Software Product Description

PRODUCT NAME: **VAX DIBOL, Version 4.1** **SPD 25.49.14**

DESCRIPTION

VAX DIBOL is a high-level procedural language designed specifically for interactive business data processing. It runs under the VMS Operating System, taking full advantage of the system facilities.

VAX DIBOL is a superset of the DIBOL-83 definition. VAX DIBOL is highly compatible with DIBOL implementation on other operating systems including CTS-300, RSTS/E, Micro/RSTS, RSX-11M-PLUS, Micro/RSX.

VAX DIBOL includes support for several tools and utilities on VMS including the VAX Language-Sensitive Editor, VAX Debugger, and the VAX Performance Coverage Analyzer.

VAX DIBOL also includes support for the current American National Standard for DIBOL, as well as the 1988 ANSI DIBOL Standard, X3.165-1988.

VAX DIBOL provides efficient terminal handling and efficient access to the VAX Record Management Services (RMS). RMS provides access to sequential, relative and indexed file organizations. The .INCLUDE directive allows access to common record definitions stored in the VAX Common Data Dictionary (CDD). Other facilities such as VAX DATATRIEVE, VAX DBMS, VAX FMS and VMS Run-Time Library routines are available as external subroutine calls.

VAX DIBOL supports a set of language statements commonly referred to as structured constructs. These statements are designed to complement and facilitate desirable programming practices.

The DIBOL compiler reads a source program and produces a shareable object module. The compiler is capable of producing a source listing with embedded diagnostics and a cross reference listing. Object modules produced by the compiler conform to the VAX Procedure Calling Standard and may be linked with native mode object modules produced by other VAX language processors.

The VAX DIBOL product includes a compiler, a run-time library, external subroutine libraries, a message manager for communicating between programs, a program to monitor the activities of the message manager, and programs that provide access to the VAX SORT using command files that are compatible with other DIBOL products.

VAX DIBOL also includes a menu facility, support for long file names (up to 39 characters in the "name" portion of the filespec) and an ISMCRE subroutine which allows creation of RMS indexed files under DIBOL program control.

The VAX DIBOL compiler generates debug records for use with the VAX Symbolic Debugger, including support for source line debugging.

DIBOL Language Description

A DIBOL program is separated into two major parts: a Data Division and a Procedure Division. The Data Division defines the data that is used by the program. The Procedure Division contains the executable statements.

The first element in most DIBOL statements is an English language verb that characterizes the action to be performed. The other elements of the statement are data names, references to statement labels, and/or expressions. DIBOL statements fall into the following categories:

- Compiler Directives - Provide information about the program to the compiler
- Compiler Declarations - Provide information about the program structure to the compiler
- Data Specification Statements - Define the data used in the program
- Data Manipulation Statements - Perform conversions and value assignments
- Control Statements - Modify the order of statement execution
- Intertask Communications Statements - Allow communication between programs
- Input/Output Statements - Move data between memory and I/O devices

Universal External Subroutine Library

This library contains external subroutines which are available and perform similar functions on all DIBOL implementations.

Operating System-Specific Library

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AE-M383P-TE

This library contains external subroutines which are available and perform similar functions on one or more of the DIBOL implementations. With VAX DIBOL, the library includes routines to perform functions such as position the file pointer within a file, mounting/dismounting disk and tape units, and locking the program into memory.

Run-Time Subroutine Library

This library contains external subroutines which are available only with VAX DIBOL and provide functions which are unique to VAX. The library includes routines to perform functions such as handling mailboxes, converting data from one type to another, and returning device/file information.

HARDWARE REQUIREMENTS

VAX, MicroVAX, or VAXstation configuration as specified in the System Support Addendum (SSA 25.49.14-x).

SOFTWARE REQUIREMENTS*

VMS Operating System

For VAXstation Systems:

VMS Workstation Software

* Refer to the System Support Addendum (SSA 25.49.14-x) for availability and required versions of prerequisite/optional software.

ORDERING INFORMATION

Software Licenses: QL-018A*-**
Software Media: QA-018A*-**
Software Documentation: QA-018AA-GZ
Software Product Services: QT-018A*-**

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

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