Changes since the last version

Multi-CPU support

Version 2.0 fully supports multiple virtual Alpha CPU's, up to a maximum of 4.

With the introduction of version 2.0 vtAlpha can now replace multi-CPU AlphaServer 2000, 2100, 4000, 4100, DS20 and ES40 systems. Currently OpenVMS support only, Tru64 will follow in a couple of weeks.

For the multi-CPU systems a minimum operating system level of 7.1-2 for OpenVMS and 4.0F for Tru64 applies.

32 GB memory support

With version 2.0 vtAlpha supports up to 32 GB of virtual Alpha memory.

Disk Caching for better storage performance

When using logical disks there is the option **Read-Cache on** and **Write-Cache on** in the configuration parameters of the logical disk. By default these are set to **no.** This ensures that write actions to disk are executed immediately to always warrant storage data integrity.

When your vtAlpha does not share its logical disks with another (virtual) Alpha, or when it shares its storage with another virtual Alpha on the same vtAlpha host computer, it is beneficial to set these caching parameters to **yes**. I/O performance can double when using this option, depending on the applications.

The caching is arranged on the vtAlpha host level. As soon as you cross that border (= another physical or virtual machine), storage data integrity can no longer be warranted when this caching option is activated. The caching options should be **no** in these cases

Eco App (Energy Conservation Application)

vtAlpha includes the 'Eco App' which downsizes the energy consumption of the vtAlpha host when the guest operating system does not require all available CPU capacity.

This Eco App is a major energy saver and we recommend to use it wherever possible.

The Eco App has to be installed in the guest operating system and it informs vtAlpha when the guest OS is idling so vtAlpha can shut down the host CPU's. A logical disk with the installation procedure can be downloaded from this location: ftp://update:getanewemulator@ftp.avtware.com/ecoapp.vdisk.

Connect this disk to your configuration, run **product install ecoapp** in OpenVMS. After this step you can disconnect the ecoapp disk again. Use **help ecoapp** for more for more information about its options.

Or you can connect directly from OpenVMS to the following FTP location: ftp.avtware.com, user-id: **update**, password: **getanewemulator**, file (binary): **ecoapp_v10.zip**, and process it in VMS.

vtMonitor enhancements

Reorganization of the System Tab.

This has now become the Toolbox Tab and the separate functions are spread over multiple sub-tabs to make room for additional functionality.

The Host tab is added to the Toolbox and shows the characteristics of the vtAlpha host computer.

Update / installation procedures

For version 2 you need to upgrade both the vtAlpha software and your license key!

The easiest way to do this is use the online update method. This will ensure all update steps between your current release and version 2 will be automatically executed, as well as the update of your license key.

Note. The version/license update process has developed over time, so we are currently dealing with multiple procedures. Starting with version 2 we will simplify and unify this process to make updating easier.

vtAlpha software update

When you are running version 1.7 or newer you can select the online update option from the vtAlpha host menu.

Pre-version 1.7 installations use the following procedure:

a) Enter super-user mode (sudo su -) using your root-password
b) Run **update**
c) Reboot the vtAlpha host

When you are unable to use the online update because your vtAlpha host is not connected to the Internet, you can use the offline update:

1. Determine your current update level. Use vtMonitor to log on to the vtAlpha host. Login and select a configuration. After the configuration name in the Manage tab a number displays (e.g. 1.7.0-15). The number after the dash (-) identifies your update level (15 in this example).

2. Access our FTP-server: ftp://update:getanewemulator@ftp.avtware.com/

3. Download all **update.tgz** files with a sequence number larger than current update level number.

4. Copy all these files to the root-directory (/) of your vtAlpha host. Access a terminal window in vtAlpha, login as super-user (sudo su -) and run **update –o**

5. When you are running version 1.7 or later you may also copy these files to a USB-stick and update from the vtAlpha host main menu using the Configuration → update → usbdvd update option.

vtAlpha license update

When using the online update this will be done automatically

For offline updates, follow this process:

Get the license key number from vtMonitor System tab. It should start with a single digit, followed by a dash followed by seven digits, like 1-1234567.

Login to our License-server (ftp://update:getanewemulator@ftp.avtware.com/license).

Download all files starting with your license key number. For example, if you have key 1-1234567 then get the files 1-1234567_*.WibuCmRaU.

Updating a version 1.7.0 or 1.7.1 license key:

There are 3 ways to update the license key:

1. Copy the file(s) to the vtAlpha host in the windows share /update (if enabled in the configuration menu (smb)). Go to the vtAlpha host menu and select the usbdvd local option: configuration → update → local.

2. Copy the file(s) to a USB-stick to the root directory, insert the stick into the vtAlpha host go to the vtAlpha host menu and select the usbdvd update option: configuration → update → usbdvd.

3. Burn the file(s) on a CD or DVD, put it in the drive, go to the vtAlpha host menu and select the usbdvd update option: configuration → update → usbdvd.

Updating a pre-version 1.7 license key:

Open a terminal window with root access (sudo su -).

Go to the update server (ftp.avtware.com, username update, password getanewemulator), select the license subdirectory and get all files starting with your license key number. For example, if you have key 1-1234567 then get the files 1-1234567_*.WibuCmRaU.

Copy all the downloaded files to the root directory (/) (for example with ftp from a local system) and type 'licupdate -o'.