Software Product Description

PRODUCT NAME: CDA Converter Library for OpenVMS Version 2.2 **SPD 31.31.03**

DESCRIPTION

The CDA™ Converter Library is a collection of format converters that allows users of different applications to exchange data. The format converters allow users to exchange document, table, graphic or image files from an application format, so that the files can be read by, and written to different applications and formats.

The CDA Converter Library is used with CDA Run-Time Services, including the CDA Viewer, and CDA compliant applications such as DECwrite™.

Users can convert a file to another format by either of the following methods:

- Select an option from an application menu such as DECwrite, ALL–IN–1™, DECwindows™ mail, CDA Viewer.
- Enter a command at the OpenVMS™ system prompt.

The CDA Converter Library V2.2 is a maintenance release that has been subject to extensive interoperability testing using the most popular PC and Mac® applications.

In addition, this version of the product provides online documentation for default sample option files that users can modify.

CONTENTS OF THE CDA CONVERTER LIBRARY

The CDA converter library consists of input and output converters. These converters may be broadly categorised as follows:

- Word processor format converters
  See Table 1 for an overview of the word processor converters.
- Tabular/spreadsheet format converters
  See Table 2 for an overview of the tabular and spreadsheet converters.
- Image/graphics format converters
  See Table 3 for an overview of the image and graphics converters.

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Table 1
Word Processor Format Converters

Supported Converters	Input and Output	Description
AFS (Alternate Format Syntax for ASCII editors)	Input and output	AFS enables users to edit text in DDIF™ documents on character-cell terminals. The DDIF document contains the following: • The text of the AFS document • Nontext (such as graphics and scanned images) stored in other files • Formatting information stored in a special file, called the companion file AFS documents contain text and markup. AFS documents use tags to denote the start and end of each text segment.
Document Content Architecture /Revisable Format Text (DCA /RFT®)	Input and output	Document Content Architecture (DCA) is the IBM® architecture for converting revisable documents.
Digital™ Standard Runoff (DSR)	Input only	The DSR converter supports Digital Standard Runoff Version 5.0.
DX™ (DEC™ WPS–PLUS™ word processor format)	Input and output	DX is Digital's word processing format for ALL–IN–1.
MacWrite® V1.1	Input and output	Macwrite is a word-processing application that runs on the Apple® Macintosh systems. The MacWrite converter supports MacWrite II Version 1.1.
MS® Word V4.0, V5.0, V5.5 for MS–DOS®	Input and output	Used with Microsoft® Word V4.0, V5.0, V5.5 word processor files.
Rich Text Format (RTF) for Microsoft Word for Microsoft Windows™ (V1.1, 2.0), and Microsoft Word for Macintosh®, V4.0	Input and output	Used with MS Word for MS Windows V1.0, V2.0 (WinWord), and used with MS Word for Macintosh V4.0 (MacWord). Microsoft recommends that RTF is used in these applications when converting to other formats.
roff (Standard UNIX® format)	Input only	The roff converter converts roff documents that use raw roff commands, or one of the standard macro packages to DDIF. The standard macro packages are: man, me, mm, ms, or mu.
SGML (ISO Standard Markup Language)	Input and output	The SGML converter converts Standard Generalised Markup Language format files.
WordPerfect™ for MS–DOS 5.0, 5.1	Input and output	The WordPerfect converter converts a WordPerfect Version 5.0 or 5.1 input file on MS–DOS 3.3 or higher.

Table 1 (Cont.)
Word Processor Format Converters

Supported Converters	Input and Output	Description
WPL (Digital's word processing format for WPS–PLUS)	Input and output	The WPL converter supports WPS–PLUS Version 3.1.

Table 2
Tabular/Spreadsheet Format Converters

Supported Converters	Input and Output	Description
ASCII Field	Input only	The ASCII field converter is similar to the ASCII tabular converter except that it contains formatting information. The field definitions file contains field definitions. A field definition is an ASCII record that contains information specifying how to interpret the input field data and how to encode it into the resulting data. The ASCII field converter reads an ASCII field file and an ASCII field definitions file and combines the information from both files into DTIF™ formatted tables.
ASCII Tabular	Input and output	ASCII tabular files are standard ASCII files in which the data is arranged in tabular format. ASCII tabular files also contain special characters to delimit cells and rows, for example, "," or tab characters. ASCII tabular files do not contain formula or formatting information.
CALCGRD (DECcalc™ binary grid files)	Input only	CALCGRD is a tabular file format for files produced and read by DECcalc Version 3.0A and DECcalc-PLUS™ Version 3.0A. The CALCGRD converter converts the values, formulae, and formatting information in a CALCGRD file to DTIF. The CALCGRD converter does not convert DECcalc files created earlier than Version 3.0A. If you want to convert a file created earlier than Version 3.0A, you must first load and save the file in DECcalc Version 3.0A or DECcalc-PLUS Version 3.0A to update it to a Version 3.0A format.
DIF (Data Interchange Format)	Input only	The DIF files are formatted according to the *DIF Technical Specification* and must contain only characters from the ASCII character set. The DIF cell values cannot exceed 32,767 characters. The DIF converter supports 20/20™ Version 2.4.
WK1 (Lotus® 1-2-3® V2.*)	Input and output	The WK1 converter does not convert Lotus 1-2-3 files that were created with versions earlier than Version 2.0. If you want to convert a file created with versions earlier than Version 2.0, you must first load and save the file in Lotus 1-2-3 and update it to a Version 2.* format. The WK1 converter supports Lotus 1-2-3 Version 2.* binary-encoded format.

Table 2 (Cont.)
Tabular/Spreadsheet Format Converters

Supported Converters	Input and Output	Description
WK3 (Lotus 1-2-3 V3.*)	Input and output	The WK3 format reflects substantial changes included in Lotus 1-2-3 Version 3.*. The WK3 converter supports Lotus 1-2-3 Version 3.* binary-encoded format.

Table 3
Image/Graphics Format Converters

Supported Converters	Input and Output	Description
CGM (Computer Graphics Metafile)	Input and output	CGM is an International Organization for Standardization (ISO) standard that defines a file format for storing and retrieving picture information. The CGM converter supports CGMview® Version 2.0, and Arts & Letters® Version 3.1.
GIF (Graphical Interchange Format)	Input only	GIF is a colour-image transfer protocol popular with PC applications.
Graphics Hardcopy (HP-GL®, SIXEL, PS)	Output only	The Graphics Hardcopy output converter first scans the input file to identify graphic elements that can be converted. The converter identifies and maps the elements to the appropriate GKS functions. The Graphics Hardcopy output converter supports two graphics output categories: raster and vector. The following table shows supported graphics protocols. **Raster Device** / **Vector Devices** Black and white (B&W) Sixel / HP-GL® Color Sixel PostScript® ReGIS™ The Graphics Hardcopy output converter can generate several kinds of final form output using a set of functions within the Graphical Kernel System (DEC GKS™). This allows you to select a different final form by modifying the options file.
MacPaint® (Macintosh bitonal image converter)	Input and output	MacPaint is an image file format used by MacDraw.

Table 3 (Cont.)
Image/Graphics Format Converters

Supported Converters	Input and Output	Description
PICT (MacDraw® image and graphical format)	Input and output	PICT is an image and graphical format used on the Macintosh, and supports files from Claris® MacDraw. PICT converter must find a Macbinary header in the input file. The PICT converter supports MacDraw II Version 1.1.
TIFF (Tagged Image File Format)	Input and output	TIFF is a tagging scheme used for image data conversion. The TIFF converter supports V5.0 of the TIFF standard.

General Restrictions

The converters in the CDA Converter Library do not perform modality conversions such as converting a text file into an image or the reverse.

Converters that support compound formats, such as DDIF, process the text, graphics and images in the input data, but the output format specified by the user limits the conversion process. If the user takes a DDIF document and converts it to ASCII text, any non-text elements are lost because they cannot be represented in the ASCII format. However, the AFS converters can be used to edit a compound document using an ASCII editor. The text file produced by the AFS converter contains tag references to temporary files where the non-text data is stored until the document is reconverted by the AFS output converter to a compound format.

HARDWARE REQUIREMENTS

Processor and/or hardware configurations as specified in the System Support Addendum (SSA 31.31.03-A).

SOFTWARE REQUIREMENTS

The CDA Converter Library V2.2 requires the following:

- OpenVMS Operating System V5.0
- DECimage™ Application Services V2.0 or Version 3.0 (when using TIFF or MacPaint® converters)
- DEC GKS (Runtime System - when using the Graphics Hardcopy converter)
- Digital's Image Applications Services (DAS) V3.0 or later - when using the Graphics Hardcopy converter. DAS V3.0 is distributed as part of the Motif kit.

Note: A version of CDA Run-Time Services is supplied with the Converter Library kit, but DECwindows non-Motif® systems cannot run CDA Run-Time Services V1.0.

For Workstations Running DECwindows V1.0 prior to Motif

The Converter Library installation procedure will not update your CDA Base Services software, if you are running a pre-Motif version of DECwindows. Digital recommends that you upgrade your system to a Motif version of DECwindows. The CDA Converter Library V2.2 is not warranted to run under older versions of CDA. However, if you have a pre-Motif version of DECwindows and cannot upgrade, it is possible that the performance of the CDA Converter Library V2.2 will be adequate to your needs.

ORDERING INFORMATION

- Software Licenses: QL-VZAA*-**
- Software Media: QA-VZAA*-**
- Software Documentation: QA-VZAAA-GZ
- Software Product Services: QT-VZAA*-**

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