Software Product Description

PRODUCT NAME: DEC ASD/SEE IDT for VMS, Version 3.0 **SPD 45.85.03**

DESCRIPTION

The DEC AeroSpace Defense Software Engineering (ASD/SEE) IDT for VMS is a software application used to automate the definition, tracking, and reporting of interfaces between system elements during a system's lifecycle. The ASD/SEE IDT automates the association of system signals to interface sets. The ASD/SEE IDT supports structured-analysis modeling as a standalone application, and also in conjunction with Cadre's Team*work*® structured-analysis tool.

The ASD/SEE IDT is a component of an overall software engineering environment referred to as the COHESION ASD/SEE Solution (SPD 40.83.xx). The COHESION ASD/SEE Solution supports software development across the entire software development lifecycle. It is designed primarily to support programming-in-the-large, which is considered to be a department /program development effort involving several small teams, and involving 500,000 lines of code or more. The COHESION ASD/SEE Solution is also useful for programming-in-the-medium, involving 50,000 to 500,000 lines of code.

The ASD/SEE IDT is one element of the COHESION ASD/SEE Solution, and is not intended to operate as a standalone product. Use the ASD/SEE IDT only as part of the COHESION ASD/SEE Solution.

Features

The ASD/SEE IDT has the following characteristics:

- Supports Interface Block Diagramming
- Provides graphical depiction of structured-analysis data flow and node objects
- Provides graphical depiction of block diagram bus and configuration item objects
- Provides the dynamic creation of new message-type and file-type tables and entry forms
- Provides for multiple bus bit-mappings and detailed message/data-element definition

The ASD/SEE IDT user interface is DECwindows Motif (REGISTERED_SYMBOL) based, supporting both workstation- and nonworkstation-based users. The interface is menu-driven for ease of use. Extensive online context-sensitive Help is provided. Database objects are graphically represented through the use of a graphics character set, which allows ASD/SEE IDT graphics to be printed on laser printers.

The ASD/SEE IDT provides a user interface to Cadre's Team*work* structured-analysis tool, which is character-cell based. This enables the user to browse the external tool database and migrate interface-related data directly to the ASD/SEE IDT database. Both an interactive and a callable data migration capability is provided, and the data migration is from Team*work* to the ASD/SEE IDT only.

The ASD/SEE IDT stores interface, signal, physical, logical, system design tool, and analysis tool information in a VAX Rdb/VMS database. The database can be physically distributed over multiple disks. Data and metadata security is provided through OpenVMS file protections. Storage of the information is optimized, and the storage definition can be modified or enhanced by the user. In particular, support is available for the creation of new message-type and file-type tables by the user. New tables are usable as soon as they have been created via the ASD/SEE IDT's internal form driver functions. Overall database performance can be monitored and tuned using existing VAX Rdb/VMS utilities.

The ASD/SEE IDT supports Export and Import capabilities for the database. These functions can be invoked via DCL or from within the ASD/SEE IDT interactively. The Export function allows portions of the database to be baselined. The Import/Merge function allows previously exported (saved) data to be retrieved. In general, these capabilities also support the distribution of ASD /SEE IDT databases across organizations and companies.

The ASD/SEE IDT generates Interleaf® ASCII markup files that can be incorporated in Interface Requirements Specification (IRS), Interface Design Document (IDD) and Interface Control Document (ICD) reports. Reports

can be generated interactively or through a callable interface. The ASD/SEE IDT also provides additional interface definition capability, not available in external tools, in support of IRS, ICD, and IDD reporting.

Online Training

The DEC ASD/SEE IDT software includes online training. The task-oriented training, accessible through Bookreader, directs a user to perform tasks, using the training databases that are created during installation. The training includes an Interface Definition Tool model example file.

Integration with the COHESION ASD/SEE Solution

The DEC ASD/SEE IDT provides direct integration with some components of the COHESION ASD/SEE Solution, and as such is not intended to operate as a standalone product. Specific points of integration provided by the DEC ASD/SEE IDT include:

- The IDT reporting option provides the ability to select component item identification numbers from the Component Identification functions database of the ASD/SEE Toolkit for use as the report number.
- The IDT migration option provides the ability to migrate Team*work* data to the IDT database and to perform consistency validation. This data consists of model, data flow diagram, data flow, and node data. IDT allows a user to generate data tables for IDT interfaces. The data tables are in Interleaf format. These tables can be included into IRS (Interleaf) documents.

HARDWARE REQUIREMENTS

Processors Supported

VAX:

VAX 4000 Model 100,
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 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

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, VAXstation 8000, VAX–11/725, VAX–11/782, VAX 7000 Model 600 Series, VAX 10000 Model 600 Series

Processor Restrictions

A TK50 or TK70 Tape Drive is required for standalone MicroVAX and VAXstation systems.

The VAXstation 4000 VLC supports up to 24 MB memory, which is less than the minimum memory requirements for the ASD/SEE IDT.

Other Hardware Required

For a character-cell interface, the following terminals or terminal emulation are required:

- VT05, VT50, VT52, VT55, VT72, VT100, VT101, VT102, VT103, VT105, VT125, VT131, VT132, VT180
- VT220, VT225, VT240-241, VT286
- VT320, VT330, VT340, VT330+/340+
- VT420
- ANSI CRT

The ASD/SEE IDT requires the following configuration for DECwindows Motif® Interface:
A valid DECwindows Motif workstation configuration

Disk Space Requirements (Block Cluster Size = 1)

Disk space required for installation:	15,000 blocks
Disk space required for use (permanent):	4,000 blocks
– If Online Documentation and Online Training are installed, add:	8,000 blocks
– For an IDT Database, add:	38,500 blocks

These counts refer to the disk space required on the system disk or on alternate disks. The sizes are approximate; actual sizes may vary depending on the user's system environment, configuration, and software options.

Memory Requirements for DECwindows Motif Support

The minimum supported memory for this application running in a standalone DECwindows Motif environment with both the client and server executing on that same system is 32 MB.

The minimum supported memory is the minimum that will allow the ASD/SEE IDT to run adequately. Additional memory may improve the performance of this product.

The performance and memory usage of DECwindows Motif 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.

CLUSTER ENVIRONMENT

This layered product is fully supported when installed on any valid and licensed VAXcluster* configuration without restrictions. The *HARDWARE REQUIREMENTS* section of this product's Software Product Description details any special hardware required by this product.

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

SOFTWARE REQUIREMENTS

For Systems Using Terminals (No DECwindows Motif Interface):

- OpenVMS VAX Operating System V5.5-2

For Workstations Running DECwindows Motif:

- OpenVMS VAX Operating System V5.5-2
  and
- Necessary components of VMS DECwindows Motif

This product may run in either of the following ways:

- Standalone 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.

Installation of VMS DECwindows Motif gives users the option to install any or all of the following three components:

- VMS DECwindows Motif Compute Server (Base kit; includes runtime support)
- VMS DECwindows Motif Device Support
- VMS DECwindows Motif Programming Support

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

- VMS DECwindows Motif Compute Server
- VMS DECwindows Motif Device Support

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

Server Machine

- VMS DECwindows Motif Compute Server
- VMS DECwindows Motif Device Support

Client Machine

- VMS DECwindows Motif Compute Server
- VMS DECwindows Motif Device Support

OpenVMS Tailoring

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

- OpenVMS Required Saveset
- Programming Support
- Network Support
- Utilities

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

PREREQUISITE SOFTWARE

Digital Products:

- VAX Rdb/VMS Runtime Option V4.2
  (part of OpenVMS VAX Operating System)

OPTIONAL SOFTWARE

Digital Products:

- VAX Rdb/VMS Interactive Option V4.2

Third-Party Products:

- Team*work* V5.0.2
- Interleaf V5.3.1.1

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

The DEC ASD/SEE IDT is not intended to operate as a standalone product and should only be used as part of the COHESION ASD/SEE Solution. Please refer to the ASD/SEE Solution Software Product Description (SPD 40.83.xx) for further information.

Software Licenses: QL-06BA*-**

Software Media: QA-06BA*-**

Software Documentation: QA-06BAA-GZ

Software Product Services: QT-06BA*-**

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

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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 and Concurrent Use. 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 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.

SOFTWARE WARRANTY

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