Software Product Description

PRODUCT NAME: DECview3D for ULTRIX, Version 2.2   **SPD 36.99.01**

DESCRIPTION

DECview3D for ULTRIX is a software tool used for display, review, markup, analysis, and manipulation of 2D and 3D engineering graphics created by CAD (Computer Aided Design) packages. It combines data translation, snapshot generation, and LiveLinks to DECwrite and DECpresent. DECview3D for ULTRIX can be used to integrate engineering graphics into other applications, or as a standalone tool for display and review of those graphics.

DECview3D for ULTRIX runs under ULTRIX DECwindows and adheres to the XUI Style Guide. It has the same look and feel as other Digital developed DECwindows applications. DECview3D for ULTRIX V2.2 does not support graphics terminals such as VT240, VT241, VT330, VT340.

Features

Input Translation

DECview3D for ULTRIX can read and translate files that conform to the following formats:

- IGES (Initial Graphics Exchange Specification)

  DECview3D for ULTRIX reads and translates files that conform to the IGES V5.0 specification and contain those entity types and forms supported by DECview3D for ULTRIX.

- HP-GL® Plot Files

  DECview3D for ULTRIX reads and translates HP-GL 7475 Plot formatted files. All non-shading plotting commands and all non-plotter specific initialization and settings commands are supported.

- CalComp® 960 Files

  DECview3D for ULTRIX reads and translates CalComp 960 Plot formatted files.

The list of supported IGES entities, HP-GL, and CalComp 960 plot commands is provided in the *DECview3D Reference Manual.*

Display and Manipulation Features

DECview3D allows the user to create one or more LAYOUTS in a DECview3D file. A LAYOUT displays the graphics that have been translated into DECview3D and keeps a record of how they were manipulated, sized, positioned, or annotated during any working session. Users can navigate through the LAYOUTS contained in a DECview3D file, and control the display of the LAYOUT with PAN and ZOOM operations.

Graphics that are translated into DECview3D for ULTRIX are displayed in VIEWPORTS on a layout. Each layout can contain one or more VIEWPORTS. Users control the display of the graphics using a selection of PAN, ZOOM, and ROTATE operations. Any PAN, ZOOM, and ROTATE combination can be stored in a user defined VIEW. User defined VIEWS can be added to the list of pre-defined VIEWS which are available in DECview3D. Pre-defined views are FRONT, BACK, LEFT, RIGHT, TOP, BOTTOM, ISOMETRIC, and TRIMETRIC. The SELECT VIEW command allows the user to apply defined views to a graphic in DECview3D.

The BLANK ENTITY function is used to simplify the display of complex 3D wireframe graphics by removing part entities from the display. LAYER OPERATIONS allow different layers contained in the original CAD graphic to be switched off or on.

Markup Operations

Users can annotate or markup layouts with text information and graphic objects and symbols. These markups can be moved, deleted, copied, or customized by changing specific markup attributes.

Color Support

Files translated into DECview3D display the original application color definition, limited by the capability of the display device. The DECview3D color table can be changed by the user to alter the display of the translated file. Color changes are reflected in the snapshot file formats, limited by the capability of the output device.

Analysis Functions

Users can obtain geometry information from the drawing entities which can be displayed and reviewed, stored in a text file, mailed to other users, or included as a text annotation on a DECview3D layout. The SELECTION FILTER can be customized to help users control the scope of the entity search.

- Part Entity Analysis provides geometry and coordinate information about drawing entities, e.g., Lines, Arcs, Polylines.

- Distance provides 3D shortest distance and 2D delta values between selected Lines, Arcs, or Point drawing entities.

Snapshot Generation

A SNAPSHOT is a file containing a 2D representation of a specified layout, portion of a layout, or selected viewport. It shows the drawings and any markups the user has added. Snapshot files can be used for producing hardcopies or for integration into other applications. The following snapshot formats are supported in DECview3D for ULTRIX:

- DDIF (Digital's Document Interchange Format)

- Sixel

- ReGIS

- HP-GL

- Interleaf®

- GKS-metafile

- CGM

- TEKTRONIX®

- PostScript®

- Color PostScript

- Color Encapsulated PostScript

User Interface

All DECview3D for ULTRIX functions are available through pull down menus or through the Application Command Line interface. The Application Command Line commands can also be used to record the events of a DECview3D session in a script file. Script files can be edited and replayed. Users can create their own script file with an editor and use it within a DECview3D session. Application Command Line commands can be used in initialization files to customize the DECview3D session.

Menu   Menu Help (located in the Main Menu) provides the user with an overview of DECview3D. Its functionality and generic instructions relate to DECview3D formats and commands.

General   General Help (available at the command line) provides an overview of the system and instructions to run DECview3D.

LiveLink

DECview3D can be invoked from the LiveLink capability, available in DECwrite and DECpresent. With LiveLink, graphics from DECview3D can become part of a DECwrite document and may automatically be updated when the document is next edited. These updates can be controlled by the user so they occur only when desired. Links from DECwrite to DECview3D can be modified or deleted.

DECview3D supports links to external CAD files. If the user selects the LINK TO GRAPHIC option, this ensures that the latest version of the external CAD file is always translated whenever the DECview3D Layout file is edited. Links from DECview3D to external CAD files can be modified or deleted.

High Quality Output

DECview3D provides high-quality output to Digital PostScript printers such as the PrintServer 20 and PrintServer 40. In addition, it supports the LN03, LN01S, and LN03 PLUS printers.

HARDWARE REQUIREMENTS

Processor and/or hardware configurations as specified in the System Support Addendum (SSA 36.99.00-x).

SOFTWARE REQUIREMENTS

ULTRIX Worksystem Software

Refer to the System Support Addendum (SSA 36.99.00-x) for availability and required versions of prerequisite /optional software.

ORDERING INFORMATION

Software Licenses: QL-MLVA*-**
Software Media: QA-MLVA*-**
Software Documentation: QA-MLVAA-GZ
Software Product Services: QT-MLVA*-**

- * Denotes variant fields. 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 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 ULTRIX License Management Facility.

License units for this product are allocated on an Unlimited System Use plus Personal Use and Concurrent Use basis.

Each Personal Use license allows one identified individual to use the layered product.

Each Concurrent Use license allows any one individual at a time to use the layered product.

For more information on the License Management Facility, refer to the ULTRIX Operating System Software Product Description (SPD 26.40.xx) or the *Guide to Software Licensing* in the ULTRIX Operating System documentation set.

SOFTWARE PRODUCT SERVICES

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

SOFTWARE WARRANTY

Warranty for this software product is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum of this SPD.

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® HP-GL is a registered trademark of Hewlett-Packard Company.

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System Support Addendum

PRODUCT NAME: DECview3D for ULTRIX, Version 2.2   **SSA 36.99.01-A**

HARDWARE REQUIREMENTS

Processors Supported

RISC-Based Processors:

DECstation: DECstation 2100, DECstation 3100,
DECstation 3100s,
DECstation 5000 Model 20/25 MX,
DECstation 5000 Model 20/25 HX,
DECstation 5000 Model 20/25 TX,
DECstation 5000 Model 20/25 PXG+,
DECstation 5000 Model 20/25 PXG TURBO+

DECstation 5000 Model 120/125/133 MX,
DECstation 5000 Model 120/125/133 CX,
DECstation 5000 Model 120/125/133 HX,
DECstation 5000 Model 120/125/133 PX,
DECstation 5000 Model 120/125/133 TX,
DECstation 5000 Model 120/125/133 PXG,
DECstation 5000 Model 120/125/133 PXG+,
DECstation 5000 Model 120/125/133 PXG Turbo,
DECstation 5000 Model 120/125/133 PXG Turbo+,

DECstation 5000 Model 200 MX,
DECstation 5000 Model 200 CX,
DECstation 5000 Model 200 HX,
DECstation 5000 Model 200 PX,
DECstation 5000 Model 200 TX,
DECstation 5000 Model 200 PXG,
DECstation 5000 Model 200 PXG+,
DECstation 5000 Model 200 PXG Turbo,
DECstation 5000 Model 200 PXG Turbo+

DECstation 5000 Model 240 MX,
DECstation 5000 Model 240 HX,
DECstation 5000 Model 240 TX,
DECstation 5000 Model 240 PXG+,
DECstation 5000 Model 240 PXG Turbo+

DECsystem: DECsystem 3100,
DECsystem 5000 Model 25,
DECsystem 5000 Model 200,
DECsystem 5000 Model 240,

DECsystem 5100, DECsystem 5400,
DECsystem 5500, DECsystem 5810,
DECsystem 5820, DECsystem 5830,
DECsystem 5840, DECsystem 5900

Processors Not Supported

VAX, MicroVAX, VAXserver, VAXstation

Other Hardware Required

A DECwindows-capable monitor or DECwindows termi-
nal is required to display the DECview3D for ULTRIX
software.

Disk Space Requirements

Disk space required for installation:

Root file system:	0 Kbytes
Other file systems:	usr 10825 Kbytes
	var 0 Kbytes

Disk space required for use (permanent):

Root file system:	0 Kbytes
Other file systems:	usr 10825 Kbytes
	var 0 Kbytes

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.

Memory Requirements for DECwindows Support

The minimum supported memory for this application
running in a standalone DECwindows environment with
both the client and server executing on that same sys-
tem is 14 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 14 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 16 Mbytes.

SOFTWARE REQUIREMENTS

ULTRIX Worksystem Software V4.2A

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

TK50 Streaming Tape

ORDERING INFORMATION

Software Licenses: QL-MLVA*-**
Software Media: QA-MLVA*-**
Software Documentation: QA-MLVAA-GZ
Software Product Services: QT-MLVA*-**

* Denotes variant fields. 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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