

HiveManager NG Virtual Appliance QuickStart Guide

This QuickStart Guide describes the installation of a HiveManager NG Virtual Appliance.

Introduction to HiveManager NG Virtual Appliance

Before you can install the HiveManager NG Virtual Appliance, you must first install VMware vCenter 5.5 or later. vCenter is required to configure your IP address, DNS, and host name for your virtual appliance.

The HiveManager NG Virtual Appliance is a VM (virtual machine) that you can download in an .ova (Open Virtual Appliance) file format and deploy on VMware ESXi hypervisor running on a physical device on your corporate network.

You also need to install VMware vSphere Client on your management system, and use it to access the vCenter and the HiveManager NG Virtual Appliance. Computers running Windows support vSphere Client.

Server Hardware Requirements

⁽⁽ⁱ⁾) This deployment procedure assumes that you have already installed VMware vCenter 5.5 or later on a dedicated PC that meets the minimum requirements noted in "Server Hardware Requirements" on page 1.

Additionally, Aerohive recommends that you use the vSphere Essentials Kit which includes vCenter Server Essentials. You can purchase it by visiting the following URL:

http://store.vmware.com/store/vmware/en_US/pd/productID.282883900?src=WWW_eBIZ_productpage_Essentials_Buy_US.

The following are the minimum hardware requirements to support the number of APs deployed.

Recommended minimum hardware requirements for deploying 2,000 APs:

Processor: 8 Virtual CPU cores

Memory: 24 GB total dedicated to HiveManager NG Virtual Appliance

Disk: 250 GB, SSD

Recommended minimum hardware requirements for deploying 250 APs:

- Processor: 4 Virtual CPU cores
- Memory: 16 GB total dedicated to HiveManager NG Virtual Appliance

Disk: 250 GB, SSD

("i") Although scalability depends on the number of APs, the number of clients per AP, the number of applications that are accessed, and other factors, the values stated here provide sufficient performance margin to allow for additional devices in a typical small-to-medium-scale Wi-Fi deployment.

HiveManager NG Virtual Appliance Software

The 64-bit HiveManager NG Virtual Appliance software is available from the Aerohive Support Software Downloads Portal. Navigate to Software Downloads > Current Software Releases to find the current version of HiveManager NG Virtual Appliance.

Log in and download the HiveManager NG Virtual Appliance OVA (Open Virtual Appliance) formatted file to your local directory, and then follow the procedure for "Installing the HiveManager NG Virtual Appliance" on page 3 to import the .ova file to your virtual machine.

Figure 1 is an illustration of a HiveManager NG Virtual Appliance installation.

Figure 1 HiveManager NG Virtual Appliance



Installing the HiveManager NG Virtual Appliance

Important Notes

- The Fully Qualified Domain Name (FQDN) is how the DNS server resolves the HiveManager NG Virtual Appliance address. The DNS server and FQDN are specified in the OVF template (see step on page 6).
- After installation, you can use vCenter to modify the HiveManager NG Virtual Appliance settings through **vApp Options**.

Before you begin, use the following checklist to make sure that you have all the items needed to complete your virtual appliance installation:

✓	Items	Notes
	.ova file	
	Network setup for your OVF deployment	
	HiveManager NG Virtual Machine login credentials	
	IP address defined for the HiveManager NG Virtual	
	Machine	
	IP gateway address	
	FQDN host name	
	IP address for the DNS server	
	Domain name or IP address of an SMTP server	

Deploying the HiveManager NG Virtual Appliance OVF Template

You deploy an OVF (Open Virtualization Format) template from an OVA (Open Virtual Appliance) directory copied from the Aerohive Customer Support Portal. An OVF template is a distribution package of several files contained in a single directory that comprises an XML descriptor, metadata, and other information for the OVF package. This directory is distributed as an OVA package that contains the OVF directory within a .tar archive file. An .ova file contains a virtual machine that is prepackaged and ready for deployment.

Use the VMware vSphere Client to install the HiveManager NG Virtual Appliance OVF template onto your virtual machine.

1. Log in to your VMware vSphere Web Client, and then enter the IP address that you defined for your virtual machine.

/Mware vSphere Welcome	
Getting Started	For Administrators
If you need to access vSphere remotely, use the following program to install vSphere Client software. After running the installer, start the client and log in to this host.	vSphere Web Client vSphere Web Client allows you to mana virtual machines and view your virtual
Download vSphere Client	infrastructure through a web browser.
If you need more help, please refer to our documentation library:	Log in to vSphere Web Client
 vSphere Documentation 	Web-Based Datastore Browser Use your web browser to find and download files (for example, virtual machine and virtual disk files). Browse datastores in the vSphere inventory

 Navigate to vCenter > Hosts and Clusters > your_VA_location, and then click Actions > Deploy OVF Template.

		Y	
vCenter	1	Lab1	Actions 👻
	E 🧕	Getting Sta	Actions - Lab1
@ vcenter1			1 Add Host
🕨 📘 Lab1		> What is	1 New Cluster
Lab2		A datace	New Datastore Cluster
		inventor	y 🏪 New Distributed Switch
		machine	🍄 🚰 New Virtual Machine
		add hos	🎲 Deploy OVF Template
		datacen	t 🚵 Migrate VM to An 🗤 er Network
		vCenter	Edit Default VM Compatibility

The Deploy OVF Template wizard launches and guides you through the following steps for deploying an OVF template.

3. Select source. Browse to the source location of your OVA-formatted file, verify that the path to your .ova file is correct, and then click **Next**.

4. **Review details**. Verify that the OVF template details are correct. Make sure that the virtual disk format size is thick provisioned. Click **Next**.

1 Source 1a Select source	Review details Verify the OVF template details		
1b Review details	Product HiveManager NG Virtual Appliance		
2 Destination	Version	11.6	
2a Select name and folder	Vendor	Aerohive Networks, Inc.	
2b Select a resource	Publisher	Aerohive Networks, Inc. (Untrusted certificate)	
2c Select storage	Download size	2.7 GB	
2d Customize template 3 Ready to complete	Size on disk	4.1 GB (thin provisioned) 240.0 GB (thick provisioned)	
	Description		
		L	

- ("i") Publisher certificates are untrusted (by default), when you install an OVA using VMware vSphere Client. But if you install the Aerohive certificate to your OS, VMware vSphere Client will indicate that the certificate is now trusted. You can install the Aerohive certificate by clicking on the publisher area (Aerohive Networks, Inc).
- 5. Select name and folder. You can accept the current name or change the unique name of the .ova file, select a folder where the file will be located, and then click **Next**.
- 6. Select a resource. Select a machine to run the deployed .ova file, and then click Next.

The Storage window appears. You can accept or change the current datastore disk format and disk space in gigabytes, select the provisioning option, and then click **Next**.

Make sure you select a data store that is large enough for the virtual machine and all of its virtual disk files. You can also choose whether you want your storage to be thin provisioned or thick provisioned.

- Thick Provision Lazy Zeroed: When you select this option, the HiveManager NGVirtual Appliance claims the entire amount of configured hard disk space from the virtualization host; however, the HiveManager NG Virtual Appliance does not immediately overwrite sectors with zeroes if it is not currently using them. As a result, any preexisting data occupying the claimed sectors might be recoverable from the host.
- Thick Provision Eager Zeroed: When you select this option, the HiveManager NG Virtual Appliance claims the entire amount of configured hard disk space from the virtualization host and immediately overwrites all allocated—but as yet unused—sectors with zeroes. This option will take longer during the initial deployment.
- Thin Provision: When you select this option, only enough host disk space is allocated for the HiveManager NG Virtual Appliance to start, leaving the rest of the disk space for other virtual machines to use if needed. Note that one disadvantage to this approach is that the HiveManager NG Virtual Appliance might run more slowly as it allocates disk space as needed.

Aerohive recommends selecting either of the thick provisioning options for better performance. Thin provisioning is useful for space-demanding VMs. After you make your selection, click **Next**.

1 Source 1a Select source	Select storage Select location to store the	e files for the deployed ten	nplate		
1b Review details	Select virtual disk format:	Thick Provision Lazy Zer	oed -)	
2 Destination	VM Storage Policy:	None	*	0	
2b Select a resource	The following datastores virtual machine configurat	are accessible from the d lion files and all of the virtu	estination resource Jal disks.	that you selected. Sele	ct the destinati
2c Select storage	Name	Capacity	Provisioned	Free	Type
2c Select storage 2d Setup networks	Name Disk1-RAID5	Capacity 2.86 TB	Provisioned 950.98 GB	Free 2.36 TB	Type VMFS
2c Select storage 2d Setup networks 2e Customize template	Name Disk1-RAID5	Capacity 2.86 TB	Provisioned 950.98 GB	Free 2.36 TB	Type VMFS
2c Select storage 2d Setup networks 2e Customize template 3 Ready to complete	Name Disk1-RAID5	Capadiy 2.86 TB	Provisioned 950.98 GB	Free 2.36 TB	Type VMFS

7. Setup networks. Choose the network that you established for your HiveManager NG Virtual Appliance, and then click Next.

Customize template. You must enter the IP address, netmask, gateway, FQDN, and the external DNS server of the virtual appliance.

1 Source 1 a Select source 1 b Review details	Customize template Customize the deployment properties of this software solution			
	All properties have valid values			
2 Destination	→ Network Settings 5 setti	ngs		
2a Select name and folder 2b Select a resource	IP Address	շիդ		
2c Select storage	IP Netmask	<u> </u>		
2d Setup networks	IP Gateway			
3 Ready to complete	FQDN			
	DNS Servers			

- ("i") Your Web browser will be assigned to the FQDN host name even if you use the static IP address. Consequently, make sure that the FQDN that you enter the actual host name that you use for external access, and then ping the host name to confirm that it is valid and reachable.
- 8. Ready to complete. Confirm that your deployment settings are correct, select Power on after deployment to start the HiveManager NG Virtual Appliance after you have deployed the VM, and then click Finish.

Monitor the progress of your OVF deployment from the VMware vSphere task window located in the right panel.

9. To launch the HiveManager NG Virtual Appliance, enter the IP address (that you configured in Step 7) from your Web browser.

After the VM start-up process begins, a start-up message appears—and might persist for up to 15 minutes, after which the login prompt appears.



Configuring the HiveManager NG Virtual Appliance

- 1. Log in to HiveManager NG through your Web browser using the following default credentials:
 - HiveManager NG Login: admin

Password: aerohive

Aerohive.	
	Welcome! Please log in.
	D _e r admin
	Login

Accessing the HiveManager NG Virtual Appliance GUI

After the HiveManager NG Virtual Appliance processes have started, you can proceed to the HiveManager NG Virtual Appliance 4-step workflow that includes the following:

- 1. Configuring Organization and User Information
- 2. Configuring Password Setup
- 3. Configuring Initial System Settings
- 4. Choose a Configuration Activity

For detailed information about the above workflow, see Configuring the HiveManager NG Virtual Appliance online Help.

If you purchase an entitlement key, but do not receive one, you can still use the product without an entitlement key for a 30-day grace period from the time of your initial login. During that time, send your sales order number and customer ID to Aerohive Customer Support Portal with a request for a HiveManager NG Virtual Appliance entitlement key.

When you receive an email response with the key, copy and paste it into the Entitlement Key field on the Home > Administration > License Management page in the Entitlement Key field, and then click **Enter**.

Upgrading HiveManager NG Software

It might be necessary to upgrade the HiveManager NG software to the latest release.

To download HiveManager NG software from the Aerohive Support site and then load it from your local management system, do the following:

1. First, Aerohive recommends that you take a snapshot of your current virtual machine before performing an upgrade. If you encounter any issues, you can revert back to the version that you saved.

("i") To create a virtual machine snapshot, see the following:

- Understanding Virtual Machine Snapshots in VMware ESXi and ESX.
- Taking Snapshots of a Virtual Machine
- Taking a Snapshot in the vSphere Web Client
- 2. Log in to and download software images from the Aerohive Customer Support Portal.
- 3. Click Patch and Upgrade.
- 4. Browse to the desired file on your system.
- 5. Then click **Upload**.

("i") Your upgrade might take up to 30 minutes depending on your virtual appliance environment. A system upgrade message appears during the upgrade process and is refreshed every 30 seconds.

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	HiveManager NG 👝	

6. After the download completes, a system start-up message appears and then your VA reboots automatically. You will have to log in again.

Understanding How to Upgrade Software

You can upgrade your HiveManager NG Virtual Appliance two ways:

- 1. "How to Upgrade with Auto Check"
- 2. "How to Upgrade Manually"

How to Upgrade with Auto Check

("i") This upgrade method is available on software version 11.9.3.3 and later.

When you allow the HiveManager NG Virtual Appliance to upgrade using the auto check method, the software checks for upgrades every night. When an upgrade is available, it is downloaded onto your virtual machine and a notice appears on the banner indicating a new release is available. To upgrade with the auto check method:

- 1. Make sure that the **Nightly check for Upgrade** field (located at the top of the page) is set to ON. This is the default setting.
- 2. Take a VMware vCenter snapshot of your HiveManager NG Virtual Appliance. See the "Upgrading HiveManager NG Software" section on how to perform a snapshot.
- 3. Click **Upgrade**. The upgrade takes approximately 30 minutes to complete. The notification is refreshed every 30 seconds.
- 4. The virtual machine reboots automatically when the upgrade is complete. You will need to log in to HiveManager NG Virtual Appliance again.

How to Upgrade Manually

When you upgrade your HiveManager NG Virtual Appliance manually, you need to check the Aerohive Customer Support Portal to see when software updates are available. Before you upgrade HiveManager NG Virtual Appliance manually, take note of the current Build version from the About pull-down menu on the banner. To upgrade with the manual method:

- 1. Take a VMware vCenter snapshot of your HiveManager NG Virtual Appliance. See the "Upgrading HiveManager NG Software" section on how to perform a snapshot.
- 2. Download a new software image from the Aerohive Customer Support Portal.
- Click Upload Patch and Upgrade to upload the image onto your HiveManager NG Virtual Appliance. The upgrade takes approximately 30 minutes to complete. The notification is refreshed every 30 seconds.
- 4. The virtual machine reboots automatically when the upgrade is complete. You will need to log in to HiveManager NG Virtual Appliance again.

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