vtServer 2.11.1 Release Highlights

vtServer v2.11.1 contains a number of bug fixes and minor changes. No major new functions are introduced in this release.

Security Updates

- Generate webserver certificate with SHA256 hash instead of obsolete SHA1.
- Introduce a two-second delay after login failure to thwart brute force attacks.

New Features and Changes

- Enabled compression for webserver to speed up information exchange between vtServer and vtMonitor.
- Removed display of iSCSI IPv6 addresses.
- Added drift file to NTP configuration for more accurate time setting.
- Added option to mount disks read-only.
- Display a progress bar during installation.
- Display LUN in addition to identifier for disks on initial installation screen.
- Display LUN and identifier for multipath devices in vtMonitor Storage tab.
- Display unmounted EFI partition for multipath devices in vtMonitor user interface.
- Removed vtVAX configuration option to set emulation CPU affinity to a host CPU.
- Added support in vtVAX for removable virtual devices (disks and tapes) that are not present when VMS is booted.

Bug Fixes

The following problems have been corrected in this release of vtServer:

- Inability to set serial line options and trace level.
- Incorrect multipath system disk name used when booting from a Fibre Channel disk.
- Renaming a configuration file did not change the configuration name parameter stored in the file.
- Failure to properly extend partitions for multipath devices.
- Unintended removal of boot partition entry from fstab.
- Problems mounting multipath iSCSI and Fibre Channel disks at boot time.
- Virtual KGPSA LUN 0 processing errors, including incorrect handling of errors during LUN 0 inquiry.
- Disks incorrectly stopped after virtual KGPSA error.
- OpenVMS pool corruption when running versions 7.3-2 and prior resulting from missing WWID header in the SRM console.
- Incorrect memory address in EI1000 Gigabit Ethernet adapter.
- Stop emulator when the physical Fibre Channel controller for a virtual KGPSA cannot be found or is locked.
- Synchronization issue that could lead to a network interface crash.
- Dropped I/O transfers resulting from KZPBA device resets.
- Intermittent KGPSA startup failures in Tru64, and intermittent reset failures in VMS.
- OpenVMS SMPSANITY bugchecks caused by reset of hung device attached to virtual KZPBA.
- Reset of removable devices.

- Allow storage controllers that do not know mode page 1 or that return SCSI level greater than SPC3 (controlled by KGPSA flags).
- Problem setting ASN in the vtAlpha CPU.
- VAX 4100 serial port problems:

    (a) VMS bug checks resulting from a hardware and driver IPL mismatch.

    (b) Occasional I/O timeouts resulting from lost interrupts.
- Unexpected VMS system time changes resulting from changes to vtServer host time while a VAX emulation is running.
- EOI handling in GPIB emulation in vtVAX.
- Attempts to create container file in a system directory (e.g., /, /etc, /usr, /var) when loading a virtual tape in vtVAX with no path specified.
- Unable to mount disks that are physically write-protected.

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.

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 should be created using the vtMonitor BACKUP command prior to the installation. After installing vtServer, the configuration data can 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. Detailed installation instructions are provided in 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); 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*.

Post-update Instructions

After completing the installation or update of vtServer, the host system should be rebooted.

The cache should be cleared on any browsers that were last used with vtServer versions 2.9.1 or earlier. Failure to do so may result in unpredictable behavior.