWNLOAD, INSTALL, OR USE THE SOFTWARE, AND YOU MUST NOT DOWNLOAD, INSTALL, OR USE THE SOFTWARE, AND YOU ACQUIRED IT WITHIN THE UNUSED SOFTWARE TO THE VENDOR FROM WHICH YOU ACQUIRED IT WITHIN THIRTY (30) DAYS AND REQUEST A REFUND OF THE LICENSE FEE, IF ANY, THAT YOU PAID FOR THE SOFTWARE.</li> <li>EVALUATION LICENSE. If You are licensing the Software for evaluation purposes, Your use of the Software is only permitted in a non-production environment and for the period limited by the License Key. Notwithstanding any other provision in this EULA, an Evaluation License of the Software is provided "AS-IS" without indemnification, support or warranty of any kind, expressed or implied.</li> <li>1. DEFINITIONS.</li> <li>1.1 "Affiliate" means, with respect to a party at a given time, an entity that then is directly or indirectly controlled by, is under common control with, or controls that party, and here "control" means an ownership, voting or similar interest representing fifty percent (50%) or more of the total interests then outstanding of that entity.</li> <li>1.2 "Documentation" means that documentation that is generally provided to You by VMware with the Software, as revised by VMware from time to time, and which may include end user manuals.</li> </ul>
	Back Next Finish Cancel

Step 5: Wait for the adapter to finish the installation process. Click Finish to complete the process.

Add Solution		?
dd Solution 1 Select Solution 2 End User License Agreement 3 Install	Install Solution         The selected solution is being installed.         Installation Details         Node Address: 10.114.43.199         State: Preapply Validated (Candidate)         Node Address: 10.114.43.199         State: Applied System Update (Candidate)         Node Address: 10.114.43.199         State: Applied Adapter Pre Script (Candidate)         Node Address: 10.114.43.199         State: Applied Adapter (Candidate)         Node Address: 10.114.43.199         State: Applied Adapter Post Script (Candidate)         Node Address: 10.114.43.199         State: Applied Adapter Post Script (Candidate)         Node Address: 10.114.43.199         State: Applied and Cleaned (Completed)	?
	State: Applied Adapter Pre Script (Candidate) Node Address: 10.114.43.199 State: Applied Adapter (Candidate) Node Address: 10.114.43.199 State: Applied Adapter Post Script (Candidate) Node Address: 10.114.43.199 State: Applied and Cleaned (Completed)	

Configuring the Horizon Adapter:

Step1: Select the VMware Horizon solution, and click the gear icon.

vmware vRealize Operations	Manager					
Back 🔹 🚮 🚯 🔇 🖬 🍇	ᡖ Solutions					
Licensing	🕂 💣 🔩   Show: 🛛 All Solution	ons 💌				
E Credentials	Name	Description		Version		
J Policies	Poperating Systems / Remote Se	ervice The End Point Operations N	lanageme	1.0.3030318		
Inventory Explorer	VMware vSphere	Manages vSphere objects s	such as CI…	6.0.3038034		
🐴 Object Relationships	Nware Horizon	Solution for managing VMw	Solution for managing VMware Horizo		6.2.0.3295266	
8 Maintenance Schedules						
👸 Access Control						
Mathentication Sources	VMware Horizon Solution Details					
3 Cluster Management	002					
Sertificates	Adapter Type	Adapter Instance Name	Credential name	e	Collector	
Soutbound Settings	Horizon Adapter	Not configured	N/A		N/A	
🖻 Audit	vCenter Adapter	Not configured	N/A		N/A	
toollector Groups						

Step 2: With the vCenter Adapter type selected, enter a Display Name for the vCenter server you will connect to. Under Basic Settings, make sure to enter the proper IP address or DNS name for the vCenter Server, and then click the green + sign to add the admin credentials.

Manage Solution - VMware Horiz	on					?
Adapter Type		Description		Instances	Version	Provided by
vCenter Adapter		Provides the connection	n information and credentia	0	2.0.3038031	VMware Inc.
Horizon Adapter		Horizon Adapter		0	6.2.3295266	VMware Inc.
Instance Name ▲ vc3.domain.local		Instance Settings Display Name Description	vc3.domain.local			
		Basic Settings				
		vCenter Server	vc3.domain.local			
		Credential	Select the plus sign		- +	
		Test Connection				
■ ■ Page 1 of 1   ▶	N   &	Advanced Settin	ngs			Save Settings
						Close

Enter the appropriate admin credentials, and click Okay to save the changes.

Manage Credential			? X
Credential name	admin		
User Name	administrator		
Password	•••••		
		ОК	Cancel

Step 4: Click the Test button to confirm the connection, and accept the certificate handshake from the server. \*\*Click Save to make sure all changes are kept. Otherwise these settings will be lost.

Manage Solution - VMware Horizon					?
Adapter Type	Description		Instances	Version	Provided by
vCenter Adapter	Provides the connection	n information and credentia	0	2.0.3038031	VMware Inc.
Horizon Adapter	Horizon Adapter		0	6.2.3295266	VMware Inc.
+ ×	Instance Settings				
Instance Name 🔺	Display Name	vc3.domain.local			
vc3.domain.local	Description				
	Pacia Sattings				
	vCenter Server	vc3 domain local		0	
	Credential	admin		<b>• •</b> /	,
	oredentia	dumm			
	Test Connection				
	Advanced Setting	gs			
🛛 🖣 Page 1 of 1   🕨 🕅 😂					Save Settings
					Close

Step 5: Select the Horizon Adapter, enter a display name for the View Pod instance. Provide a generic adapter ID, and click the green + sign to create a Broker Agent pairing key.

Manage Solution - VMware Horizon					
Adapter Type	Description		Instances	Version	Provided by
vCenter Adapter	Provides the connect	ion information and credentia	0	2.0.3038031	VMware Inc.
Horizon Adapter	Horizon Adapter		0	6.2.3295266	VMware Inc.
+ ×	Instance Settings				
Instance Name 🔺	Display Name	View Pod1			
View Pod1	Description				
	Basic Settings				
	Adapter ID	viewpod1			
	Credential	Select the plus sign		- +	
	Test Connection	]			
	Advanced Set	tings —			
4 4   Page 1 of 1   ▶ ▶	l   &				Save Setting
					Close

Enter a generic Credential Name, and provide a Broker Agent pairing key that will be used later to pair the Broker Agent.

Manage Credential			? 🗙
Credential name	broker agent key		
Server Key	••••••		8
		ОК	Cancel

Step 6: Click Save Settings before you click the close to ensure changes are kept. Click Close to finish the adapter configuration process.

Manage Solution - VMware Horizon					?
Adapter Type	Description		Instances	Version	Provided by
vCenter Adapter	Provides the connection	n information and credentia	0	2.0.3038031	VMware Inc.
Horizon Adapter	Horizon Adapter		0	6.2.3295266	VMware Inc.
+ ×	Instance Settings				
Instance Name 🔺	Display Name	View Pod1			
View Pod1	Description				
	Basic Settings Adapter ID Credential Test Connection	viewpod1 broker agent key		• + /	
4					Save Settings
					Close

Step 7: Confirm that the both the Horizon and vCenter adapter are in the Collecting and Data Receiving state. \*\*It may take a few minutes for both solutions to go green on the Data Receiving state.

Solutions								
💠 💣 🎄   Show:	All Solutions	*						
Name	*	Description		Version	P	Provided by		Licensing
Operating Systems /	Remote Service Monit	The End Point Operation	ons Management S	1.0.3030318	V	Mware Inc.		Not applicable
VMware vSphere Manages vSphere objects such as Cluster		6.0.3038034	v	'Mware Inc.		Not applicable		
Solution for managing VMware Horizon ob			VMware Horizon ob	6.2.0.3295266	v	Mware Inc.		Configure
VMware Horizon Solutio	on Details							
Adapter Type	Adapter	Instance Name	Credential name		Collector		Collection State	Collection Status
Horizon Adapter	view01		test		vRealize Operations Man	ager Coll	Collecting	Data receiving
vCenter Adapter	vc2		admin		vRealize Operations Man	ager Coll	Collecting	Data receiving
vCenter Adapter	vc3		admin		vRealize Operations Man	ager Coll	Collecting	Data receiving

Installing the Horizon Adapter Summary:

At this point both adapters are in a ready state to begin collecting data. The vCenter adapter will begin to pull in objects and metrics from the vSphere

environment. The Horizon Adapter still requires the Horizon Broker Agent to be installed on a single Connection Server per View Pod before data is populated. \*\*Both adapters will require a valid license to function. If no license is available, the Horizon Broker Agent will not populate data in the vROPs appliance. The following sections will cover these topics.

### Licensing the vROPs for Horizon solution:

Step 1: Click Licensing from the navigation menu, then click the green + sign to add a new license.

vmware vRealize Operations N	Manager				O About Help admin V	Search
Back 👻 🗂 🚯 🖸 🗮 🦓	Licensing					
A Solutions	License Keys License Groups					
Licensing     Credentials	Last Refreshed: 16 hours ago					
Reliaise	Product or Solution	License Type	License Capacity	License Usage	Status	Expiry
	🖃 🚰 vRealize Operations Manager		Unlimited number of Virtual Mac	0 number of Virtual Machine		
A Object Relationships	Evaluation - VMware vRealize Operatio	Evaluation	Unlimited number of Virtual Mac	0 number of Virtual Machine	▲ 59 days to expiry +2 more	
Maintenance Schedules						
8 Access Control						
Authentication Sources						
3 Cluster Management						
Sertificates						
Soutbound Settings						
🗟 Audit						

Step 2: Click the drop down menu and select the VMware Horizon Solution. Enter a valid license key for the solutions and click "Validate". If valid, click Save to continue.

If you have a Horizon Enterprise license key, that key can be used to license the solution. Otherwise you can use a standalone vROPs for Horizon key to continue. If you have a valid vROPs license key, that key can also be added in this section by selecting the vROPs Operation Manager solution, and validating the key.

Add License		×
Select product or solution:	VMware Horizon	
Enter License Key:	Validate	
	Save	Cancel

Add License	×
Select product or solution:	VMware Horizon
Enter License Key:	XJ6A5-NL30L-5817T-0AGH2-34AHH Validate
	✓ License key validated successfully.
License Key Details	
Solution Name:	vRealize Operations for Horizon
Licensable Capacity:	100 units of Daily License Usage Count Max of View Pod
License Key:	XJ6A5-NL30L-5817T-0AGH2-34AHH
License Type:	Temporary
Allowable Objects:	Host System, Virtual Machine, Datastore, Datacenter
Expiry:	9/16/16
	Save

# Step 3: Verify that both solutions have a valid license key before continuing.



#### Licensing the vROPs for Horizon solution summary:

At this point both solutions should have a valid license key, allowing vROPs for Horizon to properly collect and analyze data. Continue with the Horizon Broker Agent installation, so that vROPS can collect data from the Horizon environment.

### Installing the Horizon Broker Agent:

The Horizon Broker Agent must be installed on a SINGLE Horizon View Connection Server per View Pod. Installing more than one agent per pod is not supported. Step 1: Login to a View Pod Connection Server. Navigate to the latest Horizon Broker Agent installer that was downloaded previously, and launch the package. Click Next to continue the installation process.

岁 VMware vRealize Op	perations for Horizon Broker Agent 🗕 🗖 💌
<b>P</b>	Welcome to the VMware vRealize Operations for Horizon Broker Agent Setup Wizard
	The Setup Wizard will install VMware vRealize Operations for Horizon Broker Agent on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
vMware vRealize™ Operations for Horizon® 6.2.0	Copyright (c) 1998-2015 VMware, Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at http://www.vmware.com/go/patents.
	Back Next Cancel

Step 2: Accept the license agreement, and click Next.

岁 VMware vRealize Operations for Horizon Broker Agent	o x
End-User License Agreement Please read the following license agreement carefully	8
VMWARE END USER LICENSE AGREEMENT	
PLEASE NOTE THAT THE TERMS OF THIS END USE LICENSE AGREEMENT SHALL GOVERN YOUR USE OF THE SOFTWARE, REGARDLESS OF ANY TERMS THAT MAY APPEAR DURING THE INSTALLATION OF THE SOFTWARE.	R
☑ I accept the terms in the License Agreement	
Print Back Next C	ancel

Step 3: Leave "Launch the VMware vRealize Operations View Broker Agent configuration utility" option checked, click Install to continue.



Wait for the installer process to complete before continuing.

Installin	g the Broker Agent
Please wai Agent,	t while the Setup Wizard installs VMware vRealize Operations for Horizon Broker
Status:	Stopping services
	Back Next Cancel

Step 4: Click Finish to close the installer and launch the configuration utility.

🗒 VMware vRealize Ope	erations for Horizon Broker Agent 🗕 🗖 🗙
	Completed the VMware vRealize Operations for Horizon Broker Agent Setup Wizard
	Click the Finish button to exit the Setup Wizard.
VMware vRealize™	
Operations for Horizon® 6.2.0	
	Back Finish Cancel
	Carcor

### Pairing the Horizon Broker Agent

For this step you will need the Horizon Adapter pairing key created previously, View Admin credentials, and the View Events DB credentials. You will also need the new firewall ports added to the vROPs appliance that was covered in a previous section, otherwise the pairing process will fail.

Step 1: Enter the IP/FQDN Address for the vROPs appliance, and the connection port of 3091

Enter the pairing key that was created in your vROPs for Horizon solution adapter instance in previous steps. \*\*Picture of pairing key in vROPs manager is shown below.

Pair Adapter	Adapter Pairing	
View Connection Server	Adapter IP/FQDN Address	Port
Event DB and Desktop Pool Intervals and Timeouts	10.114.43.60	3091
Logging		
Broker Agent Service Ready To Complete	Pairing Key :	
	••••	
	Confirm :	
	••••	Pair Test
	Broker Agent Config Utility for Horizon Version :	: 6.2.0.3267247
	This broker Agent is already paired with Ad	dapter Address 10.114.43.60.

#### Pairing Key location created previously:

vmware vRealize Ope	rations Manager					Help   admin + 🤇
Back - 🖄 🔶 🕥	Manage Solution - VMware Horizon					?
Solutions	Adapter Type vCenter Adapter	Description Provides the connect	on information and credent	Instances	Version 2.0.3038031	Provided by VMware Inc.
Credentials	Horizon Adapter	Horizon Adapter		1	6.2.3267247	VMware Inc.
<ul> <li>Policies</li> <li>Inventory Explorer</li> <li>Object Relationships</li> <li>Maintenance Schedules</li> </ul>	+ × Instance Name A	Instance Settings Display Name	v4h6			pt
Access Control		Description Basic Settings				pr
Cluster Management Certificates		Adapter ID Credential	v4h6 test		+	/
<ul> <li>Audit</li> <li></li></ul>		Credential name Server Key	test			
Biobal Settings						
	[i i Page 1 of 1   ▶ ▶]   🧞		C	K Cance	1	Save Settings Close

Step 2: Click Pair, and validate the adapter pairs successfully. If this process fails, make sure that you added the appropriate vROPS appliance firewall ports, the firewall service or appliance was restarted, and that the Horizon Adapter states that it is Collecting and Data receiving on the Solution adapter page.

If successful, click the Test button to verify the connection. Click Next to continue.

Pair The Adapter with Broke Specify the Horizon Adapter IP	er Agent or FQDN, Port Number and the Pairing Key
Pair Adapter View Connection Server Event DB and Desktop Pool Intervals and Timeouts Logging Broker Agent Service Ready To Complete	Adapter Pairing Adapter IP/FQDN Address Port 10.114.43.60 3091 Pairing Key :  •••• Confirm :  •••• Pair Test
	Broker Agent Config Utility for Horizon Version : 6.2.0.3267247 Operation Started : Adapter Pairing Operation Adapter Pairing has finished Successfully Operation Started : Test Adapter Connection The response received is <rmi_response result="1"></rmi_response> Operation Test Adapter Connection has finished Successfully

Step 3: Verify your Horizon administrator credentials and domain.

Click Test to verify connectivity. \*\*If there are any authentication issues, you will need to resolve them before continuing.

R	Broker Agent Config Utility for Horizon	x
Horizon With View Enter the View administrator cre	edentials for this View Pod (Horizon 6.x only)	
<ul> <li>Pair Adapter</li> <li>View Connection Server</li> <li>Event DB and Desktop Pool Intervals and Timeouts</li> <li>Logging</li> <li>Broker Agent Service</li> <li>Ready To Complete</li> </ul>	Horizon With View View Environment Credentials : User name Port administrator 443 Test Domain domain.local	
	Broker Agent Config Utility for Horizon Version : 6.2.0.3267247         The response received is <rmi_response result="1"></rmi_response> Operation Test Adapter Connection has finished Successfully         Operation Started : Test View Connection Server Connection         localhost is a valid View Connection Server         Operation Test View Connection Server Connection has Finished         <	<ul> <li></li> <li>&gt;</li> </ul>
C. Selec	Back Next Cancel	

Step 4: Confirm the Event DB username and password. Click Test to verify authentication works. Click Next to continue.

₽ <sub>0</sub>	Broker Agent Config Utility for Horizon	×
Configure the Event DB and Event Database credentials and	d Desktop Pool configuration	
<ul> <li>Pair Adapter</li> <li>View Connection Server</li> <li>Event DB and Desktop Intervals and Timeouts Logging Broker Agent Service Ready To Complete</li> </ul>	Event DB and Desktop Pool Information Event Database information Event DB Username Event DB Password Desktop Pools Specify Desktop Pools (optional) Exclude Include Monitor Application Pools and hosted applications	Test
	Broker Agent Config Utility for Horizon Version : 6.2.0.3267247 localhost is a valid View Connection Server Operation Test View Connection Server Connection has Finished Operation Started : Validate DB Credentials Event DB Password validated successfully. Operation Validate DB Credentials has finished Successfully <ul> <li>Image: Mext</li> </ul>	ancel

# Step 5: Optionally you can edit the Interval timeouts for topology and session updates.

<b>\$</b>	Broker Agent Config Utility for Horizon	×
Intervals and Timeouts You can choose to configure the operations. It's recommened the operations of the operation of the ope	he default timeout paramters and intervals used by the Broker Agent for its o leave them as the default parameters.	
<ul> <li>Pair Adapter</li> <li>View Connection Server</li> <li>Event DB and Desktop Pool Intervals and Timeouts</li> <li>Logging</li> <li>Broker Agent Service</li> <li>Ready To Complete</li> </ul>	Intervals and Timeouts  Edit the Intervals and Timeouts  Full Topology Refresh Interval (in sec)  3600 Seconds Session Updates Interval (in sec)  300 Seconds Reset Reset	
	Broker Agent Config Utility for Horizon Version : 6.2.0.3267247 localhost is a valid View Connection Server Operation Test View Connection Server Connection has Finished Operation Started : Validate DB Credentials Event DB Password validated successfully. Operation Validate DB Credentials has finished Successfully < III	× ×
	Back Next Cancel	

# Step 6: Optionally you can change the logging level, Log rotation policy.

Configure the Logging para Change the Log Levels and Log	ameters g rotation parameters. Increased Logging Levels are disk intensive.
<ul> <li>Pair Adapter</li> <li>View Connection Server</li> <li>Event DB and Desktop Pool</li> <li>Intervals and Timeouts</li> <li>Logging</li> <li>Broker Agent Service</li> <li>Ready To Complete</li> </ul>	Configure the Logging parameters Logging Level Info Log File Path C:\ProgramData\\VMware\vRealize Operations for Horizon \Broker Agent\logs\ Log Rotation Policy Rotate log files every day Rotable Log file Size (in MB) 50 V Number of Log files to keep 10 V
	Broker Agent Config Utility for Horizon Version : 6.2.0.3267247       localhost is a valid View Connection Server       Operation Test View Connection Server Connection has Finished       Operation Started : Validate DB Credentials       Event DB Password validated successfully.       Operation Validate DB Credentials has finished Successfully

# Step 7: Click the Start button to enable the Horizon Adapter service.

₽₀	Broker Agent Config Utility for Horizon	X
Configure The Broker Agent Se You can start, stop or restart the Br Note : Changes made, will only appl	or <b>vice</b> oker Agent service. y once you Finish this Wizard	
<ul> <li>Pair Adapter</li> <li>View Connection Server</li> <li>Event DB and Desktop Pool</li> <li>Intervals and Timeouts</li> <li>Logging</li> <li>Broker Agent Service Ready To Complete</li> </ul>	Service configuration Current Status : Running Start Stop Restart	
	Broker Agent Config Utility for Horizon Version : 6.2.0.3267247 localhost is a valid View Connection Server Operation Test View Connection Server Connection has Finished Operation Started : Validate DB Credentials Event DB Password validated successfully. Operation Validate DB Credentials has finished Successfully	< III >
1		
	Back Next Cancel	

# Step 8: Click Finish to complete the broker agent installation process.



Step 9: Confirm Adapter Self Health dashboard is collecting information.

Log into the vROPs Manager, and open the Horizon Adapter Self Health dashboard. Confirm that the View Adapter and the View Broker agent have a



green "Collection State". If not in a green state, proceed to Step 10.

Step 10: Navigate to the solution adapter management page, and Stop/Start the VMware Horizon Adapter.

Home 🔹 🔛 🔮 🖬 😜	A Solutions						
Solutions	🕂 🧬 🎪 I Show: 🛛 All Solutions						
Credentials	Name	Description		Version	Provided by		Licensing
Policies	Contract of the second	Apps 6.2 Solution for managing P	ublished Application objects s	6.2.0.3232986	VMware Inc.		Configure
Inventory Explorer	Operating Systems / Remote Service Monito	ring The End Point Operation	The End Point Operations Management Solution for O		VMeare Inc.		Not applicable
Object Relationships	🕼 VMware vSphere	Manages vSphere object	ts such as Clusters, Hosts	6.0.3038034	VMware Inc.		Notapplicable
Maintenance Schedules	Whware Horizon	Solution for managing V	Mware Horizon objects such	6.2.0.3267247	VMware Inc.		Configure
Access Control Authentication Sources							
Cluster Management Certificates	VMware vRealize Operations for Published Ap	ps 6.2 Solution Details					
odbound beangs	Adapter Type	Adapter Instance Name	Ciedential name		Collector	Collection State	Collection Status
Audit	vCenter Adapter	vc2	administrator		vRealize Operations Manager Collector-vRe	· Starting	
Recent Tasks	vCenter Adapter	vc3	vc3		vRealize Operations Manager Collector-vRe	M Collecting	Data receiving
Collector Groups	vRealize Operations for Published Apps 6.2	Not configured	N/A		N/A		
Global Settings							

### Install Summary:

At this point the installation is completed, and the vROPs for Horizon solution will provide the latest dashboards, alerts, symptoms, and metrics for providing end-to-end visibility of Horizon View environment.

#### References:

Customizing How vRealize Operations Displays Your Data: <u>http://pubs.vmware.com/vrealizeoperationsmanager-</u> <u>61/topic/com.vmware.vcom.core.doc/GUID-4F2BC962-E68E-4EE3-B26E-</u> <u>CED2E41009AA.html</u>

vRealize Operations Manager Documentation:

https://www.vmware.com/support/pubs/vrealize-operations-manager-pubs.html

vRealize Operations for Horizon Documentation:

https://www.vmware.com/support/pubs/vcops-view-pubs.html

vRealize Operations for Horizon Sizing Guidelines:

http://kb.vmware.com/selfservice/microsites/search.do?language=en\_US&cmd =displayKC&externalId=2098051