

Software Product Description

PRODUCT NAME: DEC Disk Striping for OpenVMS AXP, Version 1.5

SPD 53.26.00

DESCRIPTION

Striping implements disk striping for the OpenVMS operating system. The product enables users to create one or more stripesets, each comprised of two or more physical disk drives and represented to the user application (and operating system) as a single pseudo-device. Stripesets must be composed of disks of a single type.

Disk striping interleaves multiple disks to improve I/O performance in the same way that high-performance memory systems interleave memory banks. In each case, data requests are decomposed and distributed to physical storage components that process those requests in parallel.

There are three types of I/O performance problems that disk striping can help relieve:

- Applications that require very high data transfer rates
- Systems in which static disk load balancing is ineffective
- Applications that are prohibited from distributing data across multiple disks, but need higher throughput than is available from a single disk

The pseudo-device responds to all of the I/O operations defined for ordinary disk drives including physical, logical, and virtual I/O. As a result, the striping driver is transparent to all OpenVMS software other than diagnostics. However, a stripeset may not be an OpenVMS boot or dump device, and backups must be done on the pseudo-device, not on the member units.

DEC Disk Striping for OpenVMS AXP does not support MSCP serving of stripesets to other nodes in a VM-Cluster. The equivalent product for VAX processors is POLYCENTER Striping for OpenVMS VAX, Version 2.1 software.

A DIGITAL Command Language (DCL) interface (CLI) is provided to enable the privileged user to define stripesets and to create and destroy the pseudo-devices that represent them. It also allows statistics and configuration information associated with the pseudo-devices to be listed.

HARDWARE REQUIREMENTS

DEC AXP configuration as specified in the System Support Addendum (SSA).

SOFTWARE REQUIREMENTS

For systems using terminals (no DECwindows interface):

OpenVMS Operating System Version 1.5 or Version 1.5-1H1

Refer to the System Support Addendum (SSA) for availability and required versions of prerequisite software.

ORDERING INFORMATION

Software License & 90-day Warranty: Q2-GNUA9-AA

Software Media: Q2-GNUAA-H8

Software Documentation: Q2-GNUAA-GZ

* Denotes variant field. For additional information on available licenses, services, and media, refer to the appropriate price book.

SOFTWARE LICENSING

This software is furnished under the licensing provisions of Digital Equipment Corporation's Terms and Conditions for Software Application Products, or where applicable, Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

License Management Facility Support

This layered product supports the OpenVMS License Management Facility.

License units for this product are NOT allocated on a CPU-capacity basis. Each node that requires access to a stripeset requires a license for Striping.

For more information on the License Management Facility, refer to the OpenVMS Operating System Software Product Description (SPD 25.01.xx) or the License Management Facility manual of the OpenVMS Operating System documentation set.

For more information about Digital's licensing terms and policies, contact your local Digital office.

SERVICE OPTIONS

Digital software specialists also are available on a per-call or resident basis to help in all phases of software development or implementation. Specialists are available to serve as technical consultants, decision support consultants or business system analysts. Digital resources are available to:

- Supplement the programming staff on your site
- Develop software on your behalf on our own premises
- Assume project management responsibility
- Augment the Packaged Application Software Solution Service package with tailored services to meet specific needs

SOFTWARE WARRANTY

Warranty for this software application product is provided under Digital's Terms and Conditions for ASSETS or, where applicable, Digital's Standard Terms and Conditions.

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System Support Addendum

PRODUCT NAME: DEC Disk Striping for OpenVMS AXP, Version 1.5

SSA 53.26.00-A

HARDWARE REQUIREMENTS

AXP Processors Supported

DEC 3000 Model 300/300L
DEC 3000 Model 400/400S
DEC 3000 Model 500/500S/500X
DEC 3000 Model 600/600S
DEC 3000 Model 800/800S

DEC 4000 Model 600 series
DEC 7000 Model 600 series
DEC 10000 Model 600 series

Disk Space Requirements (Block Cluster Size = 1)

Disk space required for installation:

1,500 blocks
(.8 MB)

Disk space required for use (permanent):

700 blocks
(0.4 MB)

These counts refer to the disk space required on the system disk. The sizes are approximate; actual sizes may vary depending on the user's system environment, configuration, and software options.

OPTIONAL HARDWARE

The following disk drives and controllers are supported up to the maximum supported by OpenVMS and the specific processor configuration:

Disk Drives

RA-series, RF-series, RZ-series

Electronic Storage Element

ESExx drives, EF-series, EZ-series

Controllers

HSC controllers, PMAZB-AA, KZMSA-AB, KDM70-AA

CLUSTER ENVIRONMENT

This layered product is fully supported when installed on any valid and licensed VMScluster configuration without restrictions. The HARDWARE REQUIREMENTS sections of this product's Software Product Description and System Support Addendum detail any special hardware required by this product.

Note: MSCP serving of stripesets is not supported by DEC Disk Striping for OpenVMS AXP, Version 1.5 software.

* VMScluster configurations are fully described in the VMScluster Software Product Description (29.78.xx) and include CI, Ethernet, and Mixed Interconnect configurations.

SOFTWARE REQUIREMENTS

For Systems Using Terminals (No DECwindows Interface):

OpenVMS AXP Operating System Version 1.5 or Version 1.5-1H1 for standalone and full VMScluster support.

For OpenVMS systems, the following OpenVMS class is required for full functionality of this layered product:

OpenVMS Required Saveset

For more information on OpenVMS classes and tailoring, refer to the OpenVMS Operating System Software Product Description (SPD 25.01.xx).

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

DISTRIBUTION MEDIA

CD-ROM

This product is also available as part of the OpenVMS Consolidated Software Distribution on CD-ROM.

ORDERING INFORMATION

Software License & 90-day Warranty: Q2-GNUA9-AA

Software Media: Q2-GNUAA-H8

Software Documentation: Q2-GNUAA-GZ

* Denotes variant field. For additional information on available licenses, services, and media, refer to the appropriate price book.

The above information is valid at time of release. Please contact your local Digital office for the most up-to-date information.

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