

# GigaVUE Licensing Guide

GigaVUE-FM and GigaVUE-OS

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(See Change Notes for document updates.)

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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.

Product	Document	Date	Change Notes
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# About this Guide

Gigamon offers both fixed and floating licensing options for its various product portfolios. This guide describes the different types of software licenses and provides details on how to install, activate, and manage the licenses.

Refer to the following sections for details:

- License Models
- GigaVUE-FM Licenses
- GigaSMART Application Licenses
- GigaVUE-OS and GigaVUE-OS Module Licenses
- GigaVUE TA Series Licenses
- Volume-Based Licenses (Cloud License)
- Licenses GUI Options in GigaVUE-FM
- License Command
- Term License Behavior after expiry (from Software Version 6.1.00)
- Gigamon License Portal
- FAQs For Licensing

**Note:** This guide does not provide details on the licenses for the hardware devices.

# License Models

Model	Description	Features	
Fixed Licensing Model	Licenses of this model are termed as <b>Node-locked</b> <b>licenses.</b> License is attached to a specific card serial number or chassis serial number.	<ul> <li>License key is generated through the licensing portal.</li> <li>You can manage the licenses from CLI or through GigaVUE-FM GUI.</li> <li>Automatic renewal of licenses is not supported. You must manually create the license in the Licensing Portal, import the licenses to GigaVUE-FM and assign the new licenses in GigaVUE-FM.</li> </ul>	
Flexible Licensing Model	Licenses of this type are termed as <b>Floating</b> <b>licenses</b> . License is not attached to a specific card or chassis. You can move the licenses across the cards within a chassis or across the chassis.	<ul> <li>License file with pooled floating licenses is generated in License Portal, and imported into GigaVUE- FM through GUI.</li> <li>You can manage the licenses using GigaVUE-FM.</li> <li>Automatic renewal of licenses is supported.</li> </ul>	
	<b>Note:</b> Only the GigaSMART application licenses can be moved across the chassis or cards. Note that you can move licenses only within the same platform devices.		
Volume-based Licensing Model	Licenses are offered based on volume. Licenses of this type are termed as <b>Volume-based</b> licenses .	License file with bundled volume license is generated in the License Portal, and imported into GigaVUE-FM through GUI.	

The following licensing models are implemented at Gigamon:

Based on the duration, licenses can be term licenses or perpetual licenses:

	Software and Feature Usability	Support	Expiry and Renewal
<ul> <li>Term Licenses can be:</li> <li>Evaluation</li> <li>Subscriptions: Subscription licenses are available as monthly or yearly subscriptions (1, 3, 5, and 7 year term)</li> </ul>	Until the license expires	Elite Support included with the license.	<ul> <li>License expires and must be renewed.</li> <li>Evaluation licenses expire after 45 days. You must upgrade to a fully licensed software at the end of the evaluation period.</li> <li>Subscription licenses expire at the end of the subscription period and can be either renewed or upgraded.</li> </ul>

Perpetual Licenses	Can be used indefinitely	Elite support to be purchased separately	Does not expire.
		separately.	

### Notes

- **Managing Licenses:** GigaVUE-FM must be installed for purchasing and managing floating licenses. Node-locked licenses can be managed either from the GigaVUE-FM GUI or using the Command Line Interface.
- **Term License Behavior:** Refer to the Term License Behavior after expiry (from Software Version 6.1.00) section for more details.

# GigaVUE-FM Licenses

GigaVUE-FM is provisioned by default with a base license. With the base license you can add one physical node, one virtual node, and 10 virtual tap points for each of the applicable cloud platforms. Contact your Gigamon representative to get an evaluation license for GigaVUE-FM.

Table 1: GigaVUE <b>-</b> FM	Evaluation	License	Package

License Types	Physical Nodes	Virtual Nodes	OpenStack/AWS/Azure	Features available	Notes
GigaVUE-FM Evaluation	Up to 200	1 (included as Base)	10 Virtual TAP Points	All features available with Prime for the evaluation period.	License automatically expires after 45 days.

Evaluation licenses are not recommended for deployment in production environment. At the end of the evaluation period, if you fail to upgrade GigaVUE-FM to a fully licensed version, the features are disabled automatically.

**Note:** To run only GigaVUE-VM, there is no requirement to purchase additional licenses for GigaVUE-FM. For information about GigaVUE-VM licensing, refer to the *GigaVUE Cloud Suite Deployment Guide - VMware*.

# GigaVUE-FM License Packages

Upgrade packages for GigaVUE-FM are available if you have already purchased GigaVUE-FM. The packages allow users to upgrade from a 5-pack option to a 10-pack or a Prime package. There is also an option to upgrade from a 10-pack to a Prime package. To find out more about the upgrade purchase, contact your Gigamon Sales representative.

The following table summarizes the GigaVUE-FM License packages.

Table 2: GigaVUE-FM License Packages

Features	Base / Evaluation License (Free of charge)	5-Pack	10-Pack	Prime
Physical Node Count	1	Up to 5	Up to 10	<sup>1</sup> Greater than 10 nodes.
Rest API	Yes	Yes	Yes	Yes
Audit, Events Logs	Yes	Yes	Yes	Yes
Firmware Upgrade	Yes	Yes	Yes	Yes
Configuration Backup	Yes	Yes	Yes	Yes
Dashboard	<ul> <li>Only the following Static Widgets are displayed:</li> <li>Top 10 Network Ports by Traffic</li> <li>Top 10 Tool Ports by Traffic</li> <li>Top 10 Maps by Traffic</li> <li>Audit Logs By Result</li> <li>Events By Severity</li> <li>Ports Link Status Summary</li> <li>Unhealthy Maps Status Summary</li> <li>Unhealthy Flows</li> </ul>	Customizable	Customizable	Customizable
Reports	No	Yes	Yes	Yes
Trending Data	1 Day	1 Week	1 Month	1 Month

<sup>1</sup>Refer to the GigaVUE-FM specifications for the maximum number of nodes.

# Manage GigaVUE-FM License

You can manage GigaVUE-FM licenses from the GigaVUE-FM GUI. To access the GigaVUE-FM license(s) page:

- 1. On the left navigation pane, click 🕸
- 2. Select System > Licenses > Fabric Manager.

This page lists the Challenge MAC address of GigaVUE-FM, GigaVUE-FM license type and the applicable licenses for the various cloud platforms and the virtual nodes.

۲	Licenses Fabric Manager	Node Licenses ~ Entitlement	Activation - Expiry Settings	Q C ¢ ∛×®×
<u>.u.</u>	Q Find		SUMMARY LICENSES	
	SETTINGS	*		
÷	✓ System	GigaVUE-FM License		
	Preferences	NAME	INFO	
	SSH	Challenge MAC	00:50:56:95:26:de	
	SNMP	GigaVUE-FM License	Prime - Licensed for 1000 nodes	
	Packet Errors and Drops			
	GigaStream Imbalance	GigaVUE Cloud Suite License		
	Traffic Drop Identification	NAME	INFO	
	Port Discovery	GigaVUE Cloud Suite for VM License	Active - Licensed for 1 GigaVUE-VM Nodes	
	Mobility	GigaVUE Cloud Suite for NSX-T License	Licensed for 10 Virtual Tap Points	
	Node Details	GigaVUE Cloud Suite for OpenStack License	Licensed for 10 Virtual Tap Points	
	IP Resolver	GigaVUE Cloud Suite for Kubernetes License	Licensed for 10 Virtual Tap Points	
	Backup/Restore			
	Images	GigaVUE Cloud Suite for Nutanix License	Licensed for 10 Virtual Tap Points	
	Certificates	GigaVUE Cloud Suite for AWS License	Licensed for 10 Virtual Tap Points	
	Event Notifications	GigaVUE Cloud Suite for Azure License	Licensed for 10 Virtual Tap Points	
	External Data Server	GigaVUE Cloud Suite for AnyCloud License	Licensed for 10 Virtual Tap Points	

Use the following buttons to manage GigaVUE-FM licenses:

Button	Description
Activate License	Use this button to activate the GigaVUE-FM licenses. Refer to Activate GigaVUE-FM License section for more information.
Delete	Use this button to delete the licenses. Refer to Delete GigaVUE-FM License the details.
Revoke	Use to button to revoke the licenses. Refer to Revoke License section for details.
Export	Use this button to export the details in the Activate Licenses page to a CSV or XLSX page.

### Obtaining a New License

Contact your Sales representative to obtain a new license for GigaVUE-FM Nodes (see Contact Sales for the contact information).

### Activate GigaVUE-FM License

To activate the license key, you need the following:

Entitlement ID	Locate the email sent to you by Gigamon containing the licensing information for your installation. This email contains one or more <b>EID</b> (Entitlement ID) values.
Challenge MAC	Locate the Challenge MAC displayed in the GigaVUE-FM GUI. The license is only valid with the corresponding MAC address. If GigaVUE-FM is deleted or re-installed, contact Gigamon Support

To activate a license:

,

- 1. On the left navigation pane, click 🕸 , and select System > Licenses > Fabric Manager.
- 2. Click **Activate** to activate a GigaVUE-FM license.

,	ises		
In order to activate y	our licenses, follow the steps below		
Step 1			
Download this inventor	y (.json) file, which contains everything we	need to know about your GigaVUE-FM.	
You can choose to incluo or GigaSMART card by		lude the IP or Hostname, you will have to identify the c	has
IP Address	Excluded	This file will only be valid for the next 1 hour. If	
Hostname	Excluded	<ol> <li>you need to export a new file, you can download your file again.</li> </ol>	
Download JSON	Fabric Inventory (.json)		
Step 2			
-	o your Gigamon license portal, after choosin	ng a SKU to activate in the portal.	
Upload the above file to	o your Gigamon license portal, after choosin	ng a SKU to activate in the portal.	
Step 3		ng a SKU to activate in the portal. wide you with a license activation (.lic) file. Import that	file
Upload the above file to Step 3 After uploading the inve			1

- 3. The Activate your license pop-up appears with instructions to:
  - a. Download the Fabric Inventory File, which is a JSON file that contains the details about GigaVUE-FM.For more information about fabric inventory file, refer to the section What is a Fabric Inventory File? in the *FAQs for Licensing* chapter.
  - b. Upload the Fabric Inventory file to the Gigamon License Portal. Refer to the Gigamon License Portal section for instructions on how to activate the licenses from the portal.
  - c. After activating the license, record the license key or keys.
  - i. Return to GigaVUE-FM GUI.
  - ii. Click the **Add FM License** link in the pop-up that appears. The Add License page is displayed. Enter the license key.
  - iii. To add more than one license, click the + button.
  - iv. Click Save.

The license and its description is added to the Licenses page.

### Delete GigaVUE-FM License

To delete a license, do the following:

- 1. On the left navigation pane, click 🕸 .
- 2. Go to System > Licenses > Fabric Manager.
- 3. Select the license key to be deleted.
- 4. Click **Delete** to delete the license.

A deleted license can be added again to GigaVUE-FM and can be reused.

### **Revoke License**

To revoke a license, do the following:

- 1. On the left navigation pane, click 🕸 .
- 2. Go to System > Licenses > Fabric Manager.
- 3. Select the license key to be revoked.
- 4. Click **Revoke** to remove the license.

Once a license is revoked, you cannot add the license again in GigaVUE-FM.

**Note:** A separate revocation key is not generated for revoked licenses.

### Retrieving a Lost License

If you lost an existing license, contact Gigamon Technical Support for assistance. For the contact information, refer to *Contact Technical Support*.

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

# Integrated License Management in GigaVUE-FM

**Note:** The registration mechanism to register GigaVUE-FM with the License Server will be enabled soon.

In the existing license model, managing licenses involves several manual steps. You must:

- 1. Download the inventory file from GigaVUE-FM, which contains details such as the virtual MAC address and software version of GigaVUE-FM, as well as the physical nodes and associated cards that GigaVUE-FM manages.
- 2. Upload the inventory file to the license portal and activate the license.
- 3. Download the activated license from the portal and import it back into GigaVUE-FM for the license to function.

This process requires multiple back-and-forth actions between GigaVUE-FM and the license portal, which can be time-consuming and error-prone.

With the introduction of the integrated license feature, the process becomes significantly streamlined. You can now establish direct communication between GigaVUE-FM and the license portal by generating a token from the license portal and registering it in GigaVUE-FM. Once registered, you can view, manage, and activate entitlements directly from GigaVUE-FM, eliminating the need to upload and download files manually. Additionally, the volume-based license (VBL) usage data is automatically captured from each GigaVUE-FM instance and sent to the license portal for tracking.

This section contains the following topics:

- Key Benefits
- License Management Workflow

• Reclaim Licenses in GigaVUE-FM

# Key Benefits

- **Self-service management**: You can activate and manage entitlements directly from GigaVUE-FM, removing the need to constantly switch between GigaVUE-FM and the license portal.
- Seamless license activation: When an entitlement expires, call Gigamon Sales team and renew it. Once you renew, you can view the new entitlement in GigaVUE-FM, from which you can activate the license.
- **Flexible licensing**: A license pool offered by an entitlement can be redistributed between multiple GigaVUE-FMs, allowing greater flexibility to accommodate changing licensing needs across the set of devices monitored by each GigaVUE-FM.
- **Reclaim and Reuse license**: You can reclaim the license from one GigaVUE-FM instance and use it in another GigaVUE-FM. You can reclaim the license for VBL and Floating types of licenses. To reuse the license, the GigaVUE-FM should be in connected mode.
- **Traceability of Renewals**: When you renew your licenses, GigaVUE-FM allows you to trace which license was renewed and update your entitlements.

This feature greatly simplifies the license management process, reduces the potential for manual errors, and offers customers enhanced control and flexibility over their licensing.

## License Management - Workflow

To manage the license, you must do the following:

- Register GigaVUE-FM with the License Server
- View Entitlements in GigaVUE-FM
- Activate Licenses in GigaVUE-FM

Register GigaVUE-FM with the License Server

**Note:** The registration mechanism to register GigaVUE-FM with the License Server will be enabled soon.

To establish direct communication between the license server and GigaVUE-FM, you must generate a token from the license portal and register the token in GigaVUE-FM. GigaVUE-FM authenticates the token and enables you to view and manage your entitlements.

This is a one-time activity, and registration is valid until you opt out of GigaVUE-FM.

To register GigaVUE-FM with the license server:

- 1. Log in to the Gigamon Community Portal.
- 2. Select License Portal from the More drop-down list.

3. In the License Portal, click the GigaVUE-FM Token Generation tab.

A dialog box Token Generator for GigaVUE-FM appears.

4. Click Generate GigaVUE-FM Token.

Copy the token that appears at the bottom of the dialog box.

- 5. Log in to GigaVUE-FM.
- 6. On the left navigation pane, click . , and then select **Licenses** > **Settings**.
- 7. Click Register.

The Enter Registration Token dialog box appears.

- 8. Paste the token you copied from the License portal into the dialog box.
- 9. Click **OK**.

You can view the option on the **Settings** page and enable them as required:

Digital License Management	Automatic Entitlement Retrieval	You can view the purchased SKUs and licenses your organization is entitled to. For more information, refer to View Entitlements in GigaVUE-FM.
	VBL Usage Reporting	GigaVUE-FM sends the volume-based license (VBL) daily usage data to the licensing server.

۲	Licenses	Fabric Manager	Node Licenses v	Entitlement	Activation ~	Expiry	Settings	Q <i>C</i> A *~®
<u>[.11]</u>	Q Find SETTINGS	Settings						Register with License Server Cancel Apply
÷ =	✓ System Preferen	(i) Registration is	already completed					
	SSH SNMP	Digital License	Management and Perfor	mance Analytics	-			
	Packet E GigaStre	Automatic Entitl	ement Retrieval	Ena	bled			$\textcircled{\begin{tabular}{ll} \label{eq:constraint} \end{tabular}} \end{tabular}$ License entitlements and activations are automatically retrieved from the license server.
	Traffic D Port Dis Mobility Node De	VBL Usage Repo	rting	Dis	abled			UBL daily usage data will be sent to licensing server.
	IP ResoL.	Volume Usage	Event Notification					
	Backup/ Images	Status		Ena	bled			① When daily usage exceeds allowance times threshold (expressed as percent), a notification is sent.
	Certificat Event N	Threshold(%) *		17				
	External Licenses							
Ű	Logs Storage	License Expiry E	vent Notifications	Dis	abled			When a license is within 90 days of expiry or is expired, a notification is sent, and also emailed to Gigamon License Renewal team.
1	Reports							

View Entitlements in GigaVUE-FM

After successfully registering GigaVUE-FM with the license portal, you can view the SKUs you purchased and the licenses you are entitled to in GigaVUE-FM. On the left navigation pane, click and then select **Licenses** > **Entitlement**.

۲	Licenses	Fabr	ic Manager No	de Licenses 🗸	Entitler	nent	Activation ~	Expiry	Settings				α 수 ☆×®`
.11	Q Find											( B	lter Export v
÷	SETTINGS System	î	ENTITLEMENT ID	SKU	+	STATUS	USED	AVAILABLE LICENSES	START DATE	END DATE	GRACE	TYPE	DESCRIPTION ©
=	Preferen		LP202408260645302	48 GFM-FM000		Active	0/5	5	Aug 26, 2024	Jan 18, 2038	0	Internal	FM-200-Pack
	SSH	L	LP202409101815523	95 GFM-FM005		Active	0/1	1	Sep 10, 2024	Oct 25, 2024	0	Internal	FM-5-Pack
	Packet E		LP202409101815548	06 GFM-FM010		Active	0/1	1	Sep 10, 2024	Oct 25, 2024	0	Internal	FM-10-Pack
	GigaStre		LP202409101831323	50 GFM-HW0-I	M010	Active	0/1	1	Sep 10, 2024	Oct 25, 2024	0	Internal	FM-HW-10-Pac
	Traffic D Port Dis		LP202409101846213	40 SMT-HC0-A	FS	Active	0/1	1	Sep 10, 2024	Oct 25, 2024	0	Internal	HC2-AFS
	Mobility		LP202408261119321	68 SMT-HC1-A	FS	Active	5/5	0	Aug 26, 2024	Oct 10, 2024	0	Internal	HC1-AFS
	Node De		LP202409090622145	48 SMT-HC1-S	SL.	Future	2/4	2	Oct 2, 2024	Nov 16, 2024	0	Internal	HC1-SSL-OOB
	IP ResoL Backup/		LP202407160712363	42 SMT-HC3-A	FI	Grace Period	2/5	3	Jul 16, 2024	Aug 30, 2024	45	Internal	HC3-AppFilterii
	Images		LP202409040444203	23 SMT-HC3-A	г1	Active	5/5	0	Sep 4, 2024	Sep 4, 2025	0	Internal	HC3-Advanced
	Certificat		LP202407290905307	91 SMT-HC3-D	D1	Active	5/5	0	Jul 29, 2024	Jan 25, 2025	45	Internal	HC3-Deduplica
	Event N External												
	Licenses												
J	Logs		<	u Dati A									
	Storage Reports		← < Go to pa	ge: 1 of 1 >	-71	10 entitlements t	otal						
<b>8</b>	reports												

The number in the **Used** column denote the licenses used by the GigaVUE-FM or the device from the entitled license. The number in the numerator represents the number of activated licenses, and the denominator denotes the total number of licenses. When you click on the link in the Used column, you can view the license details for that entitlement at the bottom of the screen, as shown in the figure.

Licens	es Fabric Manager	Node Licenses 🗸	Entitlement	Activa		Expiry	Settings			Q C A ∻~
Q Fin	nd									Filter Export
SETTING	3S	ENTITLEMENT ID $\psi$	SKU	STATUS	USI	ED /	AVAILABLE LI	START DATE	END DATE	REFERENCE ID
✓ Sys <sup>i</sup>		LP20240212171513	SMT-HC3-DD1	Expired	3/5	5 :	2	Feb 12, 2024	Mar 28, 2024	64ce640e-0d6d-4a3
	SSH	LP20240130101740	SMT-HC0-DD1	Expired	3/5	5 :	2	Jan 30, 2024	Mar 15, 2024	368cf3ac-3ee7-4e67
	SNMP	LP20240123163625	SMT-HC3-DD1	Expired	2/5	5 :	3	Jan 23, 2024	Mar 8, 2024	7e9a5522-05d1-463
	Packet Errors and Dro GigaStream Imbalance	LP20240123163544	SMT-HC3-AFI	Expired	3/5	5 :	2	Jan 23, 2024	Mar 8, 2024	11e3304d-305e-46d
	Fraffic Drop Identificat	LP20240121154918	SMT-HC3-AT1	Expired	5/5	5 (	0	Jan 21, 2024	Jul 19, 2024	9e8e7a55-14b6-46f
	Port Discovery	LP20240121154625	SMT-HC3-APF	Expired	4/5	5	1	Jan 21, 2024	Mar 6, 2024	1560ddee-394c-476
	Mobility Node Details	LP20240102165305	GFM-FM005	Active	1/5	5 4	4	Jan 2, 2024	Jan 18, 2038	7e4664aa-9add-4cc
IF	P Resolver	I← < Go to page:	6 of 6 → →	70 entitlem	ent(s) total					
	Backup/Restore mages	× Entitlement ID: LF	20240121154625185		Floating	Node Locked	]			Reclaim
C	Certificates	ACTIVATION ID			SERIAL NUMBER			LICI	INSE KEY	۲
	Event Notifications External Data Server	bf4ea50d-7fde-4dbc-b	21-daad191800cd		1DX0-8008			LK	2-SMT_HC3_APF_20240122	164812-7YF0-QL8N
	icenses	cc252d89-91d4-47b5-	b72b-5cc441a6fbe6		1DX0-1005			LK	2-SMT_HC3_APF_202402010	050639-7YF0-QL8N
	NTP .ogs									
s	Storage Management	← < Go to pag	e: 1 of 1 → →	2 node la	cked activation(s) tota	al				

You can view the following tabs in Floating License:

- **Floating** In the floating tab, you can view the details such as Activation ID, MAC Address, Number of licenses used by the GigaVUE-FM (Quantity), and whether the license is used by the current GigaVUE-FM (Owner GigaVUE-FM).
- **Node Locked**—The node-locked tab allows you to view the device's details, such as the Activation ID, Serial number, and License Key.

You can view the following tab in the VBL License:

 Activation – In the Activation tab, you can view the details such as Activation ID, MAC Address, Number of licenses used by the GigaVUE-FM (Quantity), whether the license is used by the current GigaVUE-FM (Owner GigaVUE-FM).

GigaStream imbacance	LP20241127123924003	VBL-250T-BN-CORE	Active	0/10	10	Nov 27, 2024	Nov 27, 2025	d301/152-2d.	
Traffic Drop Identification	LP20241127123929568	VBL-2500T-BN-SVP	Active	0/10	10	Nov 27, 2024	Nov 27, 2025	Oedbbbc1-b9f.	
Port Discovery Mobility	LP20241127124419760	VBL-2500T-BN-SVP-PL	Active	0/10	10	Nov 27, 2024	Jan 18, 2038	943e0e0f-34a	
Node Details	It- Go to page: 1	ατε <b>Σ →</b> Η το	3 entitlement(s) total.						
IP Resolver	Cir I i materia		a construction of the						
Backup/Restore	× Entitlement ID: LP20	2411271239	Activation						-
Images		_							
Certificates	ACTIVATION ID		OWNER FM			MAC ADORESS		QUANTITY	¢
Event Notifications	10ddb381-5a7e-479	b-8da5-51c8b885d7cb	true			00.50:56:bd:d7:b7		1	
External Data Server									
Licenses									
NTP									
Logs	H- C Go to page:								

### Activate Licenses in GigaVUE-FM

To activate the license in GigaVUE-FM:

- 1. On the left navigation pane, click , and then select Licenses > Entitlement.
- 2. Click the numbers in the **Available License** column. An **Activate License (s)** dialog box appears.
- 3. Enter the number of licenses that need to be activated.
- 4. Click OK.

#### Notes:

You cannot activate the license using the entitlement page for the following:

- For SKUs that only support node-locked licenses.
- Recently Expired and Expired licenses.

	^		SKU	STATUS		AVAILABLE LIC	E START DATE		
✓ System		cib	sku	STATUS		AVAILABLE LIC	E START DATE	END DATE	
Preference	es	LP20240909062214548	SMT-HC1-SSL	Future	2/4	2	Oct 2, 2024	Nov 16, 2024	
SSH		LP20240904044420323	SMT-HC3-AT1	Active	4/5		Sep 4, 2024	Sep 4, 2025	
SNMP									
Packet Err	rors and Drops	LP20240826111932168	SMT-HC1-AFS	Active	5/5		Aug 26, 2024	Oct 10, 2024	
GigaStrea	m Imbalance	LP20240826064530248	GFM-FM000	Active	0/5		Aug 26, 2024	Jan 18, 2038	
Traffic Dro	op Identification		Activate License(s)			×			
Port Disco	overy	LP202407290905307	Enter number of license	to activate		~	Jul 29, 2024	Jan 25, 2025	
Mobility		LP202407160712363					Jul 16, 2024	Aug 30, 2024	
Node Det	aits					,			
IP Resolve	er					· · ·			
Backup/R					Ca	ncel Ok			
Images									

# Reclaim Licenses in GigaVUE-FM

You can reclaim the license from one GigaVUE-FM instance and use it in another GigaVUE-FM. You can also reclaim the license for VBL and Floating types of licenses. To reclaim the license, the GigaVUE-FM should be in connected mode.

GigaVUE-FM allows to reclaim the licenses for:

- Floating License
- Volume Based License

### Floating License

To reclaim the floating license activations in GigaVUE-FM:

- 1. Unassign the floating license from any Node or card it is bound to. To unassign:
  - a. On the left navigation pane, click 🧖
  - b. Select the Activation drop-down list on the top navigation bar and then select **Floating**.
  - c. Click the hyperlink on the **Used** column corresponding to the floating license that you want to unassign.
  - d. In the bottom section, unassign the floating license from all the Nodes or card(s) to which they are assigned.
- 2. Reclaim the activations:
  - a. Select the Entitlements tab on the top navigation bar.
  - b. Click the numbers in the **Used Licenses** column.
  - c. In the bottom section, select Floating.
  - d. Select the activation you want to reclaim by clicking the checkbox next to the Activation ID.
  - e. Click **Reclaim**.

The Available Licenses column against the Entitlement ID displays the increase in the count by the number of reclaimed licenses.

### Volume Based License

To reclaim the Volume Based License activations in GigaVUE-FM:

1. Select **the Entitlements** tab on the top navigation bar.

- 2. Click the numbers in the **Used Licenses** column.
- 3. In the bottom section, select Activation.
- 4. Select the activation you want to reclaim by clicking the checkbox next to the Activation ID.
- 5. Click **Reclaim**.

# Upgrade and Downgrade License Packages

- Upgrading of license packages is available at all times.
- To purchase a new license, please contact Gigamon Sales Representative.
- Licenses can be either term or perpetual licenses.
- Licenses can be upgraded from Base to either a 45 day evaluation or to a paid version.
- Licenses can be deleted and re-entered as long as the MAC address tied to the license is still valid.

In case of expiration of the evaluation license, GigaVUE-FM will revert back to supporting only 1 physical and 1 virtual node.

The list below shows the node priorities in case a License is invalid and nodes are deactivated. In such a case, the nodes will be visible but deactivated. They can be re-activated if the license is reinstalled. This is especially important if the evaluation license expires and you need extra time to enter a valid license.

(1) If a cluster exists:

• Leader

In case of multiple clusters, the cluster with the top level priorities as shown in standalone will take over. For example, a cluster with leader as GigaVUE-FM and GigaVUE-OS-2404 will have preference over a cluster with leader.

- Standalone node (Based on the node priority levels as shown below)
- Standby leader, in case the leader is removed
- Stack/Cluster member
- Unreachable
- Unknown

(2) If there is no cluster

- GigaVUE-HC3
- GigaVUE-HC1
- GigaVUE-FM and GigaVUE-OS-TA100

In cases where nodes have connectivity issues as listed below, the next level nodes as shown in Scenarios (1) and (2) will take effect:

- Nodes should not have any connectivity issue
- Nodes can be reached but node response has parsing problem
- Nodes can be reached but authentication is invalid
- $_{\circ}$   $\,$  Node cannot be reached
- $_{\circ}$  Nodes cannot be added

# GigaSMART Application Licenses

GigaSMART applications improve network visibility, traffic handling, and tool efficiency. You need licensing keys to enable GigaSMART applications in the devices. GigaSMART licenses can be procured as either node-locked or floating and are available in the following licensing models:

Licensing Modal	Description
Evaluation	Use an evaluation license to evaluate GigaSMART applications. During the evaluation period of 45 days, you will have access to the full functionality of the GigaSMART applications under evaluation. You can obtain an evaluation license for any GigaSMART application, for either a single or for a number of GigaSMART applications combined into a bundle.
Subscription	Few GigaSMART applications, such as De-duplication, Inline SSL, and Application Intelligence, are available only as bundles through a subscription license.
Perpetual	Perpetual licenses are node-locked to a specific card. These can be managed from CLI as well as GigaVUE-FM

GigaSMART licenses can be purchased individually or as bundles. Refer to the GigaSMART Data Sheet for the GigaSMART License SKU for the various devices.

**Note:** Bundled features can only run on the corresponding GigaSMART hardware.

# Base GigaSMART Applications

- **GigaVUE-FM and GigaVUE-OS-HCO Module** The base applications include Packet Slicing, Masking, Trailer, and IP and L2GRE Tunnel Decap.
- **GigaVUE-HC3 SMT-HC3-C05 Module** The base applications include Packet Slicing, Masking, Trailer, and IP and L2GRE Tunnel Decap.
- **GigaVUE-HC1 Node** The base applications include Packet Slicing, Masking, and Trailer.

GigaSMART applications with the Base license available on GigaVUE-FM and GigaVUE-OS HC Series nodes:

- GigaSMART Packet Slicing
- GigaSMART Masking
- Using GigaSMART Trailers
- GigaSMART IP Encapsulation/Decapsulation (GigaSMART Tunnel)
- GigaSMART Layer 2 GRE Tunnel Encapsulation/Decapsulation
- GigaSMART VXLAN Tunnel Decapsulation
- GigaSMART Custom Tunnel Decapsulation

# Advanced Tunneling License/Tunneling License

Note: Advanced Tunneling license on and GigaVUE-HC3. Referred to as "Tunneling license" on GigaVUE-HC1.

The **Advanced Tunneling License/Tunneling License** enables the following GigaSMART applications:

- GigaSMART IP Encapsulation/Decapsulation (GigaSMART Tunnel)
- GigaSMART Layer 2 GRE Tunnel Encapsulation/Decapsulation
- GigaSMART VXLAN Tunnel Decapsulation
- GigaSMART Custom Tunnel Decapsulation
- GigaSMART ERSPAN Tunnel Decapsulation

### **De-duplication License**

The **De-duplication License** enables the following GigaSMART applications:

GigaSMART De-duplication

### Header Stripping License

The Header Stripping License enables the following applications:

- GigaSMART Header Addition
- GigaSMART Header Stripping

# Adaptive Packet Filtering (APF) License

The **Adaptive Packet Filtering License** enables the following GigaSMART applications:

GigaSMART Adaptive Packet Filtering (APF)

### Application Session Filtering (ASF) License

The **Application Session Filtering License** enables the following GigaSMART applications:

GigaSMART Application Session Filtering (ASF) and Buffer ASF

### **GTP Filtering & Correlation License**

The **GTP Filtering & Correlation License** enables the following GigaSMART applications:

- GigaSMART GTP Correlation
- GigaSMART GTP Whitelisting and GTP Flow Sampling
- GTP Scaling
- GTP Stateful Session Recovery

### SIP/RTP Correlation License

The **SIP/RTP Correlation License** enables the following GigaSMART application:

GigaSMART SIP/RTP Correlation

# FlowVUE License

The **FlowVUE License** enables the following GigaSMART applications:

GigaSMART FlowVUE

### **NetFlow Generation License**

The **NetFlow Generation License** enables the following GigaSMART applications:

GigaSMART NetFlow Generation

### SSL Decryption Licenses

The **SSL Decryption Licenses** enable the following GigaSMART applications:

- GigaSMART Passive SSL Decryption
- GigaSMART SSL Decryption for Inline and Out-of-Band Tools

#### NOTES:

- GigaSMART load balancing does not require a separate license. Stateless load balancing is included with base licenses. Stateful load balancing for GTP and ASF are included with the GTP Filtering & Correlation and Application Session Filtering (ASF) licenses. Stateful load balancing for tunnel is included with the tunneling licenses. Refer to GigaSMART Load Balancing in GigaVUE Fabric Management Guide.
- GigaSMART MPLS traffic performance enhancement does not require a separate license. Refer to GigaSMART MPLS Traffic Performance Enhancement in GigaVUE Fabric Management Guide.

# GigaVUE-OS and GigaVUE-OS Module Licenses

Starting in software version 5.12.00, Gigamon hardware devices can be manufactured with or without a software license:

License Type	Supported Platforms
Fully licensed devices (integrated devices)	Provisioned with both hardware and software licenses. Software license is a perpetual license.
Hardware-only licensed devices (suffixed with "-HW" in the hardware type)	Provisioned with only the hardware license. Need additional software licenses for the device to be fully operational.

The following software licenses must be installed in the hardware-only licensed devices for the chassis and the modules to be active and operational:

- GigaVUE-OS License.
- GigaVUE-OS Module License.

Refer to the following notes:

- GigaVUE-OS and GigaVUE-OS Module licenses support both Term and Perpetual licensing.
- You can activate the GigaVUE-OS and GigaVUE-OS Module licenses from the Gigamon Licensing portal or from the GigaVUE-FM GUI. Refer to Manage GigaSMART, GigaVUE-OS, and GigaVUE-OS Module Licenses
  - When assigning GigaVUE-OS licenses, only the relevant chassis (based on the model) is available for assignment (GigaVUE-HC1, GigaVUE-HC3, GigaVUE-HC1Plus) based on the specific SKU.
  - When assigning GigaVUE-OS module licenses, only the relevant cards (based on the card type) is available for assignment (PRT-, BPS-, TAP-, SMT-) based on the specific SKU of the card.
- Activation of licenses from GUI is applicable only for the following devices:
  - GigaVUE-HC1
  - GigaVUE-HC1-Plus
  - GigaVUE-HC3
- Devices must be running software version 6.2.00. GigaVUE-FM does not allow you to activate licenses for devices running earlier software versions.
- You cannot transfer the GigaVUE-OS and GigaVUE-OS Modules licenses across chassis and cards.
- On the GigaVUE-OS and GigaVUE-OS Module licenses that are activated from the GigaVUE-FM GUI, an F-icon is displayed.

Refer to the GigaVUE HC Series Data Sheet for the license SKUs.

### Supported Hardware Devices

The following table shows the licenses applicable for the GigaVUE HC series and TA series devices and expiry of the license.

License Type	Supported Platforms	Installation of License	Uninstallation/Expiry of License	Term License Behavior	
GigaVUE-OS License	<ul> <li>GigaVUE-HC1/ GigaVUE-HC1- Plus</li> <li>GigaVUE-HC3</li> </ul>	• Chassis will be operationally up and active.	<ul> <li>All the modules except the CC cards will be in shutdown state.</li> <li>You cannot bring the cards up through CLI or GigaVUE-FM until the licenses are renewed.</li> </ul>	Refer to Term License Behavior after expiry (from Software Version	
	<ul> <li>GigaVUE-TA25</li> <li>GigaVUE-TA25E</li> <li>GigaVUE-TA100</li> <li>GigaVUE- TA200</li> <li>GigaVUE- TA200E</li> <li>GigaVUE- TA400</li> <li>GigaVUE-TA40</li> </ul>	<ul> <li>Default ports will be up and active.</li> <li>Non-default ports (Pseudo slot) will require appropriate port license.</li> </ul>	<ul> <li>All ports in the device will go to inactive state.</li> <li>Port level configurations (such as, admin enable, port type change) are not allowed until licenses are renewed.</li> </ul>	6.1.00) for details.	
GigaVUE-OS Module License	• GigaVUE-HC1/ GigaVUE-HC1- Plus • GigaVUE-HC3	• Ports will be up and active.	<ul> <li>Ports will be in inactive state.</li> <li>Port level configurations (such as, admin enable, port type change) are not allowed until licenses are renewed.</li> </ul>		
			<b>Note:</b> The GigaVUE-HC1-X12G4 card does not require a separate module license. The GigaVUE-OS license is used to bring up / down the card.		

Appropriate banner notifications will be displayed on expiry of licenses.

The Gigamon G-TAP/Dell platforms do not support GigaVUE-OS and GigaVUE-OS Module License. The GigaVUE TA Series devices do not support GigaVUE-OS Module license.

The following table provides additional details on the dependency between the chassis and the modules types for software version 5.12.00 and above (for the GigaVUE HC Series devices):

Chassis License Type	Module License Type	Dependency
Chassis with Hardware only license	Module with Hardware only license	GigaVUE-OS license and GigaVUE-OS Module license are required for the chassis and the modules to be operationally up and active.
Chassis with integrated license	Module with integrated license	No license requirement for chassis and module to be operationally up.
Chassis with Hardware only license	Module with integrated license	GigaVUE-OS license is required for the modules to be operationally up. No license requirement for the ports.
Chassis with integrated license	Module with Hardware only license	GigaVUE-OS Module license is required for the ports to be in active state. No license requirement for the chassis.

If the GigaVUE-OS Module license expires on the BPS card, physical bypass is enabled on all protected inline-networks in the card, allowing traffic to be physically bypassed when licenses are expired.

# Rules and Notes

- For OOB clusters, it is recommended to install license for all the nodes from the leader.
- For Inband clusters, GigaVUE-OS and GigaVUE-OS module licenses (as applicable) must be installed in the individual nodes before the cluster is formed.
- On expiry of the GigaVUE-OS or GigaVUE-OS Module licenses:
  - Inband cluster will break.
  - Logical inline traffic flows will get affected.
  - config switch-to Will fail.
  - Switching to FIPS/Crypto Mode will fail

**Note:** Renew the licenses for the above functionality/commands to work.

# Install GigaVUE-OS and GigaVUE-OS Module license

Use the license command to install the GigaVUE-OS and GigaVUE-OS Module license:

GigaVUE Licensing Guide

For example: To install the GigaVUE-OS license:

\_\*\*\*

**NOTE:** Execute the **Write Memory** command after installing the license.

To verify that the GigaVUE-OS license is installed:

show license				
Box 2				
Slot Featur	e Parameter	s Start Date Expira	ation Date	
1 GVOS-mod	ule -	Never		
Chassis-Featur	e Parameters	Start Date Expirati	on Date	
GVOS	-	2021/02/22 Never		
To verify that the	e cards and ports	are operationally up:		
show card				
Box ID: 2				
HW Rev PowerR	eq PowerPrior	HW Type ity		Serial Num
ccl yes 1.0-00 N/A		HC3-Main-Board	132-00DR	1DR0-1100
1 yes 1.0-0 60		PRT-HC3-X24-HW	132-00DY	1DY0-1000
2 yes 1.0-0 160		PRT-HC3-C08Q08	132-00DW	1DW0-2001

3	yes	up	(unlicensed)	SMT-HC3-C05-HW	132-00DX	1DX0-1005
1.0-0	200		3			
4	yes	up	(unlicensed)	PRT-HC3-C08Q08-HW	132-00DW	1DW0-2002

The above **show card** output indicates the following:

- GigaVUE-OS license is installed for the chassis: cc1 is displayed as licensed.
- GigaVUE-OS Module license is installed for Module 1: *Module 1 is displayed as licensed.*
- Module 2 (PRT-HC3-C08Q08) is displayed as licensed, since it has the integrated license.
- The rest of the modules are displayed as unlicensed (highlighted in gray).

**Note:** To assign GigaVUE-OS and GigaVUE-OS Module licenses from GUI Refer to Activate Licenses section.

# Troubleshooting Scenarios

Use the following table to troubleshoot issues that you might encounter on expiry of the GigaVUE-OS and GigaVUE-OS Module licenses.

Problem	Solution
On expiry of the GigaVUE-OS Module license, installing the new term license or perpetual license will not move the ports to active state.	<ul> <li>Uninstall the new license and re-install it.</li> <li>Execute the write memory command after installing the license.</li> </ul>
<b>GigaVUE TA Series devices:</b> On expiry of the GigaVUE-OS license, installing the new term license or perpetual license will not bring up the cards.	<ul> <li>Uninstall the new license and re-install it.</li> <li>Execute the write memory command after installing the license.</li> </ul>
<b>GigaVUE HC Series devices:</b> On expiry of the GigaVUE-OS license, installing the new term license or perpetual license will not bring up the cards.	<ul> <li>Execute the no card slot <slot number=""> down command for all the cards.</slot></li> <li>If the problem persists, uninstall the new license and re-install it.</li> <li>Execute the write memory command after installing the license.</li> </ul>
During new cluster formation or adding a node to a cluster, the leader does not detect member nodes license that have been installed before the cluster formation.	<ul> <li>Install the member nodes license once again from the leader after the cluster is formed.</li> <li>If the problem persists, uninstall the new license and re-install it.</li> <li>Execute the write memory command.</li> </ul>

# Manage GigaSMART, GigaVUE-OS, and GigaVUE-OS Module Licenses

You can manage the following licenses from the GigaVUE-FM GUI:

- GigaSMART License
- GigaVUE-OS License
- GigaVUE-OS Module License

To access the licenses page for managing the above:

- 1. On the left navigation pane, click  $^{oxtimes}$  .
- 2. Select System > Licenses > Activation > Floating.

This page displays the license details of the nodes managed by GigaVUE-FM.

Use the following buttons to manage the licenses:

Button	Description
Activate Licenses	Use this button to activate the licenses. Refer to Manage GigaSMART, GigaVUE-OS, and GigaVUE-OS Module Licenses for more information.
Deactivate	Use this button to deactivate the licenses. Refer to Deactivation of Licenses for more information.
Replace Licenses	Use this button to replace licenses.
Renewal	Use this button to renew the licenses.
Export	Use this button to export the details in the Activate Licenses page to a CSV or XLSX page.
Filter	Use this button to narrow down the list of active GigaSMART Licenses that are displayed on the VBL active page.

### Activation of Licenses

Prior to activating the licenses, ensure that you have the following information:

- Entitlement IDs: Locate the email sent to you by Gigamon containing the licensing information for your installation. This email contains one or more EID (Entitlement ID) values. You will use these EIDs to generate License Keys on the Gigamon Licensing Website.
- **Challenge MAC Address**: Locate the Challenge MAC address of the virtual network adapter associated with the GigaVUE-FM installation.

To activate or find the license or licenses, do the following:

- 1. On the left navigation pane, click  $^{\textcircled{1}}$  .
- 2. Go to System > Licenses > Activation > Floating.

You can use this page to access the Gigamon license portal where you can activate licenses. You can then use this page to assign the active licenses to the devices.

### 3. Click Activate Licenses > With License Portal:

4. Follow the instructions on the screen to activate your licenses.

In these next steps you will:

- Download the fabric inventory (.json) file from GigaVUE-FM. For more details, refer to What is a Fabric Inventory File?
- Go to the Gigamon license portal and find license you want to activate and complete the three screens to activate your license. On the second screen, you will be prompted to upload the fabric inventory (.json) file. Refer to the Gigamon License Portal section for instructions on how to activate the licenses from the portal.
- After activating the license, you can download the license (.lic) files or record the license key or keys.

**Note:** When downloading the license file, ensure to not include special characters such as '(', ')' in the name of the license file.

- Return to GigaVUE-FM, log in as an administrator, and return to the license activation screen.
  - Click the gear icon. Navigate to System > Licenses > Activation > Floating. You can either,
    - Click Activate Licenses > With License Portal and complete the activation by importing the downloaded License (.lic) files.
    - Or, Click **Activate Licenses > With License Key** and complete the activation by entering the license key.

**Note:** To access the Gigamon license portal, directly, you can go to the Gigamon Community Portal, click More, and select License Portal.

**Note:** Please contact technical support team for assistance.

# Deactivation of Licenses

You can deactivate licenses that have expired and also the license must not be assigned to any node. To deactivate the licenses:

- 1. On the left navigation pane, click  $^{\textcircled{1}}$  .
- 2. Go to System > Licenses > Activation > Floating. Click Activated.

#### GigaVUE Licensing Guide

3. Select the license that you want to deactivate and Select the **Deactivate** button from the **Actions** drop-down list.

The license will get deactivated and will be added to the list view in the **Deactivated** tab.

# Manage GigaSMART Application Licenses using CLI

# Install GigaSMART Licenses

Generate the license key from the licensing portal. GigaSMART licenses can be either nodelocked or floating licenses. use the **license** command to associate the hardware to the license key.

The key consists of a long string beginning with LK2, which is a protocol, followed by the line card or module (SMT\_HC0\_R), followed by the content of the license key.

### Notify Evaluation License Expiry

After installation, the evaluation license will expire after 45 days, on a specific date.

To notify you as the evaluation license approaches the expiry date, you can enable a notification. When enabled, the notification will be sent when there are 30, 15, 10, 5, 4, 3, 2, and 1 days remaining before the license expires.

Use the following CLI command to enable the evaluation license reminder:

### (config) # snmp-server enable notify evallicensereminder

You can also use the **show license** command to display the expiration date of an evaluation license.

### How to Combine Evaluation and Perpetual Licenses

An evaluation license can be for a number of GigaSMART applications combined in a bundle. If you have a perpetual license for one GigaSMART application, for example, de-duplication, and you want to evaluate a bundle that contains 10 GigaSMART applications, including deduplication, the 45-day evaluation period will apply to the other 9 GigaSMART applications, while the perpetual license will apply to de-duplication.

If you obtain a perpetual license after an evaluation license, the perpetual license will overwrite the evaluation license.

### GigaSMART Application after Expiry

Once an evaluation license expires, access to the GigaSMART application is disabled. If maps were configured using GigaSMART applications on the evaluation license, traffic will be dropped when the evaluation license expires.

**Note:** Traffic will flow through maps with perpetually licensed GigaSMART applications.

In addition, the **gsop** command will not be available once the evaluation license has expired.

However, if a new evaluation license for the same GigaSMART application is installed, a new 45-day evaluation period will begin.

### Move Evaluation and Perpetual Licenses

Evaluation and perpetual license keys are saved on the GigaSMART line card or module, while license information is stored in the configuration database. The license key on the line card or module has to match the license information stored in the database, otherwise a license mismatch will result.

Line cards or modules may sometimes need to be moved or swapped. For the procedure to move a license, refer to Move Licensed GigaSMART Line Card to a New Slot. This procedure will clear a license mismatch under certain circumstances. Moving a license depends on the license type, as well as the expiry date, as follows:

License Key Saved on GigaSMART Line Card/Module	License Information Stored on Configuration Database	Can be Moved?
Perpetual License	Evaluation License	Yes
Evaluation License	Perpetual License	No
Evaluation License with an earlier expiry date than the one stored on the configuration database	Evaluation License	No
Evaluation License with a later expiry date than the one stored on the configuration database	Evaluation License	Yes

# Move Licensed GigaSMART Line Card to a New Slot

On the GigaVUE-FM and GigaVUE-OS HD Series, you can move a GigaSMART line card from one slot to another. On the GigaVUE-HC3, you can move a GigaSMART front module from one bay to another.

If there are no GigaSMART operations (gsops) configured on the line card or module to be moved, you can move the line card or module to the new slot or bay.

If there are GigaSMART operations (gsop), GigaSMART groups (gsgroup), and maps configured on the line card or module to be moved, the system will report a license mismatch if you try to move it without first removing the related configuration.

To clear the settings related to the GigaSMART line card or module from its previous slot, allowing you to create new GigaSMART operations, GigaSMART groups, and maps using the GigaSMART line card or module in its new slot, use the following procedure:

1. Issue the following CLI command:

#### (config) # show running-config

- 2. Copy and paste the output to a file such as Notepad, for reference.
- 3. Remove the map that uses the gsop defined on the gsgroup of the GigaSMART line card or module to be moved, using the following CLI command:

### (config) # no map alias <alias>

4. Remove the gsop that was defined on the gsgroup of the GigaSMART line card or module to be moved, using the following CLI command:

#### (config) # no gsop alias <alias>

5. Remove the gsgroup that was defined on GigaSMART line card or module to be moved, using the following CLI command:

#### (config) # no gsgroup alias <alias>

6. Issue the following CLI command on GigaSMART line card or module to be moved:

### (config) # no card slot <slot ID>

7. Assuming that the new slot does not have a GigaSMART line card or module inserted, issue the following CLI command on the new slot:

### (config) # no card slot <slot ID>

8. Issue the following CLI command on the new slot:

### (config) # card slot <slot ID>

On the new slot, configure gsgroup, gsop, and reapply the map that uses the gsop on the GigaSMART line card or module.

-----

GigaSMART applications are enabled using license keys. Refer to the **license** command in the *GigaVUE-OS CLI Configuration Guide* for details.

Contact your Sales Representative for information on obtaining a license key to enable additional GigaSMART applications.

**Note**: The "show license" command also displays the start time and end time to support term licenses.

For **perpetual licenses**, the Expiration Date column has the word Never to indicate that there is no expiration date.

For **evaluation licenses**, the Expiration Date column has a specific date on which the license expires. For more information on evaluation licenses, refer to Install GigaSMART Licenses.

# **GigaSMART Evaluation Licenses**

Use an evaluation license to evaluate GigaSMART applications. During the evaluation period of 45 days, you will have access to the full functionality of the GigaSMART applications under evaluation. You can obtain an evaluation license for any GigaSMART application, for either a single or for a number of GigaSMART applications combined in a bundle.

To obtain an evaluation license, contact your Sales Representative. A license key will be generated by Gigamon and sent to you. You then install the license, which enables the GigaSMART application for evaluation purposes.

### Install Evaluation Licenses

You install an evaluation license the same way you install a perpetual license, using the **license** command.

The key consists of a long string beginning with LK2, which is a protocol, followed by the line card or module (SMT\_HC0\_R), followed by the content of the license key.

### Notify Evaluation License Expiry

After installation, the evaluation license will expire after 45 days, on a specific date.

To notify you as the evaluation license approaches the expiry date, you can enable a notification. When enabled, the notification will be sent when there are 30, 15, 10, 5, 4, 3, 2, and 1 days remaining before the license expires.

Use the following CLI command to enable the evaluation license reminder:

### (config) # snmp-server enable notify evallicensereminder

You can also use the **show license** command to display the expiration date of an evaluation license.

### How to Combine Evaluation and Perpetual Licenses

An evaluation license can be for a number of GigaSMART applications combined in a bundle. If you have a perpetual license for one GigaSMART application, for example, de-duplication, and you want to evaluate a bundle that contains 10 GigaSMART applications, including deduplication, the 45-day evaluation period will apply to the other 9 GigaSMART applications, while the perpetual license will apply to de-duplication.

If you obtain a perpetual license after an evaluation license, the perpetual license will overwrite the evaluation license.

### GigaSMART Application after Expiry

Once an evaluation license expires, access to the GigaSMART application is disabled. If maps were configured using GigaSMART applications on the evaluation license, traffic will be dropped when the evaluation license expires.

**Note:** Traffic will flow through maps with perpetually licensed GigaSMART applications.

In addition, the **gsop** command will not be available once the evaluation license has expired.

However, if a new evaluation license for the same GigaSMART application is installed, a new 45-day evaluation period will begin.

### Move Evaluation and Perpetual Licenses

Evaluation and perpetual license keys are saved on the GigaSMART line card or module, while license information is stored in the configuration database. The license key on the line card or module has to match the license information stored in the database, otherwise a license mismatch will result.

Line cards or modules may sometimes need to be moved or swapped. For the procedure to move a license, refer to Move Licensed GigaSMART Line Card to a New Slot. This procedure will clear a license mismatch under certain circumstances. Moving a license depends on the license type, as well as the expiry date, as follows:

License Key Saved on GigaSMART Line Card/Module	License Information Stored on Configuration Database	Can be Moved?
Perpetual License	Evaluation License	Yes
Evaluation License	Perpetual License	No
Evaluation License with an earlier expiry date than the one stored on the configuration database	Evaluation License	No
Evaluation License with a later expiry date than the one stored on the configuration database	Evaluation License	Yes

# Move Licensed GigaSMART Line Card to a New Slot

On the GigaVUE-FM and GigaVUE-OS HD Series, you can move a GigaSMART line card from one slot to another. On the GigaVUE-HC3, you can move a GigaSMART front module from one bay to another.

If there are no GigaSMART operations (gsops) configured on the line card or module to be moved, you can move the line card or module to the new slot or bay.

If there are GigaSMART operations (gsop), GigaSMART groups (gsgroup), and maps configured on the line card or module to be moved, the system will report a license mismatch if you try to move it without first removing the related configuration.

To clear the settings related to the GigaSMART line card or module from its previous slot, allowing you to create new GigaSMART operations, GigaSMART groups, and maps using the GigaSMART line card or module in its new slot, use the following procedure:

1. Issue the following CLI command:

#### (config) # show running-config

- 2. Copy and paste the output to a file such as Notepad, for reference.
- 3. Remove the map that uses the gsop defined on the gsgroup of the GigaSMART line card or module to be moved, using the following CLI command:

#### (config) # no map alias <alias>

4. Remove the gsop that was defined on the gsgroup of the GigaSMART line card or module to be moved, using the following CLI command:

#### (config) # no gsop alias <alias>

5. Remove the gsgroup that was defined on GigaSMART line card or module to be moved, using the following CLI command:

#### (config) # no gsgroup alias <alias>

6. Issue the following CLI command on GigaSMART line card or module to be moved:

#### (config) # no card slot <slot ID>

7. Assuming that the new slot does not have a GigaSMART line card or module inserted, issue the following CLI command on the new slot:

#### (config) # no card slot <slot ID>

8. Issue the following CLI command on the new slot:

#### (config) # card slot <slot ID>

On the new slot, configure gsgroup, gsop, and reapply the map that uses the gsop on the GigaSMART line card or module.

# GigaVUE TA Series Licenses

GigaVUE TA Series devices need the following licenses:

- Port Licenses
- Advanced Feature
- Flexible Inline Arrangement License

Port licenses and advanced feature licenses are node-locked licenses and can be activated only from the License portal. You need the Chassis Serial number to activate the licenses. For instructions on how to activate node-locked licenses refer to Activate Node-locked licenses section. for details.

### Port Licenses

Table 1: GigaVUE TA Series License Types lists perpetual licenses available on GigaVUE-FM and GigaVUE-OS TA Series nodes.

Table 1: GigaVUE TA Series License Types

Port License	
GigaVUE-OS	To enable ports on a white box after installing GigaVUE-OS, the appropriate license needs to be installed on the whitebox. The license can be purchased by calling the Gigamon representative. The initial key sent to the user is the Gigamon Installation Key.
	Using the digital footprint and serial number of the white box along with the EID, the license key can be obtained from the Gigamon licensing portal. After obtaining the license key, install it directly on the white box from either the CLI or GigaVUE-FM.
	This enables all ports on the white box.
GigaVUE-TA25/GigaVUE- TA25A	The GigaVUE-TA25 can have either twenty-four (24) or forty-eight (48) 1Gb/10Gb/25Gb ports enabled.
	• The GigaVUE-TA25 devices with all forty-eight (48) 1Gb/10Gb/25Gb ports and eight (8) 40/100Gb ports enabled does not require a port license.
	• The 24-port GigaVUE-TA25 is called the GigaVUE-TA25A. A port license is available to expand the GigaVUE-TA25A to include all 48 1Gb/10Gb/25Gb ports as well as the eight (8) 40/100Gb ports.
	For details, refer to the GigaVUE-TA25 Hardware Installation Guide.

Port License	
GigaVUE-TA100	On the GigaVUE-TA100, only the first 16 out of 32 ports are enabled. Two port licenses are available to enable an additional 8 or 16 ports to expand to 24 or 32 ports. For details, refer to the <i>Hardware Installation Guide</i> .
GigaVUE-TA200	On the GigaVUE-TA200, only the first 32 out of 64 ports are enabled. A port license is available to enable an additional 32 ports. For details, refer to the GigaVUE- TA200 Hardware Installation Guide.
GigaVUE-TA200E	On the GigaVUE-TA200E, only the first 32 out of 64 ports are enabled. A port license is available to enable an additional 32 ports. For details, refer to the GigaVUE-TA200E Hardware Installation Guide.

**Note:** GigaVUE-TA25E, GigaVUE-TA40, and GigaVUE-TA400 have all ports enabled. No separate port license is required for these devices.

# Advanced Feature Licenses

With Advanced Feature licenses, the following capabilities are available on the GigaVUE TA Series devices:

Capability	Description
Clustering	Clustering is enabled with an Advanced Features License.
	<ul> <li>GigaVUE-TA25</li> <li>GigaVUE-TA25E</li> <li>GigaVUE-TA100</li> <li>GigaVUE-TA200</li> <li>GigaVUE-TA200E</li> <li>GigaVUE-TA400</li> </ul>
Stack Port	For ports containing stacking enabled will be moved to disabled state after license expired. Once the license is renewed, the stack port needs to be manually enabled. Disabling of stack port will stop the traffic flowing.
Circuit Port	After license expiry, all the maps containing circuit port or circuit GigaStream will moved to disabled state and the traffic is dropped. Upon license renewal, the map will be enabled again.
PTP/Time Stamping	After license expiry, all the ports having PTP / Timestamp enabled will be moved to disabled state. Upon license renewal, the PTP / Timestamp is enabled again on the port.
Tunnels	<ul> <li>Tunneling is a communication protocol that is used to transmit data from one network to another by encapsulating the data. The following tunnel types require advanced feature license:</li> <li>Circuit-ID Tunnels</li> </ul>
	Layer 2 Generic Routing Encapsulation (L2GRE) Tunnels

	Virtual Extensible LAN (VXLAN) Tunnels			
IP Address Rewrite	Internet Protocol (IP) address rewrite converts the incoming traffic's IP address (source , destination, or both) with a user configured IP address. Ensure you have advanced feature license enabled for your GigaVUE TA Series device.			
MAC Address Rewrite	Media Access Control (MAC) address rewrite converts the incoming traffic's MAC address (source , destination, or both) with a user configured MAC address. The modified packets are then delivered as per flow mapping configurations. This allows the user to maintain confidentiality of the outgoing MAC address. Ensure you have advanced feature license enabled for your GigaVUE TA Series device.			

# Flexible Inline Arrangement License

The Flexible Inline Arrangement feature can be configured in GigaVUE-TA200, GigaVUE-TA200E and GigaVUE-TA25, GigaVUE-TA25E only if you have the necessary license. Licensing can be either of the below two types:

- **Perpetual Subscription**: The license is applicable to GigaVUE-TA200, GigaVUE-TA200E and GigaVUE-TA25, GigaVUE-TA25E per node.
- Monthly Subscription: This license is applicable per node and can be renewed monthly

#### **Licensing Rules and Notes**

- Without the license you will not be allowed to create Inline-net and inline-tool ports.
- If your license has expired or uninstalled then the Inline-net and inline-tool ports will move to inactive state port params edit such as speed change and admin enable option will be blocked except for port type modification.

# Manage Licenses for GigaVUE-FM and GigaVUE-OS Nodes

To view all the licenses assigned to a GigaVUE node:

- 1. From the device view, select **Settings > Config and Licenses** from the navigation pane.
- 2. Click Licenses.

You can view the list of licenses. GigaVUE TA Series device licenses may be one of the following:

- Advanced Features Licenses start with ADV
- Ports licenses start with PRT

For all licenses, the **Expiration Date** column has the word Never to indicate that there is no expiration date. Evaluation licenses are currently not available for GigaVUE-FM and GigaVUE-OS TA Series.

To view the serial numbers:

- 1. From the device view, select **System > Chassis** from the navigation pane.
- 2. Click Table View.

The serial number is displayed in the **Serial Number** column under **Properties**.

To install licenses:

- 1. From the device view, select **Settings > Config and Licenses > Licenses** from the navigation pane.
- 2. Click Add.
- 3. In the Add Licenses page, enter the license key in the Licensel field and select the **Box ID** of the chassis to which to apply the license.
- 4. Use the +/- option to add additional licenses.
- 5. Click **Install** to install the license.

For standalone nodes, the Box ID of the selected node will be available.

For clusters you must select the required Box ID from the drop-down. Use the +/- option to add licenses for other Box IDs.

# Volume-Based Licenses (Cloud License)

All the GigaVUE V Series Nodes connected to GigaVUE-FM periodically report statistics on the amount of traffic that flows through the V Series Nodes. The statistics provide information on the actual data volume that flows through the V Series Nodes. All licensed applications, when running on the node, generate usage statistics.

Licensing for GigaVUE Cloud Suite is volume-based. In the Volume-Based Licensing (VBL) scheme, a license entitles specific applications on your V Series Nodes to use a specified amount of total data volume over the term of the license. The distribution of the license to individual nodes becomes irrelevant for Gigamon accounting purpose. GigaVUE-FM tracks the total amount of data processed by the various licensed applications and provides visibility on the actual amount of data each licensed application is using on each node, and tracks the overuse, if any.

Volume-based licenses are available as monthly subscription licenses with a service period of one month. Service period is the period of time for which the total usage or overage is tracked.

For purchasing licenses with the Volume-Based License (VBL) option, contact our Sales.

### **Base Bundles**

In volume-based licensing scheme, licenses are offered as bundles. The following three base bundle types are available:

- CoreVUE
- NetVUE
- SecureVUEPlus

The bundles are available as SKUs<sup>1</sup>. The number in the SKU indicates the total volume allowance of the SKU for that base bundle. For example, VBL-250T-BN-CORE has a daily volume allowance of 250 terabytes for CoreVUE bundle.

#### Bundle Replacement Policy

Refer to the following notes:

- You can always upgrade to a higher bundle, but you cannot move to a lower version.
- You cannot have two different base bundles at the same time however, you can have multiple base bundles of the same type.

<sup>&</sup>lt;sup>1</sup>Stock Keeping Unit. Refer to the What is a License SKU? section in the FAQs for Licenses chapter.

• Once upgraded to a higher bundle, the existing lower bundles will be automatically deactivated.

# Add-on Packages

GigaVUE-FM allows you to add additional packages called add-on packages to the base bundles. These add-on packages allow you to add additional applications to your base bundles. Add-on packages have their own start/end date and volume specifications.

#### Rules for add-on packages:

- Add-on packages can only be added when there is an active base bundle available in GigaVUE-FM.
- The base bundle limits the total volume usage of the add-on package.
- If your add-on package has a volume allowance less than the base bundle, then your addon package can only handle the volume allocated for the add-on package.
- When the life term of an add-on package extends beyond the base bundle, then when the base bundle expires, the volume allowance of the add-on package will be reduced to zero until a new base bundle is added.

For more information about SKUs refer to the respective Data Sheets as follows:

GigaVUE Data Sheets	
GigaVUE Cloud Suite for VMware Data Sheet	
SigaVUE Cloud Suite for AWS Data Sheet	
GigaVUE Cloud Suite for Azure Data Sheet	
GigaVUE Cloud Suite for OpenStack	
GigaVUE Cloud Suite for Nutanix	
GigaVUE Cloud Suite for Kubernetes	

# How GigaVUE-FM Tracks Volume-Based License Usage

GigaVUE-FM tracks the license usage for each GigaVUE V Series Node as follows:

- When you create and deploy a monitoring session, GigaVUE-FM allows you to use only those applications that are licensed at that point (applicable only for ACTIVE licenses).
- When a license expires, you will be notified with an audit log. Refer to the *About Audit Logs* section in the respective GigaVUE Cloud Suite Deployment Guide.

- When a license expires (and has not been renewed yet), the monitoring sessions using the corresponding license will not be undeployed.
  - For releases prior to 6.4:
    - The Monitoring Sessions using the corresponding license will be undeployed (but not deleted from the database).
    - When a license is later renewed or newly imported, any undeployed monitoring sessions are redeployed.

**Note:** When the license expires, GigaVUE-FM displays a notification on the screen.

# Default Trial Licenses

After you install GigaVUE-FM, you will receive a one-time, free 1TB SecureVUE Plus trial Volume-Based License (VBL) for 30 days, starting from the installation date.

1	Q Find	VBL				ACTI	VE INACTIVE					
	SETTINGS											
	✓ System						Export ~	Activate Licenses	Deactivate	Email Volur	ne Usage	Filter
	Preferen		SKU	BUNDLE	VOLUME	STARTS	ENDS	GRACE PERIOD	ACTIVATION ID	STATUS	TYPE	8
	SSH											1
	SNMP		VBL-1T-BN-SVP-TRIAL	SecureVUEPlus	1024GB daily	10/16/2024	11/15/2024	0 days	4e8cb5a4-7e	Active	Trial	
	Packet E		VBL-2500T-BN-NV	NetVUE	2560000GB d	10/04/2024	04/02/2025	30 days	62a2ba16-ba	Active	Internal	
	GigaStr											
	Traffic D											
	Port Dis											
	Mobility											
	Node D											
	IP Resol											
	Backup/											
	Images											
	Certifica											
	Event N											
	External											

This license includes the following applications:

- ERSPAN
- GENEVE
- Slicing
- Masking
- Trailer
- Tunneling
- Load Balancing
- Enhanced Load Balancing
- Flow map

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- Header Stripping
- Header Addition
- De-duplication
- NetFlow
- Application Packet Filtering
- Application Filtering Intelligence
- Application Metadata Intelligence
- Application Metadata Exporter
- Inline SSL
- SSL Decrypt
- Precryption

**Note:** If you do not have any other Volume-Based Licenses installed, then after 30 days, on expiry of the trial license, any deployed Monitoring Sessions will be undeployed from the existing GigaVUE V Series Nodes.

When you install a new Volume-Based License (VBL), the existing trial license will remain active alongside the new VBL. Once the trial license period expires, it will be automatically deactivated. After deactivation, the trial license will be moved to the **Inactive** tab in the **VBL** page.

### Activate Volume-Based Licenses

To activate Volume-Based Licenses:

- 1. On the left navigation pane, click 🕸.
- 2. Go to **System > Licenses**. From the top navigation bar, select the **VBL** from the **Activation** drop-down.
- 3. Click Activate Licenses. The Activate License page appears.
- 4. Select **IP Address** or **Hostname** to include this information. If you exclude the IP Address or Hostname, you will have to identify the chassis or GigaSMART card by its ID when activating.
- 5. Download the fabric inventory file that contains information about GigaVUE-FM. Click **Next**. Refer to the What is a Fabric Inventory File section in *GigaVUE Licensing Guide* for more details.
- 6. Click **Gigamon License Portal** to navigate to the Licensing Portal. Upload the Fabric Inventory file in the portal. Once the fabric inventory file is uploaded, select the required license and click **Activate**. A license key is provided. Record the license key or keys.
- 7. Return to GigaVUE-FM and upload the file by clicking **Choose File** button.

# Manage Volume-Based Licenses

This section provides information on how to manage active and inactive Volume-Based Licenses in GigaVUE-FM.

#### Manage active Volume-Based License

To manage active Volume-Based License (VBL):

- 1. On the left navigation pane, click 🕸.
- 2. Go to **System > Licenses**. From the top navigation bar, select the **VBL** from the **Activation** drop-down list and click **Active**.

This page lists the following information about the active Volume-Based Licenses.

Field	Description
SKU	Unique identifier associated with the license.
Bundle	Bundle to which the license belongs to.
Volume	Total daily allowance volume.
Starts	License start date.
Ends	License end date.
Туре	Type of license (Commercial, Trial, Lab, and other license types).
Activation ID	Activation ID.
Entitlement ID	Entitlement ID. Entitlement ID is the permission with which the acquired license can be activated online.
Reference ID	Reference ID.
Status	License status.

**Note:** The License Type and Activation ID are displayed by default in the Active tab in the VBL page. To display the Entitlement ID field, click on the column setting configuration option to enable the Entitlement ID field.

#### Manage Inactive Volume-Based License

To manage inactive Volume-Based License (VBL):

- 1. On the left navigation pane, click 🕸.
- 2. Go to **System > Licenses**. From the top navigation bar, select the **VBL** from the **Activation** drop-down and click **Inactive**.

This page lists the following information about the inactive Volume-Based Licenses.

Field	Description				
SKU	Unique identifier associated with the license.				
Bundle	Bundle to which the license belongs to.				
Ends	License end date.				
Deactivation Date	Date the license got deactivated.				
Revocation Code	License revocation code.				
Status	License status.				

**Note:** The License Type, Activation ID and Entitlement ID fields are not displayed by default in the Inactive tab of VBL page. To display these fields, click on the column setting configuration option and enable these fields.

Use the following buttons to manage your VBL.

Button	Description
Activate Licenses	Use this button to activate a Volume-Based License. For more information, refer to the topic Manage Volume-Based Licenses of the GigaVUE Licensing Guide.
Email Volume Usage	Use this button to send the volume usage details to the email recipients.
Filter	Use this button to narrow down the list of active Volume-Based Licenses that are displayed on the VBL active page.
Export	Use this button to export the details in the VBL active page to a CSV or XLSX file.
Deactivate	Use this button to deactivate the licenses. You can only deactivate licenses that have expired.

**Note:** If a VBL is deactivated after a bundle upgrade, you cannot create or edit Monitoring Sessions that include applications from the deactivated VBL during the grace period. You should manually deactivate the upgraded license during the grace period to move the inactive lower bundle license back to active status.

For more detailed information on dashboards and report generation for Volume-Based Licensing refer to the following table:

For details about:	Reference section	Guide		
How to generate Volume-Based License reports	Generate VBL Usage Reports	GigaVUE Administration Guide GigaVUE Administration Guide		
Volume-Based License report details	Volume Based License Usage Report			
Fabric Health Analytics dashboards for Volume- Based Licenses usage	Dashboards for Volume Based Licenses Usage	GigaVUE-FM User Guide		

# Licenses - GUI Options in GigaVUE-FM

The licenses page in the GigaVUE-FM GUI allows you to perform the following tasks:

Table 1: Licensing Tasks from GigaVUE-FM GUI

Task	Description	Refer to
Activate Licenses	To Activate licenses for the following:	
	- GigaVUE-FM	Manage GigaVUE-FM License
	- GigaSMART	Manage GigaSMART License
	- GigaVUE-OS and GigaVUE-OS Module Licenses	
	Volume-based Licenses	Manage Volume-Based Licenses
	Advanced Feature and Port Licenses	Manage Licenses for GigaVUE-FM and GigaVUE-OS Nodes
View Activated, Deactivated, and Unlicensed Hardware	View details of activated, deactivated, and Unlicensed Hardware for GigaSMART and GigaVUE-OS and GigaVUE-OS Module.	Floating
View Expired Licenses	View details of expired licenses	Expiry
Configure Settings for Event Notifications	Configure the settings for event notifications	Settings
View Node-locked Licenses	View hierarchical and list view pages for the nodes	Node Licenses

# Floating

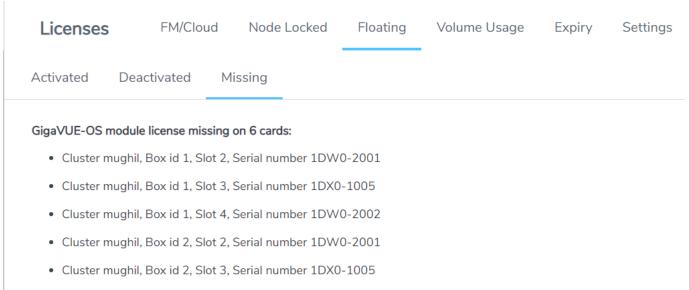
The Floating page displays the license details of floating licenses. This page has the following three tabs:

• Activated: The Activated tab displays the list of active licenses. You can activate, deactivate, and replace licenses from this page. To activate a license, refer to Activate Licenses.

**Note:** The **License Type** and **Activation ID** fields are displayed by default in the Activated page. To display the **Entitlement ID** field, click on the column setting configuration option to enable the Entitlement ID field.

• **Deactivated**: The Deactivated tab displays the list of deactivated licenses. The **License Type**, **Activation ID**, and **Entitlement ID** fields are not by default displayed in the Deactivated page. To display these fields, click on the column setting configuration option and enable these fields. • **Unlicensed Hardware** : The Unlicensed Hardware tab displays the list of GigaVUE-OS and GigaVUE-OS module licenses that are missing or not installed on a particular chassis or card.

**Note:** Floating licenses display the license type field. Node-locked licenses also display the license type field (Type), **only** if the license is imported through the GigaVUE-FM GUI. If a node-locked license is imported through CLI, then it must be re-imported through GigaVUE-FM (the license key must be saved in a .key file which is then imported), so that the node-locked license is visible on the floating activations page.



Cluster mughil, Box id 2, Slot 4, Serial number 1DW0-2002

# Node Licenses

To access the Node Licenses page:

On the left navigation pane, click 🕸 and select System > Licenses > Node Licenses.

The following views are available in the **Node Licenses** drop down list:

- Hierarchical View
- List View

#### Hierarchical View

This is a view only page showing the cluster-host-slot details along with the license expiry information. In hierarchical view:

- The cluster-host-slot is displayed as an expandable column.
- The serial number column shows chassis or card serial number, depending on the row it represents.
- The collapse all/expand all on the top right corner of the page allows you to collapse and expand in a single click.
- You can drill down in to the license information on each card of any cluster or chassis.

Ð	Licenses	Fabric Mana	ger Node Licens	es ~ Entitlement	Activation ~	Expiry	Settings	Q	C ¢		@ ~
<u>11</u>	Q Find									Export ~	$\overline{}$
*	SNMP	~ CL	USTER > HOST > SLOT	SERIAL NUMBER	EXPIRY	STATUS		FEATURES		٢	8
	Pack Giga	<ul> <li>✓ CI</li> </ul>	luster 192.168.2.39								
	Traffi	н	ost HC3: dev1 (192.168	JD30C							
	Port	SI	lot cc1	1DR0-1100							
	Mobi Node	รเ	lot 1	1DY0-1000							
	IP Re	SI	lot 2	1DW0-2001							
	Back	SI	lot 3	1DX0-0203	Never	Active		5g Correlat	ion, Cups		
	Imag Certi				Never	Active		Header Str	pping, Add	He	
	Even				Never	Active		Adaptive P	acket Filterir	ıg	

### List View

The list view provides a flat view of all licenses as retrieved from the devices. This is a view only page showing the node and cluster details along with the license expiry information.

**Note:** When you login to GigaVUE-FM, a notification is displayed on the top of the page with license expiry details for the nodes which have validity less than 30 days. Click the **Go To Licenses** option to go to the **Licenses** page.

The **Expires** option indicates the status of the license:

- Never: License is a life time license and will never expire
- Expired: License has already expired
- **Exact date:** Date when the license will expire (for example Oct 12, 2019)

					. ,	
Licenses	Fabric Manager	Node Licenses ~	Entitlement Activ	ation ~ Expiry	Settings	Q Ĵ Å ∛∨
Dashboard						Filter Export
SNMP Pack	CLUSTER ID	HOST NAME	SERIAL# (CHASSIS OR CA	SLOT ID	FEATURE	EXPIRES
Giga	cluster1	dev2	1DX0-0303	3	5g Correlation,CUPS	Never
Traffi	cluster1	dev2	1DX0-0303	3	Header Stripping,Add	Never
Port Mobi	cluster1	dev2	1DX0-0303	3	Adaptive Packet Filteri	Never
Node	cluster1	dev2	1DX0-0303	3	Apps Filtering Intellige	Never
IP Re	cluster1	dev2	1DX0-0303	3	Apps Metadata Intellig	Never
Back	cluster1	dev2	1DX0-0303	3	Application Session Fil	Never

# Expiry

The Expiry tab displays the list of node-locked licenses (licenses that are locked to specific cards or chassis serial numbers) and floating licenses (licenses that are pooled and dynamically re-assignable from one card to another) in the following three categories:

- Expired: License has already expired
- Expiring Soon: License expiry is within the notification period
- Expiring in 90 Days

The license expiry events are triggered accordingly and can be seen in the Events page. Click on an event related to expiry of license in the Events page to navigate to the Expiry page.

#### GigaVUE Licensing Guide

₩	Licenses	Fabric Manager	Node Licenses ~	Entitlement	Activation ~	Expiry	Settings	Q	S	¢	
<u>.111</u>	Q Find	Expiry Info									
\$	SNMP Over All										
	Pack	Status Category		Floating / Vo	lume Based		Node-Locked			0	Ð,
	Giga	Expired		0			0				
	Traffi	Expiring Soon		0			0				
	Port Mobi	Expiring in 90 days		10			0				
	Node	10 Floating Licenses Expiring in 90 days:									
	IP Re	Qty 1 of SKU VBL-1T-BN-SVP-TRIAL expiry on 2024/12/13 [AID 4e8cb5a4-7eb4-4c2b-9ac9-0883428d6dc7]									
	Back	Qty 1 of SKU VBL-1T-BN-SVP-TRIAL expiry on 2024/12/13 [AID 4e8cb5a4-7eb4-4c2b-9ac9-0883428d6dc7]									
	Imag	01-1-60/11/01-1		0004/10/10 MID 4-0-FF	- 4 7-64 4-26 00 00	02420464-71					

# Settings

The Settings page allows you to configure the settings for event notifications and emails. You can configure the following:

Table 1: Configure License settings

Field	Description
Digital License Management and Performance License	
Volume Usage Event Notification	Enable this to receive a notification when daily volume usage exceeds the threshold. Configure the required threshold level for volume usage.
License Expiry Event Notifications	Enable this to receive a notification when license is within 90 days of expiry or has expired.
Email Server Configured	Configure the email server for receiving emails. Click on the link to navigate to the Email Servers page.
Email Recipients for Volume Usage Reports	Enter the email recipients for receiving volume usage reports.
Email Recipients for License Expiry Notifications	Enter the email recipients for license expiry notifications.

-	Licenses	Fabric Manager	Node Licenses ~	Entitlement	Activation ~	Expiry Se	ttings	ς β ¢ *×®·
<u>[.11]</u>	Q Find	Settings						Register with License Server Cancel Apply
♦	SN Pack	Automatic Entitlement Retrieval		Disabled			Ucense entitlements and activations are automatically retrieved from the license server.	
1	Giga Traf Port Mob	VBL Usage Reportin	g		isabled			UBL daily usage data will be sent to licensing server.
	Nod IP R	Volume Usage Event Notification						
	Bac Ima	Status		Er	nabled			When daily usage exceeds allowance times threshold (expressed as percent), a     notification is sent.
	Certi Eve Exte	Threshold(%) * License Expiry Event Notifications		8	8			
	Lice NTP Logs			Er	nabled			0 . When a license is within 90 days of repliny or is expired, a notification is sent, and also emailed to Grgamon License Renewal team.
	Stor Prox	Email Server Configured	ured	Er	nabled			() To configure Email Server Click here
	Reports	€						
>	Tasks     Authenticati	Email Recipients for	Volume Usage Reports	Enter Ema	il.			Mandatory Recipient : VbI-Reports@subscriptions.gigamon.com. Enter other email.IDs separated by comma.
ت ه	High Availa Tags SUPPORT	Email Recipients for	License Expiry Reports	Enter Ema	il			email to separate by comma.     Mandatory Reopient : License-Renewal@subscriptions.gigamon.com. Enter     other email IDs separated by comma.
-	ance:GigaVUE-FM - 6.9.	00						

# License Command

The following licenses can be managed from the command line interface:

- GigaSMART Licenses
- GigaVUE-OS and GigaVUE-OS Module Licenses
- Advanced Feature Licenses
- Port Licenses

The license command is used to configure and manage licenses from CLI.

## license

#### Required Command-Line Mode = Configure

Use the **license** command to enable additional GigaVUE-FM and GigaVUE-OS features. Some license keys enable GigaSMART applications. Other license keys enable ports or clustering.

The following products have GigaSMART licensing:

- GigaVUE-HC1
- GigaVUE-HC1-Plus
- GigaVUE-HC3
- GigaVUE-HCT

For GigaSMART licensing details, refer to the "Working with GigaSMART Operations" chapter in the GigaVUE Fabric Management Guide.

The following products have port licensing:

- GigaVUE-TA25A (a 24-port version of GigaVUE-TA25)
- GigaVUE-TA100
- GigaVUE-TA200
- Certified Traffic Aggregation White Box

**Note:** GigaVUE-TA25 have all ports enabled.

The following products have Advanced Features License:

- GigaVUE-TA25 and GigaVUE-TA25A
- GigaVUE-TA100
- GigaVUE-TA200

For port licensing and Advanced Features License details, refer to the respective **Hardware Installation Guide**.

The **license** command has the following syntax:

#### (config) # license install box-id <box ID> key <license key>

For example:

```
(config) # license install box-id 1 key LK2-SMT_HC0_R-7YF0-QL2M-1G5L-Q32C-T27X-C0VU-
CD5H-NJUK-77XC-0UB1-EDMN-JUK7-7XC0-W3JC-5LNQ-RBJ7-XHY1-T7AU-KECM-N6JU-K741-
6L2G-RW60-Q3LC-A479-0L6E-HH70-W30E-9T8G-V20Q-UFEM-P78F-9Q86-GT6B-BH3Y-N8QQ-
9H20-056C-BHQQ-8KUV
```

The key is generated by Gigamon. It consists of a long string beginning with LK2, which is a protocol, followed by the card or module (SMT\_HC0\_R), followed by the content of the license key.

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

Argument	Description
box-id <box id=""></box>	Configures the system's box ID. The box ID identifies the node in the system.
key <license key=""></license>	Configures the license key.
revoke key <license key=""></license>	Revokes the license key. Once the license is revoked, the same key cannot be used for the same device at anytime.

#### **Related Commands**

The following table summarizes other commands related to the **license** command:

Task	Command					
Displays all installed	# show license					
licenses.	<b>Note:</b> The license type is displayed in the <b>show license</b> command output. For licenses obtained before 5.7 release, the license type field is displayed as NA.					
Displays the installed licenses on a specified node.	# show license box-id 1					

# Term License Behavior after expiry (from Software Version 6.1.00)

Gigamon offers a uniform 45 day window of time after a term license expires during which normal operation continues. During the time window:

- There is no impact to the flow of traffic.
- Creating new maps and editing existing map configurations are allowed.
- Appropriate notifications are displayed in GigaVUE-OS CLI and GigaVUE-FM.

At the end of the 45 day window, you will not be allowed to create new maps or edit existing maps. There is no impact to the flow of traffic during 45 days and beyond.

The following tables summarizes the configuration behavior based on the state of the license for the different license types.

License State	Restrictions / Permissions	GigaVUE- OS License	GigaVUE- OS Module License	GigaSMART License
Not Installed	All cards in the node will be in a down state.	~	-	-
	All ports of the card will be in an inactive state.	-	~	-
	Configuring new maps with GigaSMART operations.	-	-	Cannot be configured
Upon Expiration	Creating new maps and editing existing maps.	~	~	$\checkmark$
	Periodic notification from GigaVUE-FM and devices.	✓	~	√
	Banner Notification in CLI.	~	✓	✓
At Expiration +45 days	Creating new maps and editing existing maps.	Cannot create	e new maps / edit	t existing maps
	Periodic notification from GigaVUE-FM and devices.	✓	~	√
	Banner Notification in CLI.	✓	✓	✓

#### For GigaVUE HC Series devices:

#### **GigaVUE TA Series devices:**

License State	Permissions / Restrictions	GigaVUE- OS License	Port License
Not Installed	All ports will be inactive.	$\checkmark$	-
	Ports that need licenses for activation will be in an inactive state.		√
Upon Expiration	Creating new maps and editing existing maps.	$\checkmark$	$\checkmark$
	Periodic notification from GigaVUE-FM and devices.	√	~
	Banner Notification in CLI.	✓	$\checkmark$
At Expiration +45 days	Creating new maps and editing existing maps.	Cannot create ne existing	
	Periodic notification from GigaVUE-FM and devices.	$\checkmark$	✓
	Banner Notification in CLI.	$\checkmark$	$\checkmark$

Term license behavior for Inline Bypass license is as follows:

License State	Restrictions for GigaVUE TA Series Devices (applicable only for GigaVUE-TA25 and GigaVUE-TA200)
Not Installed	You are not allowed to configure inline network and inline tool ports.
Installed and expired	<ul> <li>You can:</li> <li>Configure inline network and inline tool ports.</li> <li>Edit port parameters (admin enable, port type change).</li> </ul>
Upon Expiration	<ul> <li>You can create or edit flexible inline maps.</li> <li>Periodic notification from GigaVUE-FM and devices.</li> <li>Banner Notification in CLI.</li> </ul>
At Expiration + 45 days	<ul> <li>You cannot create or edit flexible inline maps.</li> <li>Periodic notification from GigaVUE-FM and devices.</li> <li>Banner Notification in CLI.</li> </ul>

Term license behavior for **Volume-Based Licenses** is as follows. For more information on Volume-Based Licenses, refer to Volume-Based Licenses (Cloud License) and Manage Volume-Based Licenses.

License State	Permissions / Restrictions
Not Installed	You are not allowed to create a Monitoring Session.
Installed and expired	You can create, edit, delete, deploy, and redeploy a Monitoring Session.
Upon Expiration	<ul><li>You cannot create, edit, deploy, or redeploy a Monitoring Session.</li><li>You can delete a Monitoring Session.</li></ul>

License State	Permissions / Restrictions
	Traffic continues to pass.
At Expiration	<ul> <li>You cannot create, edit, deploy, or redeploy a Monitoring Session.</li> <li>You can delete a Monitoring Session.</li> <li>Traffic continues to pass.</li> </ul>

# Notification Banners for Licenses

Notification banners associated with licenses are displayed in the GigaVUE-FM GUI in the following scenarios:

- Expiry of Licenses
- Excessive Volume Usage

Until appropriate action is taken, these notification banners continue to be displayed in the GigaVUE-FM GUI:

- To temporarily close the banner, click the **X** button on the banner. The banner does not appear again until the next login session.
- To permanently clear the banners:
  - Banners for expiry of licenses: Renew the licenses or deactivate the licenses.
  - **Banners for excessive volume usage**: Add licenses with sufficient allowance to compensate for the deficient volume.

### **Expiry of Licenses**

A notification banner is displayed in the GigaVUE-FMGUI when one of the following licenses expires:

- GigaSMART Licenses
- GigaVUE-OS Licenses
- GigaVUE-OS Module Licenses
- Volume-based Licenses

Click on the Expired Licenses banner ribbon. You will be navigated to the **License Expiry** tab from where you can view the detailed status of the expired licenses.

	(e) Expired Licenses (e)											
	ⓒ Critical Disk Space Error for Hostname : GigaVUE-FM-6900 , Partition : var. Space used is 85%. >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>											
۲	Licenses	Fabric Manager	Node Licenses ~	Entitlement	Activation ~	Expiry	Settings			S	¢ ¢	* • @
<u>.u.</u>	Q Find		Expiry Info	~								
$\stackrel{s}{\Longrightarrow}$	SETTINGS		Over All									
_	Preferences		Status Category		Floatin	g / Volume Based		Node-Locked				
	SSH		Expired		19			0				
	SNMP		Expiring Soon		2			0				
	Packet Error	rs and Drops	Expiring in 90 days		2			0				
	CinaStream Imbalance											

Note: License expiry notification banner will automatically disappear when you deactivate the license. This is applicable for Volume-based licenses, GigaSMART licenses, and GigaVUE-OS and GigaVUE-OS Module licenses when the following conditions are true:

- Licenses that are in Expired state.
- Floating licenses are not assigned to any node.

### Excessive Volume Usage

In the Volume-based Licensing scheme, only licensed applications can be used to process the traffic. GigaVUE-FM calculates the volume usage of the licensed applications and displays the same in the Fabric Health Analytics dashboards and reports.

To compute excessive volume usage, GigaVUE-FM calculates the average volume usage (in Terabytes per day) every day, starting from the 15th day after the license is installed, for the previous 14-day period. If license usage is higher than twice the allowed licensed volume, thenGigaVUE-FM GUI:

- Displays a notification banner in the GUI to indicate excessive volume usage.
- Triggers an event in the Events page. Refer to the Event Notifications section in the GigaVUE Administration Guide for details on configuring email notifications for events.

Refer to the Notes section for details on license upgrade scenarios.

#### **Excessive Volume Usage calculation**

GigaVUE-FM calculates excessive volume usage using the following parameters:

- Average Allowed License Volume per day (A)
- Average Volume Usage per day (U)

Ratio = Average Volume Usage per day (U)/ Average Allowed License Volume per day (A)

- If the U/A ratio is greater than or equal to 2, notification banners are triggered in the GUI. An event with a severity level of 'Critical' is displayed in the Events page.
- If the U/A ratio is equal to 1.25, an event with a severity level of 'Major' is displayed in the Events page.

#### Example:

For a VBL license, the allowed license volume **A** is 250 Terabytes per day. GigaVUE-FM calculates volume usage on a daily basis for the previous 14-day period starting from the 15th day. If the average usage **U** is 500 Terabytes on a particular day, then**U/A** is 2. Notification banners indicating excessive volume usage will be displayed in the GUI.

The average VBL usage is calculated on a daily basis and, therefore will be different for each day.

		× Average traffic volume usag	e for last 14 days has exceeded twice the limit allowed by your current license. I	Jsed: 3 TB a	and Allowed: 1 TB					×
(∰	Physical & Virtual							Q 2	Ç Ç	@ •
	Profile: Default 🔻							(	Add Wid	get
$\stackrel{A}{\underset{V}{\Longrightarrow}}$	AUDIT LOGS	礅	EVENTS	礅	STATUS SUM	MARY: PORT L	INKS			鐐
		1 Day ~	1 Day	~	Port Type	Total	Up	Down	Dis	÷
					C Circuit	-	-	-	-	
					E GigaS	-	-	-	-	
					H Hybrid	-	-	-	-	
					iN Inline	-	-	-	-	
					iT Inline	-	-	-	-	
					N Netw	-	-	-	-	
	Success Failure		Critical 🧼 Major 🧼 Minor 💿 Info							
	STATUS SUMMARY: UNHEALTHY MAPS	¢3	HIGHEST TRAFFIC: PHYSICAL MAPS	礅	HIGHEST TRA	FFIC: TOOL P	ORTS			鐐
	Cluster Map Alias	Status 🕀	1 Day	~				1 Hou	ır	~
			Node Map Alias Traffic (Mbps)	(+)	Cluster ID	Host Name	Port ID	Port Alias	Tra	÷
				0						Ŭ
	No Records Found	ł	No Records Found			No	Records	Found		
Ð						NO	Records	i ound		
0										
ŝ										
FM Inst	tance: GigaVUE-FM							Last Updated At: A	ug 4, 2023	06:00:03

#### Notes

Refer to the following notes when upgrading licenses or importing additional licenses.

- When you upgrade the license, the licensed volume changes accordingly:
  - GigaVUE-FMdoes not display the excessive volume usage banner until the following midnight.
  - There is a net increase in the license allowance from the previous day to the next day (a behavior observed for the consecutive pair of days after licenses are upgraded). In this scenario, the banner will not be displayed for the upcoming 14-day period even if license usage is higher than twice the allowed licensed volume.
  - At the end of the 14-day period, the average volume usage (in Terabytes per day) is recalculated to determine if it is still over the 2x threshold. If it is more than the threshold ratio (2x), the banner is displayed in the GUI.

**Note:** Upgrade refers to upgrading to a higher bundle package or higher volume of the same bundle.

- When you import additional licenses, the licensed volume changes accordingly:
  - GigaVUE-FM does not display the excessive volume usage banner until the following midnight.
  - GigaVUE-FM then re-evaluates if a banner should be displayed or not. If license usage is higher than twice the allowed licensed volume, then the banner is displayed.

**Note:** Additional licenses refer to licenses belonging to the same base bundle.

# Gigamon License Portal

The Gigamon License Portal is a web-based application that allows you to view the license entitlements for your purchased software. You can activate the licenses from the portal, as required.

#### GigaVUE Licensing Guide

		hboard   Gigamon   X 😗 Gigamon Cor	mmunity Home × O Lice	nsing Portal	× +			~
C @ 08=	2 https://licensing.gi	gamon.com/LicPortal/ems					습	0
License Portal							Welcome alim.	ladra@gigamon.co
All Activated Not Activated Search								
Grid Filter : Inactive I enses • Use the Navigation Search "Above" to filter data fro • Use Grid search below the column headings to filte								T-Mobile Back to Selv
escription	Order Type	sku	Eid	License Start Date	License End Date	Activation ID		Download Export
eVUE GigaSMART software bundle for GigaVUE-HC3. I	Demo	SMT-HC3-BN-CORE ()	LP20230103222839493	2023-01-03	2024-01-03	none	3/3	Activate
bleVUE GigaSMART software bundle for GigaVUE-HC3	. Demo	SMT-HC3-BN-MV ()	LP20230103223254580	2023-01-03	2024-01-03	none	2/2	Activate
sSMART, GigsVUE-HC3, GTP Filtering & Correlation fe	Demo	SMT-HC3-GTPMAX	LP20230103231059717	2023-01-03	2024-01-03	none	2/2	Activate
aSMART, GigaVUE-HC3, FlowVUE feature license per	Demo	SMT-HC3-FVU	LP20230103231100794	2023-01-03	2024-01-03	none	2/2	Activate
vanced Feature License, GigaVUE-TA200, per node	Commercial	CLS-TAC20	SO202205673-101-263201	2022-12-23	Never Expire	none	56/56	Activate
anced Features License, GigaVUE-TA25	Commercial	CLS-TAX20	S0202205673-101-263202	2022-12-23	Never Expire	none	126/126	Activate
aSMART, GigaVUE-HC3, 5G Correlation, CUPS suppor	Commercial	SMT-HC3-5GC	\$0202205673-101-263203	2022-12-23	Nover Expire	none	82/82	Activate
aSMART, GigaVUE-HC3, FlowVUE feature license per	Commercial	SMT-HC3-FVU	50202205673-101-263204	2022-12-23	Nover Expire	none	82/82	Activate
aSMART, GigaVUE-HC3, GTP Filtering & Correlation fe	Commercial	SMT-HC3-GTPMAX	S0202205673-101-263205	2022-12-23	Never Expire	none	82/82	Activate
grade option for GigaVUE-TA200 to enable all 64 100G	Commercial	UPG-TAC20	S0202205673-101-263210	2022-12-23	Nover Expire	none	56/56	Activate
rpetual license for GigaSMART GigaVUE-HC3 license A	Trial	SMT-HC3-GEN2-AFS-SW-PL	LP20221208190358857	2022-12-08	2023-01-22	none	9/10	Activate
onthly subscription license for GigaSMART GigaVUE-HC	Trial	SMT-HC3-GEN2-AFS-SW-TM	LP20221208191544534	2022-12-08	2023-01-22	none	14/14	Activate
onthly subscription license for GigaSMART GigaVUE-HC	Trial	SMT-HC3-GEN2-AFI-SW-TM	LP20221208191545617	2022-12-08	2023-01-22	none	14/14	Activate
vanced Features License, Giga//UE-17A25	Commercial	CLS-TAX20	S0202204169-101-250721	2022-09-30	Nover Expire	none	40/40	Activate
vanced Feature License, GigaVUE-TA200, per node	Commercial	CLS-TAC20	SO202204169-101-250726	2022-09-30	Nover Expire	none	1/32	Activate
	tems per page							1 - 600 of 610

The portal lists licenses of all the product/features that you have paid for and are available in your entitlement. These features are listed as Stock Keeping Units (SKUs).

The licensing portal consists of the following tabs:

All	Lists all the licenses
Activated	Lists the licenses activated
Not Activated	Lists only the licenses that have not been activated
Search	Use to search the portal and fetch the results

The licenses in the portal consists of the following fields:

Field	Description
Activation	Date the license got activated
Device Locked To	Device ID for node-locked licenses
	MAC Address for floating licenses
Customer	Customer who purchased the license
Description	Detailed description of the license
Order Type	Order type

SKU	SKU of the license
Туре	Type of license, either floating or node locked
Eid	Entitlement Id of the license
License Start Date	License start date
License End Date	License end date
Activation ID	Activation id for the license
Quantity	Number of licenses. This is displayed as a ratio of the activated verses total number of licenses.
Status	Status of licenses, whether activated or not-activated
Lic.key	License key. For inactive licenses, link to Activation is provided.
Revoke (button)	Indicated as revoked for revoked licenses.

The last three columns listed below are fixed. They will always be visible even when you resize the page:

- Quantity
- Status
- License Key

# Activate Licenses from the Portal

You can activate both Node-locked and Floating licenses from the portal:

#### Activate Floating Licenses

Prior to activating the licenses, ensure that you have the following information:

- Entitlement IDs: Locate the email sent to you by Gigamon containing the licensing information for your installation. This email contains one or more EID (Entitlement ID) values. You will use these EIDs to generate License Keys on the Gigamon Licensing Website.
- **Challenge MAC Address**: Locate the Challenge MAC address of the virtual network adapter associated with the GigaVUE-FM installation.
- **Fabric Inventory File:** Download the Fabric Inventory JSON file and save it in your local folder.

To activate a floating license:

- 1. Identify and select the license(s) that you want to activate from the list of available licenses.
- 2. Click Activate. The Activation Method page appears.
- 3. In the Do you use GigaVUE-FM to manage your environment option, select Yes.

Gigamon	License Portal	Welcome palaniappa.mughilan@gigamon.com
	Activation Method	
	Floating licenses are available only to customers using Fabric Manager 5.7 or above Do you use GigaVUE-FM to manage your environment? Yes For GigaVUE-FM 5.6 and lower: Click Continue. For GigaVUE-FM 5.7 and higher: Please download the Fabric Inventory (json) file from the Licenses page in Fabric Manager Click Choose File to upload it here, and then click Continue	
	Choose file No file chosen	
	*	
	Cancel Continue	
	© 2023 Gigamon Inc. Contact Us Privacy Policy Supported Browsers: Google Chrome, FireFox, Edge.	

4. Choose the Fabric Inventory File downloaded from GigaVUE-FM and click **Continue**.

General License Portal	Welcome palaniappa.mughilan@gigamon.com
Floating licenses are available only to customers using Fabric Manager 5.7 or above Do you use GigaVUE-FM to manage your environment? Yes	
Choose file FabricInvent570780.json Summary of the uploaded file. GigaVUE-FM MAC Address: 00:50:56:a0:cb:8f GigaVUE-FM Version: c 2.00 Total GigaSMART Card Senial # uploaded: 1 Total TA-Chassis Senial # uploaded: 0 ModelSenial / Amassis Number	
Wode     HC3 1DX0-1005(6.2.&0_Beta)     Cancel     Continue     @ 2023 Gigamon Inc. Contact Us Privacy Policy Supported Browsers: Google Chrome, FireFox, Edge.	

- 5. Select the required quantity of the licenses. Click **Review**.
- 6. After reviewing the license details, click **Activate** to activate the license.

Gigamo	License Portal	Welcome palaniappa.mughilan@	@gigamon.com
	Review		
AUT ANC USE	ASE READ CAREFULLY: IF YOU ARE CLICKING "ACTIVATE" TO ENABLE THIS GIGAMON SOFTWARE LICENSE OR USING, INSTALLING OR ACCESSING THE GIGAMON SOF HORITY TO BIND THE COMPANY OR OTHER LEGAL ENTITY USING THE GIGAMON PRODUCT (THE "CUSTOMER") TO THE GIGAMON TERMS AND CONDITIONS SET FOR THER VALID CONTRACT FOR THE PURCHASE AND USE OF GIGAMON'S PRODUCTS AND SERVICES, THIS AGREEMENT WILL BE DEEMED A BINDING CONTRACT BETWE : OF GIGAMON PRODUCTS AND SERVICES. IF CUSTOMER DOES NOT AGREE TO THIS AGREEMENT OR IF YOU DO NOT HAVE AUTHORITY TO BIND THE CUSTOMER, THE : GIGAMON PRODUCT.	RTH AT THE "AGREEMENT", AND UNLESS EN GIGAMON AND CUSTOMER, GOVERN	S CUSTOMER HAS
		Back Cancel	Activate
SKU	Description	Device Locked to	Quantity
Floating PRT-HC	3-X24-SW-TM GigaVUE-OS Term Software License for GigaVUE-HC3 PRT-HC3-X24 module	00:50:56:a0:cb:6f	05
	© 2023 Gigamon Inc. Contact Us Privacy Policy Supported Browsers: Google Chrome, FireFox, Edge.		

The Activation Results page appears with the following details:

- Details of the SKU
- Device to which the license is locked to
- License file that can be downloaded.
- 7. Click **Download** to download the license file.

**Note:** License files downloaded from the portal have unique names. However, if you try to download the same license file again without deleting the already downloaded file, the file name is duplicated with the number 1 surrounded by parenthesis. For example: 'GigamonLic\_NL\_H2762\_f5238c63-0da0-4e16-a613-a81b7d8fa40b (1).lic'. Ensure to delete the number and the parenthesis as GigaVUE-FM does not import file names with parenthesis.

8. Navigate to GigaVUE-FM GUI and upload the license file.

A message prompts up in the GigaVUE-FM GUI to indicate that the license has been successfully activated.

Activate Node-locked licenses

You need the following details for activating node-locked licenses:

- Chassis Serial Number for the devices
- Challenge MAC Address for GigaVUE-FM

To activate a node-locked license:

1. Identify and select the license that you want to activate.

All Ad	ctivated I	Not Activated	Search												
censes								DO NOT TOU	CH ( Gimo In	ternal Ac	count - To be	e used by E	ingineering lice	nse Activ	vat
			re" to filter data from DB In headings to filter data displayed within the Grid	d.											
													Download	Expor	rt ·
ctivatio	Device L	Custome	Description	Order Ty	SKU	Туре	Eid	License	License	Activat	Quantity	Status	Download		
ctivatio	Device L	Custome	Description	Order Ty	SKU BPS-HC1-D25A24-SW-1M	Type	Eid		License 2023-11-22			Status			
ctivatio	Device L	Custome		Internal		none			2023-11-22	none	1/		Lic. Key		
activatio	Device L	Custome	GigaVUE-US Ierm software license for GigaVU	Internal	BPS-HC1-D25A24-SW-IM	none	LP20221	2023-10-08 2023-08-05	2023-11-22	none	1/*	Inactive	Lic. Key Activate		
Activatio	Device L	Custome	GigaVUE-US Term software license for GigaVU Monthly subscription license for GigaSMART G	Internal Internal Internal	BPS-HG1-D25A24-SW-TM SMT-HC1-GEN2-HS1-SW-TM	none none none	LP20221 LP20221	2023-10-08 2023-08-05	2023-11-22 2024-02-01 2023-04-30	none none none	1/* 1/*	Inactive	Lic. Key Activate Activate		

2. Click **Activate**. The Activation Method page appears.

G	G Igamon'	License Portal	Welcome
		Activation Method	
		Floating licenses are available only to customers using Fabric Manager 5.7 or above Do you use GigaVUE-FM to manage your environment? No	
		Cancel Continue	
		© 2023 Gigamon Inc. Contact Us Privacy Policy Supported Browsers: Google Chrome, FireFox, Edge.	

3. In the "Do you use GigaVUE-FM to manage your environment" option, select **No** and click **Continue**. The Activation Quantity page appears.

Gigenoor License Portal			-	-
	Activation Quant	ity		
SKU : GFM-FM000 Description : GigaVUE-FM Prime Edition, manage up to 1000 Physical add-ons	Visibility Fabric Nodes, includes VMware NSX Manager Integration (G	FM-VM-NSX)	Back Cancel	Review
Туре	Version	Device Locked to	Qty	Action
Node-Locked V	pre57 V	I	1	+
		Remaining Quantity:	41	
		n		
¢	2023 Gigamon Inc. Contact Us Privacy Policy Suppor	ted Browsers: Google Chrome, FireFox, Edge.		

- 4. In the **Device Locked To** field, enter the serial number of the chassis or the serial number of the card for the devices. For GigaVUE-FM enter the Challenge MAC address of GigaVUE-FM.
- 5. Specify the required quantity of the licenses. Click the +/- options under **Action** column. Click **Review**.
- 6. Review the license you wish to activate. Click **Activate** to activate the license. The Activation Results page with the License Key is displayed.

Install the license keys either using the GigaVUE-FM GUI or the **license** command (for GigaVUE TA Series devices and Port licenses).

# Search for Licenses in the Portal

Use the filter options in the Gigamon license portal to find the required license. The following search options are available.

- **Navigation Search**: Use navigational search to filter the data from the database. You can search based on the following criteria:
  - Device Locked To
  - EID
     SKU
  - Date Range
- **Grid Search**: Use the Grid Search below the column headings to further refine the data fetched from the navigation search.

		r data from DB	g M02FE	Search Reset								B	T-Mobile, US ack to Selection
elow the colur	umn heading	is to fiiter data displayed within the Grid.										Download	Export •
Loc Custo	tomer	Description	Order Type	SKU	Туре	Eid	License Sta	License En	Activation	Quantity	Status	Lic. Key	Revoke
T-Mot	obile, USA	Advanced Features License, GigaVUE-TA25	Commercial	CLS-TAX20	Node-Locked	S02021168	2021-02-10	Neuer Euroisee	dd00c82d		1 Activated	e Download	Revoke
Loc			Customer Description     TMoble, USA Advanced Features License, GigaVUE-TA25										Customer Description Order Type SKU Type Eid License Sta License En Activation Quantity Status Lic. Key

The search operation performed from a specific page is applicable only for the items listed in the Grid on that specific page. For example, consider you are on Page 3 of the portal and perform the following searches:

- Specific **EID** from the navigation search menu
- Specific License Start Date from the Grid search.

Only Page 3 of the portal is updated with the search results. If you navigate to Page 4, it will still list all the items. Apply the search criteria again in each of the individual pages to get the updated results.

### Activate Floating Licenses

Prior to activating the licenses, ensure that you have the following information:

- Entitlement IDs: Locate the email sent to you by Gigamon containing the licensing information for your installation. This email contains one or more EID (Entitlement ID) values. You will use these EIDs to generate License Keys on the Gigamon Licensing Website.
- **Challenge MAC Address**: Locate the Challenge MAC address of the virtual network adapter associated with the GigaVUE-FM installation.
- **Fabric Inventory File:** Download the Fabric Inventory JSON file and save it in your local folder.

To activate a floating license:

- 1. Identify and select the license(s) that you want to activate from the list of available licenses.
- 2. Click Activate. The Activation Method page appears.
- 3. In the Do you use GigaVUE-FM to manage your environment option, select Yes.

Cicense Portal	Welcome palaniappa.mughilan@gigamon.com
Activation Method	
Floating licenses are available only to customers using Fabric Manager 5.7 or above Do you use GigaVUE-FM to manage your environment? Yes For GigaVUE-FM 5.6 and Iower: Click Continue. For GigaVUE-FM 5.7 and higher: Please download the Fabric Inventory (json) file from the Licenses page in Fabric Manager Click Choose File to upload it here, and then click Continue	
Choose file No file chosen	
Cancel Continue	
© 2023 Gigamon Inc. Contact Us Privacy Policy Supported Browsers: Google Chrome, FireFox, Edge.	

4. Choose the Fabric Inventory File downloaded from GigaVUE-FM and click **Continue**.

nse Portal	Welcome palaniappa.mughilan@gigamon.com
Floating licenses are available only to customers using Fabric Manager 5.7 or above Do you use GigaVUE-FM to manage your environment? Yes	
Choose file FabricInvent570780.json	
Summary of the uploaded file. GigaVUE-FM MAC Address: 00:50:56:a0:cb:6f GigaVUE-FM Version: 6.2.00 Total GigaSMART Card Serial # uploaded: 1 Total TA-Chassis Serial # uploaded: 0 Moded	
Cancel Continue	
© 2023 Gigamon Inc. Contact Us Privacy Policy Supported Browsers: Google Chrome, FireFox, Edge.	

- 5. Select the required quantity of the licenses. Click **Review**.
- 6. After reviewing the license details, click **Activate** to activate the license.

Gigarrion License Portal		Welcome palaniappa.mughilan@	@gigamon.com
	Review		
AUTHORITY TO BIND THE CO ANOTHER VALID CONTRACT I	YOU ARE CLICKING "ACTIVATE" TO ENABLE THIS GIGAMON SOFTWARE LICENSE OR USING, INSTALLING OR ACCESSING THE GIGAMON SOFTW/ MPANY OR OTHER LEGAL ENTITY USING THE GIGAMON PRODUCT (THE "CUSTOMER") TO THE GIGAMON TERMS AND CONDITIONS SET FORTH OR THE PURCHASE AND USE OF GIGAMON'S PRODUCTS AND SERVICES, THIS AGREEMENT WILL BE DEEMED A BINDING CONTRACT BETWEEN I AND SERVICES. IF CUSTOMER DOES NOT AGREE TO THIS AGREEMENT OR IF YOU DO NOT HAVE AUTHORITY TO BIND THE CUSTOMER, THEN DO	AT THE "AGREEMENT", AND UNLESS GIGAMON AND CUSTOMER, GOVERN	S CUSTOMER HAS NING CUSTOMER'S
		Back Cancel	Activate
SKU	Description	Device Locked to	Quantity
Floating PRT-HC3-X24-SW-TM	GigaVUE-OS Term Software License for GigaVUE-HC3 PRT-HC3-X24 module	00:50:56:a0:cb:6f	05
	Ø 2023 Gigamon Inc. Contact Us Privacy Policy Supported Browsers: Google Chrome, FireFox, Edge.		

The Activation Results page appears with the following details:

- Details of the SKU
- Device to which the license is locked to
- License file that can be downloaded.
- 7. Click **Download** to download the license file.

**Note:** License files downloaded from the portal have unique names. However, if you try to download the same license file again without deleting the already downloaded file, the file name is duplicated with the number 1 surrounded by

parenthesis. For example: 'GigamonLic\_NL\_H2762\_f5238c63-0da0-4e16-a613a81b7d8fa40b (1).lic'. Ensure to delete the number and the parenthesis as GigaVUE-FM does not import file names with parenthesis.

8. Navigate to GigaVUE-FM GUI and upload the license file.

A message prompts up in the GigaVUE-FM GUI to indicate that the license has been successfully activated.

### PreActivate Node-locked Licenses

You need the following details for activating node-locked licenses:

- Chassis Serial Number for the devices
- Challenge MAC Address for GigaVUE-FM

To activate a node-locked license:

1. Identify and select the license that you want to activate.

All A	ctivated I	Not Activated	Search											
								DO NOT TOU	ICH ( Gimo In	ternal Ac	count - To b	e used by E	ngineering licer	nse Activ
enses														
• Use t	he Navigation	Search "Aboy	e" to filter data from DB											
			n headings to filter data displayed within the Grid	d.										
													Download	Export
													Download	Export
stivatio	Device L	Custome	Description	Order Ty	SKU	Туре	Eid	License	License	Activat	Quantity	Status	Download	
ctivatio	Device L	Custome	Description	Order Ty	SKU	Туре	Eid	License	License	Activat	Quantity	Status		
ctivatio	Device L	Custome	Description GigaVUE-US: Term software license for GigaVU		SKU BPS-HC1-D25A24-SW-IM	Type	Eid		License 2023-11-22			Status		
ctivatio	Device L	Custome		Internal		none		2023-10-08		none	1/		Lic. Key	
ctivatio	Device L	Custome	GigaVUE-US Term software license for GigaVU	Internal	BPS-HC1-D25A24-SW-IM	none	LP20221	2023-10-08 2023-08-05	2023-11-22	none	1/	1 Inactive	Lic. Key Activate	
Activatio	Device L	Custome	GigaVUE-US Term software license for GigaVU Monthly subscription license for GigaSMART G	Internal Internal Internal	BPS-HG1-D25A24-SW-TM SMT-HC1-GEN2-HS1-SW-TM	none none none	LP20221 LP20221	2023-10-08 2023-08-05 2023-03-16	2023-11-22 2024-02-01	none none none	1/	1 Inactive	Lic. Key Activate Activate	

2. Click Activate. The Activation Method page appears.

G	License Portal			Welcome
		Activat	ion Method	
	Floating licenses are available only to customers using Fabric Manager 5.7 or above Do you use GigaVUE-FM to manage your environment? No			
		Cancel	Continue	
	© 2023 Gigamon Inc. Contact Us	Privacy Policy	Supported Browsers: Google Chrome, FireFox, Edge.	

3. In the "Do you use GigaVUE-FM to manage your environment" option, select **No** and click **Continue**. The Activation Quantity page appears.

		-	-			
Activation Quanti	у					
Description : GigaVUE-FM Prime Edition, manage up to 1000 Physical Visibility Fabric Nodes, includes VMware NSX Manager Integration (GFM-VM-NSX) add-ons Ba						
Version	Device Locked to	Qty	Action			
pre57 v	1	1	+			
	Remaining Quantity:	41				
gamon hardware product. The activation of encryption features act for import and/or export purposes. If you plan on exporting, ing this encryption license, please contact your trade compliance team imber (ECCN) and obtain any required import or export authorization.						
© 2023 Gigamon Inc. Contact Us Privacy Policy Support	d Browsers: Google Chrome, FireFox, Edge.					
	cal Visibility Fabric Nodes, includes VMware NSX Manager Integration (GF Version pre57 v gamon hardware product. The activation of encryption features uct for import and/or export purposes. If you plan on exporting, ing this encryption license, please contact your trade compliance team miber (ECCN) and obtain any required import or export authorization.	Version         Device Locked to           pre57 v         I           gamon hardware product. The activation of encryption features         Remaining Quantity:           gamon hardware product. The activation of encryption features         If the encryption features	Back Cancel       Back Cancel       Version     Device Locked to     Oty       pre57 v     I     1       Remaining Quantity: 41       agamon hardware product. The activation of encryption features suct for import and/or export purposes. If you plan on exporting, ing this encryption license, please contact your trade compliance team imper (ECCN) and obtain any required import or export authorization.			

- 4. In the **Device Locked To** field, enter the serial number of the chassis or the serial number of the card for the devices. For GigaVUE-FM enter the Challenge MAC address of GigaVUE-FM.
- 5. Specify the required quantity of the licenses. Click the +/- options under **Action** column. Click **Review**.
- 6. Review the license you wish to activate. Click **Activate** to activate the license. The Activation Results page with the License Key is displayed.

Install the license keys either using the GigaVUE-FM GUI or the **license** command (for GigaVUE TA Series devices and Port licenses).

# FAQs For Licensing

This section provides information about some of the issues that you may face while working with Licenses.

# How to Clear License Mismatch when Moving Licenses Between Cards

A license mismatch may occur in the following cases:

- When a GigaSMART card crashes: It is possible for all licenses stored in the GigaSMART card to be erased.
- When moving licenses between cards.

In the above cases, the **show license** command output displays license-mismatch.

Re-install one of the licenses to clear the license-mismatch flag on the card. This allows you to continue using the card with the newly installed license.

**Note:** It is always recommended to execute show license command before installing a new license. Ensure to re-install all licenses that are lost.

# How to Activate License when GigaVUE-FM does not have network access?

In this case, the Fabric Inventory file (JSON file) downloaded from GigaVUE-FM cannot be uploaded in the Licensing portal. You must generate the license key manually by performing the following steps (applicable for ):

On a system that can reach the License Portal:

1. Open a notepad and paste the below.

```
{
"virtualMac": "00:50:56:94:68:c1",
"fmSwVersion": "6.0.00",
"timeOfReportCreation": "2022-08-22T17:48:39Z",
"allocationMaps": [],
"revokedTargets": [],
"revokedTargets": []
}
```

- 2. Change the virtualMAC to the MAC address of GigaVUE-FM and change the timeOfReportCreation to reflect current Zulu time.
- 3. Save and change the file extension to .json.
- 4. Log in to the License Portal and select the required Volume-based License and click **Activate**.
- 5. In the next step, select **Yes** to manage with GigaVUE-FM.
- 6. Choose the JSON that file you created.
- 7. Review the information and change quantity accordingly.
- 8. Generate the .lic file that you can download. Move this file to the network where GigaVUE-FM resides.
- 9. Log into GigaVUE-FM. Go to Settings > Licenses > Floating > Activated > Activated Licenses > With License Portal.
- 10. In the dialogue box, select Import License (.Lic). Select the license file downloaded. Click **Open** > **Continue**

The required Volume-based License is successfully activated.

### What is a Fabric Inventory File?

Fabric Inventory File is a JSON file that must be downloaded while activating the licenses. This file contains the following details.

- Details about GigaVUE-FM from which license is activated.
- Inventory of all the physical nodes connected to GigaVUE-FM.
- Inventory of GigaSMART cards within the nodes
- License information of each of the GigaSMART cards.

The file must then be uploaded in the Licensing Portal. Refer to Activate floating licenses

**Note:** The file is encrypted to prevent unauthorized use. However, you can obtain an unencrypted version of the inventory information (in JSON format) using the following API: https://<fm-IP>/api/v1.3/licensing/inventory.

Refer to the following tables for details:

#### For GigaVUE-FM

The Virtual MAC address of GigaVUE-FM (the primary GigaVUE-FMs MAC address in a HA group)

Software version of GigaVUE-FM

Time of report creation

List of cards from which all license keys have been revoked (possibly because of card RMA)

List of GigaVUE-FM license keys that have been revoked

#### For each of the devices connected to GigaVUE-FM

Serial number of the chassis

IP address

Host name

The model of the chassis (GigaVUE-HCl etc)

Name of the chassis cluster to which it belongs

The version of software running on the device

Whether the device is healthy

Information about all GigaSMART cards

#### For each GigaSMART Card

Serial Number of the card

Slot number in the chassis where the card is inserted

The type of card

Whether the card is healthy (operational etc.)

For each GigaSMART Card, the following information about all the license keys that are added on the card is collected:

License SKU
License start date
License end date
Encoded license key

### What is a License SKU?

An SKU in the licensing portal is a unique identifier defined for the various products offered by Gigamon. Depending on the type of license, the SKU identifier varies. However, it has a consistent format.

The first three letters in the SKU indicate the product, as seen in the following table:

SKU	Product/Module
GFM	GigaVUE-FM
GVS	GigaVUE-OS
BPS	By Pass Switch
PRT	Port Module
SMT	GigaSMART Module
VBL	Volume-based license
ТАР	TAP module
CLS	Advanced Features

# Where can I find the license SKUs for the various products?

You can find the license SKUs in the respective product data sheets.

GigaVUE Data Sheets
GigaVUE-FM Data Sheet
GigaSMART Data Sheet
GigaVUE HC Series Data Sheet
GigaVUE TA Series Data Sheet
GigaVUE Cloud Suite for VMware Data Sheet
GigaVUE Cloud Suite for AWS Data Sheet
GigaVUE Cloud Suite for Azure Data Sheet
GigaVUE Cloud Suite for OpenStack
GigaVUE Cloud Suite for Nutanix
GigaVUE Cloud Suite for Kubernetes

# Glossary

#### D

#### decrypt list

need to decrypt (formerly blacklist)

#### decryptlist

need to decrypt - CLI Command (formerly blacklist)

#### drop list

selective forwarding - drop (formerly blacklist)

#### F

#### forward list

selective forwarding - forward (formerly whitelist)

### L \_\_\_\_\_

#### leader

leader in clustering node relationship (formerly master)

#### Μ

#### member node

follower in clustering node relationship (formerly slave or non-master)

#### Ν

#### no-decrypt list

no need to decrypt (formerly whitelist)

#### nodecryptlist

no need to decrypt- CLI Command (formerly whitelist)

#### Ρ

#### primary source

root timing; transmits sync info to clocks in its network segment (formerly grandmaster)

#### R

#### receiver

follower in a bidirectional clock relationship (formerly slave)

#### S

#### source

leader in a bidirectional clock relationship (formerly master)