

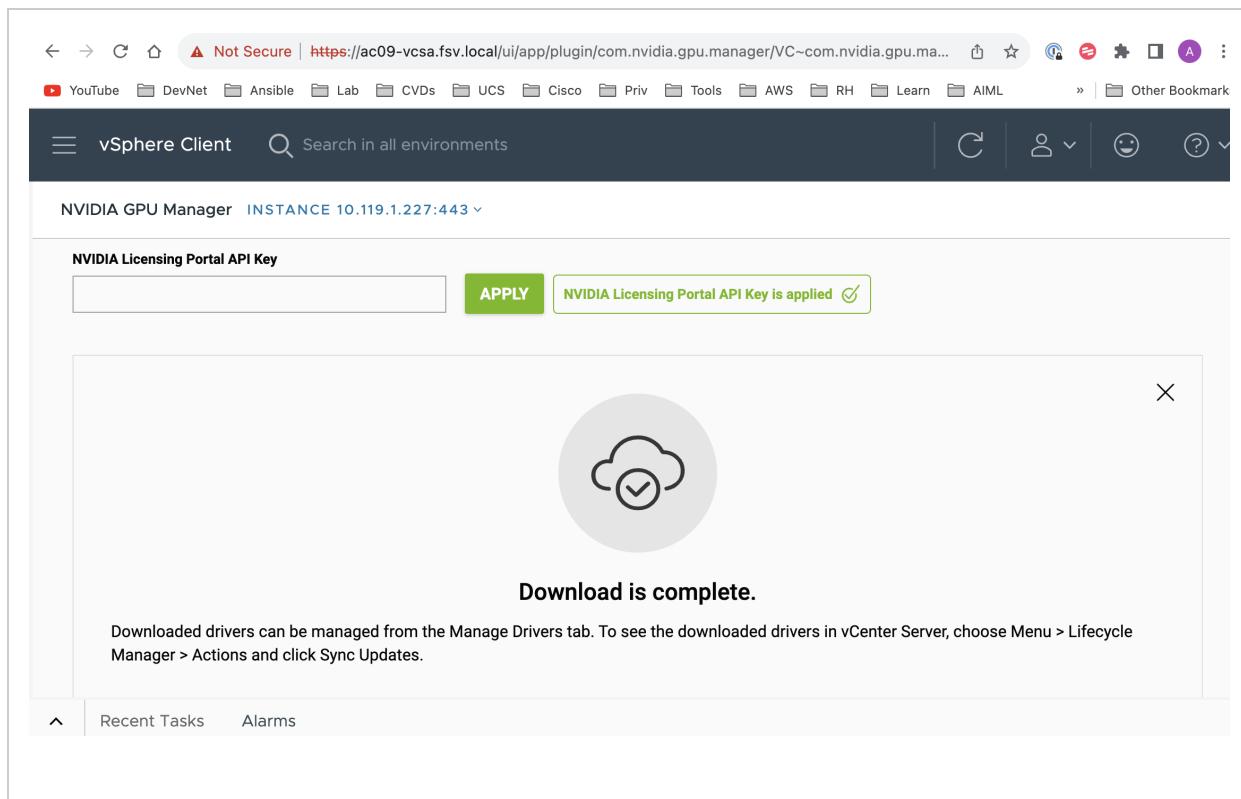
# 06\_CVD: Deploy NVAIE Host Driver for VMware vSphere

## Deploy NVIDIA AI Enterprise Host Driver for VMware vSphere

On ESXi hosts with NVIDIA data center GPUs, NVAIE host drivers must be deployed on ESXi hosts to deploy the GPUs in vGPU mode.

### Deployment Steps:

1. Use a browser to navigate to VMware vCenter and login. From the left navigation menu, select **NVIDIA GPU Manager**. From the **Driver Download** tab, select a driver to download to the local GPU Manager repo. See Cisco UCS HCL and VMware Compatibility List to select a supported driver.



2. The downloaded driver will now be visible in the **Manage Drivers** tab. This driver will be used by VMware Life Cycle Manager to deploy on the hosts.

NVIDIA GPU Manager INSTANCE 10.119.1.227:443

Driver Download Manage Drivers Events Support

Total Downloads 1 Storage 0.06 GB Used | 15 GB Total

X DELETE SELECTED DOWNLOADS

Search... Showing 1 - 1 of 1

NAME	DRIVER VERS...	PRODUCT VE...	PLATFORM	RELEASE DATE
NVIDIA_ESXi_8.0_NVAIE_3.0_525.60.12	525.60.12	3.0	ESXi 8.0	2022-12-15

3. From the left navigation menu, select **Lifecycle Manager**.
4. From the **Actions** drop-down menu, select **Updates > Sync Updates**.

New vCenter server updates are available VIEW UPDATES

Lifecycle Manager ACTIONS

Image Depot Updates

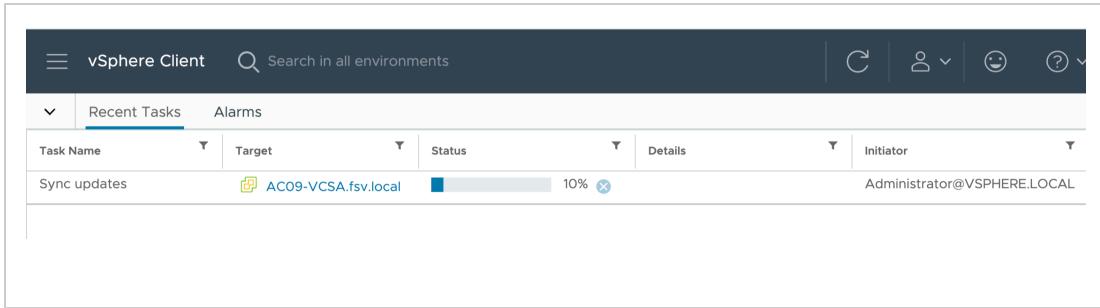
ESXI VERSIONS VENDOR A

ESXi Versions

Name	Release Date	Category
ESXi	09/20/2023	Enhancement

Last Sync: 15 hours ago. Next Sync: in 8 hours

5. Wait for sync to complete. You can monitor the sync task from the **Recent Tasks** menu.



- When sync task completes, select **Image Depot > Components** to see the downloaded NVIDIA driver. Filter on NVIDIA in the image name to narrow the list.

A screenshot of the Lifecycle Manager interface under the "Image Depot" tab. The search bar shows "NVIDIA". The "Components" tab is selected. A table lists five NVIDIA AI Enterprise vGPU drivers for VMWare ESX-8.0.0, each with a release date between 2022 and 2023 and categorized as "Enhancement".

Name	Version	Release Date	Category
NVIDIA AI Enterprise vGPU driver for VMWare ESX-8.0.0	535.129.03	10/25/2023	Enhancement
NVIDIA AI Enterprise vGPU driver for VMWare ESX-8.0.0	535.104.06	08/25/2023	Enhancement
NVIDIA AI Enterprise vGPU driver for VMWare ESX-8.0.0	525.147.01	10/16/2023	Enhancement
NVIDIA AI Enterprise vGPU driver for VMWare ESX-8.0.0	525.105.14	03/27/2023	Enhancement
NVIDIA AI Enterprise vGPU driver for VMWare ESX-8.0.0	525.60.12	12/02/2022	Enhancement

- Select the driver to get more details. Note that it is a NVAIE driver though it also says 'Grid' and 'Graphics' as the same image can be used in graphics acceleration or vGPU mode.

Lifecycle Manager | ACTIONS ▾

Image Depot    Updates    Imported ISOs    Baselines    Settings

ESXI VERSIONS    VENDOR ADDONS    COMPONENTS

Last Sync: 14 hours ago. Next Sync: in 9 hours

Components Show Independent components and Vendor Addon Components ▾

Name	Version	Release Date	Category
NVIDIA AI Enterprise vGPU driver for VMWare ESX-8.0.0	525.60.12	12/02/2022	Enhancement

**NVIDIA AI Enterprise vGPU driver for VMWare ESX**

Version 525.60.12  
NVIDIA • 12/02/2022

Category: Enhancement Severity: Important

NVIDIA Graphics Driver version 525.60.12  
<https://docs.nvidia.com/grid/index.html>

Recent Tasks    Alarms

7. With the driver available in VMware Life Cycle Manager, navigate to the vSphere cluster with the GPU Hosts to add the driver to the image for the cluster. If you're not using Lifecycle Manager and want to install the driver using the **software vib install** method, follow the directions provided [here](#).
8. Select **Configure > Desired State > Image**. Click on **Go To Image** from the top right corner.

vSphere Client | Q NVIDIA | C | ⚙️ | ⓘ | ? ▾

FSV-M7\_CL | ACTIONS

Summary    Monitor    **Configure**    Permissions    Hosts    VMs    Datastores    Networks    Updates

Desired State > Image ▾

**Image**

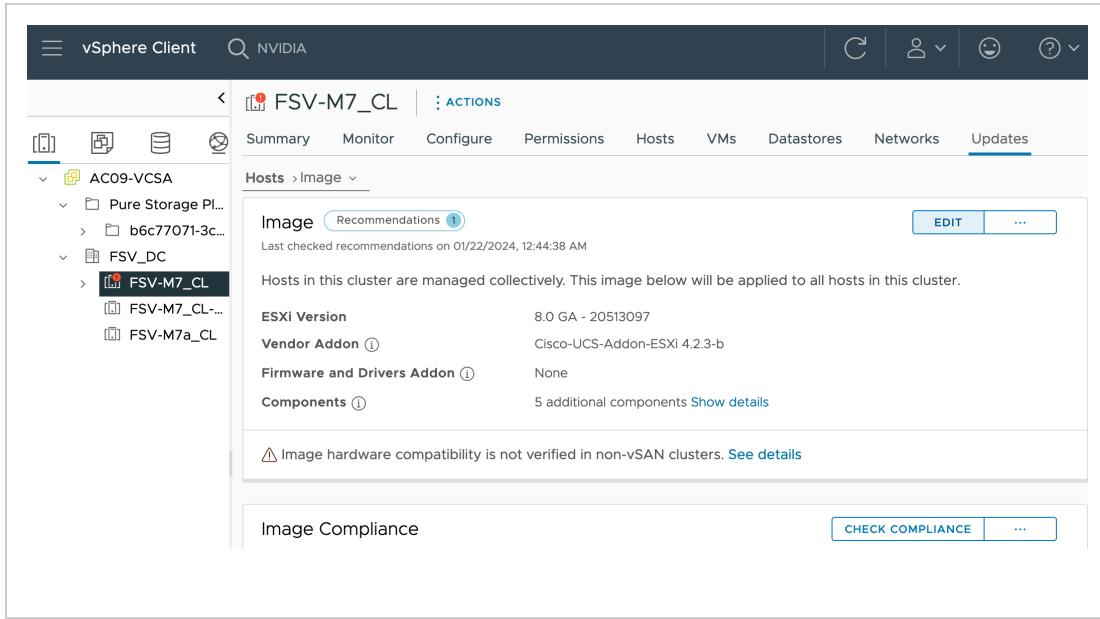
Hosts in this cluster are managed collectively. This image below will be applied to all hosts in this cluster.

**ESXi Version**    8.0 GA - 20513097  
**Vendor Addon** ⓘ    Cisco-UCS-Addon-ESXi 4.2.3-b  
**Firmware and Drivers Addon** ⓘ    None  
**Components** ⓘ    5 additional components

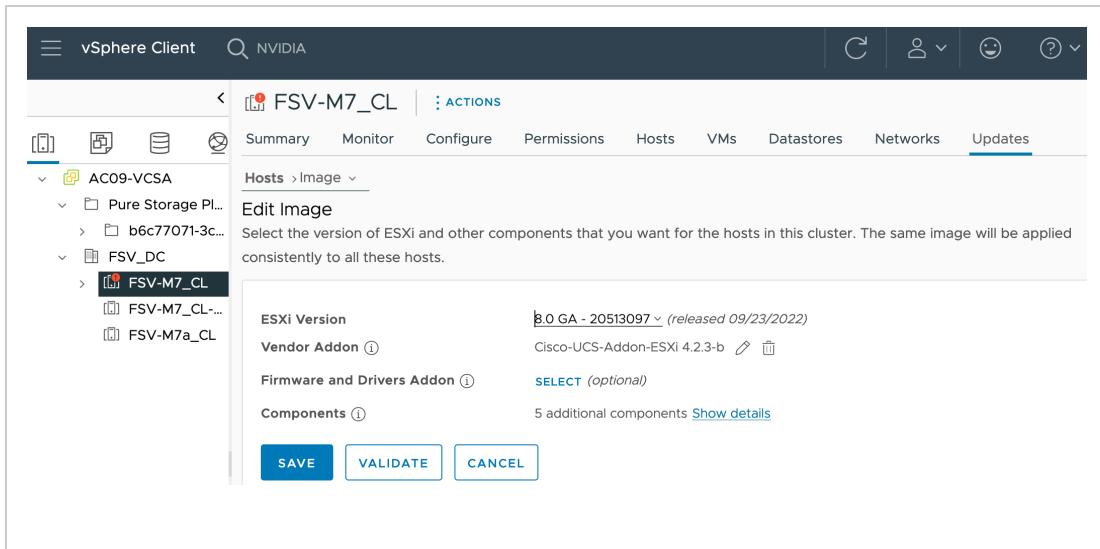
Go to Image

⚠️ Image hardware compatibility is not verified in non-vSAN clusters.

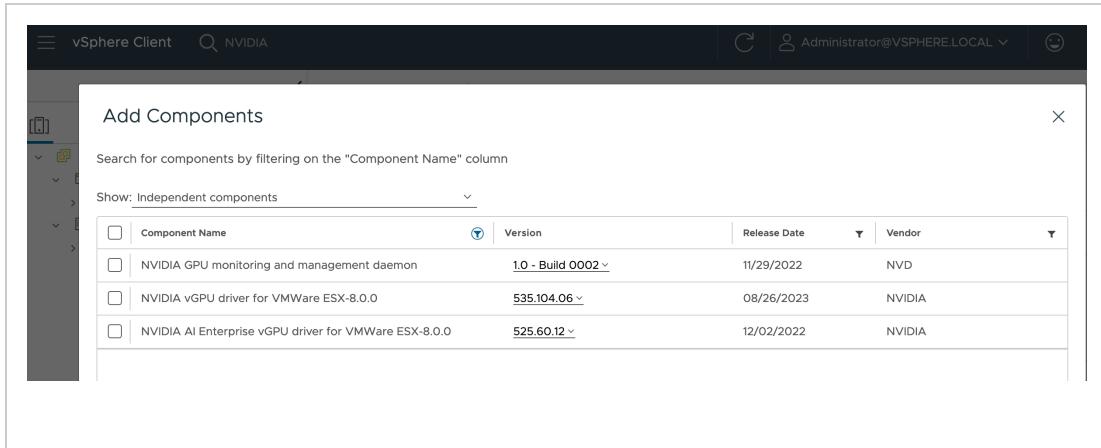
9. Click on **EDIT** from the top right corner.



10. In the **Components** section, click on **Show Details**.



11. Click on **ADD COMPONENTS** and select the NVAIE driver and related components for the same driver version (for e.g., monitoring and management daemon).



12. Click on **SAVE** and then **VALIDATE**.

Component Name	Version	Notes
NVIDIA AI Enterprise vGPU driver for VMWare ESX	525.60.12	Manually added component

13. Remediate the host to update the GPU driver.

14. Navigate to the web console of the ESXi host to verify the new driver was installed

Not Secure | <https://10.119.1.111/ui/#/host/manage/packages>

YouTube DevNet Ansible Lab CVDs UCS Cisco Priv Tools AWS RH Learn AIML Other Bookmark

ESXi Host Client

FSV-ESXi-Host-11 - Manage

System Hardware Licensing Packages Services Security & users

Install update Refresh

Name Description Version Vendor Installed on

Name	Description	Version	Vendor	Installed on
NVD-AIE_ESXi_8.0.0_Driver	NVIDIA Accelerated Graphics Driver for VMware ESXi 8.0.0	525.60.12-1OEM.800.1.0.2061...	NVD	Saturday, Octob
mnlx-bfbootctl-esxio	NVIDIA BlueField boot control driver	0.1-1vmw.800.1.0.20513097	VMW	Unknown

Search

Navigator

Name	Description	Version	Vendor	Installed on
NVD-AIE_ESXi_8.0.0_Driver	NVIDIA Accelerated Graphics Driver for VMware ESXi 8.0.0	525.60.12-1OEM.800.1.0.2061...	NVD	Saturday, Octob
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