Software Product Description

PRODUCT NAME: PDP-11 Symbolic Debugger/VAX to RSX, Version 2.2   SPD 26.75.04

DESCRIPTION

PDP-11 Symbolic Debugger is a fully symbolic debugger for FORTRAN-77 and MACRO-11 programs running on VMS under VAX-11 RSX. PDP-11 Symbolic Debugger is a tool to aid in locating programming errors in successfully compiled programs that do not execute properly.

PDP-11 Symbolic Debugger runs as a two-task debugger. A small portion of the code, necessary to debug applications, is linked with the user task and the major portion of the debugger runs as a separate task.

PDP-11 Symbolic Debugger provides access to program symbols by reading the symbol table file produced by the task builder. PDP-11 Symbolic Debugger can understand symbols produced by FORTRAN-77 and MACRO-11.

Features

- DEPOSIT and EXAMINE all data types supported by FORTRAN-77 (except virtual array elements).

- Full tracepoint and breakpoint functionality for monitoring the execution of user applications, including the ability to delay the activation of a tracepoint or breakpoint until after it has been encountered a specified number of times. The user also has the ability to specify an action to perform on encountering a tracepoint or breakpoint. The user has the option to specify conditional tracepoints or breakpoints using the WHEN mechanism.

- Control of execution using STEP by LINE or INSTRUCTION, STEP INTO routines or OVER routines, and the GO command.

- Computation of the value of source language expressions or of address expressions using the EVALUATE command.

- Full support for overlaid code including the ability to set tracepoints and breakpoints on locations not currently resident. PDP-11 Symbolic Debugger can distinguish among multiple copies of modules located at different points in the overlay structure.

- The ability to drive a debugging session using indirect command files and to record the results of a debugging session by command logging. PDP-11 Symbolic Debugger can be used interactively or in batch mode.

- On-line Multi-level Prompting HELP Facility that allows the user to receive information about the commands accepted by PDP-11 Symbolic Debugger during a debugging session.

- DATA-TYPE Table showing languages and their equivalent data types in the on-line HELP files.

- Indirection of address expressions for examining data structures at one level of indirection in only one step.

At Compile Time

To enable debugging of FORTRAN-77 programs, the user must specify a switch in the compiler command line. This switch specifies that the information about the symbols in the FORTRAN-77 application will be put into the object file created by the compiler.

To enable debugging of MACRO-11 programs, the user must specify a switch in the assembler command line. This causes information about the symbols in the assembly language program to be available to PDP-11 Symbolic Debugger.

At Taskbuild Time

When taskbuilding the application which will be run under control of PDP-11 Symbolic Debugger, the user must modify the taskbuilder command line and the overlay description file to include the PDP-11 Symbolic Debugger kernel.

HARDWARE REQUIREMENTS

VAX configuration as specified in the System Support Addendum (SSA 26.75.04-x).

SOFTWARE REQUIREMENTS*

- VMS Operating System

- VAX-11 RSX

OPTIONAL SOFTWARE*

- PDP-11 FORTRAN-77/VAX to RSX

- MACRO-11 (included as part of the prerequisite VAX-11 RSX)

* Refer to the System Support Addendum for availability and required versions of prerequisite/optional software (SSA 26.75.04-x).

ORDERING INFORMATION

Software Licenses: QL-139A*-**
Software Media: QA-139A*-**
Software Documentation: QA-139AA-GZ
Software Product Services: QT-139A*-**

* 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 VMS License Management Facility.

License units for this product are allocated on a CPU-capacity basis.

For more information on the License Management Facility, refer to the VMS Operating System Software Product Description (SPD 25.01.xx) or the VMS 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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System Support Addendum

PRODUCT NAME: PDP-11 Symbolic Debugger/VAX to RSX, Version 2.2   **SSA 26.75.04-A**

HARDWARE REQUIREMENTS

Processors Supported

VAX: VAX 6000 Model 200 Series,
            VAX 6000 Model 300 Series,
            VAX 6000 Model 400 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-11/730, VAX-11/750, VAX-11/780,
            VAX-11/785

Processors Not Supported

VAX-11/725, VAX-11/782, VAX 8842

MicroVAX, VAXstation, and VAXserver processors

Block Space Requirements (Block Cluster Size = 1):

Disk space required for installation:	1,200 blocks (600K bytes)
Disk space required for use (permanent):	650 blocks (325K bytes)

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.

OPTIONAL HARDWARE

For VAX-11/730 Systems:

An R80/RL02 configuration is required for VAX-11/730 systems.

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

• VMS Operating System V5.0-1 - V5.4

• VAX-11 RSX V2.4 - V2.5

VMS Tailoring

For VMS V5.x systems, the following VMS class is required for full functionality of this product:

• VMS Required Saveset

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

OPTIONAL SOFTWARE

• PDP-11 FORTRAN-77/VAX to RSX V5.4

• MACRO-11 V5.6 (included as part of the prerequisite VAX-11 RSX)

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

Tape: 9-track 1600 BPI Magtape (PE), TK50 Streaming Tape

ORDERING INFORMATION

Software Licenses: QL-139A*-**
Software Media: QA-139A*-**
Software Documentation: QA-139AA-GZ
Software Product Services: QT-139A*-**

* 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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