



CHARON™ - AXPstation for Windows

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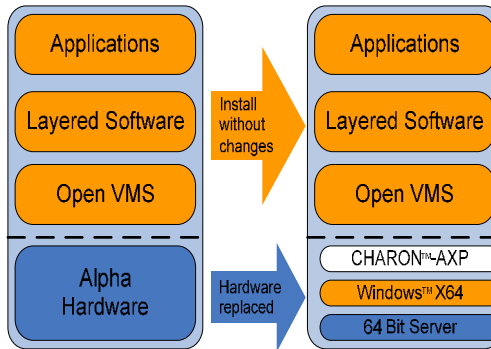
www.CHARONAlpha.com

Functionality

CHARON-AXPstation for Windows can be used to replace aging Alpha hardware. Your unmodified application code and the Alpha operating system still 'sees' the Alpha CPU, memory and peripherals recreated in real-time by the HAL software layer.

CHARON-AXPstation for Windows can in principle execute any Alpha operating system or binary application that runs on the equivalent hardware Alpha configuration. The version 1.0 is tested with OpenVMS, only. For efficiency reasons, the HAL software functionality does not include diagnostic or maintenance modes or delays to simulate mechanical device behavior.

For a list of emulated components please see the Features Matrix.



CHARON-AXPstation for Windows

is an Alpha hardware abstraction layer (HAL) designed for the complete replacement of Alpha system hardware. When executed on a fast dual CPU Windows x64 XP or 2003 or 2008 server, CHARON-AXP station for Windows provides the functional equivalent of an AlphaStation. CHARON-AXPstation for Windows is designed to allow the substitution of the AlphaStation 200 or AlphaStation

250 with industry-standard systems. This substitution does not require any changes to either the Alpha Operating System nor the layered software utilities or the binary application code. The Alpha operating system procedures, user interface, network functionality and clustering are indistinguishable from a hardware-based Alpha environment. The virtual system has been extensively tested with the standard OpenVMS and Tru64 software, without software modification of any kind. There is no need for application sources; binary code and data can be copied in the usual manner.

Features

- ◆ Provides the performance of a single CPU AlphaStation 200 system, or of systems of an equivalent performance, when executed on a 2.4 GHz Intel Core2Duo or equivalent system.
- ◆ Does not require Alpha application code conversion nor application sources. OpenVMS/Alpha, layered software and applications can be directly installed on CHARON-AXPstation for Windows and do not require any modifications. The application binaries, user interface and functionality remain unchanged.
- ◆ OpenVMS/Alpha, layered products and licensed applications running on CHARON-AXPstation for Windows require the same licensing mechanism and units as the equivalent Alpha hardware requires.
- ◆ The software installation follows the same steps as on Alpha hardware; the host system's CD/DVD drive acting as a direct replacement for the Alpha input device.
- ◆ CHARON-AXPstation for Windows operates as a Windows service.
- ◆ CHARON-AXPstation for Windows provides 512 MB of Alpha memory and practically unlimited Alpha disks, represented as physical disks or as disk images (i.e. files in the host system) that are easy to backup. Depending on OpenVMS version used, expandable up to 8 GB Alpha memory.
- ◆ CHARON-AXPstation for Windows provides up to four Ethernet adapters for a 10 or 100 Mbps network connections to other systems, terminal servers and X-terminal (emulators), providing support for Ethernet and all higher level protocols.
- ◆ OpenVMS/Alpha running on CHARON-AXPstation for Windows can be configured as a LAN cluster with other CHARON-AXP products, CHARON-VAX products, and hardware Alpha or VAX systems.
- ◆ Provides a choice between one year (extendable) or perpetual usage licenses.
- ◆ Two levels of optional software support service are available.

GOLD: Monday thru Friday, 8 AM to 5 PM EST

Platinum: 24X7



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Host system requirements

A dedicated 64-bit Windows 2003/2008 Server system with a dual CPU of at least 3 GHz, 4 GB main memory, a CD-ROM, minimum one (1) dedicated Ethernet adapter, a USB port for the license key and enough storage space for the Alpha disks.

Recommended tools

A commercially available X-terminal emulator, in case graphical feature is needed.

Product contents

- ◆ Distribution CD, containing the product executables and the documentation.
- ◆ License key.

License key

The CHARON hardware license key is permanently connected to the host system running the emulator. It preserves the customer specific license parameters, allows remote electronic updates and enables rapid change of host systems as the CHARON executable itself can be installed on multiple systems.

The MTBF of the key is more than 100 years. For mission critical applications a backup key containing 720 hours execution time can be ordered to meet any disaster recovery plan that requires replacement hardware.

Warranty

The three months standard warranty for this product is for the readability of the distribution media. Software Support (Gold or Platinum level) must be purchased as part of the initial purchase. Support Renewal beyond



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Typical applications

- ◆ Replacing AlphaStation 200 and AlphaStation 250 systems running OpenVMS.
- ◆ Replacing aging Alpha workstations by industry standard systems to reduce maintenance, space and operating costs.

Features Matrix

	AlphaStation 200/250
Emulated Alpha CPU	21064/200 (EV4)
Earliest OpenVMS version supported	6.2-1H3
Alpha memory emulated	512 MB or 1 GB or 2 GB or 4 GB or 8 GB, depending on the OpenVMS version.
SCSI Subsystem	Yes
Emulated Alpha disks	SCSI Alpha disks. Physical disks or disk images.
Emulated Alpha tapes	SCSI Alpha tapes. Tapes can only be used for data exchange. Booting from tape is not possible.
Ethernet connection	Up to four (4) Ethernet controllers. Nominal speed on the emulated Alpha level is 10 or 100 Mbps (*).
OpenVMS/Alpha clustering simulated	NI Clusters or Shared Disk Clustering with MSCP disk controllers.
Asynchronous serial line emulation	No
Host memory requirement	Size of emulated memory plus 1.5 GB

(*) The effective aggregate throughput depends on the host system's performance.

(**) Using selected serial line multiplexers on the PCI bus.

Ordering information

CHARON-AXP Station for Windows

- ◆ **CHARON-AXPstation for Windows**
- ◆ Unlimited run time license
- ◆ Initial (one year) license
- ◆ License extension for one year
- ◆ Back-up key
- ◆ GOLD Support
- ◆ PLATINUM Support

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