

## vtServer v2.9.1 Release Notes

This document describes version 2.9.1 (release 39) of the vtServer software package. vtServer is an emulation package for legacy HP/DEC Alpha and VAX hardware platforms that runs on 64-bit x86 processors. vtServer is installed on Bare Metal: that is, on a physical processor or virtual machine (VM) with no pre-installed operating system. The vtServer package consists of the following components:

- vtAlpha – Alpha system emulation component;
- vtVAX – VAX system emulation component;
- vtServer – the common infrastructure for the emulation components;
- vtMonitor – a web browser-based management and configuration interface.

For detailed information regarding these components, see the *vtServer vtAlpha/vtVAX Bare Metal Reference Manual*.

### 1 vtServer Installation and Update Procedure

The vtServer software may be installed on a new host platform, installed over an existing installation, or it may be updated incrementally. These options are described in more detail below.

#### 1.1 Installation

The installation process installs a complete version of the vtServer software package on a server with no previous vtServer installation or it will overwrite an existing vtServer installation. When overwriting an existing installation, a backup of all software configuration values and all emulation configurations may be created using the vtMonitor BACKUP command prior to the installation. After installing vtServer the configuration data may be restored using vtMonitor.

The vtServer installation kit is available in three formats: on a DVD-ROM; as an .iso format file that can be burned to a DVD or used as a virtual DVD device when installing vtServer in a virtual machine; or on a USB thumb drive for those customers who have purchased the Carry-on Alpha or Carry-on VAX options. Detailed installation instructions are provided in the *vtServer vtAlpha/vtVAX Bare Metal Reference Manual*.

#### 1.2 Incremental Update

The incremental update process is the preferred method for updating existing vtServer installations. A complete set of incremental updates is provided on the distribution media (DVD, .iso file, or Carry-on Alpha/VAX USB drive); individual update kits may also be uploaded to the host or provided on external disks. When the Update function is initiated, vtServer will automatically determine which update kits are needed and apply them, if available. When supplying individual update files, be aware that the update file for each version of vtServer between the current version and the target version must be provided.

For a detailed description of the update process, please see the *vtServer vtAlpha/vtVAX Bare Metal Reference Manual*.

#### 1.3 Post-update Instructions

After installing or updating vtServer, the host system must be rebooted.

*The cache should be cleared on any browsers that have been used with previous versions of vtMonitor. Failure to do so may result in unpredictable behavior.*

## 2 vtServer 2.9.1 Release Highlights

Release 2.9.1 of vtServer contains several significant enhancements:

- vtVAX 7000 supports larger memory sizes
- Host date and time changes may be made from vtMonitor

These and other changes are described in the sections that follow.

## 3 Security Updates

### 3.1 bash Shell Bug (Shell Shock)

We have reviewed our products in light of the details of the so-called Shell Shock exploit and have determined they have never been at risk, as they do not execute arbitrary shell scripts.

We have updated bash to version 4.1 patch 17 to maintain currency with this component of our product.

## 4 Host Platform Changes

### 4.1 Configuration

#### 4.1.1 Emulation configuration names

Configuration names beginning with a period (‘.’) are now supported. Previously the behavior was unpredictable.

#### 4.1.2 Emulation autostart failures

Configurations could attempt to autostart before the network devices were ready, causing the start to fail. vtServer now waits for all network devices to be ready before starting emulation instances.

#### 4.1.3 SmartArray controller

Creation of partitions on SmartArray controllers is now supported when alignment is incorrect.

#### 4.1.4 Incremental updates

When applying incremental updates to a release candidate (RC) (field test) version of vtServer, one must first update to the production release of the RC version before updating to a subsequent version.

For example: vtServer version 2.9.1-RC10 cannot be updated directly to version 2.9.2 using the incremental update process; the 2.9.1 production update must be applied first.

#### 4.1.5 Network device registration

New installations of vtServer assign network device names (ethn) based on the PCI bus ID rather than the MAC address. This change will prevent the device names from changing when a card is replaced. This change does not apply to existing installations (product updates) in order not to change existing adapter assignment.

#### 4.1.6 License key management software updated

The CodeMeter software has been updated to version CodeMeter-5.20.1458-501.x86\_64 to stay at the latest level.

#### 4.1.7 Allow .tar files in addition to the .tgz files for product updates

The latest version of Internet Explorer changes the file suffix from .tgz to .tar during the upload of product updates, which caused the update process to fail. vtServer now also looks for .tar files to work around this problem.

#### 4.1.8 Gateway addresses configured for each network interface

This version allows unique network gateway addresses to be configured for each network interface. One address can be defined as the default which is applied to any interface that does not have a gateway address explicitly defined.

#### 4.1.9 Prevent installation of vtServer on a SAN

vtServer must be installed on a disk that is directly connected to the host system. Installing vtServer on SAN devices is not supported.

#### 4.1.10 Change host system date and time from the vtMonitor user interface

The vtServer host system date and time may now be changed from the Toolbox/Host tab in vtMonitor. Previously date and time changes had to be performed from the vtServer console interface.

#### 4.1.11 10 GB Ethernet adapter support

Added support for 10 GB Ethernet adapters in the host system.

#### 4.1.12 KGPSA LUN 0

Some FibreChannel adapters do not present LUN 0, which is required by OpenVMS. When no LUN 0 is provided, vtServer virtualizes a LUN 0 so OpenVMS can use this SAN storage.

## 4.2 Administration

#### 4.2.1 Export file name format

The host name is now included in the filename of support and configuration files to allow for easier identification of the source of each file.

#### 4.2.2 Hide license keys in Storage tab

In previous versions the license keys were visible as storage devices in the Storage tab in vtMonitor. These are no longer included in the display as they do not provide storage space.

#### 4.2.3 Allow Dismounting of corrupted partitions

In previous versions corrupt partitions were not visible and could therefore not be dismounted. They are now visible and can be deleted.

#### 4.2.4 Device ID added to the Device List in the Storage tab

To better recognize the devices in that list.

#### 4.2.5 New network interface options in vtServer menu

Remove IP-address from adapter has been added.

It is now possible to manually change the IDs automatically assigned to network adapters. This allows you to match the internal adapter sequence to the physical cabling. In most cases the default setup will be sufficient.

#### 4.2.6 Improved log file handling

The Show Logfile option in vtMonitor now displays only the last MB of the log file.

Support info files now contain only the last portion of large log files. This change was made to reduce the size of the support info file to increase the likelihood the file can be submitted by email.

#### 4.2.7 4 GB USB installation image

The full vtServer installation now exceeds 2 GB. To provide continued support for special license keys with 2 GB of storage that are used for portable installations, we now provide 2 USB installation kits: the kit identified as 'usb\_4gb' contains the full installation; the kit identified as 'usb' omits optional software and extra drivers to remain below the 2 GB threshold.

## 5 Emulation

### 5.1 vtAlpha

#### 5.1.1 No new vtAlpha features in this release

### 5.2 vtVAX

#### 5.2.1 64-bit implementation of vtVAX 7000

VAX 7000 configurations with up to 3.5 GB of memory are now supported.

### 5.3 Common Emulation Features

#### 5.3.1 No virtual devices in the vtServer partition

Container files for logical disk and tape devices may no longer be created in the vtServer software partition. This restriction was added to prevent large container files from using all the free space, causing vtServer to crash.

#### 5.3.2 Tape unload on tape load command

When a Tape Load command is executed while a tape is still loaded, the tape will now be automatically unloaded so that a new tape can be loaded.

#### 5.3.3 Cache flush on device close

When closing a virtual tape or disk, the cache content is immediately written to the physical disk.

### 5.4 Emulation Configuration and Control Changes

#### 5.4.1 None in this release

## 6 Restrictions

### 6.1 Current Release

- None