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
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