This document provides a list of all hardware and components that are supported by this version of vtServer.

Components that are not listed have not yet been tested; it does not necessarily mean that they will not work. When in doubt about the support status of a hardware component, send email to support@avtware.com

We are receptive to your suggestions for additions to this list. However, AVTware is not responsible for the fact that unverified products may prove not to work in practice, or that support has been dropped by the manufacturer of some older products.

If you intend to run vtServer on a virtualized host system, please see the Virtual Machine section at the end of this document for a list of supported hypervisors.

Systems

In general, any 64-bit x86 host should work; however, there may be occasions where a specific chipset or on-board controller has not yet been tested. When in doubt contact support@avtware.com

HP Server Platforms

Gen8 and newer are recommended

> HP Proliant: ML (tower), DL (rackmount) and BL (blade) models

Dell

> PowerEdge Blade, Rackmount and Tower models
>
> *Note: The combination of Dell PowerEdge servers and SCSI adapter cards has proven to be a problem and cannot be used. This can be an issue when you need to attach legacy tape devices. Consult AVT or VERE if you are considering using such a combination.*

Processors

For all processors the following rule applies: **The higher the clock frequency, the better the virtualized performance**.

Intel

> i5, i7; Xeon models 5500, 5600; E3, E5, E7

AMD

> A6, A8, A10; Phenom II; Opteron 4000, 6000

Storage Adapters

Many hardware brands offer hardware RAID controllers and software RAID. Software RAID is based on special drivers made by and dedicated to that specific hardware vendor or product set.

Software RAID functionality is not supported because it utilizes proprietary software that the vendor has not made available to be included in vtServer or any other product (e.g., VMware). The software RAID controllers may be used with vtServer only if the RAID feature is disabled, which eliminates hardware redundancy.

Hardware redundancy requires hardware RAID controllers or the use of SAN-based storage. Installation of vtServer software on SAN-based storage is supported in versions 2.10.2 and later.

Adaptec

AIC-7899P
2020SA, 2410SA, 29160, 29320

Dell

PERC H310, H330
PERC H710, H710P, H730, H730P, H740P
PERC H810, H810P, H830
SPERC 8

Emulex (FibreChannel) - All

HP

Microsemi SmartPQI controller (used in Gen10 systems)
HP 412911
HP SC11Xe SCSI HBA
Smart Array 5300, 5312, 532, 5i
Smart Array 6400, 6400 EM
Smart Array 641, 642, 6i
Smart Array E200, E200i
Smart Array E500
Smart Array P212, P220i, P222, P230i, P240ar, P244br
Smart Array P400, P400i, P410, P410i, P411, P420, P420i, P421
Smart Array P430 P430i, P431, P440, P440ar, P441
Smart Array P530, P531, P600
Smart Array P700m, P711m, P712m, P721, P731m, P741m
Smart Array P800, P812, P822, P830, P830i, P831, P840
Smart HBA H240, H240ar, H241, H244br, H420ar
StorageWorks P1210m

Intel

82801ER (ICH5R) SATA

Qlogic (FibreChannel) - *All*

Promise

PDC20318, R20378

Fiber Channel Storage

IBM XIV, IBM DS8700, 3PAR, EVA, EMC VMAX, EMC Symmetrix, EMC Vplex, Hitachi, MSA1000, MSA2000

Ethernet Adapters

3COM

3c905, 3c940, 3c996, 3c980

Allied Telesis

AT-2711FX-SC-901 Fiber Optic Ethernet adapter

Broadcom

BCM5701, BCM5708, BCM5721, BCM5787

D-Link

DFE-528TX, DFE-530TX, DFE-538TX

Intel

E1000, Pro/100, Pro/1000
82541GI/PI, 82546EB, 82566D, 82573L

Realtek

RTL8139, RTL-8168, RTL8169

Graphic Adapters

Most standard graphics adapters are supported out of the box. When more advanced graphics features are needed, such as for the virtualization of a graphical workstation, adapters that use non-standard drivers may be required. A list of supported ATI and NVIDIA graphic adapters and the required drivers may be found on our web site at avtware.com/support.

Note: Management of vtServer is performed using the system console or using a browser-based interface that can be accessed from any system on the network; graphics support on the vtServer host system is not required.

ASUS

EAX550, EAH4350, EAH5450, EAH5670

AMD/ATI

Radeon, Rage XL

Intel

HD2000, HD3000
4500MHD, 850GM, 965GM

Matrox

G550, P650

Nvidia

GEFORCE, GRID, NFORCE
NVS, QUADRO, TESLA

VIA

KM400

Serial Line Adapters

Moxa

2 port multiport board:

CP-102U, CP-102UL, CP-102UF, CP-102E, CP-102EL
CP-132U-I, CP-132UL, CP-132EL, CP-132EL-I
CP-132, CP-132I, CP-132S, CP-132IS
CI-132, CI-132I, CI-132IS, C102H, C102HI, C102HIS, C102P, CP-102, CP-102S

4 port multiport board:

CP-104EL
CP-104UL, CP-104JU
CP-134U, CP-134U-I
C104H/PCI, C104HS/PCI
CP-114, CP-114I, CP-114S, CP-114IS, CP-114UL, CP-114EL, CP-114EL-I
C104H, C104HS
CI-104J, CI-104JS
CI-134, CI-134I, CI-134IS, C114HI, CT-114I, C104P
POS-104UL
CB-114
CB-134I

8 port multiport board:

CP-118EL, CP-168EL
CP-118U, CP-168U
C168H/PCI, C168H, C168HS, C168P
CB-108

Digi -- Most types

USB Serial Line Adapters – Most brands and types

Note: When using Serial line adapters, make sure they are hardware compatible with the host server, as we have seen issues with MOXA serial adapters and newer Dell servers being incompatible with each other.

Virtual Machines

Hyper-V

Yes; however, it does not support USB and requires a network-based license server (e.g., vtLicense)

KVM

Yes

VMware

Yes; however, pre-version 5 did not support USB and requires a network-based license server (e.g., vtLicense)

Xen Project Hypervisor

Yes

Note: Please refer to BN-0001-10 Running vtServer on Hypervisors Technical Note for additional installation information.

Users have experienced problems with some hypervisors dropping USB devices dedicated to the vtServer host for the hardware license key; this includes VMware ESXi versions prior to 5.5. When this occurs, virtual Alpha or VAX instances will be halted after the license time-out period (16 hours) is exceeded, unless the license is served via a network license server in the interim.

We recommend the use of vtLicense or another network license server when running vtServer on a virtual host system to eliminate the risk of the hypervisor dropping the license device from the VM; it also increases the flexibility and reliability of your virtual VAX and Alpha installation. Use of a network license server allows you to use the hypervisor's live host migration features (e.g., VMware vMotion) to move your virtual VAX and Alpha instances across physical hosts in the VM environment.

vtMonitor Management Console

vtServer includes a browser-based graphical user interface (vtMonitor) that provides the capability to manage vtServer and the virtual Alpha and VAX configurations from any computer in the network with IP (http/https) access to the vtServer host.

Supported browsers (use recent versions):

Mozilla Firefox
Microsoft Internet Explorer
Microsoft Edge
Apple Safari
Google Chrome