

NNN		NNN	MMM	MMM	LLL
NNN		NNN	MMM	MMM	LLL
NNN		NNN	MMM	MMM	LLL
NNN		NNN	MMMMMM	MMMMMM	LLL
NNN		NNN	MMMMMM	MMMMMM	LLL
NNN		NNN	MMMMMM	MMMMMM	LLL
NNNNNN		NNN	MMM	MMM	LLL
NNNNNN		NNN	MMM	MMM	LLL
NNNNNN		NNN	MMM	MMM	LLL
NNN	NNN	NNN	MMM	MMM	LLL
NNN	NNN	NNN	MMM	MMM	LLL
NNN	NNN	NNN	MMM	MMM	LLL
NNN	NNNNNN	NNN	MMM	MMM	LLL
NNN	NNNNNN	NNN	MMM	MMM	LLL
NNN	NNNNNN	NNN	MMM	MMM	LLL
NNN	NNNNNN	NNN	MMM	MMM	LLL
NNN	NNN	NNN	MMM	MMM	LLL
NNN	NNN	NNN	MMM	MMM	LLL
NNN	NNN	NNN	MMM	MMM	LLL
NNN	NNN	NNN	MMM	MMM	LLLLLLLLLLLLLLLL
NNN	NNN	NNN	MMM	MMM	LLLLLLLLLLLLLLLL
NNN	NNN	NNN	MMM	MMM	LLLLLLLLLLLLLLLL

\_S

Ps

NP

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\$G

SO

NP

PA

\_L

```

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
LL          II             SS
LLLLLLLLLLLL IIIIII          SSSSSSSS
LLLLLLLLLLLL IIIIII          SSSSSSSS

```



```
0001 0 %TITLE 'NML Network I/O module'
0002 0 MODULE NML$NETIO (
0003 0     LANGUAGE (BLISS32),
0004 0     ADDRESSING_MODE (NONEXTERNAL=GENERAL),
0005 0     ADDRESSING_MCDE (EXTERNAL=GENERAL),
0006 0     IDENT = 'V04-000'
0007 0 ) =
0008 1 BEGIN
0009 1
0010 1 *****
0011 1 *
0012 1 *   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0028 1 *   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0029 1 *
0030 1 *****
0031 1
0032 1 ++
0033 1
0034 1 FACILITY: DECnet-VAX V2.0 Network Management Listener
0035 1
0036 1
0037 1 ABSTRACT:
0038 1
0039 1     This module contains routines to handle all network I/O
0040 1     with NCP and NETACP (NETDRIVER).
0041 1
0042 1 ENVIRONMENT: VAX/VMS Operating System
0043 1
0044 1 AUTHOR: Distributed Systems Software Engineering
0045 1
0046 1 CREATION DATE: 2-Oct-1979
0047 1
0048 1 MODIFIED BY:
0049 1
0050 1     V03-007 MKP0011      Kathy Perko      25-Mar-1984
0051 1     If a circuit or line operation returns an $$$_CTRL or
0052 1     $$$_TIMEOUT error, use the middle word of the second longword
0053 1     of the IOSB for the NICE response detail field. This word is
0054 1     the error and status fields of $XMDEF.
0055 1
0056 1     V03-006 MKP0010      Kathy Perko      27-Feb-1984
0057 1     Do previous fix correctly (EQL --> NEQ).
```



58	0058	1	
59	0059	1	
60	0060	1	V03-005 MKP0009 Kathy Perko 1-Nov-1983
61	0061	1	Change mapping of parameters NETAP returns in 2nd longword
62	0062	1	of the IOSB so that, if the parameter doesn't map and the
63	0063	1	high order word is zero, it is returned as is. This is
64	0064	1	because some of the drivers return Network Management
65	0065	1	parameter IDs which don't need to be mapped.
66	0066	1	
67	0067	1	V03-004 MKP0008 Kathy Perko 14-Nov-1982
68	0068	1	Add area entity mapping.
69	0069	1	
70	0070	1	V03-003 MKP0007 Kathy Perko 6-Oct-1982
71	0071	1	Add adjacency database error mapping.
72	0072	1	
73	0073	1	V03-002 MKP0006 Kathy Perko 8-Sept-1982
74	0074	1	Move the \$ASSIGN for the QIO channel to NETACP here. This
75	0075	1	means that the assign is only attempted for NCP commands to
76	0076	1	the volatile database, and NCP commands to the permanent data
77	0077	1	base will be performed even if the network is not up.
78	0078	1	
79	0079	1	V03-001 MKP0005 Kathy Perko 17-July-1982
80	0080	1	Add module entity parameter mapping.
81	0081	1	
82	0082	1	V02-006 MKP0004 Kathy Perko 10-Jan-1982
83	0083	1	Add \$\$\$_NOLICENSE as a completion code for QIOs to NETACP.
84	0084	1	Add a parameter to NML\$DEBUG_QIO to put a header in
85	0085	1	the debug log to identify what kind of QIO is being logged.
86	0086	1	
87	0087	1	V02-005 MKP0003 Kathy Perko 05-Dec-1981
88	0088	1	Add NICE return of Component in Wrong State when
89	0089	1	NETACP returns Device Inactive (if circuit is turned
90	0090	1	on when line is off).
91	0091	1	
92	0092	1	V02-004 MKP0002 Kathy Perko 23-NOV-1981
93	0093	1	Add NICE return of Invalid Identification Format when
94	0094	1	NETACP returns Invalid Device Name.
95	0095	1	
96	0096	1	V02-003 MKP0001 Kathy Perko 11-Sept-1981
97	0097	1	Add ACP link database as a separate data base.
98	0098	1	
99	0099	1	V002 LMK0001 Len Kawell 24-Jul-1981
100	0100	1	Remove QIOSET and QIOCLEAR and other modifications for
101	0101	1	new ACP control QIO.
102	0102	1	
103	0103	1	V001 TMH0001 Tim Halvorsen 20-Jul-1981
104	0104	1	Move SEND and RECEIVE routines to NMLENTRY and NMLMAIN
105	0105	1	respectively.
106	0106	1	--



```
108 0107 1 %SBTTL 'Declarations'
109 0108 1
110 0109 1
111 0110 1 : TABLE OF CONTENTS:
112 0111 1 :
113 0112 1
114 0113 1 FORWARD ROUTINE
115 0114 1     NML$NETQIO,
116 0115 1     NML$MAPQIOERROR,
117 0116 1     NML_MAPENTITY,
118 0117 1     NML_MAPPARAMID;
119 0118 1
120 0119 1
121 0120 1 : INCLUDE FILES:
122 0121 1 :
123 0122 1
124 0123 1 LIBRARY 'LIB$:NMLLIB';
125 0124 1 LIBRARY 'SHRLIB$:NMLIBRY';
126 0125 1 LIBRARY 'SHRLIB$:NET';
127 0126 1 LIBRARY 'SYSS$LIBRARY:STARLET';
128 0127 1
129 0128 1
130 0129 1 : OWN STORAGE:
131 0130 1 :
132 0131 1
133 0132 1 :
134 0133 1 : EXTERNAL REFERENCES:
135 0134 1 :
136 0135 1
137 0136 1 $NML_EXTDEF;
138 0137 1
139 0138 1 EXTERNAL
140 0139 1     NML$GQ_PLIMAPDES,
141 0140 1     NML$GQ_EFIMAPDES,
142 0141 1     NML$GQ_ESIMAPDES,
143 0142 1     NML$GQ_LNIMAPDES,
144 0143 1     NML$GQ_NDIMAPDES,
145 0144 1     NML$GQ_OBIMAPDES,
146 0145 1     NML$GQ_CRIMAPDES,
147 0146 1     NML$GQ_LLIMAPDES,
148 0147 1     NML$GQ_XNIMAPDES,
149 0148 1     NML$GQ_XDIMAPDES,
150 0149 1     NML$GQ_XGIMAPDES,
151 0150 1     NML$GQ_XS5MAPDES,
152 0151 1     NML$GQ_XD5MAPDES,
153 0152 1     NML$GQ_XS9MAPDES,
154 0153 1     NML$GQ_XD9MAPDES,
155 0154 1     NML$GQ_AJIMAPDES,
156 0155 1     NML$GQ_ARIMAPDES;
157 0156 1
158 0157 1 EXTERNAL ROUTINE
159 0158 1     NML$DEBUG_QIO;
160 0159 1
```

```
: Facility-wide definitions
: NICE definitions
: NETACP QIO interface
: VMS common definitions
```



```

: 162 0160 1 %SBTTL 'NML$NETQIO General network QIO routine'
: 163 0161 1 GLOBAL ROUTINE NML$NETQIO (NFB DSC, P2, P3, BUF DSC) =
: 164 0162 1
: 165 0163 1 ++
: 166 0164 1 FUNCTIONAL DESCRIPTION:
: 167 0165 1
: 168 0166 1 This routine issues QIO function requests to NETACP to perform
: 169 0167 1 volatile data base operations.
: 170 0168 1
: 171 0169 1 FORMAL PARAMETERS:
: 172 0170 1
: 173 0171 1 NFB DSC Descriptor of NFB data.
: 174 0172 1 P2 Descriptor of P2 data.
: 175 0173 1 P3 Address of word to contain resulting length.
: 176 0174 1 BUF DSC Descriptor of data buffer
: 177 0175 1
: 178 0176 1 IMPLICIT INPUTS:
: 179 0177 1
: 180 0178 1 NML$GW_ACP_CHAN Channel assigned to the command process link.
: 181 0179 1
: 182 0180 1 IMPLICIT OUTPUTS:
: 183 0181 1
: 184 0182 1 NONE
: 185 0183 1
: 186 0184 1 ROUTINE VALUE:
: 187 0185 1 COMPLETION CODES:
: 188 0186 1
: 189 0187 1 This routine returns an NML status code that has been mapped from
: 190 0188 1 the QIO status code.
: 191 0189 1
: 192 0190 1 SIDE EFFECTS:
: 193 0191 1
: 194 0192 1 NONE
: 195 0193 1
: 196 0194 1 --
: 197 0195 1
: 198 0196 2 BEGIN
: 199 0197 2
: 200 0198 2 MAP
: 201 0199 2 NFB DSC : REF DESCRIPTOR,
: 202 0200 2 BUF DSC : REF DESCRIPTOR;
: 203 0201 2
: 204 0202 2 LOCAL
: 205 0203 2 IOSB : $IOSB, ! I/O status block
: 206 0204 2 DATABASE, ! Database ID
: 207 0205 2 STATUS; ! Temporary return status
: 208 0206 2
: 209 0207 2 If it hasn't already been done, establish channel to NETACP for QIO control
: 210 0208 2 functions. The channel is to NET:, the pseudo device to which volatile
: 211 0209 2 database commands are issued. Doing the assing here allows NCP commands to
: 212 0210 2 the permanent data base to be processed even if NETACP is not mounted.
: 213 0211 2
: 214 0212 2 STATUS = SS$ NORMAL;
: 215 0213 2 IF .NML$GW_ACP_CHAN EQL 0 THEN
: 216 P 0214 2 STATUS = $ASSIGN(DEVNAM = NML$GQ NETNAM DSC,
: 217 0215 2 CHAN = NML$GW_ACP_CHAN);
: 218 0216 2 IF .STATUS THEN
```



```

219      BEGIN
220      |
221      | Issue the QIO.
222      |
223      | STATUS = $QIOW (CHAN = .NML$GW_ACP_CHAN,      | Channel
224      |                FUNC = IO$ACPCONTROL,          | Function
225      |                IOSB = IOSB,                   | I/O status block
226      |                P1 = .NFB$DSC,                 | P1 descriptor (NFB)
227      |                P2 = .P2,                      | P2 descriptor (component id)
228      |                P3 = .P3,                      | Address for resulting length
229      |                P4 = .BUF$DSC);                 | P4 (data buffer) descriptor
230      |
231      | Log the QIO function.
232      |
233      | NML$DEBUG_QIO (DBG$C_ACPQIO,                  | Log type code
234      |               .STATUS,                         | QIO status value
235      |               IOSB,                             | Address of I/O status block
236      |               .NFB$DSC,                         | NFB descriptor
237      |               .P2,                              | P2 descriptor
238      |               .P3,                              | Address of P3 word
239      |               .BUF$DSC,                         | Data buffer descriptor
240      |               $ASCII('SET, SHOW, or CLEAR NETACPs database'));
241      |
242      | Map the operation status into an NML code.
243      |
244      | DATABASE = .B$BLOCK [.NFB$DSC [DSC$A_POINTER], NFB$B_DATABASE];
245      | END;
246      | STATUS = NML$MAPQIOERROR (.DATABASE, .STATUS, IOSB);
247      |
248      | Return the mapped status code.
249      |
250      | RETURN .STATUS
251      |
252      | END;

```

! End of NML\$NETQIO

```

.TITLE NML$NETIO NML Network I/O module
.IDENT \V04-000\
.PSECT $PLITS,NOWRT,NOEXE,2
.ASCII \SET, SHOW, or CLEAR NETACPs database\
.P.AAA: .LONG 36
        .ADDRESS P.AAB
.EXTRN NML$GB_EVT$SRCTYP
.EXTRN NML$GQ_EVT$SRCDSC
.EXTRN NML$GW_EVT$CLASS
.EXTRN NML$GB_EVT$MSKTYP
.EXTRN NML$GQ_EVT$MSKDC
.EXTRN NML$GW_EVT$SNKADR
.EXTRN NML$GW_ACP_CHAN
.EXTRN NML$GL_LOG$MASK, NML$GQ_ENT$STRDSC
.EXTRN NML$AB_QIO$BUFFER
.EXTRN NML$GQ_QIO$BFDSC

```



```
.EXTRN NML$AB_EXEBUFFER
.EXTRN NML$GL_EXEDATPTR
.EXTRN NML$GQ_EXEDATDSC
.EXTRN NML$GQ_EXEBFDSC
.EXTRN NML$AB_RCVBUFFER
.EXTRN NML$GQ_RCVBFDSC
.EXTRN NML$AB_SNDBUFFER
.EXTRN NML$GQ_SNDBFDSC
.EXTRN NML$GL_RCVDATLEN
.EXTRN NML$AB_CPTABLE, NML$AB_MSGBLOCK
.EXTRN NML$AB_ENTITY_ID
.EXTRN NML$AB_QUALIFIER_ID
.EXTRN NML$AB_ENTITYDATA
.EXTRN NML$AB_NML_NMV, NML$AB_PRMSEM
.EXTRN NML$AB_RECBUF, NML$AL_ENTINF TAB
.EXTRN NML$AL_PERMINFTAB
.EXTRN NML$AW_PRM_DES, NML$GB_CMD_VER
.EXTRN NML$GB_ENTITY_CODE
.EXTRN NML$GB_ENTITY_FORMAT
.EXTRN NML$GL_QUALIFIER_PST
.EXTRN NML$GB_QUALIFIER_FORMAT
.EXTRN NML$GB_FUNCTION
.EXTRN NML$GB_INFO, NML$GB_OPTIONS
.EXTRN NML$GL_PRM_CODE, NML$GL_PRS_FLGS
.EXTRN NML$GL_NML_ENTITY
.EXTRN NML$GQ_NETNAMDSC
.EXTRN NML$GQ_RECBFDSC
.EXTRN NML$GW_PRMDESCNT
.EXTRN NML$GQ_PLIMAPDES
.EXTRN NML$GQ_EFIMAPDES
.EXTRN NML$GQ_ESIMAPDES
.EXTRN NML$GQ_LNIMAPDES
.EXTRN NML$GQ_NDIMAPDES
.EXTRN NML$GQ_OBIMAPDES
.EXTRN NML$GQ_CRIMAPDES
.EXTRN NML$GQ_LCIMAPDES
.EXTRN NML$GQ_XNIMAPDES
.EXTRN NML$GQ_XDIMAPDES
.EXTRN NML$GQ_XGIMAPDES
.EXTRN NML$GQ_XS5MAPDES
.EXTRN NML$GQ_XD5MAPDES
.EXTRN NML$GQ_XS9MAPDES
.EXTRN NML$GQ_XD9MAPDES
.EXTRN NML$GQ_AJIMAPDES
.EXTRN NML$GQ_ARIMAPDES
.EXTRN NML$DEBUG_QIO, SYSS$ASSIGN
.EXTRN SYSS$QIOW
```

.PSECT \$CODE\$,NOWRT,2

```
.ENTRY NML$NETQIO, Save R2,R3,R4
MOVAB NML$GW_ACP_CHAN, R4
SUBL2 #8, SP
MOVL #1, STATUS
TSTL NML$GW_ACP_CHAN
BNEQ 1$
CLRQ -(SP)
```

```
: 0161
:
: 0212
: 0213
: 0215
```

```
54 00000000G 00 001C 00000
5E 08 C2 00009
53 01 D0 0000C
64 D5 0000F
14 12 00011
7E 7C 00013
```



NML\$NETIO  
V04-000

NML Network I/O module  
NML\$NETQIO General network QIO routine

M 15  
16-Sep-1984 00:21:15  
14-Sep-1984 12:50:14

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[NML.SRC]NMLNETIO.B32;1 Page 7  
(3)

			54	DD	00015	PUSHL	R4	:	
			00	9F	00017	PUSHAB	NML\$GQ_NETNAMDSC	:	
00000000G	00	00000000G	04	FB	0001D	CALLS	#4, SYSS\$ASSIGN	:	
	53		50	D0	00024	MOVL	R0, STATUS	:	
	49		53	E9	00027	BLBC	STATUS, 20	:	0216
			7E	7C	0002A	CLRQ	-(SP)	:	0227
	7E	0C	AC	7D	0002C	MOVQ	P3, -(SP)	:	
		08	AC	DD	00030	PUSHL	P2	:	
	52	04	AC	D0	00033	MOVL	NFBDSC, R2	:	
			52	DD	00037	PUSHL	R2	:	
			7E	7C	00039	CLRQ	-(SP)	:	
		20	AE	9F	0003B	PUSHAB	IOSB	:	
			38	DD	0003E	PUSHL	#56	:	
			64	DD	00040	PUSHL	NML\$GW_ACP_CHAN	:	
			7E	D4	00042	CLRL	-(SP)	:	
00000000G	00		0C	FB	00044	CALLS	#12, SYSS\$QIOW	:	
	53		50	D0	0004B	MOVL	R0, STATUS	:	
		00000000'	00	9F	0004E	PUSHAB	P.AAA	:	0238
	7E	0C	AC	7D	00054	MOVQ	P3, -(SP)	:	0236
		08	AC	DD	00058	PUSHL	P2	:	0235
			52	DD	0005B	PUSHL	R2	:	0234
		14	AE	9F	0005D	PUSHAB	IOSB	:	0231
			53	DD	00060	PUSHL	STATUS	:	0232
			04	DD	00062	PUSHL	#4	:	0231
00000000G	00		08	FB	00064	CALLS	#8, NML\$DEBUG_QIO	:	
	50	04	A2	D0	0006B	MOVL	4(R2), R0	:	0242
	50	02	A0	9A	0006F	MOVZBL	2(R0), DATABASE	:	
		4009	8F	BB	00073	PUSHR	#^M<R0,R3,SP>	:	0244
00000000V	00		03	FB	00077	CALLS	#3, NML\$MAPQIOERROR	:	
	53		50	D0	0007E	MOVL	R0, STATUS	:	
			04	00081	RET			:	0250

; Routine Size: 130 bytes, Routine Base: \$CODE\$ + 0000

```
254 0251 1 %SBTTL 'NML$MAPQIOERROR Map QIO error to NML error'
255 0252 1 GLOBAL ROUTINE NML$MAPQIOERROR (DATABASE, QIOSTATUS, IOSB) =
256 0253 1
257 0254 1 ++
258 0255 1 FUNCTIONAL DESCRIPTION:
259 0256 1
260 0257 1 This routine translates QIO errors into network management
261 0258 1 errors and makes the appropriate entries in the message
262 0259 1 block.
263 0260 1
264 0261 1 FORMAL PARAMETERS:
265 0262 1
266 0263 1 DATABASE Database ID
267 0264 1 QIOSTATUS QIO status return.
268 0265 1 IOSB Address of I/O status block.
269 0266 1
270 0267 1 IMPLICIT INPUTS:
271 0268 1
272 0269 1 NONE
273 0270 1
274 0271 1 IMPLICIT OUTPUTS:
275 0272 1
276 0273 1 NML$AB_MSGBLOCK contains the appropriate error code and detail
277 0274 1 if applicable.
278 0275 1
279 0276 1 ROUTINE VALUE:
280 0277 1 COMPLETION CODES:
281 0278 1
282 0279 1 The return status is the NML error that corresponds to the QIO error.
283 0280 1
284 0281 1 SIDE EFFECTS:
285 0282 1
286 0283 1 NONE
287 0284 1
288 0285 1 --
289 0286 1
290 0287 2 BEGIN
291 0288 2
292 0289 2 MAP
293 0290 2 IOSB : REF $IOSB;
294 0291 2
295 0292 2 LOCAL
296 0293 2 CODE : BYTE, : NICE status code
297 0294 2 DETAIL : WORD, : NICE detail code
298 0295 2 FLAGS, : Message flags
299 0296 2 STATUS, : Return status
300 0297 2 TEXT; : Optional text code
301 0298 2
302 0299 2 Set up the default message information.
303 0300 2
304 0301 2 CODE = NMASC_STS_OPE; : Management program error
305 0302 2 DETAIL = -1; : No detail
306 0303 2 FLAGS = MSB$M_DET_FLD; : Detail flag
307 0304 2
308 0305 2 Check the QIO status and the I/O status block.
309 0306 2
310 0307 2 IF NOT .QIOSTATUS
```



```
311 0308 2 THEN
312 0309 BEGIN
313 0310
314 0311 The QIO was in error. This indicates a program or a system error.
315 0312
316 0313 TEXT = .QIOSTATUS; ! Use system message as optional text
317 0314 FLAGS = .FLAGS OR ! Default flags
318 0315 MSB$M_MSG_FLD OR ! and optional text
319 0316 MSB$M_SYSM_FLD; ! and system text
320 0317 STATUS = NML$_STS_MPR; ! Return status
321 0318
322 0319 END
323 0320 ELSE
324 0321 BEGIN
325 0322
326 0323 The QIO status was successful so check the I/O status block.
327 0324 If it indicates success the just return. Otherwise, attempt to map
328 0325 the error code to an NML error code.
329 0326
330 0327 IF .IOSB [IOS$W_STATUS]
331 0328 THEN
332 0329 RETURN NML$_STS_SUC;
333 0330
334 0331 SELECTONE .IOSB [IOS$W_STATUS] OF
335 0332 SET
336 0333
337 0334 [SS$_BUFFEROVF]: ! Buffer is full
338 0335 BEGIN
339 0336
340 0337 4 This is a special error code. If all of the components for a plural SHOW
341 0338 4 function will not fit in a single buffer then this code is returned to
342 0339 4 indicate that more components remain. The code returned when the end of
343 0340 4 the component list has been reached is SS$_ENDOFFILE.
344 0341 4
345 0342 4 STATUS = NML$_STS_SUC;
346 0343 4 END;
347 0344 4
348 0345 3 [SS$_INSFARG]: ! Missing parameter
349 0346 4 BEGIN
350 0347 4 CODE = NML$_STS_PMS;
351 0348 4 DETAIL = NML$_MAPPARAMID (.IOSB [IOS$L_INFO]);
352 0349 4 STATUS = NML$_STS_PMS;
353 0350 3 END;
354 0351 3
355 0352 3 [SS$_BADPARAM, ! Parameter value error
356 0353 3 SS$_DEACTIVE]:
357 0354 4 BEGIN
358 0355 4 CODE = NML$_STS_PVA;
359 0356 4 DETAIL = NML$_MAPPARAMID (.IOSB [IOS$L_INFO]);
360 0357 4 STATUS = NML$_STS_PVA;
361 0358 3 END;
362 0359 3
363 0360 3 [SS$_WRITLCK]: ! Component in wrong state
364 0361 4 BEGIN
365 0362 4 CODE = NML$_STS_STA;
366 0363 4 DETAIL = NML$_MAPENTITY (.DATABASE);
367 0364 4 STATUS = NML$_STS_STA;
```



```
368 0365 3      END;
369 0366 3
370 0367 3      [SS$ INSMEM]:                ! No room for new entry
371 0368 4      BEGIN
372 0369 4      CODE = NMA$C_STS_ROO;
373 0370 4      STATUS = NML$ _STS _ROO;
374 0371 3      END;
375 0372 3
376 0373 3      [SS$ ENDOFFILE]:              ! Unrecognized component
377 0374 4      BEGIN
378 0375 4      CODE = NMA$C_STS_CMP;
379 0376 4      DETAIL = NML _MAPENTITY (.DATABASE);
380 0377 4      STATUS = NML$ _STS _CMP;
381 0378 3      END;
382 0379 3
383 0380 3      [SS$ NOPRIV]:                  ! Privilege violation
384 0381 4      BEGIN
385 0382 4      CODE = NMA$C_STS_PRI;
386 0383 4      STATUS = NML$ _STS _PRI;
387 0384 3      END;
388 0385 3
389 0386 3      [SS$ NOSUCHDEV]:              ! No such device
390 0387 4      BEGIN
391 0388 4      CODE = NMA$C_STS_CMP;
392 0389 4      DETAIL = NML _MAPENTITY (.DATABASE);
393 0390 4      TEXT = .IOSB [IOS$W STATUS];
394 0391 4      FLAGS = .FLAGS OR MSB$M _MSG _FLD OR MSB$M _SYSM _FLD;
395 0392 4      STATUS = NML$ _STS _CMP;
396 0393 3      END;
397 0394 3
398 0395 3      [SS$ NOSUCHNODE]:             ! No such node
399 0396 4      BEGIN
400 0397 4      ! This parameter only applies to SHOW and DISCONNECT LINK comands.
401 0398 4
402 0399 4
403 0400 4      CODE = NMA$C_STS_CMP;
404 0401 4      DETAIL = NMA$C ENT NOD;
405 0402 4      TEXT = .IOSB [IOS$W STATUS];
406 0403 4      FLAGS = .FLAGS OR MSB$M _MSG _FLD OR MSB$M _SYSM _FLD;
407 0404 4      STATUS = NML$ _STS _CMP;
408 0405 3      END;
409 0406 3
410 0407 3      [SS$ DEVINACT]:                ! Device inactive
411 0408 4      BEGIN
412 0409 4      CODE = NMA$C_STS_STA;
413 0410 4      DETAIL = NML _MAPPARAMID (.IOSB [IOS$L _INFO]);
414 0411 4      TEXT = .IOSB [IOS$W STATUS];
415 0412 4      FLAGS = .FLAGS OR MSB$M _MSG _FLD OR MSB$M _SYSM _FLD;
416 0413 4      STATUS = NML$ _STS _STA;
417 0414 3      END;
418 0415 3
419 0416 3      [SS$ IVDEVNAM]:                  ! Invalid device name.
420 0417 4      BEGIN
421 0418 4      CODE = NMA$C_STS_IDE;
422 0419 4      DETAIL = NML _MAPENTITY (.DATABASE);
423 0420 4      TEXT = .IOSB [IOS$W STATUS];
424 0421 4      FLAGS = .FLAGS OR MSB$M _MSG _FLD OR MSB$M _SYSM _FLD;
```



```

: 425      0422      4      STATUS = NML$_STS_IDE;
: 426      0423      3      END;
: 427      0424      3
: 428      0425      3      [SS$ NOLICENSE]:                ! Customer doesn't have a
: 429      0426      4      BEGIN
: 430      0427      4      CODE = NML$_STS_OPE;
: 431      0428      4      TEXT = .IOSB [IOS$W STATUS];
: 432      0429      4      FLAGS = .FLAGS OR MSB$M_MSG_FLD OR MSB$M_SYSM_FLD;
: 433      0430      4      STATUS = NML$_STS_OPE;
: 434      0431      3      END;
: 435      0432      3
: 436      0433      3      [OTHERWISE]:                ! Operation failure
: 437      0434      4      BEGIN
: 438      0435      4      CODE = NML$_STS_OPE;
: 439      0436      4
: 440      0437      4      | If the error was SS$ CTRL or SS$ TIMEOUT on a line or
: 441      0438      4      | circuit, the second longword of the IOSB is described by
: 442      0439      4      | $XMDEF. The 2nd and 3rd bytes are the status and error
: 443      0440      4      | fields respectively, and are the most meaningful bytes to
: 444      0441      4      | return, since the detail field is only a word.
: 445      0442      4
: 446      0443      4      IF .DATABASE EQL NFB$C_DB_CRI OR
: 447      0444      4      | .DATABASE EQL NFB$C_DB_PLI THEN
: 448      0445      5      |   DETAIL = .(IOSB [IOS$C_INFO] +1)
: 449      0446      4      ELSE
: 450      0447      4      |   DETAIL = .IOSB [IOS$L_INFO];
: 451      0448      4      TEXT = .IOSB [IOS$W STATUS];
: 452      0449      4      FLAGS = .FLAGS OR
: 453      0450      4      |   MSB$M_MSG_FLD OR
: 454      0451      4      |   MSB$M_SYSM_FLD;
: 455      0452      4      STATUS = NML$_STS_OPE;
: 456      0453      3      END;
: 457      0454      3
: 458      0455      3      TES;
: 459      0456      2      END;
: 460      0457      2      |
: 461      0458      2      | Set up the message information.
: 462      0459      2      |
: 463      0460      2      | NML$AB_MSGBLOCK [MSB$L_FLAGS] = .FLAGS;
: 464      0461      2      | NML$AB_MSGBLOCK [MSB$B_CODE] = .CODE;
: 465      0462      2      | NML$AB_MSGBLOCK [MSB$W_DETAIL] = .DETAIL;
: 466      0463      2      | NML$AB_MSGBLOCK [MSB$L_TEXT] = .TEXT;
: 467      0464      2      |
: 468      0465      2      | Return the mapped status.
: 469      0466      2      |
: 470      0467      2      | RETURN .STATUS
: 471      0468      2
: 472      0469      1      END;                ! End of NML$MAPQIOERROR
```

```

                                07FC 00000
5A 00000000V 00 9E 00002
59 00000000G 00 9E 00009
```

```

.ENTRY NML$MAPQIOERROR, Save R2,R3,R4,R5,R6,R7,R8,-: 0252
      R9,R10
MOVAB NML_MAPPARAMID, R10
MOVAB NML$AB_MSGBLOCK, R9
      :
```



58	00000000V	00	9E	00010	MOVAB	NML_MAPENTITY, R8	:	
54		19	8E	00017	MNEGB	#25, CODE	:	0301
57		01	AE	0001A	MNEGW	#1, DETAIL	:	0302
55		02	D0	0001D	MOVL	#2, FLAGS	:	0303
0D	08	AC	E8	00020	BLBS	QIOSTATUS, 1\$	:	0307
56	08	AC	D0	00024	MOVL	QIOSTATUS, TEXT	:	0313
55	44	8F	88	00028	BISB2	#68, FLAGS	:	0315
53		0A	CE	0002C	MNEGL	#10, STATUS	:	0317
		6E	11	0002F	BRB	8\$	:	0307
52	0C	AC	D0	00031	1\$: MOVL	IOSB, R2	:	0327
04		62	E9	00035	BLBC	(R2), 2\$	:	
50		01	D0	00038	MOVL	#1, R0	:	0329
			04	0003B	RET		:	
0601	8F	62	B1	0003C	2\$: CMPW	(R2), #1537	:	0334
		05	12	00041	BNEQ	3\$	:	
53		01	D0	00043	MOVL	#1, STATUS	:	0342
0114	8F	79	11	00046	BRB	11\$	:	0331
		62	B1	00048	3\$: CMPW	(R2), #276	:	0345
		11	12	0004D	BNEQ	4\$	:	
54		1D	8E	0004F	MNEGB	#29, CODE	:	0347
	04	A2	DD	00052	PUSHL	4(R2)	:	0348
6A		01	FB	00055	CALLS	#1, NML_MAPPARAMID	:	
57		50	B0	00058	MOVW	R0, DETAIL	:	
53		3A	CE	0005B	MNEGL	#58, STATUS	:	0349
		61	11	0005E	BRB	11\$	:	0331
14		62	B1	00060	4\$: CMPW	(R2), #20	:	0352
		07	13	00063	BEQL	5\$	:	
02C4	8F	62	B1	00065	CMPW	(R2), #708	:	
		11	12	0006A	BNEQ	6\$	:	
54		10	8E	0006C	5\$: MNEGB	#16, CODE	:	0355
	04	A2	DD	0006F	PUSHL	4(R2)	:	0356
6A		01	FB	00072	CALLS	#1, NML_MAPPARAMID	:	
57		50	B0	00075	MOVW	R0, DETAIL	:	
53		20	CE	00078	MNEGL	#32, STATUS	:	0357
		71	11	0007B	BRB	16\$	:	0331
025C	8F	62	B1	0007D	6\$: CMPW	(R2), #604	:	0360
		0E	12	00082	BNEQ	7\$	:	
54		0B	8E	00084	MNEGB	#11, CODE	:	0362
	04	AC	DD	00087	PUSHL	DATABASE	:	0363
68		01	FB	0008A	CALLS	#1, NML_MAPENTITY	:	
57		50	B0	0008D	MOVW	R0, DETAIL	:	
		78	11	00090	BRB	18\$	:	0364
0124	8F	62	B1	00092	7\$: CMPW	(R2), #292	:	0367
		08	12	00097	BNEQ	9\$	:	
54		14	8E	00099	MNEGB	#20, CODE	:	0369
53		28	CE	0009C	MNEGL	#40, STATUS	:	0370
		6C	11	0009F	8\$: BRB	19\$	:	0331
0870	8F	62	B1	000A1	9\$: CMPW	(R2), #2160	:	0373
		0E	12	000A6	BNEQ	10\$	:	
54		08	8E	000A8	MNEGB	#8, CODE	:	0375
	04	AC	DD	000AB	PUSHL	DATABASE	:	0376
68		01	FB	000AE	CALLS	#1, NML_MAPENTITY	:	
57		50	B0	000B1	MOVW	R0, DETAIL	:	
		35	11	000B4	BRB	15\$	:	0377
24		62	B1	000B6	10\$: CMPW	(R2), #36	:	0380
		08	12	000B9	BNEQ	12\$	:	
54		03	8E	000BB	MNEGB	#3, CODE	:	0382



	53		06	CE	000BE	MNEGL	#6, STATUS	: 0383
			69	11	000C1	BRB	21\$	: 0331
0908	8F		62	B1	000C3	CMPW	(R2), #2312	: 0386
			0E	12	000C8	BNEQ	13\$	: 0388
	54		08	8E	000CA	MNEGB	#8, CODE	: 0389
		04	AC	DD	000CD	PUSHL	DATABASE	: 0390
	68		01	FB	000D0	CALLS	#1, NML_MAPENTITY	: 0395
	57		50	B0	000D3	MOVW	R0, DETAIL	: 0400
			0C	11	000D6	BRB	14\$	: 0401
028C	8F		62	B1	000D8	CMPW	(R2), #652	: 0402
			11	12	000DD	BNEQ	17\$	: 0403
	54		08	8E	000DF	MNEGB	#8, CODE	: 0404
			57	B4	000E2	CLRW	DETAIL	: 0331
	56		62	3C	000E4	MOVZWL	(R2), TEXT	: 0407
	55	44	8F	88	000E7	BISB2	#68, FLAGS	: 0409
	53		10	CE	000EB	MNEGL	#16, STATUS	: 0410
			6D	11	000EE	BRB	27\$	: 0411
20D4	8F		62	B1	000F0	CMPW	(R2), #8404	: 0412
			18	12	000F5	BNEQ	20\$	: 0413
	54		0B	8E	000F7	MNEGB	#11, CODE	: 0331
		04	A2	DD	000FA	PUSHL	4(R2)	: 0416
	6A		01	FB	000FD	CALLS	#1, NML_MAPPARAMID	: 0418
	57		50	B0	00100	MOVW	R0, DETAIL	: 0419
	56		62	3C	00103	MOVZWL	(R2), TEXT	: 0420
	55	44	8F	88	00106	BISB2	#68, FLAGS	: 0421
	53		16	CE	0010A	MNEGL	#22, STATUS	: 0422
			4E	11	0010D	BRB	27\$	: 0331
0144	8F		62	B1	0010F	CMPW	(R2), #324	: 0416
			18	12	00114	BNEQ	22\$	: 0418
	54		09	8E	00116	MNEGB	#9, CODE	: 0419
		04	AC	DD	00119	PUSHL	DATABASE	: 0420
	68		01	FB	0011C	CALLS	#1, NML_MAPENTITY	: 0421
	57		50	B0	0011F	MOVW	R0, DETAIL	: 0422
	56		62	3C	00122	MOVZWL	(R2), TEXT	: 0331
	55	44	8F	88	00125	BISB2	#68, FLAGS	: 0425
	53		12	CE	00129	MNEGL	#18, STATUS	: 0427
			2F	11	0012C	BRB	27\$	: 0428
2194	8F		62	B1	0012E	CMPW	(R2), #8596	: 0435
			05	12	00133	BNEQ	23\$	: 0443
	54		19	8E	00135	MNEGB	#25, CODE	: 0444
			19	11	00138	BRB	26\$	: 0445
	54		19	8E	0013A	MNEGB	#25, CODE	: 0447
	04	04	AC	D1	0013D	CMPL	DATABASE, #4	: 0448
			06	13	00141	BEQL	24\$	: 0450
	05	04	AC	D1	00143	CMPL	DATABASE, #5	: 0452
			06	12	00147	BNEQ	25\$	: 0460
	57	05	A2	B0	00149	MOVW	5(R2), DETAIL	: 0461
			04	11	0014D	BRB	26\$	: 0462
	57	04	A2	B0	0014F	MOVW	4(R2), DETAIL	: 0463
	56		62	3C	00153	MOVZWL	(R2), TEXT	: 0467
	55	44	8F	88	00156	BISB2	#68, FLAGS	: 0467
	53		32	CE	0015A	MNEGL	#50, STATUS	: 0467
	69		55	D0	0015D	MOVL	FLAGS, NML\$AB_MSGBLOCK	: 0467
04	A9		54	90	00160	MOVB	CODE, NML\$AB_MSGBLOCK+4	: 0467
08	A9		57	B0	00164	MOVW	DETAIL, NML\$AB_MSGBLOCK+8	: 0467
0C	A9		56	D0	00168	MOVL	TEXT, NML\$AB_MSGBLOCK+12	: 0467
	50		53	D0	0016C	MOVL	STATUS, R0	: 0467



NML\$NETIO  
V04-000

NML Network I/O module  
NML\$MAPQIOERROR Map QIO error to NML error

G 16  
16-Sep-1984 00:21:15  
14-Sep-1984 12:50:14

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[NML.SRC]NMLNETIO.B32;1

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04 0016F

RET

; 0469

; Routine Size: 368 bytes, Routine Base: \$CODES + 0082



```
474 0470 1 %SBTTL 'NML_MAPENTITY Map NETACP database ID into entity type'
475 0471 1 ROUTINE NML_MAPENTITY (DATABASE) =
476 0472 1
477 0473 1 ++
478 0474 1 FUNCTIONAL DESCRIPTION:
479 0475 1
480 0476 1 This routine translates the QIO database ID into a network
481 0477 1 management entity detail code.
482 0478 1
483 0479 1 INPUTS:
484 0480 1
485 0481 1 DATABASE NETACP database ID
486 0482 1
487 0483 1 OUTPUTS:
488 0484 1
489 0485 1 The return value is the detail code.
490 0486 1 --
491 0487 1
492 0488 2 BEGIN
493 0489 2
494 0490 2 LOCAL
495 0491 2 DETAIL : WORD;
496 0492 2
497 0493 2 DETAIL = (
498 0494 2 SELECTONE .DATABASE OF
499 0495 2 SET
500 0496 2
501 0497 2 [NFB$C_DB_PLI]: NMA$C_ENT_LIN;
502 0498 2
503 0499 2 [NFB$C_DB_EFI,
504 0500 2 NFB$C_DB_ESI]: NMA$C_ENT_LOG;
505 0501 2
506 0502 2 [NFB$C_DB_LNI,
507 0503 2 NFB$C_DB_NDI]: NMA$C_ENT_NOD;
508 0504 2
509 0505 2 [NFB$C_DB_OBI]: NMA$C_SENT_OBJ;
510 0506 2
511 0507 2 [NFB$C_DB_CRI]: NMA$C_ENT_CIR;
512 0508 2
513 0509 2 [NFB$C_DB_AJI]: NMA$C_ENT_NOD;
514 0510 2
515 0511 2 [NFB$C_DB_XNI,
516 0512 2 NFB$C_DB_XDI,
517 0513 2 NFB$C_DB_XGI,
518 0514 2 NFB$C_DB_XD5,
519 0515 2 NFB$C_DB_XD9]: NMA$C_ENT_MOD;
520 0516 2
521 0517 2 [NFB$C_DB_AJI]: NMA$C_ENT_NOD;
522 0518 2
523 0519 2 [NFB$C_DB_LLI]: NMA$C_SENT_LNK;
524 0520 2
525 0521 2 [NFB$C_DB_ARI]: NMA$C_ENT_ARE;
526 0522 2
527 0523 2 [OTHERWISE]: -1;
528 0524 2
529 0525 2 TES);
530 0526 2
```



: 531  
: 532  
: 533

0527 2 RETURN .DETAIL  
0528 2  
0529 1 END;

! End of NML\_MAPENTITY

		0000	00000	NML_MAPENTITY:			
50	04	AC	D0	00002	.WORD	Save nothing	: 0471
05		50	D1	00006	MOVL	DATABASE, R0	: 0494
		05	12	00009	CMPL	R0, #5	: 0497
50		01	D0	0000B	BNEQ	1\$	
		65	11	0000E	MOVL	#1, R0	
06		50	D1	00010	BRB	12\$	
		0A	19	00013	CMPL	R0, #6	: 0499
07		50	D1	00015	BLSS	2\$	
		05	14	00018	CMPL	R0, #7	
50		02	D0	0001A	BGTR	2\$	
		56	11	0001D	MOVL	#2, R0	
		50	D5	0001F	BRB	12\$	
		05	15	00021	TSTL	R0	: 0502
02		50	D1	00023	BLEQ	3\$	
		32	15	00026	CMPL	R0, #2	
03		50	D1	00028	BLEQ	8\$	
		23	13	0002B	CMPL	R0, #3	: 0505
04		50	D1	0002D	BEQL	6\$	
		05	12	00030	CMPL	R0, #4	: 0507
50		03	D0	00032	BNEQ	4\$	
		3E	11	00035	MOVL	#3, R0	
13		50	D1	00037	BRB	12\$	
		1E	13	0003A	CMPL	R0, #19	: 0509
09		50	D1	0003C	BEQL	8\$	
		05	19	0003F	CMPL	R0, #9	: 0511
0B		50	D1	00041	BLSS	5\$	
		0A	15	00044	CMPL	R0, #11	
0D		50	D1	00046	BLEQ	6\$	
		05	13	00049	CMPL	R0, #13	
0F		50	D1	0004B	BEQL	6\$	
		05	12	0004E	CMPL	R0, #15	
50		04	D0	00050	BNEQ	7\$	
		20	11	00053	MOVL	#4, R0	
13		50	D1	00055	BRB	12\$	
		04	12	00058	CMPL	R0, #19	: 0517
		50	D4	0005A	BNEQ	9\$	
		17	11	0005C	CLRL	R0	
08		50	D1	0005E	BRB	12\$	
		05	12	00061	CMPL	R0, #8	: 0519
50		07	D0	00063	BNEQ	10\$	
		0D	11	00066	MOVL	#7, R0	
14		50	D1	00068	BRB	12\$	
		05	12	0006B	CMPL	R0, #20	: 0521
50		05	D0	0006D	BNEQ	11\$	
		03	11	00070	MOVL	#5, R0	
50		01	CE	00072	BRB	12\$	
51		50	B0	00075	MNEGL	#1, R0	: 0523
					MOVW	R0, DETAIL	: 0493



NML\$NETIO  
V04-000

NML Network I/O module  
NML\_MAPENTITY Map NETACP database ID into enti

J 16  
16-Sep-1984 00:21:15  
14-Sep-1984 12:50:14

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[NML.SRC]NMLNETIO.B32;1

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50

51 3C 00078  
04 0007B

MOVZWL DETAIL, R0  
RET

: 0527  
: 0529

; Routine Size: 124 bytes, Routine Base: \$CODE\$ + 01F2



```
535 0530 1 %SBTTL 'NML_MAPPARAMID Map QIO parameter ID into management code'
536 0531 1 ROUTINE NML_MAPPARAMID (PRMID) =
537 0532 1
538 0533 1 !++
539 0534 1 FUNCTIONAL DESCRIPTION:
540 0535 1
541 0536 1 This routine translates the QIO parameter ID code a into network
542 0537 1 management parameter ID to be returned in the detail field of
543 0538 1 the NICE response to NCP.
544 0539 1
545 0540 1 INPUTS:
546 0541 1
547 0542 1 PRMID NETACP QIO parameter ID
548 0543 1
549 0544 1 OUTPUTS:
550 0545 1
551 0546 1 The return value is the detail code.
552 0547 1 --
553 0548 1
554 0549 2 BEGIN
555 0550 2
556 0551 2 LOCAL
557 0552 2 I,
558 0553 2 INDEX;
559 0554 2
560 0555 2 MAP
561 0556 2 PRMID: BBLOCK;
562 0557 2
563 0558 2 BIND
564 0559 2 TABDSC = (
565 0560 2 SELECTONE .PRMID [NFB$V_DB] OF
566 0561 2 SET
567 0562 2 [NFB$C_DB_PLI]: NML$GQ_PLIMAPDES;
568 0563 2 [NFB$C_DB_EFI]: NML$GQ_EFIMAPDES;
569 0564 2 [NFB$C_DB_ESI]: NML$GQ_ESIMAPDES;
570 0565 2 [NFB$C_DB_LNI]: NML$GQ_LNIMAPDES;
571 0566 2 [NFB$C_DB_NDI]: NML$GQ_NDIMAPDES;
572 0567 2 [NFB$C_DB_OBI]: NML$GQ_OBIMAPDES;
573 0568 2 [NFB$C_DB_CRI]: NML$GQ_CRIMAPDES;
574 0569 2 [NFB$C_DB_LLI]: NML$GQ_LLIMAPDES;
575 0570 2 [NFB$C_DB_XNI]: NML$GQ_XNIMAPDES;
576 0571 2 [NFB$C_DB_XGI]: NML$GQ_XGIMAPDES;
577 0572 2 [NFB$C_DB_XDI]: NML$GQ_XDIMAPDES;
578 0573 2 [NFB$C_DB_XS5]: NML$GQ_XS5MAPDES;
579 0574 2 [NFB$C_DB_XD5]: NML$GQ_XD5MAPDES;
580 0575 2 [NFB$C_DB_XS9]: NML$GQ_XS9MAPDES;
581 0576 2 [NFB$C_DB_XD9]: NML$GQ_XD9MAPDES;
582 0577 2 [NFB$C_DB_AJI]: NML$GQ_AJIMAPDES;
583 0578 2 [NFB$C_DB_ARI]: NML$GQ_ARIMAPDES;
584 0579 2
585 0580 2 [OTHERWISE]: $ASCID (0, 0);
586 0581 2
587 0582 2 TES) : DESCRIPTOR;
588 0583 2
589 0584 2 BIND
590 0585 2 TABLE = TABDSC [DSC$A_POINTER] : REF BBLOCKVECTOR [, 6];
591 0586 2
```



```
592 0587 2 |
593 0588 2 | Step through the parameter mapping table (in NMLDAT) to find
594 0589 2 | the NETACP QIO parameter ID.
595 0590 2 |
596 0591 2 | INCR I FROM 0 TO .TABDSC [DSC$W_LENGTH] - 1 DO
597 0592 2 | BEGIN
598 0593 2 |
599 0594 2 | IF .PRMID [NFB$V_PARAM_ID] EQLU .TABLE [.I, 0,0,32,0]
600 0595 3 | THEN
601 0596 4 | BEGIN
602 0597 4 |
603 0598 4 | Extract the Network Management parameter ID from the mapping
604 0599 4 | table, and return it.
605 0600 4 |
606 0601 4 | INDEX = .TABLE [.I, 4,0,16,0];
607 0602 4 | RETURN .NML$AB_PRMSEM [.INDEX, PST$W_DATAID];
608 0603 4 |
609 0604 3 | END;
610 0605 2 | END;
611 0606 2 |
612 0607 2 | The parameter did not appear in the mapping table. Return the
613 0608 2 | low word as is (since the detail field of the NICE response message
614 0609 2 | is only a word, this is all that can be returned).
615 0610 2 |
616 0611 2 | IF .PRMID <0,16> NEQ 0 THEN
617 0612 2 | RETURN .PRMID [NFB$V_INX]
618 0613 2 | ELSE
619 0614 2 | RETURN -1
620 0615 1 | END;

! End of NML_MAPPARAMID
```

.PSECT \$SPLITS\$,NOWRT,NOEXE,2

```
30 30 0002C P.AAD: .ASCII \00\
00000002 0002E .BLKB 2
00000000' 00030 P.AAC: .LONG 2
00000000' 00034 .ADDRESS P.AAD
```

.PSECT \$CODE\$,NOWRT,2

```
001C 00000 NML_MAPPARAMID:
50 07 AC 9A 00002 .WORD Save R2,R3,R4
05 50 91 00006 MOVZBL PRMID+3, R0
09 12 00009 CMPB R0, #5
53 00000000G 00 9E 0000B BNEQ 1$
7C 11 00012 MOVAB NML$GQ_PLIMAPDES, R3
06 50 91 00014 1$: BRB 10$
09 12 00017 CMPB R0, #6
53 00000000G 00 9E 00019 BNEQ 2$
7C 11 00020 MOVAB NML$GQ_EFIMAPDES, R3
07 50 91 00022 2$: BRB 12$
09 12 00025 CMPB R0, #7
53 00000000G 00 9E 00027 BNEQ 3$
MOVAB NML$GQ_ESIMAPDES, R3
```

```
: 0531
: 0560
: 0562
:
:
: 0563
:
:
: 0564
:
```



01	7C 11 0002E	BRB 14\$	0565
	50 91 00030 3\$:	CMPB R0, #1	
	09 12 00033	BNEQ 4\$	
53 00000000G	00 9E 00035	MOVAB NML\$GQ_LNIMAPDES, R3	
	7C 11 0003C	BRB 16\$	
02	50 91 0003E 4\$:	CMPB R0, #2	0566
	09 12 00041	BNEQ 5\$	
53 00000000G	00 9E 00043	MOVAB NML\$GQ_NDIMAPDES, R3	
	7C 11 0004A	BRB 18\$	
03	50 91 0004C 5\$:	CMPB R0, #3	0567
	09 12 0004F	BNEQ 6\$	
53 00000000G	00 9E 00051	MOVAB NML\$GQ_OBIMAPDES, R3	
	7C 11 00058	BRB 20\$	
04	50 91 0005A 6\$:	CMPB R0, #4	0568
	09 12 0005D	BNEQ 7\$	
53 00000000G	00 9E 0005F	MOVAB NML\$GQ_CRIMAPDES, R3	
	7C 11 00066	BRB 22\$	
08	50 91 00068 7\$:	CMPB R0, #8	0569
	09 12 0006B	BNEQ 8\$	
53 00000000G	00 9E 0006D	MOVAB NML\$GQ_LLIMAPDES, R3	
	7C 11 00074	BRB 24\$	
09	50 91 00076 8\$:	CMPB R0, #9	0570
	09 12 00079	BNEQ 9\$	
53 00000000G	00 9E 0007B	MOVAB NML\$GQ_XNIMAPDES, R3	
	77 11 00082	BRB 26\$	
0A	50 91 00084 9\$:	CMPB R0, #10	0571
	09 12 00087	BNEQ 11\$	
53 00000000G	00 9E 00089	MOVAB NML\$GQ_XGIMAPDES, R3	
	69 11 00090	BRB 26\$	
0B	50 91 00092 10\$:	CMPB R0, #11	0572
	09 12 00095	BNEQ 13\$	
53 00000000G	00 9E 00097	MOVAB NML\$GQ_XDIMAPDES, R3	
	5B 11 0009E 12\$:	BRB 26\$	
0C	50 91 000A0 13\$:	CMPB R0, #12	0573
	09 12 000A3	BNEQ 15\$	
53 00000000G	00 9E 000A5	MOVAB NML\$GQ_XS5MAPDES, R3	
	4D 11 000AC 14\$:	BRB 26\$	
0D	50 91 000AE 15\$:	CMPB R0, #13	0574
	09 12 000B1	BNEQ 17\$	
53 00000000G	00 9E 000B3	MOVAB NML\$GQ_XD5MAPDES, R3	
	3F 11 000BA 16\$:	BRB 26\$	
0E	50 91 000BC 17\$:	CMPB R0, #14	0575
	09 12 000BF	BNEQ 19\$	
53 00000000G	00 9E 000C1	MOVAB NML\$GQ_XS9MAPDES, R3	
	31 11 000C8 18\$:	BRB 26\$	
0F	50 91 000CA 19\$:	CMPB R0, #15	0576
	09 12 000CD	BNEQ 21\$	
53 00000000G	00 9E 000CF	MOVAB NML\$GQ_XD9MAPDES, R3	
	23 11 000D6 20\$:	BRB 26\$	
13	50 91 000D8 21\$:	CMPB R0, #19	0577
	09 12 000DB	BNEQ 23\$	
53 00000000G	00 9E 000DD	MOVAB NML\$GQ_AJIMAPDES, R3	
	15 11 000E4 22\$:	BRB 26\$	
14	50 91 000E6 23\$:	CMPB R0, #20	0578
	09 12 000E9	BNEQ 25\$	
53 00000000G	00 9E 000EB	MOVAB NML\$GQ_ARIMAPDES, R3	
	07 11 000F2 24\$:	BRB 26\$	



NML\$NETIO  
V04-000

NML Network I/O module

NML\_MAPPARAMID Map QIO parameter ID into manag

B 1  
16-Sep-1984 00:21:15  
14-Sep-1984 12:50:14

VAX-11 Bliss-32 V4.0-742

DISK\$VMSMASTER:[NML.SRC]NMLNETIO.B32;1

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(6)

	53	00000000'	00	9E	000F4	25\$:	MOVAB	P.AAC, R3	:	0580
	54		63	3C	000FB	26\$:	MOVZWL	(R3), R4	:	0591
	50		01	CE	000FE		MNEGL	#1, I	:	0594
			21	11	00101		BRB	28\$	:	
52	50		06	C5	00103	27\$:	MULL3	#6, I, R2	:	
	52	04	A3	C0	00107		ADDL2	4(R3), R2	:	
	62	04	AC	D1	0010B		CMPL	PRMID, (R2)	:	
			13	12	0010F		BNEQ	28\$	:	
	51	04	A2	3C	00111		MOVZWL	4(R2), INDEX	:	0601
52	51		04	78	00115		ASHL	#4, INDEX, R2	:	0602
		00000000G00	42	9F	00119		PUSHAB	NML\$AB_PRMSEM[R2]	:	
	50		9E	3C	00120		MOVZWL	@(SP)+, R0	:	
				04	00123		RET		:	
DB	50		54	F2	00124	28\$:	AOBLSS	R4, I, 27\$	:	0591
		04	AC	B5	00128		TSTW	PRMID	:	0611
			05	13	0012B		BEQL	29\$	:	
	50	04	AC	3C	0012D		MOVZWL	PRMID, R0	:	0614
				04	00131		RET		:	
	50		01	CE	00132	29\$:	MNEGL	#1, R0	:	
			04	00135			RET		:	0615

; Routine Size: 310 bytes, Routine Base: \$CODE\$ + 026E



NML\$NETIO  
V04-000

NML Network I/O module  
NML\_MAPPARAMID Map QIO parameter ID into manag

C 1  
16-Sep-1984 00:21:15  
14-Sep-1984 12:50:14

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[NML.SRC]NMLNETIO.B32;1 (7)  
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: 622 0616 1 END ! End of module  
: 623 0617 1  
: 624 0618 0 ELUDOM

# PSECT SUMMARY

Name	Bytes	Attributes
\$PLITS	56	NOVEC,NOWRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
\$CODE\$	932	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

# Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
-\$255\$DUA28:[NML.OBJ]NMLLIB.L32;1	341	41	12	27	00:00.1
-\$255\$DUA28:[SHRLIB]NMALIBRY.L32;1	887	16	1	47	00:00.2
-\$255\$DUA28:[SHRLIB]NET.L32;1	1279	21	1	63	00:00.3
-\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	21	0	581	00:03.3

# COMMAND QUALIFIERS

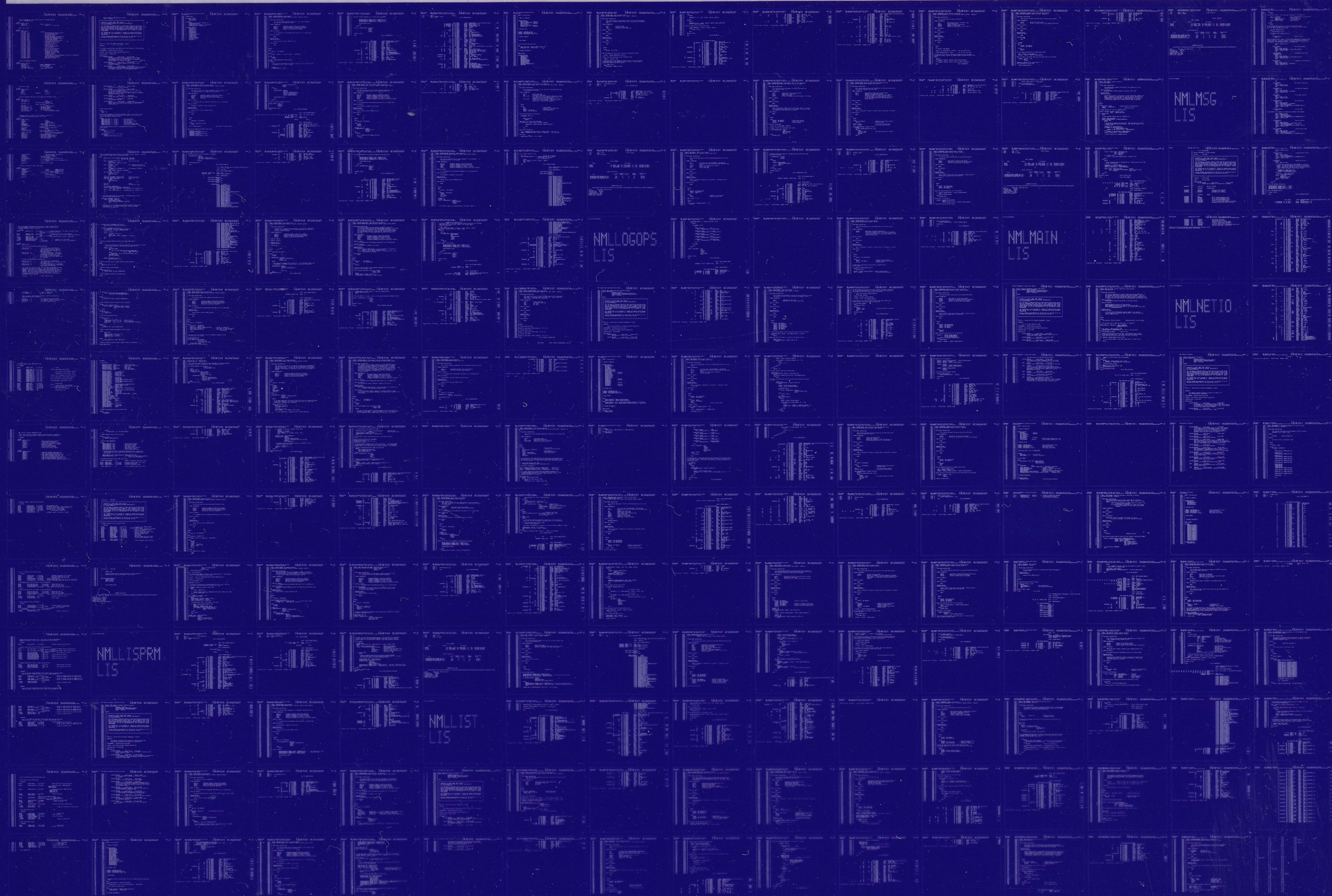
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:NMLNETIO/OBJ=OBJ\$:NMLNETIO MSRC\$:NMLNETIO/UPDATE=(ENH\$:NMLNETIO)

: Size: 932 code + 56 data bytes  
: Run Time: 00:19.8  
: Elapsed Time: 00:42.6  
: Lines/CPU Min: 1876  
: Lexemes/CPU-Min: 9607  
: Memory Used: 164 pages  
: Compilation Complete



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0285 AH-BT13A-SE  
VAX/VMS V4.0

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