

# Software Product Description

PRODUCT NAME: VAXuisx and VWS Migration Tools Kit, Version 1.1

SPD 33.58.01

## DESCRIPTION

VAXuisx Run-Time Library for VMS\*, Version 1.2 allows most existing applications written for the VWS windowing system to run under the DECwindows windowing system. VAXuisx accomplishes this by providing a new run-time library that uses the Xlib program interface for drawing and input services. UIS routines are redirected to the new UISXSHR run-time image. Therefore, most applications do not need to relink or install native VWS.

### VAXuisx Features

- Emulates most VWS routines by using X11 (does not emulate DOPs, common video QIO interfaces, tablets, or shared color maps).
- Emulates VWS virtual color maps by using X11 routines.
- Supports all of the VWS writing modes.
- The standard VWS patterns are built into VAXuisx.
- Provides the standard VWS fonts in DECwindows format.

SIGHT (Simple Interactive Graphics Handling Tool), Version 4.5 — This package enables the user to create graphics on a workstation. These graphics are stored in files for graphic output to hardcopy devices. These files can then be updated and/or transferred/copied to other supported VAXstations.

Hardcopy UIS (HCUIS), Version 4.5 — For applications requiring the generation of hardcopy output of graphics, Hardcopy UIS (HCUIS) is provided. HCUIS enables applications to translate VWS display lists to the formats needed to print them on a variety of hardcopy devices. The HCUIS routines also enable applications to create UIS files from the VWS display list. The HCUIS DCL interface also enables users to translate UIS files to the formats needed to print them on a variety of hardcopy devices.

\* The terms VMS and OpenVMS refer to the OpenVMS operating system.

UIS to DDIF Converter, Version 2.2 — This tool allows the conversion of UIS metafiles created by Hardcopy UIS (this includes SIGHT files) into any output format supported by the CDA Converter Library.

UIS Source Code Annotator, Version 2.0 — The UIS Source Code Annotator helps to migrate VWS applications to DECwindows. It gives information which can be used in porting VWS applications to DECwindows. By running a VWS application through the Annotator, users can learn which UIS routines have equivalent Xlib routines and what those routines are. Users also can learn which UIS routines have no equivalent Xlib routines. The Annotator should be used along with *A Guide to Migrating VWS Applications to DECwindows*.

*A Guide to Migrating VWS Applications to DECwindows*, Version 1.0 — This document provides information to aid software developers and architects in migrating existing VWS applications to the DECwindows platform by pointing out the differences between the two platforms and by providing programming examples in a ported application written specifically for this purpose.

VWS Demo Kit, Version 4.5 — The VWS Demo kit is a collection of VWS applications written in a variety of languages. Most of these demonstration programs include both source code and executables as part of the kit.

## HARDWARE REQUIREMENTS

Processor and/or hardware configurations as specified in the System Support Addendum (SSA 33.58.01-x).

## SOFTWARE REQUIREMENTS

The license options for the OpenVMS VAX Operating System include the right to use VAXuisx, SIGHT, HCUIS, UIS to DDIF Converter, and the UIS Source Code Annotator. See the OpenVMS VAX Operating System Software Product Description (SPD 25.01.xx) for information regarding OpenVMS VAX Operating System licenses.

*For Workstations Running VWS:*

- Open VMS VAX Operating System (and necessary components of OpenVMS DECwindows)

Refer to the System Support Addendum (SSA 33.58.01-x) for availability and required versions of prerequisite /optional software, and for information regarding components of OpenVMS DECwindows.

## ORDERING INFORMATION

Software License: (See note below)

Software Media: QA-GD8A\*-\*\*

Software Documentation: QA-GD8A\*-GZ

Software Product Services: QT-GD8A\*-\*\*

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

NOTE: A separate VAXuisx and VWS Migration Tools Kit Software License is not required. The right-to-use is provided under the OpenVMS VAX Operating System.

## SOFTWARE LICENSING

This software is furnished under the licensing provisions of Digital Equipment Corporation's 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.

The license options for the OpenVMS VAX Operating System include the right to use VAXuisx, SIGHT, HCUIS, UIS to DDIF Converter, UIS Source Code Annotator, the Guide to Migrating VWS Applications to DECwindows and the VWS Demo Kit. See the OpenVMS VAX Operating System Software Product Description (SPD 25.01.xx) for information regarding OpenVMS Operating System licenses.

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

## SOFTWARE PRODUCT SERVICES

A variety of service options are available from Digital. For more information, contact your local Digital office.

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# System Support Addendum

PRODUCT NAME: VAXuisx and VWS Migration Tools Kit, Version 1.1

SSA 33.58.01-A

## HARDWARE REQUIREMENTS

### *Processors Supported:*

VAX: VAX 4000 Model 200,  
VAX 4000 Model 300,  
VAX 4000 Model 400,  
VAX 4000 Model 500,  
VAX 4000 Model 600

VAX 6000 Model 200 Series,  
VAX 6000 Model 300 Series,  
VAX 6000 Model 400 Series,  
VAX 6000 Model 500 Series,  
VAX 6000 Model 600 Series

VAX 7000 Model 600 Series

VAX 8200, VAX 8250, VAX 8300,  
VAX 8350, VAX 8500, VAX 8530,  
VAX 8550, VAX 8600, VAX 8650,  
VAX 8700, VAX 8800, VAX 8810,  
VAX 8820, VAX 8830, VAX 8840

VAX 9000 Model 110,  
VAX 9000 Model 210,  
VAX 9000 Model 300 Series,  
VAX 9000 Model 400 Series

VAX 10000 Model 600 Series

VAXft Model 110,  
VAXft Model 310,  
VAXft Model 410,  
VAXft Model 610,  
VAXft Model 612

VAX-11/730, VAX-11/750,  
VAX-11/780, VAX-11/785

MicroVAX: MicroVAX II, MicroVAX 2000,  
MicroVAX 3100 Model 10/10E,  
MicroVAX 3100 Model 20/20E,  
MicroVAX 3100 Model 30,  
MicroVAX 3100 Model 40,  
MicroVAX 3100 Model 80,  
MicroVAX 3100 Model 90,  
MicroVAX 3300, MicroVAX 3400,  
MicroVAX 3500, MicroVAX 3600,  
MicroVAX 3800, MicroVAX 3900

VAXstation: VAXstation II, VAXstation 2000,  
VAXstation 3100 Model 30,  
VAXstation 3100 Model 38,  
VAXstation 3100 Model 40,  
VAXstation 3100 Model 48,  
VAXstation 3100 Model 76,  
VAXstation 3200, VAXstation 3500,  
VAXstation 3520, VAXstation 3540

VAXstation 4000 Model 60,  
VAXstation 4000 Model 90,  
VAXstation 4000 VLC

VAXserver: VAXserver 3100 Model 10/10E,  
VAXserver 3100 Model 20/20E,  
VAXserver 3300, VAXserver 3400,  
VAXserver 3500, VAXserver 3600,  
VAXserver 3602, VAXserver 3800,  
VAXserver 3900

VAXserver 4000 Model 200,  
VAXserver 4000 Model 300,  
VAXserver 4000 Model 500

VAXserver 6000 Model 210,  
VAXserver 6000 Model 220,  
VAXserver 6000 Model 310,  
VAXserver 6000 Model 320,  
VAXserver 6000 Model 410,  
VAXserver 6000 Model 420,  
VAXserver 6000 Model 510,  
VAXserver 6000 Model 520,  
VAXserver 6000 Model 610,  
VAXserver 6000 Model 620,  
VAXserver 6000 Model 630

*Processors Not Supported:*

MicroVAX I, VAXstation I, VAX-11/725, VAX-11/782,  
VAXstation 8000, VAX 4000 Model 100

*Disk Space Requirements (Block Cluster Size = 1):*

The following table shows 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.

**Table 1**  
**Installation and Permanent Installation, VAXuisx and VWS Migration Tools Kit**

| <b>Saveset</b> | <b>Option</b>   | <b>Blocks for Installation</b> | <b>Permanent Blocks Required</b> |
|----------------|---|--------------------------------|----------------------------------|
| A              | VAXuisx Initial Saveset   | 522                            | 369                              |
| B              | VAXuisx Images  | 936                            | 936                              |
| C              | VWS Language Files  | 6174                           | 1                                |
| D              | VWS Programming Guide Examples                                      | 540                            | 540                              |
| E              | VWS 77 DPI Monochrome Fonts   | 1566                           | 1566                             |
| F              | VWS 77 DPI Color/Grey Scale Fonts                                   | 2646                           | 2646                             |
| G              | VWS 100 DPI Monochrome Fonts  | 864                            | 864                              |
| H              | VWS 100 DPI Color/Grey Scale Fonts                                  | 1548                           | 1548                             |
| I              | SIGHT Monochrome Fonts  | 1440                           | 1440                             |
| J              | SIGHT Color/Grey Scale Fonts  | 2232                           | 2232                             |
| K              | VAXuisx 77 DPI fonts in DECwindows format                           | 990                            | 990                              |
| L              | VAXuisx 100 DPI fonts in DECwindows format                          | 612                            | 612                              |
| M              | VAXuisx SIGHT fonts in DECwindows format                            | 846                            | 846                              |
|                |   |                                |                                  |
| A              | SIGHT Initial Saveset   | 108                            | 0                                |
| B              | SIGHT Images  | 558                            | 558                              |
| C              | SIGHT Monochrome Fonts  | 1440                           | 1440                             |
| D              | SIGHT Color/Grey Scale Fonts  | 2232                           | 2232                             |
|                |   |                                |                                  |
| A              | HCUIS Initial Saveset   | 108                            | 0                                |
| B              | HCUIS Images  | 2430                           | 2430                             |
|                |   |                                |                                  |
| A              | UIS to DDIF Converter Initial Saveset                               | 108                            | 0                                |
| B              | UIS to DDIF Converter Images  | 252                            | 252                              |
|                |   |                                |                                  |
| A              | UIS Source Code Annotator Initial Saveset                           | 108                            | 0                                |
| B              | UIS Source Code Annotator Images                                    | 684                            | 684                              |
|                |   |                                |                                  |
| A              | A Guide to Migrating VWS Applications to DECwindows Initial Saveset | 1296                           | 1078                             |
| B              | Migration Guide Images  | 3780                           | 3780                             |
|                |   |                                |                                  |
| A              | VWSDEMO Initial Saveset   | 234                            | 114                              |
| B              | VWSDEMO Installation Procedures                                     | 54                             | 0                                |
| C              | VWSDEMO DEMO Sources  | 3600                           | 3600                             |
| D              | VWSDEMO DEMO Images   | 1656                           | 1656                             |

<sup>1</sup> Plus amount required for each language chosen. See *Installation and Permanent Installation, VWS Language Chart (table 2)*.

**Table 2**  
**Installation and Permanent Installation, VWS Language Chart**

| Language Support Desired | Installation/Permanent Blocks Required |
|--------------------------|--|
| Ada                      | 1805                                   |
| BLISS                    | 405                                    |
| C                        | 852                                    |
| FORTRAN                  | 441                                    |
| MACRO                    | 187                                    |
| Pascal                   | 921                                    |
| PL/I                     | 938                                    |

**NOTES:**

1. Clustered systems must add in both the Monochrome and Color/Grey scale font values when adding up the number of blocks necessary.
2. The VAXuisx and VWS Migration Tools Kit will run on any VAX/OpenVMS\* system.
3. To run HCUIS and/or SIGHT on VAXuisx, the VWS and SIGHT fonts must be installed.
4. HCUIS no longer requires a workstation to run.
5. A separate VAXuisx and VWS Migration Tools Kit Software License is not required. The right-to-use is provided under the OpenVMS VAX Operating System.

*Memory Requirements for DECwindows (VAXuisx) Support:*

The minimum supported memory for this application running in a standalone DECwindows environment with both the client and server executing on that same system is 8 Mbytes.

The performance and memory usage of DECwindows applications are particularly sensitive to system configuration. Less memory may be required on the client system (the system where the software is installed and executed) if the server (the component that displays the application) resides on another system. More memory may be required on a system with several applications running or where it may be desirable to improve the performance of an application.

The minimum memory supported is 8 Mbytes. However, the use of this software in conjunction with increased memory capability improves performance. The memory size suggested for most typical hardware configurations is at least 8 Mbytes.

\* The terms VMS and OpenVMS refer to the OpenVMS operating system.

**OPTIONAL HARDWARE**

The following printers are supported:

LA50, LA100, LA75, LA210, LA324, LN03, LN03R, LN03 PLUS, LVP16, LCP01, LCG01, LJ250, PrintServer 40, HP® 7475, HP7550, HP7580, HP7585), HP7510, the Apple® LaserWriter®, and the LaserGraphics MPS-2000.

NOTE: The LN03 does not support the printing of complex, multi-tone graphical images.

**CLUSTER ENVIRONMENT**

This layered product is fully supported when installed on any valid and licensed VAXcluster\* 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.

- V5.x VAXcluster configurations are fully described in the VAXcluster Software Product Description (29.78.xx) and include CI, Ethernet, and Mixed Interconnect configurations.

**SOFTWARE REQUIREMENTS**

The license options for the OpenVMS VAX Operating System include the right to use VAXuisx, SIGHT, HCUIS, the UIS to DDIF Converter, and the UIS Source Code Annotator. See the OpenVMS VAX Operating System Software Product Description (SPD 25.01.xx) for information regarding OpenVMS Operating System licenses.

For Workstations Running DECwindows:

- OpenVMS VAX Operating System V5.0 - V5.5-2 or higher (and necessary components of OpenVMS DECwindows)

| VAXuisx and VWS Migration Tools Version | V5.0 at a minimum | V5.1 at a minimum | V5.3 at a minimum |
|---|-------------------|-------------------|-------------------|
| VAXuisx V1.2                            |                   |                   | X                 |
| SIGHT V4.5                              | X                 |                   |                   |
| HCUIS V4.5                              | X                 |                   |                   |
| UIS to DDIF Converter V2.2              |                   | X                 |                   |
| UIS Source Code Annotator V2.0          |                   | X                 |                   |
| Guide to Migration Application V1.0     |                   | X                 |                   |
| VWS DEMO V4.5                           | X                 |                   |                   |

This product may run in either of the following ways:

- Stand-alone execution — running the X11 display server and the client application on the same machine.
- Remote execution — running the X11 display server and the client application on different machines.

For stand-alone execution, the following DECwindows components must be installed on the machine:

- OpenVMS DECwindows Compute Server
- OpenVMS DECwindows Motif® Device Support

For remote execution, the following DECwindows components must be installed on the machine:

Server Machine

- OpenVMS DECwindows Device Support

Client Machine

- OpenVMS DECwindows Compute Server

For more information, refer to the OpenVMS DECwindows Motif Software Product Description (SPD 36.09.xx).

#### OpenVMS Tailoring

For OpenVMS V5.x systems, the following OpenVMS classes are required for full functionality of this layered product:

- OpenVMS Required Saveset
- Network Support (if running DECwindows distributed)

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

#### OPTIONAL SOFTWARE

- DEC GKS for OpenVMS V5.0
- DEC PHIGS for OpenVMS V2.3C

#### 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

9-track 1600 BPI Magtape, TK50 Streaming Tape.

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

#### ORDERING INFORMATION

Software License: (See note below)

Software Media: QA-GD8A\*~\*\*

Software Documentation: QA-GD8A\*-GZ

Software Product Services: QT-GD8A\*~\*\*

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

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