

NNN		NNN	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	AAAAAAAAAA		CCCCCCCCCCCC	PPPPPPPPPP	
NNN		NNN	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	AAAAAAAAAA		CCCCCCCCCCCC	PPPPPPPPPP	
NNN		NNN	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	AAAAAAAAAA		CCCCCCCCCCCC	PPPPPPPPPP	
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN		NNN	EEE	TTT	AAA	AAA	CCC	FPP	PPP
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNNNNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNNNNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNNNNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCC	PPPPPPPPPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCC	PPPPPPPPPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCC	PPPPPPPPPP	PPP
NNN		NNNNNN	EEE	TTT	AAAAAAAAAAAAAAAA	AAA	CCC	PPP	PPP
NNN		NNNNNN	EEE	TTT	AAAAAAAAAAAAAAAA	AAA	CCC	PPP	PPP
NNN		NNNNNN	EEE	TTT	AAAAAAAAAAAAAAAA	AAA	CCC	PPP	PPP
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN		NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN		NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCCCCCCCCCCC	PPP	PPP
NNN		NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCCCCCCCCCCC	PPP	PPP
NNN		NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCCCCCCCCCCC	PPP	PPP

```

NN      NN  EEEEEEEEEE  TTTTTTTTTT
NN      NN  EEEEEEEEEE  TTTTTTTTTT
NN      NN  EE          TT
NN      NN  EE          TT
NNNN    NN  EE          TT
NNNN    NN  EE          TT
NN  NN  NN  EEEEEEEEEE  TT
NN  NN  NN  EEEEEEEEEE  TT
NN      NNNN EE          TT
NN      NNNN EE          TT
NN      NN  EE          TT
NN      NN  EE          TT
NN      NN  EEEEEEEEEE  TT
NN      NN  EEEEEEEEEE  TT

```

```

....
....
....
....

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II     SS
LL      II     SS
LL      II     SS
LL      II     SS
LL      II     SSSSSS
LL      II     SSSSSS
LL      II     SS
LL      II     SS
LL      II     SS
LLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLL IIIIII  SSSSSSSS

```

0001 0
0002 0
0003 0
0004 0
0005 0
0006 0
0007 0
0008 0
0009 0
0010 0
0011 0
0012 0
0013 0
0014 0
0015 0
0016 0
0017 0
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0036 0
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0039 0
0040 0
0041 0
0042 0
0043 0
0044 0
0045 0
0046 0
0047 0
0048 0
0049 0
0050 0
0051 0
0052 0
0053 0
0054 0
0055 0
0056 0
0057 0

```
Version: 'V04-000'

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*****

++
NMAHEAD.B32
    Define $EQLST macro to make library from the NMALIBRY.B32 file
    This source is taken from the following source:
--
++
UTLDEF.B32 - UTILITY DEFINITION MACROS FOR BLISS PROCESSING
OF STARLET DEFINITION MACROS.
--

MACRO TO GENERATE EQLST CONSTRUCTS.
MACRO
    $EQLST(P,G,I,S)[A]=
        %NAME(P,GET1ST_A) =
            %IF NUL2ND_A
            %THEN (I) % %COUNT*(S) ! ASSUMES I, S ALWAYS GENERATED BY CONVERSION PROGRAM
            %ELSE GET2ND_A
            %FI %,
    GET1ST_(A,B)=
        A-%,
    GET2ND_(A,B)=
        B-%, ! KNOWN NON-NULL
```

N 11
15-Sep-1984 23:07:02
15-Sep-1984 22:48:28

VAX-11 Bliss-32 V4.0-742 Page 2
_S255\$DUA28:[NETACP.SRC]LIBHEAD.B32;1 (1)

```

: M 0058 0      NUL2ND (A,B)=
: 0059 00      %NULL(B) %;
: 0060 00
: 0061 00      :
: 0062 00      End of NMAHEAD
: 0063 00
:
```

```

0064 0  : *****
0065 0  : Created 15-SEP-1984 23:06:10 by VAX-11 SDL V2.0 Source: 15-SEP-1984 22:47:42 _$255$DUA28:[NETACP.SRC]NETC
0066 0  : *****
0067 0  :
0068 0  :
0069 0  : *** MODULE CNR ***
0070 0  : Literal CNR$C_SEM_BIT = 0;      | Type = bit
0071 0  : Literal CNR$C_SEM_B = 1;       | Type = byte
0072 0  : Literal CNR$C_SEM_W = 2;       | Type = word
0073 0  : Literal CNR$C_SEM_L = 3;       | Type = longword
0074 0  : Literal CNR$C_SEM_STR = 4;     | Type = string descriptor
0075 0  :
0076 0  : Define field access control
0077 0  :
0078 0  : Literal CNR$C_ACC_RW = 0;      | General read/write
0079 0  : Literal CNR$C_ACC_RO = 1;      | Read only
0080 0  : Literal CNR$C_ACC_R = 1;       | Read only
0081 0  : Literal CNR$C_ACC_WO = 2;      | Write only (for passwords, etc)
0082 0  : Literal CNR$C_ACC_W = 2;       | Write only (for passwords, etc)
0083 0  : Literal CNR$C_ACC_CW = 3;      | Conditionally writable
0084 0  : Literal CNR$C_ACC_C = 3;       | Conditionally writable
0085 0  : Literal CNR$C_ACC_ER = 4;      | External read only (e.g., if from QIO)
0086 0  : Literal CNR$C_ACC_E = 4;       | External read only (e.g., if from QIO)
0087 0  : Literal CNR$C_ACC_NE = 5;      | No external read or write access
0088 0  : Literal CNR$C_ACC_N = 5;       | No external read or write access
0089 0  :
0090 0  : Define string parse table i.d.'s
0091 0  :
0092 0  : Literal CNR$C_SEM_T = 0;      | Transparent - all characters are legal
0093 0  : Literal CNR$C_SEM_A = 1;      | Upper case alpha or numerics only
0094 0  : Literal CNR$C_SEM_F = 2;      | Parse string as if file specification
0095 0  : Literal CNR$S_CNRDEF = 4;
0096 0  : macro CNR$V_SEM_OFF = 0,0,8,0 %;
0097 0  : Literal CNR$S_SEM_OFF = 8;     | Byte offset from top of CNF to field
0098 0  : macro CNR$V_SEM_TYP = 0,8,3,0 %;
0099 0  : Literal CNR$S_SEM_TYP = 3;     | Field type (bit,string,byte,word etc)
0100 0  : macro CNR$V_SEM_ACC = 0,11,3,0 %;
0101 0  : Literal CNR$S_SEM_ACC = 3;     | Field access control
0102 0  : macro CNR$V_SEM_RT = 0,14,1,0 %;
0103 0  : macro CNR$V_SEM_Z = 0,15,1,0 %;
0104 0  : macro CNR$V_SEM_MAX = 0,16,16,0 %;
0105 0  : Literal CNR$S_SEM_MAX = 16;    | Max value byte or word may be assigned
0106 0  : macro CNR$V_SEM_SMX = 0,16,12,0 %;
0107 0  : Literal CNR$S_SEM_SMX = 12;    | Field to store max size string
0108 0  : macro CNR$V_SEM_TAB = 0,28,4,0 %;
0109 0  : Literal CNR$S_SEM_TAB = 4;     | Holds i.d. of string parse table
0110 0  :
0111 0  : Define CNF$x_SEM_TYP values
0112 0  :
0113 0  : Literal CNR$C_MAX_INX = 95;    | Maximum field index possible (0 indexed => 96 indexes)
0114 0  : Literal CNR$K_LENGTH = 680;   | Structure size
0115 0  : Literal CNR$C_LENGTH = 680;   | Structure size
0116 0  : F SEM TAB,L,4*CNR$C_MAX_INX  | /* Semantic table
0117 0  : -also see CNF$S_MASK definition
0118 0  :
0119 0  : The following defines the format of each entry in the semantic table
0120 0  :

```

```

0121 0 literal CNRSS CNRDEF1 = 680;
0122 0 macro CNRSL_FCINK = 0,0,32,0 %; Forward link
0123 0 macro CNRSL_COLBTE = 0,0,32,0 %; Pointer to the collating tree entry for NDI CNR
0124 0 macro CNRSL_BLINK = 4,0,32,0 %; Backward link
0125 0 macro CNRSL_NAMEBTE = 4,0,32,0 %; Pointer to the name tree entry for NDI CNR
0126 0 macro CNRSW_SIZE = 8,0,16,0 %; Block size
0127 0 macro CNRSB_TYPE = 10,0,8,0 %; Block type (one of the NFB$C_DB_... codes)
0128 0 macro CNRSB_FLG = 11,0,8,0 %; Flag bits
0129 0 macro CNRSW_SIZ_CNF = 12,0,16,0 %; Size of associated CNF without any string storage
0130 0 macro CNRSW_MAX_INX = 14,0,16,0 %; Maximum field index defined for this database
0131 0 macro CNRSL_FLD_LOCK = 16,0,32,0 %; Storage for bit id of conditional write gate
0132 0 macro CNRSL_FLD_COLL = 20,0,32,0 %; Storage for collating bit i.d.
0133 0 macro CNRSL_ACT_QIO = 24,0,32,0 %; Ptr to QIO preprocessor for this database
0134 0 macro CNRSL_ACT_SHOW = 28,0,32,0 %; Ptr to "show" QIO to a specific CNF
0135 0 macro CNRSL_ACT_DFLT = 32,0,32,0 %; Ptr to "defaulting" action routine
0136 0 macro CNRSL_ACT_INSERT = 36,0,32,0 %; Ptr to CNF "pre-insert" action routine
0137 0 macro CNRSL_ACT_DELETE = 40,0,32,0 %; Ptr to CNF "mark-for-delete" action routine
0138 0 macro CNRSL_ACT_REMOVE = 44,0,32,0 %; Ptr to CNF "post-remove" action routine
0139 0 macro CNRSL_SCANNER = 48,0,32,0 %; Ptr to CNF scanner
0140 0 macro CNRSL_INSERT = 52,0,32,0 %; Ptr to CNF real insertion routine
0141 0 macro CNRSL_SPCSCAN = 56,0,32,0 %; Ptr to CNF special scan routine
0142 0 macro CNRSL_VEC_ACT = 60,0,0,0 %;
0143 0 literal CNRSS VEC_ACT = 64; Vector of action routine pointers
0144 0 macro CNRSL_END_ACT = 124,0,32,0 %; Mark the end of the vector
0145 0 macro CNRSL_VEC_MAND = 128,0,0,0 %;
0146 0 literal CNRSS VEC_MAND = 96; Vector of mandatory field i.d.'s
0147 0 macro CNRSL_END_MAND = 224,0,32,0 %;
0148 0 macro CNRSL_VEC_UNIQ = 228,0,0,0 %;
0149 0 literal CNRSS VEC_UNIQ = 64; Vector of i.d.'s of fields required to be
0150 0 macro CNRSL_END_UNIQ = 292,0,32,0 %; unique
0151 0 macro CNRSL_SEM_TAB = 296,0,32,0 %; Semantic table -- 4 bytes for each of 96 indexes
0152 0 macro CNRSL_SEM_TABLE = 296,0,0,0 %;
0153 0 literal CNRSS_SEM_TABLE = 384; ...synonym to reserve the space...
0154 0
0155 0 !*** MODULE CNF ***
0156 0
0157 0 Configuration Data Block (CNF)
0158 0
0159 0 This is a general block structure used to carry a sub-block in the
0160 0 configuration data base of the NETACP. The CNF and sub-block
0161 0 semantics for each component type are store in the associate CNR
0162 0 described above.
0163 0
0164 0 literal CNFSM_FLG_CNR = 1;
0165 0 literal CNFSM_FLG_DELETE = 2;
0166 0 literal CNFSM_FLG_ACP = 4;
0167 0 literal CNFSM_FLG_NOEXT = 8;
0168 0 literal CNFSM_FLG_MRK1 = 16;
0169 0 literal CNFSM_FLG_MRK2 = 32;
0170 0 literal CNFSM_FLG_MRK3 = 64;
0171 0 literal CNFSK_LENGTH = 36; Structure size
0172 0 literal CNF$C_LENGTH = 36; Structure size
0173 0 ! F MASK,L,CNR$C_MAX_INX/32 /* One bit in mask for each possible field.
0174 0 The bit is set while the field is active.
0175 0 literal CNF$S_CNDFEF = 36;
0176 0 macro CNFSL_FCINK = 0,0,32,0 %; Forward link
0177 0 macro CNFSL_COLBTE = 0,0,32,0 %; Pointer to the collating tree entry for NDI CNF

```

```

0178 0 macro CNFSL_BLINK = 4,0,32,0 %; | Backward link
0179 0 macro CNFSL_NAMEBTE = 4,0,32,0 %; | Pointer to the name tree entry for NDI CNF
0180 0 macro CNFSW_SIZE = 8,0,16,0 %; | Block size
0181 0 macro CNFSB_TYPE = 10,0,8,0 %; | Block type
0182 0 macro CNFSB_FLG = 11,0,8,0 %; | Flags defined as follows:
0183 0 macro CNFSV_FLG_CNR = 11,0,1,0 %; | Block is actually a CNR
0184 0 macro CNFSV_FLG_DELETE = 11,1,1,0 %; | Block is a temporary CNF or marked for delete
0185 0 macro CNFSV_FLG_ACP = 11,2,1,0 %; | Block is a catch-all used by the ACP
0186 0 macro CNFSV_FLG_NOEXT = 11,3,1,0 %; | Block is used internally only. It is not to be
0187 0 macro CNFSV_FLG_MRK1 = 11,4,1,0 %; | Special flags with different meanings for each
0188 0 macro CNFSV_FLG_MRK2 = 11,5,1,0 %; | database. These flags are defined locally in module
0189 0 macro CNFSV_FLG_MRK3 = 11,6,1,0 %; | NETCNFACT.MAR.
0190 0 | displayed to the 'external' world, i.e., above the
0191 0 | $QIO interface.
0192 0 macro CNFSW_OFF_FREE = 12,0,16,0 %; | Self-relative byte offset to free storage
0193 0 macro CNFSW_SIZ_FREE = 14,0,16,0 %; | Bytes left in CNF free storage
0194 0 macro CNFSW_SIZ_USED = 16,0,16,0 %; | Number of bytes used for storing strings
0195 0 macro CNFSW_ID = 18,0,16,0 %; | Database dependent identification data
0196 0 macro CNFSW_BOOLEAN = 20,0,16,0 %; | Storage for values of parameters of type 'bit'
0197 0 macro CNFSL_MASK = 24,0,0,0 %;
0198 0 literal CNFSS_MASK = 12; | see CNRSC_MAX_INX definition
0199 0
0200 0 | *** MODULE NDI ***
0201 0
0202 0 | REMOTE NODE INFORMATION
0203 0
0204 0
0205 0 | The following are commonly defined for all nodes
0206 0
0207 0 literal NDISK_LENGTH = 108; | Structure size
0208 0 literal NDISC_LENGTH = 108; | Structure size
0209 0 | (used to down-line load a node which isn't
0210 0 | up on the network yet)
0211 0 literal NDISS_NDIDEF = 108;
0212 0 macro NDISW_ADD = 0,0,16,0 %; | Node address - zero if NDI is for local node
0213 0 macro NDISW_CTI = 2,0,16,0 %; | Counter timer (units = sec)
0214 0 macro NDISL_CTA = 4,0,32,0 %; | Absolute due timer for counters to be logged
0215 0 macro NDISL_S_NNA = 8,0,32,0 %; | Name
0216 0
0217 0 | The following are defined for some, but not most, nodes
0218 0
0219 0 macro NDISL_S_NLI = 12,0,32,0 %; | Line used if NDI is a 'loopback' node
0220 0 macro NDISL_S_PUS = 16,0,32,0 %; | Priv user id
0221 0 macro NDISL_S_PAC = 20,0,32,0 %; | Priv account
0222 0 macro NDISL_S_PPW = 24,0,32,0 %; | Priv password
0223 0 macro NDISL_S_NUS = 28,0,32,0 %; | NonPriv user id
0224 0 macro NDISL_S_NAC = 32,0,32,0 %; | NonPriv account
0225 0 macro NDISL_S_NPW = 36,0,32,0 %; | NonPriv psw
0226 0 macro NDISL_S_RPA = 40,0,32,0 %; | Receive password
0227 0 macro NDISL_S_TPA = 44,0,32,0 %; | Transmit password
0228 0 macro NDISB_ACC = 48,0,8,0 %; | Access switch (inbound,outbound,etc)
0229 0 macro NDISB_PRX = 49,0,8,0 %; | Proxy access switch (inbound, outbound, etc)
0230 0 macro NDISB_SNV = 50,0,8,0 %; | System node version
0231 0
0232 0 | The following are for nodes to be downline-loaded or upline-dumped
0233 0
0234 0 macro NDISB_SDV = 53,0,8,0 %; | Service device type
    
```

```
0235 0 macro NDISB_CPU = 54,0,8,0 %; CPU type
0236 0 macro NDISB_STY = 55,0,8,0 %; Software type
0237 0 macro NDISW_IHO = 56,0,16,0 %; Host address (input)
0238 0 macro NDISW_OHO = 58,0,16,0 %; Host address (output)
0239 0 macro NDISL_DAD = 60,0,32,0 %; Dump address
0240 0 macro NDISL_DCT = 64,0,32,0 %; Dump count
0241 0 macro NDISL_S_SLI = 68,0,32,0 %; Service line
0242 0 macro NDISL_S_SPA = 72,0,32,0 %; Service password
0243 0 macro NDISL_S_LOA = 76,0,32,0 %; Load file
0244 0 macro NDISL_S_SLO = 80,0,32,0 %; Secondary loader
0245 0 macro NDISL_S_TLO = 84,0,32,0 %; Tertiary loader
0246 0 macro NDISL_S_SID = 88,0,32,0 %; Software ID
0247 0 macro NDISL_S_DUM = 92,0,32,0 %; Dump file
0248 0 macro NDISL_S_SDU = 96,0,32,0 %; Secondary dumper
0249 0 macro NDISL_S_DFL = 100,0,32,0 %; Diagnostic load file
0250 0 macro NDISL_S_HWA = 104,0,32,0 %; NI hardware address for node
0251 0
0252 0 *** MODULE LNI ***
0253 0
0254 0 LOCAL NODE INFORMATION
0255 0
0256 0
0257 0 Define local node states
0258 0
0259 0 literal LNISC_STA_ON = 0; Node available for general use
0260 0 literal LNISC_STA_OFF = 1; Node shutting down, no connects allowed
0261 0 literal LNISC_STA_SHUT = 2; No new connects allowed - shutting down
0262 0 literal LNISC_STA_RSTR = 3; Node available for outbound connects only
0263 0 literal LNISC_STA_INIT = 4; State used for ACP initialization
0264 0
0265 0 Define the CNF structure
0266 0
0267 0 literal LNISK_LENGTH = 80; Structure size
0268 0 literal LNISC_LENGTH = 80; Structure size
0269 0 literal LNISS_LNIDEF = 80;
0270 0 macro LNISW_ADD = 0,0,16,0 %; Node address
0271 0 macro LNISB_STA = 2,0,8,0 %; State
0272 0 macro LNISB_ETY = 3,0,8,0 %; Local node type
0273 0 macro LNISW_MLK = 4,0,16,0 %; Maximum links allowed
0274 0 macro LNISW_MAD = 6,0,16,0 %; Maximum node address
0275 0 macro LNISW_MBU = 8,0,16,0 %; Maximum transport buffers
0276 0 macro LNISW_MCO = 10,0,16,0 %; Maximum cost
0277 0 macro LNISB_MHO = 12,0,8,0 %; Maximum hops
0278 0 macro LNISB_MVI = 13,0,8,0 %; Maximum visits
0279 0 macro LNISB_MLN = 14,0,8,0 %; Maximum circuits (used to be called lines)
0280 0 macro LNISW_LPD = 15,0,8,0 %; Default LOOP data
0281 0 macro LNISW_LPC = 16,0,16,0 %; Default LOOP count
0282 0 macro LNISW_LPL = 18,0,16,0 %; Default LOOP length
0283 0 macro LNISB_LPH = 20,0,8,0 %; Default LOOP help type
0284 0 macro LNISW_BUS = 22,0,16,0 %; Transport forwarding buffer size
0285 0 ! (maximum size that we will receive and forward)
0286 0 macro LNISW_SBS = 24,0,16,0 %; Transport segment buffer size
0287 0 ! (maximum size that we will transmit)
0288 0 macro LNISW_RSI = 26,0,16,0 %; Routine supression interval (units = sec)
0289 0 macro LNISW_IAT = 28,0,16,0 %; Inactivity timer (units = sec)
0290 0 macro LNISW_ITI = 30,0,16,0 %; Incoming timer (units = sec)
0291 0 macro LNISW_OTI = 32,0,16,0 %; Outgoing timer (units = sec)
```



```

0292 0 macro LNISW_RTI = 34,0,16,0 %: Routing timer (units = sec)
0293 0 macro LNISW_BRT = 36,0,16,0 %: Broadcast routing timer (units = sec)
0294 0 macro LNISW_MBE = 38,0,16,0 %: Maximum broadcast endnodes
0295 0 macro LNISW_MBR = 40,0,16,0 %: Maximum broadcast routers
0296 0 macro LNISB_DFA = 42,0,8,0 %: Delay factor
0297 0 macro LNISB_DWE = 43,0,8,0 %: Delay weight
0298 0 macro LNISB_RFA = 44,0,8,0 %: Retransmit factor
0299 0 macro LNISB_DAC = 45,0,8,0 %: Default access (inbound,outbound,etc)
0300 0 macro LNISB_DPX = 46,0,8,0 %: Default proxy access (inbound,outbound,etc)
0301 0 macro LNISW_PIQ = 47,0,16,0 %: Pipeline quota
0302 0 macro LNISL_SAD = 50,0,32,0 %: X.25 sub-address range
0303 0 macro LNISB_MAR = 54,0,8,0 %: Maximum areas
0304 0 macro LNISB_AMH = 55,0,8,0 %: Area maximum hops
0305 0 macro LNISW_AMC = 56,0,16,0 %: Area maximum cost
0306 0 macro LNISW_ALI = 58,0,16,0 %: Alias local address (cluster node address)
0307 0 macro LNISL_S_NAM = 60,0,32,0 %: Node name
0308 0 macro LNISL_S_IDE = 64,0,32,0 %: System identification
0309 0 macro LNISL_S_NVE = 68,0,32,0 %: NSP version
0310 0 macro LNISL_S_RVE = 72,0,32,0 %: Routing version
0311 0 macro LNISL_S_MVE = 76,0,32,0 %: Network Management version
    
```

*** MODULE LLI ***

LOGICAL LINK INFORMATION

The following are commonly defined for all node counter blocks

Node Counter Block (NDC)

The following data block is used to maintain statistics for each node in the network. A hash of these structures is contained in NETACP.

```

0326 0 literal NDCSK_LENGTH = 28; : Structure size
0327 0 literal NDCSC_LENGTH = 28; : Structure size
0328 0 literal NDCSS_NDCDEF = 28;
0329 0 macro NDCSL_ABS_TIM = 0,0,32,0 %: Absolute time counter block was last zeroed
    
```

Network services layer counters

```

0333 0 macro NDCSW_RSE = 4,0,16,0 %: Transmitted connect rejects due to resource errors
0334 0 macro NDCSW_RTO = 6,0,16,0 %: Response timeouts
0335 0 macro NDCSW_CRC = 8,0,16,0 %: Connects received
0336 0 macro NDCSW_CSN = 10,0,16,0 %: Connects sent
0337 0 macro NDCSL_BRC = 12,0,32,0 %: Bytes received
0338 0 macro NDCSL_BSN = 16,0,32,0 %: Bytes sent
0339 0 macro NDCSL_PRC = 20,0,32,0 %: Packets received
0340 0 macro NDCSL_PSN = 24,0,32,0 %: Packets sent
    
```

The following are commonly defined for all logical links

```

0344 0 literal LLISK_LENGTH = 64; : Structure size
0345 0 literal LLISC_LENGTH = 64; : Structure size
0346 0 literal LLISS_LLIDF = 64;
0347 0 macro LLISL_XWB = 0,0,32,0 %: Pointer to XWB
0348 0 macro LLISW_LLN = 4,0,16,0 %: Local link number
    
```

```
0349 0 macro LLISW_PNA = 6,0,16,0 %; ! Partner's node address
0350 0
0351 0 Network services layer Running Total counters
0352 0
0353 0 macro LLISZ_NDC_RT = 8,0,0,1 %;
0354 0 literal LLISS_NDC_RT = 28; ! Running total counters
0355 0
0356 0 Network services layer Last Zeroed counters
0357 0
0358 0 macro LLISZ_NDC_LZ = 36,0,0,1 %;
0359 0 literal LLISS_NDC_LZ = 28; ! Last zeroed counters
0360 0
0361 0 *** MODULE OBI ***
0362 0
0363 0 NETWORK OBJECT INFORMATION
0364 0
0365 0 Define CNF storage
0366 0
0367 0
0368 0 literal OBISK_LENGTH = 40; ! Structure size
0369 0 literal OBISC_LENGTH = 40; ! Structure size
0370 0 literal OBISS_OBIDEF = 40;
0371 0 macro OBISB_NOM = 0,0,8,0 %; ! Object number
0372 0 macro OBISB_PRX = 1,0,8,0 %; ! Proxy login switch (inbound, outbound, etc)
0373 0 macro OBISW_CHN = 2,0,16,0 %; ! Channel over which declaration occurred
0374 0 macro OBISL_LPR = 4,0,32,0 %; ! Low order privilege mask
0375 0 macro OBISL_HPR = 8,0,32,0 %; ! High order privilege mask
0376 0 macro OBISL_UCB = 12,0,32,0 %; ! Associated NET UCB if declared task
0377 0 macro OBISL_PID = 16,0,32,0 %; ! Associated process i.d. if declared task
0378 0 macro OBISL_S_NAM = 20,0,32,0 %; ! Name
0379 0 macro OBISL_S_FID = 24,0,32,0 %; ! File id
0380 0 macro OBISL_S_USR = 28,0,32,0 %; ! User id
0381 0 macro OBISL_S_ACC = 32,0,32,0 %; ! Account
0382 0 macro OBISL_S_PSW = 36,0,32,0 %; ! Password
0383 0
0384 0 *** MODULE CRI ***
0385 0
0386 0 CIRCUIT INFORMATION
0387 0
0388 0
0389 0 Define CNF storage for fields used internally
0390 0
0391 0 literal CRISK_LENGTH = 65; ! Structure size
0392 0 literal CRISC_LENGTH = 65; ! Structure size
0393 0 literal CRISS_CRIDEF = 65;
0394 0 macro CRISL_S_NAM = 0,0,32,0 %; ! Circuit name
0395 0 macro CRISL_OBPID = 4,0,32,0 %; ! PID of temporary owner of line in service state
0396 0 macro CRISL_CTA = 8,0,32,0 %; ! Absolute due time for counter logging
0397 0
0398 0 Define CNF storage for fields defined by the NICE protocol
0399 0
0400 0 macro CRISB_STA = 12,0,8,0 %; ! State
0401 0 macro CRISB_CHN = 13,0,8,0 %; ! X.25 Channel No.
0402 0 macro CRISW_LCT = 14,0,16,0 %; ! Counter timer
0403 0 macro CRISL_S_LOO = 16,0,32,0 %; ! Loopback name
0404 0 macro CRISW_HET = 20,0,16,0 %; ! Hello timer
0405 0 macro CRISB_COS = 24,0,8,0 %; ! Cost
```

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0406 0 macro CRISB_MRC = 25.0.8.0 %: Maximum recalls
0407 0 macro CRISW_RCT = 26.0.16.0 %: Recall timer
0408 0 macro CRISL_S_NUM = 28.0.32.0 %: Call Number
0409 0 macro CRISB_POL = 32.0.8.0 %: Polling state
0410 0 macro CRISB_PLS = 33.0.8.0 %: Polling substate
0411 0 macro CRISB_TYP = 34.0.8.0 %: Type
0412 0 macro CRISL_S_DTE = 36.0.32.0 %: DTE
0413 0 macro CRISW_MBL = 40.0.16.0 %: Maximum block
0414 0 macro CRISB_MWI = 42.0.8.0 %: Maximum window
0415 0 macro CRISB_TRI = 43.0.8.0 %: Tributary
0416 0 macro CRISW_BBT = 44.0.16.0 %: Babble timer
0417 0 macro CRISW_TRT = 46.0.16.0 %: Transmit timer
0418 0 macro CRISW_CHN = 48.0.16.0 %: X.25 channel
0419 0 macro CRISB_USE = 50.0.8.0 %: X.25 Usage
0420 0 macro CRISB_MRB = 51.0.8.0 %: Maximum receive buffers
0421 0 macro CRISB_MTR = 52.0.8.0 %: Maximum transmits
0422 0 macro CRISB_ACB = 53.0.8.0 %: Active base
0423 0 macro CRISB_ACI = 54.0.8.0 %: Active increment
0424 0 macro CRISB_IAB = 55.0.8.0 %: Inactive base
0425 0 macro CRISB_IAI = 56.0.8.0 %: Inactive increment
0426 0 macro CRISB_IAT = 57.0.8.0 %: Inactive threshold
0427 0 macro CRISB_DYB = 58.0.8.0 %: Dying base
0428 0 macro CRISB_DYI = 59.0.8.0 %: Dying increment
0429 0 macro CRISB_DYT = 60.0.8.0 %: Dying threshold
0430 0 macro CRISB_DTH = 61.0.8.0 %: Dead threshold
0431 0 macro CRISB_XPT = 62.0.8.0 %: Transport protocol
0432 0 macro CRISB_MRT = 63.0.8.0 %: Maximum routers on NI
0433 0 macro CRISB_RPR = 64.0.8.0 %: Router priority on NI
0434 0
0435 0 *** MODULE PLI ***
0436 0
0437 0 PHYSICAL LINE INFORMATION
0438 0
0439 0
0440 0 Define CNF storage for fields used internally
0441 0
0442 0 literal PLISK_LENGTH = 46: Structure size
0443 0 literal PLISC_LENGTH = 46: Structure size
0444 0 literal PLISS_PLIDEF = 46:
0445 0 macro PLISL_S_NAM = 0.0.32.0 %: Line name
0446 0 macro PLISL_CTA = 4.0.32.0 %: Absolute due time for counter logging
0447 0
0448 0 Define CNF storage for fields defined by the NICE protocol
0449 0
0450 0 macro PLISB_BFN = 8.0.8.0 %: Number of buffers in receive pool
0451 0 macro PLISB_STA = 9.0.8.0 %: State
0452 0 macro PLISB_SUB = 10.0.8.0 %: Substate
0453 0 macro PLISB_PRO = 11.0.8.0 %: Protocol
0454 0 macro PLISW_LCT = 12.0.16.0 %: Counter timer
0455 0 macro PLISW_STI = 14.0.16.0 %: Service timer
0456 0 macro PLISW_HTI = 16.0.16.0 %: Holdback timer
0457 0 macro PLISW_RIT = 18.0.16.0 %: Retransmit timer
0458 0 macro PLISW_MBL = 20.0.16.0 %: Maximum block
0459 0 macro PLISB_MRT = 22.0.8.0 %: Maximum retransmits
0460 0 macro PLISB_MWI = 23.0.8.0 %: Maximum window
0461 0 macro PLISW_SLT = 24.0.16.0 %: Scheduling timer
0462 0 macro PLISW_DDT = 26.0.16.0 %: Dead timer
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0463 0 macro PLISW_DLT = 28,0,16,0 %: | Delay timer
0464 0 macro PLISW_SRT = 30,0,16,0 %: | Stream timer
0465 0 macro PLISL_S_HWA = 32,0,32,0 %: | NI hardware address [READ ONLY]
0466 0 macro PLISL_S_MCD = 36,0,32,0 %: | X.25 KMX microcode dump file [WRITE ONLY - ONE SHOT]
0467 0 macro PLISW_EPT = 40,0,16,0 %: | Ethernet protocol type
0468 0 macro PLISB_MOD = 42,0,8,0 %: | X.25 mode (DTE, DCE, etc.)
0469 0 macro PLISW_BFS = 44,0,16,0 %: | Buffer size to override executor buffer size
0470 0
0471 0 |*** MODULE EFI ***
0472 0 |
0473 0 | EVENT LOGGING FILTER INFORMATION
0474 0 |
0475 0 | Define the CNF structure
0476 0 |
0477 0 |
0478 0 literal EFISK_LENGTH = 28: | Structure size
0479 0 literal EFISC_LENGTH = 28: | Structure size
0480 0 literal EFISS_EFIDEF = 28: |
0481 0 macro EFISW_SIN = 0,0,16,0 %: | Sink node address
0482 0 macro EFISW_SPI = 2,0,16,0 %: | Spare
0483 0 macro EFISL_B1 = 4,0,32,0 %: | For user defined use
0484 0 macro EFISL_B2 = 8,0,32,0 %: | For user defined use
0485 0 macro EFISL_S_EVE = 12,0,32,0 %: | Event list
0486 0 macro EFISL_S_SB1 = 16,0,32,0 %: | For user defined use
0487 0 macro EFISL_S_SB2 = 20,0,32,0 %: | For user defined use
0488 0 macro EFISL_S_SB3 = 24,0,32,0 %: | For user defined use
0489 0
0490 0 |*** MODULE ESI ***
0491 0 |
0492 0 | EVENT LOGGING SINK INFORMATION
0493 0 |
0494 0 | Define logging sink states
0495 0 |
0496 0 |
0497 0 literal ESISC_STA_ON = 0: | Logging is on
0498 0 literal ESISC_STA_OFF = 1: | Logging is off
0499 0 literal ESISC_STA_HLD = 2: | Hold events
0500 0
0501 0 | Define logging sink types
0502 0 |
0503 0 literal ESISC_SNK_CON = 1: | Console
0504 0 literal ESISC_SNK_FIL = 2: | File
0505 0 literal ESISC_SNK_MON = 3: | Monitor
0506 0
0507 0 | Define the CNF structure
0508 0 |
0509 0 |
0510 0 literal ESISK_LENGTH = 28: | Structure size
0511 0 literal ESISC_LENGTH = 28: | Structure size
0512 0 literal EFISS_ESIDEF = 28: |
0513 0 macro ESISB_SNK = 0,0,8,0 %: | Sink type
0514 0 macro ESISB_STA = 1,0,8,0 %: | Sink state
0515 0 macro ESISW_SPI = 2,0,16,0 %: | Spare
0516 0 macro ESISL_B1 = 4,0,32,0 %: | For user defined use
0517 0 macro ESISL_B2 = 8,0,32,0 %: | For user defined use
0518 0 macro ESISL_S_LNA = 12,0,32,0 %: | Sink name
0519 0 macro ESISL_S_SB1 = 16,0,32,0 %: | For user defined use
0519 0 macro ESISL_S_SB2 = 20,0,32,0 %: | For user defined use
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0520 0 macro ESISL_S_SB3 = 24,0,32,0 %; ! For user defined use
0521 0
0522 0
0523 0
0524 0 *** MODULE SPI ***
0525 0 NETWORK SERVER PROCESS INFORMATION
0526 0
0527 0 Define CNF storage
0528 0
0529 0 literal SPISK_LENGTH = 32; ! Structure size
0530 0 literal SPISC_LENGTH = 32; ! Structure size
0531 0 literal SPISS_SPIDEF = 32;
0532 0 macro SPISL_PID = 0,0,32,0 %; ! Server PID
0533 0 macro SPISL_IRP = 4,0,32,0 %; ! IRP of waiting DECLSERV QIO. 0 if process active
0534 0 macro SPISW_RNA = 8,0,16,0 %; ! Remote node address which initially started server
0535 0 macro SPISW_CHN = 10,0,16,0 %; ! Channel associated with L_IRP (waiting DECLSERV)
0536 0 macro SPISL_S_ACS = 12,0,32,0 %; ! ACS used initially to start server process
0537 0 macro SPISL_S_RID = 16,0,32,0 %; ! Remote user ID which initially started server
0538 0 macro SPISL_S_SFI = 20,0,32,0 %; ! Last (current) filespec given to server
0539 0 macro SPISL_S_NCB = 24,0,32,0 %; ! Last (current) NCB given to server
0540 0 macro SPISL_S_PNM = 28,0,32,0 %; ! Last (current) process name given to server
0541 0
0542 0 *** MODULE WQE ***
0543 0
0544 0 Work Queue Elements (WQE) are used by the ACP to serialize and standardize
0545 0 all schedulable but non-IRP oriented work. Datalink state transition
0546 0 control and events originating from ASTs are examples.
0547 0
0548 0 The WQE structure is depicted below. The WQESB SUB field is used to
0549 0 determine if any special processing is needed when the WQE is queued or
0550 0 dequeued as follows:
0551 0
0552 0 literal WQESC_SUB_BAS = 0; ! The WQE is the base of a list - NOTE low bit clear
0553 0 for this SOB constant only!!!
0554 0
0555 0 literal WQESC_SUB_ACP = 1; ! The WQE was spawned during normal internal ACP
0556 0 activity, e.g., during IOS_ACPCONTROL Qio activity.
0557 0 No special action is required when it is queued.
0558 0 When it is dequeued, dispatch directly to the action
0559 0 routine which responsible for deallocating it.
0560 0
0561 0 literal WQESC_SUB_AST = 3; ! The WQE is the consequence of a miscellaneous AST,
0562 0 e.g., a datalink Qio AST. If its the first entry
0563 0 queued then $WAKE the ACP. When it is dequeued,
0564 0 dispatch directly to the action routine - which is
0565 0 responsible for deallocating it.
0566 0
0567 0 literal WQESC_SUB_MBX = 5; ! The WQE is the consequence of a mailbox read AST. If
0568 0 it is the first element queued then $WAKE the ACP.
0569 0 When it is dequeued, it is sent to the mailbox
0570 0 servicing routine - which permanently owns the WQE.
0571 0
0572 0 literal WQESC_SUB_TIM = 7; ! The WQE is the consequence of a timer AST. If it is
0573 0 the first element queued then $WAKE the ACP. When
0574 0 dequeued, another VMS timer must be set if there are
0575 0 any more elements in the WQE timer queue.
0576 0 literal WQESC_QUAL_DLL = 1; ! A data link event - REQIDT is the LPDSW_PTH value
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0577 0 literal WQESC_QUAL_RTG = 2; | An ACP routing event - REQIDT is always zero
0578 00 literal WQESC_QUAL_CTM = 3; | A counter timer event - REQIDT identifies data base
0579 00 literal WQESC_QUAL_ACT = 4; | The ACP active timer
0580 00 literal WQESK_LENGTH = 36; | Structure size and begining of data area
0581 00 literal WQESC_LENGTH = 36; | Structure size and begining of data area
0582 00 literal WQESS_WQDEF = 36; |
0583 00 macro WQESL_FLINK = 0,0,32,0 %; | Queue forward link
0584 00 macro WQESL_BLINK = 4,0,32,0 %; | Queue backward link
0585 00 macro WQESW_SIZE = 8,0,16,0 %; | Bytes allocated for the WQE
0586 00 macro WQESB_TYPE = 10,0,8,0 %; | Structure type code
0587 00 macro WQESB_SUB = 11,0,8,0 %; | Structure sub-type code as follows:
0588 00 |
0589 00 macro WQESL_ACTION = 12,0,32,0 %; | Action routine address
0590 00 macro WQESL_PM1 = 16,0,32,0 %; | Action routine first parameter
0591 00 macro WQESB_EVT = 16,0,8,0 %; | Event code - interpreted in the context of the
0592 00 | QUAL field
0593 00 macro WQESB_QUAL = 17,0,8,0 %; | REQIDT qualifier as follows:
0594 00 |
0595 00 macro WQESW_REQIDT = 18,0,16,0 %; | Request identifier - interpreted in the context of
0596 00 | the QUAL field.
0597 00 macro WQESL_PM2 = 20,0,32,0 %; | Action routine second parameter
0598 00 macro WQESL_EVL_PKT = 24,0,32,0 %; | Ptr to the packet header if the WQE is being used
0599 00 | for event logging
0600 00 macro WQESW_EVL_CODE = 28,0,16,0 %; | Event logging code if WQE is used for event logging
0601 00 macro WQESB_EVL_DT1 = 30,0,8,0 %; | Event logging immediate data
0602 00 macro WQESB_EVL_DT2 = 31,0,8,0 %; | Event logging immediate data
0603 00 macro WQESW_ADJ_INX = 32,0,16,0 %; | Adjacency to which this WQE applies (0 if none)
0604 00 macro WQESW_SPARE = 34,0,16,0 %; | SPARE WORD
0605 00 |
0606 00 |*** MODULE DLLQIO ***
0607 00 |
0608 00 | DLLQIO - Datalink $QIO parameter block
0609 00 |
0610 00 literal DLLQIOSK_LENGTH = 24; | Structure size
0611 00 literal DLLQIOSC_LENGTH = 24; | Structure size
0612 00 literal DLLQIOSS_DLLQIODEF = 24; |
0613 00 macro DLLQIOSL_FUNC = 0,0,32,0 %; | Function code
0614 00 macro DLLQIOSL_P1 = 4,0,32,0 %; | QIO P1 parameter
0615 00 macro DLLQIOSL_P2 = 8,0,32,0 %; | QIO P2 parameter
0616 00 macro DLLQIOSL_P3 = 12,0,32,0 %; | QIO P3 parameter
0617 00 macro DLLQIOSL_P4 = 16,0,32,0 %; | QIO P4 parameter
0618 00 macro DLLQIOSL_P5 = 20,0,32,0 %; | QIO P5 parameter
0619 00 |
0620 00 |*** MODULE DEVTRN ***
0621 00 |
0622 00 | DEVTRN - Device translation table
0623 00 |
0624 00 literal DEVTRNSC_DEV_UNK = 0; | Unknown device
0625 00 literal DEVTRNSC_DEV_DMC = 1; | DMC-11
0626 00 literal DEVTRNSC_DEV_PCL = 2; | PCL-11
0627 00 literal DEVTRNSC_DEV_DMF = 3; | DMF-32
0628 00 literal DEVTRNSC_DEV_CI = 4; | CI-780
0629 00 literal DEVTRNSC_DEV_DMP = 5; | DMP-11
0630 00 literal DEVTRNSC_DEV_DUP = 6; | DUP-11 (for X.25)
0631 00 literal DEVTRNSC_DEV_KMC = 7; | KMC-11 (for X.25)
0632 00 literal DEVTRNSC_DEV_X25 = 8; | X.25 datalink (datalink mapping)
0633 00 literal DEVTRNSC_DEV_UNA = 9; | DEUNA (Ethernet)

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0634 0 literal DEVTRNSC_DEV_PPUNA = 10; ! DEUNA operating in point-to-point mode
0635 0 ! (internal testing purposes only!)
0636 0 literal DEVTRNSK_LENGTH = 13; ! Structure size
0637 0 literal DEVTRNSC_LENGTH = 13; ! Structure size
0638 0 literal DEVTRNSM_MULTI = 1;
0639 0 literal DEVTRNSS_DEVTRNDEF = 13;
0640 0 macro DEVTRNSB_NETMAN = 0,0,8,0 %; ! Count of Network Management device name
0641 0 macro DEVTRNST_NETMAN = 1,0,0,0 %;
0642 0 literal DEVTRNSS_NETMAN = 5; ! Network Management device name text
0643 0 macro DEVTRNSB_VMS = 6,0,8,0 %; ! Count of VMS device name
0644 0 macro DEVTRNST_VMS = 7,0,24,0 %;
0645 0 literal DEVTRNSS_VMS = 3; ! VMS device name text
0646 0 macro DEVTRNSB_DEV = 10,0,8,0 %; ! Device code
0647 0 ! Define device codes
0648 0 macro DEVTRNSB_PROT = 11,0,8,0 %; ! Default device protocol (NMASC_LINPR...)
0649 0 macro DEVTRNSB_CHAR = 12,0,8,0 %; ! Device characteristics
0650 0 macro DEVTRNSV_MULTI = 12,0,1,0 %; ! Multi-unit device
0651 0
0652 0 !*** MODULE NDB ***
0653 0 !
0654 0 ! NDB - DEFINE OPCOM MESSAGE CODES
0655 0 !
0656 0 ! Message codes for OPCOM
0657 0 literal NDB$C_MSG_START = 1; ! DECnet starting
0658 0 literal NDB$C_MSG_SHUT = 2; ! DECnet shutting down
```

```
0659 0 | *****
0660 0 | Created 15-SEP-1984 23:06:24 by VAX-11 SDL V2.0 Source: 15-SEP-1984 22:47:47 $255$DUA28:[NETACP.SRC]NETN
0661 0 | *****
0662 0 |
0663 0 |
0664 0 | !*** MODULE RCB ***
0665 0 | literal RCB$M_LVL2 = 1;
0666 0 | literal RCB$M_ACT = 2;
0667 0 | literal RCB$C_CNT_SIZE = 12; | Number of bytes used for counters
0668 0 | literal RCB$K_LENGTH = 174; | Structure size
0669 0 | literal RCB$C_LENGTH = 174; | Structure size
0670 0 | ! an unspecified output adjacency (ETY=PH4 only)
0671 0 | literal RCB$S_RCBDEF = 174;
0672 0 | macro RCB$Q_IRP_FREE = 0,0,0,0 %;
0673 0 | literal RCB$S_IRP_FREE = 8; | Listhead of free IRPs
0674 0 | macro RCB$W_SIZE = 8,0,16,0 %; | Bytes allocated for structure
0675 0 | macro RCB$B_TYPE = 10,0,8,0 %; | Structure type
0676 0 | macro RCB$B_STATUS = 11,0,8,0 %; | Status flags
0677 0 | macro RCB$V_LVL2 = 11,0,1,0 %; | True if we can use level 2 routing (AOA, etc)
0678 0 | macro RCB$V_ACT = 11,1,1,0 %; | (ROUTING LAYER BIT) Set if NETACP is considered active
0679 0 | ! False if we detect that we are an isolated area router
0680 0 | macro RCB$W_TRANS = 12,0,16,0 %; | Outstanding transaction count
0681 0 | macro RCB$W_ADDR = 14,0,16,0 %; | Local node address
0682 0 | macro RCB$L_AQB = 16,0,32,0 %; | Ptr to AQB
0683 0 | macro RCB$L_ACP_UCB = 20,0,32,0 %; | Ptr to Network ACP's UCB
0684 0 | macro RCB$L_PTR_JNX = 24,0,32,0 %; | Ptr to journal buffer
0685 0 | macro RCB$L_PTR_OA = 28,0,32,0 %; | Ptr to Output Adjacency vector
0686 0 | macro RCB$L_PTR_OA = 32,0,32,0 %; | Ptr to Area Output Adjacency vector
0687 0 | macro RCB$L_PTR_LTB = 36,0,32,0 %; | Ptr to logical link table (dispatch vector)
0688 0 | macro RCB$L_PTR_LPD = 40,0,32,0 %; | Ptr to Logical Path Descriptor vector
0689 0 | macro RCB$L_PTR_ADJ = 44,0,32,0 %; | Pointer to vector of adjacency blocks (0 based)
0690 0 | macro RCB$L_PTR_TQE = 48,0,32,0 %; | Ptr to internal Timer Queue element
0691 0 | macro RCB$L_PTR_NDC = 52,0,32,0 %; | Ptr to Node Counters vector
0692 0 | macro RCB$L_PTR_DCS = 56,0,32,0 %; | Ptr to NETDRIVER's control storage
0693 0 | macro RCB$Q_LOC_RCV = 60,0,0,0 %;
0694 0 | literal RCB$S_LOC_RCV = 8; | Receive listhead for "local" Datalink
0695 0 | macro RCB$Q_LOC_XMT = 68,0,0,0 %;
0696 0 | literal RCB$S_LOC_XMT = 8; | Transmit listhead for "local" Datalink
0697 0 | macro RCB$Q_IRP_WAIT = 76,0,0,0 %;
0698 0 | literal RCB$S_IRP_WAIT = 8; | Listhead of fork processes waiting for an IRP
0699 0 | macro RCB$W_MCOUNT = 84,0,16,0 %; | Mount count - includes current logical links plus 1
0700 0 | ! for the ACP reference
0701 0 | macro RCB$W_CUR_LNK = 86,0,16,0 %; | Current number of logical links
0702 0 | macro RCB$W_MAX_LNK = 88,0,16,0 %; | Max allowable logical links
0703 0 | macro RCB$W_MAX_ADDR = 90,0,16,0 %; | Max allowable node address
0704 0 | macro RCB$B_MAX_LPD = 92,0,8,0 %; | Max number of DLL LPDs
0705 0 | macro RCB$B_MAX_SNK = 93,0,8,0 %; | Max IRPs queueable to any sink queue
0706 0 | macro RCB$B_MAX_VISIT = 94,0,8,0 %; | Max nodes a packet may visit
0707 0 | macro RCB$B_INT_PTH = 95,0,8,0 %; | Index of path to intercept node: 0=>no intercept
0708 0 | macro RCB$B_ACT_DLL = 96,0,8,0 %; | Active data links
0709 0 | macro RCB$B_STI = 97,0,8,0 %; | Internal state
0710 0 | macro RCB$B_ECL_RFLW = 98,0,8,0 %; | ECL receiver pipeline quota (in packets)
0711 0 | macro RCB$B_ECL_RFA = 99,0,8,0 %; | ECL retransmit factor
0712 0 | macro RCB$B_ECL_DFA = 100,0,8,0 %; | ECL delay factor
0713 0 | macro RCB$B_ECL_DWE = 101,0,8,0 %; | ECL delay weight
0714 0 | macro RCB$B_ECL_DAC = 102,0,8,0 %; | ECL default access state
0715 0 | macro RCB$B_ECL_DPX = 103,0,8,0 %; | ECL default proxy access state
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0716 0 macro RCBSW_MAX_ADJ = 104,0,16,0 %: | Size of adjacency vector (PTR_ADJ), in entries
0717 0 macro RCBSW_MAX_RTG = 106,0,16,0 %: | Number of "routing destinations" (LPDs + BRAs)
0718 0 macro RCBSL_DLE_XWB = 108,0,32,0 %: | Linked list head for direct-circuit-access XWBs
0719 0 macro RCBSW_TIM_RSI = 112,0,16,0 %: | Min delay before next routing update in seconds
0720 0 macro RCBSW_TIM_RTI = 114,0,16,0 %: | Max time before next routing update in seconds
0721 0 macro RCBSW_TIM_IAT = 116,0,16,0 %: | Max logical link inactivity interval in seconds
0722 0 macro RCBSW_TIM_CNI = 118,0,16,0 %: | Max inbound connect interval in seconds
0723 0 macro RCBSW_TIM_CNO = 120,0,16,0 %: | Max outbound connect interval in seconds
0724 0 macro RCBSW_TIM_CTI = 122,0,16,0 %: | Sample interval in seconds
0725 0 macro RCBSW_ECLSEGSIZ = 124,0,16,0 %: | Default ECL data segment size (excludes header size)
0726 0 macro RCBSW_TOTBUFSIZ = 126,0,16,0 %: | Buffer size including NSP header + 6 bytes
0727 0 ! + CXBSC OVERHEAD bytes for datalink overhead
0728 0 macro RCBSW_CUR_PKT = 128,0,16,0 %: | Current total IRPs
0729 0 macro RCBSW_MAX_PKT = 130,0,16,0 %: | Max total IRPs
0730 0 macro RCBSW_PKT_FREE = 132,0,16,0 %: | Packets left in Transmit pool
0731 0 macro RCBSW_PKT_PEAK = 134,0,16,0 %: | Peak number of packets used
0732 0 macro RCBSB_PKT_FAIL = 136,0,8,0 %: | Packet allocation failures (over packet quota)
0733 0 macro RCBSB_MEM_FAIL = 137,0,8,0 %: | Packet allocation failures (insufficient memory)
0734 0 macro RCBSB_ETY = 138,0,8,0 %: | Type of executor node (ADJ$C_PTY_xxx)
0735 0 macro RCBSB_HOMEAREA = 139,0,8,0 %: | Our home area number (only if area router)
0736 0 macro RCBSB_MAX_AREA = 140,0,8,0 %: | Max allowable area address
0737 0 macro RCBSW_ALIAS = 141,0,16,0 %: | Alias local address (0 if none)
0738 0 macro RCBSB_ACT_TIMER = 143,0,8,0 %: | ACP activity timer
0739 0
0740 0 Transport layer counters
0741 0
0742 0 macro RCBSL_ABS_TIM = 144,0,32,0 %: | Absolute time counters were last zeroed
0743 0 macro RCBSB_CNT_NOL = 148,0,8,0 %: | Node out-of-range packet loss
0744 0 macro RCBSB_CNT_1ST = 148,0,8,0 %: | First counter cell marker
0745 0 macro RCBSB_CNT_APL = 149,0,8,0 %: | Aged packet loss
0746 0 macro RCBSB_CNT_OPL = 150,0,8,0 %: | Oversized packet loss
0747 0 macro RCBSB_CNT_PFE = 151,0,8,0 %: | Packet format error
0748 0 macro RCBSB_CNT_RUL = 152,0,8,0 %: | Partial routing update loss
0749 0 macro RCBSB_CNT_VER = 153,0,8,0 %: | Verification rejects
0750 0 macro RCBSW_CNT_NUL = 154,0,16,0 %: | Node unreachable packet loss
0751 0 macro RCBSW_CNT_XRE = 156,0,16,0 %: | Xmitted connect resource errors (ECL layer counter)
0752 0 macro RCBSW_CNT_MLL = 158,0,16,0 %: | Maximum logical links active (ECL layer counter)
0753 0
0754 0 End of transport counters
0755 0
0756 0 macro RCBSW_CXB_FREE = 160,0,0,0 %: | Free CXB listhead
0757 0 literal RCBSW_CXB_FREE = 8: | Current position in ADJ for listener processing
0758 0 macro RCBSB_LSN_ADJ = 168,0,8,0 %: | Count of entries on AQB
0759 0 macro RCBSB_AQB_CNT = 169,0,8,0 %: | Designated router ADJ index for all transmits
0760 0 macro RCBSW_DRT = 170,0,16,0 %: |
0761 0 ! with an unspecified output adjacency
0762 0 macro RCBSW_LVL2 = 172,0,16,0 %: | Level 2 router ADJ index for all transmits with
0763 0
0764 0 *** MODULE LPD ***
0765 0
0766 0 Logical Path Descriptor (LPD)
0767 0
0768 0 The following control block describes a path to a data sink/source -- either
0769 0 a datalink driver (e.g., XMDRIVER) or an end communications level (ECL)
0770 0 driver (e.g., NETDRIVER).
0771 0
0772 0 literal LPD$C_LOC_INX = 1: | Index associate with the primary "local" LPD

```

```
0773 0
0774 0      Status on control info
0775 0
0776 0      literal LPDSM_ACTIVE = 1;
0777 0      literal LPDSM_STRTIM = 2;
0778 0      literal LPDSM_DLE = 4;
0779 0      literal LPDSM_ACCESS = 8;
0780 0      literal LPDSM_RUN = 16;
0781 0      literal LPDSM_XBF = 32;
0782 0      literal LPDSM_RBF = 64;
0783 0      literal LPDSM_X25 = 128;
0784 0      literal LPDSM_X25BLK = 256;
0785 0      literal LPDSM_INCOMING = 512;
0786 0      literal LPDSM_BC = 1024;
0787 0      literal LPDSM_XEND = 2048;
0788 0      literal LPDSM_TOGGLE = 4096;
0789 0      literal LPDSM_ALIGNW = 8192;
0790 0      literal LPDSM_ALIGNQ = 16384;
0791 0      literal LPDSM_ELECT_TIM = 32768;
0792 0      literal LPDSM_XMT_DALLY = 1;
0793 0      literal LPDSM_XMT_STR = 2;
0794 0      literal LPDSM_XMT_VRF = 4;
0795 0      literal LPDSM_XMT_IDLE = 8;
0796 0      literal LPDSM_XMT_RT = 16;
0797 0      literal LPDSM_XMT_HEL = 32;
0798 0      literal LPDSM_XMT_ART = 64;
0799 0      literal LPDSM_PVC_ACCESS = 1;
0800 0      literal LPDSM_PVC_RESTRT = 2;
0801 0      literal LPDSM_PVC_RESET = 4;
0802 0      literal LPDSM_FILE_2 = 120;
0803 0      literal LPDSM_PVC_ACCESSED = 128;
0804 0      literal LPDSC_CNT_SIZE = 22;
0805 0      literal LPDSC_SRM_NODES = 32;
0806 0      literal LPDSC_SRM_SHFT = 5;
0807 0      literal LPDSC_SRM_SIZE = 32;
0808 0      literal LPDSC_ASRM_AREAS = 64;
0809 0      literal LPDSC_ASRM_SHFT = 6;
0810 0      literal LPDSC_ASRM_SIZE = 1;
0811 0      literal LPDSK_LENGTH = 106;
0812 0      literal LPDSC_LENGTH = 106;
0813 0      literal LPDSS_LPDEF = 106;
0814 0      macro LPDSQ_REQ_WAIT = 0,0,0,0 %;
0815 0      literal LPDSS_REQ_WAIT = 8;
0816 0      ! slot on the LPD sink queue.
0817 0      macro LPDSW_SIZE = 8,0,16,0 %;
0818 0      macro LPDSB_TYPE = 10,0,8,0 %;
0819 0      macro LPDSB_STARTUPS = 11,0,8,0 %;
0820 0      macro LPDSL_WIND = 12,0,32,0 %;
0821 0      macro LPDSL_UCB = 16,0,32,0 %;
0822 0      macro LPDSW_CHAN = 20,0,16,0 %;
0823 0      macro LPDSW_TIM_TLK = 22,0,16,0 %;
0824 0      macro LPDSW_INT_TLK = 24,0,16,0 %;
0825 0      macro LPDSB_TSTCNT = 26,0,8,0 %;
0826 0      ! the RUN state
0827 0      macro LPDSB_ASTCNT = 27,0,8,0 %;
0828 0      macro LPDSB_IRPCNT = 28,0,8,0 %;
0829 0      macro LPDSB_ETY = 29,0,8,0 %;
```

```
! Number of bytes used for counters
! Number of nodes per segment(bit)
! Bit shift for node<->bit!
! Number of bits in SRM bitmask (allows for 1024 nodes)
! Number of areas per segment(bit)
! Bit shift for area<->bit!
! Number of bits in ASRM bitmask (allows for 64 areas)
! Structure size
! Structure size

! Listhead of fork processes waiting for a 'request'

! Structure size
! Structure type
! Number of datalink startup attempts since last "run"
! Driver context - WIND field image for IRPs
! Driver context - UCB address
! ACP channel to device
! "Talker" timer
! "Talker" interval (used to init TIM_TLK)
! Number of test messages left to send before entering

! Number of outstanding ASTs
! Number of outstanding IRPs queued by NETDRIVER
! Our node type, on this circuit
```

```
0830 0 macro LPDSB_XMT_SRL = 30,0,8,0 %: Output "square root limiter" value
0831 0 macro LPDSB_XMT_IPL = 31,0,8,0 %: Output queue "input packet limiter"
0832 0 macro LPDSB_PTH = 32,0,16,0 %: Path ID
0833 0 macro LPDSB_PTH_INX = 32,0,8,0 %: Path index
0834 0 macro LPDSB_PTH_SEQ = 33,0,8,0 %: Path sequence
0835 0 macro LPDSB_STS = 34,0,16,0 %: Status bits as follows:
0836 0 macro LPDSV_ACTIVE = 34,0,1,0 %: Path is active
0837 0 macro LPDSV_STRTIM = 34,1,1,0 %: Set if restart supression timer is ticking
0838 0 macro LPDSV_DLE = 34,2,1,0 %: Set if in use for physical line service
0839 0 macro LPDSV_ACCESS = 34,3,1,0 %: Set if LPD is being "accessed" by a server process
0840 0 macro LPDSV_RUN = 34,4,1,0 %: Set if active and in use for normal data msgs
0841 0 macro LPDSV_XBF = 34,5,1,0 %: Set if Xmitter uses buffered I/O
0842 0 macro LPDSV_RBF = 34,6,1,0 %: Set if Receiver uses buffered I/O
0843 0 macro LPDSV_X25 = 34,7,1,0 %: Set if X.25 datalink mapping used on this circuit
0844 0 macro LPDSV_X25BLK = 34,8,1,0 %: Set if blocking requested for X.25 datalink
0845 0 macro LPDSV_INCOMING = 34,9,1,0 %: Set if X.25 circuit waiting for incoming call
0846 0 macro LPDSV_BC = 34,10,1,0 %: Set if circuit is a broadcast circuit (NI)
0847 0 macro LPDSV_XEND = 34,11,1,0 %: Set if "send hello msg to all endnodes" is requested
0848 0 macro LPDSV_TOGGLE = 34,12,1,0 %: Set if listener timeout on DMC line (toggles line)
0849 0 macro LPDSV_ALIGNW = 34,13,1,0 %: Set if datalink requires word alignment
0850 0 macro LPDSV_ALIGNQ = 34,14,1,0 %: Set if datalink requires quadword alignment
0851 0 macro LPDSV_ELECT_TIM = 34,15,1,0 %: Set if election suppression timer ticking
0852 0 macro LPDSB_XMTFLG = 36,0,8,0 %: Xmit flags -- since a FFS is used to schedule message
0853 0 ! transimission, the order of these flags are crucial
0854 0 macro LPDSV_XMT_DALLY = 36,0,1,0 %: Dally before sending a start msg (must precede STR)
0855 0 macro LPDSV_XMT_STR = 36,1,1,0 %: Xmit a Transport start msg
0856 0 macro LPDSV_XMT_VRF = 36,2,1,0 %: Xmit a Transport verification msg
0857 0 macro LPDSV_XMT_IDLE = 36,3,1,0 %: Signals "no more Transport init messages to send"
0858 0 macro LPDSV_XMT_RT = 36,4,1,0 %: Xmit a Transport routing message
0859 0 macro LPDSV_XMT_HEL = 36,5,1,0 %: Xmit a Transport hello message
0860 0 macro LPDSV_XMT_ART = 36,6,1,0 %: Xmit a Transport Area routing message
0861 0 macro LPDSB_PVCFLG = 37,0,8,0 %: X.25 PVC startup flags -- since a FFS is used to
0862 0 ! schedule it, the order of these flags are crucial
0863 0 macro LPDSV_PVC_ACCESS = 37,0,1,0 %: Issue an IOS_ACCESS to establish the connection
0864 0 macro LPDSV_PVC_RESTRT = 37,1,1,0 %: Issue a "restart confirmation"
0865 0 macro LPDSV_PVC_RESET = 37,2,1,0 %: Issue a "reset" or "reset confirmation"
0866 0 macro LPDSV_FILE_2 = 37,3,4,0 %:
0867 0 literal LPDSV_FILE_2 = 4; (reserve low 4 bits for state, 3 more bits unused)
0868 0 macro LPDSV_PVC_ACCESSED = 37,7,1,0 %: True if PVC ACCESSED
0869 0 macro LPDSB_STI = 38,0,8,0 %: Internal state used by the ACP for initialization
0870 0 macro LPDSB_SUB_STA = 39,0,8,0 %: Circuit sub-state
0871 0 macro LPDSB_PLVEC = 40,0,8,0 %: Associate PLVEC index
0872 0 macro LPDSB_COST = 41,0,8,0 %: Circuit cost
0873 0 macro LPDSB_BCPR1 = 42,0,8,0 %: Circuit NI router priority
0874 0 macro LPDSB_DRT = 44,0,16,0 %: Designated router on NI
0875 0 macro LPDSL_RTR_LIST = 46,0,32,0 %: For BC LPDs, address of "most recently received
0876 0 ! election message" from Router Hello messages
0877 0 ! (stured as an byte-counted string)
0878 0 macro LPDSL_RCV_IRP = 50,0,32,0 %: ! Address of suspended receiver IRP
0879 0
0880 0 Transport layer counters
0881 0
0882 0 macro LPDSL_ABS_TIM = 54,0,32,0 %: ! Absolute time counters were last zeroed
0883 0 macro LPDSL_CNT_APR = 58,0,32,0 %: ! Arriving packets received
0884 0 macro LPDSB_CNT_1ST = 58,0,8,0 %: ! First counter cell marker
0885 0 macro LPDSL_CNT_TPR = 62,0,32,0 %: ! Transit packets received
0886 0 macro LPDSL_CNT_DPS = 66,0,32,0 %: ! Departing packets sent
```

```
0887 0 macro LPD$L_CNT_TPS = 70,0,32,0 %; | Transit packets sent
0888 0 macro LPD$W_CNT_ACL = 74,0,16,0 %; | Arriving congestion loss
0889 0 macro LPD$W_CNT_TCL = 76,0,16,0 %; | Transit congestion loss
0890 0 macro LPD$B_CNT_LDN = 78,0,8,0 %; | Line down events
0891 0 macro LPD$B_CNT_IFL = 79,0,8,0 %; | Initialization failures
0892 0 macro LPD$W_BUF$SIZ = 80,0,16,0 %; | Datalink buffer size including Transport overhead
0893 0 | (variable route header depending on the datalink)
0894 0 macro LPD$B_SRM_POS = 82,0,8,0 %; | Current position in transmit XMT_SRM bitmask (bit !)
0895 0 macro LPD$B_SRM_LEFT = 83,0,8,0 %; | Number of transmit XMT_SRM bits left to check/process
0896 0 macro LPD$B_ASRM_POS = 84,0,8,0 %; | Current position in transmit XMT_ASRM bitmask (bit !)
0897 0 macro LPD$B_ASRM_LEFT = 85,0,8,0 %; | Number of transmit XMT_ASRM bits left to check/process
0898 0 macro LPD$G_SRM = 86,0,32,0 %; |
0899 0 literal LPD$S_SRM = 4; | (32/8) ; "Send routing message" flags (one per segment)
0900 0 macro LPD$G_XMT_SRM = 90,0,32,0 %; |
0901 0 literal LPD$S_XMT_SRM = 4; | Copy of SRM flags used for rtg msg transmission
0902 0 macro LPD$G_ASRM = 94,0,32,0 %; |
0903 0 literal LPD$S_ASRM = 4; | (1/8); "Send area routing message" flags (one per segment)
0904 0 macro LPD$G_XMT_ASRM = 98,0,32,0 %; |
0905 0 literal LPD$S_XMT_ASRM = 4; | Copy of ASRM flags used for rtg msg transmission
0906 0 macro LPD$L_CACHE = 102,0,32,0 %; | Address of endnode cache storage (endnodes only)
0907 0
0908 0 | *** MODULE ADJ ***
0909 0
0910 0 | Adjacency Node Data Base Block (ADJ)
0911 0
0912 0 | This block describes the contents of the Adjacency Node Data Base. The
0913 0 | Adjacency Node Data Base is used in conjunction with the LPD data base
0914 0 | to describe the destination to any node in the network.
0915 0
0916 0 literal ADJ$M_INUSE = 1; |
0917 0 literal ADJ$M_RUN = 2; |
0918 0 literal ADJ$M_RTG = 4; |
0919 0 literal ADJ$M_LSN = 8; |
0920 0 literal ADJ$C_PTY_UNK = -1; | Node type is unknown
0921 0 literal ADJ$C_PTY_PH3 = 0; | Phase III full routing
0922 0 literal ADJ$C_PTY_PH3N = 1; | Phase III non routing
0923 0 literal ADJ$C_PTY_PH2 = 2; | Phase II
0924 0 literal ADJ$C_PTY_AREA = 3; | Phase IV area routing
0925 0 literal ADJ$C_PTY_PH4 = 4; | Phase IV routing
0926 0 literal ADJ$C_PTY_PH4N = 5; | Phase IV non routing
0927 0 literal ADJ$K_LENGTH = 13; | Structure size
0928 0 literal ADJ$C_LENGTH = 13; | Structure size
0929 0 literal ADJ$S_ADJDEF = 13; |
0930 0 macro ADJ$B_STS = 0,0,8,0 %; | Status flags
0931 0 macro ADJ$V_INUSE = 0,0,1,0 %; | Adjacency block in use
0932 0 macro ADJ$V_RUN = 0,1,1,0 %; | Adjacency is up (can transmit pkts over it)
0933 0 macro ADJ$V_RTG = 0,2,1,0 %; | Partner is a routing node (PH3,PH4-1,PH4-2)
0934 0 macro ADJ$V_LSN = 0,3,1,0 %; | Listen timer is ticking
0935 0 macro ADJ$B_PTYPE = 1,0,8,0 %; | Type of partner node (routing, non-routing, etc.)
0936 0 macro ADJ$W_LPD = 2,0,16,0 %; | Path ID
0937 0 macro ADJ$B_LPD_INX = 2,0,8,0 %; | Path index
0938 0 macro ADJ$B_LPD_SEQ = 3,0,8,0 %; | Path sequence
0939 0 macro ADJ$W_PNA = 4,0,16,0 %; | Partner node address
0940 0 macro ADJ$W_BUF$SIZ = 6,0,16,0 %; | Neighbor's block size
0941 0 macro ADJ$W_INT_LSN = 8,0,16,0 %; | Listener interval (computed from neighbor's hello)
0942 0 macro ADJ$W_TIM_LSN = 10,0,16,0 %; | Listener timer (seconds left)
0943 0 macro ADJ$B_BCPRI = 12,0,8,0 %; | Broadcast priority
```

```
0944 0
0945 0
0946 0
0947 0
0948 0
0949 0
0950 0
0951 0
0952 0
0953 0
0954 0
0955 0
0956 0
0957 0
0958 0
0959 0
0960 0
0961 0
0962 0
0963 0
0964 0
0965 0
0966 0
0967 0
0968 0
0969 0
0970 0
0971 0
0972 0
0973 0
0974 0
0975 0
0976 0
0977 0
0978 0
0979 0
0980 0
0981 0
0982 0
0983 0
0984 0
0985 0
0986 0
0987 0
0988 0
0989 0
0990 0
0991 0
0992 0
0993 0
0994 0
0995 0
0996 0
0997 0
0998 0
0999 0
1000 0

*** MODULE XMC ***
+
DMC counter block - provides offsets for SHOW QIO return of counters
-
literal XMCSK_LENGTH = 28;          ! Length of counter block
literal XMCSL_LENGTH = 28;          ! Length of counter block
literal XMCSX_XMCDEF = 28;
macro XMCSL_XMTBYTCNT = 0,0,32,0 %; ! No. of bytes transmitted
macro XMCSL_RCVBYTCNT = 4,0,32,0 %; ! No. of bytes received
macro XMCSW_XMTMSGCNT = 8,0,16,0 %; ! No. of msgs transmitted
macro XMCSW_RCVMSGCNT = 10,0,16,0 %; ! No. of msgs received
macro XMCSW_RCVNOBUF = 12,0,16,0 %; ! No. of "no buffer" NAKS received
macro XMCSW_RCVHDRBCC = 14,0,16,0 %; ! No. of "header BCC error" NAKS received
macro XMCSW_RCVDATBCC = 16,0,16,0 %; ! No. of "data BCC error" NAKS received
macro XMCSW_XMTNOBUF = 18,0,16,0 %; ! No. of "no buffer" NAKS xmitted
macro XMCSW_XMTHDRBCC = 20,0,16,0 %; ! No. of "header BCC error" NAKS xmitted
macro XMCSW_XMTDATBCC = 22,0,16,0 %; ! No. of "data BCC error" NAKS xmitted
macro XMCSW_XMTREPS = 24,0,16,0 %; ! No. of REPS xmitted
macro XMCSW_RCVREPS = 26,0,16,0 %; ! No. of REPS received

*** MODULE LTB ***
LINK TABLE - LTB
This structure is maintained by NSP (NETDRIVER). It contains all
local 'end communications layer' parameters and a vector of logical
link slots.
literal LTBSK_LENGTH = 20;          ! Structure size
literal LTBSL_LENGTH = 20;          ! Structure size
This is the first slot, not a pointer to it.
Each slot in the vector is 4 bytes. If the
low bit is set then the slot is available and
its sequence number (number of times used) is
found in the high order word. If the low bit
is clear then the slot contains a pointer to
a structure containing the link context and
state information.
This vector is terminated by a longword of all
ones followed by a longword of all zeroes.
literal LTBSX_LTBDEF = 20;
macro LTBSL_SCT_NXT = 0,0,32,0 %;    ! Pointer into the link slot vector of the
! slot candidate to be tried the next time
! a link slot needs to be allocated
macro LTBSW_SLT_TOT = 4,0,16,0 %;    ! Total slots in vector
macro LTBSW_SLT_LMT = 6,0,16,0 %;    ! Total useable slots in vector
macro LTBSW_SIZE = 8,0,16,0 %;       ! Size, in bytes, of this structure
macro LTBSB_TYPE = 1,0,8,0 %;       ! Structure identifier
macro LTBSB_SPARE = 11,0,8,0 %;     ! Reserved for future use
macro LTBSL_XWB = 12,0,32,0 %;      ! XWB listhead
macro LTBSL_SLOTS = 16,0,32,0 %;    ! The begining of the logical link slot vector.

*** MODULE ICB ***
```



```
1058 0      !      F      ACCT,T 39      /* "Account" field of that account
1059 0      macro ICBSB_DATA = 124,0,8,0 %;      !      Count of bytes used in next field
1060 0      macro ICBST_DATA = 125,0,0,0 %;
1061 0      literal ICBSB_DATA = 16;      !      Optional connect data
1062 0      macro ICBSW_REMNOG = 141,0,16,0 %;      !      Network address of partner
1063 0      macro ICBSB_RID = 146,0,8,0 %;      !      Remote user (process, task, etc.) i.d.
1064 0      macro ICBST_RID = 147,0,0,0 %;
1065 0      literal ICBSB_RID = 16;
1066 0
1067 0      *** MODULE NETUPD ***
1068 0      +
1069 0
1070 0      Function codes for XWB update routine (ACP communication routine)
1071 0
1072 0      -
1073 0      Code
1074 0      literal NETUPDS_ABORT = 1;      !      Breaking link
1075 0      literal NETUPDS_CONNECT = 2;      !      Give NCB to task w/ declared name or object
1076 0      literal NETUPDS_EXIT = 3;      !      Task is exiting
1077 0      literal NETUPDS_PROCRE = 4;      !      Starting a new process
1078 0      literal NETUPDS_DLL_ON = 5;      !      Datalink starting for normal use
1079 0      literal NETUPDS_DLL_DLE = 6;      !      Datalink starting for service functions
1080 0      literal NETUPDS_CRELNK = 7;      !      Create a logical link control block
1081 0      literal NETUPDS_ABOLNK = 8;      !      Abort all links - network shutdown
1082 0      literal NETUPDS_DSCLNK = 9;      !      Disconnect the specified link
1083 0      literal NETUPDS_BRDCST = 10;      !      Broadcast mailbox message
1084 0      literal NETUPDS_REPLY = 11;      !      Send mailbox message to a specific mailbox
1085 0      literal NETUPDS_REACT_RCV = 12;      !      Reactivate datalink receiver
1086 0      literal NETUPDS_SEND_HELLO = 13;      !      Send hello message immediately
1087 0      literal NETUPDS_GET_ADJ = 14;      !      Get output ADJ for a given node address
1088 0      literal NETUPDS_TEST_ADJ = 15;      !      Test if given node is adjacent to endnode
1089 0
1090 0      *** MODULE NETMSG ***
1091 0      +
1092 0      Define event codes used to pass blocks to the ACP
1093 0
1094 0      -
1095 0
1096 0      literal NETMSGSC_UNK = 1;      !      Unknown message
1097 0      literal NETMSGSC_ILL = 2;      !      Illegal message
1098 0      literal NETMSGSC_TR = 3;      !      Transport control message
1099 0      literal NETMSGSC_IRP = 4;      !      IRP from datalink which is shutting down
1100 0      literal NETMSGSC_APL = 5;      !      Aged packet
1101 0      literal NETMSGSC_NUL = 6;      !      Node unreachable packet
1102 0      literal NETMSGSC_NOL = 7;      !      Node out of range packet
1103 0      literal NETMSGSC_PFE = 8;      !      Packet format error
1104 0      literal NETMSGSC_LSN = 9;      !      Listener timer expired
1105 0      literal NETMSGSC_OPL = 10;      !      Oversized packet loss
1106 0      literal NETMSGSC_CRD = 11;      !      Circuit run down
1107 0      literal NETMSGSC_ADJ = 12;      !      Adjacency up
```

1108 0
 1109 0
 1110 0
 1111 0
 1112 0
 1113 0
 1114 0
 1115 0
 1116 0
 1117 0
 1118 0
 1119 0
 1120 0
 1121 0
 1122 0
 1123 0
 1124 0
 1125 0
 1126 0
 1127 0
 1128 0
 1129 0
 1130 0
 1131 0
 1132 0
 1133 0
 1134 0
 1135 0
 1136 0
 1137 0
 1138 0
 1139 0
 1140 0
 1141 0
 1142 0
 1143 0
 1144 0
 1145 0
 1146 0
 1147 0
 1148 0
 1149 0
 1150 0
 1151 0
 1152 0
 1153 0
 1154 0
 1155 0
 1156 0
 1157 0
 1158 0
 1159 0
 1160 0
 1161 0
 1162 0
 1163 0
 1164 0

```

*****
Created 15-SEP-1984 22:48:56 by VAX-11 SDL V2.0 Source: 15-SEP-1984 22:47:52 _$255$DUA28:[NETACP.SRC]NETU
*****

*** MODULE NFB ***

    The following generic field identifiers are defined for all databases.

literal NFBSC_ENDOFLIST = 0;      ! Used to terminate the field i.d.
literal NFBSC_WILDCARD = 1;      ! Field i.d. used for "match all" database searches
literal NFBSC_CTX_SIZE = 64;     ! Length of context area in P2 buffer

    The following codes are passed in the second IOSB longword to qualify
    as SSS_ILLCNTRFUNC error.

    The high order word of these error codes must be 0
    so that they won't be confused with field i.d.s
literal NFB$B_ERR_FCT = 1;       ! Unrecognized NFB$B_FCT value.
literal NFB$B_ERR_DB = 2;       ! Unrecognized NFB$B_DATABASE value.
literal NFB$B_ERR_P1 = 3;       ! The P1 buffer is invalid.
literal NFB$B_ERR_P2 = 4;       ! The P2 buffer is invalid.
literal NFB$B_ERR_P3 = 5;       ! The P3 buffer is invalid.
literal NFB$B_ERR_P4 = 6;       ! The P4 buffer is invalid.
literal NFB$B_ERR_P5 = 7;       ! The P5 buffer should not have been specified.
literal NFB$B_ERR_P6 = 8;       ! The P6 buffer should not have been specified.
literal NFB$B_ERR_CELL = 9;     ! Unrecognized NFB$B_CELL value.
literal NFB$B_ERR_OPER = 10;    ! Unrecognized NFB$B_OPER value.
literal NFB$B_ERR_SRCH = 11;    ! Unrecognized NFB$B_SRCH_KEY field ID
literal NFB$B_ERR_SRCH2 = 12;   ! Unrecognized NFB$B_SRCH2_KEY field ID
literal NFB$B_ERR_OPER2 = 13;   ! Unrecognized NFB$B_OPER2 value.
literal NFB$B_ERR_FLAGS = 14;   ! Undefined bits in NFB$B_FLAGS were not zero.

    Define the P1 buffer format

literal NFBSC_DECLNAME = 21;     ! Declare name
literal NFBSC_DECLOBJ = 22;     ! Declare object
literal NFBSC_DECLSERV = 23;    ! Declare server process available
    Resume defining function codes
    (leave room for 4 obsolete function codes)
literal NFBSC_LOGEVENT = 28;    ! Log a network event
literal NFBSC_READEVENT = 29;   ! Read current raw event queue (used by EVL only)
    Resume defining function codes
    (leave room for 3 obsolete function codes)
literal NFBSC_FC_DELETE = 33;   ! Remove an entry from the data base.
literal NFBSC_FC_SHOW = 34;    ! Return specified field values.
literal NFBSC_FC_SET = 35;     ! Set/modify the field values.
literal NFBSC_FC_CLEAR = 36;   ! Clear specified field values.
literal NFBSC_FC_ZERCOU = 37;  ! Zero (and optionally read) counters
literal NFBSC_FC_LOOP = 38;    ! Loop (used only to PSI to loop an X.25 line)
    Maximum FCT value
literal NFBSC_FC_MAX = 38;     ! Maximum FCT value
literal NFB$M_ERRUPD = 1;
literal NFB$M_MULT = 2;
literal NFB$M_NOCTX = 4;
literal NFBSC_DB_LNI = 1;      ! Local node
literal NFBSC_DB_NDI = 2;      ! Common nodes
    
```



```
1165 0 literal NFBSC_DB_OBI = 3: Network objects
1166 00 literal NFBSC_DB_CRI = 4: Circuits
1167 00 literal NFBSC_DB_PLI = 5: Lines
1168 00 literal NFBSC_DB_EFI = 6: Event logging filters
1169 00 literal NFBSC_DB_ESI = 7: Event logging sinks
1170 00 literal NFBSC_DB_LLI = 8: Logical-links
1171 00 literal NFBSC_DB_XNI = 9: X.25 networks
1172 00 literal NFBSC_DB_XGI = 10: X.25 groups
1173 00 literal NFBSC_DB_XDI = 11: X.25 DTEs
1174 00 literal NFBSC_DB_XS5 = 12: X.25 server
1175 00 literal NFBSC_DB_XD5 = 13: X.25 destinations
1176 00 literal NFBSC_DB_XS9 = 14: X.29 server
1177 00 literal NFBSC_DB_XD9 = 15: X.29 destinations
1178 00 literal NFBSC_DB_XTI = 16: X.25 trace facility
1179 00 literal NFBSC_DB_XTT = 17: X.25 tracepoints
1180 00 literal NFBSC_DB_SPI = 18: Server Process
1181 00 literal NFBSC_DB_AJI = 19: Adjacency information
1182 00 literal NFBSC_DB_ARI = 20: Area information
1183 00 (The following codes are reserved for future PSACP
1184 00 databases. These codes should only be used in the
1185 00 event PSACP needs a database code before a new
1186 00 new NETACP can be supplied to support it).
1187 00 literal NFBSC_DB_PSI1 = 21: PSI reserved database
1188 00 literal NFBSC_DB_PSI2 = 22: PSI reserved database
1189 00 literal NFBSC_DB_PSI3 = 23: PSI reserved database
1190 00 literal NFBSC_DB_PSI4 = 24: PSI reserved database
1191 00 literal NFBSC_DB_PSI5 = 25: PSI reserved database
1192 00 literal NFBSC_DB_SDI = 26: Service (DLE) information
1193 00 literal NFBSC_DB_XAI = 27: X.25 access database
1194 00 literal NFBSC_DB_XXX = 28: Last database definition for NFBSC_DB_MAX calc.
1195 00 Maximum DATABASE value
1196 00 literal NFBSC_DB_MAX = 27: Maximum DATABASE value
1197 00 literal NFBSC_OP_EQL = 0: Match if SEARCH_KEY value EQL database entry field
1198 00 literal NFBSC_OP_GTRU = 1: Match if SEARCH_KEY value GTRU database entry field
1199 00 literal NFBSC_OP_LSSU = 2: Match if SEARCH_KEY value LSSU database entry field
1200 00 literal NFBSC_OP_NEQ = 3: Match if SEARCH_KEY value NEQ database entry field
1201 00 The following may only be used internally by NETACP
1202 00 literal NFBSC_OP_FNDMIN = 4: Find entry with minimum key value
1203 00 literal NFBSC_OP_FNDMAX = 5: Find entry with maximum key value
1204 00 literal NFBSC_OP_FNDPOS = 6: Find entry position in database
1205 00 Maximum operator function
1206 00 literal NFBSC_OP_MAXFCY = 3: Maximum operator function
1207 00 literal NFBSC_OP_MAXINT = 6: Maximum internal function
1208 00 literal NFBSC_LENGTH = 16: Minimum structure size.
1209 00 literal NFBSC_LENGTH = 16: Minimum structure size.
1210 00 counted strings. If the "cell size" is non-zero, it
1211 00 indicates the number of bytes which each string in
1212 00 the P4 buffer occupies. If it is zero then strings
1213 00 fields are stored as variable lengthed strings.
1214 00 literal NFBSS_NFBDEF = 20:
1215 00 macro NFB$B_FCT = 0,0,8,0 %: A function code as follows:
1216 00 Function codes for the NFB
1217 00 (leaving room for 20 obsolete function codes)
1218 00 macro NFB$B_FLAGS = 1,0,8,0 %: Miscellaneous control flags
1219 00 macro NFB$V_ERRUPD = 1,0,1,0 %: Update position context, even on error
1220 00 macro NFB$V_MULT = 1,1,1,0 %: Process as many entries as can be fit into P4
1221 00 macro NFB$V_NOCTX = 1,2,1,0 %: Don't update position context, even if successful
```

```
1222 0      | (used to stay on an entry for a while). This
1223 0      | flag overrides the ERRUPD flag.
1224 0      | macro NFBSB_DATABASE = 2,0,8,0 %;      | A code identifying the database as follows:
1225 0      | ZERO is an illegal value for this field
1226 0      | macro NFBSB_OPER = 3,0,8,0 %;         | Specifies the sense of the search (e.g. EQL, GEQU)
1227 0      | when comparing against the SRCH_KEY field.
1228 0      | macro NFBSL_SRCH_KEY = 4,0,32,0 %;    | Search key field identifier specifying the key used
1229 0      | to locate the entry in the database. This search is
1230 0      | controlled by the sense of the NFBSB_OPER field.
1231 0      |
1232 0      | If this field has the value 'NFBS_C_WILDCARD', then
1233 0      | the very next entry in the list is assumed to be the
1234 0      | target of the search.
1235 0      |
1236 0      | If this field is not specified (zero), then it
1237 0      | is assumed to be NFBS_C_WILDCARD (no search key).
1238 0      |
1239 0      | macro NFBSL_SRCH2_KEY = 8,0,32,0 %;   | Secondary search key field ID specifying the key used
1240 0      | to locate the entry in the database. This search is
1241 0      | controlled by the sense of the NFBSB_OPER2 field.
1242 0      |
1243 0      | If both SRCH_KEY and SRCH2_KEY are specified, then
1244 0      | only those database entries matching both search keys
1245 0      | will be processed.
1246 0      |
1247 0      | If this field is not specified (zero), then it
1248 0      | is assumed to be NFBS_C_WILDCARD (no search key).
1249 0      |
1250 0      | macro NFBSB_OPER2 = 12,0,8,0 %;       | Specifies the sense of the search (e.g. EQL, GEQU)
1251 0      | when comparing against the SRCH2_KEY field.
1252 0      | macro NFBSB_MBZ1 = 13,0,8,0 %;        | Reserved. MBZ.
1253 0      | macro NFBSW_CELL_SIZE = 14,0,16,0 %;  | Some of the field values found in the P4 buffer are
1254 0      | macro NFBSL_FLDID = 16,0,32,0 %;     | Cell containing the first field ID -- the list
1255 0      | of field IDs begins here and continues to the
1256 0      | end of the structure.
1257 0      |
1258 0      | The list may be terminated before the end of the
1259 0      | structure by placing the value NFBS_C_ENDOFLIST
1260 0      | in the longword following the last field ID.
1261 0      |
1262 0      |
1263 0      | Define the "field i.d." format.
1264 0      |
1265 0      | literal NFBSM_INX = 65535;
1266 0      | literal NFBSM_TYP = 196608;
1267 0      | literal NFBSM_SPARE = 16515072;
1268 0      | literal NFBSM_DB = -16777216;
1269 0      | literal NFBS_C_TYP_BIT = 0;           | Field type for bits
1270 0      | literal NFBS_C_TYP_V = 0;             | Field type for bits
1271 0      | literal NFBS_C_TYP_LNG = 1;           | Field type for longwords
1272 0      | literal NFBS_C_TYP_L = 1;             | Field type for longwords
1273 0      | literal NFBS_C_TYP_STR = 2;           | Field type for strings
1274 0      | literal NFBS_C_TYP_S = 2;             | Field type for strings
1275 0      |
1276 0      | Define useful symbols for storing and retrieving binary and string
1277 0      | values from the P2 and P4 buffers
1278 0
```

```

1279 0 Literal NFBSS_NFBDEF1 = 4;
1280 0 macro NFB$L_PARAM_ID = 0,0,32,0 %; ! Define parameter ID longword
1281 0 macro NFB$V_INX = 0,0,16,0 %; !
1282 0 Literal NFBSS_INX = 16; ! Index into semantic table
1283 0 macro NFB$V_TYP = 0,16,2,0 %; !
1284 0 Literal NFBSS_TYP = 2; ! Field type (string, bit, etc.)
1285 0 macro NFB$V_SPARE = 0,18,6,0 %; !
1286 0 Literal NFBSS_SPARE = 6; ! Reserved, MBZ
1287 0 macro NFB$V_DB = 0,24,8,0 %; !
1288 0 Literal NFBSS_DB = 8; ! Data-base i.d.
1289 0 Literal NFBSS_NFBDEF2 = 4; !
1290 0 macro NFB$L_LNG_VALUE = 0,0,32,0 %; ! Longword value
1291 0 Literal NFBSS_NFBDEF3 = 4; !
1292 0 macro NFB$L_BIT_VALUE = 0,0,32,0 %; ! Boolean value
1293 0 Literal NFB$C_NDI_LCK = 33554433; ! Set if conditionally writable fields are not writable
1294 0 Literal NFB$C_NDI_LOO = 33554434; ! Set if CNF is for a 'loopback' node
1295 0 Literal NFB$C_NDI_REA = 33554435; ! Set if node is reachable
1296 0
1297 0 'Longword' Parameters
1298 0
1299 0 Literal NFB$C_NDI_TAD = 33619984; ! 'transformed address' - uses local node address
1300 0 ! for the local NDI (instead of zero as does ADD)
1301 0 Literal NFB$C_NDI_CTA = 33619985; ! Absolute due time for logging counters
1302 0 Literal NFB$C_NDI_ADD = 33619986; ! Address
1303 0 Literal NFB$C_NDI_CTI = 33619987; ! Counter timer
1304 0 Literal NFB$C_NDI_ACL = 33619988; ! Active links
1305 0 Literal NFB$C_NDI_DEL = 33619989; ! Delay
1306 0 Literal NFB$C_NDI_DTY = 33619990; ! Destination Type
1307 0 Literal NFB$C_NDI_DCO = 33619991; ! Destination Cost
1308 0 Literal NFB$C_NDI_DHO = 33619992; ! Destination Hops
1309 0 Literal NFB$C_NDI_SDV = 33619993; ! Service Device
1310 0 Literal NFB$C_NDI_CPU = 33619994; ! CPU type
1311 0 Literal NFB$C_NDI_STY = 33619995; ! Software type
1312 0 Literal NFB$C_NDI_DAD = 33619996; ! Dump address
1313 0 Literal NFB$C_NDI_DCT = 33619997; ! Dump count
1314 0 Literal NFB$C_NDI_OHO = 33619998; ! Host
1315 0 Literal NFB$C_NDI_IHO = 33619999; ! Host
1316 0 Literal NFB$C_NDI_ACC = 33620000; ! Access switch (inbound, outbound, etc)
1317 0 Literal NFB$C_NDI_PRX = 33620001; ! ** obsolete ** (Node proxy parameter)
1318 0 Literal NFB$C_NDI_NND = 33620002; ! Next node address
1319 0 Literal NFB$C_NDI_SNV = 33620003; ! Service Node Version
1320 0
1321 0 'String parameters
1322 0
1323 0 Literal NFB$C_NDI_COL = 33685568; ! Collating field
1324 0 Literal NFB$C_NDI_HAC = 33685569; ! Node address/loop linename combination
1325 0 Literal NFB$C_NDI_CNT = 33685570; ! Counters
1326 0 Literal NFB$C_NDI_NNA = 33685571; ! Name
1327 0 Literal NFB$C_NDI_SLI = 33685572; ! Service line
1328 0 Literal NFB$C_NDI_SPA = 33685573; ! Service password
1329 0 Literal NFB$C_NDI_LOA = 33685574; ! Load file
1330 0 Literal NFB$C_NDI_SLO = 33685575; ! Secondary loader
1331 0 Literal NFB$C_NDI_TLO = 33685576; ! Tertiary loader
1332 0 Literal NFB$C_NDI_SID = 33685577; ! Software ID
1333 0 Literal NFB$C_NDI_DUM = 33685578; ! Dump file
1334 0 Literal NFB$C_NDI_SDU = 33685579; ! Secondary dumper
1335 0 Literal NFB$C_NDI_NLI = 33685580; ! Loopback Line

```

```
1336 00 literal NFBSC_NDI_DLI = 33685581: Destination Line
1337 00 literal NFBSC_NDI_PUS = 33685582: Privileged user id
1338 00 literal NFBSC_NDI_PAC = 33685583: Privileged account
1339 00 literal NFBSC_NDI_PPW = 33685584: Privileged password
1340 00 literal NFBSC_NDI_NUS = 33685585: Non-privileged user id
1341 00 literal NFBSC_NDI_NAC = 33685586: Non-privileged account
1342 00 literal NFBSC_NDI_NPW = 33685587: Non-privileged password
1343 00 literal NFBSC_NDI_RPA = 33685588: Receive password
1344 00 literal NFBSC_NDI_TPA = 33685589: Transmit password
1345 00 literal NFBSC_NDI_DFL = 33685590: Diagnostic load file
1346 00 literal NFBSC_NDI_HWA = 33685591: Hardware NI address (ROM address)
1347 00 literal NFBSC_NDI_LPA = 33685592: Loop assistant NI address
1348 00 literal NFBSC_NDI_NNN = 33685593: Next node name to destination (goes with NND)
1349
1350 Define a field identifier index for each parameter in the LNI database.
1351
1352 Boolean parameters
1353
1354 literal NFBSC_LNI_LCK = 16777217: Set if conditionally writable fields are not writable
1355 literal NFBSC_LNI_SUP = 16777218: Set if area numbers are to be suppressed
1356
1357 'Longword parameters
1358
1359 literal NFBSC_LNI_ADD = 16842768: Address
1360 literal NFBSC_LNI_ACL = 16842769: Total number of active links
1361 literal NFBSC_LNI_ITI = 16842770: Incoming timer
1362 literal NFBSC_LNI_OTI = 16842771: Outgoing timer
1363 literal NFBSC_LNI_STA = 16842772: State
1364 literal NFBSC_LNI_MLK = 16842773: Maximum links
1365 literal NFBSC_LNI_DFA = 16842774: Delay factor
1366 literal NFBSC_LNI_DWE = 16842775: Delay weight
1367 literal NFBSC_LNI_IAT = 16842776: Inactivity timer
1368 literal NFBSC_LNI_RFA = 16842777: Retransmit factor
1369 literal NFBSC_LNI_ETY = 16842778: Executor Type
1370 literal NFBSC_LNI_RTI = 16842779: Routing timer
1371 literal NFBSC_LNI_RSI = 16842780: Routing suppression timer
1372 literal NFBSC_LNI_SAD = 16842781: Subaddress
1373 (lower word = lower limit, upper word = upper limit)
1374 literal NFBSC_LNI_MAD = 16842782: Maximum address
1375 literal NFBSC_LNI_MLN = 16842783: Maximum lines
1376 literal NFBSC_LNI_MCO = 16842784: Maximum cost
1377 literal NFBSC_LNI_MHO = 16842785: Maximum hops
1378 literal NFBSC_LNI_MVI = 16842786: Maximum visits
1379 literal NFBSC_LNI_MBU = 16842787: Maximum buffers
1380 literal NFBSC_LNI_BUS = 16842788: Forwarding buffer size
1381 literal NFBSC_LNI_LPC = 16842789: Loop count
1382 literal NFBSC_LNI_LPL = 16842790: Loop length
1383 literal NFBSC_LNI_LPD = 16842791: Loop Data type
1384 literal NFBSC_LNI_DAC = 16842792: Default access switch (inbound, outbound, etc)
1385 literal NFBSC_LNI_DPX = 16842793: Default proxy access (inbound, outbound, etc)
1386 literal NFBSC_LNI_PIQ = 16842794: Pipeline quota
1387 literal NFBSC_LNI_LPH = 16842795: Loop help type of assistance given to loop requestors
1388 literal NFBSC_LNI_BRT = 16842796: Broadcast routing timer
1389 literal NFBSC_LNI_MAR = 16842797: Maximum areas
1390 literal NFBSC_LNI_MBE = 16842798: Maximum nonrouters on NI
1391 literal NFBSC_LNI_MBR = 16842799: Maximum routers on NI
1392
```

```

1393 0 literal NFBSC_LNI_AMC = 16842800; : Area maximum cost
1394 00 literal NFBSC_LNI_AMH = 16842801; : Area maximum hops
1395 000 literal NFBSC_LNI_SBS = 16842802; : Segment buffer size
1396 0000 literal NFBSC_LNI_ALI = 16842803; : Alias local node address (cluster address)
1397 00000

```

String parameters

```

1398 00000
1399 00000
1400 00000 literal NFBSC_LNI_COL = 16908352; : Collating field
1401 00000 literal NFBSC_LNI_NAM = 16908353; : Local node name
1402 00000 literal NFBSC_LNI_CNT = 16908354; : Counters
1403 00000 literal NFBSC_LNI_IDE = 16908355; : Identification
1404 00000 literal NFBSC_LNI_MVE = 16908356; : Management version
1405 00000 literal NFBSC_LNI_NVE = 16908357; : Nsp version
1406 00000 literal NFBSC_LNI_RVE = 16908358; : Routing version
1407 00000 literal NFBSC_LNI_PHA = 16908359; : Physical NI address (current address)
1408 00000

```

Define a field identifier index for each parameter in the OBI database.

Boolean Parameters

```

1409 00000
1410 00000
1411 00000
1412 00000
1413 00000
1414 00000 literal NFBSC_OBI_LCK = 50331649; : Set if conditionally writable fields are not writable
1415 00000 literal NFBSC_OBI_SET = 50331650; : Set if a "set" QIO has ever modified the CNF. If
1416 00000 not then the CNF was due to a "declare name/object"
1417 00000 only and may be deleted when the declaring process
1418 00000 breaks the channel over which the object was declared
1419 00000

```

Longword Parameters

```

1420 00000
1421 00000
1422 00000 literal NFBSC_OBI_LPR = 50397200; : Low order privileges
1423 00000 literal NFBSC_OBI_HPR = 50397201; : High order privileges
1424 00000 literal NFBSC_OBI_UCB = 50397202; : Owner's UCB address
1425 00000 literal NFBSC_OBI_CHN = 50397203; : Owner's channel
1426 00000 literal NFBSC_OBI_NUM = 50397204; : Number
1427 00000 literal NFBSC_OBI_PID = 50397205; : Process id
1428 00000 literal NFBSC_OBI_PRX = 50397206; : Proxy login switch (inbound, outbound, etc)
1429 00000

```

String Parameters

```

1430 00000
1431 00000
1432 00000 literal NFBSC_OBI_COL = 50462784; : Collating field
1433 00000 literal NFBSC_OBI_ZNA = 50462785; : Zero obj+name identifier
1434 00000 literal NFBSC_OBI_SFI = 50462786; : Parsed file i.d.
1435 00000 literal NFBSC_OBI_IAC = 50462787; : Default inbound combined access control string
1436 00000 literal NFBSC_OBI_NAM = 50462788; : Name
1437 00000 literal NFBSC_OBI_FID = 50462789; : File id
1438 00000 literal NFBSC_OBI_USR = 50462790; : User id
1439 00000 literal NFBSC_OBI_ACC = 50462791; : Account
1440 00000 literal NFBSC_OBI_PSW = 50462792; : Password
1441 00000

```

Define a field identifier index for each parameter in the CRI database.

```

1442 00000
1443 00000
1444 00000
1445 00000 /* Use
1446 00000 /* ----
1447 00000 C = common
1448 00000 E = Executor (used by Transport)
1449 00000 X = Native X.25 network management

```

D = DECnet (not X.25)

Boolean Parameters

1450 0
1451 0
1452 0
1453 0
1454 0
1455 0 literal NFBSC_CRI_LCK = 67108865; : D Set if conditionally writable fields are
1456 0 not writable
1457 0 literal NFBSC_CRI_SER = 67108866; : D Set if Service functions not allowed
1458 0 literal NFBSC_CRI_BLK = 67108867; : E Blocking
1459 0 literal NFBSC_CRI_VER = 67108868; : D Transport verification requested if set
1460 0 literal NFBSC_CRI_DLM = 67108869; : E Circuit to be used as X.25 datalink, if set
1461 0 If clear, circuit is for X.25 native use

'Longword' parameters

1462 0
1463 0
1464 0
1465 0 literal NFBSC_CRI_OWPID = 67174416; : D PID of temp owner of line in service state
1466 0 literal NFBSC_CRI_CTA = 67174417; : D Absolute due time for counter logging
1467 0 literal NFBSC_CRI_SRV = 67174418; : D Service substate qualifier
1468 0 literal NFBSC_CRI_STA = 67174419; : C State
1469 0 literal NFBSC_CRI_SUB = 67174420; : C Substate
1470 0 literal NFBSC_CRI_LCT = 67174421; : C Counter timer
1471 0 literal NFBSC_CRI_PNA = 67174422; : E Adjacent node address
1472 0 literal NFBSC_CRI_BLO = 67174423; : E Partner's receive block size
1473 0 literal NFBSC_CRI_COS = 67174424; : E Cost
1474 0 literal NFBSC_CRI_HET = 67174425; : E Hello timer
1475 0 literal NFBSC_CRI_LIT = 67174426; : E Listen timer
1476 0 literal NFBSC_CRI_MRC = 67174427; : E Maximum recalls
1477 0 literal NFBSC_CRI_RCT = 67174428; : E Recall timer
1478 0 literal NFBSC_CRI_POL = 67174429; : D Polling state
1479 0 literal NFBSC_CRI_PLS = 67174430; : D Polling substate
1480 0 literal NFBSC_CRI_USE = 67174431; : X Usage
1481 0 literal NFBSC_CRI_TYP = 67174432; : C Type
1482 0 literal NFBSC_CRI_CHN = 67174433; : X X.25 Channel
1483 0 literal NFBSC_CRI_MBL = 67174434; : X Maximum block
1484 0 literal NFBSC_CRI_MWI = 67174435; : X Maximum window
1485 0 literal NFBSC_CRI_TRI = 67174436; : D Tributary
1486 0 literal NFBSC_CRI_BBT = 67174437; : D Babble timer
1487 0 literal NFBSC_CRI_TRT = 67174438; : D Transmit timer
1488 0 literal NFBSC_CRI_MRB = 67174439; : D Maximum receive buffers
1489 0 literal NFBSC_CRI_MTR = 67174440; : D Maximum transmits
1490 0 literal NFBSC_CRI_ACB = 67174441; : D Active base
1491 0 literal NFBSC_CRI_ACI = 67174442; : D Active increment
1492 0 literal NFBSC_CRI_IAB = 67174443; : D Inactive base
1493 0 literal NFBSC_CRI_IAI = 67174444; : D Inactive increment
1494 0 literal NFBSC_CRI_IAT = 67174445; : D Inactive threshold
1495 0 literal NFBSC_CRI_DYB = 67174446; : D Dying base
1496 0 literal NFBSC_CRI_DYI = 67174447; : D Dying increment
1497 0 literal NFBSC_CRI_DYT = 67174448; : D Dying threshold
1498 0 literal NFBSC_CRI_DTH = 67174449; : D Dead threshold
1499 0 literal NFBSC_CRI_MST = 67174450; : D Maintenance mode state (0 => On, 1 => Off)
1500 0 literal NFBSC_CRI_XPT = 67174451; : E Transport protocol to use
1501 0 literal NFBSC_CRI_MRT = 67174452; : E Maximum routers on this NI
1502 0 literal NFBSC_CRI_RPR = 67174453; : E Router priority
1503 0 literal NFBSC_CRI_DRT = 67174454; : E Designated router on NI (node address)

String Parameters

1504 0
1505 0
1506 0

```
1507 0 literal NFB$C_CRI_COL = 67240000; : D Collating field
1508 00 literal NFB$C_CRI_NAM = 67240001; : C Circuit name
1509 00 literal NFB$C_CRI_VMSNAM = 67240002; : D Device name in VMS format
1510 00 literal NFB$C_CRI_CHR = 67240003; : D Characteristics buffer for startup control QIO
1511 00 literal NFB$C_CRI_CNT = 67240004; : C Counters
1512 00 literal NFB$C_CRI_P2P = 67240005; : D Line's PhaseII partner name (for loopback)
1513 00 literal NFB$C_CRI_LOO = 67240006; : E Loopback name
1514 00 literal NFB$C_CRI_PNN = 67240007; : E Adjacent node name
1515 00 literal NFB$C_CRI_NUM = 67240008; : X Call Number
1516 000 literal NFB$C_CRI_DTE = 67240009; : X DTE
1517 0000 literal NFB$C_CRI_DEVNAM = 67240010; : D Device name in VMS format, with unit included
1518 0000
1519 0000 Define a field identifier index for each parameter in the PLI database.
1520 0000
1521 0000 C = common
1522 0000 L = LAPB (X.25)
1523 0000 D = DDCMP (not X.25)
1524 0000 E = Ethernet
1525 0000
1526 0000 /r Use
1527 0000 ----
1528 0000
1529 0000 Boolean Parameters
1530 0000
1531 0000 literal NFB$C_PLI_LCK = 83886081; : D Set if conditionally writable fields are
1532 0000 not_writable
1533 0000 literal NFB$C_PLI_SER = 83886082; : D Service
1534 0000 literal NFB$C_PLI_DUP = 83886083; : C Duplex (set if half)
1535 0000 literal NFB$C_PLI_CON = 83886084; : C Controller (set if loopback)
1536 0000 literal NFB$C_PLI_CLO = 83886085; : C Clock mode (set if internal)
1537 0000
1538 0000 'Longword' Parameters
1539 0000
1540 0000 literal NFB$C_PLI_CTA = 83951632; : D Absolute time for counter read and clear
1541 0000 literal NFB$C_PLI_STA = 83951633; : C State
1542 0000 literal NFB$C_PLI_SUB = 83951634; : C Substate
1543 0000 literal NFB$C_PLI_LCT = 83951635; : D Counter timer
1544 0000 literal NFB$C_PLI_PRO = 83951636; : C Protocol
1545 0000 literal NFB$C_PLI_STI = 83951637; : D Service timer
1546 0000 literal NFB$C_PLI_HTI = 83951638; : L Holdback timer
1547 0000 literal NFB$C_PLI_MBL = 83951639; : L Maximum block
1548 0000 literal NFB$C_PLI_MRT = 83951640; : L Maximum retransmits
1549 0000 literal NFB$C_PLI_MWI = 83951641; : L Maximum window
1550 0000 literal NFB$C_PLI_SLT = 83951642; : D Scheduling timer
1551 0000 literal NFB$C_PLI_DDT = 83951643; : D Dead timer
1552 0000 literal NFB$C_PLI_DLT = 83951644; : D Delay timer
1553 0000 literal NFB$C_PLI_SRT = 83951645; : D Stream timer
1554 0000 literal NFB$C_PLI_BFN = 83951646; : D Receive buffers
1555 0000 literal NFB$C_PLI_BUS = 83951647; : D Action routine returns bufsiz used for line
1556 0000 literal NFB$C_PLI_PLVEC = 83951648; : D PLVEC i.d.
1557 0000 literal NFB$C_PLI_RTT = 83951649; : D Retransmit timer
1558 0000 literal NFB$C_PLI_MOD = 83951650; : L X.25 mode (DCE, DTE, etc).
1559 0000 literal NFB$C_PLI_LPC = 83951651; : L Loop count
1560 0000 literal NFB$C_PLI_LPL = 83951652; : L Loop length
1561 0000 literal NFB$C_PLI_LPD = 83951653; : L Loop Data type
1562 0000 literal NFB$C_PLI_EPT = 83951654; : E Ethernet protocol type for datalink
1563 0000 literal NFB$C_PLI_BFS = 83951655; : C Line buffer size (overrides executor bufsiz)
```

1564 0
1565 0
1566 0
1567 0
1568 0
1569 0
1570 0
1571 0
1572 0
1573 0
1574 0
1575 0
1576 0
1577 0
1578 0
1579 0
1580 0
1581 0
1582 0
1583 0
1584 0
1585 0
1586 0
1587 0
1588 0
1589 0
1590 0
1591 0
1592 0
1593 0
1594 0
1595 0
1596 0
1597 0
1598 0
1599 0
1600 0
1601 0
1602 0
1603 0
1604 0
1605 0
1606 0
1607 0
1608 0
1609 0
1610 0
1611 0
1612 0
1613 0
1614 0
1615 0
1616 0
1617 0
1618 0
1619 0
1620 0

```
String Parameters
literal NFB$C_PLI_COL = 84017216;      ! D Collating field
literal NFB$C_PLI_NAM = 84017217;      ! C Line name
literal NFB$C_PLI_VMSNAM = 84017218;   ! D Device name in VMS format
literal NFB$C_PLI_CHR = 84017219;     ! D Set-mode $QIO Line Characteristics buffer
literal NFB$C_PLI_CNT = 84017220;     ! C Counters
literal NFB$C_PLI_MCD = 84017221;     ! L Filespec for microcode dump (initiates dump)
literal NFB$C_PLI_HWA = 84017222;     ! D NI hardware address (ROM address)
literal NFB$C_PLI_DEVNAM = 84017223;   ! D Device name in VMS format, with unit included

Define a field identifier index for each parameter in the EFI database.

Boolean Parameters
literal NFB$C_EFI_LCK = 100663297;     ! Set if conditionally writable fields are not writable

'Longword' Parameters
literal NFB$C_EFI_SIN = 100728848;
literal NFB$C_EFI_SP1 = 100728849;
literal NFB$C_EFI_B1 = 100728850;
literal NFB$C_EFI_B2 = 100728851;

String Parameters
literal NFB$C_EFI_COL = 100794432;     ! Collating field
literal NFB$C_EFI_EVE = 100794433;
literal NFB$C_EFI_SB1 = 100794434;
literal NFB$C_EFI_SB2 = 100794435;
literal NFB$C_EFI_SB3 = 100794436;

Define a field identifier index for each parameter in the ESI database.

Boolean Parameters
literal NFB$C_ESI_LCK = 117440513;     ! Set if conditionally writable fields are not writable

'Longword' Parameters
literal NFB$C_ESI_SNK = 117506064;
literal NFB$C_ESI_STA = 117506065;
literal NFB$C_ESI_SP1 = 117506066;
literal NFB$C_ESI_B1 = 117506067;
literal NFB$C_ESI_B2 = 117506068;

String Parameters
literal NFB$C_ESI_COL = 117571648;     ! Collating field
literal NFB$C_ESI_LNA = 117571649;
literal NFB$C_ESI_SB1 = 117571650;
literal NFB$C_ESI_SB2 = 117571651;
literal NFB$C_ESI_SB3 = 117571652;
```


1621 0
1622 0
1623 0
1624 0
1625 0
1626 0
1627 0
1628 0
1629 0
1630 0
1631 0
1632 0
1633 0
1634 0
1635 0
1636 0
1637 0
1638 0
1639 0
1640 0
1641 0
1642 0
1643 0
1644 0
1645 0
1646 0
1647 0
1648 0
1649 0
1650 0
1651 0
1652 0
1653 0
1654 0
1655 0
1656 0
1657 0
1658 0
1659 0
1660 0
1661 0
1662 0
1663 0
1664 0
1665 0
1666 0
1667 0
1668 0
1669 0
1670 0
1671 0
1672 0
1673 0
1674 0
1675 0
1676 0
1677 0

Define a field identifier index for each parameter in the LLI database.

Boolean Parameters

literal NFB\$C_LLI_LCK = 134217729; ! Set if conditionally writable fields are not writable

Longword Parameters

literal NFB\$C_LLI_DLY = 134283280; ! Round trip delay time
literal NFB\$C_LLI_STA = 134283281; ! State
literal NFB\$C_LLI_LLN = 134283282; ! Local link number
literal NFB\$C_LLI_RLN = 134283283; ! Remote link number
literal NFB\$C_LLI_PNA = 134283284; ! Partner's node address
literal NFB\$C_LLI_PID = 134283285; ! External Process I.D.
literal NFB\$C_LLI_IPID = 134283286; ! Internal Process I.D.
literal NFB\$C_LLI_XWB = 134283287; ! Pointer to XWB
literal NFB\$C_LLI_CNT = 134283288; ! Counters

String Parameters

literal NFB\$C_LLI_COL = 134348864; ! Collating field
literal NFB\$C_LLI_USR = 134348865; ! User name
literal NFB\$C_LLI_PRC = 134348866; ! Process name
literal NFB\$C_LLI_PNN = 134348867; ! Partner's node name
literal NFB\$C_LLI_RID = 134348868; ! Partner's process i.d.

X.25 network parameters (part of MODULE X25-PROTOCOL)

Define a field identifier index for each parameter in the XNI database.

Boolean Parameters

literal NFB\$C_XNI_LCK = 150994945; ! Set if conditionally writable fields are not writable
literal NFB\$C_XNI_MNS = 150994946; ! X.25 multi-network support (set if enabled)

'Longword' Parameters

literal NFB\$C_XNI_CAT = 151060496; ! Call timer
literal NFB\$C_XNI_CLT = 151060497; ! Clear timer
literal NFB\$C_XNI_DBL = 151060498; ! Default data
literal NFB\$C_XNI_DWI = 151060499; ! Default window
literal NFB\$C_XNI_MBL = 151060500; ! Maximum data
literal NFB\$C_XNI_MCL = 151060501; ! Maximum clears
literal NFB\$C_XNI_MRS = 151060502; ! Maximum resets
literal NFB\$C_XNI_MST = 151060503; ! Maximum restarts
literal NFB\$C_XNI_MWI = 151060504; ! Maximum window
literal NFB\$C_XNI_RST = 151060505; ! Reset timer
literal NFB\$C_XNI_STT = 151060506; ! Restart timer

String Parameters

literal NFB\$C_XNI_COL = 151126080; ! Collating field
literal NFB\$C_XNI_NET = 151126081; ! Network

X.25 DTE parameters (qualified by a given network)

1678 0
1679 0
1680 0
1681 0
1682 0
1683 0
1684 0
1685 0
1686 0
1687 0
1688 0
1689 0
1690 0
1691 0
1692 0
1693 0
1694 0
1695 0
1696 0
1697 0
1698 0
1699 0
1700 0
1701 0
1702 0
1703 0
1704 0
1705 0
1706 0
1707 0
1708 0
1709 0
1710 0
1711 0
1712 0
1713 0
1714 0
1715 0
1716 0
1717 0
1718 0
1719 0
1720 0
1721 0
1722 0
1723 0
1724 0
1725 0
1726 0
1727 0
1728 0
1729 0
1730 0
1731 0
1732 0
1733 0
1734 0

Define a field identifier index for each parameter in the XDI database.

Boolean Parameters

literal NFBSC_XDI_LCK = 184549377; ! Set if conditionally writable fields are not writable

'Longword' Parameters

literal NFBSC_XDI_ACH = 184614928; ! Active channels
literal NFBSC_XDI_ASW = 184614929; ! Active switched
literal NFBSC_XDI_CTM = 184614930; ! Counter timer
literal NFBSC_XDI_MCH = 184614931; ! Maximum channels
literal NFBSC_XDI_STA = 184614932; ! State
literal NFBSC_XDI_SUB = 184614933; ! Substate
literal NFBSC_XDI_MCI = 184614934; ! Maximum circuits [VMS only]

String Parameters

literal NFBSC_XDI_COL = 184680512; ! Collating field
literal NFBSC_XDI_DTE = 184680513; ! DTE address
literal NFBSC_XDI_CHN = 184680514; ! Channels
literal NFBSC_XDI_LIN = 184680515; ! Line
literal NFBSC_XDI_NET = 184680516; ! Network
literal NFBSC_XDI_CNT = 184680517; ! Counters

X.25 group parameters (qualified by a given DTE)

Define a field identifier index for each parameter in the XGI database.

Boolean Parameters

literal NFBSC_XGI_LCK = 167772161; ! Set if conditionally writable fields are not writable

'Longword' Parameters

literal NFBSC_XGI_GNM = 167837712; ! Group number
literal NFBSC_XGI_GTY = 167837713; ! Group type

String Parameters

literal NFBSC_XGI_COL = 167903296; ! Collating field. This field must be unique across
all entries in this database. It consists of the
group-name string followed by the DTE address.
literal NFBSC_XGI_GRP = 167903297; ! Group name
literal NFBSC_XGI_GDT = 167903298; ! Group DTE address

X.25 server parameters (global parameters for all destinations)

Define a field identifier index for each parameter in the XSS database.

Boolean Parameters

literal NFBSC_XSS_LCK = 201326593; ! Set if conditionally writable fields are not writable

1735 0
1736 0
1737 0
1738 0
1739 0
1740 0
1741 0
1742 0
1743 0
1744 0
1745 0
1746 0
1747 0
1748 0
1749 0
1750 0
1751 0
1752 0
1753 0
1754 0
1755 0
1756 0
1757 0
1758 0
1759 0
1760 0
1761 0
1762 0
1763 0
1764 0
1765 0
1766 0
1767 0
1768 0
1769 0
1770 0
1771 0
1772 0
1773 0
1774 0
1775 0
1776 0
1777 0
1778 0
1779 0
1780 0
1781 0
1782 0
1783 0
1784 0
1785 0
1786 0
1787 0
1788 0
1789 0
1790 0
1791 0

'Longword' Parameters

literal NFB\$C_XSS_MCI = 201392144; ! Maximum circuits allowed
literal NFB\$C_XSS_STA = 201392145; ! State
literal NFB\$C_XSS_ACI = 201392146; ! Active circuits
literal NFB\$C_XSS_CTM = 201392147; ! Counter timer

String Parameters

literal NFB\$C_XSS_COL = 201457728; ! Collating field. This field must be unique across
all entries in this database.
literal NFB\$C_XSS_CNT = 201457729; ! Counters

X.25 destination parameters (part of MODULE X25-SERVER)

Define a field identifier index for each parameter in the XDS database.

Boolean Parameters

literal NFB\$C_XDS_LCK = 218103809; ! Set if conditionally writable fields are not writable

'Longword' Parameters

literal NFB\$C_XDS_PRI = 218169360; ! Priority
literal NFB\$C_XDS_SAD = 218169361; ! Subaddress range
(lower word = lower limit, upper word = upper limit)
literal NFB\$C_XDS_NOD = 218169362; ! Remote node address containing server (gateways only)

String Parameters

literal NFB\$C_XDS_COL = 218234944; ! Collating field. This field must be unique across
all entries in this database.
literal NFB\$C_XDS_DST = 218234945; ! Destination DTE address
literal NFB\$C_XDS_CMK = 218234946; ! Call mask
literal NFB\$C_XDS_CVL = 218234947; ! Call value
literal NFB\$C_XDS_GRP = 218234948; ! Group name
literal NFB\$C_XDS_NUM = 218234949; ! DTE number
literal NFB\$C_XDS_OBJ = 218234950; ! Object name
literal NFB\$C_XDS_FIL = 218234951; ! Command procedure to execute when starting object
literal NFB\$C_XDS_USR = 218234952; ! User name
literal NFB\$C_XDS_PSW = 218234953; ! Password
literal NFB\$C_XDS_ACC = 218234954; ! Account

X.29 server parameters (global parameters for all destinations)

Define a field identifier index for each parameter in the XS9 database.

Boolean Parameters

literal NFB\$C_XS9_LCK = 234881025; ! Set if conditionally writable fields are not writable

'Longword' Parameters

literal NFB\$C_XS9_MCI = 234946576; ! Maximum circuits allowed

```
1792 0 Literal NFB$C_XS9_STA = 234946577:      ! State
1793 0 Literal NFB$C_XS9_ACI = 234946578:      ! Active circuits
1794 0 Literal NFB$C_XS9_CTM = 234946579:      ! Counter timer
1795 0
1796 0 String Parameters
1797 0
1798 0 Literal NFB$C_XS9_COL = 235012160:      ! Collating field. This field must be unique across
1799 0 all entries in this database.
1800 0 Literal NFB$C_XS9_CNT = 235012161:      ! Counters
1801 0
1802 0 X.29 destination parameters (part of MODULE X29-SERVER)
1803 0
1804 0 Define a field identifier index for each parameter in the XD9 database.
1805 0
1806 0
1807 0 Boolean Parameters
1808 0
1809 0 Literal NFB$C_XD9_LCK = 251658241:      ! Set if conditionally writable fields are not writable
1810 0
1811 0 'Longword' Parameters
1812 0
1813 0 Literal NFB$C_XD9_PRI = 251723792:      ! Priority
1814 0 Literal NFB$C_XD9_SAD = 251723793:      ! Subaddress range
1815 0 (lower word = lower limit, upper word = upper limit)
1816 0 Literal NFB$C_XD9_NOD = 251723794:      ! Remote node address containing server (gateways only)
1817 0
1818 0 String Parameters
1819 0
1820 0 Literal NFB$C_XD9_COL = 251789376:      ! Collating field. This field must be unique across
1821 0 all entries in this database.
1822 0 Literal NFB$C_XD9_DST = 251789377:      ! Destination DTE address
1823 0 Literal NFB$C_XD9_CMK = 251789378:      ! Call mask
1824 0 Literal NFB$C_XD9_CVL = 251789379:      ! Call value
1825 0 Literal NFB$C_XD9_GRP = 251789380:      ! Group name
1826 0 Literal NFB$C_XD9_NUM = 251789381:      ! DTE number
1827 0 Literal NFB$C_XD9_OBJ = 251789382:      ! && Object name
1828 0 Literal NFB$C_XD9_FIL = 251789383:      ! Command procedure to execute when starting object
1829 0 Literal NFB$C_XD9_USR = 251789384:      ! User name
1830 0 Literal NFB$C_XD9_PSW = 251789385:      ! Password
1831 0 Literal NFB$C_XD9_ACC = 251789386:      ! Account
1832 0
1833 0 X.25 tracing facility (global) parameters.
1834 0
1835 0 Define a field identifier index for each parameter in the XTI database.
1836 0
1837 0
1838 0 Boolean Parameters
1839 0
1840 0 Literal NFB$C_XTI_LCK = 268435457:      ! Set if conditionally writable fields are not writable
1841 0
1842 0 'Longword' Parameters
1843 0
1844 0 Literal NFB$C_XTI_STA = 268501008:      ! State
1845 0 Literal NFB$C_XTI_BFZ = 268501009:      ! Buffer size
1846 0 Literal NFB$C_XTI_CPL = 268501010:      ! Capture limit
1847 0 Literal NFB$C_XTI_MBK = 268501011:      ! Maximum blocks/file
1848 0 Literal NFB$C_XTI_MBF = 268501012:      ! Maximum number of buffers
```

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```
1849 0 Literal NFBSC_XTI_MVR = 268501013; ! Maximum trace file version number
1850 0
1851 0 String Parameters
1852 0
1853 0 Literal NFBSC_XTI_COL = 268566592; ! Collating field. This field must be unique across
1854 0 all entries in this database.
1855 0 Literal NFBSC_XTI_FNM = 268566593; ! Trace file name
1856 0
1857 0 X.25 tracpoint (local) parameters.
1858 0
1859 0 Define a field identifier index for each parameter in the XTI database.
1860 0
1861 0 Boolean Parameters
1862 0
1863 0
1864 0 Literal NFBSC_XTT_LCK = 285212673; ! Set if conditionally writable fields are not writable
1865 0
1866 0 'Longword' Parameters
1867 0
1868 0 Literal NFBSC_XTT_TST = 285278224; ! State
1869 0 Literal NFBSC_XTT_CPS = 285278225; ! Capture size
1870 0
1871 0 String Parameters
1872 0
1873 0 Literal NFBSC_XTT_COL = 285343808; ! Collating field. This field must be unique across
1874 0 all entries in this database.
1875 0 Literal NFBSC_XTT_TPT = 285343809; ! Tracepoint name
1876 0
1877 0 X.25 Access (qualified by a given network)
1878 0
1879 0 Define a field identifier index for each parameter in the XAI database.
1880 0
1881 0 Boolean Parameters
1882 0
1883 0
1884 0 Literal NFBSC_XAI_LCK = 452984833; ! Set if conditionally writable fields are not writable
1885 0
1886 0 'Longword' Parameters
1887 0
1888 0 Literal NFBSC_XAI_NDA = 453050384; ! Node address
1889 0
1890 0 String Parameters
1891 0
1892 0 Literal NFBSC_XAI_COL = 453115968; ! Collating field
1893 0 Literal NFBSC_XAI_NET = 453115969; ! Network
1894 0 Literal NFBSC_XAI_USR = 453115970; ! User id
1895 0 Literal NFBSC_XAI_PSW = 453115971; ! Password
1896 0 Literal NFBSC_XAI_ACC = 453115972; ! Account
1897 0 Literal NFBSC_XAI_NOD = 453115973; ! Node id
1898 0
1899 0 Define SPI (Server Process) parameters
1900 0
1901 0 Boolean Parameters
1902 0
1903 0
1904 0 Literal NFBSC_SPI_LCK = 301989889; ! Set if conditionally writable fields are not writable
1905 0 Literal NFBSC_SPI_PRL = 301989890; ! Proxy flag which initially started server process
```

```

1906 0
1907 00
1908 00
1909 00
1910 00
1911 00
1912 00
1913 00
1914 00
1915 00
1916 00
1917 00
1918 00
1919 00
1920 00
1921 00
1922 00
1923 00
1924 00
1925 00
1926 00
1927 00
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1946 00
1947 00
1948 00
1949 00
1950 00
1951 00
1952 00
1953 00
1954 00
1955 00
1956 00
1957 00
1958 00
1959 00
1960 00
1961 00
1962 00

```

Longword Parameters

```

Literal NFB$C_SPI_PID = 302055440:      ! Server PID
Literal NFB$C_SPI_IRP = 302055441:      ! IRP of waiting DECLSERV QIO (0 if process active)
Literal NFB$C_SPI_CHN = 302055442:      ! Channel associated with DECLSERV IRP
Literal NFB$C_SPI_RNA = 302055443:      ! Remote node address which initially started server

```

String Parameters

```

Literal NFB$C_SPI_COL = 302121024:      ! Collating field
Literal NFB$C_SPI_ACS = 302121025:      ! ACS used to initially start server process
Literal NFB$C_SPI_RID = 302121026:      ! Remote user ID which initially started server
Literal NFB$C_SPI_SFI = 302121027:      ! Last (current) SFI given to server process
Literal NFB$C_SPI_NCB = 302121028:      ! Last (current) NCB given to server process
Literal NFB$C_SPI_PNM = 302121029:      ! Last (current) process name given to server

```

Define AJI (Adjacency) parameters

Boolean Parameters

```

Literal NFB$C_AJI_LCK = 318767105:      ! Set if conditionally writable fields are not writable
Literal NFB$C_AJI_REA = 318767106:      ! Reachable (set if two-way communication established)

```

Longword Parameters

```

Literal NFB$C_AJI_ADD = 318832656:      ! Node address
Literal NFB$C_AJI_TYP = 318832657:      ! Node type
Literal NFB$C_AJI_LIT = 318832658:      ! Listen timer for this adjacency
Literal NFB$C_AJI_BLS = 318832659:      ! Partner's block size
Literal NFB$C_AJI_RPR = 318832660:      ! Partner's router priority (on NI)

```

String Parameters

```

Literal NFB$C_AJI_COL = 318898240:      ! Collating field
Literal NFB$C_AJI_NNA = 318898241:      ! Node name
Literal NFB$C_AJI_CIR = 318898242:      ! Circuit name

```

Define SDI (Service DLE) parameters

Boolean Parameters

```

Literal NFB$C_SDI_LCK = 436207617:      ! Set if conditionally writable fields are not writable

```

Longword Parameters

```

Literal NFB$C_SDI_SUB = 436273168:      ! Service substate
Literal NFB$C_SDI_PID = 436273169:      ! PID of process owning this DLE link

```

String Parameters

```

Literal NFB$C_SDI_COL = 436338752:      ! Collating field
Literal NFB$C_SDI_CIR = 436338753:      ! Circuit name
Literal NFB$C_SDI_PHA = 436338754:      ! Service physical address (BC only)
Literal NFB$C_SDI_PRC = 436338755:      ! Name of process owning this DLE link

```

1963 0
1964 0
1965 0
1966 0
1967 0
1968 0
1969 0
1970 0
1971 0
1972 0
1973 0
1974 0
1975 0
1976 0
1977 0
1978 0
1979 0
1980 0
1981 0
1982 0
1983 0
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2008 0
2009 0
2010 0
2011 0
2012 0
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2014 0
2015 0
2016 0
2017 0
2018 0
2019 0

Define the AREA database (read only) for level 2 Phase IV routers only.

Boolean parameters

Literal NFBSC_ARI_LCK = 335544321: ! Set if conditionally writable fields are not writable
Literal NFBSC_ARI_REA = 335544322: ! Set if node is reachable

'Longword' Parameters

Literal NFBSC_ARI_ADD = 335609872: ! Address
Literal NFBSC_ARI_DCO = 335609873: ! Destination Cost
Literal NFBSC_ARI_DHO = 335609874: ! Destination Hops
Literal NFBSC_ARI_NND = 335609875: ! Next node address

String parameters

Literal NFBSC_ARI_COL = 335675456: ! Collating field
Literal NFBSC_ARI_DLI = 335675457: ! Circuit used for normal traffic to area
Literal NFBSS_NFBDEF4 = 2;
macro NFB\$W_STR_COUNT = 0,0,16,0 %; ! String count field
macro NFB\$B_STR_TEXT = 2,0,0,0 %; ! Start of string data

Define identifiers for each parameter in all database

** The low order 16 bits for each parameter must be unique **
*** with respect to all other parameters in its particular ***
** database. **

Define a field identifier index for each parameter in the NDI database.

Boolean parameters

*** MODULE DR ***

DISCONNECT REASONS

Literal NETSC_DR_NORMAL = 0: ! NO ERROR (SYNCH DISCONNECT)
Literal NETSC_DR_RSU = 1: ! COULDN'T ALLOCATE UCB ADDRESS
Literal NETSC_DR_NONODE = 2: ! Unrecognized node name
Literal NETSC_DR_SHUT = 3: ! NODE OR LINE SHUTTING DOWN
Literal NETSC_DR_NOBJ = 4: ! UNKNOWN OBJECT TYPE OR PROCESS
Literal NETSC_DR_FMT = 5: ! ILLEGAL PROCESS NAME FIELD
Literal NETSC_DR_BUSY = 6: ! Object too busy
Literal NETSC_DR_PROTCL = 7: ! GENERAL PROTOCOL ERROR
Literal NETSC_DR_THIRD = 8: ! THIRD PARTY DISCONNECT
Literal NETSC_DR_ABORT = 9: ! DISCONNECT ABORT
Literal NETSC_DR_IVNODE = 2: ! Invalid node name format
Literal NETSC_DR_NONZ = 21: ! NON-ZERO DST ADDRESS
Literal NETSC_DR_BADLNK = 22: ! INCONSISTENT DSTLNK
Literal NETSC_DR_ZERO = 23: ! ZERO SOURCE ADDRESS
Literal NETSC_DR_BADFC = 24: ! FCVAL ILLEGAL
Literal NETSC_DR_NOCON = 32: ! NO CONNECT SLOTS AVAILABLE
Literal NETSC_DR_ACCESS = 34: ! INVALID ACCESS CONTROL

K 14
15-Sep-1984 23:07:02
15-Sep-1984 22:48:58

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_S255\$DUA28:[NETACP.OBJ]NETUSR.R32;1 Page 38
(1)

```
: 2020 0 literal NETSC_DR_BADSRV = 35:  
: 2021 0 literal NETSC_DR_ACCNT = 36:  
: 2022 0 literal NETSC_DR_SEGSIZ = 37:  
: 2023 0 literal NETSC_DR_EXIT = 38:  
: 2024 0 literal NETSC_DR_NOPATH = 39:  
: 2025 0 literal NETSC_DR_LOSS = 40:  
: 2026 0 literal NETSC_DR_NOLINK = 41:  
: 2027 0 literal NETSC_DR_CONF = 42:  
: 2028 0 literal NETSC_DR_IMLONG = 43:
```

```
: LOGICAL LINK SERVICES MISMATCH  
: INVALID ACCOUNT INFORMATION  
: SEGSIZE TOO SMALL  
: USER EXIT OR TIMEOUT  
: NO PATH TO DESTINATION NODE  
: LOSS OF DATA HAS OCCURRED  
: ILLEGAL MSG FOR LINK NOLINK STATE  
: REAL DISCONNECT CONFIRM  
: IMAGE DATA FIELD TOO LONG
```


2029 0
2030 0
2031 0
2032 0
2033 0
2034 0
2035 0
2036 0
2037 0
2038 0
2039 0
2040 0
2041 0
2042 0
2043 0
2044 0
2045 0
2046 0
2047 0
2048 0
2049 0
2050 0
2051 0
2052 0
2053 0
2054 0
2055 0
2056 0
2057 0
2058 0
2059 0
2060 0
2061 0
2062 0
2063 0
2064 0
2065 0
2066 0
2067 0
2068 0
2069 0
2070 0
2071 0
2072 0
2073 0
2074 0
2075 0
2076 0

```
*****  
Created 15-SEP-1984 23:06:45 by VAX-11 SDL V2.0 Source: 15-SEP-1984 22:47:57 _S255$DUA28:[NETACP.SRC]DLED  
*****  
  
!*** MODULE dwb ***  
literal dwb$m_run = 1;  
literal dwb$m_dll_rbf = 2;  
literal dwb$m_dll_xbf = 4;  
literal dwb$m_bc = 8;  
literal dwb$m_delete = 16;  
literal dwb$c_length = 80;  
literal dwb$s_dwb = 80;  
macro dwb$l_flink = 0,0,32,0 %;  
macro dwb$l_blink = 4,0,32,0 %;  
macro dwb$w_size = 8,0,16,1 %;  
macro dwb$b_type = 10,0,8,1 %;  
macro dwb$b_access = 11,0,8,1 %;  
macro dwb$w_refcnt = 12,0,16,1 %;  
macro dwb$w_flags = 14,0,16,0 %;  
literal dwb$s_flags = 2;  
macro dwb$v_run = 14,0,1,0 %;  
macro dwb$v_dll_rbf = 14,1,1,0 %;  
macro dwb$v_dll_xbf = 14,2,1,0 %;  
macro dwb$v_bc = 14,3,1,0 %;  
macro dwb$v_delete = 14,4,1,0 %;  
macro dwb$v_fill_1 = 14,5,1,0 %;  
literal dwb$s_fill_1 = 11;  
macro dwb$l_orgucb = 16,0,32,0 %;  
macro dwb$q_rcv_msg = 20,0,0,0 %;  
literal dwb$s_rcv_msg = 8;  
macro dwb$q_user_rcv = 28,0,0,0 %;  
literal dwb$s_user_rcv = 8;  
macro dwb$q_user_xmt = 36,0,0,0 %;  
literal dwb$s_user_xmt = 8;  
macro dwb$q_xmt_pnd = 44,0,0,0 %;  
literal dwb$s_xmt_pnd = 8;  
macro dwb$l_pid = 52,0,32,1 %;  
macro dwb$l_ucb0 = 56,0,32,1 %;  
macro dwb$w_chan = 60,0,16,1 %;  
macro dwb$w_path = 62,0,16,1 %;  
macro dwb$g_remnod = 64,0,0,0 %;  
literal dwb$s_remnod = 6;  
macro dwb$b_substa = 70,0,8,1 %;  
macro dwb$b_irqcnt = 71,0,8,1 %;  
macro dwb$l_dll_ucb = 72,0,32,0 %;  
macro dwb$w_dll_chan = 76,0,16,1 %;  
macro dwb$w_id = 78,0,16,1 %;
```

M 14
15-Sep-1984 23:07:02
15-Sep-1984 22:48:33

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_S255\$DUA28:[NETACP.SRC]LIBTAIL.B32;1 (1)

```
2077 0
2078 0
2079 0
2080 0
2081 0
2082 0
2083 0
2084 0
2085 0
2086 0
2087 0
2088 0
2089 0
2090 0
2091 0
2092 0
2093 0
2094 0
2095 0
2096 0

Version:      'V04-000'

++
NMATAIL.B32

Source to undeclare the macros required for the precompile of
NMALIBRY.B32 so they do not appear in the library.

--

UNDECLARE %QUOTE $EQU%LST,
          %QUOTE GET1ST_,
          %QUOTE GET2ND_,
          %QUOTE NUL2ND_
          ;

End of NMATAIL.B32
```

COMMAND QUALIFIERS

BLISS/LIB=LIBS:NET/LIS=LISS:NET SRCS:LIBHEAD+LIBS:NETCTL+NETNPAGED+NETUSR+DLEDEF+SRCS:LIBTAIL

```
: Run Time:      00:19.8
: Elapsed Time:  00:31.0
: Lines/CPU Min: 6348
: Lexemes/CPU-Min: 36490
: Memory Used:  227 pages
: Library Precompilation Complete
```


