

# Software Product Description

PRODUCT NAME: DECdesign Version 2.0 for OpenVMS\* VAX

SPD 29.29.05

## DESCRIPTION

DECdesign is a CASE product that supports the development of software applications. Through the use of graphical modeling techniques, the user can perform analysis and design for the application under development. DECdesign offers the choice of structured or object-oriented modeling techniques. The user is given the ability, in selected techniques, to generate SQL (for the creation of a database) or C++ code for the applications.

DECdesign supports many popular modeling techniques. The structured techniques support the ability to create integrated process and data models (conceptual and logical) and generate VAX Rdb SQL for the user's application. The structured techniques supported in DECdesign include:

- Yourdon with Ward-Mellor extensions/Extended Entity Relationship (EER)/Logical Data Modeling (LDM)/VAX Rdb SQL Generation

NOTE: DECdesign does not validate Ward-Mellor State Transition Diagrams or State Tables.

- Gane and Sarson/EER/LDM/VAX Rdb SQL Generation
- Merise/LDM/VAX Rdb SQL Generation

The object-oriented techniques newly supported in DECdesign include:

- Ptech® OO Analysis and Design with the Ptech C++ Code Generator
- Coad/Yourdon OO Analysis and Design (which supports the generation of C++ header files)

## Features

DECdesign is a multiple-user system that supports concurrent access, data security, and permanent data storage.

DECdesign stores analysis and design models in a design library. A library has the following functions:

- Security — Users can be authorized to use a library.
- Data Storage — The library maintains incremental versions of views.
- Data Sharing — All authorized users of a library have access to all views in the library.
- Design Control — The library applies the rules for the specified modeling technique and includes:
  - The shape and meaning of graphical objects in a model
  - The relationships between the objects in a model
  - Requirements for a valid model
  - Tools for evaluating and reporting on the state of the models

DECdesign is integrated (for Yourdon, Gane and Sarson, and Merise) with CDD/Repository (referred to as CDD in all following text). Selected data definitions stored in CDD can be re-used by importing and linking to models produced in DECdesign. Likewise, selected data definitions created in DECdesign can be exported and linked to CDD. Notification of changes to these linked definitions in CDD is provided to the DECdesign user during validation of the model.

DECdesign allows the user to interactively navigate through the design library, determining where elements of that design are used. Information about the design library is also provided to the user with the aid of an extensive set of report templates. These reports can be previewed on the display or output to an OpenVMS file using the Digital Data Interchange Format (DDIF), which is a part of Digital Equipment Corporation's Compound Document Architecture (CDA).

DECdesign has been implemented to support a client/server model of operation. The product can run on a stand-alone workstation with both client and server images of DECdesign running on the workstation. Alternatively, the client and server images of DECdesign can be divided physically to run on separate systems. Client and server image installation can be selected at installation time. For further information and installation procedures, refer to the *DECdesign Installation Guide*.

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

**HARDWARE REQUIREMENTS**

Processor and/or hardware configurations as specified in the System Support Addendum (SSA 29.29.05-x).

**SOFTWARE REQUIREMENTS**

*For Workstations:*

- OpenVMS VAX Operating System
- VMS DECwindows Motif®
- CDD/Repository for VMS (for Server component of DECdesign)

In addition, the following components may also be required depending on the user's requirements:

*For Compilation of Generated SQL:*

- VAX Rdb/VMS

*For Compilation and Execution of C++ Code from Ptech Code Generator:*

- Objectivity/DB™ for VMS Full Development Kit (Refer to SPD 33.64.xx for ordering information)
- Objectivity/C++™

NOTE: Objectivity/C++ is available from Objectivity, Inc.

Refer to the System Support Addendum (SSA 29.29.05-x) for availability and required versions of prerequisite/optional software and for information regarding components of VMS DECwindows.

**ORDERING INFORMATION**

The product is offered in modules, allowing users to purchase what they need to solve their problem. An order must contain the licenses for the platform and at least one of the techniques, the chosen software media, and the documentation for the chosen modules. Additional techniques may be ordered as desired. The Ptech C++ code generator will only work with the Ptech technique.

Software Licenses:

DECdesign Platform: QL-XD1A\*-\*\*  
 Yourdon Technique: QL-XAKA\*-\*\*  
 Gane & Sarson Technique: QL-XALAA\*-\*\*  
 Merise Technique: QL-XAMAA\*-\*\*  
 Coad/Yourdon Technique: QL-MH8AA\*-\*\*  
 Ptech Technique: QL-MH7AA\*-\*\*  
 Ptech C++ Code Generator: QL-MH9AA\*-\*\*

Software Media:

QA-XD1A\*-\*\*

Software Documentation:

*DECdesign Installation Guide and  
 Guide to DECdesign:* QA-XD1AA-GZ  
 Yourdon Documentation: QA-XAKAA-GZ  
 Gane & Sarson Documentation: QA-XALAA-GZ  
 Merise Documentation: QA-XAMAA-GZ  
 Coad/Yourdon Documentation: QA-MH8AA-GZ  
 Ptech Documentation: QA-MH7AA-GZ

Software Product Services:

QT-XD1A\*-\*\*  
 QT-XAKA\*-\*\*  
 QT-XALAA\*-\*\*  
 QT-XAMAA\*-\*\*  
 QT-MH8AA\*-\*\*  
 QT-MH7AA\*-\*\*  
 QT-MH9AA\*-\*\*

\* 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 plus Personal Use and Concurrent Use basis.

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

DECdesign also offers a Concurrent Use license. 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 25.02.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. For more information, please 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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- ® Ptech is a registered trademark of Associative Design Technology (U.S.) Ltd.
- ™ Objectivity/DB and Objectivity/C++ are trademarks of Objectivity, Inc.
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# System Support Addendum

PRODUCT NAME: DECdesign Version 2.0 for OpenVMS\* VAX

SSA 29.29.05-A

## 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 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

MicroVAX: 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 30/40,  
VAXstation 3100 Model 38/48,  
VAXstation 3100 Model 76  
VAXstation 3200, VAXstation 3500

VAXstation 4000 Model 60,  
VAXstation 4000 Model 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

### *Display Devices Only:*

VAXstation II, VAXstation 2000  
VT 1300  
VXT 2000 (requires at least VXT V1.1 and floating point)  
PCs which are PCSA standard

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

*Processors Not Supported:*

VAX-11/725, VAX-11/730, VAX-11/750, VAX-11/780, VAX-11/782, VAX-11/785, MicroVAX I, MicroVAX II, MicroVAX 2000, VAXstation I, VAXstation 3520, VAXstation 3540, VAXstation 8000, VT1000, and VT1200

**Disk Space Requirements (Block Cluster Size = 1):***Minimum disk space requirements:*

Disk space required during installation: 50,589 blocks  
(25.9 Mbytes)

Disk space required for use (permanent): 28,990 blocks  
(14.8 Mbytes)

*Maximum configuration requirements:*

Disk space required during installation: 244,283 blocks  
(125.0 Mbytes)

Disk space required for use (permanent): 175,530 blocks  
(90.0 Mbytes)

Creating and using one DECdesign library will add 38,300 blocks to the maximum configuration for a total of 213,830 blocks.

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.

Some files from the maximum configuration may optionally be placed on an alternate disk if one is available, reducing the disk space required on the system disk both during and after installation. Refer to the *DECdesign Installation Guide* for details on the block requirements of specific configurations.

*Memory Requirements for DECwindows 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 16MB. Most users experience much improved performance when running with 24MB.

**OPTIONAL HARDWARE**

Hardcopy reports of the information from DECdesign model database can be printed (after conversion from DDIF to PostScript® format) using any Digital PostScript printer, ScriptPrinter (LN03R), PrintServer 20, PrintServer 40, or PrintServer 40 Plus laser printer.

**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***For Workstations:*

- OpenVMS VAX Operating System V5.4-3 - V5.5-1
- VMS DECwindows Motif V1.1
- CDD/Repository for VMS (for Server component of DECdesign) V5.1

In addition, the following components may also be required depending on the user's requirements:

*For Compilation of Generated SQL:*

- VAX Rdb/VMS V4.0 - V4.1

*For Compilation and Execution of Server C++ Code from Ptech® Code Generator:*

- Objectivity/DB™ for VMS Full Development Kit V1.2 (Refer to SPD 33.64.xx for ordering information)
- Objectivity/C++™ V2.1

**Note:** Objectivity/C++ is available from Objectivity, Inc.

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.

VMS DECwindows is part of the OpenVMS VAX Operating System but must be installed separately on versions prior to V5.4. Installation of VMS DECwindows gives users the option to install any or all of the following three components:

- VMS DECwindows Compute Server (Base kit; provides runtime support)
- VMS DECwindows Device Support
- VMS DECwindows Applications Support

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

- VMS DECwindows Compute Server (runtime support)
- VMS DECwindows Device Support

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

#### *Server and Client Machine*

- VMS DECwindows Compute Server (runtime support)
- VMS DECwindows Device Support

#### *VMS Tailoring*

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

- VMS Required Saveset
- Network Support
- Programming Support
- System Programming Support
- Utilities
- Secure User's Environment

The following DECwindows classes are required for full functionality of this layered product:

- DECwindows Applications Files
- DECwindows Device Support Files

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

### **OPTIONAL SOFTWARE**

DECwrite for VMS V1.1 - V2.0

For PC Display Only:

- PATHWORKS for VMS V4.1-2  
OR
- eXcursion for Windows V1.0

### **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**

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 Coad/Yourdon Technique: QL-MH8A\*-\*\*  
 Ptech Technique: QL-MH7A\*-\*\*  
 Ptech C++ Code Generator: QL-MH9A\*-\*\*

#### Software Media:

QA-XD1A\*-\*\*

#### Software Documentation:

*DECdesign Installation Guide and Guide to DECdesign:* QA-XD1AA-GZ  
 Yourdon Documentation: QA-XAKAA-GZ  
 Gane & Sarson Documentation: QA-XALAA-GZ  
 Merise Documentation: QA-XAMAA-GZ  
 Coad/Yourdon Documentation: QA-MH8AA-GZ  
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 QT-MH7A\*-\*\*  
 QT-MH9A\*-\*\*

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