VMSLIB

FILEID**SYITABLE

```
SSSSSSSS  YY      YY    IIIIII   TTTTTTTTTT   AAAAAA    BBBBBBBB   LL           EEEEEEEEEE
SSSSSSSS  YY      YY    IIIIII   TTTTTTTTTT   AAAAAA    BBBBBBBB   LL           EEEEEEEEEE
SS        YY      YY      II         TT      AA    AA   BB    BB   LL           EE
SS        YY      YY      II         TT      AA    AA   BB    BB   LL           EE
SS          YY  YY        II         TT      AA    AA   BB    BB   LL           EE
SS          YY  YY        II         TT      AA    AA   BB    BB   LL           EE
 SSSSSS       YY          II         TT      AA    AA   BBBBBBBB   LL           EEEEEEE
 SSSSSS       YY          II         TT      AA    AA   BBBBBBBB   LL           EEEEEEE
      SS      YY          II         TT    AAAAAAAAAA   BB    BB   LL           EE
      SS      YY          II         TT    AAAAAAAAAA   BB    BB   LL           EE
      SS      YY          II         TT      AA    AA   BB    BB   LL           EE
      SS      YY          II         TT      AA    AA   BB    BB   LL           EE
SSSSSSSS      YY        IIIIII       TT      AA    AA   BBBBBBBB   LLLLLLLLLL   EEEEEEEEEE    ....
SSSSSSSS      YY        IIIIII       TT      AA    AA   BBBBBBBB   LLLLLLLLLL   EEEEEEEEEE    ....
```

```
MM      MM    AAAAAA     RRRRRRRR
MM      MM    AAAAAA     RRRRRRRR
MMMM  MMMM   AA    AA    RR    RR
MMMM  MMMM   AA    AA    RR    RR
MM  MM  MM   AA    AA    RR    RR
MM  MM  MM   AA    AA    RR    RR
MM      MM   AA    AA    RRRRRRRR
MM      MM   AA    AA    RRRRRRRR
MM      MM  AAAAAAAAAA   RR  RR
MM      MM  AAAAAAAAAA   RR  RR
MM      MM   AA    AA    RR    RR
MM      MM   AA    AA    RR    RR
MM      MM   AA    AA    RR      RR
MM      MM   AA    AA    RR      RR
```

```
      .IDENT  'V04-000'

;
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;*******************************************************************
;
;
; ENVIRONMENT: prefix file
;
; AUTHOR: Ken Henderson          CREATION DATE: 15 Feb 1983
;
; MODIFIED BY:
;
;       V03-011 CWH3011          CW Hoobs              24-Jul-1984
;               Add WS_OPA0 bit, workstation using QVSS console.
;
;       V03-010 WMC0003          Wayne Cardoza         2-Feb-1984
;               Need at least one bit set in PAGEFILE_PAGE
;
;       V03-009 WMC0002          Wayne Cardoza         31-Jan-1984
;               Add emulated instruction flags.
;
;       V03-008 WMC0001          Wayne Cardoza         01-JAN-1984
;               Add page and swap file data.
;
;       V03-007 KFH0006          Ken Henderson         18 Aug 1983
;               Change SCS EXISTS to boolean
;               Changed SID back to DECNUM
;
;       V03-006 KFH0005          Ken Henderson         28 Jul 1983
;               Add SCS$GA_EXISTS, delete SERIAL, MFGPLANT,
;               HWREVISION, ALLOCLASS and the login security params
;
;       V03-005 GAS0142          Gerry Smith           23-Jun-1983
;               Add ALLOCLASS, and the login security parameters
```

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        V03-004 KFH0004   Ken Henderson   16 Jun 1983
                Changed SID to HEXNUM, NODE_AREA and
                NODE_NUMBER to 4 bytes long.

        V03-003 KFH0003   Ken Henderson   21 May 1983
                Added cluster item-codes.

        V03-002 KFH0002   Ken Henderson   8 Mar 1983
                Added BOOTTIME item-code.

        V03-001 KFH0001   Ken Henderson   22 Feb 1983
                Added SERIAL, MFGPLANT, and HWREVISION
                item-codes.

```
        .MACRO  SYI_ITEMTABLES

;++
; ABSTRACT:
;
; SYI_ITEMTABLES macro
;
; This macro expands to generate multiple calls to the SYI_ITEM_CODE macro,
; which must be previously locally defined in the module which invokes
; SYI_GENERATE_TABLE. The SYI_GENERATE_TABLE macro calls SYI_ITEMTABLES
; once - to define the GETSYI item-codes that are Not SYSBOOT parameters.
;
; The parameters that are passed to the SYI_ITEM_CODE macro follow:
;
;       BASE            determines which EXE$GETSYI table to use. It's
;                       tables correspond roughly to the source of the data.
;                       The legal parameter values here are: EXE, FLD
;
;       NAME            is the name of the SYS$GETSYI item-code.
;                       The legal parameter values here are determined by
;                       the $SYIDEF macro (in [VMSLIB.SRC]STARDEFQZ.SDL).
;
;       SOURCE          is either an address of a cell, or a processor
;                       register number (as determined by the BASE parameter).
;
;       DTYPE           is both a datatype and a usage indicator.
;                       The legal values and examples for this parameter follow:
;
;                       STDTIM          (CTL$GQ_LOGIN)          64 bit time
;                       STDUIC          (PCB$L_UIC)             user ID code
;                       HEXNUM          (CTL$AQ_EXCVEC)         hex number
;                       HEXSTR          (CLUB$B_FSYSID)         hex string
;                       DECNUM          (PCB$L_BYTLM)           decimal number
;                       PRVMSK          (PHD$Q_PRIVMSK)         privilege mask
;                       STRDSC          (CTL$GL_IMGHDRBF)       string descr
;                       CNTSTR          (PCB$T_TERMINAL)        counted string
;                       PADSTR          (JIB$T_ACCOUNT)         blank padded str
;                       BITVEC          (PCB$L_STS)             bit vector
;                       BITVAL          (JIB$V_TERMDIAL)        boolean quantity
;
;       BITPOS          is the bit position for FLD data items.
;
;       BITSIZ          is the bit size of FLD data items.
;
;       OUTLEN          is used by EXE$GETSYI in fetching information (number
;                       of bytes).
;
;--
```

UT

```
;BASE,  NAME,                SOURCE,        DTYPE,  BITPOS, BITSIZ, OUTLEN
;

; 64-bit abs. system at system boot
SYI_ITEM_CODE -
EXE;    BOOTTIME,           EXE$GQ_BOOTTIME, STDTIM, 0,      0,      8

; software version number
SYI_ITEM_CODE -
EXE;    VERSION,            SYS$GQ_VERSION, PADSTR, 0,      0,      8

; system ID register
SYI_ITEM_CODE -
EXE;    SID,                PR$_SID,        DECNUM, 0,      0,      4

; total nodes in cluster
SYI_ITEM_CODE -
EXE;    CLUSTER_NODES, CLUB$W_NODES,        DECNUM, 0,      0,      2

; total votes in cluster
SYI_ITEM_CODE -
EXE;    CLUSTER_VOTES, CLUB$W_VOTES,        DECNUM, 0,      0,      2

; total quorum in cluster
SYI_ITEM_CODE -
EXE;    CLUSTER_QUORUM, CLUB$W_QUORUM,      DECNUM, 0,      0,      2

; founding system id
SYI_ITEM_CODE -
EXE;    CLUSTER_FSYSID, CLUB$B_FSYSID,      HEXNUM, 0,      0,      6

; founding boottime
SYI_ITEM_CODE -
EXE;    CLUSTER_FTIME, CLUB$Q_FTIME,        STDTIM, 0,      0,      8

; cluster membership status
SYI_ITEM_CODE -
EXE;    CLUSTER_MEMBER, CLU$GL_CLUB,        BITVAL, 0,      0,      1


;BASE,  NAME,                SOURCE,        DTYPE,  BITPOS, BITSIZ, OUTLEN
;

; CSID of target
SYI_ITEM_CODE -
EXE;    NODE_CSID,          CSB$L_CSID,     HEXNUM, 0,      0,      4

; votes of target
SYI_ITEM_CODE -
EXE;    NODE_VOTES,         CSB$W_VOTES,    DECNUM, 0,      0,      2

; quorum of target
SYI_ITEM_CODE -
EXE;    NODE_QUORUM,        CSB$W_QUORUM,   DECNUM, 0,      0,      2
```

```
; system id of target
SYI_ITEM_CODE -
EXE;   NODE_SYSTEMID, SB$B_SYSTEMID, HEXSTR, 0,      0,      6

; decnet area of target
SYI_ITEM_CODE -
FLD;   NODE_AREA,      SB$B_SYSTEMID, DECNUM, 10,     6,      4

; decnet number of target
SYI_ITEM_CODE -
FLD;   NODE_NUMBER,    SB$B_SYSTEMID, DECNUM, 0,      10,     4

; S/W incarnation of target
SYI_ITEM_CODE -
EXE;   NODE_SWINCARN, SB$Q_SWINCARN, HEXSTR, 0,      0,      8

; S/W type of target
SYI_ITEM_CODE -
EXE;   NODE_SWTYPE,    SB$T_SWTYPE,   PADSTR, 0,      0,      4

; S/W version of target
SYI_ITEM_CODE -
EXE;   NODE_SWVERS,    SB$T_SWVERS,   PADSTR, 0,      0,      4

; H/W type of target
SYI_ITEM_CODE -
EXE;   NODE_HWTYPE,    SB$T_HWTYPE,   PADSTR, 0,      0,      4

; H/W version of target
SYI_ITEM_CODE -
EXE;   NODE_HWVERS,    SB$B_HWVERS,   HEXSTR, 0,      0,      12

; Nodename of target
SYI_ITEM_CODE -
EXE;   NODENAME,       SB$T_NODENAME, CNTSTR, 0,      0,      16

; Architecture Flags
SYI_ITEM_CODE -
EXE;   ARCHFLAG,       EXE$GL_ARCHFLAG, BITVEC, 0,      0,      4
SYI_ITEM_CODE -
FLD; CHARACTER_EMULATED, EXE$GL_ARCHFLAG, BITVAL, ARC$V_CHAR_EMUL, 1, 1
SYI_ITEM_CODE -
FLD; DECIMAL_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARC$V_DCML_EMUL, 1, 1
SYI_ITEM_CODE -
FLD; D_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARC$V_DFLT_EMUL, 1, 1
SYI_ITEM_CODE -
FLD; F_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARC$V_FFLT_EMUL, 1, 1
SYI_ITEM_CODE -
FLD; G_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARC$V_GFLT_EMUL, 1, 1
SYI_ITEM_CODE -
FLD; H_FLOAT_EMULATED,  EXE$GL_ARCHFLAG, BITVAL, ARC$V_HFLT_EMUL, 1, 1

; Workstation flags
SYI_ITEM_CODE -
FLD; WS_OPA0,           EXE$GL_WSFLAGS,  BITVAL, EXE$V_OPA0, 1, 1
```

```
;
;BASE,  NAME,              SOURCE,         DTYPE,  BITPOS, BITSIZ, OUTLEN
;
; CPU type
SYI_ITEM_CODE -
FLD,    CPU,              PR$_SID,        DECNUM  PR$V_SID_TYPE,  PR$S_SID_TYPE,  4

; Flag to show whether SCS is loaded
SYI_ITEM_CODE -
EXE,    SCS_EXISTS,       SCS$GA_EXISTS,  BITVAL, 0,      0,      1

; Total size of page files
SYI_ITEM_CODE -
EXE,    PAGEFILE_PAGE,    4+0,            DECNUM, 0,      0,      4

; Total size of swap files
SYI_ITEM_CODE -
EXE,    SWAPFILE_PAGE,    4+1,            DECNUM, 0,      0,      4

; Free pagefile pages
SYI_ITEM_CODE -
EXE,    PAGEFILE_FREE,    4+2,            DECNUM, 0,      0,      4

; Free swapfile pages
SYI_ITEM_CODE -
EXE,    SWAPFILE_FREE,    4+3,            DECNUM, 0,      0,      4

        .ENDM   SYI_ITEMTABLES
```

CLIMAC REQ

TPAMAC REQ

UTLDEFB B32

STARMISC MAR

EODEFM MAR

TPAMAR MAR

CALBYNAME LIS

SCRPROLOG REQ

STARLET SDL

SCRTCB REQ

OFFSET MAR

SYITABLE MAR

EODEFB B32

JPITABLE MAR

DVITABLE MAR

UTLDEFM MAR

B32MSG LIS

SCRTERM REQ

RSXLBLDF MAR

C74MSG LIS