```
EEEEEEEEEEEEEEE  VVV         VVV  LLL
EEEEEEEEEEEEEEE  VVV         VVV  LLL
EEEEEEEEEEEEEEE  VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEEEEEEEEEEE     VVV         VVV  LLL
EEEEEEEEEEEE     VVV         VVV  LLL
EEEEEEEEEEEE     VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE              VVV         VVV  LLL
EEE                 VVV   VVV     LLL
EEE                 VVV   VVV     LLL
EEE                 VVV   VVV     LLL
EEEEEEEEEEEEEEE        VVV        LLLLLLLLLLLLLLL
EEEEEEEEEEEEEEE        VVV        LLLLLLLLLLLLLLL
EEEEEEEEEEEEEEE        VVV        LLLLLLLLLLLLLLL
```

```
_$25

Valu
----
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
0200
```

FILEID**EVCDEF

```
EEEEEEEEEE  VV      VV    CCCCCCCC  DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF
EEEEEEEEEE  VV      VV    CCCCCCCC  DDDDDDDD    EEEEEEEEEE  FFFFFFFFFF
EE          VV      VV  CC          DD      DD  EE          FF
EE          VV      VV  CC          DD      DD  EE          FF
EE          VV      VV  CC          DD      DD  EE          FF
EE          VV      VV  CC          DD      DD  EE          FF
EEEEEEEE    VV      VV  CC          DD      DD  EEEEEEEE    FFFFFFFF
EEEEEEEE    VV      VV  CC          DD      DD  EEEEEEEE    FFFFFFFF
EE          VV      VV  CC          DD      DD  EE          FF
EE          VV      VV  CC          DD      DD  EE          FF
EE            VV  VV    CC          DD      DD  EE          FF          ....
EE            VV  VV    CC          DD      DD  EE          FF          ....
EEEEEEEEEE      VV        CCCCCCCC  DDDDDDDD    EEEEEEEEEE  FF          ....
EEEEEEEEEE      VV        CCCCCCCC  DDDDDDDD    EEEEEEEEEE  FF          ....

MM      MM  DDDDDDDD    LL
MM      MM  DDDDDDDD    LL
MMMM  MMMM  DD      DD  LL
MMMM  MMMM  DD      DD  LL
MM  MM  MM  DD      DD  LL
MM  MM  MM  DD      DD  LL
MM      MM  DD      DD  LL
MM      MM  DD      DD  LL
MM      MM  DD      DD  LL
MM      MM  DD      DD  LL
MM      MM  DD      DD  LL
MM      MM  DD      DD  LL
MM      MM  DDDDDDDD    LLLLLLLLLL
MM      MM  DDDDDDDD    LLLLLLLLLL
```

```
;       .TITLE  EVCDEF          Network Event Logger Definitions
;       .IDENT  'V04-000'

;
;*****************************************************************************
;*                                                                           *
;*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
;*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                   *
;*  ALL RIGHTS RESERVED.                                                     *
;*                                                                           *
;*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED    *
;*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE    *
;*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER    *
;*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY    *
;*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY    *
;*  TRANSFERRED.                                                             *
;*                                                                           *
;*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE    *
;*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT    *
;*  CORPORATION.                                                             *
;*                                                                           *
;*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS    *
;*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
;*                                                                           *
;*                                                                           *
;*****************************************************************************
;

;++
; FACILITY:     DECnet-VAX Network Management Components
;               for Event Logging
;
; ABSTRACT:
;
;       Common Definitions for Network Management Event Logging
;       These definitions are used by other components of the
;       network.
;
; ENVIRONMENT:  VAX/VMS Operating System
;
; AUTHOR:       Darrell Duffy, Tim Halvorsen, 13-June-1980
;
; MODIFIED BY:
;
;       V011    MKP0001         Kathy Perko             12-June-1984
;               Add Ethernet address to Management layer events.
;
;       V010    TMH0010         Tim Halvorsen           26-Apr-1983
;               Add "verification password required from Phase III node"
;               and "dropped by adjacent node" Routing Layer reasons.
;
;       V009    TMH0009         Tim Halvorsen           08-Apr-1983
;               Make ECOs approved during the March 1983 DRG meetings.
;
;       V008    TMH0008         Tim Halvorsen           22-Nov-1982
```

```
;               Add "area" to the list of event sources.
;               Add new DTE parameter for event class 0.
;
;       V007    TMH0007         Tim Halvorsen           26-Sep-1982
;               Add VMS-specific events for process creation/termination.
;               Add "module" to the list of event sources.
;               Add DTE up/down events, newly added to DNA NM.
;
;       V006    TMH0006         Tim Halvorsen           27-Jul-1982
;               Add Transport Phase IV events, and new "adjacent node"
;               transport layer event parameter.
;
;       V005    TMH0005         Tim Halvorsen           05-Apr-1982
;               Fix comments describing raw event buffer.
;               Fix typo in SCL reason code symbol.
;
;       V004    TMH0004         Tim Halvorsen           11-Nov-1981
;               Add Duplicate Phase II transport initialization event.
;
;       V003    TMH0003         Tim Halvorsen           05-Aug-1981
;               Add DAP CRC VMS-specific event
;
;       V002    TMH0002         Tim Halvorsen           07-Jul-1981
;               Add new 2.2 events.
;
;       V001    TMH0001         Tim Halvorsen           19-Dec-1980
;               Make line and node ID codes conform to the DNA entity
;               numbering scheme.
;--
```

```
EVLD

;
;
;
;
;
;
;
$STR
F
F
F
F
F
F
F
F
F
L
E
;
;
;
;
;
$STR
F
F
F
F
F
F
F
F
F
F
F
F
F
F
F
F
V
F
F
F
F
L
```

```
;
;       Symbols for event codes
;

        $STRUCT EVC

;
;       Symbols for event classes
;

        C <

        CLS_NMA, 0                      ; Network management
        CLS_APL, 1                      ; Application layer
        CLS_SCL, 2                      ; Session control layer
        CLS_NSL, 3                      ; Network services layer
        CLS_TPL, 4                      ; Transport layer
        CLS_DLL, 5                      ; Data link layer
        CLS_PLL, 6                      ; Physical link layer
        CLS_VMS, 128                    ; VMS Specific

        >

        C <                             ; Source codes

        SRC_NON, 255                    ; No source id
        SRC_NOD, 0                      ; Node source
        SRC_LIN, 1                      ; Line source
        SRC_CIR, 3                      ; Circuit source
        SRC_MOD, 4                      ; Module source
        SRC_ARE, 5                      ; Area source

        WLDCLS_KNO, 3                   ; Value for known events
        WLDCLS_ALL, 2                   ; Value of all events in class

        >

        V <M                            ; Mask values for sink flags

        SNKFLG_CON, 1                   ; Console
        SNKFLG_FIL, 1                   ; File
        SNKFLG_MON, 1                   ; Monitor

        >
```

```
;
;       Specific event codes, note that values contain the event class
;       as well as the code.
;

        C <

        NMA_LOS, 0@6+0                  ; event records lost
        NMA_ANC, 0@6+1                  ; automatic node counters
        NMA_ALC, 0@6+2                  ; automatic line counters
        NMA_ALS, 0@6+3                  ; automatic line service
        NMA_LCZ, 0@6+4                  ; circuit counters zeroed
        NMA_NCZ, 0@6+5                  ; node counters zeroed
        NMA_PSL, 0@6+6                  ; passive loopback
        NMA_ABS, 0@6+7                  ; aborted service request
        NMA_CTR, 0@6+8                  ; automatic counters
        NMA_ZER, 0@6+9                  ; counters zeroed

        SCL_LNS, 2@6+0                  ; local node state change
        SCL_ACR, 2@6+1                  ; access control reject

        NSL_IMS, 3@6+0                  ; invalid message
        NSL_IFC, 3@6+1                  ; invalid flow control
        NSL_DBR, 3@6+2                  ; data base reused

        TPL_APL, 4@6+0                  ; aged packet loss
        TPL_UPL, 4@6+1                  ; node unreachable packet loss
        TPL_RPL, 4@6+2                  ; node out-of-range packet loss
        TPL_OPL, 4@6+3                  ; oversized packet loss
        TPL_PFM, 4@6+4                  ; packet format error
        TPL_PRU, 4@6+5                  ; partial routing update loss
        TPL_VFR, 4@6+6                  ; verification reject
        TPL_LDF, 4@6+7                  ; circuit down, circuit fault
        TPL_CDS, 4@6+8                  ; circuit down
        TPL_CDO, 4@6+9                  ; circuit down, operator initiated
        TPL_LUP, 4@6+10                 ; circuit up
        TPL_ILF, 4@6+11                 ; initialization failure, circuit fault
        TPL_ISF, 4@6+12                 ; initialization failure, software fault
        TPL_IOF, 4@6+13                 ; initialization failure, operator fault
        TPL_RCH, 4@6+14                 ; node reachability change
        TPL_AUP, 4@6+15                 ; adjacency up
        TPL_ARJ, 4@6+16                 ; adjacency rejected
        TPL_ACH, 4@6+17                 ; area reachability change
        TPL_LDS, 4@6+18                 ; adjacency down
        TPL_LDO, 4@6+19                 ; adjacency down, operator initiated

        DLL_LSC, 5@6+0                  ; locally initiated state change
        DLL_RSC, 5@6+1                  ; remotely initiated state change
        DLL_PRS, 5@6+2                  ; protocol restart received in maintenance mode
        DLL_SND, 5@6+3                  ; send error threshold
        DLL_RET, 5@6+4                  ; receive error threshold
        DLL_SLC, 5@6+5                  ; select error threshold
        DLL_BHF, 5@6+6                  ; block header format error
        DLL_SAD, 5@6+7                  ; selection address error
        DLL_STT, 5@6+8                  ; streaming tributary
```

```
        DLL_LBS, 5@6+9          ; local buffer too small
        DLL_RST, 5@6+10         ; restart (x.25 protocol)
        DLL_STC, 5@6+11         ; state change (x.25 protocol)
        DLL_RME, 5@6+12         ; retransmit maximum exceeded (x.25)
        DLL_IFL, 5@6+13         ; initialization failure
        DLL_SFL, 5@6+14         ; send failure
        DLL_RFL, 5@6+15         ; receive failure
        DLL_CDC, 5@6+16         ; collision detect check failed
        DLL_DTU, 5@6+17         ; DTE up (x.25 protocol)
        DLL_DTD, 5@6+18         ; DTE down (x.25 protocol)

        PLL_DSR, 6@6+0          ; data set ready transition
        PLL_RIN, 6@6+1          ; ring indicator transition
        PLL_CAR, 6@6+2          ; unexpected carrier transition
        PLL_MEM, 6@6+3          ; memory access error
        PLL_COM, 6@6+4          ; communications interface error
        PLL_PFM, 6@6+5          ; performance error

        VMS_DBC, 128@6+0        ; logging data base change
                                ;       (no parameters)
                                ;
        VMS_DPC, 128@6+1        ; DAP CRC error
                                ;       remote node
                                ;
        VMS_DP2, 128@6+2        ; Duplicate Phase II initialization
                                ;       (no parameters)
                                ;
        VMS_PCR, 128@6+3        ; process creation
                                ;       name
                                ;       PID
                                ;       status (creation)
                                ;
        VMS_PTR, 128@6+4        ; process termination
                                ;       PID
                                ;       status (termination)

>
```

```
;
;       Event Parameter Codes
;

        C <

        NMA_PSER, 0                     ; service
        NMA_PSER_LOA, 0                 ; load
        NMA_PSER_DUM, 1                 ; dump
        NMA_PSTS, 1                     ; status
        NMA_POPR, 2                     ; operation
        NMA_POPR_INI, 0                 ; initiated
        NMA_POPR_TER, 1                 ; terminated
        NMA_PRSN, 3                     ; reason
        NMA_PRSN_TMO, 0                 ; receive timeout
        NMA_PRSN_ERR, 1                 ; receive error
        NMA_PRSN_LSC, 2                 ; line state change by higher level
        NMA_PRSN_UNR, 3                 ; unrecognized request
        NMA_PRSN_LOE, 4                 ; line open error
        NMA_PNOD, 5                     ; Node ID
        NMA_PDTE, 6                     ; DTE address (AI-16)
        NMA_PFIL, 7                     ; Filespec
        NMA_PSTY, 8                     ; Software type
        NMA_PSNI, 9                     ; Source NI address

        SCL_PRSN, 0                     ; reason
        SCL_PRSN_OPC, 0                 ; operator command
        SCL_PRSN_NOR, 1                 ; normal operation
        SCL_POLD, 1                     ; old state
                                        ; use node states for code
        SCL_PNEW, 2                     ; new state
                                        ; use node states for code
        SCL_PNOD, 3                     ; source node
        SCL_PSPC, 4                     ; source process
        SCL_PDPC, 5                     ; destination process
        SCL_PUSR, 6                     ; user identification
        SCL_PPSW, 7                     ; password
        SCL_PACC, 8                     ; account

        NSL_PMSG, 0                     ; message
        NSL_PFLO, 1                     ; current flow control
        NSL_PNOD, 2                     ; source node

        TPL_PPKH, 0                     ; packet header
        TPL_PPKB, 1                     ; packet beginning
        TPL_PHIA, 2                     ; highest address
        TPL_PNOD, 3                     ; node
        TPL_PEXP, 4                     ; expected node
        TPL_PRSN, 5                     ; reason
        TPL_PRSN_SYNC, 0                        ; line synchronization lost
        TPL_PRSN_DAER, 1                        ; data errors
        TPL_PRSN_UXPK, 2                        ; unexpected packet type
        TPL_PRSN_RUCS, 3                        ; routing update checksum error
        TPL_PRSN_ADJC, 4                        ; adjacent node address change
        TPL_PRSN_VTMO, 5                        ; verification receive timeout
```

```
        TPL_PRSN_VRSK, 6                ; version skew
        TPL_PRSN_ADJR, 7                ; adjacent node address out of range
        TPL_PRSN_ADJB, 8                ; adjacent node block size too small
        TPL_PRSN_SEED, 9                ; invalid verification seed value
        TPL_PRSN_LTMO, 10               ; adjacent node listener receive timeout
        TPL_PRSN_LINV, 11               ; adjacent node listener received invalid data
        TPL_PRSN_CFAI, 12               ; call failed
        TPL_PRSN_VREQ, 13               ; verification password required from Phase III node
        TPL_PRSN_DROP, 14               ; dropped by adjacent node
        TPL_PVRS, 6                   ; received version
        TPL_PSTS, 7                   ; status
        TPL_PSTS_RCH, 0               ; reachable
        TPL_PSTS_URC, 1               ; unreachable
        TPL_PADJ, 8                   ; adjacent node

        DLL_POLD, 0                   ; old state
        DLL_POLD_HALT, 0                ; halted
        DLL_POLD_ISTR, 1                ; istrt
        DLL_POLD_ASTR, 2                ; astrt
        DLL_POLD_RUNG, 3                ; running
        DLL_POLD_MAIN, 4                ; maintenance
        DLL_PNEW, 1                   ; new state
        DLL_PHDR, 2                   ; header
        DLL_PSLT, 3                   ; selected tributary
        DLL_PPVT, 4                   ; previous tributary
        DLL_PTST, 5                   ; tributary status
        DLL_PTST_STRM, 0                ; streaming
        DLL_PTST_STMO, 1                ; continued send after timeout
        DLL_PTST_SDES, 2                ; continued send after deselect
        DLL_PTST_ESTR, 3                ; ended streaming
        DLL_PRTB, 6                   ; received tributary
        DLL_PBKL, 7                   ; block length
        DLL_PBFL, 8                   ; buffer length
        DLL_PDTE, 9                   ; DTE (ascic)
        DLL_PRSN, 10                  ; Reason
        DLL_PRSN_OPER, 0                ; operator command
        DLL_PRSN_NORM, 1                ; normal operation
        DLL_POST, 11                  ; Old X.25 state (only event 5.11)
        DLL_POST_ON, 0                  ; on
        DLL_POST_OFF, 1                 ; off
        DLL_POST_SHUT, 2                ; shut
        DLL_PNST, 12                  ; New X.25 state (only event 5.11)
        DLL_PTYP, 13                  ; Parameter type (DNA numbering scheme)
        DLL_PCAU, 14                  ; Cause (byte)
        DLL_PDIA, 15                  ; Diagnostic (byte)
        DLL_PFRS, 16                  ; failure reason
        DLL_PFRS_EXCO, 0                ; excessive collisions
        DLL_PFRS_CACK, 1                ; carrier check failed
                                        ; (2 is obsolete)
        DLL_PFRS_SHCI, 3                ; short circuit
        DLL_PFRS_OPCI, 4                ; open circuit
        DLL_PFRS_FLNG, 5                ; frame too long
        DLL_PFRS_RFTD, 6                ; remote failure to defer
        DLL_PFRS_BCHK, 7                ; block check error
        DLL_PFRS_FRAM, 8                ; framing error
        DLL_PFRS_OVER, 9                ; data overrun
```

```
        DLL_PFRS_SBU, 10                        ; system buffer unavailable
        DLL_PFRS_UBU, 11                        ; user buffer unavailable
        DLL_PFRS_UNPf, 12                       ; unrecognized frame destination
        DLL_PDIS, 17                    ; distance
        DLL_PEHD, 18                    ; ethernet header
        DLL_PHWS, 19                    ; hardware status (any noncoded type)

        PLL_PDVR, 0                     ; device register
        PLL_PNEW, 1                     ; new state
        PLL_PNEW_OFF, 0                 ; off
        PLL_PNEW_ON, 1                  ; on

        VMS_PNOD, 0                     ; Remote node (CM-1/2, DU-2, AI-6)
        VMS_PPRC, 1                     ; (process) name (AI-16)
        VMS_PPID, 2                     ; (process) PID (H-4)
        VMS_PSTS, 3                     ; (process) status (H-4)
        >


        E                               ; End of EVC structure
```

EVLDE

E

:
:
:

$STRU

F
F
F
F
L

E

:
:
:

```
;
;       Raw event structure
;
$STRUCT RAW

F       BYTES, W                ; Number of bytes including this count
F       SYSTIM, T, 8            ; 64 bit system time of event
F       EVTCODE, W              ; DNA event code
V       <M
        EVTTYP, 6               ; Type number of event
        EVTCLS, 9               ; Class number of event
        ,1
        >
F       SRCTYP, B               ; DNA source type code
F       SRCID, T, 17            ; Source code
F       DATA, T, 1              ; Event data starts here in DNA format
                                ; (may be mixed counters and/or parameters)
L       SIZE
E

;
;       End of EVCDEF.MDL
;
```

**FI

EVLDEF
MDL

LIBTAIL
B32

XXXQUE
LIS

UTILDEF
REQ

ERRDEF
MDL

EVCDEF
MDL

CONSOLE
LIS

USEROPEN
LIS

VAXPSL
LIS

ERRFMT

VAX780REG
LIS

ERRFMT
MAP

EVLIBRARY
B32

VAX750REG
LIS

VECMAPREG
LIS

ERRFMT
LIS

EVL

LIBHEAD
B32

EVL
MAP

WQDEF
MDL