

Software Product Description

PRODUCT NAME: PDP-11 SORT/MERGE, Version 3.1

SPD 12.07.10

DESCRIPTION

PDP-11 SORT/MERGE is a product of Mentec, Inc. and is licensed under Digital Equipment Corporation's Standard Terms and Conditions.

PDP-11 SORT/MERGE is a utility for the RSX-11M and RSX-11M-PLUS Operating Systems. It can accept as input up to 10 RMS-11 formatted files and will produce as output one reordered RMS-11 formatted file. Records may be sequenced in ascending or descending order by as many as 16 key fields with a maximum total key size of 512 bytes.

Features

Types of Record Formats

- Fixed length
- Variable Length
- Variable with fixed control (VFC)
- RMS stream

Types of File Organizations

- Sequential
- Relative
- Indexed

(If more than one input file is used, each file may have a different organization and record format.)

Types of Keys

- Character
- Single and double precision floating
- Decimal
 - Unsigned zoned
 - Sign separate trailing
 - Sign separate leading
 - Sign overpunched leading
 - DIBOL overpunched trailing
 - Packed-decimal

- ASCII-zoned
- Signed binary
- Unsigned binary
- Signed 2's complement binary
- FORTRAN-77 ASCII floating

Sorting Processes

- Record sort
- Tag sort
- Index sort
- Address routing sort

Collating Sequences

- ASCII
- EBCDIC
- Multinational (8-bit)
- User-defined

Changes to Collating Sequences

- Shifting character positions
- Ignoring characters
- Equating characters
- Treat a single character as two
- Treat two characters as one

Additional Functionality

- Record selection (OMIT or INCLUDE)
- Record formatting for output records
- Conditional keys and data for multiple record configuration

Commands to PDP-11 SORT/MERGE may be issued interactively via the standard command line interface or through the specification file created by the user. PDP-11 SORT/MERGE routines are used directly by COBOL-81 via the COBOL SORT and MERGE statements.

PDP-11 SORT/MERGE includes a package of callable subroutines which allow many other PDP-11 languages to execute a sort or merge. These subroutines accept either records one at a time from the host program or file specifications for input. The output may be either records one at a time or a complete file, regardless of the input mode.

This callable package also allows the user to specify several user-written routines that will be used instead of the predefined PDP-11 SORT/MERGE routines. These routines include an equal-key callback, to be invoked whenever two keys are found to be equal, a user-defined key comparison algorithm, a user-defined warning routine to be invoked when non-fatal errors occur, and a user-defined input routine for the merge record interface.

HARDWARE REQUIREMENTS

Any valid RSX-11M or RSX-11M-PLUS system configuration with the following:

- 700 free blocks of contiguous storage space for Auto-install, if Auto-install is not already installed on your system.
- 1,000 free blocks of storage space on the system device. Of this, you need 390 contiguous blocks for SORT task and 370 contiguous blocks for MERGE task.
- 2,100 free blocks on your login device for installation files. If your login device is the system device, you will need 3,100 blocks total.

SOFTWARE REQUIREMENTS

RSX-11
M or RSX-11M-PLUS Operating System

Refer to the the RSX-11M and RSX-11M-PLUS Software Product Descriptions (SPD 14.35.xx and SPD 14.70.xx) for the required versions.

Note: RMS-11 must be installed under the RSX-11M Operating System.

OPTIONAL SOFTWARE

None

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product may be different from the minimum requirements of the current version.

DISTRIBUTION MEDIA

The distribution media codes are described below. Specify the desired Media Code at the end of the Order Number (e.g. QP602-H5 = binaries on TK50 Tape Cartridge).

5 = TK50 Tape Cartridge
M = 1600 BPI Magtape
Z = No hardware dependency

ORDERING INFORMATION

License Options:

Single-Use License: QP602-UZ

Media and Service Options:

Software Media/Documentation: QP602-H*

Software Documentation: QP602-GZ

Software Product Services: QP602-**

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

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