

vtServer®
vtAlpha and vtVAX Bare Metal
v4.5.0

Release Notes
BU-0001-42

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Chapter 1

Version 4.5.0 Release Highlights

V4.5.0 is an updated release of the vtServer Bare Metal hypervisor platform that includes updates, new features and bug fixes.

The most significant changes are:

1.1 vtServer

1.1.1 New

- Linux kernel (6.6.56).
- vtMonitor autostart capability on local monitor.
- 'enable_old_ssh_settings' system parameter to control ssh console access with *old* ciphers.
- VM and console logs are backed-up and rotated as soon as their size exceeds 1 Mb. In the config folder we keep up to 5 files before that the log gets overwritten. This new feature ensures to keep the size of the saved information under control. Log rotation only works for files with a 'txt' or 'log' extension. Logs that are created on a different then the default location won't be rotated.

1.1.2 Fixes

- Multi instance management from the UI.
 - Double error when dismounting busy device.
 - Don't remove samba share on dismount error.
 - Mixed case mounts that cannot be accessed via samba, all forced to lowercase.
 - Installation and snapshots on nvme devices.
 - Do not continue installation a update or patch if the snapshot creation fails.
 - Failure to create a swapfile after a new install.
 - Configuration import in templates.
 - Certificate for remote support access.
 - Clean update directory on boot to prevent stray patches that remain after restoring a snapshot.
 - Installation failure on disk with invalid boot partition label.
 - Restart of nfs server.
 - Failure when renewing cloud certificates.
 - System hangs during swap.
 - Prevent tapemgr 'set' command when tapeunit is mounted.
 - Handling of expired root password.
 - Prevent mounting of reserved directories.
 - Keep remotesupport connection alive after network issues.
 - Disallow spaces in the mount path.
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1.2 vtAlpha

1.2.1 New

- Refresh button has been added to the 'Mounted Storage' window.
- add 'lic rescan' to management interface to force unconditionally re-scanning for a license.
- add support for vd, xvd and nvme devices as a physical device.
- log baudrate setting for serial lines.
- allow 64GB memory per qbb in wildfire.
- allow reset of pbxda via management interface.
- add stf instruction to jit.
- add workaround for bad descriptors in de500 in tru64 causing slow network.

1.2.2 Fixes

- make sure that dynamically created npiv adapters are removed if the emulator startup encounters an error.
- regression that readonly container file without readonly configuration setting resulted in a mount failure on older vms versions.
- possible crash in pbxda_timer when there's a heavy load.
- OPINCOMPL error on a removable device during mount or init when there's an io_uring init failure after a previous successful mount.
- do not process tapemanager commands on an inactive controller.
- always stop emulator on scsi target conflict.
- always save nvram on emulator stop.
- reading near end of disk with io_uring.
- possible crash in vtfsk logging.
- return proper error on mapping failure in vtfsk.
- work around vms bug resulting in asking for the system time and date after a reboot.
- crash on stopping scsi thread.
- writing small dump files in netdmp when snap size is less than the received packet size.
- relative queue instructions in different address spaces.
- tiny timing hole in kgpsa causing a thread crash.
- scsi thread stop that may have a memory leak.
- wildfire crash on non-consecutive numbering of qbb's.
- prevent boot failure on wildfire with more than 508Gb memory.
- re-enable jit at reset time to the initial state after a runtime error.
- booting from physical disk on kgpsa in Oracle VM.
- timeout issues for physical tape.
- palcode memory management issue for Tru64.
- urti palcode to throw an error on failure instead of halting the system.
- calculation of jit processors on wildfire.
- allow configuring virtual tape with non-existing container file.

1.3 vtVAX

1.3.1 New

New version of the vtVAX emulator:

vtVAXEmulator 4.0.30

vtVAXMVII 4.0.27 (247)
vtVAX3900 4.0.26 (247)
vtVAX4090 4.0.27 (247)
vtVAX4100 4.0.28 (247)
vtVAX4200 4.0.29 (247)
vtVAX7000 4.0.27 (544)

- VAX virtual tapes can be compressed by default. A compress check-box is added to the vtVAX tape configuration.

1.3.2 Fixes

- Change serial line logging to log without being connected.
- Correct SCSI thread leak.
- Correct SCSI virtual disk OpenVMS errors.
NFS(notably NFS4) buffers data and creates significant delays when syncing. If the delay exceeds 24 seconds, OpenVMS will record an error against the device and/or controller. Syncing write data regularly prevents a buildup of un-syncd data.
- Correct handling of serial logging files with spaces in path.
- Correct SCSI command lookup table to fix physical CDROM support.

1.4 vtMonitor

1.4.1 New

- System parameter `autostart_vtmonitor` to start vtMonitor on the console terminal connected to the host system when vtServer is started.
- QBB memory can now be selected up to 64 Gb.
- All xml configurations are opened one level deeper in the UI. This is to make the content of controllers for the ALPHA_GS backplane visible immediately at file-open. (Because of the QBB in the ALPHA_GS backplane is the configuration one level deeper than others).
- Refresh button has been added to the 'Mounted Storage' window.
- Third-party cookies are added the 'Partitioned' attribute and cookie name is prefixed with ' __Host '. This will allow modern browsers to restrict the usage of these cookies to the host 'Referer' which will become mandatory on relative short term or the 3rd party cookie will be refused.
- In Firefox it is now possible to call the context menu on all password fields. To see your typed password, right-click on the password and in the context menu select 'Reveal Password'.
- A double click on a file in the Storage Browse Window is executing a select (without the need to click the Select button).
- Uptime of a running VM config is shown at the bottom of the configuration pane.
- add a check that when a device is added to a scsi controller it is not using the same target id as the controller itself.
- add a check that a change of target id for a KZPBA adapter does not conflict with another device target id.
- In this version you can start a reboot from the UI of your main host (host from which vtMonitor is loaded) and wait until you are automatically logged-in again.
- In this version after a refresh of vtMonitor (or even after a close and reopen of your browser application) vtMonitor won't ask you for a password again, a least: . if you were logged in once before in the last 12 hours . if you did not log out. . if your session did not expire.
- When a user chooses to enter an absolute path for the nvram, validity of the path entered is now checked.
- Command 'Save a copy as...' does not only copy the configuration file but the nvram as well. (Logs are not included). If the nvram path is absolute the nvram will be copied into the new configuration folder with the default name 'nvram.dat'.

1.4.2 Fixes

- Selecting and copying a configuration comment (`ctrl/A + Ctrl/C`) don't trigger a dirty flag on the configuration anymore.
- An error is shown in vtMonitor when a directory listing contains file names with characters that cannot be parsed by the UI. Characters like: `< > & ' or "`.
- Log files opened from the Logging Tab are always scrolled down to the latest entries.
- When a move, copy or (de)compress action gets canceled partial result is removed.
- Bug solved in the storage tab concerning the upload of files into a connected server.

1.5 vtTools disk

1.5.1 New

- In the directory [3RDPARTY.UTILS.OPENVMS_INFORMATION] OPENVMS_INFORMATION_V2-1.COM is placed. This version is tested on more OpenVMS versions and can run on smaller systems. It can create HTML files to show the collected data using an Internet browser.

1.5.2 Fixes

- Xdisp V1.3 fixes installation on OpenVMS Alpha V7.0, V7.1, V7.1-1H1, V7.1-1H2 and V7.1-2.
- Xdisp V1.3 fixes installation on OpenVMS VAX V6.1.
- TapeMGR V2.2 disallow a change of compression, maximum size, format or autoloading when the tapeunit is mounted.

Chapter 2

Installation And Update Procedure

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

2.1 Installation On A New Host

The installation process installs a complete version of the vtServer software package on a server with no previous vtServer installation.

The vtServer installation kit is available in multiple formats:

1. On a DVD-ROM; as an .iso formatted file that can be burned to a DVD or used as a virtual DVD device when installing vtServer in a virtual machine.
2. As a bootable USB thumb drive.

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

2.2 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 USB drive). Update files can also be retrieved from our ftp server.

To update to vtServer V4.5.0 the current version has to be V4.4.0.

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

2.3 Post-Update Instructions

After completing the installation or update of vtServer, the host system should be rebooted and the vtMonitor user interface should be reloaded.

Creating a vtServer backup after an installation or update is recommended.
