



NVIDIA AI Enterprise

Product Support Matrix

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Chapter 1. Product Support Matrix

Driver package: NVIDIA AI Enterprise 3.0

Validated partner integrations:

- ▶ Run: AI: 2.5
- ▶ Domino Data Lab



Note:

- ▶ The GPUs listed in the table are supported only with [NVIDIA AI Enterprise compatible](#) servers.
- ▶ 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.

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> ▶ NVIDIA A800 PCIe 80GB ▶ NVIDIA A800 PCIe 80GB liquid cooled ▶ NVIDIA A800 HGX 80GB 	<ul style="list-style-type: none"> ▶ VMware vSphere Hypervisor (ESXi) Enterprise Plus Edition 8.0 	<ul style="list-style-type: none"> ▶ NVIDIA vGPU ▶ GPU pass through 	<ul style="list-style-type: none"> ▶ SUSE Linux Enterprise Server 15 SP2+ ▶ Ubuntu 22.04 LTS ▶ Ubuntu 20.04 LTS 	containerd	<ul style="list-style-type: none"> ▶ Upstream Kubernetes 1.21 through 1.25 ▶ VMware vSphere with Tanzu 7.0 U3c
<ul style="list-style-type: none"> ▶ NVIDIA A100X ▶ NVIDIA A100 PCIe 40GB ▶ NVIDIA A100 HGX 40GB 	<ul style="list-style-type: none"> ▶ VMware vSphere Hypervisor (ESXi) Enterprise Plus Edition 7.0 Update 3 		<ul style="list-style-type: none"> ▶ Red Hat OpenShift 4.9 and later using Red Hat Linux CoreOS (RHCOS) 	Docker	N/A
	VMware vCenter			CRI-O	<ul style="list-style-type: none"> ▶ Red Hat OpenShift 4.9 and later using RHCOS

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform			
<ul style="list-style-type: none"> ▶ NVIDIA A100 PCIe 80GB ▶ NVIDIA A100 PCIe 80GB liquid cooled ▶ NVIDIA A100 HGX 80GB ▶ NVIDIA A40 ▶ NVIDIA A30X ▶ NVIDIA A30 ▶ NVIDIA A10 ▶ NVIDIA A16 ▶ NVIDIA A2 ▶ NVIDIA H100 PCIe 80GB ▶ NVIDIA RTX A6000 ▶ NVIDIA RTX A5500 ▶ NVIDIA RTX A5000 ▶ NVIDIA RTX 6000 passive ▶ NVIDIA RTX 8000 passive ▶ NVIDIA T4 ▶ NVIDIA V100 	<ul style="list-style-type: none"> Server 7.0 Update 3 ▶ VMware vSphere Hypervisor (ESXi) Enterprise Plus Edition 7.0 Update 2 ▶ VMware vCenter Server 7.0 Update 2 		<ul style="list-style-type: none"> ▶ Red Hat Enterprise Linux 8.4 	containerd	HPE Ezmeral Runtime Enterprise 5.5			
			<ul style="list-style-type: none"> ▶ Red Hat Enterprise Linux 9.1, 9.0 ▶ Red Hat Enterprise Linux 8.7, 8.6, 8.4 ▶ Red Hat Enterprise Linux 7.9 	Podman	N/A			
			<ul style="list-style-type: none"> ▶ Microsoft Windows Server 2022, 2019 ▶ Microsoft Windows 11, 10 	N/A	N/A			
			<ul style="list-style-type: none"> ▶ NVIDIA A800 PCIe 80GB ▶ NVIDIA A800 PCIe 80GB liquid cooled 	<ul style="list-style-type: none"> ▶ Red Hat Enterprise Linux with KVM 9.1, 9.0 ▶ Red Hat Enterprise Linux with 	<ul style="list-style-type: none"> ▶ NVIDIA vGPU ▶ GPU pass through 	<ul style="list-style-type: none"> ▶ Red Hat OpenShift 4.9 and later using RHCOS 	CRI-O	<ul style="list-style-type: none"> ▶ Red Hat OpenShift 4.9 and later using RHCOS
						<ul style="list-style-type: none"> ▶ Red Hat Enterprise 	Podman	N/A

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> ▶ NVIDIA A800 HGX 80GB ▶ 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 A10 ▶ NVIDIA A16 ▶ NVIDIA A2 ▶ NVIDIA H100 PCIe 80GB ▶ NVIDIA RTX A6000 ▶ NVIDIA RTX A5500 ▶ NVIDIA RTX A5000 ▶ NVIDIA RTX 6000 passive ▶ NVIDIA RTX 8000 passive ▶ NVIDIA T4 	KVM 8.7, 8.6, 8.4		<ul style="list-style-type: none"> Linux 9.1, 9.0 ▶ Red Hat Enterprise Linux 8.7, 8.6, 8.4 ▶ Red Hat Enterprise Linux 7.9 		
			<ul style="list-style-type: none"> ▶ Microsoft Windows Server 2022, 2019 	N/A	N/A

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
▶ NVIDIA V100					
▶ NVIDIA A800 PCIe 80GB	▶ SUSE Linux Enterprise Server 15 SP2+	▶ Bare metal	N/A	containerd	▶ Upstream Kubernetes 1.21 through 1.25
▶ NVIDIA A800 PCIe 80GB liquid cooled	▶ Ubuntu 22.04 LTS				▶ VMware vSphere with Tanzu 7.0 U3c
▶ NVIDIA A800 HGX 80GB	▶ Ubuntu 20.04 LTS				
▶ NVIDIA A100X				Docker	N/A
▶ 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 A10					
▶ NVIDIA A16					
▶ NVIDIA A2					
▶ NVIDIA H100 PCIe 80GB					
▶ NVIDIA RTX A6000					

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> ▶ NVIDIA RTX A5500 ▶ NVIDIA RTX A5000 ▶ N ▶ NVIDIA RTX 6000 passive ▶ NVIDIA RTX 8000 passive ▶ NVIDIA T4 ▶ NVIDIA V100 					
<ul style="list-style-type: none"> ▶ NVIDIA A800 PCIe 80GB ▶ NVIDIA A800 PCIe 80GB liquid cooled ▶ NVIDIA A800 HGX 80GB ▶ 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 	<ul style="list-style-type: none"> ▶ Red Hat OpenShift 4.9 and later using RHCOS 	<ul style="list-style-type: none"> ▶ Bare metal 	N/A	CRI-O	<ul style="list-style-type: none"> ▶ Red Hat OpenShift 4.9 and later using RHCOS

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> ▶ NVIDIA A30X ▶ NVIDIA A30 ▶ NVIDIA A10 ▶ NVIDIA A16 ▶ NVIDIA A2 ▶ NVIDIA H100 PCIe 80GB ▶ NVIDIA RTX A6000 ▶ NVIDIA RTX A5500 ▶ NVIDIA RTX A ▶ NVIDIA RTX 6000 passive ▶ NVIDIA RTX 8000 passive ▶ 5000 ▶ NVIDIA T4 ▶ NVIDIA V100 					
<ul style="list-style-type: none"> ▶ NVIDIA A800 PCIe 80GB 	<ul style="list-style-type: none"> ▶ Red Hat Enterprise Linux 8.4 	<ul style="list-style-type: none"> ▶ Bare metal 	N/A	containerd	HPE Ezmeral Runtime Enterprise 5.5
<ul style="list-style-type: none"> ▶ NVIDIA A800 PCIe 80GB liquid cooled ▶ NVIDIA A800 HGX 80GB ▶ NVIDIA A100X ▶ NVIDIA A100 PCIe 40GB ▶ NVIDIA A100 HGX 40GB 	<ul style="list-style-type: none"> ▶ Red Hat Enterprise Linux 9.1, 9.0 ▶ Red Hat Enterprise Linux 8.7, 8.6, 8.4 ▶ Red Hat Enterprise Linux 7.9 	<ul style="list-style-type: none"> ▶ Bare metal 	N/A	Podman	N/A

GPU	Hypervisor or Bare-Metal OS	GPU Deployment	Guest OS Support	Container Engine	Container Orchestration Platform
<ul style="list-style-type: none"> ▶ NVIDIA A100 PCIe 80GB ▶ NVIDIA A100 PCIe 80GB liquid cooled ▶ NVIDIA A100 HGX 80GB ▶ NVIDIA A40 ▶ NVIDIA A30X ▶ NVIDIA A30 ▶ NVIDIA A10 ▶ NVIDIA A16 ▶ NVIDIA A2 ▶ NVIDIA H100 PCIe 80GB ▶ NVIDIA RTX A6000 ▶ NVIDIA RTX A5500 ▶ NVIDIA RTX A5000 ▶ NVIDIA RTX 6000 passive ▶ NVIDIA RTX 8000 passive ▶ NVIDIA T4 ▶ NVIDIA V100 					

Chapter 2. 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.

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



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.

2.1. Amazon Web Services Elastic Compute Cloud (AWS EC2)

GPU	Supported AWS EC2 Instances	Supported Guest Operating Systems
NVIDIA T4	g4dn.xlarge g4dn.2xlarge g4dn.4xlarge g4dn.8xlarge g4dn.12xlarge g4dn.16xlarge	Red Hat Enterprise Linux 8.4 Red Hat Enterprise Linux 7.9 Red Hat OpenShift 4.10 using Red Hat Linux CoreOS (RHCOS) Red Hat OpenShift 4.9 using Red Hat Linux CoreOS (RHCOS)
NVIDIA V100	P3.2xlarge P3.8xlarge P3.16xlarge	Ubuntu 22.04 Ubuntu 20.04
NVIDIA A10G	g5.xlarge	

GPU	Supported AWS EC2 Instances	Supported Guest Operating Systems
	g5.2xlarge g5.4xlarge g5.8xlarge g5.12xlarge g5.16xlarge g5.24xlarge g5.48xlarge	
NVIDIA A100	p4d.24xlarge	

2.2. Google Cloud Platform (GCP)



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

GPU	Supported GCP Instances	Supported Guest Operating Systems
Tesla T4	Any predefined machine type .	Red Hat Enterprise Linux 8.4
Tesla V100	Any custom machine type that can be created in a zone.	Red Hat Enterprise Linux 7.9
Tesla A100	a2-highgpu-1g a2-highgpu-2g a2-highgpu-4g a2-highgpu-8g a2-megagpu-16g	Red Hat OpenShift 4.10 using Red Hat Linux CoreOS (RHCOS) Red Hat OpenShift 4.9 using Red Hat Linux CoreOS (RHCOS) Ubuntu 22.04 Ubuntu 20.04

2.3. Microsoft Azure

GPU	Supported Azure Instances	Supported Guest Operating Systems
NVIDIA V100	NC6s_v3 NC12s_v3 NC24s_v3 NC24rs_v3 ND40rs_v2	Red Hat Enterprise Linux 8.4 Red Hat Enterprise Linux 7.9 Red Hat OpenShift 4.10 using Red Hat Linux CoreOS (RHCOS) Red Hat OpenShift 4.9 using Red Hat Linux CoreOS (RHCOS)

GPU	Supported Azure Instances	Supported Guest Operating Systems
NVIDIA T4	NC4asT4_v3 NC8asT4_v3 NC16asT4_v3 NC64asT4_v3	Ubuntu 22.04 Ubuntu 20.04
NVIDIA A100	ND96asr_v4 ND96amsr_A100_v4	
NVIDIA A10	NV6ads_A10_v5 NV12ads_A10_v5 NV18ads_A10_v5 NV36ads_A10_v5 NV36adms_A10_v5 NV72ads_A10_v5	

2.4. Oracle Cloud Infrastructure

GPU	Oracle Cloud Infrastructure Shapes	Supported Guest Operating Systems
NVIDIA P100	VM.GPU2.1 BM.GPU2.2	Linux: <ul style="list-style-type: none"> ▶ Ubuntu 22.04 ▶ Ubuntu 20.04 Windows: <ul style="list-style-type: none"> ▶ Microsoft Windows Server 2022 ▶ Microsoft Windows Server 2019
NVIDIA V100	VM.GPU3.1 VM.GPU3.2 VM.GPU3.4 BM.GPU3.8	
NVIDIA A100	BM.GPU.GM4.8 BM.GPU4.8	
NVIDIA A10	BM.GPU.GU1.4	

2.5. 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 3. 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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