

P R O G R A M P R O D U C T S P E C I F I C A T I O N

BEM — OS/3
Basic Editor Monitor System
Type Number 6509-00

SECTION I

The SPERRY UNIVAC Basic Editor Monitor System (BEM) has been designed for operation on SPERRY UNIVAC Series 90 Systems which are operational under the OS/3 Operating System.

Using UNISCOPE 100 or 200 Display Terminals, or other Teletype¹ compatible terminals, as input devices to the BEM System, a user is able to accomplish tasks in an online, interactive mode of operation that, prior to BEM, were relegated to relatively slow batch processing techniques.

The BEM System can be used to accomplish functions such as the printing and punching of elements from a library file, obtaining a directory listing of a library, and executing certain interactive application programs like EDT, BASIC, or RSP.

When the EDT (Editor) program is used in conjunction with the BEM System, the user's capabilities are greatly increased and allows for the creation and insertion of source-level statements to both programs and text, and for the modification and updating of existing library elements, etc.

Using the BASIC (Beginner's All-Purpose Symbolic Instruction Code) language, an interactive program with the BEM System further enhances the capabilities available to the user. It allows new programs, written in the BASIC language, to be entered through the display terminals in an online mode, and for the execution of these new or existing programs using commands also entered through the online terminals.

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RSP provides the terminal user with interactive access to all of the features of the OS/3 Spool file. The capabilities of the UNISCOPE terminal are utilized to simplify command entry. At each stage of operation, the list of applicable commands is displayed on the screen in a menu-type list; the user need only skip to the desired command, enter any options, and transmit it to RSP.

System Features

The BEM monitor provides the interface to the terminal devices, permanent files, workspace, and application subsystems. Error recovery is provided for terminal-related errors with both immediate and delayed recovery procedures. Permanent file and workspace (disk) access errors are nonfatal and result in error messages displayed at the originating terminal.

Permanent files required by terminal users are validated by BEM to maintain file security. Often used files may be cataloged to simplify file specifications. Passwords are also provided for user files for read/write protection. Permanent files, accessible under BEM, must be in OS/3 Librarian format.

Both disk and main storage workspaces are shared by all users of the system and controlled by workspace management routines within BEM. This space is obtained from a common space pool. All application subsystems are re-entrant and are rolled in and out of main storage as needed. Only one copy of any

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application subsystem is ever in memory at any one time, regardless of the number of terminals the subsystem is supporting.

BEM also features a batch interface. This feature permits users to submit BEM sessions on punched cards instead of using an interactive terminal. Users may also submit files containing BEM, EDT, or BASIC commands for execution in a background mode. The output from a batch session, which includes a header page, is printed on the control site printer.

Another important part of BEM is accounting and security. Using these features a site administrator can control and track user access to the system. The site administrator identifies system facility restrictions in the user-id, account-number, and password. When this information is keyed-in, at the beginning of a terminal session, at logon time, the security feature checks for any system restrictions. The security feature can be used to restrict the use of individual commands or entire application programs.

The accounting feature is used at the end of a terminal session. When a terminal session is over, system usage statistics are logged and can be processed at any time by site personnel.

Terminal Functions

The BEM user interacts with the system through remote display terminals such as the UNISCOPE, DCT 1000, DCT 500, or other Teletype compatible terminals. Commands are available to display system status information, access elements in permanent files, execute one of the BEM applications, or to submit jobs for execution at the main computer site.

BEM status information available at the terminal includes a list of users of the BEM System, and a display of the resources available to these users. Additional status information such as jobs being run at the main site, and disk volumes currently on the 90/30 System may also be requested.

Permanent file elements may be accessed through BEM to obtain either a hard-copy listing or punched card output. Commands to list the names of elements or delete specific elements have also been provided.

BEM users may request that application programs such as EDT, BASIC, or RSP be initiated for terminal use or may schedule jobs to be run at the main site.

Command Syntax

The BEM System provides commands to enable the user to monitor and direct execution of jobs by the OS/3 System (EXEC, RUN, DISPLAY, etc.), display and delete elements (FSTATUS, PRINT, PUNCH, DELETE, etc.), and display system status or resources (STATUS, DISPLAY, etc.).

A HELP function has also been implemented throughout the entire system to provide the terminal user with additional information about any error encountered. This is particularly useful for the first time user in that the HELP function often suggests a corrective action.

Console Controls

The 90/30 System console operator has at his disposal commands to monitor and control BEM System operation. Status information may be requested to determine which terminals are in use and the amount of resources allocated to each. The operator may also restrict system use by not allowing users to begin new sessions, or may remove active users from the system as necessary.

Two-way communication with a single user or a group of users is available from the console for sending informational messages and answering questions.

Hardware and Software Requirements

BEM is designed for use on a SPERRY UNIVAC 90/30 System, operational under the OS/3 Operating System, with a minimum of 65K of memory. The minimal peripheral device requirements are:

- Two disk drives
- A communication adapter with at least one terminal device
- The extended micro-logic feature

Programming Considerations

The BEM System and application programs are furnished in library format as load modules, ready to execute.

The system can be run with a general startup job control (provided in the BEM documentation), or can be tailored by the user to a specific site by changing the general job control stream. All configuration related parameters are stated in the execution job control.

Before BEM can be run, an ICAM system must be generated.

SECTION II

Customer Education

Sperry Univac makes available customer education related to this Program Product. Course availability and schedules are contained in the published course catalog. Charges for courses will be at the then prevailing rates. Customers should contact their local Sperry Univac representative for enrollment procedures.

Program Product Support

Sperry Univac will endeavor to correct any significant error in an unaltered current release of the Program Product, which the customer brings to the attention of Sperry Univac in accordance with established correction procedures. Sperry Univac does not represent or warrant that all errors will be corrected.

This error correction service may result, from time-to-time, in update releases which the customer will install. Sperry Univac reserves the right to alter the classification of this Program Product to reflect changes in policy or support requirements.

Ordering Information

This Program Product and its associated documentation may be leased from Sperry Univac at separately stated lease charges. Upon execution of a Supplemental Lease for Program Products (Form UD1-1306 or its equivalent) for this Program Product, the following will be provided:

1. OS/3 Librarian format magnetic tape containing:
 - BEM load modules for execution.
 - A test program for the Program Product Validation Aid.
2. One copy of the associated documentation:
 - *BEM — OS/3 Basic Editor Monitor, User Reference Manual* UA-0139
 - *BEM — OS/3 Operator Command Summary Card* UA-0189
 - Installation Memorandum

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