

# GPU Manager for VMware vCenter

**Release Notes** 

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# Chapter 1. Supported Platforms

# 1.1. Supported Software Releases

NVIDIA GPU Manager for VMware vCenter is supported on specific releases of VMware vSphere Hypervisor (ESXi) and NVIDIA vGPU software.

Software	Supported Releases
VMware vCenter Server	<ul> <li>8.0 and later updates to release 8.0 unless explicitly stated otherwise</li> <li>7.0 Update 2 and later updates to release 7.0 unless explicitly stated otherwise</li> </ul>
	Note: The base VMware vSphere Hypervisor (ESXi) 7.0 release and 7.0 Update 1 are <b>not</b> supported.
VMware vSphere with Tanzu	VMware vSphere 8.0 with supervisor cluster version v1.26.4+vmware.wcp.1-vsc0.1.6-22282210 Later updates to VMware vSphere 8.0 are also supported
NVIDIA vGPU software	unless explicitly stated otherwise. All supported releases of Virtual GPU Manager for VMware vSphere

# 1.2. Web Browser Requirements

The NVIDIA GPU Manager for VMware vCenter virtual appliance provides a web-based management interface to the **NVIDIA GPU Manager** application on the appliance. This management interface must be accessed through a supported web browser.

The following web browsers are supported:

- ► Firefox
- ▶ Google Chrome
- Microsoft Edge

Safari

# 1.3. Known Product Limitations

NVIDIA GPU Manager for VMware vCenter supports **only** IPv4. IPv6 is **not** supported.

# Chapter 2. Changes in this Release

#### Changes in Release 1.4

- Security updates as listed in <u>Security Updates</u>
- Miscellaneous bug fixes as listed in <u>Issues Resolved in Release 1.4</u>

#### Changes in Release 1.3

- Support for VMware vSphere 8.0 with Tanzu
- Security updates as listed in <u>Security Updates</u>
- Miscellaneous bug fixes as listed in <u>Issues Resolved in Release 1.3</u>

#### Changes in Release 1.2

- Support for communication through a proxy server
- Functionality to reset SSL certificates through the web console of the vCenter web client
- Security updates as listed in <u>Security Updates</u>
- Miscellaneous bug fixes as listed in <u>Issues Resolved in Release 1.2</u>

#### Changes in Release 1.1

- Dark theme support for the web-based user interface (UI) to the NVIDIA GPU
   Manager and the vSphere client plugin
  - For NVIDIA GPU Manager, you can select the theme from the NVIDIA GPU Manager UI.
  - For the vSphere client plugin, the theme matches the theme that is set for the vSphere client.
- Localization of the **NVIDIA GPU Manager** into the following languages:
  - Chinese (simplified)
  - Chinese (traditional)
  - French

- ► German
- Italian
- Japanese
- Korean
- Spanish
- Security updates as listed in <u>Security Updates</u>
- Miscellaneous bug fixes as listed in <u>Issues Resolved in Release 1.1</u>

#### Changes in Release 1.0

Release 1.0 is the first generally available release of NVIDIA GPU Manager for VMware vCenter.

# Chapter 3. Security Updates

#### Security Updates in Release 1.4

To address vulnerabilities CVE-2023-6931, CVE-2023-6932, CVE-2023-51781, and CVE-2024-0646, a new version of the OS package linux-libc-dev (5.4.0-172.190) is included in NVIDIA GPU Manager for VMware vCenter.

#### Security Updates in Release 1.3

- To address vulnerabilities CVE-2023-4622, CVE-2023-4623, CVE-2023-4921, CVE-2023-42752, CVE-2023-42753, CVE-2023-42755, and CVE-2023-42756, a new version of the OS package linux-libc-dev (5.4.0-169.187) is included in NVIDIA GPU Manager for VMware vCenter.
- To address vulnerability CVE-2023-23583, a new version of the OS package intelmicrocode (3.20231114.0ubuntu0.20.04.1) is included in NVIDIA GPU Manager for VMware vCenter.
- To address vulnerability CVE-2023-33733, new versions of the OS packages python3renderpm, python3-reportlab, python3-reportlab-accel (3.5.34-lubuntul.1) are included in NVIDIA GPU Manager for VMware vCenter.

#### Security Updates in Release 1.2

- To address vulnerabilities CVE-2023-3609, CVE-2023-3611, CVE-2023-3776, and CVE-2023-20593, a new version of the OS package linux-libc-dev (5.4.0-159.176) is included in NVIDIA GPU Manager for VMware vCenter.
- To address vulnerabilities CVE-2023-20569 and CVE-2023-20593, a new version of the OS package amd64-microcode (3.20191218.1ubuntu1.2) is included in NVIDIA GPU Manager for VMware vCenter.

#### Security Updates in Release 1.1

To address vulnerability CVE-2023-1281, a new version of the OS package linux-libcdev (5.4.0-153.170) is included in NVIDIA GPU Manager for VMware vCenter.

# Chapter 4. Resolved Issues

Only resolved issues that have been previously noted as known issues or had a noticeable user impact are listed. The summary and description for each resolved issue indicate the effect of the issue on NVIDIA GPU Manager for VMware vCenter **before the issue was resolved**.

# 4.1. Issues Resolved in Release 1.4

Bug ID	Summary and Description
4507972	1.3.0 Only: Static IP address cannot be set during installation of the NVIDIA GPU Manager for VMware vCenter virtual appliance
	A static IP address for an NVIDIA GPU Manager for VMware vCenter virtual appliance cannot be set during installation of the appliance because network settings for a static IP address are missing from the <b>VMware vSphere Client</b> UI.

# 4.2. Issues Resolved in Release 1.3

Bug ID	Summary and Description
4442922	<u>1.0.0-1.2.0 Only: NVIDIA GPU Manager for VMware vCenter registration</u> <u>fails if IPv6 and IPv4 addresses are associated with the vCenter Server</u> <u>domain name</u>
	If an IPv6 address and an IPv4 address are associated with the fully qualified domain name of a vCenter Server host, any attempt to register NVIDIA GPU Manager for VMware vCenter with the host by specifying the host's fully qualified domain name fails. This issue occurs because NVIDIA GPU Manager for VMware vCenter does not support IPv6 addresses and enforces this restriction by checking whether an IPv6 address is associated with the host's fully qualified domain name. If so, registration fails even if an IPv4 address is also associated with the host's fully qualified domain name. When this issue occurs, the following error message is displayed. IPv6 addresses are not supported

# 4.3. Issues Resolved in Release 1.2

Bug ID	Summary and Description
4117784	1.0.0, 1.1.0 Only: NVIDIA GPU Manager does not support communication through a proxy server
	<b>NVIDIA GPU Manager</b> does not support communication through a proxy server. As a result, if a proxy server is used in communications with <b>NVIDIA GPU Manager</b> , the following operations on <b>NVIDIA GPU Manager</b> fail:
	Registration of NVIDIA GPU Manager fails because VMware vCenter Server cannot reach the NVIDIA GPU Manager drivers repository on the NVIDIA GPU Manager for VMware vCenter virtual appliance.
	<ul> <li>Connection to the NVIDIA driver download service and API service fails because NVIDIA GPU Manager cannot reach the NVIDIA Licensing Portal.</li> </ul>
4334769	1.1.0 Only: NVIDIA GPU Manager for VMware vCenter registration fails with incompatible error on vSphere 7.0.3.01700
	As a result of an issue with vCenter Server, vSphere Client cannot find a manifest file that is compatible with its version, namely, 7.0.3.1700. When this issue occurs, vSphere Client shows that deployment of NVIDIA GPU Manager has failed with following error:
	The plug-in is incompatible with the current vSphere Client version. com.vmware.vise.plugin.capability.IncompatibleVsphereClientExcepti Invalid vSphere Client environment. Expected version: '[8.0,)', Actual: '7.0.3.1700'.

# 4.4. Issues Resolved in Release 1.1

Bug ID	Summary and Description
4116054	1.0.0 Only: NVIDIA GPU Manager UI fails to open with Plugin Access Check Failed error
	The <b>NVIDIA GPU Manager</b> UI fails to open on the vSphere client, which displays the Plugin Access Check Failed error. This issue occurs because the vSphere client is being accessed through the fully qualified domain name of the VMware vCenter Server instance, but the fully qualified domain name is not all in lowercase.
4117722	1.0.0 Only: NVIDIA GPU Manager for VMware vCenter registration fails with connection refused error
	If an NVIDIA GPU Manager for VMware vCenter virtual appliance is assigned an IP address that is not mapped to a valid fully qualified domain name, NVIDIA GPU Manager for VMware vCenter registration fails. This error occurs because, by default, <b>NVIDIA GPU Manager</b> uses the fully qualified domain name for communications. If the fully qualified domain

Bug ID	Summary and Description
	name is invalid, the <b>NVIDIA GPU Manager</b> cannot be located through this name, and Error No. 111 Connection refused occurs when registration fails.
4140398	1.0.0 Only: NVIDIA GPU Manager for VMware vCenter registration fails with invalid CA certificate error
	The SSL certificate that is installed on an NVIDIA GPU Manager for VMware vCenter virtual appliance might not be from a trusted certificate authority (CA) and contain a certificate chain. If you try to register the NVIDIA GPU Manager for VMware vCenter, the registration fails with the following error: not a valid CA certificate. Please retry with a valid certificate chain

# Chapter 5. Known Issues

## 5.1. 1.3.0 Only: Static IP address cannot be set during installation of the NVIDIA GPU Manager for VMware vCenter virtual appliance

#### Description

A static IP address for an NVIDIA GPU Manager for VMware vCenter virtual appliance cannot be set during installation of the appliance because network settings for a static IP address are missing from the **VMware vSphere Client** UI.

#### Workaround

If the NVIDIA GPU Manager for VMware vCenter virtual appliance can obtain network settings from a DHCP server, complete the installation of the appliance and assign a static IP address to the appliance from the **NVIDIA GPU Manager** application on the appliance or from the hypervisor. For instructions, refer to the following topics in *GPU Manager for VMware vCenter User Guide*:

- Updating the Network Settings for the NVIDIA GPU Manager for VMware vCenter Virtual Appliance
- Setting the IP Address of an NVIDIA GPU Manager for VMware vCenter Virtual Appliance from the Hypervisor

If only static IP addresses are available in your network environment, revert to the previous release of the NVIDIA GPU Manager for VMware vCenter.

#### **Status**

Resolved in NVIDIA GPU Manager for VMware vCenter 1.4.0

**Ref. #** 4507972

# 5.2. 1.0.0-1.2.0 Only: NVIDIA GPU Manager for VMware vCenter registration fails if IPv6 and IPv4 addresses are associated with the vCenter Server domain name

#### Description

If an IPv6 address and an IPv4 address are associated with the fully qualified domain name of a vCenter Server host, any attempt to register NVIDIA GPU Manager for VMware vCenter with the host by specifying the host's fully qualified domain name fails. This issue occurs because NVIDIA GPU Manager for VMware vCenter does not support IPv6 addresses and enforces this restriction by checking whether an IPv6 address is associated with the host's fully qualified domain name. If so, registration fails even if an IPv4 address is also associated with the host's fully qualified domain name. When this issue occurs, the following error message is displayed. IPv6 addresses are not supported

#### Workaround

When registering NVIDIA GPU Manager for VMware vCenter, specify the IPv4 address of the vCenter Server host, **not** its fully qualified domain name.

#### **Status**

Resolved in NVIDIA GPU Manager for VMware vCenter 1.3.0

Note: Resolution of this issue affects only fully qualified domain names with which both an IPv6 address and an IPv4 address are associated. Because NVIDIA GPU Manager for VMware vCenter does **not** support IPv6 addresses, registration still fails if only an IPv6 address is associated with the fully qualified domain name of the vCenter Server host.

Ref. #

## 5.3. 1.1.0 Only: NVIDIA GPU Manager for VMware vCenter registration fails with incompatible error on vSphere 7.0.3.01700

#### Description

As a result of an issue with vCenter Server, vSphere Client cannot find a manifest file that is compatible with its version, namely, 7.0.3.1700. When this issue occurs, vSphere Client shows that deployment of NVIDIA GPU Manager has failed with following error:

```
The plug-in is incompatible with the current vSphere Client version.
com.vmware.vise.plugin.capability.IncompatibleVsphereClientException:
Invalid vSphere Client environment. Expected version: '[8.0,)', Actual:
'7.0.3.1700'.
```

#### Workaround

- 1. Use secure shell (SSH) to log in to vCenter Server.
- 2. In a plain text editor, edit the file /etc/vmware/vsphere-ui/vc-packages/vsphereclient-serenity/com.nvidia.gpu.manager-1.1.0.0/plugin-80.json as follows.
  - a). Append a comma (,) to line 16 after the closing brace (}).
  - b). On the next line, add "open.modal.api": "1.1.0" with the correct indentation.

},
"open.modal.api": "1.1.0"

- 3. Save your changes and quit the editor.
- 4. Restart vSphere Client.

service-control --restart vsphere-ui

**Note:** If NVIDIA GPU Manager for VMware vCenter is re-registered, updates to the plugin-80.json are lost must be redone.

#### **S**tatus

Resolved in NVIDIA GPU Manager for VMware vCenter 1.2.0

#### Ref. #

# 5.4. Assignment of a static IP address fails if any properties are invalid or blank

#### Description

Network settings for a static IP address can be provided during the installation of the NVIDIA GPU Manager for VMware vCenter virtual appliance. However, these values cannot be validated before the VM that hosts the appliance is created. Therefore, if any field **except DNS Server 2** is blank or if any field contains invalid data, a static IP address is **not** assigned to the VM. Instead, the VM obtains network settings from a DHCP server.

#### Workaround

If the VM obtains network settings from a DHCP server, assign a static IP address to the VM.

- 1. Register the NVIDIA GPU Manager for VMware vCenter administrator user.
- 2. Update the network settings for the NVIDIA GPU Manager for VMware vCenter virtual appliance.

For instructions for how to perform these tasks, refer to <u>GPU Manager for VMware</u> <u>vCenter User Guide</u>.

Do not attempt to register the NVIDIA GPU Manager for VMware vCenter until a static IP address has been assigned to the VM that hosts the appliance.

#### Status

Open

#### Ref. #

# 5.5. Unregistering NVIDIA GPU Manager for VMware vCenter does not remove the NVIDIA GPU Manager drivers repository

#### Description

After NVIDIA GPU Manager for VMware vCenter is unregistered, the entry for **NVIDIA GPU Manager drivers repository** is not removed from vSphere Lifecycle Management (vLCM). This issue occurs if an NVIDIA GPU Manager for VMware vCenter for which no drivers are synchronized with vLCM is unregistered.

When this issue occurs, the following error message can be seen by selecting **vSphere Client** > **Tasks** :

```
A general system error occurred: Cannot find the content of online depot

'https://nvidia-gpu-manager-appliance-ip/DriverRepo/index.xml';.

Either the depot's content has not been imported yet or has already been deleted

or the depot was migrated from an old version of

vSphere Lifecycle Manager that does not support this operation.
```

#### Version

This issue affects supported versions of VMware vSphere Hypervisor (ESXi) before 8.0 update 1.

#### Workaround

Delete the entry in the table for **NVIDIA GPU Manager drivers repository** manually as explained in <u>Modify a Download Source</u> on the VMware Docs site.

#### **Status**

Not an NVIDIA bug

#### Ref. #

# 5.6. Unregistering NVIDIA GPU Manager for VMware vCenter does not remove downloaded NVIDIA GPU drivers from vLCM

#### Description

After NVIDIA GPU Manager for VMware vCenter is unregistered, the entries for downloaded NVIDIA GPU drivers are not removed from vSphere Lifecycle Management (vLCM). The downloaded drivers can still be seen by selecting vSphere Client > Lifecycle Manager > COMPONENTS.

#### Version

This issue affects supported versions of VMware vSphere Hypervisor (ESXi) before 8.0 update 1.

#### Workaround

Delete the entries for downloaded NVIDIA GPU drivers manually from vLCM as explained in <u>VMware Knowledge Base Article: Resetting VMware Update Manager Database in</u> <u>vCenter Server Appliance 6.5/6.7/7.0 (2147284)</u>.

#### CAUTION:

- Resetting the Update Manager database is a destructive task. The following items are removed and must be reapplied after the reset:
  - Custom baselines (but not cluster images)
  - Custom download settings
  - Manually imported patches and ISO images
- To prevent loss of data if the reset fails, back up your data before resetting the Update Manager database as follows:
  - Create a snapshot of the virtual appliance and, if the vCenter Server is part of a Linked Mode replication setup, create a snapshot of all replicating nodes.

For instructions, refer to Take Snapshots of a Virtual Machine.

If the reset fails, you can restore the affected virtual appliance and replicating nodes from their snapshots as explained in <u>Revert a Virtual Machine Snapshot</u>.

Note all custom configuration settings in Update Manager, for example, proxy settings, third-party download URLs, and customized baselines.

#### Status

Not an NVIDIA bug

# 5.7. Since 1.2.0: System Text on the **Proxy Server Settings** page is not localized

#### Description

Most of the system text on the **Proxy Server Settings** page, which was added in NVIDIA GPU Manager for VMware vCenter release 1.2.0, is not localized.

#### **S**tatus

Open

#### Ref. #

4326144

## 5.8. 1.0.0, 1.1.0 Only: NVIDIA GPU Manager does not support communication through a proxy server

#### Description

**NVIDIA GPU Manager** does not support communication through a proxy server. As a result, if a proxy server is used in communications with **NVIDIA GPU Manager**, the following operations on **NVIDIA GPU Manager** fail:

Registration of NVIDIA GPU Manager fails because VMware vCenter Server cannot reach the NVIDIA GPU Manager drivers repository on the NVIDIA GPU Manager for VMware vCenter virtual appliance.  Connection to the NVIDIA driver download service and API service fails because NVIDIA GPU Manager cannot reach the NVIDIA Licensing Portal.

#### **Status**

Resolved in NVIDIA GPU Manager for VMware vCenter 1.2.0

#### Ref. #

4117784

## 5.9. 1.0.0 Only: NVIDIA GPU Manager for VMware vCenter registration fails with connection refused error

#### Description

If an NVIDIA GPU Manager for VMware vCenter virtual appliance is assigned an IP address that is not mapped to a valid fully qualified domain name, NVIDIA GPU Manager for VMware vCenter registration fails. This error occurs because, by default, **NVIDIA GPU Manager** uses the fully qualified domain name for communications. If the fully qualified domain name is invalid, the **NVIDIA GPU Manager** cannot be located through this name, and Error No. 111 Connection refused occurs when registration fails.

#### Status

Resolved in NVIDIA GPU Manager for VMware vCenter 1.1.0

Ref. #

4117722

## 5.10. 1.0.0 Only: NVIDIA GPU Manager UI fails to open with Plugin Access Check Failed error

#### Description

The **NVIDIA GPU Manager** UI fails to open on the vSphere client, which displays the Plugin Access Check Failed error. This issue occurs because the vSphere client is

being accessed through the fully qualified domain name of the VMware vCenter Server instance, but the fully qualified domain name is not all in lowercase.

#### **Status**

Resolved in NVIDIA GPU Manager for VMware vCenter 1.1.0

#### Ref. #

4116054

## 5.11. 1.0.0 Only: NVIDIA GPU Manager for VMware vCenter registration fails with invalid CA certificate error

#### Description

The SSL certificate that is installed on an NVIDIA GPU Manager for VMware vCenter virtual appliance might not be from a trusted certificate authority (CA) and contain a certificate chain. If you try to register the NVIDIA GPU Manager for VMware vCenter, the registration fails with the following error:

not a valid CA certificate. Please retry with a valid certificate chain

#### **S**tatus

Resolved in NVIDIA GPU Manager for VMware vCenter 1.1.0

#### Ref. #

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