

vtAlpha version 2.5 Release Notes

Changes since the last version

Name change

Upon requests from the field we changed the name of vtAlpha-LE into vtAlpha-AS. The name Light Edition was considered to do no just to the product and we altered it into Alpha Start. Only the name changed.

Adjusted host memory requirements

It turned out that the original host memory calculation formula (1.5 GB + memory) does not cover large virtual memory configurations. From now on please reserve per virtual Alpha: Alpha memory + 25% + 1 GB.

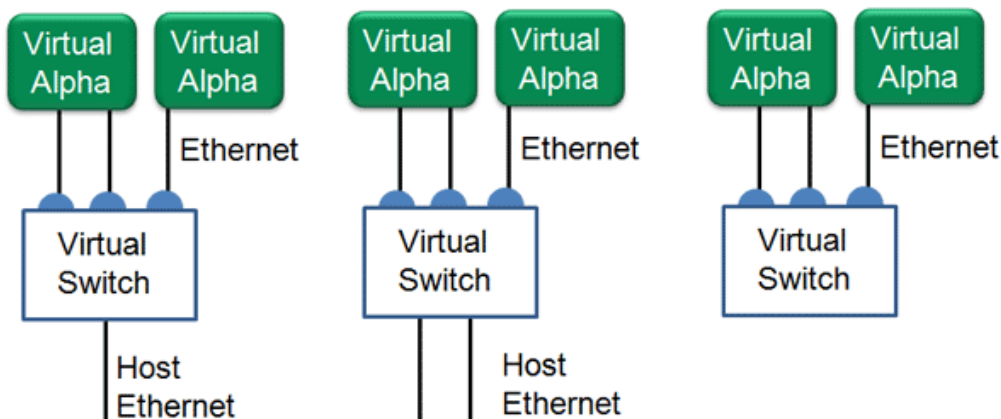
Virtual Network Switch

The majority of x86-64 based host computers offer only a few PCI-slots, limiting the number of I/O adapters that can be plugged in. This can become a problem since Alpha computers offered support for many adapters (SCSI, Serial, FibreChannel, Network). This is especially the case when using low-profile rack-mount computers, blade systems or when combining multiple virtual Alpha's on a single host platform.

To solve this issue we added support for Virtual Network Switches to vtAlpha, which allow sharing physical Ethernet links on the host by multiple virtual Ethernet adapters and/or Virtual Alpha's.

The vtAlpha Virtual Network Switch supports the following configurations:

Adapters.



The first configuration will be the most commonly used, where 1 host adapter is shared by multiple virtual Ethernet adapters. Configuration 2 is much alike the first, but with multiple host adapters connected for fail-over capabilities. The 3rd configuration enables multiple virtual Alpha's in one host system to connect to one another without occupying a host adapter.

By default vtAlpha does not include Virtual Network Adapters, and the network displays only the adapters that are found in the host system. You have to manually add the Virtual Switches in the Toolbox/Network tab and assign them to host adapters.

In the virtual Alpha Configuration Tab the virtual switches will show up next to the host adapters in the right-click menu for the DExxx adapter.

When a virtual Alpha is started it will automatically open a port on the Virtual Network Switch and use the host adapter line that is assigned to that Switch for the external network link.

Note: Sharing a single host adapter by multiple virtual Ethernet adapters must be used wisely, because you can easily connect to many virtual lines to a physical, turning it into a bottleneck in your network link.

Eco App for Tru64 v5

In this vtAlpha version we added Tru64 support for the Eco App (Energy Conservation Application). The Eco App releases the host CPU when the guest Operating System (OpenVMS or Tru64) has no immediate demand for it. Tru64 v5 and newer can now benefit from the energy saving options the Eco App offers.

It is disabled by default. To enable it for Tru64 execute the following SRM console command: **set ecoapp 1**

vtMonitor changes

- Initiate vtAlpha version upgrade from the vtMonitor tool (Toolbox/Host tab)
- Virtual Network Switch management

The screenshot shows the 'Configuration' pane with tabs for Host, Network, User Accounts, License Mgt, and Configurations. The 'Network' tab is active, showing settings for the selected adapter 'eth0 (Intel Corporation 82571EB Gigabit Ethernet Controller (rev 06))'. The settings include IP-address (192.168.5.6), Subnet mask (255.255.255.0), Default gateway (192.168.5.254), DNS server (192.168.5.254), MAC-address (00:15:17:EA:48:06), and State (eth0 up). There are 'Change to:' fields for IP, Subnet mask, and Default gateway, each with a grid of input boxes. A 'DHCP' checkbox is present. Below this is the 'Virtual Network Configuration' section with an 'Add Switch' button. It lists several network devices: Adapter eth0 (up), Switch avt0 (down), Switch avt1 (down), Port eth1 (standby), Port eth2 (listening), Switch avt11 (up), and Port eth3 (up). Each device entry includes its name, state, and manufacturer/model information.

The upper section of this pane displays the characteristics of the host adapter or virtual network switch that is selected from the Virtual Network Configuration section. By default it shows the values of adapter eth0.

Current values can be altered by entering the new value(s) in the text boxes and pressing the update-button (will appear when this section is selected)

Clicking DHCP will empty the address fields and open up the Ethernet adapter for the address that your DHCP server will supply.

Please note that the address for the Default Gateway and DNS server are global for the host computer. Be careful when changing the values for these two fields, when mistaken the vtAlpha host will become unreachable over the network.

Underneath the Adapter/Switch specifications information about the line characteristics is displayed: Line State, Auto Negotiate on/off, Line Speed and Full/Half Duplex.

Note: only relevant information is shown. Auto Negotiate to on avoids displaying the other settings, and so on. These will appear when appropriate. This section has its own update button. Activated when entering a section.

The Virtual Network Configuration section shows all host adapters and the Virtual Switches you created.

Use the Add Switch button to create a new Virtual Network Switch. A unique name will be assigned automatically, starting with avt0.

The list of network devices starts with the host adapters that are not assigned to a Virtual Network Switch. Next are the Virtual Network Switches and the host adapters (ports) that are assigned to these.

Selecting any of these devices displays the characteristics of that device in the upper hand side of this panel.

Use the right-mouse-button to display the options you have for a particular device:

- Delete Virtual Network Switch
- Delete Network Port (or remove host adapter from switch)
- Add an available host network adapter to the switch

Available network adapters are adapters without IP-address.