

### GigaVUE-TA10



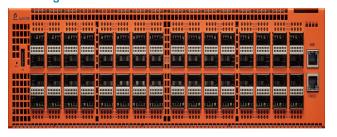
GigaVUE-TA40



GigaVUE-TA100



GigaVUE-TA200



## GigaVUE-HC1



## GigaVUE-HC2



## GigaVUE-HC3



# GigaVUE-OS Upgrade Guide

GigaVUE-0S 5.6.00

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# Contents

Chapter 1 GigaVUE-OS Upgrade Overview	. 5
Before You Begin – Required Items	
Upgrade Summary/Path – Standalone Nodes	
Upgrade Summary – Clustered Nodes	
Licensing for Clustered Nodes in GigaVUE-OS	
Upgrade Sequence	
Bootloader Code by GigaVUE-OS Release	
Gateway Ports Converted to Tool Ports	
GigaVUE TA Series Licenses	
Port Licenses	
Advanced Features Licenses	
Chapter 2 Upgrading GigaVUE Nodes	15
Preparing for the Upgrade	. 15
Upgrading GigaVUE Nodes	. 16
Before you Begin	
Change Default admin Password	
Check Number of Images	
Check U-Boot Version	. 17
Check Coreboot Version	. 17
Install the Software Image	. 17
Install U-Boot (If a Newer Version is Available)	. 18
Install Coreboot (If a Newer Version is Available)	. 19
Verify Version Numbers	
Appendix A Additional Sources of Information	21
Documentation	
Documentation Feedback	
Contacting Technical Support	
Premium Support	
Contacting Sales	
The Gigamon Community	. 22

Contents 3

# GigaVUE-OS Upgrade Overview

This chapter describes how to upgrade GigaVUE H Series and GigaVUE TA Series nodes to the GigaVUE-OS 5.6.xx release. Refer to the following sections for details:

- Before You Begin Required Items on page 5
- Upgrade Summary/Path Standalone Nodes on page 7
- Upgrade Summary Clustered Nodes on page 8
- Bootloader Code by GigaVUE-OS Release on page 10
- Gateway Ports Converted to Tool Ports on page 13
- GigaVUE TA Series Licenses on page 14

## Before You Begin - Required Items

Use this upgrade guide to upgrade to software version 5.6.xx. This guide is for nodes running the previous General Availability (GA) releases or the previous Long Term Support (LTS) release, which is 5.4.xx.

#### **Obtaining Software Images**

To obtain software images, register on the customer portal and download the software. You will need to provide the serial number for each node you want to update. Use the **show chassis** command to retrieve a node's serial number.

To reach the customer portal, use the following link:

https://gigamoncp.force.com/gigamoncp/

For assistance, contact Technical Support at the following email address:

support@gigamon.com

### Separate Software Images for Different Nodes

The software image upgrade procedure is slightly different depending on the node you are upgrading. Relevant files and documentation are available on the customer portal. Note the filenames in Table 1-2.

**Note:** For installing GigaVUE-OS on a white box, follow the instructions highlighted in the *GigaVUE-OS Installation Guide on a White Box*.

Table 1-1: Software Image Filenames Unique to the Node

Control Card or Node	Required Items	Description
GigaVUE-HCCv2	hdd56xx.img	Binary image file containing the updated software for the GigaVUE-HCCv2 control card for GigaVUE-HD4 and GigaVUE-HD8. The <b>xx</b> indicates the exact build number.
GigaVUE-HC1	hc1_56xx.img	Binary image file containing the updated software for the GigaVUE-HC1. The <b>xx</b> indicates the exact build number.
GigaVUE-HC2	hc2_56xx.img	Binary image file containing the updated software for the GigaVUE-HC2. The <b>xx</b> indicates the exact build number.
GigaVUE-HC3	hc3_56xx.img	Binary image file containing the updated software for the GigaVUE-HC3. The <b>xx</b> indicates the exact build number.
GigaVUE-TA1	ta1_56xx.img	Binary image file containing the updated software for the GigaVUE-TA1. The <b>xx</b> indicates the exact build number.
GigaVUE-TA10	ta10_56xx.img	Binary image file containing the updated software for the GigaVUE-TA10. The <b>xx</b> indicates the exact build number.
GigaVUE-TA40	ta40_56xx.img	Binary image file containing the updated software for the GigaVUE-TA40. The <b>xx</b> indicates the exact build number.
GigaVUE-TA100	ta100_56xx.img	Binary image file containing the updated software for the GigaVUE-TA100. The <b>xx</b> indicates the exact build number.
GigaVUE-TA100-CX P	tacx100_56xx.i mg	Binary image file containing the updated software for the GigaVUE-TA100-CXP. The <b>xx</b> indicates the exact build number.
GigaVUE-TA200	ta200_56xx.img	Binary image file containing the updated software for the GigaVUE-TA200. The <b>xx</b> indicates the exact build number.

### Required Items for Upgrades

The following table summarizes the items you will need to perform the upgrade to GigaVUE-OS 5.6.xx:

Table 1-2: Required Items for System Upgrade

Node Type/ Version	Protocols	Description
All	FTP, TFTP, SFTP, SCP,	You will need to fetch the GigaVUE nodes' software packages from a file server using one of the supported protocols.
	HTTP, HTTPS, or USB	<b>NOTE:</b> Only the GigaVUE-HC1, GigaVUE-HC3, GigaVUE-TA100, GigaVUE-TA100CXP, and GigaVUE-TA200 support the USB parameter.
		The GigaVUE nodes will need the file server's IP address so that it can connect to the server and download the image.
		<b>NOTE:</b> There are freeware file servers available on the Internet for a variety of operating systems. A Web search will provide links to many implementations.
		You can also upload a new software build directly from your PC using H-VUE.

# Upgrade Summary/Path — Standalone Nodes

Use the procedures in this chapter to upgrade GigaVUE H Series and GigaVUE TA Series nodes to GigaVUE-OS 5.6.xx.

**Note:** If your node is running software version 5.2.xx, first upgrade to 5.3.xx, then upgrade to 5.4.xx. Refer to the respective GigaVUE H Series Upgrade Guide.

**Note:** If your node is running a pre-5.1 software version, first upgrade to 5.1.xx, then upgrade to 5.4.xx. Refer to the respective GigaVUE H Series Upgrade Guide.

**Note:** All upgrades start and end by saving the node's configuration with the **write memory** command.

Note: Before any upgrade, save your current configuration.

Refer to *Upgrade Summary – Clustered Nodes* on page 8 for considerations when upgrading nodes in a cluster.

Table 1-3: GigaVUE-OS Upgrade Summary from Different Software Versions

Starting Version	GigaVUE TA Series Upgrade Summary	GigaVUE-HD4/GigaVUE-HD8/ GigaVUE-HC1/GigaVUE-HC2/GigaVUE-HC3 Upgrade Summary
From 5.4.xx	GigaVUE TA Series nodes running 5.4.xx or 5.5.xx can be upgraded directly to a 5.6.xx release using the following procedure:  a. Delete all available image files using the image	GigaVUE-HD4, GigaVUE-HD8, GigaVUE-HC1, GigaVUE-HC2, and GigaVUE-HC3 nodes running 5.4.xx or 5.5.xx can be upgraded directly to a 5.6.xx release using the following procedure:
or 5.5.xx to 5.6.xx	delete <filename.img> command. Use the show images command to display the existing image filenames.</filename.img>	<ul> <li>a. Delete all available image files using the image delete <filename.img> command.</filename.img></li> <li>Use the show images command to display the existing image filenames.</li> </ul>
	<ul> <li>Fetch and install the 5.6.xx software image (based on the node information) and bootloader, set next boot, and reload.</li> </ul>	b. Fetch and install 5.6.xx software image and bootloader, set next boot, and reload.

NOTE: Upgrades of the GigaVUE-HC1, GigaVUE-HC2, and GigaVUE-HC3 can skip all steps related to Control Card Version 2.

# Upgrade Summary – Clustered Nodes

This section summarizes the upgrade procedure for nodes operating in a cluster.

The upgrade procedure for an individual node in a cluster is nearly identical to that for a standalone node. The only difference is that instead of reloading individual nodes as you upgrade them, you perform a single **cluster reload** after the master node has completed the image upgrade.

Note that a GigaVUE TA Series can never be a master in a cluster configuration. However since the GigaVUE-OS versions are shared amongst the GigaVUE nodes, it is important to upgrade all nodes per instructions prior to using the **cluster reload** command.

To add a GigaVUE TA Series node to a cluster, apply the Advanced Features License to each GigaVUE TA Series node either using the CLI or H-VUE prior to adding the node to a cluster.

**Note:** Instructions to obtain and apply the licenses are available in the *GigaVUE TA Series* Hardware Installation Guide. White boxes with the same version of GigaVUE-OS software can also be added to a cluster.

### Licensing for Clustered Nodes in GigaVUE-OS

The license required for the clustering feature is Advanced Features License (AD\_Features).

- When upgrading to GigaVUE-OS v5.6.xx, if the node already has a Clustering License, it will automatically be updated to Advanced Features License (AD\_Features) upon upgrade.
- If a license has not been generated yet, or if an earlier version of the license has been generated but not yet installed, then you need to generate (or regenerate) a license from the customer portal after upgrading to 5.6.xx. Install and activate the new license.

**Note:** The license requirement for clustering changed in GigaVUE-OS 5.4.00. If you are upgrading to 5.4.00 from a previous release, the name changed from "Clustering License" to "Advanced Features License". However, the instructions remain the same.

## Upgrade Sequence

Gigamon recommends the following upgrade sequence for clusters:

- 1. Use the **write memory** command on each node in the cluster to preserve settings that are stored locally rather than globally (for example, AAA and hostname settings).
- 2. Use the **image delete <filename.img>** command to delete all the available image files.

**Note:** Use the **show images** command to verify if there are any images existing on the node.

3. On the individual nodes including the master node, fetch and install 5.6.xx software image and bootloader, and set the next boot.

**IMPORTANT:** Do not reload the nodes as you upgrade them.

4. Use the **cluster reload** command from the master to reestablish the cluster settings.

**Note:** The time it takes for the cluster to complete the cluster reload and re-establish packet distribution will vary depending on the number of nodes in the cluster and the complexity of the packet distribution to restore. An average cluster reload will interrupt traffic for five minutes. However, an eight-node cluster with complex packet distribution in place can take as long as 20 minutes to reload completely.

**Note:** After reloading the cluster, it is possible that a new physical node will claim the master role. Use the **show cluster global brief** command to determine the roles used by each node in the cluster. If you want to transfer the master role to the current standby node, use the **cluster master yield** command.

5. After completing the upgrade, run the **show version** command on each node in the cluster to make sure they are all running a 5.6.xx build. If any node does not show the correct version number, upgrade it individually.

Figure 1-1 summarizes the cluster upgrade sequence.

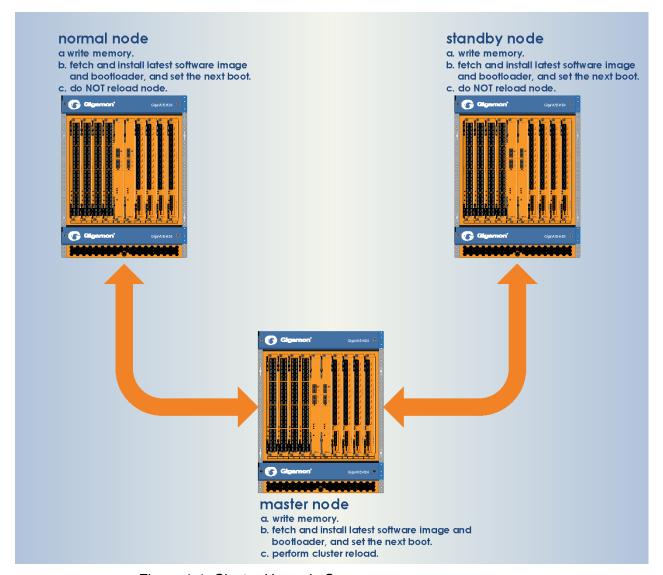


Figure 1-1: Cluster Upgrade Summary

### Adding a New Node to an Existing Cluster

Before adding a new node to a cluster, make sure you upgrade it to the same major and minor version the other nodes in the cluster are running. All nodes in the cluster must run the same major and minor version for successful operations.

**Note:** For a GigaVUE TA Series nodes, ensure that the applicable licenses are activated.

# **Bootloader Code by GigaVUE-OS Release**

The following table summarizes the version of bootloader code associated with each GigaVUE node type and software release. Use the **show version** command to check the currently installed bootloader and software image versions.

SW Version	Node Type	Software Image Filename	Bootloader Filename	Bootloader Version
	GV-HC1	hc1_5600.img	N/A*	N/A*
	GV-HC2	hc2_5600.img	hc2_5500.bin	2011.06.9
	GV-HC3	hc3_5600.img	N/A*	N/A*
	HCCv2	hdd5600.img	hdd5500.bin	2011.06.20
5.6.00	GV-TA10	ta10_5600.img	ta10_5500.bin	2014.01.01
	GV-TA40	ta40_5600.img	ta40_5500.bin	2014.01.01
	GV-TA100	ta100_5600.img	N/A*	N/A*
	GV-TA100-CXP	tacx100_5600.img	N/A*	N/A*
	GV-TA200	ta200_5600.img	N/A**	N/A**
	GV-HC1	hc1_5500.img	N/A*	N/A*
	GV-HC2	hc2_5500.img	hc2_5500.bin	2011.06.9
	GV-HC3	hc3_5500.img	N/A*	N/A*
	HCCv2	hdd5500.img	hdd5500.bin	2011.06.20
5.5.00	GV-TA1	ta1_5500.img	ta1_5500.bin	2010.06.16
5.5.00	GV-TA10	ta10_5500.img	ta10_5500.bin	2014.01.01
	GV-TA40	ta40_5500.img	ta40_5500.bin	2014.01.01
	GV-TA100	ta100_5500.img	N/A*	N/A*
	GV-TA100-CXP	tacx100_5500.img	N/A*	N/A*
	GV-TA200	ta200_5500.img	N/A**	N/A**

SW Version	Node Type	Software Image Filename	Bootloader Filename	Bootloader Version
	GV-HB1	hb1_5400.img	hb1_5400.bin	2010.06.5
	GV-HC1	hc1_5400.img	N/A*	N/A*
	GV-HC2	hc2_5400.img	hc2_5400.bin	2011.06.9
	GV-HC3	hc3_5400.img	N/A*	N/A*
	HCCv2	hdd5400.img	hdd5400.bin	2011.06.20
5.4.00	GV-TA1	ta1_5400.img	ta1_5400.bin	2010.06.16
	GV-TA10	ta10_5400.img	ta10_5400.bin	2014.01.01
	GV-TA40	ta40_5400.img	ta40_5400.bin	2014.01.01
	GV-TA100	ta100_5400.img	N/A*	N/A*
	GV-TA100-CXP	tacx100_5400.img	N/A*	N/A*
	GV-TA200	ta200_5400.img	N/A**	N/A**
	GV-HB1	hb1_5300.img	hb1_5300.bin	2010.06.5
	GV-HC1	hc1_5300.img	N/A*	N/A*
	GV-HC2	hc2_5300.img	hc2_5300.bin	2011.06.9
-	GV-HC3	hc3_5300.img	N/A*	N/A*
	HCCv2	hdd5300.img	hdd5300.bin	2011.06.20
5.3.00	GV-TA1	ta1_5300.img	ta1_5300.bin	2010.06.16
	GV-TA10	ta10_5300.img	ta10_5300.bin	2014.01.01
	GV-TA40	ta40_5300.img	ta40_5300.bin	2014.01.01
	GV-TA100	ta100_5300.img	N/A*	N/A*
	GV-TA100-CXP	tacx100_5300.img	N/A*	N/A*
	GV-TA200	ta200_5300.img	N/A**	N/A**
	GV-HB1	hb1_5200.img	hb1_5200.bin	2010.06.5
	GV-HC1	hc1_5200.img	N/A*	N/A*
	GV-HC2	hc2_5200.img	hc2_5200.bin	2011.06.9
	GV-HC3	hc3_5200.img	N/A*	N/A*
5.2.00	HCCv2	hdd5200.img	hdd5200.bin	2011.06.20
J.Z.UU	GV-TA1	ta1_5200.img	ta1_5200.bin	2010.06.16
	GV-TA10	ta10_5200.img	ta10_5200.bin	2014.01.01
	GV-TA40	ta40_5200.img	ta40_5200.bin	2014.01.01
	GV-TA100	ta100_5200.img	N/A*	N/A*
	GV-TA100-CXP	tacx100_5200.img	N/A*	N/A*

SW Version	Node Type	Software Image Filename	Bootloader Filename	Bootloader Version
	GV-HB1	hb1_5100.img	hb1_5100.bin	2010.06.5
	GV-HC1	hc1_5100.img	N/A*	N/A*
	GV-HC2	hc2_5100.img	hc2_5100.bin	2011.06.8
	GV-HC3	hc3_5100.img	N/A*	N/A*
5.1.00	HCCv2	hdd5100.img	hdd5100.bin	2011.06.20
5.1.00	GV-TA1	ta1_5100.img	ta1_5100.bin	2010.06.16
	GV-TA10	ta10_5100.img	ta10_5100.bin	2014.01.01
	GV-TA40	ta40_5100.img	ta40_5100.bin	2014.01.01
	GV-TA100	ta100_5100.img	N/A*	N/A*
	GV-TA100-CXP	tacx100_5100.img N/A* N/A*		N/A*

<sup>\*</sup> GigaVUE-HC1, GigaVUE-HC3, GigaVUE-TA100, and GigaVUE-TA100-CXP do not have U-boot. They are preloaded with coreboot. The following table summarizes the coreboot versions for GigaVUE-HC1, GigaVUE-HC3, GigaVUE-TA100, and GigaVUE-TA100-CXP:

SW Version	Node Type	Software Image Filename	Coreboot Version
	GV-HC3	hc3_5600.img	1.0.4
5.6.00	GV-HC1	hc1_5600.img	1.0.1
3.0.00	GV-TA100	ta100_5600.img	0.2.5
	GV-TA100-CXP	tacx100_5600.img	1.0.0
	GV-HC3	hc3_5500.img	1.0.4
5.5.00	GV-HC1	hc1_5500.img	1.0.1
5.5.00	GV-TA100	ta100_5500.img	0.2.5
	GV-TA100-CXP	tacx100_5500.img	1.0.0
	GV-HC3	hc3_5400.img	1.0.3
5.4.00	GV-HC1	hc1_5400.img	1.0.1
5.4.00	GV-TA100	ta100_5400.img	0.2.5
	GV-TA100-CXP	tacx100_5400.img	1.0.0
5.3.00	GV-HC3	hc3_5300.img	1.0.3
	GV-HC1	hc1_5300.img	1.0.1
3.3.00	GV-TA100	ta100_5300.img	0.2.5
	GV-TA100-CXP	tacx100_5300.img	1.0.0

SW Version	Node Type	Software Image Filename	Coreboot Version
	GV-HC3	hc3_5200.img	1.0.3
5.2.00	GV-HC1	hc1_5200.img	1.0.1
5.2.00	GV-TA100	ta100_5200.img	0.2.5
	GV-TA100-CXP	tacx100_5200.img	1.0.0
	GV-HC3	hc3_5100.img	1.0.3
5.1.00	GV-HC1	hc1_5100.img	1.0.1
3.1.00	GV-TA100	ta100_5100.img	0.2.5
	GV-TA100-CXP	tacx100_5100.img	1.0.0

<sup>\*\*</sup> GigaVUE-TA200 does not have U-boot. They are preloaded with AMI BIOS. The following table summarizes the versions for GigaVUE-TA200:

Table 1-4: AMI BIOS Version for GigaVUE-TA200

SW Version	Node Type	Software Image Filename	AMI BIOS Version
5.6.00	GV-TA200	ta200_5600.img	1.0.9
5.5.00	GV-TA200	ta200_5500.img	1.0.9
5.4.00	GV-TA200	ta200_5400.img	1.0.9
5.3.00	GV-TA200	ta200_5300.img	1.0.9

# **Gateway Ports Converted to Tool Ports**

During an upgrade to 4.7.xx or higher release (from a prior software version), gateway ports and gateway mirrors are automatically converted to tool ports and tool mirrors.

Refer to the following notes and considerations for GigaVUE TA Series nodes starting in software version 4.7.00 (including GigaVUE-TA10, GigaVUE-TA40, GigaVUE-TA100, and Certified Traffic Aggregation White Box):

- Gateway ports on GigaVUE TA Series nodes are removed and converted to tool ports. In addition, gateway mirrors are removed and converted to tool mirrors.
- Tool ports on GigaVUE TA Series nodes can continue to be used to aggregate traffic.
- Tool ports on GigaVUE TA Series nodes can also be used to directly connect to tools, such as firewalls, Intrusion Prevention Systems, or Application Performance Monitors.
- GigaVUE TA Series nodes support network, tool, stack, and hybrid port types.
- Hybrid ports are fully supported in both standalone and cluster mode on GigaVUE TA Series nodes. When a GigaVUE TA Series node is in a cluster, hybrid ports can be configured.
- GigaVUE TA Series nodes can continue to be clustered with GigaVUE H Series nodes. Tool ports are supported on GigaVUE TA Series nodes in a cluster.

 When GigaVUE TA Series nodes are in a cluster, bidirectional traffic flow is enabled on the stack links of GigaVUE TA Series nodes.

# GigaVUE TA Series Licenses

There are two types of licenses: Port Licenses and Advanced Features Licenses.

### Port Licenses

The GigaVUE-TA10 can have either twenty-four (24) or forty-eight (48) 1Gb/10Gb ports enabled. The 24-port GigaVUE-TA10 is called the GigaVUE-TA10A. A port license is available to expand the GigaVUE-TA10A to include all 48 1Gb/10Gb ports as well as the four (4) 40Gb ports. For details, refer to the *GigaVUE TA Series Hardware Installation Guide*.

On the GigaVUE-TA100, only the first 16 out of 32 ports are enabled. Two port licenses are available to enable an additional 8 or 16 ports to expand to 24 or 32 ports. For details, refer to the *GigaVUE TA Series Hardware Installation Guide*.

On the GigaVUE-TA200, only the first 32 out of 64 ports are enabled. A port license is available to enable an additional 32 ports.

**Note:** GigaVUE-TA10, GigaVUE-TA40, and GigaVUE-TA100-CXP have all ports enabled.

### Advanced Features Licenses

GigaVUE-TA10 and GigaVUE-TA10A, GigaVUE-TA40, GigaVUE-TA100, and GigaVUE-TA200 nodes require an Advanced Features License to be enabled when clustering with other Gigamon nodes. For details, refer to the *GigaVUE TA Series Hardware Installation Guide*.

**Note:** After an upgrade, licenses may need to be reapplied.

# **Upgrading GigaVUE Nodes**

Use the procedures in this chapter to upgrade GigaVUE H Series and GigaVUE TA Series nodes to GigaVUE-OS 5.6.xx.

To begin, prepare the GigaVUE nodes for upgrade by following the procedure in *Preparing for the Upgrade* on page 15.

**Note:** If your nodes and GigaVUE-FM instance are running software version 5.5.xx or earlier, ensure that you add all the nodes to GigaVUE-FM, upgrade the GigaVUE-FM to 5.6.xx, and then upgrade the nodes to 5.6.xx. This is to ensure that the flexible inline maps added to the nodes before the upgrade are visible in the canvas in GigaVUE-FM.

# Preparing for the Upgrade

- 1. Copy the 5.6.xx installation file to your file server.
- 2. Use the **write memory** command on each node in the cluster to preserve settings that are stored locally rather than globally (for example, AAA and hostname settings).

Back up the running configuration using either of the following methods:

Back Up by	(config) # show running-config
Copying and Pasting	This command displays the commands necessary to recreate the node's running configuration on the terminal display. You can copy and paste the output from this command into a text file and save it on your client system. The file can later be pasted back into the CLI to restore the configuration.
Back up to FTP/ TFTP/SCP/SFTP	(config) # configuration text generate active running upload <upload url=""> <filename></filename></upload>
Server	This command uses FTP, TFTP, SCP, or SFTP to upload the running configuration to a text file on remote storage. The format for the <upload url=""> is as follows:</upload>
	[protocol]://username[:password]@hostname/path/filename
	For example, the following command uploads a text configuration file based on the active running configuration and uploads it to an FTP server at 192.168.1.49 with the name <b>config.txt</b> :
	(config) # configuration text generate active running upload ftp://myuser:mypass@192.168.1.49/ftp/config.txt

3. Next, follow the procedure: *Upgrading GigaVUE Nodes* on page 16 to upgrade GigaVUE H Series nodes.

## **Upgrading GigaVUE Nodes**

Use the following procedure to upgrade GigaVUE H Series and GigaVUE TA Series nodes.

## Before you Begin

Before you start installing the software image, perform the following checks:

- Change Default admin Password on page 16
- Check Number of Images on page 16
- Check U-Boot Version on page 17
- Check Coreboot Version on page 17

### Change Default admin Password

Check the password on the **admin** account. If it is the default password (admin123A!), change it.

Starting in software version 4.7.00, the default password on the **admin** account is no longer allowed. If you are using the default password on this account, the best practice is to change it to a non-default password before you upgrade to 4.7.xx or higher release.

When the upgrade to 4.7.xx or higher release is complete and the node has rebooted, log in with your non-default password.

If you have not changed the default password before the upgrade, when the upgrade is complete and the node has rebooted, you will be prompted to enter a non-default password. The **jump-start** script will automatically launch and prompt the system administrator to change the password on the **admin** account.

### **Check Number of Images**

Check the number of images currently available for installation on the node with the following command:

(config) # show images

The maximum number of images allowed on GigaVUE H Series or GigaVUE TA Series nodes at any one time is three.

If there is already the maximum number of images listed in the **Images available to be installed** section of the **show images** output, use the **image delete** command to remove at least one of the existing images before you fetch a new one.

The recommendation is to delete any unused images.

**Note:** Once an image is installed, you can delete the uploaded image.

### Check U-Boot Version

If you are upgrading from an older software version, check the U-Boot version using the following command:

(config) # show version

For example on a GigaVUE-HC2 node, the following output is displayed:

```
U-Boot version: 2011.06.8
```

Check that the U-Boot version matches the version listed in *Bootloader Code by GigaVUE-OS Release* on page 10 in the Bootloader Version column.

If you do not have the same version, you will have to do a U-Boot installation, after the image installation. Refer to *Install U-Boot (If a Newer Version is Available)* on page 18.

### **Check Coreboot Version**

If you are upgrading from an older software version, check the coreboot version using the following command:

(config) # show version

For example on a GigaVUE-TA100 node, the following output is displayed:

```
1st flash version: coreboot-ta100-0.2.4 Wed Jan 20 15:19:09 CST 2016 ** 2nd flash version: coreboot-ta100-0.2.5 Fri Sep 25 19:54:15 CST 2015
```

Check that the coreboot version matches the version listed in *Bootloader Code by GigaVUE-OS Release* on page 10 in the Coreboot Version column.

If you do not have the same version, you will have to do a coreboot installation, after the image installation. Refer to *Install Coreboot (If a Newer Version is Available)* on page 19.

## Install the Software Image

- 1. Log in on the GigaVUE node to be updated as an admin user and switch to Configure mode.
- 2. Use the **image fetch** command to retrieve the software image from your file server. For example, the following command uses SCP to retrieve the **hdd56xx** image from the **builds** folder on 192.168.1.25:

(config) # image fetch scp://user:password@192.168.1.25/builds/hdd56xx.img

The CLI shows you the progress of the image fetch with a series of hash marks, returning you to the system prompt when complete.

3. Use the **image install** command to install the downloaded image file. For example, to install the image downloaded in the previous step:

```
(config) # image install hdd56xx.img
```

The GigaVUE-OS CLI presents a series of status messages as it verifies and uncompresses the image, creates file systems, and extracts the image, returning you to the system prompt when complete.

**4.** The next step is to tell the GigaVUE node which node image to load at the next system boot. The GigaVUE node has two partitions, each of which has a separate

image installed. When you install a new image, it automatically installs on the "next" partition – the one you are not using now. The **image boot next** command tells the GigaVUE node to boot from the next partition after the one currently booted – the one where you just installed the new image:

(config) # image boot next

**Note:** In order for sync to work properly following a reload, ensure that the installation file for the active configuration is present after the **image boot next** command in the previous step.

5. Save the current configuration with the following command: (config) # write mem

- **6.** Is this node part of a cluster?
  - No Reboot with the following command.

(config) # reload

When the node comes back up, save the configuration with write memory.

- Yes Is this the last node in the cluster?
  - •No Do not the reload at this time. Proceed to upgrade the next node in the cluster.
  - •Yes If this the last node to be upgraded in the cluster (that is, it is the master), reload the cluster using the following CLI command.

(config) # cluster reload

**7.** Save the current configuration with the following command:

(config) # write mem

### Install U-Boot (If a Newer Version is Available)

After checking the U-Boot version, if a newer version is available, you will have to do a U-Boot installation.

Install U-Boot after the image installation if it does not match the Bootloader Version column in *Bootloader Code by GigaVUE-OS Release* on page 10. Use this procedure in particular when you are upgrading from an older software version.

After the image installation of 5.6.xx, use the following command (type **uboot** in full): (config) # show uboot

If there is a newer U-Boot version available, the output of the **show uboot** command displays it. For example in the following output, the installed U-Boot is 2011.06.8, but 2011.06.9 is available for installation.

```
* Installed U-Boot binary: 2011.06.8 (Dec 06 2016 - 04:35:29)
* U-Boot binary from active/booted image: 2011.06.9 (Feb 09 2017-02:16:26)
```

If there is a newer U-Boot version available, use the following command to install it: (config) # uboot install

The binary bootloader code included with the installed image is installed.

**Note:** The newer U-Boot version only goes into effect after a reload.

## Install Coreboot (If a Newer Version is Available)

After checking the coreboot version, if a newer version is available, you will have to do a coreboot installation.

Install coreboot after the image installation if it does not match the Coreboot Version column in *Bootloader Code by GigaVUE-OS Release* on page 10. Use this procedure in particular when you are upgrading from an older software version.

After the image installation of 5.6.xx, use the following command: (config) # show version

If there is a newer coreboot version available, the output of the **show version** command displays it.

If there is a newer coreboot version available, use the following command to install it: (config) # coreboot install

The binary bootloader code included with the installed image is installed.

**Note:** The newer coreboot version only goes into effect after a reload.

## **Verify Version Numbers**

After completing the upgrade to GigaVUE-OS 5.6.xx, run the **show version** command on all upgraded nodes to make sure they are all running a 5.6.xx build. If any node does not show the correct version number, upgrade it individually.

# **Additional Sources of Information**

This appendix provides additional sources of information. Refer to the following sections for details:

- Documentation on page 21
- Documentation Feedback on page 22
- Contacting Technical Support on page 22
- Contacting Sales on page 22
- The Gigamon Community on page 22

## Documentation

Gigamon provides additional documentation for the GigaVUE H Series on the Gigamon Customer Portal:

Document	Summary
GigaVUE-HC3 Hardware Installation Guide	Describes how to unpack, assemble, rack-mount, connect, and perform the initial configuration of GigaVUE-HC3 nodes. Also provides reference information for the GigaVUE-HC3 node, including specifications.
GigaVUE-HC2 Hardware Installation Guide	Describes how to unpack, assemble, rack-mount, connect, and perform the initial configuration of GigaVUE-HC2 nodes. Also provides reference information for the GigaVUE-HC2 node, including specifications.
GigaVUE-HC1 Hardware Installation Guide	Describes how to unpack, assemble, rack-mount, connect, and perform the initial configuration of GigaVUE-HC1 nodes. Also provides reference information for the GigaVUE-HC1 node, including specifications.
GigaVUE TA Series Hardware Installation Guide	Describes how to unpack, assemble, rack-mount, connect, and perform the initial configuration of GigaVUE-TA10, GigaVUE-TA40, GigaVUE-TA100, GigaVUE-TA100-CXP, and GigaVUE-TA200 nodes. Also provides reference information for these nodes, including specifications.
GigaVUE-OS CLI User's Guide	Describes how to configure and operate the GigaVUE-OS software from the command-line interface.
GigaVUE-OS H-VUE™ Administration Guide	Describes how to use the Web-based H-VUE interface to administer the GigaVUE H Series software.

Document	Summary
GigaVUE-OS H-VUE Online Help	Describes the Web-based GUI for the H Series.
GigaVUE-OS Release Notes	Describes new features and known issues in the release.

## **Documentation Feedback**

To send feedback and report issues in our documentation, complete the short survey at the following link:

https://www.surveymonkey.com/r/gigamondocumentationfeedback

# **Contacting Technical Support**

Refer to http://www.gigamon.com/support-and-services/contact-support for Technical Support hours and contact information. You can also email Technical Support at support@gigamon.com.

## **Premium Support**

Email Gigamon at inside.sales@gigamon.com for information on purchasing 24x7 Premium Support for your GigaVUE node. Premium Support entitles you to round-the-clock phone support with a dedicated Support Engineer every day of the week.

# **Contacting Sales**

Table i shows how to reach the Sales Department at Gigamon.

Table i: Sales Contact Information

Telephone	+1 408.831.4025
Sales	inside.sales@gigamon.com

# The Gigamon Community

The Gigamon Community is a technical site where Gigamon users, partners, security and network professionals and Gigamon employees come together to share knowledge and expertise, ask questions, build their network and learn about best practices for Gigamon products.

Visit the Gigamon Community site to:

Find knowledge base articles and documentation

- Ask and answer questions and learn best practices from other members.
- Join special-interest groups to have focused collaboration around a technology, use-case, vertical market or beta release
- Take online learning lessons and tutorials to broaden your knowledge of Gigamon products.
- Submit and vote on feature enhancements and share product feedback.
   (Customers only)
- Open support tickets (Customers only)
- Download the latest product updates and documentation (Customers only)

The Gigamon Community is a great way to get answers fast, learn from experts and collaborate directly with other members around your areas of interest.

### Register today at community.gigamon.com

Questions? Contact our Community team at community.gigamon.com