Software Product Description

DESCRIPTION

DECwrite™ is a compound document processing application that combines word processing, publishing, color text and graphics creation, data-driven charting, image integration, audio annotation, and LiveLink™ connections to supported applications and data.

DECwrite is particularly suitable for use in collaborative authoring environments. Its multiplatform coverage, multilingual support, ease of use, and advanced publishing features make it the perfect document processing solution for large organizations. With DECwrite, users can create a common "house style" and apply it to many documents. This ensures that in-house standards are adhered to and that consistent results and quality are obtained in print.

DECwrite is compliant with the Digital™ NAS™ (Network Application Support) architecture. This enables users to share DECwrite documents, containing text and graphics content, throughout an organization.

DECwrite emulates WordPerfect™, Microsoft® Word and WPS–PLUS™ keyboard conventions. This makes DECwrite easy to learn and makes it easy for users to move between desktop applications.

A third-party converter that allows you to convert documents between Interleaf® and DECwrite formats is available. This converter is called the Interlink converter, and it enables DECwrite to be used as a preparation tool for the more expensive Interleaf TPS™ software. The InterLink converter is available from Keyword Office Technologies, Ltd., Calgary, Canada.

FEATURES

User Interface

DECwrite presents functions through a graphical user interface. Functions are represented through menu selections and an icon-oriented function bar.

DECwrite offers users a choice of short menus that contain the most frequently used features, or full menus that contain all features. The short menus contain the top-level items such as File, Edit, Format, Insert, Page, Draw, Utilities, and Options. Users can switch between short and full menus. The menus also display the keyboard equivalents that allow users to use these features from the keyboard.

The function bar provides "point and click" access to functions such as style selection, font family, text size and alignment, language, application of plain, bold, italic, and underline renditions, paragraph and line spacing, page layout, color selection, table insertion, conditional content, and audio annotation. The function bar is dynamic and tracks the attributes at the current cursor position.

DECwrite also provides five context-sensitive pop-up menus. These menus pop up near the pointer position for easy access. The pop-up menus include the most frequently used editing features for text and graphics, as well as the entries for the most commonly used styles, tables, and objects.

DECwrite supports multilingual installations and provides language switching *via* the DECwindows™ Motif® Session Manager. Selecting a language in the Session Manager automatically sets the user interface language for DECwrite.

The user interface also features the following:

- Rulers with tracking and grids for easy placement of text blocks and objects.

- Snap to ruler on or off.

- Status display boxes that display information such as the current page number, first and last page, current style, text block connections, and graphic object size.

- A vertical and horizontal scroll bar.

DECwrite emulates several keyboard styles including GOLD KEY™ for WPS–PLUS compatibility, WordPerfect and Microsoft Word; EVE™, EDT™, and EMACS for technical users. There is also a DECwrite-specific keyboard interface.

Help

DECwrite provides task-oriented help, context-sensitive help, and reference help. In addition, an online tutorial, which aids the user in learning DECwrite concepts, can be accessed from the Help menu. These help features accelerate the learning process for new users of DECwrite.

Editor

DECwrite includes a full word-processing editor with functions such as select, cut, copy, paste, undo, redo, and navigation. DECwrite has sophisticated search and replace capabilities including the ability to search for carriage returns, special characters, patterns, and arbitrary white space.

Advanced editorial features such as redlining, change bars, and change pages make DECwrite an appropriate application for documentation and publication groups.

DECwrite allows the user to create exception dictionaries for words that would not commonly appear in a standard dictionary. The exception dictionaries can be kept locally or used globally in a DECwrite workgroup.

Hyphenation can be controlled with discretionary hyphens, or disabled on a paragraph by paragraph basis. DECwrite also supports multiple language hyphenation. For example, French and German may be used within the same document. Supported language hyphenation includes: Danish, Dutch, English (American and British), Finnish, French, German, Italian, Norwegian, Portuguese, Spanish, and Swedish.

DECwrite allows users to verify and correct spelling in multiple languages. For example, when French and German are used within a document, the spelling of the words in those languages is checked if the French and German optional lexicons are added to the system. (See the OPTIONAL SOFTWARE section for a list of the optional language lexicons.)

In addition, the user can verify and correct word usage and access an electronic thesaurus.

Color

DECwrite allows the user to apply color to text, tables and graphic objects. Users can create color style files and print documents on color PostScript® printers.

Rulers/Tabs

DECwrite provides left, right, center, and decimal tab alignment. Users can modify the current ruler, which affects consecutive paragraphs that have the same ruler. Starting a new ruler affects the current and all following consecutive paragraphs that have the same ruler. Rulers can also be saved as part of a paragraph style.

Tables

DECwrite supports cell-based table editing, allowing users to create tables that can include text, graphics, or numeric data. Users can apply paragraph styles and format text in a table and can apply colors to the table outline, background, and content. Rows and columns can be joined and split, added or deleted. Contents can be aligned left, right, or center within the table cell, and copy, cut, paste, and clear functions can be performed. ASCII text can be imported into a table and a new table is created if necessary. Tables can be split over multiple pages, with table headers automatically inherited from one page to the next.

DECwrite provides predefined table styles. Users can also define and store their own table styles.

Mail Merge

With DECwrite's mail merge function, users can create form letters using variables inside a form document. A records file containing the variables can be either a text file in WPS–PLUS or tabular format, or a DDIF (Digital Document Interchange Format) file. The mail merge function allows users to automatically print unique documents or save them as DECwrite documents.

Variables

DECwrite supports the definition of variables to streamline the creation of documents with common elements, such as document number, author, revision number, company name, etc. When the variable definition changes, all locations in a document are updated. Variables may be defined in a style file for shared use.

Conditional Content

DECwrite allows users to define conditions that control which parts of a document are to be displayed. This enables writers to create a generic document that can be tailored to a specific audience by including or excluding the conditional text.

Audio Content

Audio content can be recorded and played within a DECwrite document from an audio-capable workstation. (See the PROCESSORS SUPPORTED section for information on which workstations allow you to play back audio content.) The ability to include audio content provides users with a simple means of annotating a document.

Tables of Contents

DECwrite allows users to generate a table of contents automatically, using the titles in a document. Users can insert a table of contents anywhere in a document and edit or regenerate it at any time.

The table of contents entries are formatted based on the title styles of the entries, and the overall format of the table of contents is determined by the table of contents style.

Index

DECwrite allows users to generate an index made up of entries that they specify as they create the document. The index can contain up to four levels of index entries. For each level, users can specify a sorting order (for example, for numbers or special characters). Users can edit or regenerate the index at any time.

Cross-References

Users can insert cross-references in DECwrite documents (for example, "See Figure 3 on page 45"). Users can make cross-references to the label, content, or page number of a title, paragraph, or list item anywhere in the document.

LiveLink Connections

DECwrite documents can include LiveLink connections to supported applications and their data. Data that is linked to DECwrite is displayed as part of the DECwrite document. If the data changes, the DECwrite document can be updated automatically to reflect the changes in the data. The user can also specify that LiveLink connections are updated only when desired. The user can modify or delete LiveLink connections to applications at any time.

DECwrite can link to data anywhere in the network as long as the user has the privileges required to access the data. LiveLink connections can be specified with several file location types. These include: with the document, in a private library, in a network library, and in a system library. These file location types tell DECwrite where to look for the linked data and how the compound document should be packaged for mailing.

Applications to which users can insert LiveLink connections include the following:

- DECpaint (included with DECwindows Motif)
- DECchart™ (included with DECwrite)
- Equation Editor (included with DECwrite)
- DECsound (included with DECwindows Motif)

Data Links

It is possible to insert LiveLink connections to other DECwrite documents, to DDIF pictures and DDIF images (for example, images produced by DECimage™), and to final form data (for example, Encapsulated PostScript (EPS) files produced by Adobe® Illustrator).

Mailing DECwrite Documents

When you use DECwindows Motif Mail or the Open-VMS™ Mail Utility to mail a DECwrite document, the mail software creates one file containing the DECwrite document and any files linked to the document and sends this file to the recipient. The recipient can un-pack the file to recover the DECwrite document and all files linked to the document.

Export to Bookreader

DECwrite can be used as an authoring tool for the creation of online documentation when used with the Export to Bookreader™ function. DECwrite will create topic or page-based books with graphics, tables and footnotes as in-line content or as pop-ups in a separate window. The DECwrite table of contents and index are used for Bookreader navigation and all cross references become Bookreader hot spots.

Text Styles

DECwrite allows users to create text styles for the following types of elements:

- Paragraphs
- Titles
- Lists
- Tables
- Footnotes
- Table of contents
- Indexes

Users have full formatting control through the use of styles. By modifying style attributes, the user can create other styles such as abstracts and subheads.

Users can copy and then modify the style files supplied with DECwrite, or they can create new style files of their own. Style files can be used in any number of documents. In addition, style files can be shared among users.

This method of formatting under style file control allows the document content to remain separate from the document format. The user has total control over document appearance. Style information is entered into fill-in-the-blank dialog boxes. The user may change point size, fonts, line spacing, justification modes, color, and other text attributes.

Document appearance is automatically modified when the user changes the definition of a style. A user can give an element a new style at any time. For example, a user can change all main heads into subheads by simply applying a subhead style. Styles may be changed globally, which makes DECwrite an appropriate product for long documents.

When local changes are desired, such as underlining a word, the user can use the function bar, the underline key, the format menu, or the text attributes box which lists a variety of rendition attributes such as font, point size, color, and slant. This allows the user to make quick one-time changes in cases where global style changes would be inappropriate.

Page Composition and Pagination

DECwrite provides a variety of layout functions for text, pages, and documents. Text styles are discussed separately (see the Text Styles section of this SPD). Pages are formatted using page styles, which can be defined for single or double-sided pages. Any number of page styles can be used in a document. Items that appear repetitively throughout the document (for example, running headers and footers, logos, and page or column rules) can be stored as part of page styles, and are automatically placed on each page.

Users can create the page layouts of a document using a dialogue box or they can interactively create layouts for specific pages. DECwrite automatically links text flows from column to column and from page to page, or users can connect text flows in a non-contiguous fashion for documents such as newsletters.

The formatting capabilities provided with DECwrite include:

- Automatic pagination with automatic page numbering
- Running headers and footers that can contain graphics or text
- Up to 100 columns per page with the ability to freely mix a variable number of columns per page (for example, two columns at the top of a page and three at the bottom)
- Hyphenation according to dictionary or algorithm
- Alignment (justified, ragged-right, ragged-left, or centered)
- Color text
- Color outline and fill for graphics
- Conditional content that enables parts of a document to be hidden or revealed depending on a selected condition, allowing users to create multiple variations of a single document
- Vertical justification
- Widow and orphan control
- Manual kerning
- Font scaling from 2 to 300 points, in .01-point increments
- Support for installation of additional fonts
- Support for the ISO-Latin 1 character set

- Macros for user-defined functions
- Hierarchical lists and sublists with automatic labeling and user-controlled indents
- Automatic numbering of sections, chapters, headings, paragraphs, lists, sublists, footnotes, and appendixes
- Automatic cross-referencing
- Numeric references for footnotes, automatic super-scripting of footnote references
- Side notes
- Redlining, change bars, and change pages
- Spell Corrector
- Usage Alert and Electronic Thesaurus (for American English only)
- Generation of table of contents and index (up to four levels of index entries)
- Right, left, center, and decimal tabs, with or without user- defined leaders
- Equation editor
- Ability to include Encapsulated PostScript files
- LiveLink connections to other supported applications
- Ability to mix page sizes and portrait and landscape pages in a document

Link to Document

DECwrite includes a Link to Document feature. This allows the user to link files together to form a complete document. Chapters and pages are correctly numbered and a table of contents or index for the entire document can be generated. This feature allows users to work on different sections of a document and then easily combine those into a consecutively numbered document. This feature allows DECwrite to be used in a multiauthor environment.

Graphics

DECwrite supports object-oriented color graphic editing, allowing users to draw the following objects: lines (constrained or at any angle), square, rounded square, rectangle, rounded rectangle, circle, ellipse, arc, polygon, and polyline. Arcs can be open or closed, pie wedge or chord. Objects can be colored, filled with patterns or shaded. Object outlines can be solid, dotted, dashed, colored, or patterned. Objects can also be drawn in a wide variety of line weights. DECwrite also provides a freehand drawing tool.

Annotation arrows (or lines or polylines) with filled, open, double, or single arrowheads can be easily applied to drawings or on top of images. Text labels can be placed next to the arrows to identify parts of a drawing.

All graphic objects, including text labels, can be sized and scaled to a percentage or to exact dimensions. During scaling, the user can choose whether or not to scale line widths. Alignment, duplication, and space distribution features allow the user to easily create diagrams, schematics, and flowcharts.

Graphics can be placed anywhere within a document, including in table cells, running headers, and running footers. Graphics can be placed in frames that can be anchored to various reference points in text or to a particular place on a page, including the margin.

Clip Art

DECwrite contains a large selection of clip art files in DDIF image, DDIF picture, and Encapsulated PostScript format. Users can edit the DDIF picture clip art in DECwrite. DDIF image clip art can be edited using a bitmap editor such as DECwindows Paint.

DECchart

The DECchart component is an easy-to-use and easy-to-learn data charting application that allows users to create professional business graphics for printing or for inclusion in DECwrite documents. The user specifies the data to be charted and the desired chart style, and DECchart automatically generates the chart. DECchart features include:

- Nine predefined chart types: Bar, Column, Line, Pie, Area, Scatter, Hi-Lo, Histogram, Combination

- Up to 45 chart style variations to choose from

- Ability to modify predefined chart styles to create user- defined chart styles

- Easy-to-use worksheet interface for data entry, modification, and manipulation (cut, copy, and paste data in the worksheet)

- Automatic trend line generation for scatter charts

- Graphic annotation with overlays of text, lines, rectangles and arrowheads

- Support for assigning color attributes to: axes, baseline, frame, grids, legend, tags, tick marks, column and bar fills, and overlay objects

- Modification of chart attributes including: axes, baseline, data values, frame, grids, legend, tags, tick marks, drop shadows, bar spacing, and bar overlap

- Modification of text attributes: font size, family, weight, and slant

- File flexibility: saving data, chart style, chart overlay, and color selections separately, or save everything together

- Selectable fill patterns, line patterns, marker types, and attributes

- Customization with user preferences

- Ability to move and resize overlay objects

Images and Graphic Formats

DECwrite can link to or include black and white, gray scale, and color images such as those created by the DECwindows Print Screen utility.

Image files created with DECwindows Paint can also be linked into DECwrite. Once images are in a DECwrite document they can be annotated, scaled, or cropped.

Encapsulated PostScript files may be linked into DECwrite, and if the Display PostScript® extensions to DECwindows are available, these graphics will be displayed on the screen.

Optional graphic converters are available in the CDA Converter Library.

Document Styles

DECwrite includes fifteen predefined style files: general, example, letter, manual, simple memo, technical memo, military specification, newsletter, price list, report, portrait slide, landscape slide, technical slide, technical journal, and telephone directory. These document styles can be used as is, with other documents, or they can be easily modified by the user to suit any specifications. A set of companion style files for Bookreader output is also included.

High Quality Output

DECwrite provides high-quality black and white output to Digital PostScript printers such as the LN03 Script-Printer™, DEClaser™ 3250, PrintServer™20, turbo PrintServer20, PrintServer40, and PrintServer40 Plus printers. DECwrite also provides color PostScript output for Digital and most third-party color printers.

HARDWARE REQUIREMENTS

This section describes the hardware requirements for DECwrite Version 3.1 for OpenVMS Alpha.

Processors Supported
Enterprise

> DEC/4610,4620,4710,4720
> DEC/7610,7620,7630,7640,7700
> DEC/10610,10620,10630,10640
> AlphaServer™ 8200 Uni
> AlphaServer 8400 Dual
> AlphaServer 8200 Dual
> AlphaServer 8400 Uni

Departmental

> DEC/3500,3500S,3500X,3800,3800S,3900
>
> AlphaServer 2000 4/200,2100,4/275,2100 4/200

Workgroup

> DEC/2300S,2500
>
> DEC/3300,3300L,3300LX,3400,3400S, 3600,600S,3700
>
> AlphaStation™ 200 4/100,200 4/16 250 4 /266 400 4/233
>
> AlphaServer 1000 4/200
>
> AXPpci 33
>
> AXPvme

DECwrite will run on any of the processors listed on the Processors Supported list, but it requires a display device. The supported display devices are a workstation, a VT1200*, VT1300*, VXT2000™*, a PC with PC DECwindows™*, or a PC with eXcursion™ for Windows*. These display devices must be running a display server compliant with X Window System, Version 11, Release 4 or higher. OpenVMS Alpha V6.1 supports DECnet and local transports.

*   Not recommended as replacements for workstations. There are a number of restrictions imposed by these display devices, for example: number of simultaneously open windows, number of graphics or images in a document, time to download fonts when opening a document, ability to support the Export to Bookreader feature, support for inter-application cut and paste of large amounts of text, graphics or images, and absence of support for Display PostScript™.

Disk Space Requirements (Block Cluster Size = 1):

Disk space required for installation:	51,200 blocks (26 Mbytes)
Disk space required for use (permanent):	47,300 blocks (22 Mbytes)

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

A minimum of 12 Mbytes of memory is required on a workstation to operate DECwrite whether DECwrite is running on the workstation or on another processor.

A minimum of 4 Mbytes of memory is required on a VT1200 to display DECwrite.

A (standard) VT1300 has 8 Mbytes of memory which is enough to support DECwrite (with the limitations noted above).

A minimum of 4 Mbytes of memory is required on a VXT2000 to display DECwrite. VXT2000s running off an appropriately configured Infoserver™ provide for rapid downloading of fonts when opening a DECwrite document.

Display Devices

DECwrite will run on any of the processors listed in the SSA, but it requires a display device. The supported display devices are a workstation, a VT1200*, VT1300*, VXT2000™*, a PC with PC DECwindows*, or a PC with eXcursion for Windows*.

*   Not recommended as replacements for workstations. There are a number of restrictions imposed by these display devices, for example:

- Number of simultaneously open windows
- Number of graphics or images in a document
- Time to download fonts when opening a document
- Support for inter-application cut and paste of large amounts of text, graphics or images
- Absence of some fonts
- Absence of support for Display PostScript

OPTIONAL HARDWARE

DECwrite files can be printed using any Digital™ monochrome PostScript® printer, LN03 ScriptPrinter™, DEClaser™ 3250, the PrintServer™20, PrintServer40, or the PrintServer40 Plus.

DECwrite and DECchart produce both monochrome and color PostScript that can be printed on most color laser and ink-jet PostScript printers including QMS®, NEC Colormate, and HP® printers. If the DECprint™ Utility for PostScript to Sixel Printing for OpenVMS is installed, then PostScript output (either color or monochrome) can be printed on the LJ250 Companion Color Printer.

DECwrite documents can include audio annotations when used with audio-enabled workstations. This feature is enabled using the DECwindows™ Motif® DEC-sound application. See the DECwindows Motif for OpenVMS Alpha Software Product Description (SPD 41.19.xx) for details on implementation. The part number for the approved audio headset is VSXXX-JA.

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 describe any special hardware required by this product.

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

SOFTWARE REQUIREMENTS

The following software is required to run DECwrite Version 3.1:

• OpenVMS Alpha Operating System V6.1 or higher

• DECwindows Motif for OpenVMS Alpha V1.1 or higher

Note: Digital recommends that systems running DECwindows Motif V1.0 upgrade to DECwindows Motif V1.1.

DECwrite can run in either of the following ways:

• Stand-alone execution - Running the OpenVMS DECwindows Motif display server and the client application on the same machine.

• Remote execution - Running the OpenVMS DECwindows Motif display server and the client application on different machines.

OpenVMS DECwindows Motif is an optional product, not part of the OpenVMS Operating System. For more information on OpenVMS DECwindows Motif, see the Software Product Description (SPD 41.19.xx).

OpenVMS Tailoring

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

• OpenVMS Required Saveset

The following OpenVMS classes are optional:

• Network Support - required for cluster or server systems

• Utilities - required for mail

For more information on OpenVMS classes and tailoring, see the OpenVMS Alpha Operating System Software Product Description (SPD 41.87.xx).

DISPLAY DEVICES

PC DECwindows Display Facility

The PC DECwindows Display Facility is an MS–DOS® application that implements an X server that uses the industry-standard X Window System, Version 11 (X11) protocol. DECwrite executing on a remote OpenVMS system with DECnet™ may be displayed on and receive input from the personal computer. Refer to the PATH-WORKS™ for DOS Software Product Description (SPD 55.07.xx) for full hardware and software requirements.

eXcursion for Windows

eXcursion for Windows is a Microsoft® Windows™ application that implements an X server that uses the industry-standard X Window System, Version 11 (X11) protocol. DECwrite executing on a remote OpenVMS system with DECnet or TCP/IP may be displayed on and receive input from the personal computer. Refer to the eXcursion for Windows Software Product Descriptions (SPD 37.43.xx) for full hardware and software requirements.

OPTIONAL SOFTWARE

• International Lexicons for OpenVMS V1.1:

 — International Lexicon/Danish for OpenVMS V1.1

 — International Lexicon/Dutch for OpenVMS V1.1

 — International Lexicon/Finnish for OpenVMS V1.1

 — International Lexicon/Deutsch for OpenVMS V1.1

 — International Lexicon/Italian for OpenVMS V1.1

 — International Lexicon/Français for OpenVMS V1.1

 — International Lexicon/Portugese for OpenVMS V1.1

 — International Lexicon/Spanish for OpenVMS V1.1

 — International Lexicon/Swedish for OpenVMS V1.1

 — International Lexicon/American English for OpenVMS V1.1 (included with the U.S. Version)

 — International Lexicon/British English for OpenVMS V1.1

 — International Lexicon/American Medical for OpenVMS V1.1

 — International Lexicon/American Business for OpenVMS V1.1

• PATHWORKS for DOS V4.2

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

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

The documentation for this product is also available as part of the OpenVMS Online Documentation Library on CD-ROM.

ORDERING INFORMATION

Software Licenses: QL-2FNE*-**

Software Media: QA-2FNEA-H8

Software Documentation: QA-2FNEA-GZ

Software Product Services: QT-2FN**-**

* 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 OpenVMS License Management Facility.

License units for this product are allocated on an Unlimited System Use, 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 OpenVMS Alpha Operating System Software Product Description (SPD 41.87.xx), or the License Management Facility manual of the OpenVMS Alpha Operating System documentation set.

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

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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