



# NVIDIA AI Enterprise

## Product Support Matrix

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# Chapter 1. Product Support Matrix

**Driver package:** NVIDIA AI Enterprise 4.2

Validated partner integrations:

- ▶ Run: AI: 2.5
- ▶ Domino Data Lab

Details of NVIDIA AI Enterprise support on various hypervisors and bare-metal operating systems are provided in the following sections:

- ▶ [Amazon Web Services \(AWS\) Nitro Support](#)
- ▶ [Azure Kubernetes Service \(AKS\) Support](#)
- ▶ [Google Cloud Platform \(GCP\) KVM Support](#)
- ▶ [Linux with KVM Support](#)
- ▶ [Red Hat Enterprise Linux with KVM Support](#)
- ▶ [Red Hat OpenShift Support](#)
- ▶ [SUSE Linux Enterprise Server Support](#)
- ▶ [Ubuntu Support](#)
- ▶ [VMware vSphere Support](#)

## Amazon Web Services (AWS) Nitro Support

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"><li>▶ NVIDIA A100</li><li>▶ NVIDIA A10G</li><li>▶ NVIDIA T4</li><li>▶ NVIDIA V100</li></ul>	Amazon Web Services (AWS) Nitro		<ul style="list-style-type: none"><li>▶ Ubuntu 22.04 LTS</li><li>▶ Ubuntu 20.04 LTS</li></ul>	containerd	Amazon Elastic Kubernetes Service (EKS)

## Azure Kubernetes Service (AKS) Support


GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA A100</li> <li>▶ NVIDIA A10</li> <li>▶ NVIDIA T4</li> <li>▶ NVIDIA V100</li> </ul>	Azure Hypervisor		<ul style="list-style-type: none"> <li>▶ Ubuntu 22.04 LTS</li> </ul>	containerd	Azure Kubernetes Service (AKS)

## Google Cloud Platform (GCP) KVM Support

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA A100</li> <li>▶ NVIDIA T4</li> <li>▶ NVIDIA V100</li> </ul>	Google Cloud Platform (GCP) KVM		<ul style="list-style-type: none"> <li>▶ Ubuntu 22.04 LTS</li> <li>▶ Ubuntu 20.04 LTS</li> </ul>	containerd	Google Kubernetes Engine (GKE)

## Linux with KVM Support

NVIDIA AI Enterprise is supported on Linux with KVM platforms **only** by specific hypervisor software vendors. For information about which NVIDIA AI Enterprise releases and hypervisor software releases are supported, consult the documentation from your hypervisor vendor.

Hypervisor Vendor	Platform	Additional Information
Nutanix	AHV	<p>Obtain the NVIDIA Virtual GPU Manager software directly from Nutanix through the <a href="#">My Nutanix</a> portal (My Nutanix account required).</p> <div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc;"> <p> <b>Note:</b> If the NVIDIA AI Enterprise release that you need is not available from the My Nutanix portal, contact Nutanix.</p> </div>

Hypervisor Vendor	Platform	Additional Information
		Then follow the instructions on the My Nutanix portal to obtain the correct NVIDIA AI Enterprise graphics drivers from the NVIDIA Licensing Portal.

## Red Hat Enterprise Linux with KVM Support



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with [NVIDIA AI Enterprise compatible](#) servers.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 PCIe 80GB</li> <li>▶ NVIDIA A800 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A800 HGX 80GB</li> <li>▶ NVIDIA A800 40GB PCIe active cooled</li> <li>▶ NVIDIA AX800<sup>1</sup></li> <li>▶ NVIDIA A100X</li> <li>▶ NVIDIA A100 PCIe 40GB</li> </ul>	<ul style="list-style-type: none"> <li>▶ Red Hat Enterprise Linux with KVM 9.2, 9.0</li> <li>▶ Red Hat Enterprise Linux with KVM 8.9, 8.8, 8.6</li> </ul>	<ul style="list-style-type: none"> <li>▶ NVIDIA vGPU</li> <li>▶ GPU pass through</li> </ul>	<ul style="list-style-type: none"> <li>▶ Red Hat OpenShift 4.11 and later using RHCOS</li> </ul>	CRI-O	<ul style="list-style-type: none"> <li>▶ Red Hat OpenShift 4.11 and later using RHCOS</li> <li>▶ Upstream Kubernetes 1.21 through 1.25</li> </ul>
			<ul style="list-style-type: none"> <li>▶ Red Hat Enterprise Linux 9.2, 9.0</li> <li>▶ Red Hat Enterprise Linux 8.9, 8.8, 8.6</li> <li>▶ Red Hat Enterprise Linux 7.9</li> </ul>	Podman	N/A
			<ul style="list-style-type: none"> <li>▶ Microsoft Windows Server</li> </ul>	N/A	N/A

<sup>1</sup> The NVIDIA AX800 GPU is supported only on Linux OSes. Windows is **not** supported.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA A100 HGX 40GB			2022, 2019		
▶ NVIDIA A100 PCIe 80GB					
▶ NVIDIA A100 PCIe 80GB liquid cooled					
▶ NVIDIA A100 HGX 80GB					
▶ NVIDIA A40					
▶ NVIDIA A30X					
▶ NVIDIA A30					
▶ NVIDIA A30 liquid cooled					
▶ NVIDIA A10					
▶ NVIDIA A16					
▶ NVIDIA A2					
▶ NVIDIA H800 PCIe 94GB (H800 NVL)					
▶ NVIDIA H800 PCIe 80GB					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA H100 PCIe 94GB (H100 NVL)					
▶ NVIDIA H100 PCIe 80GB					
▶ NVIDIA L40					
▶ NVIDIA L40S					
▶ NVIDIA L20					
▶ NVIDIA L4					
▶ NVIDIA L2					
▶ NVIDIA RTX 6000 Ada					
▶ NVIDIA RTX 5000 Ada					
▶ NVIDIA RTX A6000					
▶ NVIDIA RTX A5500					
▶ NVIDIA RTX A5000					
▶ NVIDIA RTX 6000 passive					
▶ NVIDIA RTX 8000 passive					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA T4</li> <li>▶ NVIDIA V100</li> </ul>					
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 PCIe 80GB</li> <li>▶ NVIDIA A800 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A800 HGX 80GB</li> </ul>	<ul style="list-style-type: none"> <li>▶ Red Hat Enterprise Linux 9.2, 9.0</li> <li>▶ Red Hat Enterprise Linux 8.9, 8.8, 8.6</li> <li>▶ Red Hat Enterprise Linux 7.9</li> </ul>	<ul style="list-style-type: none"> <li>▶ Bare metal</li> </ul>	N/A	Podman	N/A
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 40GB PCIe active cooled</li> <li>▶ NVIDIA AX800<sup>1</sup></li> <li>▶ NVIDIA A100X</li> <li>▶ NVIDIA A100 PCIe 40GB</li> <li>▶ NVIDIA A100 HGX 40GB</li> <li>▶ NVIDIA A100 PCIe 80GB</li> <li>▶ NVIDIA A100 PCIe 80GB liquid cooled</li> </ul>	Red Hat Enterprise Linux 8.9, 8.8, 8.6	<ul style="list-style-type: none"> <li>▶ Bare metal</li> </ul>	N/A	containerd	HPE Ezmeral Runtime Enterprise 5.5



GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA A100 HGX 80GB					
▶ NVIDIA A40					
▶ NVIDIA A30X					
▶ NVIDIA A30					
▶ NVIDIA A30 liquid cooled					
▶ NVIDIA A10					
▶ NVIDIA A16					
▶ NVIDIA A2					
▶ NVIDIA GH200 Grace Hopper™ Superchip					
▶ NVIDIA H800 PCIe 94GB (H800 NVL)					
▶ NVIDIA H800 PCIe 80GB					
▶ NVIDIA H100 PCIe 94GB (H100 NVL)					

<sup>2</sup> The NVIDIA GH200 Grace Hopper Superchip is supported only in bare-metal deployments on Red Hat Enterprise Linux, SUSE Linux Enterprise Server, and Ubuntu.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA H100 PCIe 80GB					
▶ NVIDIA H100 SXM5 94GB <sup>3</sup>					
▶ NVIDIA H100 SXM5 80GB <sup>3</sup>					
▶ NVIDIA H100 SXM5 64GB <sup>3</sup>					
▶ NVIDIA L40					
▶ NVIDIA L40S					
▶ NVIDIA L20					
▶ NVIDIA L4					
▶ NVIDIA L2					
▶ NVIDIA RTX 6000 Ada					
▶ NVIDIA RTX 5000 Ada					
▶ NVIDIA RTX A6000					
▶ NVIDIA RTX A5500					

<sup>3</sup> NVIDIA H100 SXM5 GPUs are supported only in bare-metal deployments on Red Hat Enterprise Linux, SUSE Linux Enterprise Server, and Ubuntu with NVIDIA Datacenter Drivers. NVIDIA vGPU guest drivers are not supported.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA RTX A5000</li> <li>▶ NVIDIA RTX 6000 passive</li> <li>▶ NVIDIA RTX 8000 passive</li> <li>▶ NVIDIA T4</li> <li>▶ NVIDIA V100</li> </ul>					

## Red Hat OpenShift Support



**Note:** NVIDIA AI Enterprise supports every patch release for the listed Red Hat OpenShift release provided that Red Hat also supports it. When a release or patch release is no longer supported by Red Hat, it is no longer supported by NVIDIA AI Enterprise.



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with [NVIDIA AI Enterprise compatible](#) servers.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 PCIe 80GB</li> <li>▶ NVIDIA A800 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A800 HGX 80GB</li> </ul>	<ul style="list-style-type: none"> <li>▶ Red Hat OpenShift 4.11 and later using RHCOS</li> </ul>	<ul style="list-style-type: none"> <li>▶ Bare metal</li> </ul>	N/A	CRI-O	<ul style="list-style-type: none"> <li>▶ Red Hat OpenShift 4.11 and later using RHCOS</li> </ul>

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA A800 40GB PCIe active cooled					
▶ NVIDIA AX800 <sup>1</sup>					
▶ NVIDIA A100X					
▶ NVIDIA A100 PCIe 40GB					
▶ NVIDIA A100 HGX 40GB					
▶ NVIDIA A100 PCIe 80GB					
▶ NVIDIA A100 PCIe 80GB liquid cooled					
▶ NVIDIA A100 HGX 80GB					
▶ NVIDIA A40					
▶ NVIDIA A30X					
▶ NVIDIA A30					
▶ NVIDIA A30 liquid cooled					
▶ NVIDIA A10					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA A16					
▶ NVIDIA A2					
▶ NVIDIA H800 PCIe 94GB (H800 NVL)					
▶ NVIDIA H800 PCIe 80GB					
▶ NVIDIA H100 PCIe 94GB (H100 NVL)					
▶ NVIDIA H100 PCIe 80GB					
▶ NVIDIA H100 SXM5 94GB <sup>3</sup>					
▶ NVIDIA H100 SXM5 80GB <sup>3</sup>					
▶ NVIDIA H100 SXM5 64GB <sup>3</sup>					
▶ NVIDIA L40					
▶ NVIDIA L40S					
▶ NVIDIA L20					
▶ NVIDIA L4					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA L2					
▶ NVIDIA RTX 6000 Ada					
▶ NVIDIA RTX 5000 Ada					
▶ NVIDIA RTX A6000					
▶ NVIDIA RTX A5500					
▶ NVIDIA RTX A5000					
▶ NVIDIA RTX 6000 passive					
▶ NVIDIA RTX 8000 passive					
▶ 5000					
▶ NVIDIA T4					
▶ NVIDIA V100					

## SUSE Linux Enterprise Server Support



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with [NVIDIA AI Enterprise compatible](#) servers.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 PCIe 80GB</li> <li>▶ NVIDIA A800 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A800 HGX 80GB</li> <li>▶ NVIDIA A800 40GB PCIe active cooled</li> <li>▶ NVIDIA AX800<sup>1</sup></li> <li>▶ NVIDIA A100X</li> <li>▶ NVIDIA A100 PCIe 40GB</li> <li>▶ NVIDIA A100 HGX 40GB</li> <li>▶ NVIDIA A100 PCIe 80GB</li> <li>▶ NVIDIA A100 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A100 HGX 80GB</li> </ul>	<ul style="list-style-type: none"> <li>▶ SUSE Linux Enterprise Server 15 SP2+</li> </ul>	<ul style="list-style-type: none"> <li>▶ Bare metal</li> </ul>	N/A	<ul style="list-style-type: none"> <li>containerd</li> </ul>	<ul style="list-style-type: none"> <li>▶ Upstream Kubernetes 1.21 through 1.25</li> </ul>
				<ul style="list-style-type: none"> <li>Docker</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA A40					
▶ NVIDIA A30X					
▶ NVIDIA A30					
▶ NVIDIA A30 liquid cooled					
▶ NVIDIA A10					
▶ NVIDIA A16					
▶ NVIDIA A2					
▶ NVIDIA GH200 Grace Hopper Superchip <sub>2</sub>					
▶ NVIDIA H800 PCIe 94GB (H800 NVL)					
▶ NVIDIA H800 PCIe 80GB					
▶ NVIDIA H100 PCIe 94GB (H100 NVL)					
▶ NVIDIA H100 PCIe 80GB					
▶ NVIDIA H100					



GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
SXM5 94GB3 ▶ NVIDIA H100 SXM5 80GB3 ▶ NVIDIA H100 SXM5 64GB3 ▶ NVIDIA L40 ▶ NVIDIA L40S ▶ NVIDIA L20 ▶ NVIDIA L4 ▶ NVIDIA L2 ▶ NVIDIA RTX 6000 Ada ▶ NVIDIA RTX 5000 Ada ▶ NVIDIA RTX A6000 ▶ NVIDIA RTX A5500 ▶ NVIDIA RTX A5000 ▶ NVIDIA RTX 6000 passive					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA RTX 8000 passive</li> <li>▶ NVIDIA T4</li> <li>▶ NVIDIA V100</li> </ul>					

## Ubuntu Support



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise only with [NVIDIA AI Enterprise compatible](#) servers.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 PCIe 80GB</li> <li>▶ NVIDIA A800 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A800 HGX 80GB</li> <li>▶ NVIDIA A800 40GB PCIe active cooled</li> <li>▶ NVIDIA AX800<sub>1</sub></li> <li>▶ NVIDIA A100X</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ubuntu 22.04 LTS</li> <li>▶ Ubuntu 20.04 LTS</li> </ul>	<ul style="list-style-type: none"> <li>▶ NVIDIA vGPU</li> <li>▶ GPU pass through</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ubuntu 22.04 LTS</li> <li>▶ Ubuntu 20.04 LTS</li> </ul>	<ul style="list-style-type: none"> <li>containerd</li> <li>Docker</li> </ul>	<ul style="list-style-type: none"> <li>▶ Upstream Kubernetes 1.21 through 1.25</li> <li>▶ VMware vSphere with Tanzu 7.0 U3c</li> <li>N/A</li> </ul>

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA A100 PCIe 40GB					
▶ NVIDIA A100 HGX 40GB					
▶ NVIDIA A100 PCIe 80GB					
▶ NVIDIA A100 PCIe 80GB liquid cooled					
▶ NVIDIA A100 HGX 80GB					
▶ NVIDIA A40					
▶ NVIDIA A30X					
▶ NVIDIA A30					
▶ NVIDIA A30 liquid cooled					
▶ NVIDIA A10					
▶ NVIDIA A16					
▶ NVIDIA A2					
▶ NVIDIA H800 PCIe 94GB (H800 NVL)					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA H800 PCIe 80GB					
▶ NVIDIA H100 PCIe 94GB (H100 NVL)					
▶ NVIDIA H100 PCIe 80GB					
▶ NVIDIA L40					
▶ NVIDIA L40S					
▶ NVIDIA L20					
▶ NVIDIA L4					
▶ NVIDIA L2					
▶ NVIDIA RTX 6000 Ada					
▶ NVIDIA RTX 5000 Ada					
▶ NVIDIA RTX A6000					
▶ NVIDIA RTX A5500					
▶ NVIDIA RTX A5000					
▶ NVIDIA RTX 6000 passive					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA RTX 8000 passive</li> <li>▶ NVIDIA T4</li> <li>▶ NVIDIA V100</li> </ul>					
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 PCIe 80GB</li> <li>▶ NVIDIA A800 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A800 HGX 80GB</li> <li>▶ NVIDIA A800 40GB PCIe active cooled</li> <li>▶ NVIDIA AX800<sup>1</sup></li> <li>▶ NVIDIA A100X</li> <li>▶ NVIDIA A100 PCIe 40GB</li> <li>▶ NVIDIA A100 HGX 40GB</li> <li>▶ NVIDIA A100 PCIe 80GB</li> <li>▶ NVIDIA A100 PCIe</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ubuntu 22.04 LTS</li> <li>▶ Ubuntu 20.04 LTS</li> </ul>	<ul style="list-style-type: none"> <li>▶ Bare metal</li> </ul>	N/A	containerd	<ul style="list-style-type: none"> <li>▶ Upstream Kubernetes 1.21 through 1.25</li> <li>▶ VMware vSphere with Tanzu 7.0 U3c</li> </ul>
				Docker	N/A

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
80GB liquid cooled ► NVIDIA A100 HGX 80GB ► NVIDIA A40 ► NVIDIA A30X ► NVIDIA A30 ► NVIDIA A30 liquid cooled ► NVIDIA A10 ► NVIDIA A16 ► NVIDIA A2 ► NVIDIA GH200 Grace Hopper Superchip <sup>2</sup> ► NVIDIA H800 PCIe 94GB (H800 NVL) ► NVIDIA H800 PCIe 80GB ► NVIDIA H100 PCIe 94GB (H100 NVL)					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA H100 PCIe 80GB					
▶ NVIDIA H100 SXM5 94GB3					
▶ NVIDIA H100 SXM5 80GB3					
▶ NVIDIA H100 SXM5 64GB3					
▶ NVIDIA L40					
▶ NVIDIA L40S					
▶ NVIDIA L20					
▶ NVIDIA L4					
▶ NVIDIA L2					
▶ NVIDIA RTX 6000 Ada					
▶ NVIDIA RTX 5000 Ada					
▶ NVIDIA RTX A6000					
▶ NVIDIA RTX A5500					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA RTX A5000</li> <li>▶ NVIDIA RTX 6000 passive</li> <li>▶ NVIDIA RTX 8000 passive</li> <li>▶ NVIDIA T4</li> <li>▶ NVIDIA V100</li> </ul>					

## VMware vSphere Support



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with [NVIDIA AI Enterprise compatible](#) servers.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>▶ NVIDIA A800 PCIe 80GB</li> <li>▶ NVIDIA A800 PCIe 80GB liquid cooled</li> <li>▶ NVIDIA A800 HGX 80GB</li> <li>▶ NVIDIA A800 40GB PCIe active cooled</li> </ul>	<ul style="list-style-type: none"> <li>▶ VMware vSphere Hypervisor (ESXi) Enterprise Plus Edition 8.0</li> <li>▶ VMware vCenter Server 8.0</li> <li>▶ VMware vSphere Hypervisor (ESXi) Enterprise Plus</li> </ul>	<ul style="list-style-type: none"> <li>▶ NVIDIA vGPU</li> <li>▶ GPU pass through</li> </ul>	<ul style="list-style-type: none"> <li>▶ SUSE Linux Enterprise Server 15 SP2+</li> <li>▶ Ubuntu 22.04 LTS</li> <li>▶ Ubuntu 20.04 LTS</li> <li>▶ Red Hat OpenShift 4.11 and later using Red Hat</li> </ul>	<ul style="list-style-type: none"> <li>containerd</li> <li>Docker</li> <li>CRI-O</li> </ul>	<ul style="list-style-type: none"> <li>▶ Upstream Kubernetes 1.21 through 1.25</li> <li>▶ VMware vSphere with Tanzu 7.0 U3c</li> <li>N/A</li> <li>▶ Red Hat OpenShift 4.11 and later using RHCOS</li> </ul>



GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA AX800	Edition 7.0 Update 3		Linux CoreOS (RHCOS)		
▶ NVIDIA A100X	VMware vCenter Server 7.0 Update 3		▶ Red Hat Enterprise Linux 9.2, 9.0	Podman	N/A
▶ NVIDIA A100 PCIe 40GB	▶ VMware vSphere Hypervisor (ESXi) Enterprise Plus Edition 7.0 Update 2		▶ Red Hat Enterprise Linux 8.9, 8.8, 8.6		
▶ NVIDIA A100 HGX 40GB			▶ Red Hat Enterprise Linux 7.9		
▶ NVIDIA A100 PCIe 80GB	▶ VMware vCenter Server 7.0 Update 2		Red Hat Enterprise Linux 8.9, 8.8, 8.6	containerd	HPE Ezmeral Runtime Enterprise 5.5
▶ NVIDIA A100 PCIe 80GB liquid cooled			▶ Microsoft Windows Server 2022, 2019	N/A	N/A
▶ NVIDIA A100 HGX 80GB			▶ Microsoft Windows 11, 10		
▶ NVIDIA A40					
▶ NVIDIA A30X					
▶ NVIDIA A30					
▶ NVIDIA A30 liquid cooled					
▶ NVIDIA A10					
▶ NVIDIA A16					
▶ NVIDIA A2					
▶ NVIDIA H800 PCIe					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> <li>94GB (H800 NVL)</li> <li>▶ NVIDIA H800 PCIe 80GB</li> <li>▶ NVIDIA H100 PCIe 94GB (H100 NVL)</li> <li>▶ NVIDIA H100 PCIe 80GB</li> <li>▶ NVIDIA L40</li> <li>▶ NVIDIA L40S</li> <li>▶ NVIDIA L20</li> <li>▶ NVIDIA L4</li> <li>▶ NVIDIA L2</li> <li>▶ NVIDIA RTX 6000 Ada</li> <li>▶ NVIDIA RTX 5000 Ada</li> <li>▶ NVIDIA RTX A6000</li> <li>▶ NVIDIA RTX A5500</li> <li>▶ NVIDIA RTX A5000</li> </ul>					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"><li>▶ NVIDIA RTX 6000 passive</li><li>▶ NVIDIA RTX 8000 passive</li><li>▶ NVIDIA T4</li><li>▶ NVIDIA V100</li></ul>					

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# Chapter 2. NVIDIA RAPIDS Accelerator for Apache Spark Support

NVIDIA RAPIDS Accelerator for Apache Spark is a software component of NVIDIA AI Enterprise. It uses NVIDIA GPUs to accelerate Spark data frame workloads transparently, that is, without code changes.

NVIDIA AI Enterprise supports RAPIDS Accelerator for Apache Spark on the following platforms:

- ▶ [Google Cloud Dataproc](#)
- ▶ [Databricks](#) on the following cloud services:
  - ▶ Amazon Web Services (AWS)
  - ▶ Microsoft Azure
- ▶ [Amazon EMR](#) (formerly “Amazon Elastic MapReduce”)

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# Chapter 3. NVIDIA AI Enterprise Supported Cloud Services

NVIDIA AI Enterprise is supported on several cloud services with bring-your-own-license (BYOL) licensing. Pay-as-you-go licensing is also available with some cloud services.

- ▶ [Alibaba](#)
- ▶ [Amazon Web Services Elastic Compute Cloud \(AWS EC2\)](#)
- ▶ [Google Cloud Platform \(GCP\)](#)
- ▶ [Microsoft Azure](#)
- ▶ [Oracle Cloud Infrastructure](#)
- ▶ [Tencent Cloud](#)




**Note:** Red Hat Enterprise Linux guest OS support is limited to running containers by using Docker **without** Kubernetes. NVIDIA AI Enterprise features that depend on Kubernetes, for example, the use of GPU Operator, are not supported on Red Hat Enterprise Linux.

## 3.1. Alibaba


GPU	Supported Alibaba Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA V100	gn6e gn6v	Upstream Kubernetes	▶ Ubuntu 22.04 ▶ Ubuntu 20.04
NVIDIA A10	gn7e gn7i		

## 3.2. Amazon Web Services Elastic Compute Cloud (AWS EC2)

 **Note:** Pay-as-you-go licensing is also available for all supported AWS EC2 instances.

GPU	Supported AWS EC2 Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA T4	All G4 series instances	Amazon Elastic Kubernetes Service (EKS)  Red Hat OpenShift  Upstream Kubernetes	Red Hat Enterprise Linux 8.4
NVIDIA V100	All P3 series instances		Red Hat Enterprise Linux 7.9
NVIDIA A10G	All G5 series instances		Red Hat OpenShift 4.10 using Red Hat Linux CoreOS (RHCOS)
NVIDIA A100	All P4d and P4de series instances		Red Hat OpenShift 4.9 using Red Hat Linux CoreOS (RHCOS)
NVIDIA H100	All P5 series instances		Ubuntu 22.04 Ubuntu 20.04

## 3.3. Google Cloud Platform (GCP)

 **Note:** Pay-as-you-go licensing is also available for all supported GCP instances.

GPU	Supported GCP Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA A100	All A2 series instances	Google Kubernetes Engine (GKE)  Red Hat OpenShift  Upstream Kubernetes	Red Hat Enterprise Linux 8.4
NVIDIA H100	All A3 series instances		Red Hat Enterprise Linux 7.9
NVIDIA L4	All G2 series instances		Red Hat OpenShift 4.10 using Red Hat Linux CoreOS (RHCOS)
NVIDIA T4	Any <a href="#">predefined machine type</a> .  Any <a href="#">custom machine type</a> that can be created in a zone.		Red Hat OpenShift 4.9 using Red Hat Linux CoreOS (RHCOS)
NVIDIA V100			Ubuntu 22.04

GPU	Supported GCP Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
			Ubuntu 20.04

### 3.4. Microsoft Azure

**Note:** Pay-as-you-go licensing is also available for all supported Microsoft Azure instances, except NV\_A10\_v5 instances.

GPU	Supported Azure Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA V100	All NC v3 and ND v2 instances	Azure Kubernetes Service (AKS) Red Hat OpenShift Upstream Kubernetes	Red Hat Enterprise Linux 8.4
NVIDIA T4	All NC T4_v3 instances		Red Hat Enterprise Linux 7.9
NVIDIA H100	All ND H100_v5 instances		Red Hat OpenShift 4.10 using Red Hat Linux CoreOS (RHCOS)
NVIDIA A100	All NC A100_v4 instances		Red Hat OpenShift 4.9 using Red Hat Linux CoreOS (RHCOS)
	All ND A100_v4 instances		Ubuntu 22.04
NVIDIA A10	All NV A10_v5 instances	Ubuntu 20.04	

### 3.5. Oracle Cloud Infrastructure

**Note:** Pay-as-you-go licensing is also available for all supported Oracle Cloud Infrastructure instances.

GPU	Oracle Cloud Infrastructure Shapes	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA V100	All VM.GPU3 shapes	Upstream Kubernetes	Linux: ► Ubuntu 22.04 ► Ubuntu 20.04 Windows:
NVIDIA H100	BM.GPU.H100.8		
NVIDIA A100	All BM.GPU4 shapes All BM.GPU.A100-v2 shapes		

GPU	Oracle Cloud Infrastructure Shapes	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA A10	All VM.GPU.A10 shapes		<ul style="list-style-type: none"> <li>▶ Microsoft Windows Server 2022</li> <li>▶ Microsoft Windows Server 2019</li> </ul>

## 3.6. Tencent Cloud

GPU	Supported Tencent Cloud Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA V100	GN10Xp	Upstream Kubernetes	▶ Ubuntu 22.04
NVIDIA A10	PNV4		▶ Ubuntu 20.04

## 3.7. NVIDIA GPU Optimized VMI on CSP Marketplace

For ease of use in the cloud, NVIDIA provides compute optimized and validated base Virtual Machine Instances (VMI) through CSP marketplaces. Each VMI includes key technologies and software from NVIDIA for rapid deployment, management, and scaling of AI workloads in the modern hybrid cloud.

Each VMI has the following software pre-installed:

- ▶ Ubuntu Server 20.04
- ▶ NVIDIA driver 525 TRD - 525.60.13
- ▶ Docker-ce 20.10.12
- ▶ NVIDIA Container Toolkit 1.8.1
- ▶ NVIDIA Container Runtime 3.8.1



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# Chapter 4. CPU Only Server Support

NVIDIA AI Enterprise supports deployments on CPU only servers that are part of the [NVIDIA Certified Systems](#) list. Customers can deploy both GPU and CPU Only systems with VMware vSphere or Red Hat Enterprise Linux.

NVIDIA AI Enterprise will support the following CPU enabled frameworks:

- ▶ TensorFlow
- ▶ PyTorch
- ▶ Triton Inference Server with FIL backend
- ▶ NVIDIA RAPIDS with XGBoost and Dask

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