## Version 4.1.0 Release Highlights

V4.1.0 is an updated release of the vtServer Bare Metal platform that includes updates, new features and bug fixes.

The most significant changes are:

## Security Updates

- New kernel (5.4.56).

## vtMonitor

- Added extra CPU type options for vtAlpha.
- Preload of unique node/port name for the KGPSA adapter is done on button-click.
- Added NFS server setup in vtMonitor.
- Added usage of system parameter: 'alpha_start_override_checks' to allow connecting an interface WITH IP to a vtAlpha or vtVax.
- Added storage tab to vtLicense.
- Changed protocol to connect to vtVax console has been extended with ssh and ip/dns restriction: [<protocol>:][<ip>:]<port_nr>. Is now the same as for vtAlpha.
- Added password to the certificate-install window in case private key needs to be decrypted.
- vtServer documentation has been augmented.

## vtAlpha

- Fix crashe in SCSI adapters when resetting adapter while a lot of requests are still in progress.
- Fix crash in SRM console when reading invalid wwid nvram contents.
- Fix memory leak in network adapters in combination with failsafe IP.
- Fix use of OpenVMS SCD debugger.
- Fix hparith trap from cvtdg instruction.
- Fix incorrect console device ipl.
- Fix possible thread crash on ssh serial line.
- Fix possible hang when console variables were updated from tru64.
- Fix spurious 'Bad file descriptor' errors from network interfaces.
- Fix crash caused by network packet storm.
- Fix incorrect timestamps in I/O trace logging.
- Fix machine check crash when resetting degxa adapter.

- Fix path lost handling and failover in kgpsa.
- Fix bad node name and port name for a given port_id in kgpsa.
- Fix transmit timeouts on de600 in tru64.
- Make unit numbers of gg devices unique.
- Make wwid's of multiple pseudo kgpsa's unique.
- Make sure max jit memory = 10% of physical memory + 400Mb.
- Make sure degxa always enables multicasts.
- Update CPU table definitions.
- Update EcoApp to version V2.1.
- Stop logging certain kernel events on AMD systems with a big load.
- Decrease license server connection timeout from 120 to 15 minutes.
- Add optional padding for network interfaces.
- Prevent stack dump after manual 'power off' command followed by a stop from the user interface.
- Remove dependency of /dev/disk/by-path links for Fibrechannel.
- Prevent kgpsa thread crash if a rediscovered disk has invalid parameters.
- Raise maximum I/O queue size to 4096.
- Do not crash in kgpsa or isp1040 if we could not get a free active I/O slot.
- Work around tru64 de600 driver bug to prevent packet storm.
- Allow creation of fibre channel npiv port by the virtual machine.
- New version of libssh (0.9.5).


**vtVAX**

- New version vtVAX 4.0.11 (238).
- Add console support for SSH connections
- Add console support for localhost only, for connections for high security implementations
- Modified tape handling code for both physical and virtual tapes for end of tape detection (third party VMS backup software)
- Modified tape handling code to remove auto unload flag for physical tapes on DSSI controller
- Corrected XQA MOP message handling that sporadically caused a VMS crash when shutting down.
- Add configuration parameters lbns, sectors, tracks and cylinders for RQDX3, KZDDA and KFDDA controllers.
- Corrected VCB02 XML interface handling that did not allow the vtVAXstation product to start properly.

## vtServer

- Updated Linux kernel (5.4.56).
- Updated ECOApp to v2.1.
- Add cfg80211 firmware.
- Updated PCI and USB device id database.
- Check network configuration when starting vpn.
- Never configure a floppy controller.
- Fix possible loss of dns servers in cloud configuration.
- Fix setting fixed speed/duplex for network interfaces at boot.
- Fix import of vpn configuration when there were no configurations defined.
- Fix security issue: login to root account was always possible if the p2223 certificate is available.
- Fix install on vmware with sas controller (use built-in udev path_id).
- Fix nvme disk support for vmware.
- Fix uninitialized key message in user interface if key has only a vax license.
- Fix Fibrechannel device manager so that it allows new fc adapters while preserving npiv adapters.
- Limit vtscan to 25 network interfaces.
- Add nfs server.
- New Codemeter version: codemeter-lite_7.0.3933.502 (V7.0b).
- Add warning to sysinfo if the system must be rebooted after applying a patch.
- Disable TLSv1.1 protocol in apache.
- Check free space on all mounted disks for alerts.
- Allow vpn tunnel over a local network in a cloud configuration.
- Do not hang the user interface if a mounted nfs disk cannot be reached.
- Always ignore the ntp-servers option from dhcp.
- Rework opening consoles in a browser: no more need for open ports 51000-51999.
- Allow supportfile created from the console to be copied off /support via smb.

## vtLicense

- Add nfs server.
- Added storage tab to vtLicense.

### 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.

### Installation on 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: 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 as a bootable USB thumb drive.

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

### 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 V4.1.0 the current version has to be V4.0.1.

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

### 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.