

# **NVIDIA AI Enterprise**

**Product Support Matrix** 

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# Chapter 1. Product Support Matrix

Driver package: NVIDIA AI Enterprise 5.0

Validated partner integrations:

Run: Al: 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 Support
- Red Hat OpenShift Support
- SUSE Linux Enterprise Server Support
- <u>Ubuntu Support</u>
- 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> <li>NVIDIA     A100</li> <li>NVIDIA     A10G</li> <li>NVIDIA     H100</li> <li>NVIDIA T4</li> </ul>	Amazon Web Services (AWS) Nitro		<ul><li>Ubuntu 22.04 LTS</li><li>Ubuntu 20.04 LTS</li></ul>	containerd	Amazon Elastic Kubernetes Service (EKS)

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
NVIDIA V100					

### Azure Kubernetes Service (AKS) Support

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul> <li>NVIDIA     A100</li> <li>NVIDIA     A10</li> <li>NVIDIA     H100</li> <li>NVIDIA T4</li> <li>NVIDIA     V100</li> </ul>	Azure Hypervisor		Ubuntu 22.04 LTS	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> <li>NVIDIA A100</li> <li>NVIDIA H100</li> <li>NVIDIA L4</li> <li>NVIDIA T4</li> <li>NVIDIA V100</li> </ul>	Google Cloud Platform (GCP) KVM		<ul><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	Obtain the NVIDIA Virtual GPU Manager software directly from Nutanix through the My Nutanix portal (My Nutanix account required).
		Note: If the NVIDIA AI Enterprise release that you need is not available from the My Nutanix portal, contact Nutanix.
		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	OpenStack Platform	Product Documentation for Red Hat OpenStack Platform

### Red Hat Enterprise Linux Support



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with <u>NVIDIA AI Enterprise compatible</u> servers.

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul> <li>NVIDIA     A800 PCIe     80GB</li> <li>NVIDIA     A800 PCIe     80GB     liquid     cooled</li> <li>NVIDIA     A800 HGX     80GB</li> </ul>	<ul> <li>Red Hat Enterprise Linux with KVM 9.3, 9.2, 9.0</li> <li>Red Hat Enterprise Linux with KVM 8.9, 8.8, 8.6</li> </ul>	<ul> <li>NVIDIA</li> <li>vGPU</li> <li>GPU pass</li> <li>through</li> </ul>	Red Hat OpenShift 4.12 through 4.15 using RHCOS	CRI-O	<ul> <li>Red Hat         <ul> <li>OpenShift</li> <li>4.12</li> <li>through</li> <li>4.15 using</li> <li>RHCOS</li> </ul> </li> <li>Upstream         <ul> <li>Kubernetes</li> <li>1.22</li> <li>through</li> <li>1.29</li> </ul> </li> </ul>
NVIDIA A800 40GB PCIe			Red Hat Enterprise	Podman	N/A

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
active cooled  NVIDIA AX8001  NVIDIA A100X  NVIDIA A100 PCle 40GB			Linux 9.3, 9.2, 9.0  Red Hat Enterprise Linux 8.9, 8.8, 8.6  Red Hat Enterprise Linux 7.9		
NVIDIA A100 HGX 40GB NVIDIA A100 PCIe 80GB			Microsoft Windows Server 2022	N/A	N/A
NVIDIA A100 PCIe 80GB liquid cooled NVIDIA A100 HGX					
80GB NVIDIA A40					
NVIDIA A30X					
NVIDIA A30					
NVIDIA A30 liquid cooled					
NVIDIA A10					

The NVIDIA AX800 GPU is supported only on Linux OSes. Windows is **not** supported.

		Hypervisor				Container
GP	DI I	or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Orchestration Platform
Gr ▶	NVIDIA	Wetai 03	Deployment	Support	Liigiile	Flationiii
	A16					
•	NVIDIA A2					
•	NVIDIA H800 PCIe 94GB (H800 NVL)					
•	NVIDIA H800 PCle 80GB					
•	NVIDIA H800 SXM5 80GB					
•	NVIDIA H100 PCIe 94GB (H100 NVL)					
•	NVIDIA H100 PCle 80GB					
•	NVIDIA H100 SXM5 94GB					
•	NVIDIA H100 SXM5 80GB					
•	NVIDIA H100 SXM5 64GB					
•	NVIDIA L40					

		Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
GP		Metal OS	Deployment	Support	Engine	Platform
•	NVIDIA					
	L40S					
•	NVIDIA L20					
•	NVIDIA L4					
•	NVIDIA L2					
•	NVIDIA RTX 6000 Ada					
•	NVIDIA RTX 5880 Ada					
•	NVIDIA RTX 5000 Ada					
•	NVIDIA RTX A6000					
•	NVIDIA RTX A5500					
•	NVIDIA RTX A5000					
•	NVIDIA RTX 6000 passive					
•	NVIDIA RTX 8000 passive					
•	NVIDIA T4					
•	NVIDIA V100					
•	NVIDIA A800 PCIe 80GB	<ul><li>Red Hat Enterprise</li></ul>	► Bare metal	N/A	Podman	N/A

CF	NI I	Hypervisor or Bare-	GPU Deployment	Guest OS	Container	Container Orchestration
GF	NVIDIA A800 PCIe 80GB liquid cooled NVIDIA A800 HGX 80GB NVIDIA	Metal OS  Linux 9.3, 9.2, 9.0  Red Hat Enterprise Linux 8.9, 8.8, 8.6  Red Hat Enterprise Linux 7.9	Deployment	Support	Engine	Platform
	A800 40GB PCle active cooled	Red Hat Enterprise Linux 8.9, 8.8,	► Bare metal	N/A	containerd	HPE Ezmeral Runtime Enterprise 5.5
•	NVIDIA AX800 <u>1</u> NVIDIA	8.6		CRI-O	Upstream Kubernetes 1.22 through	
•	A100X NVIDIA					1.29
•	A100 PCle 40GB NVIDIA					
	A100 HGX 40GB NVIDIA					
	A100 PCle 80GB					
	NVIDIA A100 PCIe 80GB liquid cooled					
•	NVIDIA A100 HGX 80GB NVIDIA A40					

GP	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA A30X					
•	NVIDIA A30					
•	NVIDIA A30 liquid cooled					
•	NVIDIA A10					
•	NVIDIA A16					
•	NVIDIA A2					
•	NVIDIA GH200 96GB (CG1) Grace Hopper <sup>™</sup> Superchip2					
•	NVIDIA GH200 Grace Hopper 144GB (CG1) Superchip2					
•	NVIDIA H800 PCIe 94GB (H800 NVL)					
•	NVIDIA H800 PCIe 80GB					
•	NVIDIA H800					

All variants of the NVIDIA GH200 Grace Hopper Superchip are supported only in bare-metal deployments on Red Hat Enterprise Linux, SUSE Linux Enterprise Server, and Ubuntu.

	Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
GPU	Metal OS	Deployment	Support	Engine	Platform
SXM5 80GB					
► NVIDIA					
H100 PCle					
94GB (H100					
NVL)					
► NVIDIA					
H100 PCle					
80GB ► NVIDIA					
H100					
SXM5					
94GB					
NVIDIA					
SXM5					
80GB					
NVIDIA					
SXM5					
64GB					
► NVIDIA					
L40 ► NVIDIA					
L40S					
► NVIDIA					
L20					
NVIDIA L4					
<ul><li>NVIDIA L2</li><li>NVIDIA</li></ul>					
RTX 6000					
Ada					
► NVIDIA					
RTX 5880 Ada					
,					

GF	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA RTX 5000 Ada					
	NVIDIA RTX A6000					
•	NVIDIA RTX A5500					
•	NVIDIA RTX A5000					
•	NVIDIA RTX 6000 passive					
•	NVIDIA RTX 8000 passive					
<b>&gt;</b>	NVIDIA T4 NVIDIA V100					

### 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  $\underline{\text{NVIDIA}}$  AI Enterprise compatible servers.

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
NVIDIA A800 PCIe 80GB	Red Hat OpenShift 4.12	► Bare metal	N/A	CRI-O	Red Hat OpenShift 4.12

GP	'U	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA A800 PCIe 80GB liquid cooled	through 4.15 using RHCOS				through 4.15 using RHCOS
•	NVIDIA A800 HGX 80GB					
•	NVIDIA A800 40GB PCIe active cooled					
•	NVIDIA AX800 <u>1</u>					
•	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					

GP	U	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
GP	NVIDIA A30 NVIDIA A30 liquid cooled NVIDIA A10 NVIDIA A16 NVIDIA A2 NVIDIA H800 PCIe 94GB (H800 NVL) NVIDIA H800 PCIe 80GB NVIDIA H800 SXM5 80GB NVIDIA H100 PCIe 94GB (H100 NVL) NVIDIA	or Bare-				Orchestration
•						
•	NVIDIA H100 SXM5 80GB					

	Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
GPU	Metal OS	Deployment	Support	Engine	Platform
NVIDIA H100 SXM5 64GB					
NVIDIA L40					
NVIDIA L40S					
NVIDIA					
► NVIDIA	L4				
► NVIDIA	L2				
NVIDIA RTX 60	00				
NVIDIA RTX 58	80				
Ada  NVIDIA RTX 50	00				
NVIDIA RTX A6000					
NVIDIA RTX A5500					
NVIDIA RTX A5000					
NVIDIA RTX 60					
NVIDIA RTX 80	00				
► 5000					

GPU		Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
► NVII	DIA T4					
NVIE V10						

### SUSE Linux Enterprise Server Support



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with <u>NVIDIA AI Enterprise compatible</u> servers.

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul> <li>NVIDIA     A800 PCIe     80GB</li> <li>NVIDIA     A800 PCIe     80GB     liquid     cooled</li> <li>NVIDIA     A800 HGX</li> </ul>	SUSE Linux Enterprise Server 15 SP2+	► Bare metal	N/A	Docker	N/A
80GB  NVIDIA A800 40GB PCIe active cooled  NVIDIA AX8001  NVIDIA A100X  NVIDIA A100 PCIe					

		Hypervisor				Container
GPI	U	or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Orchestration Platform
•	NVIDIA A100 HGX 40GB		. ,		, and the second	
	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 GH200 96GB (CG1) Grace Hopper Superchip2					
	NVIDIA GH200 144GB					

	Hyperviso or Bare-	or GPU	Cuest OC	Container	Container Orchestration
GPU	or Bare- Metal OS	Deployment	Guest OS Support	Container Engine	Platform
(CG1) Grace Hoppe Superc					
NVIDIA H800 F 94GB (H800 NVL)					
NVIDIA H800 F 80GB					
NVIDIA H800 SXM5 80GB					
NVIDIA H100 F 94GB (H100 NVL)					
NVIDIA H100 F 80GB					
NVIDIA H100 SXM5 94GB					
NVIDIA H100 SXM5 80GB	A				
NVIDIA H100 SXM5 64GB	<b>A</b>				
NVIDIA	<b>A</b>				

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
NVIDIA L40S				-	
NVIDIA					
► NVIDIA L4					
► NVIDIA L2					
NVIDIA RTX 6000 Ada					
NVIDIA RTX 5880 Ada					
NVIDIA RTX 5000 Ada					
NVIDIA RTX A6000					
NVIDIA RTX A5500					
NVIDIA RTX A5000					
NVIDIA RTX 6000 passive					
NVIDIA RTX 8000 passive					
NVIDIA T4					
NVIDIA V100					

### **Ubuntu Support**



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with <u>NVIDIA AI Enterprise compatible</u> servers.

GF	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<b>&gt; &gt;</b>	NVIDIA A800 PCIe 80GB NVIDIA A800 PCIe 80GB liquid cooled NVIDIA A800 HGX 80GB NVIDIA A800 HGX 40GB PCIe active cooled	<ul><li>Ubuntu 22.04 LTS</li><li>Ubuntu 20.04 LTS</li></ul>	<ul> <li>NVIDIA         vGPU</li> <li>GPU pass         through</li> </ul>	<ul><li>Ubuntu 22.04 LTS</li><li>Ubuntu 20.04 LTS</li></ul>	containerd	<ul> <li>Charmed Kubernetes 1.28</li> <li>Upstream Kubernetes 1.22 through 1.29</li> <li>VMware vSphere with Tanzu 8.0</li> <li>VMware vSphere with Tanzu 7.0 U3c</li> </ul>
<ul><li>*</li></ul>	NVIDIA AX800 <u>1</u> NVIDIA A100X				Docker	N/A
•	NVIDIA A100 PCIe 40GB					
<b>•</b>	NVIDIA A100 HGX 40GB					
•	NVIDIA A100 PCIe 80GB					
•	NVIDIA A100 PCIe 80GB					

CDU	Hypervisor or Bare-	GPU Deployment	Guest OS	Container	Container Orchestration
GPU	Metal OS	Deployment	Support	Engine	Platform
liquid cooled					
NVIDIA A100 HG	(				
80GB					
NVIDIA A40					
► NVIDIA					
A30X ► NVIDIA					
A30					
► NVIDIA					
A30 liquid					
cooled					
NVIDIA A10					
NVIDIA A16					
► NVIDIA A2	2				
NVIDIA H800 PCI 94GB (H800 NVL)	е				
NVIDIA H800 PCI	е				
NVIDIA H800					
SXM5 80GB					
NVIDIA H100 PCI	е				
(H100 NVL)					

GP	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA H100 PCle 80GB					
•	NVIDIA H100 SXM5 94GB					
•	NVIDIA H100 SXM5 80GB					
•	NVIDIA H100 SXM5 64GB					
<b>&gt;</b>	NVIDIA L40					
<b>&gt;</b>	NVIDIA L40S					
•	NVIDIA L20					
<b>•</b>	NVIDIA L4					
<b>•</b>	NVIDIA L2					
•	NVIDIA RTX 6000 Ada					
•	NVIDIA RTX 5880 Ada					
•	NVIDIA RTX 5000 Ada					
•	NVIDIA RTX A6000					

GF	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul><li></li></ul>	NVIDIA RTX A5500 NVIDIA RTX A5000 NVIDIA RTX 6000 passive NVIDIA RTX 8000 passive NVIDIA RTX 8000 passive NVIDIA RTX 8000					
<b>&gt; &gt; &gt;</b>	NVIDIA A800 PCIe 80GB NVIDIA A800 PCIe 80GB liquid cooled NVIDIA A800 HGX 80GB NVIDIA A800 HGX 40GB PCIe active cooled	<ul><li>Ubuntu 22.04 LTS</li><li>Ubuntu 20.04 LTS</li></ul>	► Bare metal	N/A	containerd	<ul> <li>Charmed Kubernetes 1.28</li> <li>Upstream Kubernetes 1.22 through 1.29</li> <li>VMware vSphere with Tanzu 8.0</li> <li>VMware vSphere with Tanzu 7.0 U3c</li> </ul>
•	NVIDIA AX800 <u>1</u> NVIDIA A100X				CRI-O	Upstream Kubernetes 1.22 through 1.29
					Docker	N/A

GPU		Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
► N	VIDIA 100 PCle	Wetai 03	Deployment	Зиррогс	Liigine	Fiationiii
40	OGB					
А	VIDIA 100 HGX DGB					
А	VIDIA 100 PCIe 0GB					
A 80 lic	VIDIA 100 PCle OGB quid poled					
А	VIDIA 100 HGX OGB					
	VIDIA 40					
	VIDIA 30X					
► N	VIDIA 30					
A.	VIDIA 30 liquid poled					
	VIDIA 10					
	VIDIA 16					
	VIDIA A2					
	VIDIA H200					
	race					
	opper uperchip <u>2</u>					

		Hypervisor				Container
		or Bare-	GPU	Guest OS	Container	Orchestration
GP		Metal OS	Deployment	Support	Engine	Platform
	NVIDIA H800 PCIe 94GB (H800 NVL)					
•	NVIDIA H800 PCle 80GB					
•	NVIDIA H800 SXM5 80GB					
•	NVIDIA H100 PCIe 94GB (H100 NVL)					
•	NVIDIA H100 PCle 80GB					
•	NVIDIA H100 SXM5 94GB					
•	NVIDIA H100 SXM5 80GB					
•	NVIDIA H100 SXM5 64GB					
•	NVIDIA L40					
•	NVIDIA L40S					
•	NVIDIA L20					

GF	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<b>•</b>	NVIDIA L4					
•	NVIDIA L2					
•	NVIDIA RTX 6000 Ada					
•	NVIDIA RTX 5880 Ada					
•	NVIDIA RTX 5000 Ada					
•	NVIDIA RTX A6000					
•	NVIDIA RTX A5500					
•	NVIDIA RTX A5000					
•	NVIDIA RTX 6000 passive					
•	NVIDIA RTX 8000 passive					
•	NVIDIA T4					
•	NVIDIA V100					

### VMware vSphere Support



**Note:** The NVIDIA GPUs listed in the table support NVIDIA AI Enterprise **only** with <u>NVIDIA AI Enterprise compatible</u> servers.

GPU		Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
80G NVII A8C 80G liqui coo NVII A8C 80G	DIA	<ul> <li>VMware vSphere Hypervisor (ESXi)         Enterprise Plus Edition 8.0</li> <li>VMware vCenter Server 8.0</li> <li>VMware vSphere Hypervisor (ESXi)</li> </ul>	<ul> <li>NVIDIA</li> <li>vGPU</li> <li>GPU pass</li> <li>through</li> </ul>	<ul><li>Ubuntu 22.04 LTS</li><li>Ubuntu 20.04 LTS</li></ul>	containerd	<ul> <li>Upstream         Kubernetes         1.22         through         1.29</li> <li>VMware         vSphere         with Tanzu         8.0</li> <li>VMware         vSphere         with Tanzu         7.0 U3c</li> </ul>
acti coo NVII AX8 NVIII A10	led DIA 3001 DIA 00X DIA DIA 00 PCIe	Enterprise Plus Edition 7.0 Update 3  VMware vCenter Server 7.0 Update 3  VMware vSphere Hypervisor (ESXi) Enterprise Plus Edition 7.0 Update 2  VMware vCenter Server 7.0		➤ SUSE Linux Enterprise Server 15 SP2+ ➤ Ubuntu 22.04 LTS ➤ Ubuntu 20.04 LTS	Docker	N/A
400 NVII A10 800 NVII A10 800	DIA			se .0	PRed Hat OpenShift 4.12 through 4.15 using Red Hat Linux CoreOS (RHCOS)	CRI-O
liqui coo NVII A10	led DIA 00 HGX	Update 2		Red Hat Enterprise Linux 9.3, 9.2, 9.0	Podman	N/A

GF	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA A40 NVIDIA A30X			Red Hat Enterprise Linux 8.9, 8.8, 8.6		
•	NVIDIA A30			Red Hat Enterprise Linux 7.9		
•	NVIDIA A30 liquid cooled NVIDIA			Red Hat Enterprise Linux 8.9, 8.8,	containerd	HPE Ezmeral Runtime Enterprise 5.5
•	A10 NVIDIA A16 NVIDIA A2			8.6	<ul><li>containerd</li><li>CRI-O</li></ul>	Upstream Kubernetes 1.22 through 1.29
•	NVIDIA H800 PCIe 94GB (H800 NVL)			Microsoft Windows Server 2022 Microsoft	N/A	N/A
•	NVIDIA H800 PCle 80GB			Microsoft Windows 11, 10		
•	NVIDIA H800 SXM5 80GB <u>3</u>					
•	NVIDIA H100 PCle 94GB (H100 NVL)					
•	NVIDIA H100 PCIe 80GB					

When deployed on an NVIDIA HGX Hopper 8-GPU baseboard, this GPU is supported starting with VMware vSphere 8 update 2. Earlier VMware vSphere releases are **not** supported.

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul> <li>NVIDIA H100 SXM5 94GB</li> <li>NVIDIA H100 SXM5 80GB3</li> <li>NVIDIA H100 SXM5 64GB</li> <li>NVIDIA L40</li> <li>NVIDIA L40</li> <li>NVIDIA L40S</li> <li>NVIDIA</li> </ul>	Metal OS	Deployment	Support	Engine	Platform
L20 NVIDIA L4 NVIDIA L2 NVIDIA RTX 6000 Ada NVIDIA RTX 5880 Ada NVIDIA RTX 5000 Ada NVIDIA RTX 46000 NVIDIA RTX A6000 NVIDIA RTX A5500					

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul> <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>					

# 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
- ▶ <u>Databricks</u> on the following cloud services:
  - Amazon Web Services (AWS)
  - Microsoft Azure
- Amazon EMR (formerly "Amazon Elastic MapReduce")

# 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
- Volcano Engine

## 3.1. Alibaba

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

# 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		Red Hat Enterprise Linux 8.9, 8.8, 8.6
NVIDIA V100 NVIDIA A10G	All G5 series instances	Amazon Elastic Kubernetes Service	Red Hat Enterprise Linux 7.9
NVIDIA A100	All P4d and P4de series instances	(EKS) Red Hat OpenShift	Red Hat OpenShift 4.12 through 4.15 using Red Hat Linux
NVIDIA H100	All P5 series instances	Upstream Kubernetes	CoreOS (RHCOS) 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	A3 series instances  G2 series instances  Google Kubernetes Engine (GKE)  Red Hat OpenShift Upstream Kubernetes	Red Hat Enterprise Linux 8.9, 8.8, 8.6 Red Hat Enterprise Linux 7.9 Red Hat OpenShift 4.12 through 15 using Red Hat Linux CoreOS (RHCOS)
NVIDIA H100 NVIDIA L4	All G2 series instances		
NVIDIA T4	Any <u>predefined</u> machine type.		
NVIDIA V100  Any <u>custom machine</u> <u>type</u> that can be created in a zone.		Ubuntu 22.04 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_v5instances		Red Hat OpenShift 4.10 using Red Hat Linux CoreOS (RHCOS) Red Hat OpenShift 4.9 using Red Hat Linux CoreOS (RHCOS)
NVIDIA A100	All NC A100_v4 instances All ND A100_v4 instances		
NVIDIA A10	All NV A10_v5 instances		Ubuntu 22.04 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:
NVIDIA H100	BM.GPU.H100.8		▶ Ubuntu 22.04
NVIDIA A100	All BM.GPU4 shapes All BM.GPU.A100-v2 shapes		<ul><li>Ubuntu 20.04</li><li>Windows:</li><li>Microsoft</li></ul>
NVIDIA A10	All VM.GPU.A10 shapes		Windows Server 2022

# 3.6. Tencent Cloud

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

GPU	Supported Tencent Cloud Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
			▶ Ubuntu 20.04

# 3.7. Volcano Engine

GPU	Volcano Engine Instances	Certified Container Orchestration Platforms	Supported Guest Operating Systems
NVIDIA A10	ecs.gni2	Upstream Kubernetes	<ul><li>Ubuntu 22.04</li><li>Ubuntu 20.04</li></ul>

# 3.8. 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

# Chapter 4. CPU Only Server Support

NVIDIA AI Enterprise supports deployments on CPU only servers that are part of the <a href="NVIDIA Certified Systems">NVIDIA Certified Systems</a> 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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