

Specifications

Series/1 Event Driven Executive Sort/Merge 5719-SM2

The Series/1 Event Driven Executive Sort/Merge program product handles the sorting and merging of records from up to eight input data sets into one output data set in either ascending or descending order. The user specifies one or more control fields in the records to be sorted; the program then compares the control fields to determine the relative sequence of the records.

The program provides four different sort/merge types:

- Address Sort
- Record Sort
- Record Summary Sort
- Merge

Address Sort:

Address sort produces an output data set of four-byte relative record numbers, one for each record in the input data set. A user program can then use the record numbers to access the records in the input data set in the ascending or descending sequence specified for the sort.

Record Sort:

Record sort produces an output data set of records sorted in either ascending or descending order. The user determines the format and content of the sorted output record. The output record can be comprised of either the entire input record or one or more fields in the input record.

Record Summary Sort:

Record summary sort accumulates totals from one or more user-specified fields (called summary fields) in the input records and provides one summary record for each set of input records having control fields with the same value (for example, in an inventory file, records with the same part number).

The sorted summary records contain the totals for each summary field specified; in addition, they can

also contain the same user-specified data as allowed for record sort.

Merge:

Merge combines up to eight previously sorted data sets, collating them in their previous ascending or descending sequence, into one consecutive output data set.

The merged record can be comprised of the entire input record and, at the option of the user, the control fields specified for the merge.

Highlights:

In addition to performing the sort and merge operations, the program provides a variety of other functions, allowing the user to:

- Use any disk, tape, or diskette device supported by the Event Driven Executive system.
- Sort or merge data sets having consecutive or indexed organizations. To use an indexed organization, the Indexed Access Method Program Product (Program Number 5719-AM3) must be installed.
- Sort or merge variable or fixed records in unblocked or blocked format.
- Sort up to eight input data sets for each sort/merge job.
- Selectively sort records from the same input data set by including or omitting specified categories of records.
- Specify the insertion of characters into the records to be sorted, either to control the sort or to appear in the sorted output as editorial characters, or both.
- Specify either the Extended Binary Coded Decimal Interchange Code (EBCDIC) or the American National Standard Code for Information Interchange (ASCII) be used in collating the records.
- Specify that the program deviate from either ASCII or EBCDIC, allowing the rearrangement

- of the collating sequence and the addition of characters not present in either code.
- Invoke sort/merge using one of three system facilities: (1) the \$L operator command from a Series/1 terminal (2) as a batch job using the \$JOBUTIL utility and (3) the LOAD instruction from a program written in the Event Driven Executive language or Series/1 assembler language.
- Write routines, which interface with sort/merge program exits, to handle I/O errors and to process records both before and after the sort.
- Obtain statistics on the number of input records read from the input data set, written to the output data set, and processed by the user-exit routines.

Specified Operating Environment

Machine Requirements

A minimum hardware configuration as supported by the Event Driven Executive system is required as follows:

- A Series/1 processor
- A disk or diskette device
- An operator display station

Sort/Merge requires a minimum of 16K bytes of main storage for execution. This excludes the amount needed by the Event Driven Executive system and user programs that initiate sort/merge.

Programming Requirements

The following programming configuration is required to install and execute sort/merge:

• IBM Series/1 Event Driven Executive Basic Supervisor and Emulator (5719-XS1)

• IBM Series/1 Event Driven Executive Utilities (5719-UT3)

If data sets with indexed data set organizations are to be processed, the IBM Series/1 Event Driven Executive Indexed Access Method Program Product (Program Number 5719-AM3) must be installed.

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Restricted materials—No. All modules of this licensed program are available with source licensed program materials.

Supplemental Terms

Testing Period

The testing period for the Basic License is one month.

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Not applicable. A separate license is required for each machine on which the licensed program will be used.

Usage License

Not applicable.

Type/Duration of Program Services

Central Service, until discontinued by IBM with a minimum of six months written notice.

Warranty

The Series/1 Event Driven Executive Sort/Merge will conform, when shipped to the Customer, to its Licensed Program Specifications which are in effect for it at that time, provided it is properly used in a Specified Operating Environment. If the Customer believes there is a defect in the program such that it does not meet its Licensed Program Specifications, the Customer must notify IBM while Program Services are available for the program. IBM does not warrant that the functions contained in the program will meet the Customer's requirements or will operate in the combinations which may be selected for use by the Customer, or that the operation of the program will be uninterrupted or error free or that all program defects will be corrected.

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