

# **NVIDIA AI Enterprise**

**Product Support Matrix** 

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# Chapter 1. Product Support Matrix

Driver package: NVIDIA AI Enterprise 5.1

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  $\underline{\text{NVIDIA}}$  AI Enterprise compatible 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 9.4, 9.2</li> <li>Red Hat Enterprise Linux with KVM 8.10, 8.8</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         OpenShift         4.12         through         4.15 using         RHCOS</li> <li>Upstream         Kubernetes         1.22         through         1.29</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 9.4, 9.2  Red Hat Enterprise Linux 8.10, 8.8  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 or Bare-	GPU	Guest OS	Container	Container Orchestration
GPU		Metal OS	Deployment	Support	Engine	Platform
	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 H100 PCIe 80GB					
	NVIDIA H100 SXM5 94GB					
	NVIDIA H100 SXM5 80GB					
	NVIDIA H100 SXM5 64GB					
	NVIDIA L40					

		Hypervisor	CDU	C 0C	0	Container
GP	บ	or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Orchestration Platform
•	NVIDIA					
	L40S					
•	NVIDIA L20					
•	NVIDIA L20 liquid cooled					
•	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					

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 9.4,         9.2</li> <li>Red Hat         Enterprise         Linux 8.10,         8.8</li> <li>Red Hat         Enterprise         Linux 7.9</li> </ul>	► Bare metal	N/A	Podman	N/A
NVIDIA A800 40GB PCIe active	Red Hat Enterprise Linux 8.10, 8.8	N/A	containerd	HPE Ezmeral Runtime Enterprise 5.5	
cooled  NVIDIA  AX8001				CRI-O	Upstream Kubernetes 1.22 through
NVIDIA A100X				1.29	
NVIDIA A100 PCIe 40GB					
NVIDIA A100 HGX 40GB					
NVIDIA A100 PCIe 80GB					
NVIDIA A100 PCIe 80GB liquid cooled		e			
NVIDIA A100 HGX 80GB					

GP	U	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA		-17		<b>J</b>	
•	A40 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					

<sup>&</sup>lt;sup>2</sup> 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
GP	U	Metal OS	Deployment	Support	Engine	Platform
•	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					
•	NVIDIA L20 liquid cooled					
•	NVIDIA L4					
•	NVIDIA L2					
•	NVIDIA RTX 6000 Ada					

GF	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	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					
<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.

► NVIDIA Red Hat A800 PCIe OpenShift 80GB 4.12 through	GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
40GB PCIe active cooled  NVIDIA AX8001  NVIDIA A100X  NVIDIA A100 PCIe 40GB  NVIDIA A100 HGX 40GB  NVIDIA A100 PCIe 80GB  Iquid cooled  NVIDIA A100 HGX	NVIDIA A800 PCIe 80GB NVIDIA A800 PCIe 80GB liquid cooled NVIDIA A800 HGX 80GB NVIDIA A800 40GB PCIe active cooled NVIDIA AX8001 NVIDIA AX8001 NVIDIA A100X NVIDIA A100 PCIe 40GB NVIDIA A100 PCIe 80GB NVIDIA A100 PCIe 80GB NVIDIA A100 PCIe 80GB NVIDIA A100 PCIe	Metal OS  Red Hat OpenShift 4.12 through 4.15 using	Deployment	Support	Engine	Platform  Red Hat OpenShift 4.12 through 4.15 using

	Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
GPU	Metal OS	Deployment	Support	Engine	Platform
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					
NVIDIA H800 SXM5 80GB					
NVIDIA H100 PCIe 94GB (H100 NVL)					
NVIDIA H100 PCIe 80GB					
NVIDIA H100 SXM5 94GB					

		Hypervisor				Container
GF	ЭΠ	or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Orchestration Platform
<b>G</b> F	NVIDIA	Wetai 03	Deployment	Support	Liigiile	Platioiiii
	H100					
	SXM5					
	80GB					
•	NVIDIA H100					
	SXM5					
	64GB					
•	NVIDIA					
	L40					
•	NVIDIA					
	L40S NVIDIA					
	L20					
•	NVIDIA					
	L20 liquid					
	cooled					
•	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					

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
NVIDIA RTX 6000 passive					
NVIDIA RTX 8000 passive					
<ul><li>5000</li><li>NVIDIA T4</li><li>NVIDIA V100</li></ul>					

### 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.

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

		Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
GP		Metal OS	Deployment	Support	Engine	Platform
	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					
•	NVIDIA A16					
•	NVIDIA A2					
•	NVIDIA GH200 96GB (CG1)					

		Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
GPU		Metal OS	Deployment	Support	Engine	Platform
F	Grace Hopper Superchip <u>2</u>					
() () () ()	NVIDIA GH200 I 44GB CG1) Grace Hopper Guperchip <u>2</u>					
F (	NVIDIA H800 PCIe H800 H800					
F	NVIDIA H800 PCIe BOGB					
F	NVIDIA H800 SXM5 BOGB					
F (	NVIDIA H100 PCIe H100 H100 NVL)					
F	NVIDIA H100 PCIe BOGB					
H	NVIDIA H100 SXM5 94GB					
H	NVIDIA H100 SXM5 BOGB					

0.01	1	Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
	NVIDIA H100 SXM5 64GB	Metal OS	Deployment	Support	Engine	Platform
	NVIDIA L40					
	NVIDIA L40S					
	NVIDIA L20					
	NVIDIA L20 liquid cooled					
•	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					

GI	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	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.

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul> <li>NVIDIA</li></ul>	<ul><li>Ubuntu 22.04 LTS</li><li>Ubuntu 20.04 LTS</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>Charmed     Kubernetes     1.28</li> <li>Upstream     Kubernetes     1.22     through     1.29</li> <li>VMware     vSphere     with Tanzu     8.0</li> <li>VMware</li> </ul>
40GB PCle active cooled					vSphere with Tanzu 7.0 U3c
NVIDIA AX8001 NVIDIA A100X				Docker	N/A

GF	DI I	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<b>G</b> F	NVIDIA	Metal 03	Deployment	Support	Liigiile	Platioiiii
	A100 PCle					
	40GB					
•	NVIDIA					
	A100 HGX					
	40GB					
•	NVIDIA					
	A100 PCle					
	80GB					
•	NVIDIA					
	A100 PCle 80GB					
	liquid					
	cooled					
<b>•</b>	NVIDIA					
	A100 HGX					
	80GB					
•	NVIDIA					
	A40					
•	NVIDIA					
	A30X					
	NVIDIA A30					
	NVIDIA					
	A30 liquid					
	cooled					
•	NVIDIA					
	A10					
•	NVIDIA					
	A16					
•	NVIDIA A2					
•	NVIDIA					
	NVIDIA A2					

	Hypervisor				Container
GPU	or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Orchestration Platform
<ul><li>NVIDIA H800 PCIe 80GB</li><li>NVIDIA H800 SXM5</li></ul>					
80GB NVIDIA H100 PCIe 94GB (H100 NVL)					
NVIDIA H100 PCle 80GB					
NVIDIA H100 SXM5 94GB					
NVIDIA H100 SXM5 80GB					
NVIDIA H100 SXM5 64GB					
NVIDIA					
NVIDIA L40S					
NVIDIA					
NVIDIA L20 liquid cooled					
<ul><li>NVIDIA L4</li><li>NVIDIA L2</li></ul>					

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul> <li>NVIDIA RTX 6000 Ada</li> <li>NVIDIA RTX 5880 Ada</li> <li>NVIDIA RTX 5000 Ada</li> <li>NVIDIA RTX A6000</li> <li>NVIDIA RTX A5500</li> <li>NVIDIA RTX A5000</li> <li>NVIDIA RTX A5000</li> <li>NVIDIA RTX 6000 passive</li> <li>NVIDIA RTX 8000 passive</li> <li>NVIDIA RTX 8000 passive</li> <li>NVIDIA RTX 8000</li> <li>NVIDIA T4</li> <li>NVIDIA</li> <li>NVIDIA&lt;</li></ul>					
<ul> <li>NVIDIA</li></ul>	<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>Nutanix DKP 1.27</li> <li>Upstream Kubernetes 1.22 through 1.29</li> </ul>

	Hypervisor	0.011			Container
GPU	or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Orchestration Platform
NVIDIA A800 HG 80GB NVIDIA A800 40GB PCI active cooled					<ul> <li>VMware         vSphere         with Tanzu         8.0</li> <li>VMware         vSphere         with Tanzu         7.0 U3c</li> </ul>
NVIDIA AX8001 NVIDIA A100X				CRI-O	Upstream Kubernetes 1.22 through 1.29
NVIDIA A100 PCI 40GB	е			Docker	N/A
NVIDIA A100 HGX 40GB	×				
NVIDIA A100 PCI 80GB	е				
NVIDIA A100 PCI 80GB liquid cooled	е				
NVIDIA A100 HGX	×				
NVIDIA A40					
NVIDIA A30X					
NVIDIA A30					
NVIDIA A30 liquid	1				

		Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
GP		Metal OS	Deployment	Support	Engine	Platform
•	NVIDIA A10					
•	NVIDIA A16					
•	NVIDIA A2					
•	NVIDIA GH200 Grace Hopper Superchip2					
•	NVIDIA H800 PCIe 94GB (H800 NVL)					
•	NVIDIA H800 PCIe 80GB					
•	NVIDIA H800 SXM5 80GB					
•	NVIDIA H100 PCIe 94GB (H100 NVL)					
•	NVIDIA H100 PCle 80GB					
•	NVIDIA H100 SXM5 94GB					
•	NVIDIA H100 SXM5 80GB					

0.01	1	Hypervisor or Bare-	GPU	Guest OS	Container	Container Orchestration
	NVIDIA H100 SXM5 64GB	Metal OS	Deployment	Support	Engine	Platform
	NVIDIA L40					
	NVIDIA L40S					
	NVIDIA L20					
	NVIDIA L20 liquid cooled					
•	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					

GPU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
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
NVIDIA A800 F 80GB NVIDIA A800 F 80GB liquid cooled NVIDIA A800 F 80GB	Hypervisor (ESXi)  Cle Enterprise Plus Edition 8.0  VMware vCenter Server 8.0  VMware vSphere Hypervisor	through	<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>
40GB F active cooled  NVIDIA AX800  NVIDIA A100X	Enterprise Plus Edition 7.0 Update 3		➤ SUSE Linux Enterprise Server 15 SP2+ ➤ Ubuntu 22.04 LTS	Docker	N/A

GP	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA A100 PCle 40GB	<ul><li>VMware vSphere Hypervisor</li></ul>		Ubuntu 20.04 LTS	J	
<ul><li> </li></ul>	NVIDIA A100 HGX 40GB NVIDIA A100 PCIe 80GB NVIDIA A100 PCIe 80GB	Hypervisor (ESXi) Enterprise Plus Edition 7.0 Update 2  VMware vCenter Server 7.0 Update 2	Enterprise Plus Edition 7.0 Update 2 VMware vCenter Server 7.0	Red Hat OpenShift 4.12 through 4.15 using Red Hat Linux CoreOS (RHCOS)	CRI-O	PRed Hat OpenShift 4.12 through 4.15 using RHCOS
<b>&gt; &gt; &gt;</b>	liquid cooled NVIDIA A100 HGX 80GB NVIDIA A40 NVIDIA A30X NVIDIA A30			<ul> <li>Red Hat         Enterprise         Linux 9.4,         9.2</li> <li>Red Hat         Enterprise         Linux 8.10,         8.8</li> <li>Red Hat         Enterprise         Linux 7.9</li> </ul>	Podman	N/A
	NVIDIA A30 liquid cooled NVIDIA			Red Hat Enterprise Linux 8.10, 8.8	containerd	HPE Ezmeral Runtime Enterprise 5.5
•	A10 NVIDIA A16				<ul><li>containerd</li><li>CRI-O</li></ul>	Upstream Kubernetes 1.22 through 1.29
•	NVIDIA A2 NVIDIA H800 PCIe 94GB (H800 NVL)			Microsoft Windows Server 2022	N/A	N/A

GP		Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	NVIDIA H800 PCIe 80GB			<ul><li>Microsoft</li><li>Windows</li><li>11, 10</li></ul>		
•	NVIDIA H800 SXM5 80GB <u>3</u>					
•	NVIDIA H100 PCIe 94GB (H100 NVL)					
•	NVIDIA H100 PCle 80GB					
	NVIDIA H100 SXM5 94GB					
•	NVIDIA H100 SXM5 80GB <u>3</u>					
•	NVIDIA H100 SXM5 64GB					
•	NVIDIA L40					
•	NVIDIA L40S					
•	NVIDIA L20 NVIDIA L20 liquid cooled					

<sup>3</sup> 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.

GF	PU	Hypervisor or Bare- Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
•	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					
<b>•</b>	NVIDIA T4					
•	NVIDIA V100					

# 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	Amazon Elastic Kubernetes Service (EKS) Red Hat OpenShift Upstream Kubernetes	Red Hat Enterprise Linux 8.9, 8.8, 8.6
NVIDIA V100 NVIDIA A10G	All G5 series instances		Red Hat Enterprise Linux 7.9
NVIDIA A100	All P4d and P4de series instances		Red Hat OpenShift 4.12 through 4.15 using Red Hat Linux CoreOS (RHCOS) Ubuntu 22.04 Ubuntu 20.04
NVIDIA H100	All P5 series instances		

# 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	Red Hat Enterprise Linux 8.9, 8.8, 8.6
NVIDIA H100 NVIDIA L4	All G2 series instances		Red Hat Enterprise Linux 7.9 Red Hat OpenShift 4.12 through 15 using Red Hat Linux CoreOS (RHCOS)
NVIDIA 1/100	Any <u>predefined</u> machine type.  Any <u>custom machine</u>	Engine (GKE) Red Hat OpenShift Upstream Kubernetes	
type	type that can be created in a zone.	nat can be	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	l la atua a sa IZ da a sua ata a	
NVIDIA A 10	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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