

digital

Software Product Description

PRODUCT NAME: DSM-11, Version 1.0

SPD 12.18.2

DESCRIPTION:

DSM-11 is a multiuser data base management system that includes both an operating system and a high-level language—DIGITAL Standard MUMPS, a superset of the American National Standard specification X11.1-1977.

The key features of the Standard MUMPS language are:

- The text-handling capabilities allow the inspection of any piece of data for content (such as particular keywords) or for format (such as letters, numbers, or punctuation characters in a string of text). These capabilities are useful for on-line data entry error checking and correction. Other text-handling capabilities include the ability to concatenate text strings, and to segment text.
- The system's hierarchical file structure allows users to design data file strategies to suit the needs of a particular processing environment easily. Data is stored dynamically—space does not have to be allocated prior to data entry. Dynamic file storage with variable length string subscripts allows the user to modify or expand the existing data base easily.
- Standard MUMPS is a high-level language whose syntax and semantics are oriented towards solving data base problems. Standard MUMPS can be used by programmers with relatively little programming experience. Although full utilization of the complete range of Standard MUMPS capabilities requires programming experience, useful working code can be produced by the novice programmer very quickly.

The operating system provides the following features:

- Many users can access DSM-11 simultaneously and be relatively unaffected by the activities of other users.
- Any data base can be inspected or changed by an authorized user, irrespective of any other interactions with the data base.
- The Standard MUMPS language is implemented as an interpreter. This eliminates the need for any time-consuming compilation step or extra storage space for compiled code in addition to the source code.
- DSM-11 is an on-line program development and data storage and retrieval system. A programmer can very rapidly write, test, debug, or modify a pro-

gram so that a working application is quickly established. A user can enter, inspect, or change data interactively and efficiently.

- System level journaling (to magtape) of data base changes is supported. (Journaling will reduce, by 10 to 25 per cent, the maximum number of jobs in the system whose response times remain the same as when run with no journaling).
- Line printer output is spooled for a single printer (LP11 series).
- Distributed data base processing is supported for point-to-point systems connected by DMC11s.

MINIMUM HARDWARE REQUIRED:

One of the following processor systems:

- PDP-11/34 with KY11-LB programmer's console
- PDP-11/60
- PDP-11/70

that meets the following main memory requirements:

- At least 64K bytes of memory are required to build a minimum system—typically two or three terminals.
- The operating system varies in size between a 40K byte minimum and a 55K byte maximum. The size increases above the minimum for each optional software feature added during system generation.

The optional features selected must not cause the operating system to exceed the 55K byte maximum. Typically, at least one of the following options must be omitted: spooling, job communications, sequential disk processor, DMC-11 support, distributed data base support or magtape support.

One of the following mass storage packages (multiple disk types are not supported):

1. Dual drive RK11 cartridge disk system (unit 0 must be an RK05J) or dual drive RK06 cartridge disk system or
2. Either RM02 or RM03 or RP04 or RP05 or RP06 disk pack or dual drive RK07 cartridge disk controller and drive; and a 9-track magnetic tape transport (with appropriate controller): either TS03, TE10, or TE16.

OPTIONAL HARDWARE:

- Additional main memory up to a system total of 248K bytes on PDP-11/34, /60; up to 1M byte on PDP-11/70.

- Up to eight logical units RK05 (an RK05F disk drive represents two logical units) or
- Up to eight RK06 or RK07 disk drives; or
- Up to eight RP04/5/6 disk drives; or
- Up to eight RM02s or RM03s
- 9-track magnetic tape controller with up to four TS03, TE10, or TE16 transports
- One (1) LP11 or LA11-P line printer (Additional LA11-P line printers can be added at the expense of single line interface terminals, up to a system total of 8 line printers.)
- Additional VT50, VT52, VT55 (no graphics support) or LA36 terminals, with interface as follows:
 1. Up to a total of 80 additional terminals if using DH11 interfaces only or
 2. Up to total of 64 additional terminals if using DZ11s and DL11s (maximum of 16) or
 3. Up to a total of 16 additional terminals if using DL11s
- Modem support provided for DL11-E, DH11-AD, DZ11-A (with BC05D cable) interfaces
- Up to a system total of four DMC11 links (DMC11 local option is limited to a speed of 56K baud). Note that each of these is at the expense of one single line interface for purposes of determining the maximum number of terminals.

PREREQUISITE SOFTWARE:

None

OPTIONAL SOFTWARE:

None

TRAINING CREDITS:

FOUR (4) — Applies only to options that include support services. Consult the latest Educational Services Catalog at your local office for the available courses, course requirements, and guidelines.

SUPPORT CATEGORY:

A — Software Support will be provided as stated in the Software Support Categories Addendum to this SPD.

UPDATE POLICY:

Software Updates, if any, released by DIGITAL during the one (1) year period following installation, will be provided to the customer for a media charge (includes no installation). After the first year, updates, if any, will be made available according to then prevailing DIGITAL policies.

ORDERING INFORMATION:

All binary licensed software, including any subsequent updates, is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions of Sale, which provide in part that the software and any part thereof may be used on only the single CPU on which the software is first installed, and may be copied, in whole or in part (with the proper inclusion of the DIGITAL copyright notice and any DIGITAL proprietary notices on the software) only for use on such CPU. All source licensed software is furnished

only under the terms and conditions of a separate Software Program Sources Agreement between Purchaser and DIGITAL.

Standard options with no support services are only available after the purchase of one supported license. When a software license is ordered without support services, the category of support applicable to such software is Category C.

A single-use license only option is a license to copy the software previously obtained under license, and use such software in accordance with DIGITAL's Standard Terms and Conditions of Sale. The category of support applicable to such copied software is Category C.

The following key (D, E, T, Z) represents the distribution media for the product and must be specified at the end of the order number, e.g., QJ821-AD = binaries on 9-track magnetic tape.

D = 9-track Magnetic Tape
 E = RK05 Disk Cartridge
 T = RK06 Disk Cartridge
 Z = No hardware dependency

Standard Options

- QJ821 -A— Single-use license, binaries, documentation, support services (media: D, E, T)
- QJ821 -C— Single-use license, binaries, documentation, no support services (media: D, E, T)
- QJ821 -D— Single-use license only, no binaries, no documentation, no support services (media: Z)

Upgrade Options

The following option is available as an upgrade kit from MUMPS-11 for use on the same single CPU on which MUMPS-11 is licensed. The license previously granted for MUMPS-11 shall be extended to cover this upgrade.

- QJ826 -C— Binaries, documentation (media: D, E, T)

ADDITIONAL SERVICES:

None

ADDENDUM
SOFTWARE SUPPORT CATEGORIES

Each software product (hereinafter 'SOFTWARE') with a designated Support Category A or B in the applicable Software Product Description (SPD) existing at the time of order will be the current release at the time of delivery and will conform to the SPD. DIGITAL's sole obligation shall be to correct defects (nonconformance of the SOFTWARE to the SPD) as described below. Any SOFTWARE with a designated Support Category C will be furnished on an 'as is' basis.

For SOFTWARE with a designated Support Category A or B, DIGITAL will provide the services set forth below without additional charge.

CATEGORY A

1. Upon notification by customer to the nearest DIGITAL office that the computer system, including all required prerequisite hardware and software, is ready for the installation of the SOFTWARE, DIGITAL will install such SOFTWARE in any location within the contiguous forty-eight (48) United States, the District of Columbia, or a country in which DIGITAL or a subsidiary of DIGITAL has a software service facility. The notification must be received by DIGITAL and the system must be ready for installation within thirty (30) days after the delivery of the SOFTWARE to customer or DIGITAL will have no obligation to install. Installation will consist of: (1) verification that all components of the SOFTWARE have been received by customer, (2) loading the SOFTWARE, and (3) executing a DIGITAL sample procedure.
2. During the ninety (90) day period after installation, if the customer encounters a problem with the current unaltered release of the SOFTWARE which DIGITAL determines to be a defect in the SOFTWARE, DIGITAL will provide the following remedial service (on site where necessary): (1) if the SOFTWARE is inoperable, apply a temporary correction (TC) or make a reasonable attempt to develop an emergency by-pass, and (2) assist the customer to prepare a Software Performance Report (SPR) and submit it to DIGITAL.
3. During the one (1) year period following installation, if the customer encounters a problem with the SOFTWARE which his diagnosis indicates is caused by a SOFTWARE defect, the customer may submit an SPR to DIGITAL. DIGITAL will respond to problems reported in SPRs which are caused by defects in the current unaltered release of the SOFTWARE via the Maintenance Periodical for the SOFTWARE, which reports SPRs received, code corrections, temporary corrections, generally useful emergency by-passes and/or notice of the availability of corrected code. Software Updates, if any, released by DIGITAL during the one (1) year period, will be provided to the customer on DIGITAL's standard distribution media as specified in the applicable SPD. The customer will be charged only for the media on which such updates are provided, unless otherwise stated in the applicable SPD, at DIGITAL's then current media prices.

CATEGORY B

During the one (1) year period following delivery, the services provided to the customer will be the same as set forth in 3 above.

CATEGORY C

SOFTWARE is provided on an 'as is' basis. Any software services, if available, will be provided at the then current charges.

DIGITAL shall have the right to make additional charges for any additional effort required to provide services resulting from customer use of other than current unaltered release of the SOFTWARE operated in accordance with the SPD.