

# SOFTWARE PRODUCT DESCRIPTION

## CHARON-VAX/66x0 PLUS for Windows

Product version 4.5

Document: 30-15-061-005



### DESCRIPTION

CHARON-VAX/66x0 PLUS represents 4 products that are designed to replace XMI-based 6000 and 7000 series multi CPU VAX systems. They are members of the CHARON cross-platform hardware virtualization family.

VAX hardware	Virtual VAX 66x0 product
VAX6610, VAX7610	⇒ CHARON-VAX/6610 PLUS
VAX6620, VAX7620	⇒ CHARON-VAX/6620 PLUS
VAX6630, VAX7630	⇒ CHARON-VAX/6630 PLUS
VAX6660, VAX7660	⇒ CHARON-VAX/6660 PLUS

**CHARON-VAX/66x0 PLUS for Windows** family is designed to emulate a VAX6000-610, -620, -630 or -660 system by its virtual equivalent running on a standard host platform. It will run the VAX operating system and application software in their existing, binary form. It can also be used to replace any XMI based multi CPU VAX system from 6000, 7000, 8000, and 10000 series. Most VAX hardware is virtualized, allowing the VAX/VMS operating system and software that is running in that environment to remain working as always. Almost no changes to the VAX operating system, layered products or applications, its procedures or handling have to be applied.

### NETWORK

CHARON-VAX virtualizes the Ethernet controllers present in the original VAX hardware. Any protocol that ran on these controllers (DECnet, TCP/IP, LAT) will run over virtualized link.

### STORAGE

CHARON-VAX/66x0 PLUS provides support for (T)MSCP and CI storage devices. CHARON translates it into any modern technology (SCSI, SATA, SAS) by means of logical files in a Windows directory or physical LUNs attached locally or remotely by iSCSI, SAN, or NAS.

### HOST SYSTEM REQUIREMENTS

A physical system or virtual VMware appliance (ESXi 4.1 update 1 - ESXi 5.x) running Windows Server 2012 (R2) Standard Edition - 64 bit version, Windows Server 2008 R2 (SP1) Standard and Enterprise Editions - 64 bit version, Windows 7 Professional and Ultimate (SP1) Editions - 32 bit and 64 bit versions, Windows 8.1 Professional Edition - 32 and 64 bit versions, with a with N+1 CPU cores of at least 2.6 GHz (where N is the number of emulated VAX CPUs), from 3 GB to 6 GB host memory, one dedicated Ethernet adapter, a USB port for the license key and enough disk space for the VAX disks. CHARON-VAX/66x0 PLUS software requires approximately 100 MB disk space on the host system.

### PRODUCT LICENSE KEY

The HASP USB license key should be permanently connected to the host system. 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. It allows running multiple CHARON-VAX and CHARON-AXP instances on a single host computer.

### PERFORMANCES

	Hardware VAX	CHARON-VAX*
VAX6610	32 VUPS	125 VUPS
VAX6620	50 VUPS	225 VUPS
VAX6630	75 VUPS	338 VUPS
VAX6660	150 VUPS	675 VUPS

\*When run on an Intel i7 965 (3.2 GHz) based system

### DISTRIBUTION KITS

CHARON Installation kits, Release notes, User manuals, Software Product Descriptions, Patches

### CHARON utilities

- **HASP View:** for viewing CHARON license content
- **HASPRUS:** for updating CHARON license
- **Network Control Center:** to manage CHARON network drivers and settings
- **DEVcheck:** provides configuration assistance for directly connected SCSI devices
- **MKdisk:** create empty VAX disk images
- **MTD:** transfer the data between physical tape and CHARON tape container file
- **CHARON Launcher:** start/stop/configure CHARON, setup CHARON services
- **Service Manager:** manage CHARON instances as services
- **HOSTprint:** redirect virtual parallel port (LPV11) to a Windows local or network printer (applicable to QBUS based CHARON systems only).
- **IDLE VMS utility:** suspend host CPU utilization if VMS is idle – energy save mode.
- **Slowdown VMS utility:** slow down CHARON virtual CPU to match original VAX performance level
- **Shutdown VMS utility:** shutdown CHARON

**Web based User Interface:** CHARON-VAX instances could be started, stopped, and configured using a local or remote web browser.

### USER ENVIRONMENT

After installation the system will behave like the VAX it replaces and should be treated like that VAX. Operating procedures will be the same and we advise not to treat it as a Windows system, despite the fact it runs on a Windows kernel. The product documentation includes an advisory for switching off unused Windows services and the Windows kernel can be disconnected from the network after installation.



stromasys  
engineered solutions

## VIRTUALIZED HARDWARE

	CHARON-VAX/6610 PLUS	CHARON-VAX/6610 PLUS	CHARON-VAX/6630 PLUS	CHARON-VAX/6660 PLUS
<b>Virtualized VAX model</b>	VAX6000-610	VAX6000-620	VAX6000-630	VAX6000-660
<b>Virtualized VAX CPU</b>	KA66-A 1 VAX CPU	KA66-A 2 VAX CPU's	KA66-A 3 VAX CPU's	KA66-A 4, 5, or 6 VAX CPU's
<b>Earliest VMS version</b>	5.5-2			
<b>Max. virtual VAX memory</b>	1 GB	2 GB	2 GB on 32 bit Windows 3 GB on 64 bit Windows	2 GB on 32 bit Windows 3 GB on 64 bit Windows
<b>Internal bus</b>	XMI			
<b>SCSI and QBUS buses</b>	N/A			
<b>Emulated VAX disks</b>	Virtual disk images (container files) and physical SCSI disks and partitions on KDM70 XMI disk/tape controllers; CIXCD CI disk controllers; HSJ50 storage controllers			
<b>Emulated VAX tapes</b>	KDM70 XMI disk/tape controller with container files (boot from tape not supported)			
<b>Ethernet</b>	Multiple emulated DEMNA Ethernet adapters up to the available maximum slots on the emulated XMI bus. Connection speed on the emulated VAX level is 10, 100 Mbps, and 1Gbps <sup>1)</sup>			
<b>VAX/VMS clustering</b>	NI clusters; Shared Disk Clusters with emulated CIXCD and HSJ50 controllers			
<b>Host memory requirement</b>	3 GB	4 GB	6 GB	6 GB

<sup>1)</sup> The effective aggregate throughput depends on the host system performance

Each virtual VAX model follows the characteristics of its VAX hardware equivalent, requiring the corresponding level of license units and supports the peripherals particular to that VAX model. The virtual VAX does not include diagnostic and maintenance modes or delays to simulate mechanical device behavior.

Ordering information	CHARON-VAX/6610 PLUS	CHARON-VAX/6620 PLUS	CHARON-VAX/6630 PLUS	CHARON-VAX/6660 PLUS
Unlimited runtime license	CHVX-261-PG-WI	CHVX-262-PH-WI	CHVX-263-PH-WI	CHVX-260-PH-WI
One year license	CHVX-261-YG-WI	CHVX-262-YH-WI	CHVX-263-YH-WI	CHVX-260-YH-WI
Backup license (720 hours)	CHVX-261-KG-WI	CHVX-262-KH-WI	CHVX-263-KH-WI	CHVX-260-KH-WI
GOLD support (9x5)	CHVX-261-UG-WI	CHVX-262-UH-WI	CHVX-263-UH-WI	CHVX-260-UH-WI
PLATINUM support (24x7)	CHVX-261-TG-WI	CHVX-262-TH-WI	CHVX-263-TH-WI	CHVX-260-TH-WI

«Copyright © 2014 Stromasys Inc. All rights reserved. CHARON name / logo is a trademark of Stromasys SA» - zaostratecrea.com

### STROMASYS INC

Americas Region  
2840 Plaza Place,  
Ste 450  
Raleigh, NC 27612  
United States of America  
Phone: +1 919 239 8450  
Fax: +1 919 239 8451  
us.sales@stromasys.com

### STROMASYS SA

Europe, Middle East & Africa  
Avenue Louis-Casal 84  
5<sup>th</sup> Floor  
1216 Cointrin  
Switzerland  
Phone: +41 22 794 1070  
Fax: +41 22 794 1073  
emea.sales@stromasys.com

### STROMASYS ASIA PACIFIC LTD

Asia Pacific Region  
28/F, Room D, Tower B, Billion Centre  
1 Wang Kwong Road  
Kowloon Bay  
Hong Kong  
Phone: +852 2853 1600  
Fax: +852 2853 1699  
apac.sales@stromasys.com



stromasys  
engineered solutions