

# VMware ESX on Arm Tech Preview

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## Overview

Arm-based servers are supported as a technical preview in ESX 9.1. This document describes the features supported in the tech preview.

All content is confidential and subject to change.

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# Introduction

Support for Arm-based servers is in technical preview in ESX 9.1 and not all ESX features are supported. See the **Installation, Update, and Support Notes** section for details.

## Installation, Update, and Support Notes

This content is subject to change.

### Installation and Update Notes:

- This release is applicable only to new installations.
- Deploy the vCenter instance that manages a cluster of Arm hosts on an x86 ESX host.  
**Important:** Arm host clusters must be managed by a separate, standalone vCenter running on x86. We do not recommend managing x86 installations and Arm installations from the same vCenter.
- Updates will be provided by the same offline depot from which you download the main Arm distribution.
- The following guest operating systems are supported and qualified:
  - Red Hat Enterprise Linux (RHEL): 9.6 and later, 10.0 and later
  - Ubuntu: 24.04 LTS (24.04.3 and later), 26.04 LTS
  - SUSE Linux Enterprise Server (SLES): 15 SP7, 16.0 and later
- Virtual Machine Disks (VMDK) are supported on remote storage such as NFSv3, NFSv4.1, and software iSCSI.
- I/O: SATA and NVME SSDs storage drives as well as Mellanox ConnectX, and Intel NICs are supported.

**Support Notes:** This release does not provide error messages for the unsupported operations listed below and they fail silently:

- Mixing Arm and x86 hosts in the same cluster.
- Running x86 workloads on Arm hosts.
- Running Arm workloads on x86 hosts.
- Migrating workloads between x86 and Arm hosts.
- Migrating workloads between different Arm CPUs (e.g. Ampere Altra and nVidia Grace)
- Arm clusters inside VCF workload domains are not supported. An Arm cluster must be managed by a standalone vCenter instance.
- The following VCF capabilities are not supported on Arm:
  - vSAN (Hyper-Converged Storage)
  - NSX
  - Fiber-Channel
  - NVMe-over-TCP
  - RDMA

- Hardware iSCSI
- vSphere API for Array Integration (VAAI). If you require VAAI support, contact a Technical Account Manager
- vSphere Virtual Volumes (vVols) is unsupported since it is deprecated
- Precision Time Protocol (PTP)
- Device Virtualization Extensions (DVX)
- 3D Graphics on guest OS
- vSphere Configuration Profiles (VCP)
- Fault Tolerance (Guest level redundancy)
- Enhanced vMotion Compatibility (EVC). All Arm hosts of a particular CPU type must be in a separate vSphere cluster.
- vSphere Kubernetes Service (VKS) and vSphere Supervisor are not supported.
- The use of Auto Deploy is not supported since it is deprecated.
- Live patches and express patches are not supported. All updates require a reboot of the Arm hosts.

## Server and CPU support

Arm-based servers can be obtained from a variety of vendors. In this tech preview, we support the following:

Server Model	CPU
HPE RL300 Gen11	Ampere Altra/AltraMax
Gigabyte	Ampere Altra/AltraMax
SuperMicro ARS-221GL	Single and Dual-CPU Nvidia Grace (C1,C2)