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Cover Letter for VMS Version 5.3

AV–EF56J–TE

Digital is pleased to announce VMS operating system Version 5.3. This release is the first major functional release since VMS Version 5.2. Some new features included in this release are:

- Enhanced VMS DECwindows software for workstations

- Distributed Name Service (DNS) Clerk

- Enhanced VAX Text Processing Utility (TPU) and Extensible VAX Editor (EVE)

- Third-party Small Computer System Interface (SCSI) support

- Batch/Print performance improvements

The VMS DECwindows software provided with VMS Version 5.3 supports the TCP/IP transport. Users need only purchase the VMS/ULTRIX Connection (UCX) product media and documentation kit to use TCP/IP. If the full UCX functionality is required, then a UCX license must also be purchased.

The following should be considered an addendum to the VMS Version 5.3 Software Product Description:

> "VMS provides software to allow the attachment of peripherals that are not made by Digital to VAX systems utilizing the industry-standard SCSI bus. A generic class driver offers a high-level programming interface to aid customers in connecting their devices. A template driver is also provided for customers who prefer to develop their own interface.
>
> The use of devices not made by Digital on VAX systems cannot be warranted by Digital."

Digital now supports higher performance options for both the DELQA and the DESQA Ethernet adapters. For other information related to DECnet–VAX, please read the DECnet–VAX Cover Letter (**AV–DL04I–TE**) included in your Release Notes kit.

For VAXcluster software information relevant to VMS Version 5.3, please read the VAXcluster Cover Letter (**AV–LS20D–TE**) included in your Release Notes kit.

Please refer to the *VMS Version 5.3 New Features Manual* or the *VMS Version 5.3 Release Notes* for more information about these enhancements.

Documentation

The VMS Version 5.3 documentation set includes the following new manuals:

- *VMS Version 5.3 Upgrade and Installation Procedures*

- *VMS Version 5.3 Release Notes*

- *VMS Version 5.3 New Features Manual*

- *VMS Version 5.3 Small Computer System Interface (SCSI) Device Support Manual*

The manuals in the DECwindows User Kit that were revised for VMS Version 5.3 include the following:

- *VMS DECwindows User's Guide*
- *VMS DECwindows Desktop Applications Guide*

The new manuals in the DECwindows Programming Kit for VMS Version 5.3 include the following:

- *VMS DECwindows Transport Manual*
- *CDA Reference Manual*
- *VMS DECwindows Programming Documentation Supplement*

The *VMS Version 5.3 New Features Manual* provides detailed reference information about the VMS Version 5.3 new features that are not documented in a new or revised printed manual. For example, full reference information about all new VMS Version 5.3 DCL commands and system services is provided in the *VMS Version 5.3 New Features Manual*.

Installation and Upgrade

To successfully install VMS Version 5.3 software or to upgrade to VMS Version 5.3, you must read and follow the *VMS Version 5.3 Upgrade and Installation Procedures*. Refer to the VMS installation and operations guide for your VAX computer for information specific to your computer, such as turning on the system, booting Standalone Backup, and booting the new system disk.

To upgrade to VMS Version 5.3, your system must be running a version of VMS no earlier than Version 5.0. (This includes all the maintenance releases and the hardware support releases.) Please refer to the *VMS Version 5.3 Upgrade and Installation Procedures* for detailed steps on performing an upgrade. Read through the entire upgrade procedure section before beginning.

If you are performing an installation (that is, installing VMS on a new VAX computer system or creating a new system disk on an existing system), it is necessary to read only the installation section of the *VMS Version 5.3 Upgrade and Installation Procedures* before beginning.

Please read the *VMS Version 5.3 Release Notes* prior to upgrading your system. If you are upgrading to VMS Version 5.3, only release notes marked as being appropriate for VMS Version 5.3 are necessary to read. If you are installing VMS for the first time, the release notes can be read after the installation is complete.

Media Kits

Your media kit may contain more than one installation and operations guide. If desired, you may place the appropriate guide for your VAX computer in the Release Notes binder.

VAX 8800 Series Customers

The media kits for VAX 8800 series machines include a TK50 labeled "VMS V5.2 CONSOL S/A BKUP TK50". Please use this TK50 tape cartridge to boot Standalone Backup before installing VMS Version 5.3. The installation and operations procedures manual for your computer contains instructions for booting Standalone Backup.

Media Retirement

RX33 Media

In the spring of 1989, Digital began the process of retiring RX33 media distribution of the VMS operating system and VMS layered product software. The RX33 is no longer a preferred VMS distribution medium because the number of RX33 diskettes required to distribute the VMS operating system increases with VMS technical enhancements. The following systems are affected by the RX33 media retirement:

- VAXstation II
- VAXstation 2000
- MicroVAX II
- MicroVAX 2000

Effective March 31, 1989, Digital no longer distributed the VMS operating system and VMS layered products on RX33 media to new MicroVAX II and VAXstation II customers.

Effective November 1989, Digital will no longer distribute the VMS operating system and VMS layered products on RX33 media to new VAXstation 2000 and MicroVAX 2000 customers. This is the last release of VMS to be distributed to new customers on RX33 media.

Software Product Service customers will continue to receive software on RX33 media through December 31, 1990.

VMS Version 5.3 includes the DECwindows software. Because of the size of the kit, however, VMS DECwindows software is not available on RX33 media. Instead, your RX33 distribution kit for VMS Version 5.3 includes a TK50 tape cartridge labeled "VMS V5.3 BIN TK50 2/2, DECWINDOWS & S/A BKUP". This tape cartridge contains VMS DECwindows software and a new Standalone Backup. If you have a tape cartridge drive, you can install VMS DECwindows software from the TK50 distribution media. For information about installing VMS DECwindows software, refer to the *VMS Version 5.3 Upgrade and Installation Procedures*.

RA60 Media

Digital is also retiring RA60 media distribution of the VMS operating system and VMS layered product software. The RA60 is no longer a preferred VMS distribution medium because of the size of the disk and the difficulty of shipping it intact. The following systems are affected by the RA60 media retirement:

- VAX 11/730
- VAX 11/780 and 11/785
- VAX 8200/8250
- VAX 8300/8350

Effective September 30, 1989, Digital will no longer distribute the VMS operating system and VMS layered products on RA60 media to new customers. VMS Version 5.3 is the last release of VMS to be distributed to new customers on RA60 media.

Software Product Service customers will continue to receive software on RA60 media through March 31, 1991.

Building Standalone Backup on TU58 Media

Under VMS Version 5.3, you cannot use the command procedure STABACKIT.COM to build a copy of Standalone Backup on TU58. All other supported media types still work properly. The problem with the TU58 media will be fixed in the next release of VMS.

If your media kit includes Standalone Backup on TU58, please take care to *not* destroy this media because you will not be able to build it again using the command procedure STABACKIT.COM. If you are performing an upgrade, Digital recommends that you build an extra copy of Standalone Backup on TU58 media prior to upgrading to VMS Version 5.3, because previous versions of Standalone Backup will work with VMS Version 5.3. If you are performing an installation and do not have another copy of Standalone Backup on TU58 media there are two alternatives:

1. Use STABACKIT.COM to build Standalone Backup on a disk. The disk can be either the system disk or alternate disk. Please refer to the installation and operations guide for your VAX computer for information about using STABACKIT.COM.

2. Use the Exchange Utility to make a copy of the TU58 kit you received onto another set of TU58s. Refer to the *VMS Exchange Utility Reference Manual* for information about using the Exchange Utility.

We are sorry for any inconvenience this may have caused.

CLUSTER_CONFIG.COM Behavior with New KFQSA/DSSI Device Naming

The *VMS Version 5.3 Release Notes* describe additional dual-host configuations that are supported as a result of changes in the device naming for KFQSA-connected Digital Storage Systems Interconnect (DSSI) disks. These configuations are only supported when the VMS SYSGEN parameter VMS5 is set to 0. When this parameter is set to 0, VMS uses the new device naming scheme.

When adding a new cluster member, the CLUSTER_CONFIG.COM procedure propagates the VMS5 value for the current node to the new system root. If the new cluster member is going to be used in the dual-host configuration with multiple KFQSAs per system or mixed DSSI adapter types, the SYSGEN parameter VMS5 must be set to 0 on the current node before invoking CLUSTER_CONFIG.COM. To do so, edit the file SYS$SYSTEM:MODPARAMS.DAT to remove the line "VMS5=1" and then invoke AUTOGEN to reset the parameter and reboot the system.

For more information on the device naming change for KFQSA-connected DSSI disks, please see the *VMS Version 5.3 Release Notes*.

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AV-DL04I-TE

Cover Letter for DECnet–VAX™

DECnet–VAX Version 5.3 is fully integrated with VMS Version 5.3 and does not require a separate media and documentation kit (H-kit). Therefore, all orders that include the VMS Version 5.3 media and documentation kit also include DECnet–VAX images and documentation.

With the purchase of a DECnet–VAX Version 5.3 license, you will receive a Product Authorization Key (PAK), which enables network functionality on a system. A DECnet–VAX license grants the right to use the product as specified in the DECnet–VAX Software Product Description (SPD).

Using the License Management Facility, you can register either a DECnet–VAX end-node PAK (DVNETEND) or a DECnet–VAX full-function PAK (DVNETRTG). For more information on the License Management Facility, refer to the *VMS License Management Utility Manual*.

Changes in Device Support

In the next 6 to 12 months, VMS, DECnet–VAX, and VAXcluster software support for the DEQNA Ethernet adapter will be withdrawn. For 24 months after this software support is withdrawn, the DEQNA will be accessible only by user applications using the $QIO interface to the Q-bus Ethernet device driver (XQDRIVER). During that time, when the XQDRIVER recognizes the device as a DEQNA, a console message will be printed specifying that the DEQNA is an unsupported device. However, these user applications will continue to work. At the end of the 24-month period, the DEQNA Ethernet adapter will no longer be accessible.

Digital recommends that customer implementations that are using the DEQNA upgrade as soon as possible either to the DELQA or the DESQA, whichever is appropriate for the system.

Digital now supports higher performance options for both the DELQA and the DESQA Ethernet adapters.

The DSV11 synchronous communications option was incorrectly classified as a Class II device in the DECnet–VAX V5.3 SPD Load Unit Table. The DSV11 is a Class I device and is capable of running with one or two lines at 64Kbps, or with one line at up to 256Kbps.

Documentation

For systems that you will use to manage your network, Digital recommends that you purchase the VMS Extended Documentation Set, which includes all VMS, DECnet–VAX, and VAXcluster manuals.

Individual DECnet–VAX manuals or the DECnet–VAX volume can be ordered separately. For more details about DECnet–VAX documentation, see the *Overview of VMS Documentation*, which describes all the VMS documentation components and provides information on ordering these components.

VMS V5.3 Software Product Services Cover Letter

AV-LS18C-TE

Dear Customer,

We are pleased to provide your VMS Version 5.3 update kit. The following notices on Service Update Product Authorization Keys (SUPs) and available Software Product Services will assist you in your VMS V5.3 update plans and service needs.

You can disregard the sections of this letter on VAXcluster Software and Decnet-VAX if you already have Product Authorization Keys (PAK) or Service Update PAKs (SUP) for VAXcluster Software and DECnet or if you are not licensed for these products. The use of a SUP is authorized for purposes of Software Service update only, pursuant to a valid software license for the software product. The SUP described within this cover letter does not represent a license and will be replaced with a permanent License PAK some time in the future for entitled Software Product Service customers.

VMS V5.3 Installation

This VMS V5.3 update kit does not include a VMS PAK.

If you are running a version of VMS prior to V5.0, then you will either need a VMS license PAK or need to upgrade to V5.0 first, using your V5.0 Service Update kit which includes a self loading PAK on the V5.0 Warranty Mandatory Update (MUP) media.

An upgrade from VMS V5.0 or later to V5.3 does not usually require a new VMS license PAK since the upgrade procedure preserves your existing license database. However, if you are running VMS with a Temporary Service PAK (TSP) issued from the local office or a support center, and you do not have access to the VMS mandatory updates from either V5.0 or V5.2 for reloading, you may need to obtain and install another TSP for your license database to be valid for VMS V5.3. This can be determined by using the LICENSE LIST/FULL VAX-VMS command to view the DATE field (not the EXPIRATION DATE field). If the DATE field lists a date prior to December 1, 1989, then you will need to obtain and install a new Temporary Service PAK for VMS. In the U.S., TSPs are available through the Digital Software Information Network (DSIN).

If you are going to perform a new VMS installation rather than an upgrade from VMS V5.x, you will either need to have a VMS license PAK or save your VMS Version V5.0 or later license database (or databases) when using your VMS V5.3 update kit. Refer to your *VMS License Management Utility Manual* for information on saving your license database (or databases).

Contact your local Digital representative if you require assistance.

VAXcluster Software Service Update PAK (SUP)

VAXcluster Software has been LMF compliant since VMS V5.2. A VAXcluster SUP on paper was distributed with your VMS V5.2 update kit and for your convenience the same SUP is being distributed again as part of your VMS V5.3 media kit. You must either install a license PAK for VAXcluster Software or the VAXcluster Software SUP when doing a new installation of VMS V5.3 and VAXcluster Software on your system rather than following an upgrade path from VMS V5.2. The VAXcluster Software SUP is for use by customers who have not yet received a VAXcluster Software License PAK but are entitled to one because they were a licensed Local Area VAXcluster customer or a SPS contract or warranty customer when VMS Version 5.0 was released. Register your paper VAXcluster SUP using the VMS License Management Facility. Refer to *VMS Version 5.3 Release Notes*, License Management, for additional information.

DECnet-VAX Service Update PAK (SUP)

DECnet-VAX update service customers will receive a DECnet-VAX SUP on paper with their DECnet-VAX V5.3 update kit. You must either install a license PAK for DECnet-VAX or the DECnet-VAX SUP when performing a new installation of VMS V5.3 and DECnet-VAX on your system rather than following an upgrade path from VMS V5.2.

Media Retirement

SPS is retiring VMS and Layered Product update distribution on the following media:

MEDIA TYPE	END SERVICE DATE
RK07	March 1990
RL02	December 1990
RX33	December 1990
RA60	March 1991

We recommend you convert your contract to another media type such as Magtape, TK50 or CDrom media.

Services Available to Assist You

Installation and miscellaneous information regarding VMS Version 5.3 is available through the Digital Software Information Network (DSIN). Customers with DSIN service coverage are encouraged to review the database for the most up-to-date information. Please contact your local sales representative for additional information regarding DSIN within your country.

In addition to DSIN, Digital has installation services available to meet increased service needs during an update period. Installation service may be available as part of your service agreement or as a one time service.

If you use VMS DECwindows and have a VMS DECwindows Programming Doc-
umentation set (part number QA-001AM-GZ), you may wish to upgrade your
Software Product Services contract to include VMS DECwindows Programming
Documentation updates (part number QT-001AM-KZ) based on DECwindows system
programming needs. This documentation is recommended for customers developing
DECwindows application programs.

Please contact your local Software Product Services Representative for additional
information on any of the items noted within this letter.

We would like to take this opportunity to thank you for your commitment to Digital
Equipment Corporation and look forward to continuing to provide services to you in
the future.

Software Product Services Management

Option Number	Option Title	Date	Page #
QA-001AC-WM5.31	VMS V5.3-1 MAG	28-Mar-90	1 of 1

Comments: FINISHED KIT

QTY	PICK	LOCATION	PART NUMBER	PART DESCRIPTION
1	____	FK (UR)	QA-001AC-WM5.31	VMS V5.3-1 MAG
1	*****		36-28231-07	THERMAL BARCODE LABEL
2	*****		99-07809-01	CRONEL
				Notes: Can also use 99-06229-05
1	*****	(UR)	AV-LX25F-TE	VMS V5.3-1 CUSTOMER LETTER
1	*****	(UR)	BB-ND08C-BE	VMS V5.3-1 BIN 16MT9

EXPORT CONTENTS SUMMARY:

3 PACKAGING	1 SPD / LETTER	1 MAGTAPE

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Read Before Installing or Using VAX FORTRAN Version 5.4
AV–N672T–TE

Whether you are a new or a continuing VAX FORTRAN customer, please take time to read the following information about your product.

Installation Information

This installation kit contains media for installing VAX FORTRAN Version 5.4. The installation of the full kit requires a minimum of 10,000 blocks of free disk space. (The prior version required 11,800 blocks.)

Installing this product requires VMS Version 5.2 (or higher).

Release Notes Information

The release notes for VAX FORTRAN Version 5.4 contain important installation-related instructions and a summary of technical changes, new features, differences, known problems, corrected errors, performance enhancements, documentation errors, restrictions, and incompatibilities.

You can read the release notes before installing VAX FORTRAN by invoking VMSINSTAL and following the instructions in the installation guide. You can locate the release notes after installing VAX FORTRAN by typing the following DCL command:

```
$ HELP FORTRAN RELEASE_NOTES  RETURN
```

Contents of This Kit

- **Indented Bill Report (BIL) and Bill of Materials (BOM)**

  Please read the BIL and BOM enclosed in this kit and check to see that all items listed are actually in your kit. If your kit is damaged or any items are missing, call your Digital representative.

- **Media**

  If you ordered media, you will find the media and the *VAX FORTRAN Installation Guide* in this kit. Consult the *VAX FORTRAN Installation Guide* for information about installing VAX FORTRAN on your system.

- **Software Product Description (SPD)**

  The SPD provides an overview of the VAX FORTRAN kit and its features.

- **Documentation**

  Depending on your order, this kit may include copies of the following VAX FORTRAN manuals:

  VAX FORTRAN Language Reference Manual
  VAX FORTRAN User Manual

  User documentation is always included for new customers. However, for continuing customers, user documentation is included only if the customer orders it separately or if it has been revised since the prior release of VAX FORTRAN.

  Note that the *VAX FORTRAN Installation Guide* is included with the media.

- **Software Performance Report (SPR)**

  Use this form to report any problems with VAX FORTRAN, provided you have purchased warranty services.

Restrictions

Please note the following restrictions concerning the use of the /ANALYSIS_DATA and /DESIGN qualifiers with VAX FORTRAN Version 5.4:

- To load the analysis data files created by the /ANALYSIS_DATA qualifier into a VAX Source Code Analyzer (SCA) library, you must use SCA Version 2.0.

- To use the the /DESIGN qualifier, you must have VAX Language-Sensitive Editor (LSE) Version 3.0 installed on your system.

SCA Version 2.0 and LSE Version 3.0 are available individually or in VAXset Version 9.0.

A Final Note

Digital prides itself on responding to customer needs. In order to continue serving you, we need your comments. Each manual contains preaddressed, postage-paid Reader's Comments forms at the back. If you find errors in a manual or want to make comments about it, please fill out one of these forms and send it to us.

DECUS — The Benefits of Belonging

DECUS, the Digital Equipment Computer Users Society, is one of the largest and most active user groups in the computer industry. Since it was founded in 1961, DECUS has grown internationally, with more than 70,000 members worldwide.

DECUS, a not-for-profit organization, is actively directed by individuals like yourself who have purchased, leased, or ordered a Digital computer, who currently use a Digital computer, or who have a genuine interest in DECUS.

Membership is free. Benefits of belonging to DECUS include the following:

Interchange of information among users and with Digital personnel

DECUS maintains contact between Digital and users primarily through Special Interest Groups (SIGs). SIGs are formed around areas of common interest, such as hardware, operating systems, languages, applications, and marketing. SIGs participate in a newsletter and they offer effective and focused exchanges of information between Digital and users. In addition, SIGs represent users on ANSI committees responsible for standards.

Local area activities

DECUS members participate on a local level through one of many Local User Groups (LUGs). Digital often assigns representatives to keep LUGs informed of new products and available services.

Symposia

DECUS holds symposia around the world several times each year. Intensive days of meetings consist of workshops, panels, tutorials, and formal paper presentations.

SIGs also sponsor seminars at which both Digital and users give presentations on topics such as strategies, products, problems, and solutions that are of interest to Digital users.

Software at nominal charge

DECUS maintains a library of approximately 2000 active programs written and submitted by users. These programs include compilers, editors, numerical functions, utilities, and games. Individual SIGs also maintain separate libraries of programs specific to each Digital software product. Programs from the libraries are available to any DECUS member. You can get ordering information from your DECUS office.

Feedback to Digital

DECUS members have significant input into Digital's hardware and software designs. Digital managers and developers frequently participate in symposia and SIG/LUG meetings to obtain feedback on current products and to get direction for future products.

Publications

DECUS produces a newsletter, symposia proceedings, SIG newsletters, and other publications containing useful technical ideas and information about industry trends. (Please note that there are charges for some of these services.)

The following is a list of the DECUS SIGs:

APL	MUMPS
BUSINESS APPLICATIONS	NETWORKS
DAARC	THE NATIONAL LUG ORGANIZATION (NLO)
DATATRIEVE	OFFICE AUTOMATION
DATA MANAGEMENT SYSTEMS	PERSONAL COMPUTER
DATABASE MANAGEMENT SYSTEMS	REFERRED PAPERS JOURNAL
EDUCATIONAL	RSTS
GRAPHICS APPLICATIONS	RSX
HARDWARE AND MICRO	RT–11
INTERACTIVE APPLICATIONS SYSTEM	SITE MANAGEMENT AND TRAINING
LANGUAGES AND TOOLS	UNISIG
LARGE SYSTEMS	VAX SYSTEMS

To obtain a DECUS membership application form, write to the address closest to you:

DECUS U.S. 249 NORTHBORO ROAD MARLBORO, MA 01752 UNITED STATES	DECUS CANADA P.O. BOX 13000 KANATA, ONTARIO K2K2A6 CANADA
DECUS EUROPE 12 AVENUE DES MORGINES CASE POSTALE 510 CH-1213 PETIT-LANCY 1 GENEVA SWITZERLAND	DECUS JAPAN SUNSHINE 60, P.O. BOX 1135 1-1 HIGASHI IKEBUKURO-CHOME TOSHIMA-KU TOKYO 170 JAPAN
DECUS AUSTRALIA P/L (including New Zealand) DIGITAL EQUIPMENT CORPORATION PTY. LIMITED 100 P.O. BOX 384 CHATSWOOD, NEW SOUTH WALES 2067 AUSTRALIA	DECUS (for all other nations): DIGITAL EQUIPMENT CORPORATION NAGOG PARK AK01 ACTON, MA 01720 UNITED STATES

DECUS is supported and administered by Digital.

print release notes first!

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Cover Letter for VMS Version 5.3-1

AV–LX25F–TE

Digital is pleased to announce VMS operating system Version 5.3-1. This release is the first maintenance update to VMS Version 5.3. The "-1" portion of the version number indicates that this is a maintenance release. VMS maintenance releases contain fixes to the operating system and in some cases, new hardware support. Some of these fixes correct visible problems; other fixes increase system integrity in ways that are not visible to users.

Kit Contents

Enclosed is the VMS Version 5.3-1 media. For new customers, Version 5.3-1 is distributed on the following pieces of media:

- One nine-track, 1600 bpi magnetic tape
- One TK50 tape cartridge
- One Compact Disc

Update Procedure

Attached to this letter are instructions on how to update your system. Chapter 1 describes maintenance updates. The amount of time it takes to update your system depends on the type of media you use. The following are approximate times for updating a Version 5.3 system disk to Version 5.3-1:

- Magnetic tape kit: 30 minutes
- TK50 kit: 45 minutes
- Compact Disc (CDROM): 15 minutes

Updating to VMS Version 5.3-1 requires that your system be running VMS Version 5.3. If you are running any other version of VMS, you need to upgrade it to VMS Version 5.3 before proceeding with the installation of Version 5.3-1. VMS Version 5.3 supports a rolling upgrade in which different versions of the VMS operating system coexist in a VAXcluster environment. Section 1.4 of the attached update procedure explains in detail the supported mixed-version VAXcluster configurations.

Release Notes

The VMS Version 5.3-1 release notes are included on the distribution media. During the update, the procedure copies the release notes to the SYS$HELP directory on the system disk. The update procedure also displays a menu that allows you to print or display the release notes (refer to the attached update procedure).

You can also read the release notes without updating your system (either before or after the update). To do this, choose the appropriate option from the menu and then exit the update procedure (refer to the attached update procedure). Regardless of the method you choose, Digital recommends that you read the release notes before using your updated system.

Additional Release Notes

This section contains additional release notes for VMS Version 5.3-1. Please read this section and the release notes on the distribution media before you update your system to VMS Version 5.3-1.

License Unit Requirement Table (LURT) Change

With the release of VMS, Version 5.3-1, the License Unit Requirement for Layered Products on the MicroVAX 3500, 3600, 3800, and 3900 has changed from 300 to 200 units. As of April 2, 1990, Digital will begin issuing 200 unit License Product Authorization Keys (PAKs) for all new license orders for Layered Products on the MicroVAX 3500, 3600, 3800, and 3900 processors.

Systems Running VMS Version 5.3-1

Customers who are running VMS Version 5.3-1 will *not* be affected by this change. New License PAKs issued for Layered Products on the MicroVAX 3500, 3600, 3800 and 3900 processors will run with no impact to the customer.

Systems Running VMS Versions Prior to V5.3-1

Customers who are running a version of VMS prior to Version 5.3-1 on a MicroVAX 3500, 3600, 3800, and 3900 processor *will* be affected if the Layered Product License PAK has an Issue Date of April 2, 1990 or later, with an Availability Table Code of "F".

In order to use the License PAK issued for these new license orders on a version of VMS prior to Version 5.3-1 running on a MicroVAX 3500, 3600, 3800, and 3900 processor, you will need to increase each Layered Product's unit size by 100 (from 200 to 300 units). This will match the LURT value required by the VMS version prior to VMS Version 5.3-1. Authorization to make this modification does not require any privileges or indicate a change in license size.

The command below uses FORTRAN as an example of how to increase license units. (The product has to be registered and unloaded.) If there is more than one PAK for the same product in a database, use the /AUTHORIZATION command qualifier to uniquely identify the PAK. These same commands can be used to reduce the license size back to 200 once VMS Version 5.3-1 or later is installed. The commands are as follows:

```
$ LICENSE MODIFY/UNITS=300 FORTRAN
$ LICENSE LOAD FORTRAN
```

For more information on the License Management Facility (LMF), please see the *VMS License Management Utility Manual*. For information on simplified instructions in a VAXcluster environment, please see the *VMS SYSMAN Utility Manual*.

SPX Graphics Option Release Notes

This section contains general user release notes pertaining to the SPX graphics option installed in a VAXstation 3100 workstation.

New DECwindows Graphics Option Support

VMS Version 5.3-1 provides full DECwindows support for the SPX graphics option. The SPX graphics option provides enhanced graphics performance on a VAXstation 3100 for commonly used graphics operations.

Cursor Size Expanded

The SPX graphics option expands the size of supported cursors. The cursor size has increased from 16 x 16 pixels (supported by the GPX graphics option) to 64 x 64 pixels.

SHOW CLUSTER/CONTINUOUS Command

When entering the SHOW CLUSTER/CONTINUOUS command and adding HW_TYPE, a VAXstation 3100 with an SPX graphics option installed appears as: *VAXstation 3100/SPX*.

The following example shows the commands and the system response for a VAXstation 3100 with an SPX graphics option installed. In the example, the VAXstation 3100 is running VMS Version 5.3-1. Its node name is BETA, and it is a member of a cluster.

```
$ SHOW CLUSTER/CONTINUOUS
Command > ADD HW_TYPE
```

The system responds as follows:

```
    .
    .
    .
BETA    VAXstation 3100/SPX    V5.3-1    MEMBER
```

Using the F$GETSYI Function on a VAXstation 3100

When using the F$GETSYI( ) lexical function and specifying either the HW_MODEL or HW_NAME parameters on a VAXstation 3100 with the SPX graphics option, the information returned is *VAXstation 3100/SPX*.

VMS DECwindows Printscreen Function Problem

In VMS Version 5.3-1, a problem exists with the session manager's printscreen function. The screen image is not properly captured, when color output in sixel format is requested from the Customize Print Screen dialog box. This problem will be corrected in a future version of VMS.

Installation of DEC GKS-3D under VMS Version 5.3-1

Special setup is needed to install Version 1.0 of DEC GKS-3D for VMS correctly on a VAXstation 3100 (nn), which contains the new SPX graphics module. These instructions are contained in the Installation Guide for Version 1.0 of DEC GKS-3D for VMS.

DEC GKS-3D for VMS checks for certain graphic devices on the system in order to set the product's output specification correctly. DEC GKS-3D only checks for graphic devices that were available when this product version was originally developed. Because the new SPX graphics module was developed after this release of DEC GKS-3D, it is "UNKNOWN" and therefore, DEC GKS-3D chooses the default SIXEL output.

In order to produce DEC GKS-3D for VMS IVP output to the display of your VAXstation 3100 (nn) with a SPX graphics module, please follow the workstation setup for post-installation IVP execution explained in the DEC GKS-3D for VMS Installation Guide, Section 3.3.2 Running IVP After Installation.

Type the following commands at the DCL level:

```
$ DEFINE GKS3D$WSTYPE 210
$ DEFINE GKS3D$CONID 0::0
$ RUN GKS3D$TEST:GKS3D$IVP
```

Building Standalone Backup on TU58 Media

Under VMS Version 5.3, you could not use the command procedure STABACKIT.COM to build a copy of Standalone Backup on TU58. (All other supported media types worked properly.) This problem with the TU58 media is fixed in this release of VMS.

Installing VMS Version 5.3-1 on an RD32 System Disk

If your system disk is an RD32, some number files must be removed in order to free up enough space to update to VMS Version 5.3-1. There are two choices for removing files:

1.   Delete some or all of the files in the SYS$EXAMPLE directory

2.   Use the VMSTAILOR utility to remove files that are not used in your environment

For more information on the VMSTAILOR utility, please see the *VMS Version 5.3 Upgrade and Installation Procedures*.

4

1 Updating the VMS Operating System to Version 5.3-1

This document describes how to update the VMS operating system to Version 5.3-1.

The following is a list of the media types and their respective contents for the VMS Version 5.3-1 Release:

- TK50—V5.3-1
- RA60—V5.3-1
- RK07—V5.3-1
- RL02—V5.3-1
- RX33—V5.3-1
- Magnetic tape—V5.3-1
- CDROM—V5.3 and V5.3-1

The order of VMS Version installations should be as follows:

- Install or upgrade to Version 5.3 of the VMS operating system. See the *VMS V5.3 Upgrade and Installation Procedures*.
- Update to Version 5.3-1 of the VMS operating system.

1.1 Preparing to Update Your System

This section describes how to prepare your system for the Version 5.3-1 update. Before performing the update, follow the steps in this section.

1 Log into the SYSTEM account.

2 Make a backup copy of the system disk. When you update to Version 5.3-1, apply the update to the backup copy. Backing up the system disk preserves the original system disk in case the update fails. For more information, see the installation and operations guide for your VAX computer.

CAUTION: **A system failure at a critical point in the update procedure might corrupt the contents of the disk. Back up the system disk so that you will always have a working copy.**

3 Make sure the system disk has enough free space. The VMS Version 5.3-1 maintenance update requires 16,000 free blocks (for peak disk block utilization) in order to use deferred file movement, which is highly desirable, or a minimum of 13,000 free blocks on the system disk. To determine the number of free blocks, enter the following command:

```
$ SHOW DEVICE SYS$SYSDEVICE:
```

If your system disk has a sufficient number of free blocks, go to step 4.

If your system disk does not have sufficient free blocks, create free space by doing the following:

a. Log into an account that has SYSPRV privileges to create space on the system disk.

b. Delete or purge all unwanted files from the system disk.

c. If there still is not enough free space, copy the following files to another disk or tape and delete them from the system disk:

- All files with file types of JNL, MAP, and LOG

- All files in SYS$EXAMPLES and SYS$TEST

4 The V5.3-1 update attempts to replace SYS$LIBRARY:DCLTABLES.EXE, after adding a new verb. The free global page requirements for this update should be sufficient to replace DCL tables. The update procedure then evaluates the system to see if there are enough free global pages to successfully replace the image in memory. If there are not, you will see the following message:

```
%VMSU1-W-NOGBLPAGES, The installation requires n and only n-1 exist.
-%VMSU1-W-NOGBLPAGES, During the last phase of the update you will see an error
-%VMSU1-W-NOGBLPAGES, stating that DCLTABLES.EXE could not be replaced.
-%VMSU1-W-NOGBLPAGES, This error is not fatal if you reboot immediately after
 the update completes.

* Do you want to abort the update and modify GBLPAGES [NO]?
```

In the previous message, n is the number of global pages required and $n-1$ is the number of global pages available.

Digital recommends that you do not abort the installation to modify the system parameters. V5.3-1 does not place greater demands on your system than the previous VMS version. The global pages are used only during the update to replace DCL tables in memory. After this warning occurs, no new users can log into the system. You must reboot to rectify this shortage of global pages to replace DCL tables.

5 Use the following procedure to make sure that the SYSTEM account has sufficient quotas and limits:

a. Log into the SYSTEM account.

b. Enter the following commands:

```
$ SET DEFAULT SYS$SYSTEM
$ RUN AUTHORIZE
UAF> SHOW SYSTEM
```

c. Compare the SYSTEM account's limits and quotas to the following minimum required values:

Open file quota (FILLM)	40
Buffered I/O limit (BIOLM)	18

Direct I/O limit (DIOLM)	18
AST limit (ASTLM)	24
Enqueue quota (ENQLM)	200
Buffered byte quota count (BYTLM)	32768

d. Adjust the limits and quotas, as needed, to ensure that they are equal to or greater than the required values. You can change each value by entering a command in the following format:

```
UAF> MODIFY SYSTEM/limit=new_value
```

For example:

```
UAF> MODIFY SYSTEM/DIOLM=18
```

e. When the adjustments are complete, enter the following command:

```
UAF> EXIT
```

If you adjusted any of the SYSTEM account's values, log out and log in again so that the new values take effect.

6 Once you are logged into the SYSTEM account, make sure that you are the only user logged in by doing the following:

a. Notify current users that they must log out by entering the following command:

```
$ REPLY/ALL/BELL/SHUTDOWN "Log out for VMS V5.3-1 update please..."
```

b. Prevent non-privileged users from logging in by entering the following command:

```
$ SET LOGINS/INTERACTIVE=0
```

7 You are not required to shut the network down. However, if you wish to do so, follow the procedure given here.

If you are not sure whether your system includes DECnet–VAX software, enter the following command:

```
$ SHOW NETWORK
```

If the system displays the following message, skip to Section 1.2:

```
%SHOW-I-NONET, network unavailable
```

If your system includes DECnet–VAX software, you can shut it down by entering the following commands:

```
$ RUN SYS$SYSTEM:NCP
NCP> SET EXECUTOR STATE OFF
NCP> EXIT
```

1.2 How to Proceed

Different system configurations require slightly different update procedures. The following list indicates the possible system configurations and the section to which you should refer. If you are updating a:

- Standalone system, go to Section 1.6.

- VAXcluster environment (either CI-only, mixed-interconnect, or local area), use the procedure in Section 1.3.

- Mixed-version VAXcluster environment (for example, one that combines Version 5.2 and Version 5.3 systems), see Section 1.4.

- Local area VAXcluster environment with one boot server and two system disks, follow the instructions in Section 1.5.

1.3 Updating VAXcluster Environments

Use the following procedure to update VAXcluster environments (not including mixed-version VAXclusters and local area VAXclusters with one boot server and two system disks):

Note: **After completing this procedure, all the systems in your VAXcluster environment will be running the same version of the VMS operating system. If you want different versions of the VMS operating system to exist in the same cluster, see Section 1.4.**

1 Make sure that you have prepared your system for the update, as described in Section 1.1.

2 Log into the SYSTEM account on a node that uses the system disk that you are updating.

3 Apply the update using the instructions in Section 1.6.

4 If the VAXcluster environment uses several system disks, repeat steps 1 through 3 for each system disk in the VAXcluster environment.

5 After the update is complete, follow the steps in Section 1.7.

1.4 Mixed-Version VAXcluster Environments—Rolling Update

You perform a rolling update when you want a VAXcluster environment to run different versions of the VMS operating system. Since you only apply the update to certain system disks, the systems that are not being updated remain available to users. For example, during the Version 5.3-1 rolling update, the Version 5.3 systems are available to users.

Note: **Only Version 5.3 systems can be considered for updating to mixed-version VAXcluster environments. Before performing a rolling update, Digital recommends that you upgrade all nodes to VMS Version 5.3. See the** *VMS V5.3 Upgrade and Installation Procedures.*

A rolling update is *not* applicable when all systems boot from a single
system disk. If all systems boot from a single system disk, you must follow
the instructions in Section 1.3.

1.4.1 Performing a Rolling Update

To perform a rolling update, complete the following steps:

1 Make sure you have prepared your system for the update, as described
in Section 1.1.

2 Log into the SYSTEM account on a node that uses the system disk
that you are updating.

3 Apply the update as described in Section 1.6. Note that while you
update the system, users can remain logged in to any systems in the
VAXcluster environment that are not being updated.

4 If you are updating several system disks, repeat steps 1 through 3 for
each system disk that you are updating.

5 Follow the steps in Section 1.7.

1.5 Local Area VAXclusters with One Boot Server and Two System Disks

To update a local area VAXcluster with one boot server and two system
disks, do the following:

1 Log into the SYSTEM account on the boot server.

2 Follow the steps in Section 1.1 to prepare your system for the update.

3 Apply the update to the first system disk, as described in Section 1.6.

4 To update the second disk, follow these steps:

a. Log into the SYSTEM account on a satellite node that runs off the
second system disk.

b. Apply the update as described in Section 1.6.

5 Follow the steps in Section 1.7.

1.6 Applying the Version 5.3-1 Update

To update the VMS operating system to Version 5.3-1, complete the
following steps:

1 To start the VMSINSTAL command procedure, you must specify a
product name on the command line. The product name for the VMS
Version 5.3-1 maintenance update is specified as VMSU1053. To
update to Version 5.3-1, enter the following command:

```
$ @SYS$UPDATE:VMSINSTAL VMSU1053 ddcu: OPTIONS N
```

In the previous example, substitute for *ddcu* the device name of the
source drive that will hold the update distribution media, for example,
MUA0. The "N" entered after OPTIONS indicates that you wish to

have the release notes option menu displayed. If the source drive is an HSC drive, precede the device name with an HSC name and a dollar sign ($), as shown in the following example:

```
$  @SYS$UPDATE:VMSINSTAL VMSU1053 FLOWER$DUA2: OPTIONS N
```

For more information about the format of device names on your system, see the installation and operations guide for your VAX computer.

For another example, if your distribution media is loaded on a TU81 magnetic tape drive on controller A, with unit number 0, and you are updating to Version 5.3-1, enter the following command:

```
$  @SYS$UPDATE:VMSINSTAL VMSU1053 MUA0: OPTIONS N
```

If you are updating to Version 5.3-1 from a TA81 magnetic tape drive connected to an HSC (named TREE) on controller A, with unit number 0, enter the following command:

```
$  @SYS$UPDATE:VMSINSTAL VMSU1053 TREE$MUA0: OPTIONS N
```

If the VMSINSTAL command fails, determine if either of the following conditions occurred:

- If VMSINSTAL displays the following message, check to make sure you typed the number zero and not the letter "O" in the product name:

  ```
  %VMSINSTAL-E-NOPRODS, None of the specified products
  were found
  ```

- If VMSINSTAL displays an "invalid device" error message, it prompts for a device name until you specify the correct name of a device existing on the system. Remember to put a colon (:) after the device name.

2 As the update procedure begins, VMSINSTAL displays the following messages:

```
        VAX/VMS Software Product Installation Procedure V5.3

It is 5-MAR-1990 at 13:30.
Enter a question mark (?) at any time for help.
*.Are you satisfied with the backup of your system disk [YES]?
```

If you backed up the system disk, press the RETURN key and continue.

If you have not yet backed up your system disk, do the following:

a. Type NO and press the RETURN key. VMSINSTAL returns to DCL level to permit you to perform the backup.

b. Back up and restore your system disk (see step 2 of Section 1.1).

c. When the backup is completed, restart the update procedure at step 1.

3 VMSINSTAL continues with the following display:

```
The following products will be processed:

    VMSU1 V5.3

            Beginning installation of VMSU1 V5.3 at 13:31.
%VMSINSTAL-I-RESTORE, Restoring product save set A...
```

4 The procedure then displays the following message:

```
        Release notes included with this kit are always
        copied to SYS$HELP.

        Additional Release Notes Options:

            1.  Display release notes
            2.  Print release notes
            3.  Both 1 and 2
            4.  None of the above

* Select option [2]: 1
```

Enter a number from 1 to 4.

The system displays the following message:

```
* Do you want to continue the installation? [no]
%VMSINSTAL-I-RELMOVED, The product's release notes have been
successfully moved to SYS$HELP.
```

If you want to continue with the update, type Y (for YES) and press
RETURN. If you want to abort the update procedure, type N (for NO)
and press RETURN. In either case, if you have selected option 1, 2, or
3, the release notes will be displayed or printed.

5 If you chose to continue with the update, VMSINSTAL begins to apply
the update to the system disk and displays the following message:

```
            Installing VMS 5.3-1
```

The procedure then displays the following messages:

```
Completion of this update requires a system reboot. This
procedure will automatically shut down the node being updated.
Any other VAXcluster nodes using this system disk should be
shut down before the installation.

Please ignore any messages you see at the end of the
installation from INSTALL concerning the failure to REPLACE an
entry. The "global page table full" messages accompanying the
INSTALL messages should be ignored as well.  These messages do
not affect the installation, and conditions causing them will
be corrected on reboot.

*Do you want to continue [YES]?
*Do you want to purge files replaced by this installation [YES]?
```

If you want to purge files replaced by the update, press RETURN. If
you do not want to purge these files, type NO and press RETURN.
Purging files deletes multiple copies of files and increases space on the
system disk.

6   The procedure continues with the following messages:

```
No more questions will be asked.

%VMSINSTAL-I-RESTORE, Restoring product save set B...

    Now applying the updates...

    (If reapplying the update, ignore any ECOSET messages,
    and the subsequent NOFILE messages. These are normal
    and simply mean that the fixes have already been applied.)
```

You will see a series of installation messages identifying the files being modified.

Note: **When updating a tailored system, some files might not be present. Because the update might attempt to repair these files, you should do the following:**

- **Ignore any "file not found" error messages that appear during the application of a VMS maintenance update.**

- **If you use VMSTAILOR or DECW$TAILOR to restore these files at any time, reapply the update after restoring the files. You can do this by re-entering the VMSINSTAL command. Digital recommends that you backup and restore the system disk before reapplying the update.**

If you are updating a tailored system or reapplying the update, the procedure displays the following message:

```
%VMSSUn-E-ERRORS, Of the nn fixes listed above, the following mm
should be reviewed:
```

In the previous message, *n* is the version number, *nn* is the total number of patches and *mm* is the number of patches that may have failed. These errors can be related to tailoring your system or reapplying the update and can be ignored.

Once the update has been applied, the procedure displays the following message:

```
A description of these changes will be in SYS$UPDATE:VMSU1053.TXT

After rebooting, you may wish to run @SYS$UPDATE:VMSU1053-PURGE.COM,
which purges old copies of files generated by this installation.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
```

7   VMSINSTAL creates a journal file (with a JNL file type) for each image that is patched during the update process. (See Section 1.8 for additional information on the JNL files produced by the update.)

When VMSINSTAL completes the update, it displays the following message:

```
    Installation of VMSU1 V5.3 completed at 13:51

%VMSINSTAL-I-SHUTDOWN, This product requires that the system
    be rebooted.
```

8 If your system uses console media, the procedure displays the following message:

`* Do you want to mount the console volume on ddcu:. [NO]?`

Substitute the device name of the console device for *ddcu*, for example MUA0.

Remove the the distribution media from the drive, and insert the console volume. Type Y (for yes) and press RETURN.

9 The procedure will now shut down the system.

10 Reboot the updated system disk. If you have a VAXcluster environment, reboot the nodes that use the newly-updated system disk. When each node reboots, it will be running Version 5.3-1 of the VMS operating system.

1.7 Tasks to Perform After the Update

After you apply a maintenance update to your system, Digital recommends that you perform the following tasks:

1 After the update, you will notice that the space used on the system disk increased by as much as 13,000 blocks (net disk block utilization). Use the following procedure to recover all of this space:

Note: **Do not use this procedure until you have rebooted the updated system disk and any nodes that use the updated system disk (refer to Section 1.6).**

a. If you want to see the patches, go to Section 1.8.

b. Display the free block count by entering the following command:

`$ SHOW DEVICE SYS$SYSDEVICE:`

c. To purge files which the update procedure could not, Digital provides the command procedure VMSU1053-PURGE.COM. For example, to purge files produced by a Version 5.3-1 update, enter the following command and press RETURN:

`$ @SYS$UPDATE:VMSU1053-PURGE`

You can also use the Analyze Utility to determine if the update procedure purged files incompletely. For more information, see the *VMS Analyze/Disk_Structure Utility Manual*.

1.8 Printing Patches Applied by the Update Kit

If you want a listing of the patches produced by the update, you can print the journal files by logging into any account that has SYSPRV privilege and entering the following command:

`$ PRINT SYS$SYSTEM:*.JNL,SYS$LIBRARY:*.JNL,SYS$LOADABLE_IMAGES:*.JNL`

1.9 Displaying or Printing the Release Notes

The VMSINSTAL procedure copies the release notes to the file
SYS$HELP:VMSU1053.RELEASE_NOTES. You can print this file on
a line printer, or display it at a terminal.

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Cover Letter for the VMS Version 5.3 KFQSA Upgrade Problem

AV–NZ71A–TE

The VMS Version 5.3 release notes describe the change in device names for KFQSA-connected DSSI (RF-series) disks. The release notes state that systems being upgraded from a previous version of VMS will have the parameter VMS5 set to 1 by the upgrade procedure, thus retaining the device name used prior to Version 5.3. The parameter is set during stage 5 of the upgrade procedure, but if device names for KFQSA-connected disks change during earlier stages of the upgrade procedure, the procedure may fail. If the procedure fails, the system displays the following messages:

```
Configuring distribution device ...

Waiting ....
Waiting ....
Waiting ....
Waiting ....
Waiting ....

The distribution device DIA3: could not be configured.
The controller for this device has possibly changed names.

Please check the distribution device and restart the upgrade from phase 2.
```

To prevent the upgrade procedure from failing, you must set the VMS5 parameter when the system is first booted from the SYSF root, before entering stage 2 of the procedure. To set VMS5, enter the following command at the console-mode prompt, replacing *ddcu* with the name of the disk drive that contains the system disk:

```
>>> B/F0000001 ddcu
```

When the SYSBOOT prompt appears, enter the following commands to set the VMS5 parameter to 1 and continue booting:

```
SYSBOOT>   SET VMS5 1

SYSBOOT>   CONTINUE
```

The upgrade procedure will later add the line "VMS5=1" to MODPARAMS.DAT so that AUTOGEN will continue to set the parameter correctly.

This problem will be addressed in a future VMS release.