


```

PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PP      PP      RR      RR      EE      FF      II      XX      XX
PP      PP      RR      RR      EE      FF      II      XX      XX
PP      PP      RR      RR      EE      FF      II      XX      XX
PP      PP      RR      RR      EE      FF      II      XX      XX
PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PPPPPPPP      RRRRRRRR      EEEEEEEEEEE      FFFFFFFFFFF      IIIIIII      XX      XX
PP      RR      RR      EE      FF      II      XX      XX
PP      RR      RR      EE      FF      II      XX      XX
PP      RR      RR      EE      FF      II      XX      XX
PP      RR      RR      EE      FF      II      XX      XX
PP      RR      RR      EEEEEEEEEEE      FFF      IIIIIII      XX      XX
PP      RR      RR      EEEEEEEEEEE      FF      IIIIIII      XX      XX

```

```

RRRRRRRR      EEEEEEEEEEE      QQQQQQ
RRRRRRRR      EEEEEEEEEEE      QQQQQQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RRRRRRRR      EEEEEEEEEEE      QQ      QQ
RRRRRRRR      EEEEEEEEEEE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EE      QQ      QQ
RR      RR      EEEEEEEEEEE      QQQQ      QQ
RR      RR      EEEEEEEEEEE      QQQQ      QQ

```

Require file for the Library access routines

Version: 'V04-000'

```

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FACILITY: Library access procedures

ABSTRACT:

The VAX/VMS librarian procedures implement a standard access method to libraries through a shared, common procedure set.

ENVIRONMENT:

VAX native, user mode.

--

AUTHOR: Benn Schreiber, Tim Halvorsen

CREATION DATE: June-1979

MODIFIED BY:

--

```
Define VMS block structures
STRUCTURE
  BBLOCK [O, P, S, E; N] =
    [N]
    (BBLOCK+O)<P,S,E>;

Define routine linkages
LINKAGE
  JSB_0 = JSB,
  JSB_1 = JSB (REGISTER = 0),
  JSB_2 = JSB (REGISTER = 0, REGISTER = 1),
  JSB_3 = JSB (REGISTER = 0, REGISTER = 1, REGISTER = 2);

Useful macros
MACRO
Macro to generate a pointer to a counted string
  CSTRING(String) = UPLIT BYTE(%CHARCOUNT(String),String)%,
Macro to describe a string
  STRINGDESC(String) = %CHARCOUNT(String), UPLIT(%ASCII String)%,
Macro to generate a quadword string descriptor
  DESCRIPTOR(String) = BBLOCK [dsc$c_s_bln] INITIAL(STRINGDESC(String))%,
Macro to generate a counted string
  COUNTEDSTRING(String) = VECTOR [%CHARCOUNT (String)+1, BYTE] INITIAL (BYTE(%CHARCOUNT(String),%ASCII String ))%,
Macro to execute a given sequence of commands and return if any error
perform (command, errorcode) =
  BEGIN
  LOCAL
    status;
  status = command;
  IF NOT .status          ! If error detected,
  THEN
    %IF %LENGTH GTR 1    ! If errorcode arg is present
    %THEN
      SIGNAL (errorcode, %REMAINING, .status);
    %ELSE
      RETURN .status;    ! then return with error
    %FI
  END%,
Macro to execute a command which may have and RMS error return
involving both a status and STV value
```

```

rms_perform (command, errorcode, rms_stv) =
BEGIN
LOCAL
  status;
status = command;
IF NOT .status              ! If error detected,
THEN
  %IF %LENGTH GTR 1        ! If errorcode arg is present
  %THEN
    SIGNAL (errorcode, %REMAINING, .status, rms_stv);
  %ELSE
    RETURN .status;        ! then return with error
  %FI
END%;
```

```

: Macros to ease typing
```

```

MACRO
SHORT = UNSIGNED(6)%,      ! Short attribute
BYTLIT = UNSIGNED(8)%,    ! Unsigned byte attribute
WORDLIT = UNSIGNED(16)%;  ! Unsigned word attribute
```

```

: Equated symbols
```

```

LITERAL
SYMSC_MAXLNG = 31,        ! Max length of symbols in object/macro libs
SYMSC_SHORTSYM = 15,     ! Max length of short symbols (help library)
TRUE = 1,                ! Boolean TRUE
FALSE = 0;               ! Boolean FALSE
```

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A dense grid of technical diagrams and data tables, including sections labeled:

- CACHE LIS
- DATA LIS
- LBR
- LBR SHR MAP
- OLD LBFMT MDL
- DUMP LIS
- LBR MDL
- PREFIX REQ
- LBRUSR MDL

The diagrams consist of various flowcharts, data tables, and schematic representations of system components and their interactions.