

# GigaVUE-FM Installation and Migration Guide

#### **GigaVUE-FM**

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# Change Notes

When a document is updated, the document version number on the cover page will indicate a new version and will provide a link to this Change Notes table, which will describe the updates.

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# GigaVUE-FM Installation and Migration

This guide describes how to install the GigaVUE<sup>®</sup> Fabric Manager (GigaVUE-FM) on ESX and MS HyperV.

Starting with release 5.8.00, GigaVUE-FM introduces several significant changes, which include improvements in usability and performance. These changes include upgrading and replacing databases and changing the underlying operating system. So, you must migrate your existing configurations and data such as audit logs, events, syslogs, and statistics from your current GigaVUE-FM version (either 5.7 or lower) to GigaVUE-FM 5.8.00. You cannot directly upgrade your GigaVUE-FM instance to release 5.8.00. You must first upgrade to GigaVUE-FM 5.7.01.01, a special release that provides the tools to manage and perform the migration. You can then upgrade to GigaVUE-FM 5.8.00. For instructions, refer to Migrate GigaVUE-FM

Upgrade information is also provided. Refer to the following sections for details:

- Install GigaVUE-FM on VMware ESXi
- Install GigaVUE-FM on MS Hyper-V
- Migrate GigaVUE-FM
- Upgrade GigaVUE-FM

# Install GigaVUE-FM on VMware ESXi

This section describes how to install GigaVUE-FM on VMware hypervisor, ESXi. It consists of the following main sections:

- Before You Install describes the minimum hardware and computing requirements.
- Install New GigaVUE-FM on VMware ESXi describes the steps to install and deploy GigaVUE-FM on VMware ESXi hypervisor.

### **Before You Install**

This section describes the hardware and virtual computing requirements for GigaVUE-FM. Ensure that the time on the VMware ESXi host is set correctly to ensure accuracy of the trending data that is captured.

# Prerequisites for GigaVUE-FM

Before Installing GigaVUE-FM, ensure that VMware vSphere Standard, Enterprise, or Enterprise Plus is installed on hardware that meets minimum requirements. The following VMware vSphere versions are supported. Note the minimum version requirements under Hardware Requirements.

### VMware ESXi and NSX-V Hardware Requirements

The following table describes the hardware requirements on which VMware ESXi runs GigaVUE-FM.

Table 1: Hardware Requirements for VMware Hypervisor

Hardware Requirements	
VMware Hypervisor	vSphere ESXi: v5.5 and above.
СРИ	One or more 64-bit x86 CPUs with virtualization assist (Intel-VT or AMD-V) enabled.
	<b>Note</b> : To run GigaVUE-FM, hardware support for virtualization must be enabled on the VMware ESXi host. Make sure that the BIOS option for virtualization support is not disabled. For more information, see your BIOS documentation

Hardware Requirements		
RAM	At least 16GB	
Disk Space	At least 40GB shared (FC, iSCSI, NFS, or FCoE) or locally attached storage (PATA, SATA, SCSI)	
Network	At least one 1Gb NIC	

The following table lists the virtual computing resources for GigaVUE-FM.

Table 2: Minimum Virtual Computing Requirements for VMware Hypervisor

Minimum Virtual Computing Requirements		
Memory Minimum 16GB memory		
Virtual CPU (vCPU)	2 vCPU	
Virtual Storage for Guest 40GB using PVSCSI (VMware Paravirtual SCSI)		
Virtual Network Interfaces  One vNIC using VMXNET3 (VMware 3rd Generation Paravirtual NIC)		

GigaVUE-FM has been tested on the following browsers:

Browser	Version
Mozilla Firefox <sup>™</sup>	• Version 49.00
Apple <sup>®</sup> Safari <sup>®</sup>	Version 9.1 and Higher
Google <sup>®</sup> Chrome <sup>®</sup>	Version 54 and higher
Microsoft Edge	Version 38

## Notes:

- Only the browsers that support TLS v1.2 can access GigaVUE-FM.
- Internet Explorer 11 (IE11) is deprecated for security reasons and is no longer supported. IE users are strongly encouraged to switch to Microsoft Edge.

# Install New GigaVUE-FM on VMware ESXi

The GigaVUE-FM software package is distributed as an OVA file. The following sections describe how to deploy a fresh installation of GigaVUE-FM on an ESXi host and perform its initial configuration:

- Deploy GigaVUE-FM from an OVA File
- Initial GigaVUE-FM Configuration

## Deploy GigaVUE-FM from an OVA File

Use the vSphere Client to install the GigaVUE-FM OVA file. Starting from software version 5.3, you cannot deploy GigaVUE-FM directly from the ESXi host. You must login to the VCenter on the vSphere client to deploy a GigaVUE-FM instance.

**Note:** The OVA file must be stored in a location that is accessible to the vSphere Client. This location cannot be a datastore accessible to the ESXi host which will be the target of the deployment.

**Note:** Starting in software version 5.4.01, you cannot deploy the GigaVUE-FM OVA file on older versions of VMware ESXi. If you have an older version of ESXi, then you must upgrade your VMware ESXi to at least version 5.5. Otherwise, GigaVUE-FM OVA deployment will fail.

The following steps are shown using the ESXi version 6.x. To deploy a GigaVUE-FM instance:

- 1. Log in to the VMware vCenter web interface.
- 2. Go to Menu > VMs and Templates.
- 3. Right-click the ESXi Host or data center on which you want to deploy GigaVUE-FM 5.8, and then select **Deploy OVF Template** as shown in the following figure:

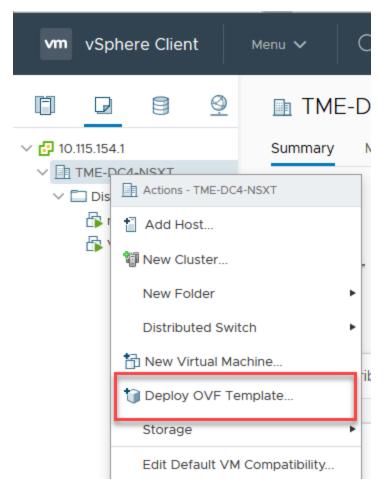


Figure 1: vSphere Client: OVF Template

The Deploy OVF Template wizard opens.

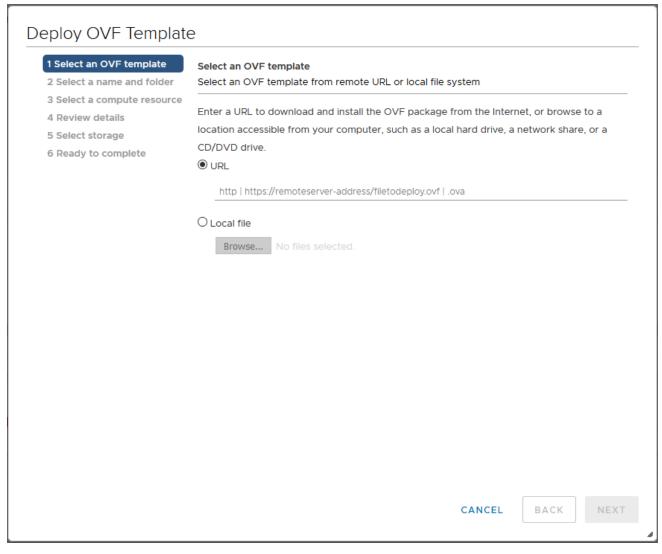


Figure 2: vSphere Client: Find the Location of the OVA File

- 4. In the **Select an OVF template** page of the **Deploy OVF Template** wizard, choose one of the following options:
  - a. URL—Enter the URL from where you want to download and install the OVF package.
  - b. **Local file**—Click **Browse** to navigate to the OVA file available on your local machine, and then select the OVA file.
- 5. Click the **Next**. The **Select a name and folder** page of the **Deploy OVF Template** wizard appears.

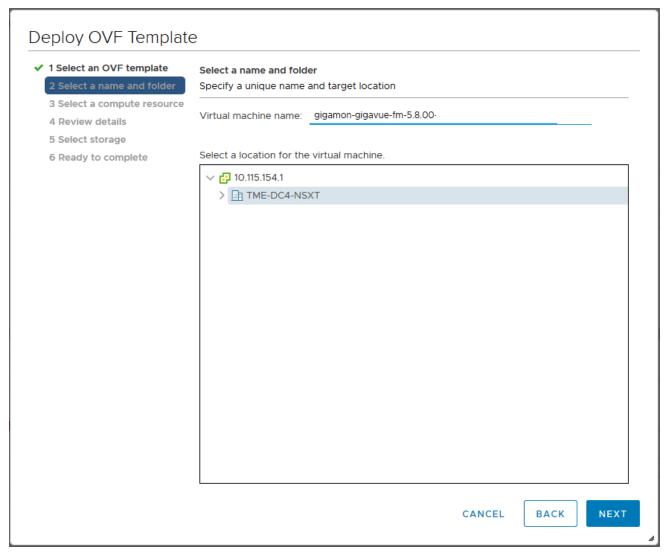


Figure 3: vSphere Client: Enter Name and Location for OVA File on ESXi Server

- 6. Specify a unique name for the GigaVUE-FM instance, and then select a location and host to which you want to deploy the GigaVUE-FM instance.
- 7. Click **Next**. The **Select a compute resource** page of the **Deploy OVF Template** wizard appears.

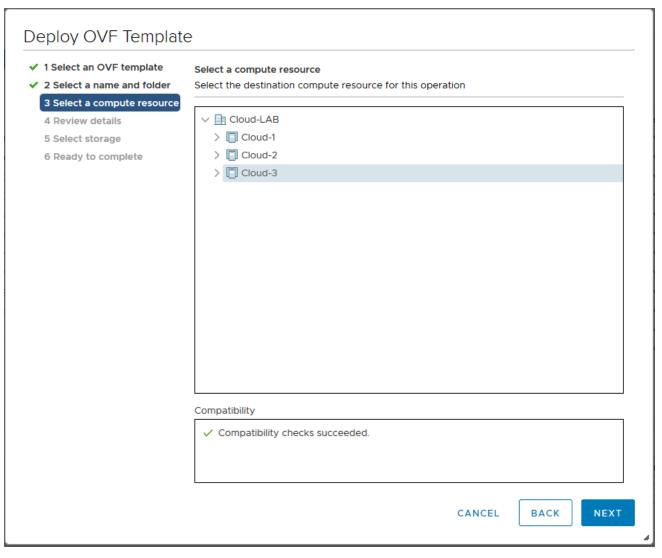


Figure 4: vSphere Client: Select a Compute Resource for the OVF Deployment

- 8. Select a destination compute host for the OVF deployment. The Deploy OVF Template wizard performs a validation to ensure that the selected host has all the resources required for the GigaVUE-FM deployment.
- 9. Click **Next**. The **Review details** page of the **Deploy OVF Template** wizard appears.

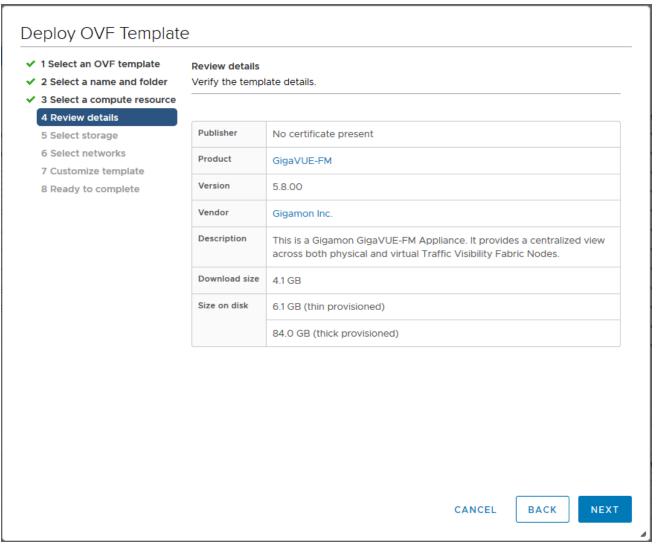


Figure 5: vSphere Client: Review Details

10. Verify the OVF template details, and then click **Next**. The **Select storage** page of the **Deploy OVF Template** wizard appears.

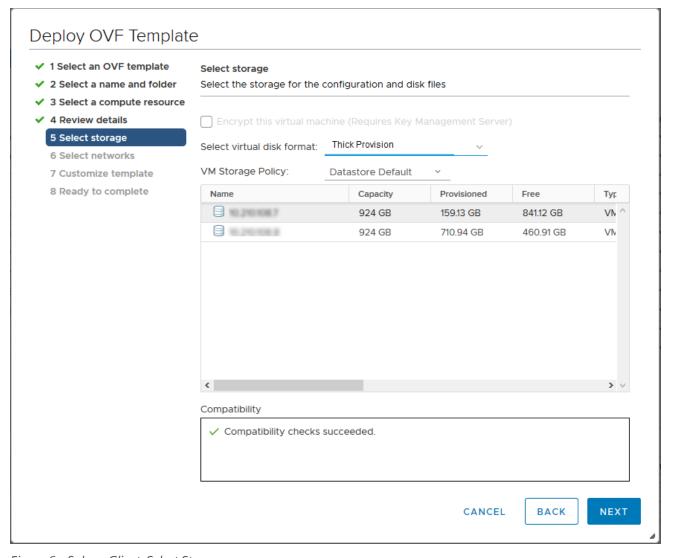


Figure 6: vSphere Client: Select Storage

11. From the **Select virtual disk format** drop-down list, select **Thick Provisioning** as the format for the virtual disks and provisioning.

**Note:** You must deploy GigaVUE-FM using **Thick Provisioning**. Any other choice results in GigaVUE-FM not working correctly.

- 12. Select the datastore where the virtual machine's files will be stored.
- 13. Click **Next**. The **Select networks** page of the **Deploy OVF Template** wizard appears.

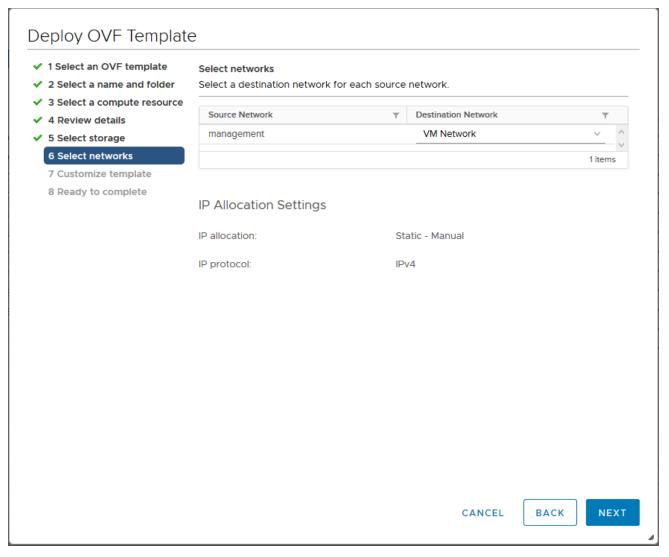


Figure 7: vSphere Client: Select Networks

- 14. Set network mapping by doing either of the following, depending on how your are deploying, and then click **Next**:
  - If you are not deploying on a standalone ESXi host, the Network Mapping displays under Source Networks. Use the drop-down lists to assign the correct Destination Network to the source network.
  - If you are deploying GigaVUE-FM on a standalone ESXi host, the network mapping is set automatically by assigning the destination network to the VM Network. In case of multiple port groups, you need to manually assign the destination network to the VM Network.
- 15. Click **Next**. The **Customize template** page of the **Deploy OVF Template** wizard appears.
- 16. In the **System Hostname** field, enter the hostname of the GigaVUE-FM instance, and then specify **40** GB as the size of the data disk.

- 17. Set the admin password. The admin password must be a minimum of 11 characters and a maximum of 30 characters. The characters must include at least:
  - One numerical character
  - One upper case character
  - One lower case character
  - One special character

**Note:** The password that you set here is applicable only to the GigaVUE-FM Shell. To access the GigaVUE-FM UI, the default username is admin and password is admin123A!!. You can change the password when you first login to the GigaVUE-FM UI.

If the password does not meet the complexity requirements:

- The system does not display any error message.
- The parameters configured above are not passed on to the GigaVUE-FM except the host name parameter.
- The static IP addresses that were configured originally will be unavailable after GigaVUE-FM is deployed.
- 18. (Optional) Complete the IP Networking configurations such as the default gateway for the management port, IP address of the DNS server, and the domain name for this GigaVUE-FM instance.
- 19. (Optional) Complete the NTP configurations such as the IP address and version of the NTP server, and then click **Next**.

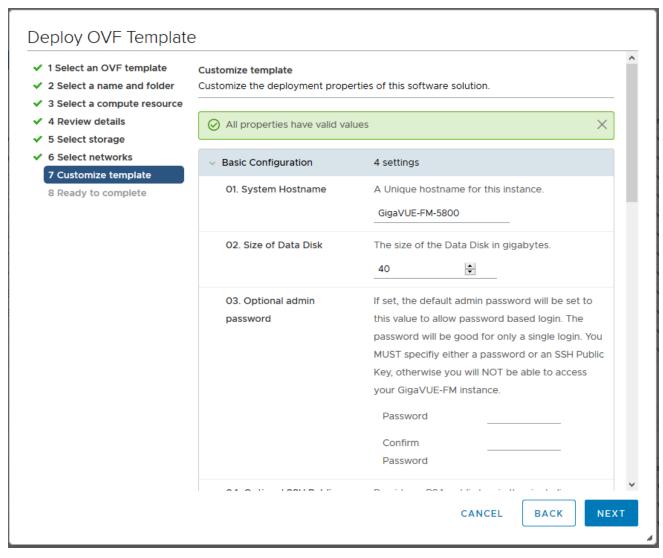


Figure 8: vSphere Client: Customize Template

**Note:** You can also choose to perform the IP Networking and NTP configurations by running the **fmctl jump-start** command after you power on the GigaVUE-FM instance at the successful completion of the OVF template deployment. For details, refer to Perform Network Configurations

The **Ready to Complete** page of the **Deploy OVF Template** wizard appears.

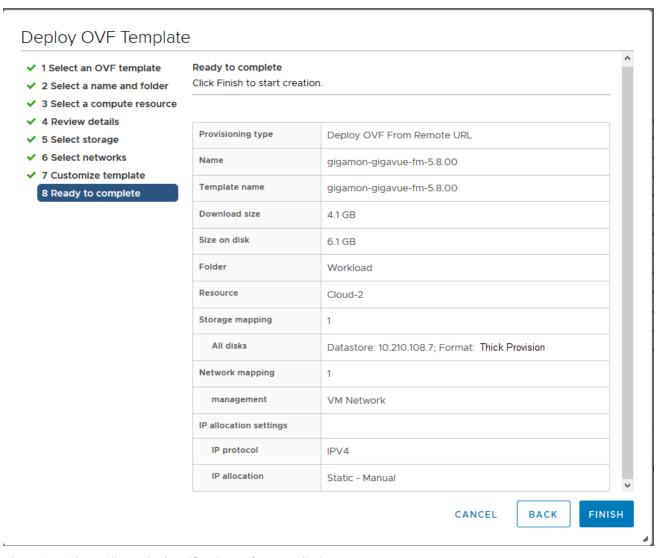


Figure 9: vSphere Client: Final Verification Before Installation

20. Verify that all of the settings are correct, and then click **Finish**. The Recent Tasks pane of the vSphere Client Home page shows the progress of the deployment operation.



Figure 10: vSphere Client: OVF Deployment Progress

When the operation completes, you have successfully deployed a GigaVUE-FM instance.

Important: Clear the browser cache before logging in to GigaVUE-FM.

# Redeploy GigaVUE-FM Instance (with VMs Already Deployed)

If there is a need to remove an existing instance of GigaVUE-FM and reinstall it, delete all the virtual centers configured in the Virtual > Management > Virtual Center tab prior to deleting the GigaVUE-FM. To re-install GigaVUE-FM, refer to the Install New GigaVUE-FM on VMware ESXi or Install GigaVUE-FM for Microsoft Hyper-V.

By deleting the virtual centers, you will lose all the GigaVUE-VM nodes and vMaps configured on those virtual centers and they will need to be recreated.

# Initial GigaVUE-FM Configuration

After you have deployed a new GigaVUE-FM instance, you can choose to perform some initial configuration before you start using GigaVUE-FM. This procedure only needs to be performed once for each GigaVUE-FM instance deployed.

**Note:** Use care when Shutting Down or Rebooting a GigaVUE-FM. **Never** directly Power-Off the virtual machine. In VMware ESXi environment when using vSphere client, ALWAYS use **Shut Down Guest OS** or **Restart Guest** functions from VMware. Access is available from either the FILE menu or from the appropriate buttons on the GigaVUE-FM console. Failure to follow these steps may lead to database corruption issues.

# Use Fault Tolerance for GigaVUE-FM Deployments (VMware ESXi only)

Gigamon recommends that you enable the VMware Fault Tolerance feature for the GigaVUE-FM virtual machine, providing redundancy in the case of a failure. Enabling the VMware Fault Tolerance feature provides a "hot" GigaVUE-FM virtual machine instance on another ESXi host in the cluster. If the ESXi host with the primary GigaVUE-FM instance goes down, you can take advantage of the Fault Tolerance feature to continue GigaVUE-FM operations.

When in Fault Tolerance mode, the MAC address and the UUID for both the primary GigaVUE-FM and the "hot" GigaVUE-FM virtual machine instance remains the same, therefore there is no need to update the existing licenses for GigaVUE-FM or GigaVUE-VM that are installed on the primary.

Both instances of the GigaVUE-FM implement VMware vLockstep technology to keep in virtual lockstep with each other. Any events are executed on the primary and then transmitted over a Gigabit Ethernet network to the other instance. Both instances access a common disk and appear as a single instance since they share the MAC address and UUID.

**Note:** Refer to the VMware Fault Tolerance documentation for deployment requirements and instructions.

Depending on the host configurations, there may be a need to shutdown GigaVUE-FM (primary) to enable the Fault Tolerance mode.

# Perform Initial Configuration

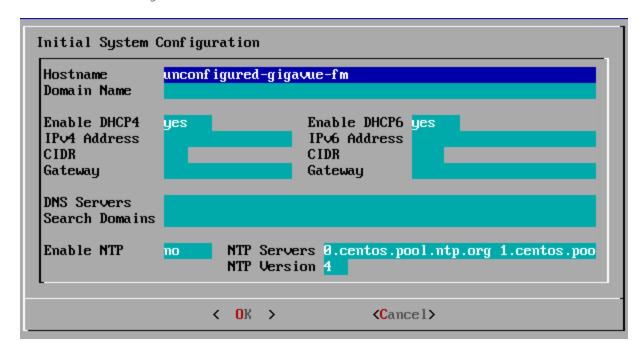
Before powering on GigaVUE-FM, you can optionally perform the following:

- Perform Network Configurations
- Add Additional vNIC
- Increase the Memory
- Add vCPUs

#### Perform Network Configurations

To perform the initial configuration:

- 1. Log in to GigaVUE-FM using one of the following methods:
  - If you have a static IP address set up for the GigaVUE-FM, log in through SSH.
  - If you do not have a static IP address set up for the GigaVUE-FM, complete the following steps:
  - a. Log in to the VMware vCenter web interface.
  - b. Go to Menu > VMs and Templates.
  - c. Right-click the GigaVUE-FM virtual machine, and select **Open Remote Console**.
  - d. Log in with your GigaVUE-FM Shell credentials.
- 2. Run the **fmctl jump-start** command. The Initial System Configuration screen appears as shown in the following figure:



- 3. Provide a unique hostname for GigaVUE-FM. Note that the hostname may contain letters, numbers, periods (.), and hyphens (-), but may not begin with a hyphen. No other special characters are permitted.
- 4. Enter the required domain name.
- 5. Decide whether to use DHCP for the management interface. Choose one of the following options:
  - If you enter yes, the IPv4 Address or IPv6 Address, CIDR, Gateway, DNS Servers, and Search Domains are dynamically set up for the management interface.
  - If you enter **no**, you must provide the following:
  - a. IPv4 Address or IPv6 Address, and the respective CIDR and Gateway.
  - b. In the **DNS Servers** field, provide the address of any additional name servers required. Enter the set of IP addresses with spaces in between.
  - c. In the **Search Domains** field, provide the required DNS domains with spaces in between.
- 6. You can choose to either enable or disable NTP. In the **Enable NTP** field, enter one of the following:
  - **Yes**—Use NTP to synchronize the time between GigaVUE-FM virtual machine and the NTP server. In the **NTP Servers** and **NTP Version** fields, enter the NTP server address and the version number of the NTP server.
  - **No**—you can skip the next step and directly save your configurations.
- 7. Select **OK** to save your configurations.

Log out of GigaVUE-FM and re-login to view the changes.

#### Add Additional vNIC

Gigamon allows you to configure GigaVUE-FM with two network interfaces—eth0 and eth1. The network interface eth0 can be configured to connect to a network used to manage Gigamon devices. The other network interface eth1 can be configured to connect to a network hosting different servers like SMTP server, Archive server, and so on.

#### To add an additional vNIC:

1. Right-click the GigaVUE-FM instance and select **Edit Settings...** Refer to Figure 11: vSphere Client: Edit Settings.

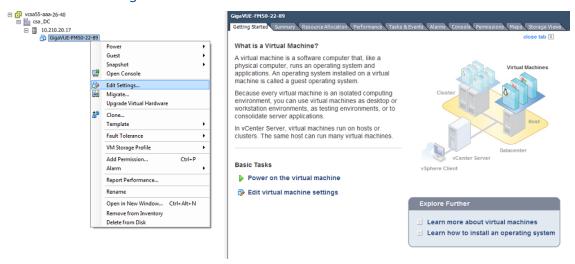


Figure 11: vSphere Client: Edit Settings

- 2. In the Hardware tab, click **Add**.
- 3. In the Add Hardware dialog box, select **Ethernet Adapter** and then click **Next**.Refer to Figure 12: vSphere Client: Selecting Ethernet Adapter.

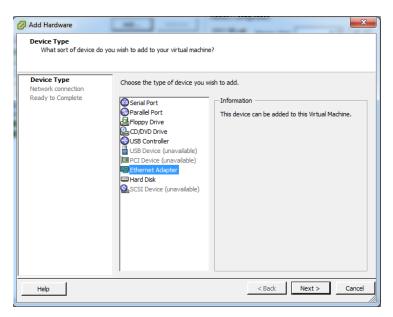


Figure 12: vSphere Client: Selecting Ethernet Adapter

4. In the **Adapter Type** drop-down list, select an appropriate adapter type. Refer to Figure 13: vSphere Client: Selecting Device Type.

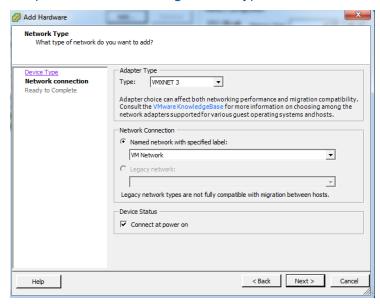


Figure 13: vSphere Client: Selecting Device Type

5. In the **Named network with specified label** drop-down list, select an appropriate network and click **Next**.

The Network adapter 2 is added to GigaVUE-FM.

### Increase the Memory

Based on the requirement, you can increase the memory of the GigaVUE-FM instance.

#### To increase the memory:

1. Right-click the GigaVUE-FM instance and select **Edit Settings...** Refer to Figure 14: vSphere Client: Edit Settings.

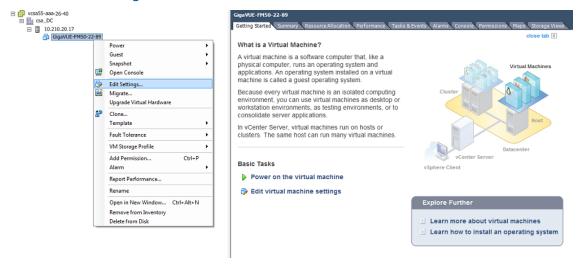


Figure 14: vSphere Client: Edit Settings

- 2. In the Hardware tab, select **Memory**.
- 3. In Memory Configuration, increase the size of the memory as per your requirement. Refer to the recommended size for your guest OS in the dialog box. Refer to Figure 15: vSphere Client: Increasing Memory.

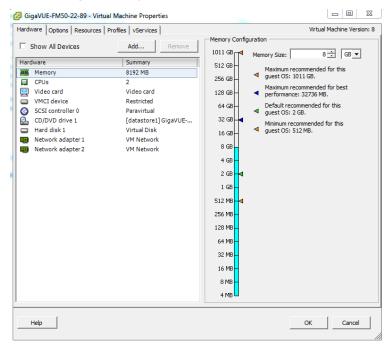


Figure 15: vSphere Client: Increasing Memory

4. Click OK.

#### Add vCPUs

Based on the requirement, you can add additional vCPUs to the GigaVUE-FM instance.

- 1. Right-click the GigaVUE-FM instance and select **Edit Settings...**
- 2. In the Hardware tab, select **CPUs**. Refer to Figure 16: vSphere Client: Adding vCPUs.

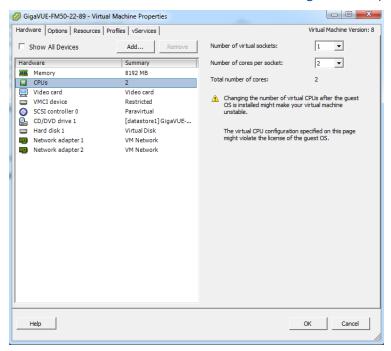


Figure 16: vSphere Client: Adding vCPUs

- 3. In the **Number of virtual sockets** field, enter the appropriate number of sockets.
- 4. In the **Number of cores per socket** field, enter the appropriate number of cores per socket.
- 5. Click OK.

## Install Third-Party Certificate

Use the following procedure to install a third-party certificate on GigaVUE-FM:

- 1. Generate a certificate and a private key file in pem format. Use the following command on Linux or a Linux app (such as Cygwin) for generating the files:
  - openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout privatekey.pem -out certificate.pem
- 2. Copy the contents of the certificate file. You will use the contents in Step.

**Note:** When you copy the contents, do not delete the EOL characters at the start of each line.

3. Log in to the GigaVUE-FM CLI.

- 4. Execute the following steps from the shell prompt as a root user (sudo):
  - Replace SSLCertificateFile: /etc/pki/tls/certs/localhost.crt
  - Replace SSLCertificateKeyFile: /etc/pki/tls/private/localhost.key
  - Provide access to certificate and key files: chmod 600
  - Restart apache as root systematl restart httpd.

The system will now start using the newly installed certificate.

GigaVUE-FM uses a public key (cms.p12 file) to encrypt the Security Assertion Markup Language (SAML) messages. You can either use the default public key available in GigaVUE-FM or generate a new public key using the following command:

```
openssl pkcs12 -export -name CMS -out cms.p12 -inkey
/etc/pki/tls/private/localhost.key -in /etc/pki/tls/certs/localhost.crt -
passout pass:cms123
```

You will be prompted for a pass phrase for the localhost.key.

After the public key (cms.p12 file) is generated, place the file in the /etc/gigamon directory.

# Install GigaVUE-FM on MS Hyper-V

This section describes how to install and configure GigaVUE-FM. It consists of the following main sections:

- System Requirements describes the hardware requirements.
- Install GigaVUE-FM for Microsoft Hyper-V describes the steps to install and deploy GigaVUE-FM.

# System Requirements

This section describes the hardware and virtual computing requirements for GigaVUE-FM Before installing GigaVUE-FM, ensure that a supported version of Windows Server is installed on hardware that meets minimum requirements (see Windows Server Hardware Requirements for hardware requirements).

Ensure that the GigaVUE-FM time is set correctly to ensure accuracy of the trending data that is captured.

The Hyper-V implementations provided by the following Windows Server versions have been tested and found to operate acceptably with GigaVUE-FM:

• Windows Server 2012 R2 and later

### Windows Server Hardware Requirements

The following table describes the minimum requirements for the hardware on which Microsoft Hyper-V runs GigaVUE-FM.

Minimum Hardware Requirements		
Hypervisor	Microsoft Hyper-V	
СРИ	One or more 64-bit x86 CPUs with virtualization assist (Intel-VT or AMD-V) enabled.	
	<b>Note</b> : To run GigaVUE-FM, hardware support for virtualization must be enabled. Make sure that the BIOS option for virtualization support is not disabled. For more information, see your BIOS documentation	

Minimum Hardware Requirements		
RAM	At least 16GB	
Disk Space	At least 41GB shared (FC, iSCSI, NFS, or FCoE) or locally attached storage (PATA, SATA, SCSI)	
Network	At least one 1Gb NIC	

Note: Refer to the Microsoft documentation for information on enabling Hyper-V.

The following table lists the virtual computing resources that the Windows Server must provide for each GigaVUE-FM instance.

Minimum Virtual Computing Requirements		
Memory	Minimum 8GB memory	
Virtual CPU	2 vCPU	
Virtual Storage for Guest 41GB using Virtual IDE (the Hyper-V default)		
Virtual Network Interfaces 1 vNIC using Hyper-V Virtualized NIC (the Hyper-V default)		

#### GigaVUE-FM v3.5 has been tested on the following browsers:

Browser	Version
Mozilla Firefox <sup>™</sup>	• Version 47
Apple® Safari®	• Version 9.1
Google <sup>®</sup> Chrome <sup>®</sup>	• Version 52
Microsoft Edge	• Version 38

#### **Notes:**

# Install GigaVUE-FM for Microsoft Hyper-V

The GigaVUE-FM software package for Microsoft Hyper-V environments is distributed as an **ISO image** file. The following sections describes how to deploy a fresh installation of GigaVUE-FM on a Hyper-V host and perform its initial configuration:

• Install GigaVUE-FM from an ISO Image File

• Initial GigaVUE-FM Configuration

# Install GigaVUE-FM from an ISO Image File

Use the Hyper-V Manager to install the GigaVUE-FM ISO image file.

Note: The ISO image file must be stored in a location that is accessible to the Hyper-V Manager.

To create the Virtual Machine for GigaVUE-FM in Microsoft Hyper-V:

- 1. Click **Start > Administrative Tools > Hyper-V Manager** to open the Hyper-V Manager.
- 2. From the Actions pane, click **New > Virtual Machine**. Refer to Figure 1: Opening the Virtual Machine Wizard.

The New Virtual Machine Wizard opens.

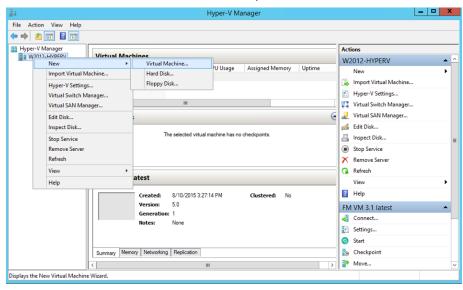


Figure 1: Opening the Virtual Machine Wizard

3. Read the notes on the Before You Begin screen (refer to Figure 2: Before You Begin Screen), and then click **Next** to continue.

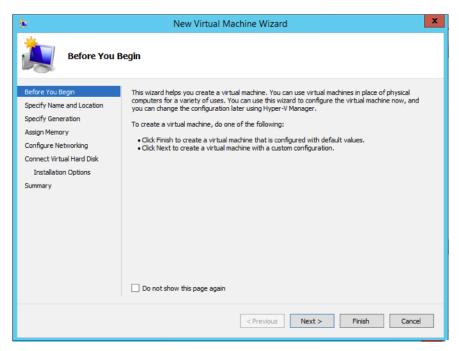


Figure 2: Before You Begin Screen

- 4. After the **Specify Name and Location** page of the **New Virtual Machine Wizard** opens as shown in Figure 3: Name and Location Page, do the following:
  - a. Supply a descriptive name for the GigaVUE-FM virtual machine in the Name field.
     By default, the virtual machine will be stored in the default configuration folder shown in the Location text box. You can change this default location by checking the Store the virtual machine in a different location check box and providing a custom path.
  - b. Click Next to continue.

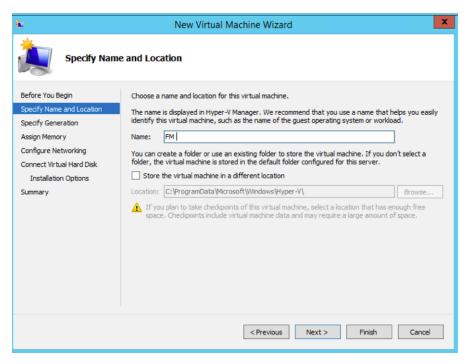


Figure 3: Name and Location Page

5. On the **Specify Generation** page of the **New Virtual Machine Wizard**, select **Generation 1** as shown in Figure 4: Specify Generation Page

**Note:** It is important to select Generation 1 and not Generation 2. Selecting Generation 2 may lead to failure of the GigaVUE-FM installation process because the CD Drive is presented as an SCSI device and not IDE.

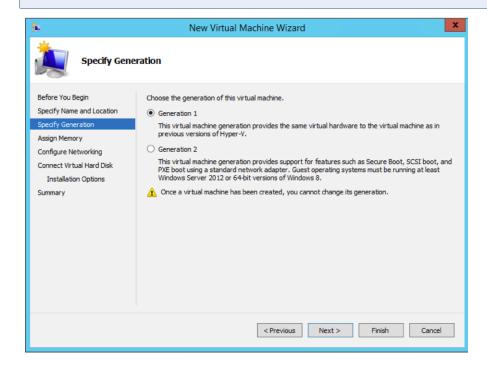


Figure 4: Specify Generation Page

6. Click **Next** to continue.

The **Assign Memory** page of the **New Virtual Machine Wizard**opens, which is shown in Figure 5: Assign Memory Page.

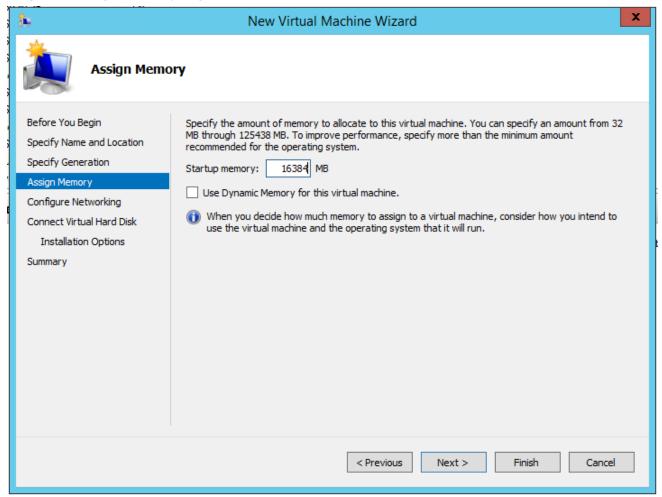


Figure 5: Assign Memory Page

7. Change the **Memory** assigned to this virtual machine to **16384** MB, and then click **Next** to continue.

The **Configure Networking** page of the **New Virtual Machine Wizard**opens, which is shown in Figure 6: Configure Networking Page.

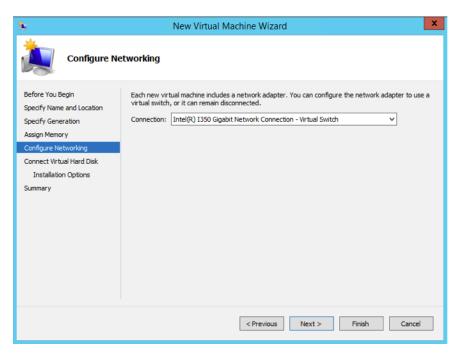


Figure 6: Configure Networking Page

8. From the Connection drop-down list, select the virtual network to which GigaVUE-FM will connect to, and then click **Next** to continue.

The **Connect Virtual Hard Disk**page of the **New Virtual Machine Wizard** opens, which is shown in Figure 7: Connect Virtual Hard Disk Page.

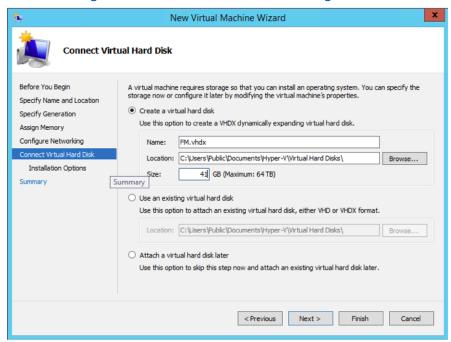


Figure 7: Connect Virtual Hard Disk Page

9. Select the **Create a virtual hard disk** option and set the **Size** to **41** GB.

You can accept the default **Name** and **Location** or customize them according to your needs. When you have finished, click **Next** to continue.

The **Installation Options** page of the **New Virtual Machine Wizard**opens, which is shown in Figure 8: Install Options Page.

- 10. Use this dialog box to select the ISO image file for GigaVUE-FM. As shown in the figure Figure 8: Install Options Page, set the following options:
  - a. Select the option Install an operating system from a bootable CD/DVD-ROM.
  - b. Set the **Media** option to **Image file (.iso)**.
  - c. Use the **Browse** button to navigate to the GigaVUE-FM ISO image file.
  - d. Click **Next** to continue.

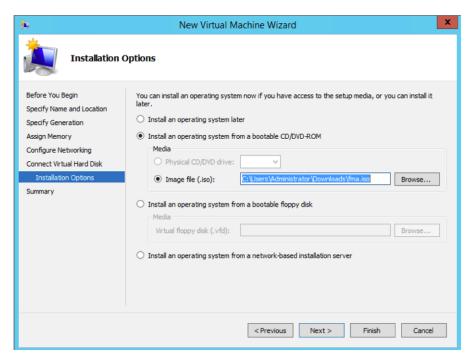


Figure 8: Install Options Page

After you click **Next**, the summary page of the **New Virtual Machine Wizard**opens, showing the settings that you configured for the GigaVUE-FM virtual machine. An example is shown in Figure 9: Summary Page.

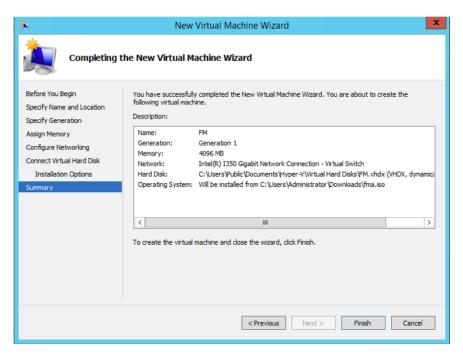


Figure 9: Summary Page

11. Click **Finish** to create the GigaVUE-FM virtual machine as configured. Alternatively, you can use the **Previous** button to go back and change settings.

The New Virtual Machine Wizard only creates the GigaVUE-FM virtual machine, returning you to the Hyper-V Manager when creation is complete. The new GigaVUE-FM virtual machine is listed in the **Action** pane by the name you supplied during installation.

The procedures given below will take you through the steps of adding an additional virtual hard disk and actually installing GigaVUE-FM.

### Add Additional Virtual Hard Disk and Install GigaVUE-FM

To add an additional virtual hard disk and install GigaVUE-FM:

- 1. In Hyper-V Manager, from the Actions pane, select the newly added GigaVUE-FM virtual machine, and then click **Settings**.
- 2. In the Settings page, select IDE Controller 0.
- 3. In the IDE Controller pane that appears to the right, select **Hard Drive**, and then click **Add**. Refer to the following figure:

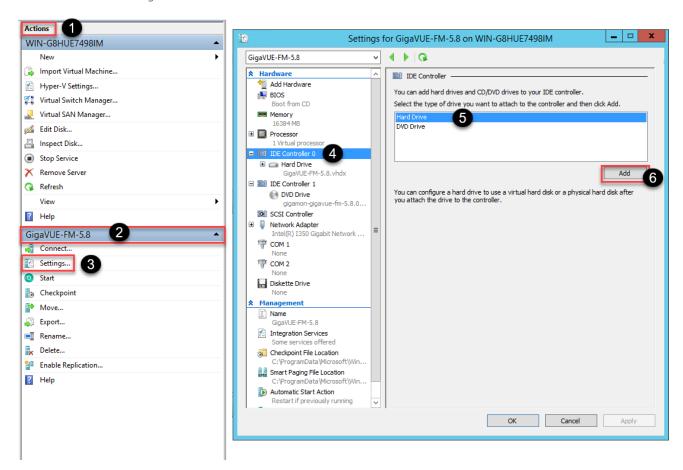


Figure 10: Navigating to Add Additional Hard Disk

A new Hard Drive entry is added under IDE Controller 0.

- 4. Select the Hard Drive entry.
- 5. In the Hard Drive pane that appears to the right, select **Virtual hard disk**, and then click **New** as shown in the following figure:

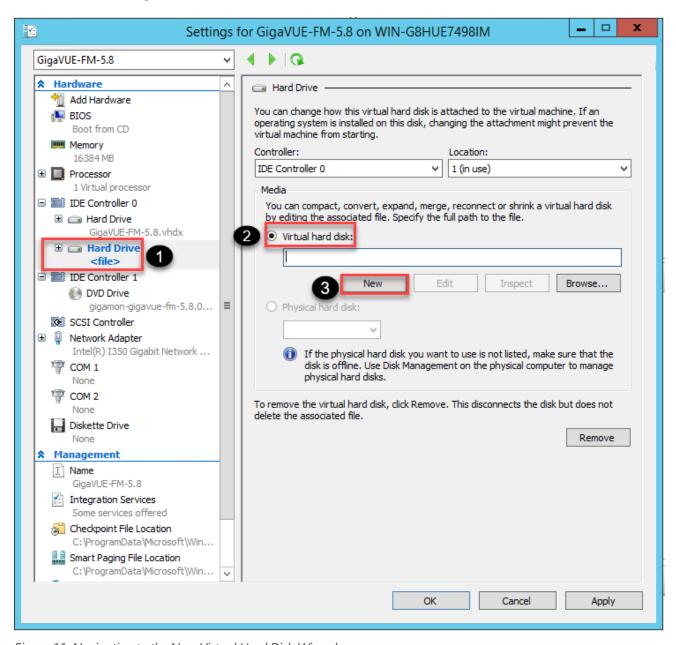


Figure 11: Navigating to the New Virtual Hard Disk Wizard

The New Virtual Hard Disk Wizard opens.

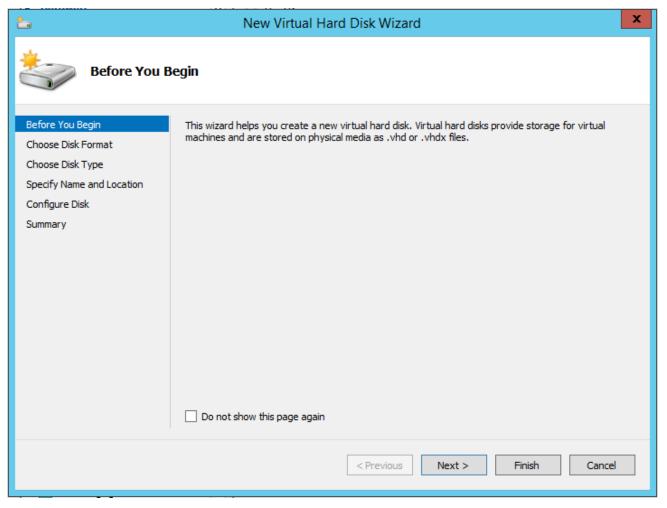


Figure 12: New Virtual Hard Disk Wizard

- 6. Click **Next** to go to the Choose Disk Format page of the wizard.
- 7. Select the required format that you want to use for the virtual hard disk, and then click **Next**.

The Choose Disk Type page of the wizard appears.

8. Select the required disk type for the virtual hard disk, and then click **Next**.

The Specify Name and Location page of the wizard appears.

- 9. Specify a unique name for the virtual hard disk, and then browse and select the location where you want to save the disk.
- 10. Click **Next**. The Configure Disk page of the wizard appears.
- 11. You can choose one of the following options to configure the virtual hard disk:
  - Create a blank virtual hard disk of size 41 GB.
  - Choose a physical hard disk from which you can copy the contents into the new virtual hard disk

- Browse and select a virtual hard disk from which you can copy the contents into the new virtual hard disk.
- 12. Click **Next** to exit the New Virtual Hard Disk Wizard.
- 13. Click **OK**. The GigaVUE-FM installation begins as shown in the following figure:

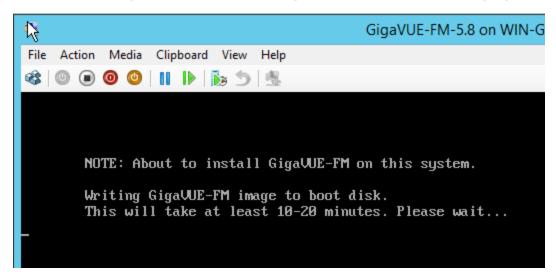


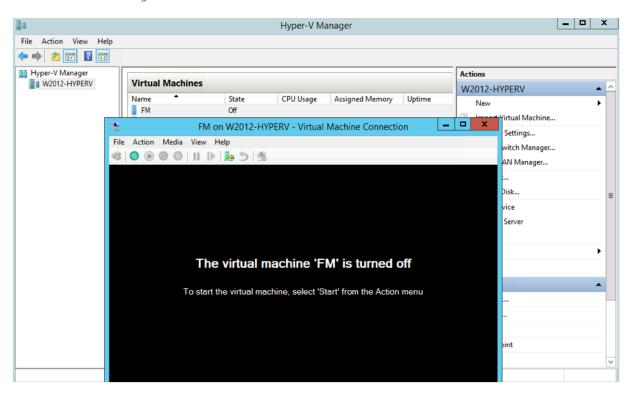
Figure 13: GigaVUE-FM Installation Begins

It may take several minutes for the installation to complete. The system will reboot after the installation is completed.

## Connect and Power On the GigaVUE-FM Virtual Machine

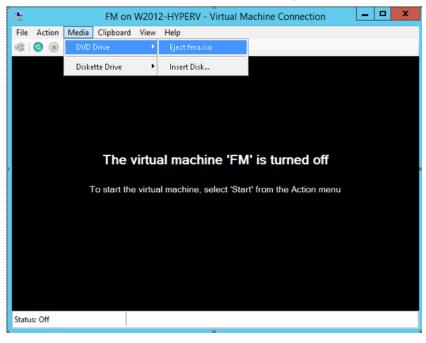
The next step is to connect to the GigaVUE-FM virtual machine from within Hyper-V Manager and start it. This begins the actual installation of the GigaVUE-FM Virtual Appliance from the connected ISO image file. Once GigaVUE-FM finishes installing from the ISO image file, you will then disconnect the ISO image file and restart the virtual machine.

- 1. In Hyper-V Manager, locate the **Virtual Machines** entry in the results pane, right-click the GigaVUE-FM virtual machine, and click the **Connect** option.
- 2. The Virtual Machine Connection tool opens for the GigaVUE-FM virtual machine.



- 3. Select **Action > Start** to start the GigaVUE-FM virtual machine from the Virtual Machine Connection tool.
- 4. The GigaVUE-FM virtual machine powers on. You can monitor the progress of the system start in the Virtual Machine Connection tool.

The system power-on can take several minutes as GigaVUE-FM is installed from the ISO image file. Disconnect the media before Powering On as shown below:



### Disconnect the ISO Image File

It is important to disconnect the ISO image file before you power on GigaVUE-FM again so you don't have to go through the image install process again. Disconnect the ISO image file as follows:

- 1. In Hyper-V Manager, locate the **Virtual Machines** entry in the results pane and select the GigaVUE-FM virtual machine.
- In the **Actions** pane, click the **Settings** entry under the GigaVUE-FM virtual machine name.
   A Settings dialog box for the GigaVUE-FM virtual machine appears.
- 3. Select the **DVD Drive** entry in the panel on the left of the Settings dialog box and change its setting from **Image file** to **None**, as shown in the figure below.
- 4. Click the **OK** button to apply the changes.

This concludes the installation procedure for GigaVUE-FM on Hyper-V. The next step is to power on the virtual machine and perform its initial configuration, as described in Initial GigaVUE-FM Configuration .

**IMPORTANT:** Clear the browser cache before logging in to GigaVUE-FM.

## Initial GigaVUE-FM Configuration

After you have deployed a new GigaVUE-FM instance, you need to perform an initial configuration before you can start using GigaVUE-FM. This procedure only needs to be performed once for each GigaVUE-FM instance deployed.

**Note:** Use Care When Shutting Down or Rebooting a GigaVUE-FM. **Never** directly Power-Off the virtual machine. For Microsoft Hyper-V environment, you cannot use any of the reset, or turn-off hooks. Using either of these may lead to corruption that will prevent proper GigaVUE-FM operation.

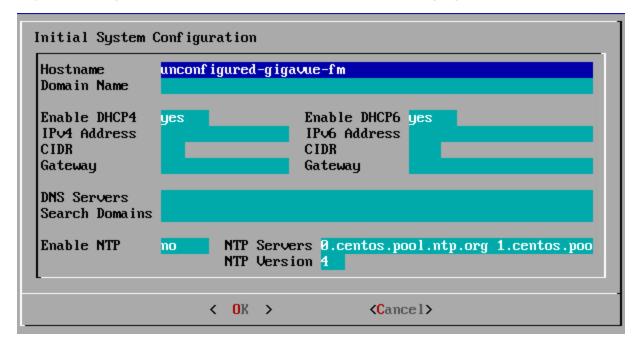
The best ways to **shutdown** a GigaVUE-FM on Hyper-V is to use either Shutdown or Ctrl+Alt+Del from the **Action** button on the virtual console.

To perform the initial configuration:

1. Click **Start > Administrative Tools > Hyper-V Manager**.

**Note:** Make sure you have already disconnected the ISO image file used to install GigaVUE-FM. Refer to Disconnect the ISO Image File for details.

- 2. Locate the **Virtual Machines** entry in the results pane, right-click the GigaVUE-FM virtual machine, and click the **Connect** option. The Virtual Machine Connection tool opens for the GigaVUE-FM virtual machine.
- 3. Select **Action > Start** to start the GigaVUE-FM virtual machine from the Virtual Machine Connection tool. The GigaVUE-FM virtual machine powers on and displays a login prompt.
- 4. Log in as **admin** with password **admin123A!**. You will be prompted to change your password.
- 5. After you change and confirm your password, run the **fmctl jump-start** command. The Initial System Configuration screen appears as shown in the following figure:



- 6. Provide a unique hostname for GigaVUE-FM. Note that the hostname may contain letters, numbers, periods (.), and hyphens (-), but may not begin with a hyphen. No other special characters are permitted.
- 7. Enter the required domain name.
- 8. Decide whether to use DHCP for the management interface. Choose one of the following options:
  - If you enter yes, the IPv4 Address or IPv6 Address, CIDR, Gateway, DNS Servers, and Search Domains are dynamically set up for the management interface.
  - If you enter **no**, you must provide the following:
    - a. IPv4 Address or IPv6 Address, and the respective CIDR and Gateway.
    - b. In the **DNS Servers** field, provide the address of any additional name servers required. Enter the set of IP addresses with spaces in between.
    - c. In the **Search Domains** field, provide the required DNS domains with spaces in between.

- 9. You can choose to either enable or disable NTP. In the **Enable NTP** field, enter one of the following:
  - **Yes**—Use NTP to synchronize the time between GigaVUE-FM virtual machine and the NTP server. In the **NTP Servers** and **NTP Version** fields, enter the NTP server address and the version number of the NTP server.
  - No—you can skip the next step and directly save your configurations.
- 10. Select **OK** to save your configurations.
- 11. Reboot your GigaVUE-FM virtual machine.

You can now access GigaVUE-FM by opening a browser and entering its IP address (the IP address you specified).

# Migrate GigaVUE-FM

This section provides information about migrating your GigaVUE-FM to release 5.8.01. Refer to the following sections for details:

- Migration Overview
- Plan Your Migration
- Rules and Notes
- Supported Upgrade Paths
- GigaVUE-FM Migration on VMware
- GigaVUE-FM Migration on Hardware Appliance
- GigaVUE-FM Migration on AWS

Migration to GigaVUE-FM 5.8.01 is supported only on VMware ESXi, GigaVUE-FM Hardware Appliance, and AWS platforms.

# Migration Overview

Starting with release 5.8.00, GigaVUE-FM introduces several significant changes, which include improvements in usability and performance. These changes include upgrading and replacing databases and changing the underlying operating system. So, you must migrate your existing configurations and data such as audit logs, events, syslogs, and statistics from your current GigaVUE-FM version (either 5.7 or lower) to GigaVUE-FM 5.8.01. You cannot directly upgrade your GigaVUE-FM instance to release 5.8.01. You must first upgrade to GigaVUE-FM 5.7.02.01, a special release that provides the tools to manage and perform the migration. You can then upgrade to GigaVUE-FM 5.8.01.

# Plan Your Migration

This section will help you plan your migration. It provides details about the scope of the migration, the best migration method to use for your deployment, and how to complete the migration process.

Refer to the following sections for details:

S.No	Purpose	Refer to:
1.	Ensure that meets the requirements for migrating to GigaVUE-FM 5.8.01. Also, keep in mind the limitations before starting the migration process.	Rules and Notes
2.	Determine the migration and upgrade path.	Supported Upgrade Paths
4.	Complete the migration process.	<ul> <li>GigaVUE-FM Migration on VMware</li> <li>GigaVUE-FM Migration on Hardware Appliance</li> <li>GigaVUE-FM Migration on AWS</li> </ul>

## **Rules and Notes**

Keep in mind the following notes before proceeding with the migration:

- Migration to GigaVUE-FM 5.8.01 is supported only on VMware ESXi, GigaVUE-FM Hardware Appliance, and AWS platforms.
- The minimum size of hard disk for VMware, AWS, and GigaVUE-FM Hardware Appliance is 40Gb.
- Ensure that you plan for a maintenance window depending on the size of the data that you plan to migrate and the network latency.

Following table provides a guideline for the maintenance window that you can refer to when you plan for migration:

Note that the actual migration time may vary depending on your configurations.

Data Set		Statistics Loss Time	Management Loss Time	Estimated Migration Time		
Environment 1						
No.of nodes	2	10 minutes	5 minutes	• 2 hours (for 25 days of		
No.of Ports	6	6		<ul><li>data)</li><li>35 minutes (for 7 days</li></ul>		
No.of Maps 6 No.of Events 1000				of data)		
					No.of Syslogs	1000
No.of Audit logs	1000					

Data Set		Statistics Loss Time	Management Loss Time	Estimated Migration Time
<b>Environment 2</b>				
No.of nodes	40	1 hour	5 minutes	<ul> <li>8 hours (for 25 days of data)</li> <li>4 hours (for 7 days of data)</li> </ul>
No.of Ports	2000			
No.of Maps	1000			
No.of Events	10000			
No.of Syslogs	10000			
No.of Audit logs	10000			
<b>Environment 3</b>				
No.of nodes	300	3 hours	5 minutes	10 hours (for 7 days of data)
No.of Ports	12000			
No.of Maps	6000			
No.of Events 10000 No.of Syslogs 10000				

- The custom SSL certificates and private keys will not be migrated to GigaVUE-FM 5.8.01. You must upload them manually. For instructions, refer to Install Third-Party Certificate.
- Any configurations that you have set up using DHCP will not be migrated.
- If you have IP interface configured with the IP address of your current version of GigaVUE-FM, after the migration is completed, you must manually associate the IP address of the new GigaVUE-FM to the IP interface.

# Supported Upgrade Paths

Use the following table to determine the supported upgrade path for your current version of GigaVUE-FM:

GigaVUE-FM Version	Recommended Upgrade Path
From 5.8.00 to 5.8.01	5.8.00 > 5.8.01
From 5.7.00 or 5.7.01 to 5.8.01	5.7.00 or 5.7.01 > 5.7.02.01 > 5.8.01
From 5.6.xx to 5.8.01	5.6.xx > 5.7.02.01 > 5.8.01
From 5.5.xx to 5.8.01	5.5.xx > 5.7.02.01 > 5.8.01
From 5.4.xx to 5.8.01	5.4.xx > 5.7.02.01 > 5.8.01

**Note:** For deployments with GigaVUE-FM 5.3.xx or lower, upgrade to GigaVUE-FM 5.4.xx and then follow the upgrade path listed in the above table to migrate to GigaVUE-FM 5.8.01. Refer to the "Installation and Upgrade" section in the GigaVUE-FM and GigaVUE-VM User's Guide of the respective versions.

# GigaVUE-FM Migration on VMware

Use this option if your current instance of GigaVUE-FM is running on VMware ESXi. Migrating using this option minimizes the downtime and the loss of statistical data.

#### At-a-Glance

Following is an at-a-glance view of the tasks that you must perform to migrate to GigaVUE-FM 5.8.01:

**Step 1:** Perform the GigaVUE-FM backup to an archive server. For instructions on how to backup the data, refer to the "Backup Immediately" section in the GigaVUE-OS and GigaVUE-FM Administration Guide.

**Step 2:** Upgrade your existing GigaVUE-FM instance to GigaVUE-FM 5.7.02.01. For details about the recommended upgrade path, refer to Supported Upgrade Paths. For upgrade instructions, refer to the Upgrade an Existing GigaVUE-FM Deployment.

**Step 3:** Deploy a new GigaVUE-FM 5.8.01 using an OVA file. For installation instructions, refer to the Deploy GigaVUE-FM from an OVA File. Ensure that the password has a minimum of 11 characters and they must include at least:

- · One numerical character
- One upper case character
- One lower case character
- One special character

**Step 4:** Log in to GigaVUE-FM 5.7.02.01 and start the migration process. The data and the configuration files migrate to GigaVUE-FM 5.8.01.

**Step 5:** After the migration is complete, decommission the GigaVUE-FM 5.7.02.01 instance immediately to avoid dual connection from both GigaVUE-FM 5.7.02.01 and GigaVUE-FM 5.8.01.

**Step 6:** This step is applicable only for VMware NSX-V platform managed by GigaVUE-FM 5.7.02.01. Configure the IP address and SHA-1 Thumbprint of the GigaVUE-FM 5.8.01 as the service manager so that GigaVUE-FM 5.8.01 and VMware NSX-V can communicate with each other. For instructions, refer to Configure GigaVUE-FM 5.8.01 IP Address as Service Manager for VMware NSX-V.

Figure 14: GigaVUE-FM Migration on VMware ESXi illustrates the GigaVUE-FM migration process on VMware ESXi.

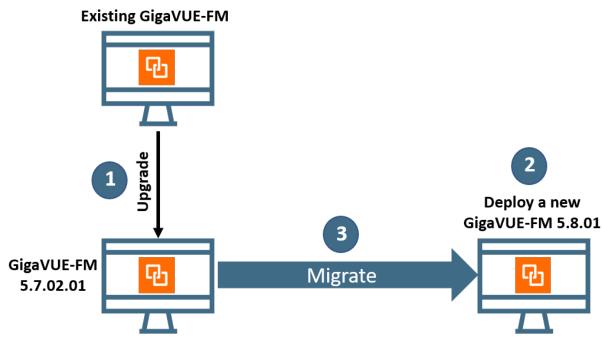


Figure 14: GigaVUE-FM Migration on VMware ESXi

# Migrate GigaVUE-FM on VMware ESXi

Before proceeding with the migration, ensure that you meet the following prerequisites:

- You have upgraded your existing GigaVUE-FM instance to GigaVUE-FM 5.7.02.01.
- You have deployed a new GigaVUE-FM 5.8.01 using an OVA file.

**Note:** To obtain the required software images, register on the customer portal and download the software. To reach the customer portal, go to https://community.gigamon.com/gigamoncp/.

- You have set up your remote authentication servers to work with the GigaVUE-FM 5.8.01.
- Both instances of GigaVUE-FM are identical in terms of hardware resources and that they are reachable to each other.
- Set up the same username and password to access both, GigaVUE-FM UI and GigaVUE-FM Shell at least till the migration is complete.
- Configure NTP to synchronize the time of both the GigaVUE-FM instances.
- Ensure that you use the same password for both GigaVUE-FM 5.7.02.01 and GigaVUE-FM 5.8.01.

#### To migrate using this option:

- 1. Log in to GigaVUE-FM 5.7.02.01.
- 2. On the right side of the top navigation bar, click the **Admin** drop-down list, and then select **Software Upgrade**. The Software Upgrade Wizard appears.

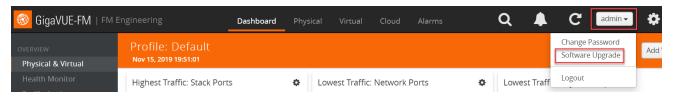


Figure 15: Accessing the Software Upgrade Wizard

3. Ensure that you meet all the prerequisites listed on the **Requirements** screen of the Wizard.

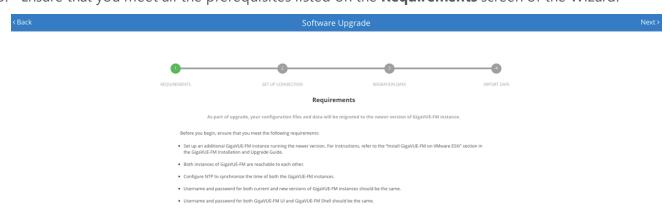


Figure 16: Requirements Screen

- 4. Click **Next**. The Set Up Connection screen of the Software Upgrade Wizard appears.
- 5. Enter the IP Address or Hostname of GigaVUE-FM 5.8.01.

- 6. Enter the login credentials such as the Username and Password, and then click **Connect**. The connection is established between both the GigaVUE-FM instances.
- 7. Click **Next**. The Migration Data screen of the Software Upgrade Wizard appears.
- 8. Select the **Data Files** check box to migrate the statistics, events, audit logs, and syslogs. By default, all the configuration files will be migrated.
- 9. Enter the number of days for which you want the data to be migrated. The estimated time for migration appears in the Wizard.

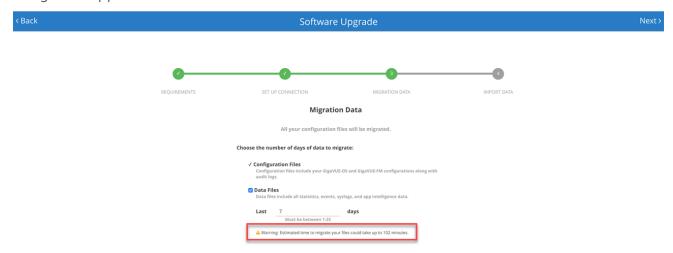


Figure 17: Estimated Migration Time

10. Click **Next**. The data migration process begins. All the files will be exported from GigaVUE-FM 5.7.02.01 and then imported to GigaVUE-FM 5.8.01.

**Note:** The migration process will continue in the background even if you close the browser. You can login again to check the migration status.

11. After the migration is complete, Click **Finish**.

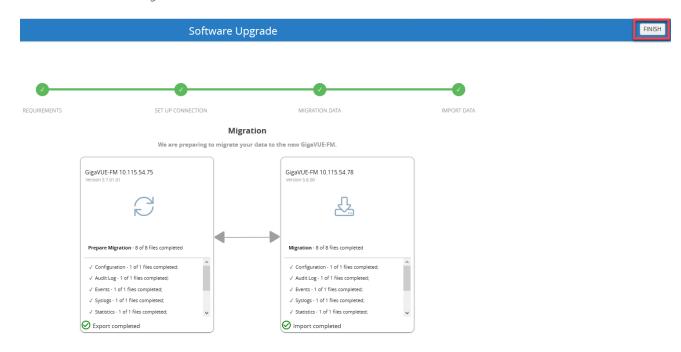


Figure 18: Migration Process Complete for VMware ESXi

After the migration is successful, you can decommission the GigaVUE-FM 5.7.02.01 instance.

# Configure GigaVUE-FM 5.8.01 IP Address as Service Manager for VMware NSX-V

GigaVUE-FM and VMware NSX-V communicate with each other using the GigaVUE-FM's IP address, which acts as a service manager. When you migrate from GigaVUE-FM 5.7.02.01 to GigaVUE-FM 5.8.01, the IP address that is configured as the Service Manager in VMware NSX-V does not change. You must manually configure the IP address and SHA-1 Thumbprint of GigaVUE-FM 5.8.01.

Before you proceed with the configuration, ensure that you meet the following prerequisites:

- You have decommissioned the GigaVUE-FM 5.7.02.01 instance.
- You have made a note of the IP address and SHA-1 Thumbprint of GigaVUE-FM 5.8.01. You can get the IP address and SHA-1 Thumbprint from the About GigaVUE-FM page of the GigaVUE-FM 5.8.01. To access the About GigaVUE-FM page, click on the top navigation bar, and then from the left navigation pane, select About.

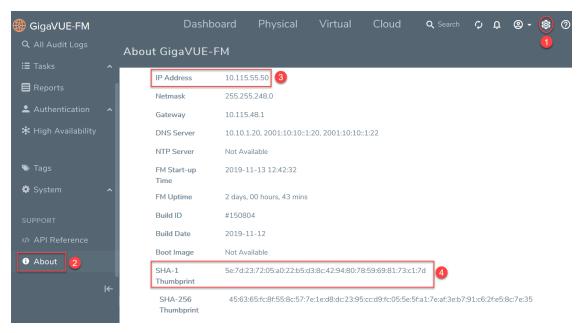


Figure 19: Accessing About GigaVUE-FM Page

To configure GigaVUE-FM 5.8.01 IP address as Service Manager for VMware NSX-V:

- 1. Launch the VMware vSphere Web Client.
- 2. Go to Networking & Security > Service Definitions > Service Managers.
- 3. Select **Gigamon Traffic Visibility Manager**, and then click the Edit Service Manager icon. The Edit Service Manager page appears.
- 4. In the **Administration URL** and the **Base API URL** fields, replace only the IP address with the GigaVUE-FM 5.8.01 IP.
- 5. In the **Thumbprint** field, enter the SHA-1 Thumbprint of GigaVUE-FM 5.8.01. Refer to Figure 20: Service Manager Configuration in VMware NSX-V
- 6. Click OK.

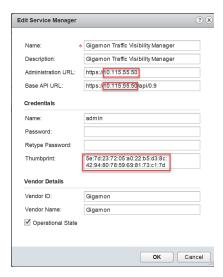


Figure 20: Service Manager Configuration in VMware NSX-V

# GigaVUE-FM Migration on Hardware Appliance

Use this option if you have a GigaVUE-FM Hardware Appliance running on GigaVUE-FM version 5.7 or lower that you want to migrate to GigaVUE-FM 5.8.01.

#### At-A-Glance

**Step 1:** Backup your data and configuration files from your GigaVUE-FM instance to an archive server. For instructions on how to backup the data, refer to the "Backup Immediately" section in the GigaVUE-OS and GigaVUE-FM Administration Guide.

**Step 2:** Upgrade your existing GigaVUE-FM instance to GigaVUE-FM 5.7.02.01. For the upgrade path, refer to Supported Upgrade Paths. For upgrade instructions, refer to Upgrade an Existing GigaVUE-FM Deployment.

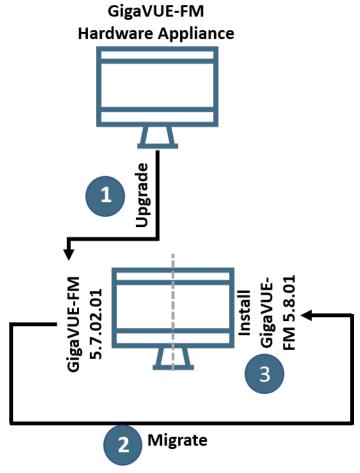
**Step 3:** Log in to GigaVUE-FM 5.7.02.01 and start the migration process.

**Step 4:** Install the GigaVUE-FM Hardware Appliance with GigaVUE-FM 5.8.01 using an ISO file. For installation instructions, refer to the Migrate GigaVUE-FM Hardware Appliance.

**Note:** To obtain the required software images, register on the customer portal and download the software. To reach the customer portal, go to https://community.gigamon.com/gigamoncp/.

**Step 5:** After the GigaVUE-FM 5.8.01 is installed, the restoration process gets triggered automatically.

Figure 21: GigaVUE-FM Hardware Appliance Migration illustrates the migration process on the GigaVUE-FM Hardware Appliance.



All configuration files along with the data files that you have chosen for migration are migrated to GigaVUE-FM 5.8.01

Figure 21: GigaVUE-FM Hardware Appliance Migration

# Migrate GigaVUE-FM Hardware Appliance

Before proceeding with the migration, ensure that you meet the following prerequisites:

• Upgrade your GigaVUE-FM Hardware Appliance to GigaVUE-FM 5.7.02.01.

**Note:** To obtain the required software images, register on the customer portal and download the software. To reach the customer portal, go to https://community.gigamon.com/gigamoncp/.

If you choose to set up the ISO image of GigaVUE-FM 5.8.01 using the automated process:

- Ensure that you have the login credentials of i-DRAC that is managing the GigaVUE-FM Hardware Appliance.
- Download the ISO image of GigaVUE-FM 5.8.01 from the customer portal and save it to your Remote File Sharing (RFS) server.

To migrate the GigaVUE-FM Hardware Appliance to GigaVUE-FM 5.8.01:

- 1. Log in to the GigaVUE-FM Hardware Appliance running on GigaVUE-FM 5.7.02.01.
- 2. On the right side of the top navigation bar, click the **Admin** drop-down list, and then select **Software Upgrade**. Refer to Figure 22: Accessing the Software Upgrade Wizard.

The Software Upgrade Wizard appears.

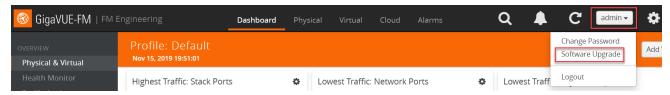


Figure 22: Accessing the Software Upgrade Wizard

- 3. In the Setup ISO Image screen of the Software Upgrade Wizard, choose one of the following methods to set up the ISO image of GigaVUE-FM 5.8.01:
  - Manual—You must download the ISO image of GigaVUE-FM 5.8.01 from the customer portal. Mount the ISO image to your Hardware Appliance. The Hardware Appliance reboots after the ISO image is loaded. For instructions, refer to Set Up the GigaVUE-FM 5.8.01 ISO Image Manually.
  - Automatically—Set up the ISO image using an automated process.
     Complete the following steps if you choose to set up the ISO image automatically (refer to Figure 23: GigaVUE-FM Hardware Appliance—Automatic ISO Image Setup):
  - a. Under the i-DRAC section, enter the IP Address, Username, and Password for i-DRAC that is managing the GigaVUE-FM Hardware Appliance.
  - b. Under the RFS section, enter the IP Address, Username, and Password of the Remote File Sharing server in which you have downloaded the ISO image of GigaVUE-FM 5.8.01.
  - c. In the **ISO Image Path** field, enter the absolute path of the ISO image.
  - d. From the **Protocol** drop-down list, select **NFS** or **CIFS**.
  - e. Click Connect.

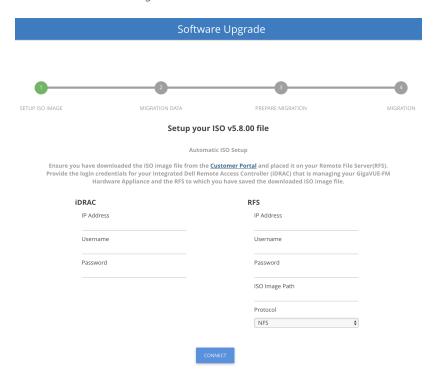


Figure 23: GigaVUE-FM Hardware Appliance—Automatic ISO Image Setup

- 4. In the Migration Data screen of the Software Upgrade Wizard, select the **Data Files** check box to migrate the statistics, events, audit logs, and syslogs. By default, all the configuration files will be migrated.
- 5. Enter the number of days for which you want the data to be migrated. By default, seven days of data will be migrated.
- 6. Click **Next**. The data migration process begins. All the files will be converted to the GigaVUE-FM 5.8.01 format and will be restored on the Hardware Appliance.

## Set Up the GigaVUE-FM 5.8.01 ISO Image Manually

You can perform a manual installation of ISO image either from local file system or RFS server. Before proceeding with the ISO installation, it is recommended that you set up the boot sequence in the following order:

- 1. Hard disk
- 2. Physical DVD
- 3. Virtual DVD

Refer to the following sections for details:

- Set Up First Boot Device
- Install ISO Image from Local File System

Migrate GigaVUE-FM
GigaVUE-FM Migration on Hardware Appliance

Install ISO Image from Remote File Sharing Server

#### **Set Up First Boot Device**

To set up the first boot device:

- 1. Log in to the iDRAC web interface.
- 2. Go to **Overview > Server > Setup**. The First Boot Device page appears. Refer to Figure 24: First Boot Device



Figure 24: First Boot Device

- 3. From the **First Boot Device** drop-down list, select **Virtual CD/DVD/ISO**.
- 4. Select the **Boot Once** check box, and then click **Apply**.

#### **Install ISO Image from Local File System**

Before proceeding with the ISO installation, ensure that you have downloaded the GigaVUE-FM 5.8.01 ISO image to your local file system.

**Note:** To obtain the required software images, register on the customer portal and download the software. To reach the customer portal, go to https://community.gigamon.com/gigamoncp/.

To install ISO image from a local file system:

- 1. In the iDRAC web interface, go to **Overview > Server > Virtual Console**. The Virtual Console page appears.
- 2. Click **Launch Virtual Console**. The Virtual Console Viewer is launched.
- 3. Go to **Virtual Media** > **Connect Virtual Media**. The Virtual Media session is established and the Virtual Media menu displays the list of devices available for mapping. Refer to Figure 25: Connecting to Virtual Media.



Figure 25: Connecting to Virtual Media

4. Go to Virtual Media > Map CD/DVD. The Virtual Media - Map CD/DVD pop-up window appears. Refer to Figure 26: Map CD/DVD.

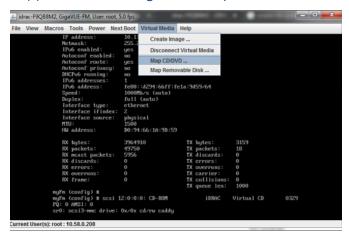


Figure 26: Map CD/DVD

5. Browse and select the GigaVUE-FM 5.8.01 ISO image that you have downloaded to your local file system, and then click Map Device. Refer to Figure 27: Select ISO Image From Local File System.

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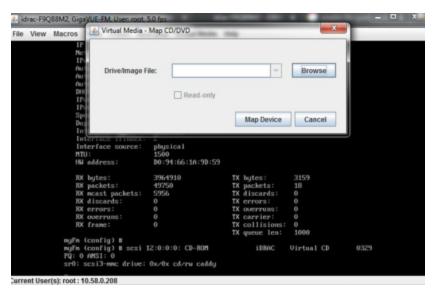


Figure 27: Select ISO Image From Local File System

6. Go to **Power > Power Cycle System (cold boot)** to power cycle GigaVUE-FM. Refer to Figure 28: Power Cycle GigaVUE-FM.



Figure 28: Power Cycle GigaVUE-FM

Wait for 30-45 minutes for the ISO image to install and the data to be migrated.

#### **Install ISO Image from Remote File Sharing Server**

Before proceeding with the ISO installation, ensure that you have downloaded the GigaVUE-FM 5.8.01 ISO image to a RFS server—NFS or CIFS.

**Note:** To obtain the required software images, register on the customer portal and download the software. To reach the customer portal, go to https://community.gigamon.com/gigamoncp/.

To install ISO image from RFS:

1. In the iDRAC web interface, go to **Overview > Server > Attached Media**. The Attached Media page appears. Refer to Figure 29: Select ISO Image from RFS.

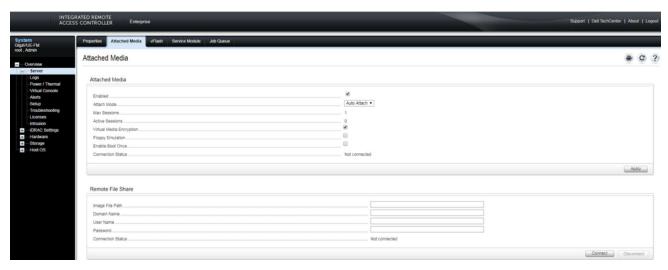


Figure 29: Select ISO Image from RFS

2. In the Remote File Share area, enter the absolute file path of the ISO image, domain name, user name, and password of your NFS or CIFS server.

**Note:** The file path format for NFS server is <*nfs server IP*>:<*path*> *eg* 10.10.10:/home/admin/gigavue-fm-5800.iso

The file path format for CIFS is \\< cifs server IP>\< path to iso> eg. //10.10.10.10/Downloads/gigavue-fm-5800.iso

- 3. Click **Connect**. After connection is established with RFS, the Connection Status changes to **Connected**.
- 4. Set up the First Boot Device to Virtual CD/DVD/ISO. Refer to Set Up First Boot Device.
- 5. Go to **Power > Power Cycle System (cold boot)** to power cycle GigaVUE-FM. Refer to Figure 30: Power Cycle GigaVUE-FM.

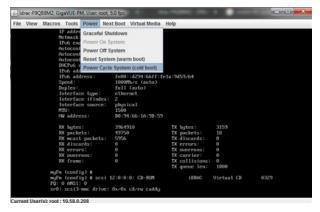


Figure 30: Power Cycle GigaVUE-FM

Wait for 30-45 minutes for the ISO image to install and the data to be migrated.

# GigaVUE-FM Migration on AWS

Use this option if you want to migrate your GigaVUE-FM instance running on the AWS platform.

**Note:** The migration process is applicable only if your current deployment has GigaVUE-FM 5.7. For deployments with GigaVUE-FM 5.6 or lower, you must deploy a fresh installation of GigaVUE-FM 5.8.01 and create the configurations again.

Figure 31: GigaVUE-FM Migration on AWS illustrates the GigaVUE-FM migration process on AWS.

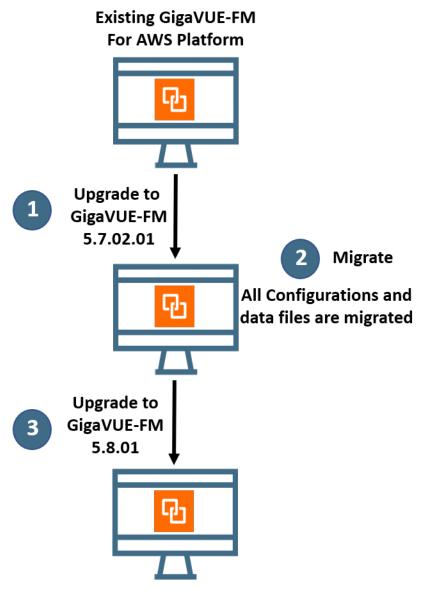


Figure 31: GigaVUE-FM Migration on AWS

#### At-a-Glance

Following is an at-a-glance view of the tasks that you must perform to migrate to GigaVUE-FM 5.8.01:

- **Step 1**: Stop the existing version of the GigaVUE-FM instance. Refer to Stop GigaVUE FM Instance.
- **Step 2**: Create a snapshot of the second disk (dev/sdb) of the FM instance. Ensure to make a note of the snapshot ID. Refer to Create Snapshot of the GigaVUE-FM Instance.
- **Step 3**: Upgrade your GigaVUE-FM 5.7 instance to GigaVUE-FM 5.7.02.01. Refer to Upgrade GigaVUE-FM Instance. To get the software image, contact customer support.
- **Step 4:** Launch GigaVUE-FM 5.7.02.01. While launching the instance, enter the snapshot ID of the old version of the GigaVUE-FM instance (that you have made a note of in Step 2) in **Add Storage > Add New Volume**.
- **Step 5**: Verify if the data from the previous GigaVUE-FM instance is restored in the new instance. Ensure that you set up the same password that you used to access the old GigaVUE-FM instance.
- **Step 6:** Initiate the migration process in GigaVUE-FM 5.7.02.01. Refer to Migrate GigaVUE-FM on AWS.
- **Step 7**: After the migration is complete, stop the GigaVUE-FM 5.7.02.01 instance. Refer to Stop GigaVUE FM Instance.
- **Step 8**: Create a snapshot of the second disk (dev/sdb) of the GigaVUE-FM 5.7.02.01 instance. Ensure to make a note of the snapshot ID. Refer to Create Snapshot of the GigaVUE-FM Instance.
- **Step 9**: Upgrade your GigaVUE-FM 5.7.02.01 instance to GigaVUE-FM 5.8.01. Refer to Upgrade GigaVUE-FM Instance. You can get the software image from AWS Marketplace or Community AMIs.
- **Step 10**: Launch GigaVUE-FM 5.8.01. While launching the instance, enter the snapshot ID of the GigaVUE-FM 5.7.02.01 instance (that you have made a note of in Step 8) in **Add Storage > Add New Volume**.
- **Step 11**: Wait for about 10 minutes for the restore process to get completed before you login to the GigaVUE-FM 5.8.01 instance. Verify if the data from the GigaVUE-FM 5.7.02.01 instance is restored in the GigaVUE-FM 5.8.01 instance. Ensure that you use the same password that you used to access the old GigaVUE-FM instances.
- **Step 12**: Terminate the old GigaVUE-FM and the GigaVUE-FM 5.7.02.01 instances.

Refer to the following sections for details:

- Stop GigaVUE FM Instance
- Create Snapshot of the GigaVUE-FM Instance
- Upgrade GigaVUE-FM Instance
- Migrate GigaVUE-FM on AWS

## Stop GigaVUE FM Instance

Before upgrading the GigaVUE-FM instance, the existing version of the GigaVUE-FM instance must be stopped.

**Note:** Do not terminate the GigaVUE-FM instance.

To stop the GigaVUE-FM instance:

- 1. Login to the AWS account and select **Services > EC2**.
- 2. In the left navigation pane, select **Instances**. Refer to Figure 32: Selecting Instances.

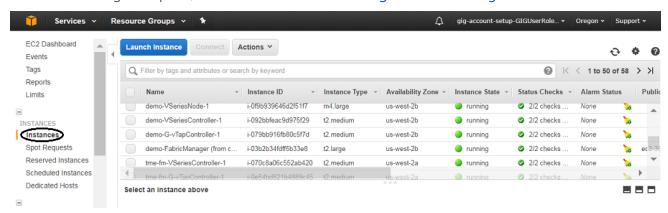


Figure 32: Selecting Instances

3. In the search field, enter the name of the existing GigaVUE-FM instance and select the Instance ID.

**Note:** If the instance ID is the password for logging in to the existing GigaVUE-FM, make note of this instance ID. This instance ID will be used as the password for logging in to the upgraded GigaVUE-FM as well. If the password is changed, use the changed password to login to the upgraded GigaVUE-FM.

4. Go to Actions > Instance State > Stop.

## Create Snapshot of the GigaVUE-FM Instance

You must create a snapshot of the volume of the existing version (dev/sdb) of the GigaVUE-FM instance. Snapshots capture data that are written to your Amazon EBS volume at the time the snapshot is taken. This excludes any data that are cached by any applications or the operating system.

#### To create a snapshot:

1. Select the GigaVUE-FM instance and click the **Description** tab. Refer to Figure 33: Searching for the GigaVUE-FM Instance.

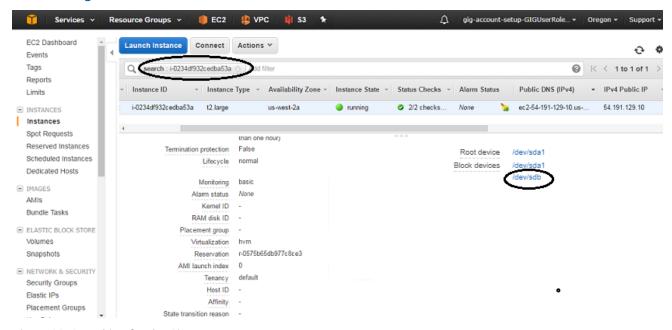


Figure 33: Searching for the GigaVUE-FM Instance

- 2. Scroll down and locate Block Devices. Refer to Figure 33: Searching for the GigaVUE-FM Instance.
- 3. Click the /dev/sdb link. The Block Device dialog box is displayed with the volume ID link. Refer to Figure 34: Opening Block Device Dialog Box.

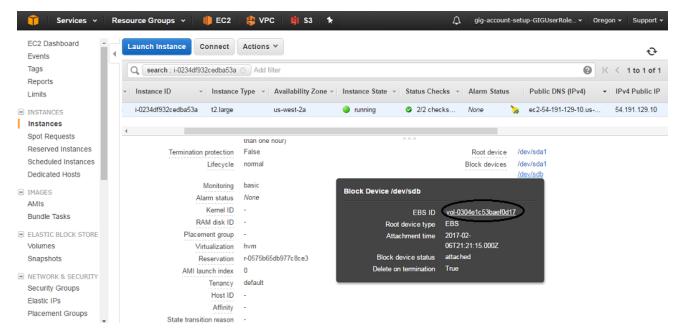


Figure 34: Opening Block Device Dialog Box

4. In the Block Device dialog box, click the volume ID link. The Volumes page is displayed. Refer to Figure 35: Viewing the Volumes Page.

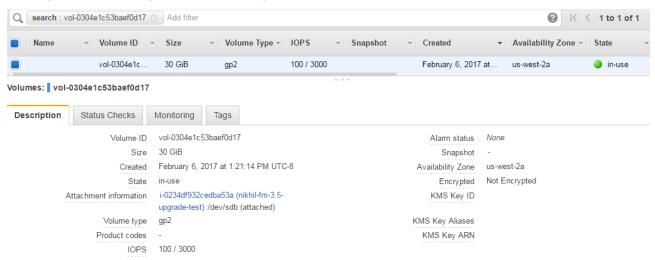


Figure 35: Viewing the Volumes Page

5. Click **Actions** and select **Create Snapshot**. Refer to Figure 36: Selecting Create Snapshot.



Figure 36: Selecting Create Snapshot

The Create Snapshot page appears. Refer to Figure 37: Creating a Snapshot.

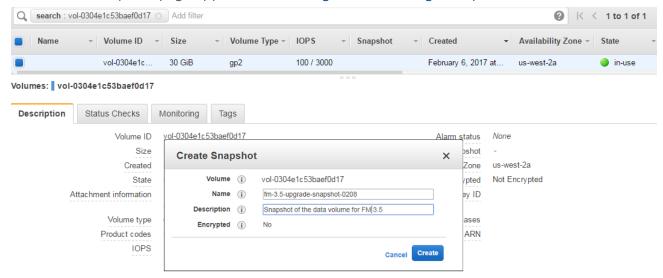


Figure 37: Creating a Snapshot

- 6. Enter the description of the snapshot.
- 7. Click **Add Tag** to add the required key and value.
- 8. Click **Create Snapshot**. It will take several minutes for the snapshot to be created. Refer to Figure 38: Viewing the Snapshot Page.

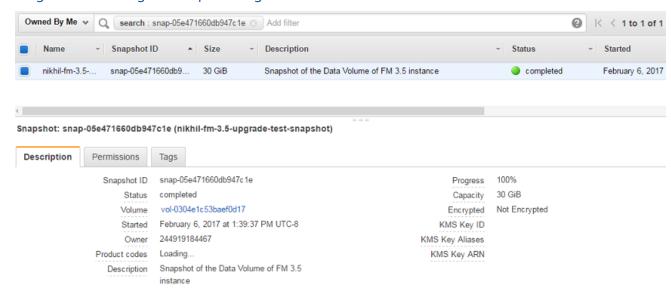


Figure 38: Viewing the Snapshot Page

**Note:** Make a note of the snapshot ID. This snapshot ID will be used to find the snapshot and add the volume while upgrading the GigaVUE-FM instance.

## Upgrade GigaVUE-FM Instance

While upgrading the GigaVUE-FM instance, the Amazon EBS volume must be restored with the data from the snapshot that is created in Create Snapshot of the GigaVUE-FM Instance.

To upgrade the GigaVUE-FM instance:

- 1. Select **Services > EC2**.
- 2. Click Launch Instance and go to AWS Marketplace or Community AMIs.

**Note:** The GigaVUE-FM 5.7.02.01 software image will not be available in the AWS Marketplace or Community AMIs. To get the software image, contact customer support.

- 3. Search for **Gigamon**, locate the latest version of the GigaVUE-FM AMI, and click **Select**.
- 4. Choose the Instance Type. The recommended instance type is **m4.xlarge**.

**Note:** Do not select the t2 instance types as they are not supported.

5. Click **Next: Configure Instance Details.** Refer to Figure 39: Configuring an Instance.

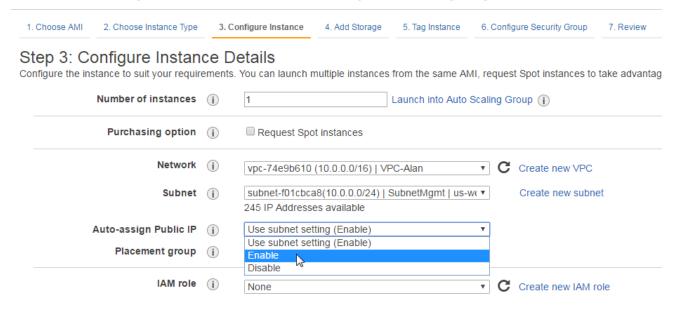


Figure 39: Configuring an Instance

- 6. Enter the following information.
  - **Network** Select the VPC where you want to launch the AMI.
  - **Subnet** Select the management subnet that the instance will use after launch. (Required)
  - Auto-assign Public IP— Select Enable.

- IAM role—Select an existing IAM role to associate with the instance. Refer to the GigaVUE Cloud Suite for AWS Quick Start Guide.
- Click Next: Add Storage and click Add New Volume. Refer to Figure 40: Adding New Volume.

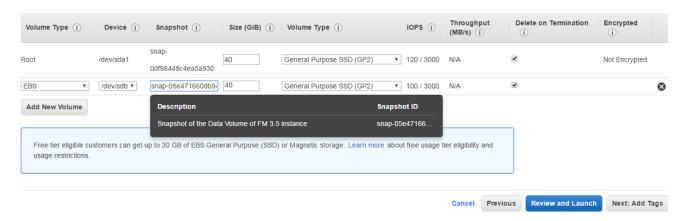


Figure 40: Adding New Volume

- 8. Enter the following storage device settings as shown in Figure 40: Adding New Volume:
  - **Snapshot**—Enter the name of the snapshot that is created in step 6 in the section Create Snapshot of the GigaVUE-FM Instance.
  - Size (GiB)— Enter the storage size of the volume.

**Note:** When upgrading from GigaVUE-FM 5.7 to GigaVUE-FM 5.7.02.01, ensure that the size of the volume is double the volume selected while launching the GigaVUE-FM 5.7 instance.

When upgrading from GigaVUE-FM 5.7.02.01 to GigaVUE-FM 5.8.01, ensure that the size of the volume is same as the volume selected while launching GigaVUE-FM 5.7.02.01.

- **Volume Type** Select a volume type. The recommended volume is General Purpose SSD (GP2).
- **Delete on Termination** Select this check box to make sure the volumes are cleaned up when the GigaVUE-FM instance is removed.
- 9. Click **Next: Tag Instance**, and then add a key-value pair to identify the instance. Refer to Figure 41: Adding a Tag to an Instance.



Figure 41: Adding a Tag to an Instance

- 10. Click **Next: Add Security Group**. Click the **Select an existing security group** check box if the security group is already created. Otherwise, select the **Create a new security group** check box and click **Add Rule**. For more information on creating a security group, refer to the *GigaVUE Cloud Suite for AWS Quick Start Guide*.
- 11. Click **Review and Launch**. Review the instance launch details and click **Launch**.
- 12. Select the SSH key pair, check the acknowledgment check box, and click **Launch Instances** as shown in Figure 42: Selecting an SSH Key Pair.

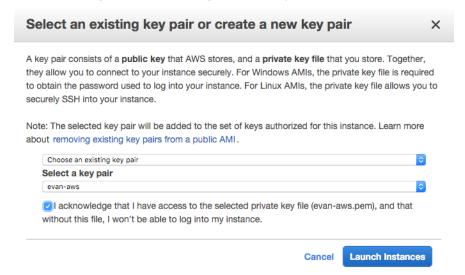


Figure 42: Selecting an SSH Key Pair

- 13. It will take several minutes for the instance to initialize. After the initialization is completed, verify the instance through the Web interface as follows:
  - a. Find the instance and expand the page in the **Descriptions** tab to view the instance information, if necessary.
  - b. Copy the Public DNS value and paste the value into a new browser window or tab.
  - c. Copy the Instance ID of the previous version of the GigaVUE-FM. If the password is changed, use the changed password to login to the upgraded GigaVUE-FM.

**Note:** Do not have multiple versions of GigaVUE-FM instances monitoring the same AWS connection.

## Migrate GigaVUE-FM on AWS

Before proceeding with the migration, ensure that you meet the following prerequisites:

• Ensure that you have upgraded your current GigaVUE-FM instance to GigaVUE-FM 5.7.02.01.

**Note:** To obtain the required software images, contact customer support.

To migrate using this option:

- 1. Log in to GigaVUE-FM 5.7.02.01.
- 2. On the right side of the top navigation bar, click the **Admin** drop-down list, and then select **Software Upgrade**. The Software Upgrade Wizard appears. Refer to Figure 43: Accessing the Software Upgrade Wizard.

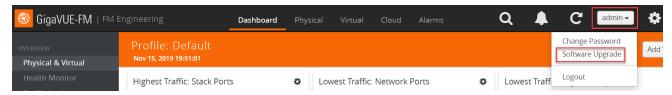


Figure 43: Accessing the Software Upgrade Wizard

- 3. In the Migration Data screen of the Wizard, select the **Data Files** check box to migrate the statistics, events, audit logs, and syslogs. By default, all the configuration files will be migrated.
- 4. Enter the number of days for which you want the data to be migrated.
- 5. Click **Next**. The Migration process begins. The Migration Data screen displays the estimated migration time for the specified number of days of data. All the selected data files along with the configuration files will be exported. This may take several minutes.
- 6. After the export is complete, you must upgrade the GigaVUE-FM instance to GigaVUE-FM 5.8.01 to complete the migration. Refer Figure 44: Migration Process on AWS.
  - For information about how to upgrade GigaVUE-FM in AWS, refer to Upgrade GigaVUE-FM Instance.



Your data export has been completed. To complete the migration, please follow the regular steps and upgrade to the 5.8.00 version

Figure 44: Migration Process on AWS

# Upgrade GigaVUE-FM

Starting with release 5.8.00, GigaVUE-FM introduces several significant changes, which include improvements in usability and performance. These changes include upgrading and replacing databases and changing the underlying operating system. So, you must migrate your existing configurations and data such as audit logs, events, syslogs, and statistics from your current GigaVUE-FM version (either 5.7 or lower) to GigaVUE-FM 5.8.00. You cannot directly upgrade your GigaVUE-FM instance to release 5.8.00. You must first upgrade to GigaVUE-FM 5.7.01.01, a special release that provides the tools to manage and perform the migration. You can then upgrade to GigaVUE-FM 5.8.00. For instructions, refer to Migrate GigaVUE-FM .

This section describes how to upgrade GigaVUE-FM to the latest revision in either a VMware ESXi host or in Microsoft HyperV environment. Starting with release 3.1, Gigamon supports KVM environments. Previous versions of GigaVUE-FM have not been tested in the KVM environment.

**Note:** To upgrade software on H Series or TA Series nodes, refer to the "Upgrading Software on a GigaVUE Node or a Cluster from GigaVUE-FM" section in the GigaVUE-FM User's Guide.

#### Refer to the following sections for details:

- Upgrade an Existing GigaVUE-FM Deployment, which describes the overall upgrade path from an existing GigaVUE-FM deployment.
- How to Use the Snapshot Feature, which describes how to upgrade GigaVUE-FM 3.1 and above to the current version of GigaVUE-FM.

### Upgrade an Existing GigaVUE-FM Deployment

Before starting an upgrade to GigaVUE-FM version, be sure to get the latest image, upgrade information, and release notes from the customer portal. Be sure to review the release notes for the latest release prior to upgrading your instance of GigaVUE-FM.

Once the GigaVUE-FM image is obtained, download it to a server within your environment from which the current instance of GigaVUE-FM can upload it. It is important to save your current running configuration using the facilities provided by the hypervisor before upgrading.

**Note:** When upgrading from any version of GigaVUE-FM lower than 5.4.00, be aware of the minimum memory requirements in the new release. Earlier releases specified 4GB of memory for the OVA template; whereas versions after 5.4.00 require 8GB. If the existing virtual or physical hardware running GigaVUE-FM is configured with less memory than required, then increase the amount of memory available to the GigaVUE-FM machine.

Ensure that GigaVUE-FM time is set correctly to ensure accuracy of the trending data that is captured.

You can upgrade the existing deployment of GigaVUE-FM either from the CLI or from the GigaVUE-FM UI.

**Note:** When upgrading GigaVUE-FM, you must also upgrade GigaVUE-VM. For the steps to upgrade GigaVUE-VM, refer to the "Bulk Upgrading GigaVUE-VM Nodes" section in the GigaVUE Cloud Suite for VMware Configuration Guide.

# **Upgrade from CLI**

There are five steps on how to upgrade an existing GigaVUE-FM deployment to the current release.

- 1. Verify that less than two images are present on the GigaVUE-FM server.
- 2. Download the new image into GigaVUE-FM using either HTTP, HTTPS, FTP, TFTP, SCP, or SFTP.
- 3. Install the new image.
- 4. Change boot partition.
- 5. Reboot GigaVUE-FM.

#### **Notes:**

- It is important to log in with the **admin** account/username when upgrading the image on the existing GigaVUE-FM.
- GigaVUE-FM 3.2 and higher versions compute node health status differently than previous versions. After the upgrade completes, rediscover the nodes to recompute node health status.
- Prior to GigaVUE-FM 3.2, backup files for physical nodes were in a binary format. Starting with GigaVUE-FM 3.2, backup and restore files use a text based format and binary backup or restore on physical nodes is not supported. When upgrading from a version lower than version 3.2, backup your configuration prior to upgrading to the current version of GigaVUE-FM if you desire, but the files will be in a binary format. Existing binary backups are not visible to GigaVUE-FM. For binary backups, you must back up the node using the CLI commands rather than GigaVUE-FM. For more information about the CLI commands, refer to the GigaVUE-OS CLI Reference Guide.

• When using the Firefox or IE browser, clear the cache before upgrading to prevent issues with the browser.

#### Step 1: Verify that only two images are present on GigaVUE-FM server

**Note:** It is important that you log in with the **admin** account/username when upgrading the image on the existing GigaVUE-FM.

- 1. To begin an upgrade, open a SSH session or console session within the vSphere Client, and log int o GigaVUE-FM and change to configure mode, by entering the following on the command line:
  - a. Type en <Enter> to switch to Enable mode.The system prompt changes from [hostname] > to [hostname] #.
  - b. Type **config t <Enter>** to switch to Configure mode.

The system prompt changes from [hostname] # to [hostname] (config) #

Figure 1: Console Login to vSphere Clientshows an example of the login console.

2. Check the number of images currently available for installation with the following command from the GigaVUE-FM CLI:

```
(config) # show images
```

**Important:** If there are more than two images listed in the **Images available to be installed** section of the **show images** output, Gigamon recommends that you use the **image delete** command to remove existing images until the system has only a single image. Both GigaVUE-FM and GigaVUE-VM will display a warning if you attempt to fetch a third image.

3. To delete an existing image from the server use the following command:

```
(config) # image delete fma3300.img
```

4. Go to Step 2: Fetch the latest release of GigaVUE-FM.

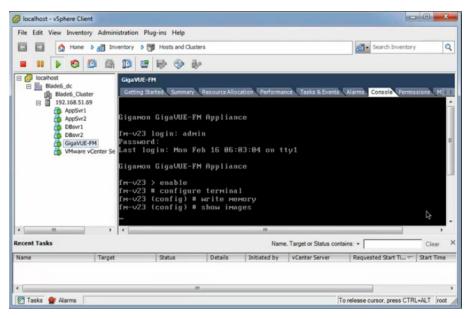


Figure 1: Console Login to vSphere Client

#### Step 2: Fetch the latest release of GigaVUE-FM

Gigamon provides an FTP site where the new release image file resides. To fetch the latest release, do the following:

- 1. Locate the image file for the new release. Image files are named using a fmaxxxx.img format. The xxxx indicates the version and build number (for example, **fma3500.img** for the v3.5 release).
- 2. Copy the image to your file server.
- 3. Use the **image fetch** command to retrieve the software image from your file server. The CLI shows you the progress of the image fetch with a series of hash marks, returning you to the system prompt when complete.

**Note:** The **image fetch** command supports the use of HTTP, HTTPS, FTP, TFTP, SCP, or SFTP for the transfer of images.

a. The following command uses SCP to retrieve the **fma3500** image from the image server with the IP address of 10.115.0.100 using login and password.

```
(config) # image fetch scp://user:password@10.115.0.100/fma3500.img
```

b. The following command uses FTP to retrieve the same image using login and password as well.

```
(config) # image fetch ftp://user:password@10.115.0.100/fma3500.img
```

c. The following command uses TFTP to retrieve the same image without using a password but using a DNS server instead of an IP address for the download server.

(config) # image fetch tftp://myserver.gigamon.com/tftpboot/fma3500.img

Ensure that you specify the base directory when using TFTP

4. Go to Step 3: Install the latest release of the GigaVUE-FM.

#### Step 3: Install the latest release of the GigaVUE-FM

Use the **image install** command to install the downloaded image file. When running the following command, the process will first verify that the filename used for the image is suitable for installation prior to installing the image. For example, to install the image downloaded in the previous step:

```
(config) # image install fma3400.img
```

#### Step 4: Change the boot partition

Set the image you just installed to boot next with the following command. This ensures that at the next boot the latest image will be picked up.

```
(config) # image boot next
```

#### Step 5: Reboot

The following command shuts down the current instance of GigaVUE-FM and reloads. If Step 4 is performed, upon reboot, the new image is used.

```
(config) # reload
```

#### Step 6: Upgrade GigaVUE-VM

After upgrading GigaVUE-FM, you must also upgrade any deployed GigaVUE-VMs. Otherwise, maps may not work and the GigaVUE-VMs will be unreachable. For information about upgrading GigaVUE-VM, refer to the "Bulk Upgrading GigaVUE-VM Nodes" section in the GigaVUE Cloud Suite for VMware Configuration Guide.

### CLI Summary of the Upgrade Path

The following summarizes the CLI commands used to upgrade an image after logging in from the console:

```
> en
# config t
(config) # write memory
(config) # show images
(config) # image delete fma3400.img
(config) # image fetch tftp://192.158.51.41/fma3500.img
(config) # image install fma3500.img
```

```
(config) # image boot next
(config) # reload
```

# Upgrade from GigaVUE-FM UI

This section describes the steps to upgrade GigaVUE-FM from the UI. You can upgrade by using an image that is located on an external image server, or you can use GigaVUE-FM as the image server.

#### Note:

- When using the GigaVUE-FM UI to upgrade GigaVUE-FM, you can only upgrade to the currently available version or to the next version. You cannot downgrade.
- When using the Firefox browser, clear the cache before upgrading to prevent issues with the browser

### Upgrade from External Image Server

This section provides the steps for upgrading the GigaVUE-FM from an image stored on an external server. The image can be transferred from the server to the GigaVUE-FM using either SCP or TFTP file protocols.

To upgrade with an image stored on an external image server, do the following:

- Upload the image to the external image server to make it available to GigaVUE-FM.
   To obtain software images, register on the customer portal and download the software. To reach the customer portal, go to https://gigamoncp.force.com/gigamoncp/.
- 2. Add the image server to GigaVUE-FM. This stores the credentials, image file name, and IP address of the server on GigaVUE-FM.

To add the image server:

- a. In GigaVUE-FM, click on the top navigation bar.
- b. Select **System** on the left navigation panel and go to **Images > External Servers**. The External Servers page displays as shown in Figure 2: Adding Image Servers.

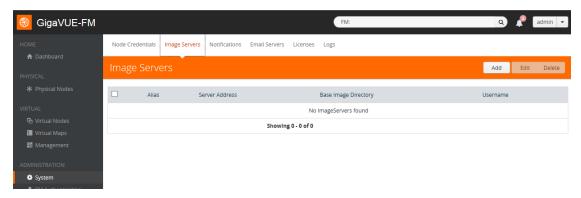


Figure 2: Adding Image Servers

c. Click Add. The Add External Server page displays as shown in Figure 3: Add External Server



Figure 3: Add External Server

- d. On the Images Server page, specify the following:
- An alias to help identify the image server.
- The host IP address of the server.
- The protocol to use for the download: SCP or TFTP.
- The user name and password if you selected SCP. They are not needed for TFTP.
- e. Click Save.

The External Server page displays the newly added external server. From the **Admin** drop-down list in the top right corner of the window, select **Upgrade** to open the FM Image Upgrade page shown in Figure 4: FM Image Upgrade Page.



Figure 4: FM Image Upgrade Page

To monitor the progress and status of the upgrade, click GigaVUE-OS and GigaVUE-FM Administration Guide".

3. On the FM Image Upgrade page, click on the Image Server field and select the server added in Step 2.

- 4. In the Image File Path, enter the image path and filename on the external file server.
- 5. Upgrade any deployed GigaVUE-VMs.

After upgrading GigaVUE-FM, you must also upgrade any deployed GigaVUE-VMs. Otherwise, maps may not work and the GigaVUE-VMs will be unreachable. For information about upgrading GigaVUE-VM, refer to the "Bulk Upgrading GigaVUE-VM Nodes" section in the GigaVUE Cloud Suite for VMware Configuration Guide.

### Upgrade with GigaVUE-FM as the Image Server

This section provides the steps for upgrading GigaVUE-FM when GigaVUE-FM is used as the file server instead of an external server.

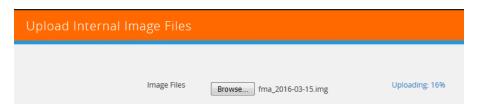
Upgrading from GigaVUE-FM 5.6.01 to 5.7.xx.00 or 5.7.01 via an internal image will not work because internal server storage does not function during the upgrade procedure.

Alternatively, you can upgrade using an external image server or the GigaVUE-FM CLI or you can use the GigaVUE-FM internal storage to store the GigaVUE-FM image, and point to it as if it were an external server as follows:

- 1. Add the GigaVUE-FM 5.7 image under the GigaVUE-FM internal image server (/con-fig/gigamon/imagesRepo).
- 2. Configure the GigaVUE-FM external server with the GigaVUE-FM IP address.
- 3. Initiate the upgrade process, select External Image Server, and then specify the path to the GigaVUE-FM Image file that you added in step 1 (/con-fig/gigamon/imagesRepo/fma5700.img).

To upgrade a GigaVUE-FM using internal image files, do the following:

- 1. Download the images from the Gigamon website and place them where they can be available for uploading to GigaVUE-FM.
  - To obtain software images, register on the customer portal and download the software. To reach the customer portal, go to https://gigamoncp.forc.com/gigamoncp/.
- 2. Upload the images file to GigaVUE-FM.
  - a. Click on the top navigation bar. In the left navigation panel, go to **System > Images > Internal Image Files**.
  - b. On the Internal Image File page, click **Upload**.
  - c. Click **Browse** to locate the image file.
  - d. Click **OK** to upload the file. The page displays the progress of the upload.



After the upload completes, you can see the GigaVUE-FM image to use for the upgrade on the Internal Images Files page.

3. Click the **Admin** drop-down list on the top right of the window and select **Upgrade** as shown in Figure 5: Selecting Upgrade.

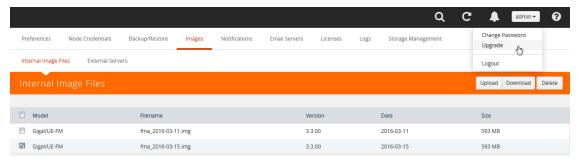


Figure 5: Selecting Upgrade

4. On the FM Image Upgrade page, click in the **Image Server** field and select **Internal Image Server**.



5. From the **Version** drop-down list, select the version to which you are upgrading.

**Note:** You can only upgrade to another instance of the current version or the immediate next version. Downgrading to a lower version is not supported through the UI.

6. Click **Upgrade**.

To monitor the progress and status of the upgrade, click on the top navigation bar and select **Events** on the left navigation panel. Also, email notifications are sent if email notifications have been configured. Upgrade any deployed GigaVUE-VMs.

After upgrading GigaVUE-FM, you must also upgrade any deployed GigaVUE-VMs. Otherwise, maps may not work and the GigaVUE-VMs will be unreachable. For information about upgrading GigaVUE-FM, refer to the "Bulk Upgrading GigaVUE-VM Nodes" section in the GigaVUE Cloud Suite for VMware Configuration Guide.

**Note:** If you are using FireFox, clear the cache before upgrading to prevent issues with the browser

### How to Use the Snapshot Feature

This procedure is only valid for upgrading from GigaVUE-FM v3.0 and above. For upgrades from pre-3.0 releases, review the GigaVUE-FM v3.0 User's Guide and upgrade to release GigaVUE-FM v3.1. Then follow the steps below to upgrade to the current release version of GigaVUE-FM.

**Note:** You cannot directly upgrade from a pre-3.3 releases to the current release. You can only upgrade from GigaVUE-FM v3.3 or v3.4 release.

- 1. Prior to upgrading, ensure that the available **memory size is at least 8GB** prior to upgrading to the new GigaVUE-FM release. If the available memory size is less than 8GB, it will cause out of memory issues. Also, at least 2 vCPU are required.
- 2. When upgrading from v3.1, it's a good idea to use the vSphere client's **Snapshot** feature to record the current state of the GigaVUE-FM virtual machine. Steps to use **Snapshot** feature are as follows:
  - a. Log into the vSphere client and navigate to the Datacenter or Cluster level where the GigaVUE-FM installation is located.
  - b. Right-click the GigaVUE-FM entry in the vSphere client and select the **Take Snapshot** option.

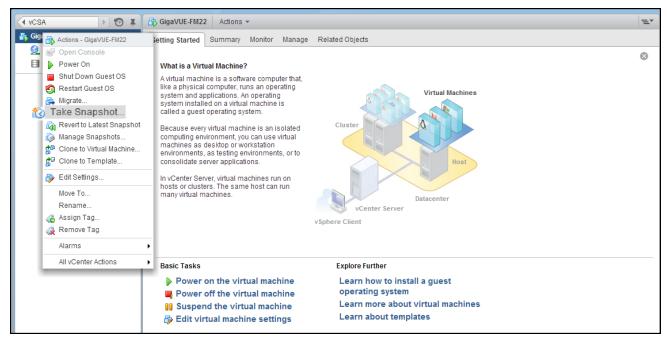


Figure 6: "Take Snapshot" Command to Preserve Current Settings Prior to Upgrade

c. Follow the system prompts to record a snapshot of GigaVUE-FM's current state.

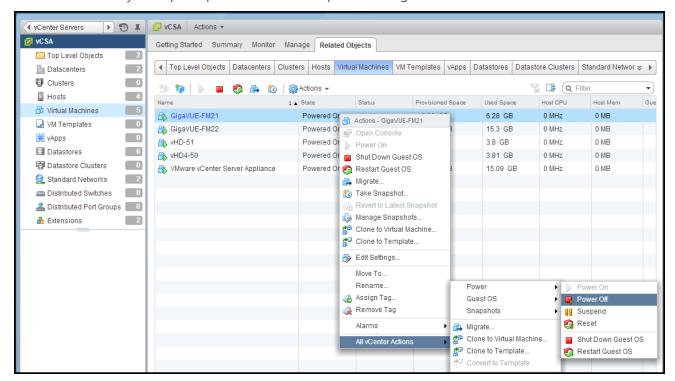


Figure 7: Power Off Command

# **Related Commands**

This section describes the related commands for GigaVUE-FM.

#### fmctl

Use the fmctl command to manage GigaVUE-FM-related configurations.

The fmctI command has the following syntax:

```
fmctl
   image
          fetch <download URI> [<filename>]
          list [details] [<filename>]
          install <filename> [next|location {1|2}]
          boot [next|location {1|2}]
          delete [force] <filename>
          {move|rename} <old filename> <new filename>
          show
      jump-start
      {get|show} {ip|ntp|hostname|domain|fqdn}
      set ip dhcp
      set ip [static] <address/cidr> <gateway> <dns1>[,<dns2>[,...]
      set ntp {disable|[enable] <server1>[,<server2>[,...]}
      set hostname < hostname>
      set domain <domain>
      set fqdn <hostname> <domain>
      set/get/show searchdomains [<domain1>[,<domain2>[,...]]]
      set/get/show nameservers [<dns1>[,<dns2>[,...]]]
      --interface <interface name>
```

The following table describes the arguments for the **fmctl** command:

**Related Commands** fmctl

Argument	Description
image fetch <download uri=""> [<filename>]</filename></download>	Retrieves a saved configuration file from a remote host. Use HTTP(S), FTP, TFTP, or SCP to retrieve the file. The format for the download URL is as follows:
	[protocol]://username [:password]@hostname/path/filename
	For example, the following command retrieves the configuration file named myconfig from the FTP server at 192.168.1.10 using the <b>robh</b> account with the <b>xray</b> password:
	fmctl image fetch ftp://robh:xray@192.168.1.10/myconfig
	You can also use the <b><filename></filename></b> argument to give the retrieved file a new name on the GigaVUE H Series node. For example, the following command retrieves <b>myconfig</b> and names it <b>newconfig</b> on the node:
	fmctl image fetch scp://bbochy:catch1@192.168.1.75/myconfig newconfig
	<b>Note:</b> You cannot retrieve a file with the same name as the currently active configuration file.
image list	Provides the list of image file names available in GigaVUE-FM.
	For example:  fmctl image list
image install <filename> [next location</filename>	Installs the image file.
{1 2}]	For example, use the following command to install the image file on the next partition:
	fmctl image install gigamon-gigavue-fm- 5.9.00-160194-trial.img next
	Use the following command to install the image file on the specified partition:
	fmctl image install gigamon-gigavue-fm- 5.9.00-160194-trial.img location 1
	<b>Note:</b> Ensure that your current partition is not the same as the partition you specified for installation. Else, an error is displayed.
image boot [next location {1 2}]	Boots the image file on the specified partition. Ensure that the partition has the installed image file.
	For example, use the following command to boot the image file on the next partition:

**Related Commands** fmctl

Argument	Description
	fmctl image boot next Use the folloaing command to boot the image file on the specified partition: fmctl image boot location 1  Note: GigaVUE-FM reboots immediately.
image delete [force] <filename></filename>	Deletes the named image file.  For example:  fmctl image delete myimage
image {move rename} <old filename=""> <new filename=""></new></old>	Moves or renames the specified image file. For example, the following command renames myimage as newimage:  fmctl image rename myimage newimage
image show	Displays the last boot partition.  For example:  fmctl image show
jump-start	Runs the configuration wizard for the initial setup of GigaVUE-FM. Refer to Perform Initial Configuration.
set mapping <fqdn> <ip address=""></ip></fqdn>	Maps the FQDN with the IP address of GigaVUE-FM.  For example:  fmctl set mapping fm 10.10.10.1  Use the following command to remove the mapping:  fmctl set mapping fm
{get show} {ip ntp hostname domain fqdn}	Use to either fetch or display the IP address, NTP configurations, host name, domain name, or FQDN .  For example:  fmctl get {ip ntp hostname domain fqdn}  fmctl show {ip ntp hostname domain fqdn}
set ip dhcp	Configures the management interface to use DHCP.  For example:  fmctl set ip dhcp
set ip [static] <address cidr=""> <gateway> <dns1>[,<dns2>[,]</dns2></dns1></gateway></address>	Configures the static IP address and gateway on the management interface. You can also choose to configure DNS.  fmctl set ip static 10.115.46.72/21 10.115.40.1 10.10.1.20
set ntp {disable [enable] <server1> [,<server2>[,]}</server2></server1>	Use to enable or disable NTP for synchronization of the system's clock.

**Related Commands** 86 fmctl

Argument	Description
	For example, the following command disables NTP:
	fmctl set ntp disable
	You choose to enable NTP and add NTP servers. For example, the following command enables NTP and adds a NTP server:
	fmctl set ntp enable 192.168.1.10
set hostname <hostname></hostname>	Configures the hostname.
	For example:
	fmctl set hostname myfm
	<b>Note:</b> Ensure that you log out and re-login to the GigaVUE-FM to view the changes.
set domain <domain></domain>	Configures the domain for GigaVUE-FM.
	fmctl set domain gigamon.com
set fqdn <hostname> <domain></domain></hostname>	Configures the Fully Qualified Domain Name (FQDN) for the current GigaVUE-FM.
	fmctl set fqdn myfm gigamon.com
set/get/show searchdomains [ <domain1>[,<domain2>[,]]]</domain2></domain1>	Use the command to display a list of domains for the current GigaVUE-FM
	fmctl set searchdomains
	fmctl get   show searchdomains
set/get/show nameservers [ <dns1> [,<dns2>[,]]]</dns2></dns1>	Use the command to display a list of name servers for the current GigaVUE-FM
	fmctl set nameservers
	fmctl get   show nameservers
interface <interface name=""></interface>	Changes the management interface to be used for various configurations.
	For example, use the following command to change eth1 as the management interface to use DHCP:
	fmctlinterface eth1 ip dhcp

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# Additional Sources of Information

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

- Documentation
- Documentation Feedback
- Contact Technical Support
- Contact Sales
- The Gigamon Community

### **Documentation**

The following table provides a list of the additional documentation provided for GigaVUE H Series and TA Series nodes. "\*" indicates new documents in this release. "\*\*" indicates documents that are renamed in this release.

<b>Note</b> : Release Notes are not included in the online documentation. Registered Customers can download the Release Notes from the Software & Docs page on to My Gigamon. Refer to How to Download PDFs from My Gigamon.
<b>TIP</b> : If you keep all PDFs for a particular release in common folder, you can easily search across the doc set by opening one of the files in Acrobat and choosing <b>Edit &gt; Advanced Search</b> from the menu. This opens an interface that allows you to select a directory and search across all PDFs in a folder.

Table 1: Documentation Suite for Gigamon Products

Summary	Document
complete doc set for the respective release, minus Release     Notes, in a zip file	All-Documents Zip
<ul> <li>how to unpack, assemble, rack-mount, connect, and initially configure the respective GigaVUE devices</li> <li>reference information and specifications for the respective</li> </ul>	GigaVUE-HC1 Hardware Installation Guide
	GigaVUE-HC2 Hardware Installation Guide
GigaVUE devices	GigaVUE-HC3 Hardware Installation Guide
	GigaVUE TA Series Hardware Installation Guide
Software Installation and Upgrade Guides	
how to install GigaVUE-FM on VMware ESXi, MS Hyper-V, and KVM	**GigaVUE-FM Installation and Migration Guide
<ul> <li>how to migrate GigaVUE-FM on VMware ESXi, Hardware Appliance, and AWS</li> </ul>	
<ul> <li>how to upgrade the embedded GigaVUE-OS on GigaVUE H Series and GigaVUE TA Series nodes</li> </ul>	GigaVUE-OS Upgrade Guide
Administration Guide	
how to administer the GigaVUE-OS and GigaVUE-FM software	GigaVUE-OS and GigaVUE-FM Administration Guide
Configuration and Monitoring Guides	
how to install, deploy, and operate GigaVUE-FM	GigaVUE-FM User's Guide
how to configure GigaSMART operations	
how to deploy the GigaVUE Cloud Suite solution in any cloud platform	GigaVUE Cloud Suite for AnyCloud Configuration Guide

Summary	Document
how to configure the GigaVUE Cloud Suite components and set up traffic monitoring sessions for the respective cloud platform	GigaVUE Cloud Suite for AWS Configuration Guide
	GigaVUE Cloud Suite for AWS QuickStart Guide
	*GigaVUE Cloud Suite for AWS Secret Regions Configuration Guide
	GigaVUE Cloud Suite for Azure Configuration Guide
	GigaVUE Cloud Suite for Kubernetes Configuration Guide
	*GigaVUE Cloud Suite for Nutanix Configuration Guide
	GigaVUE Cloud Suite for OpenStack Configuration Guide
	GigaVUE Cloud Suite for VMware Configuration Guide
Reference Guides	
<ul> <li>library of GigaVUE-OS CLI (Command Line Interface) commands used to configure and operate GigaVUE H Series and TA Series devices</li> </ul>	GigaVUE-OS CLI Reference Guide
guidelines for the different types of cables used to connect Gigamon devices	GigaVUE-OS Cabling Quick Reference Guide
compatibility information and interoperability requirements for Gigamon devices	GigaVUE-OS Compatibility and Interoperability Matrix
<ul> <li>samples uses of the GigaVUE-FM Application Program Interfaces (APIs)</li> </ul>	GigaVUE-FM REST API Getting Started Guide
<b>Note:</b> Content will be merged into the GigaVUE-FM User's Guide in a future release.	
Release Notes	
<ul> <li>new features, resolved issues, and known issues in this release</li> <li>important notes regarding installing and upgrading to this release</li> </ul>	GigaVUE-OS, GigaVUE-FM, GigaVUE-VM, and GigaVUE Cloud Suite Release Notes
<b>Note:</b> In 5.7.00, the Release Notes documents combines GigaVUE-OS, GigaVUE-FM, and GigaVUE Cloud Suite into one document.	

Summary	Document	
In-Product Help		
how to install, deploy, and operate GigaVUE-FM. Provided from the GigaVUE-FM interface.	GigaVUE-FM Online Help	
the web-based GUI for the GigaVUE-OS. Provided from the GigaVUE-OS H-VUE interface.	GigaVUE-OS H-VUE Online Help	

**Note:** Registered customers can log in to My Gigamon to download documentation for specific releases under Software & Documentation Downloads. Refer to How to Download PDFs from My Gigamon.

### How to Download PDFs from My Gigamon

#### To download release-specific PDFs:

- 1. Log in to My Gigamon
- 2. Click on the **Software & Documentation** link.
- 3. Use the **Product** and **Release** filters to find documentation for the current release. For example, select Product: "GigaVUE-FM" and Release: "5.7," enter "pdf" in the search box, and then click **GO** to view all PDF documentation for GigaVUE-FM 5.7.xx.

#### **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

# **Contact Technical Support**

See https://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.

#### **Contact Sales**

Use the following information to Gigamon channel partner or Gigamon sales representatives.

**Telephone**: +1.408.831.4025

Sales: inside.sales@gigamon.com

Partners: www.gigamon.com/partners.html

### **Premium Support**

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

### 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