
```
CCCCCCCC  AAAAAA  NN      NN  CCCCCCCC  EEEEEEEEE  LL
CCCCCCCC  AAAAAA  NN      NN  CCCCCCCC  EEEEEEEEE  LL
CC         AA      AA  NN      NN  CC         EE      LL
CC         AA      AA  NN      NN  CC         EE      LL
CC         AA      AA  NNNN     NN  CC         EE      LL
CC         AA      AA  NNNN     NN  CC         EE      LL
CC         AA      AA  NN  NN    NN  CC         EEEEEEE  LL
CC         AA      AA  NN  NN    NN  CC         EEEEEEE  LL
CC         AAAAAAAA  NN      NNNN  CC         EE      LL
CC         AAAAAAAA  NN      NNNN  CC         EE      LL
CC         AA      AA  NN      NN  CC         EE      LL
CC         AA      AA  NN      NN  CC         EE      LL
CCCCCCCC  AA      AA  NN      NN  CCCCCCCC  EEEEEEEEE  LLLLLLLLLL
CCCCCCCC  AA      AA  NN      NN  CCCCCCCC  EEEEEEEEE  LLLLLLLLLL
```

```
....
....
....
....
```

```
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
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```



```
1 0001 0 MODULE OPC$CANCEL (
2 0002 0 LANGUAGE (BLISS32),
3 0003 0 IDENT = 'V04-000'
4 0004 0 ) =
5 0005 0
6 0006 0 *****
7 0007 0 *
8 0008 0 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
9 0009 0 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
10 0010 0 * ALL RIGHTS RESERVED.
11 0011 0 *
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24 0024 0 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
25 0025 0 *
26 0026 0 *
27 0027 0 *****
28 0028 0
29 0029 0 ++
30 0030 0 FACILITY:
31 0031 0
32 0032 0 OPCOM
33 0033 0
34 0034 0 ABSTRACT:
35 0035 0
36 0036 0 This module contains the specialized logic to service
37 0037 0 a particular type of request sent by a user to OPCOM.
38 0038 0
39 0039 0 Environment:
40 0040 0
41 0041 0 VAX/VMS operating system.
42 0042 0
43 0043 0 Author:
44 0044 0
45 0045 0 Steven T. Jeffreys
46 0046 0
47 0047 0 Creation date:
48 0048 0
49 0049 0 March 10, 1981
50 0050 0
51 0051 0 Revision history:
52 0052 0
53 0053 0 V03-001 CWH3001 CW Hobbs 30-Jul-1983
54 0054 0 Various and sundry things to make OPCOM distributed
55 0055 0 across the cluster.
56 0056 0
57 0057 0 V02-002 STJ0117 Steven T. Jeffreys 05-Sep-1981
```



```

58      0058 0 !
59      0059 0 !
60      0060 0 !
61      0061 0 !
62      0062 0 !
63      0063 0 !
64      0064 0 !
65      0065 1 BEGIN                                ! Start of CANCEL
66      0066 1
67      0067 1 LIBRARY 'SYS$LIBRARY:LIB.L32';
68      0068 1 LIBRARY 'LIB$:OPCOMLIB';
69      0069 1
70      0070 1 FORWARD ROUTINE
71      0071 1 CANCEL_HANDLER                      : NOVALUE,
72      0072 1 CANCEL_CLM_HANDLER                  : NOVALUE;
73      0073 1
74      0074 1 BUILTIN
75      0075 1 INSQUE,                               ! Insert entry onto a queue
76      0076 1 REMQUE;                               ! Remove entry from a queue
77      0077 1
78      0078 1 EXTERNAL ROUTINE
79      0079 1 CHECK_REQUEST,
80      0080 1 CLUSMSG_CONV_CLM_RQCB,
81      0081 1 CLUSMSG_RQCB_SEND,
82      0082 1 DEALLOCATE_RQCB : NOVALUE,
83      0083 1 DUMP_LOG_FILE,
84      0084 1 FORMAT_MESSAGE,
85      0085 1 LOG_MESSAGE,
86      0086 1 NOTIFY_LISTED_OPERATORS,
87      0087 1 SEND_REPLY;
88      0088 1
89      0089 1 EXTERNAL
90      0090 1 OCD_VECTOR                          : VECTOR;
91      0091 1
92      0092 1 EXTERNAL LITERAL
93      0093 1 MAX_SCOPE,
94      0094 1 MIN_SCOPE;

```

Added support for alternate cancellation message.
This message indicates that the request was satisfied,
and canceled by the requestor.

! Common sanity checks
! Convert cluster message to RQCB
! Send RQCB to remote nodes
! Dispose of an RQCB
! Format the message into the log file
! Format a message
! Write a message to a logfile
! Just like it says
! Send a reply to the requestor

! OCD list headers

! Maximum scope value
! Minimum scope value


```

96 0095 1 GLOBAL ROUTINE CANCEL_HANDLER (BUFFER_DESC) : NOVALUE =
97 0096 1
98 0097 1 ++
99 0098 1 Functional description:
100 0099 1
101 0100 1 This routine is the handler for all CANCEL messages received by OPCOM.
102 0101 1
103 0102 1
104 0103 1 Input:
105 0104 1
106 0105 1 BUFFER_DESC : The address of a quadword buffer descriptor that
107 0106 1 describes the buffer containing the message.
108 0107 1
109 0108 1 Implicit Input:
110 0109 1
111 0110 1 None.
112 0111 1
113 0112 1 Output:
114 0113 1
115 0114 1 None.
116 0115 1
117 0116 1 Implicit output:
118 0117 1
119 0118 1 Some accounting data will be updated
120 0119 1 to reflect the receipt of the message.
121 0120 1
122 0121 1 Side effects:
123 0122 1
124 0123 1 None.
125 0124 1
126 0125 1 Routine value:
127 0126 1
128 0127 1 None.
129 0128 1 --
130 0129 1
131 0130 2 BEGIN ! Start of CANCEL_HANDLER
132 0131 2
133 0132 2 MAP
134 0133 2 BUFFER_DESC : $ref_bblock;
135 0134 2
136 0135 2 LOCAL
137 0136 2
138 0137 2 MESSAGE_VECTOR : VECTOR [5, LONG], ! Message info
139 0138 2 RQCB : $ref_bblock, ! RQCB data structure
140 0139 2 MCB : $ref_bblock, ! MCB data structure
141 0140 2 OCD : $ref_bblock, ! OCD data structure
142 0141 2 RQST_RQCB : $ref_bblock, ! Request RQCB
143 0142 2 OCD_COUNT : LONG, ! Count of OCD in an OCD list
144 0143 2 OCD_INDEX : LONG, ! Index into OCD_VECTOR
145 0144 2 RQST_COUNT : LONG, ! Count of requests in a list
146 0145 2 MESSAGE : LONG, ! Message code
147 0146 2 FOUND : LONG, ! Boolean
148 0147 2 STATUS : LONG;
149 0148 2
150 0149 2
151 0150 2 Check request for minimum amount of data.
152 0151 2
```



```
153 0152 3 IF .BUFFER_DESC [DSC$W_LENGTH] LSS (OPC$K_COMHDRSIZ + OPC$K_CANCEL_MIN_SIZE)
154 0153 2 THEN
155 0154 2 RETURN;
156 0155 2
157 0156 2 ! Do some sanity checking.
158 0157 2
159 0158 2 IF NOT CHECK_REQUEST (.BUFFER_DESC, RQCB)
160 0159 2 THEN
161 0160 2 RETURN;
162 0161 2
163 0162 2 ! Check for a reply mailbox. If none specified, then ignore the
164 0163 2 ! cancelation message, as it would be impossible to locate the correct
165 0164 2 ! request without it.
166 0165 2
167 0166 2 IF .RQCB [RQCB_W_REPLYMBX] EQL 0
168 0167 2 THEN
169 0168 2 RETURN;
170 0169 2
171 0170 2 ! See if the requestor is issuing this request on another's behalf.
172 0171 2 ! If so, and the requestor does not have the privilege to do so,
173 0172 2 ! then dismiss the request.
174 0173 2
175 0174 2 IF .RQCB [RQCB_L_SENDERUIC] NEQ .RQCB [RQCB_L_UIC]
176 0175 2 THEN
177 0176 2 IF (NOT .%bblock [RQCB [RQCB_L_PRIVMASK1], PRV$V_OPER])
178 0177 2 THEN
179 0178 2 IF NOT ((.%bblock [RQCB [RQCB_L_SENDERUIC], 2,0,16,0] EQL .%bblock [RQCB [RQCB_L_UIC], 2,0,16,0]) AN
180 0179 2 (%bblock [RQCB [RQCB_L_PRIVMASK1], PRV$V_GROUP]))
181 0180 2 THEN
182 0181 2 BEGIN
183 0182 2 MESSAGE_VECTOR [0] = OPC$_ILLRQST;
184 0183 2 MESSAGE_VECTOR [1] = 0;
185 0184 2 FORMAT MESSAGE (.RQCB, MESSAGE_VECTOR);
186 0185 2 SEND REPLY (.RQCB);
187 0186 2 DEALLOCATE_RQCB (.RQCB);
188 0187 2 RETURN;
189 0188 2 END;
190 0189 2
191 0190 2 ! Locate the request in the database. The entire database must be
192 0191 2 ! searched, as the responsibility for the request may have been bounced
193 0192 2 ! around by the operators, and the request may not be in an obvious place.
194 0193 2 ! When the search is done, RQST_RQCB will contain the address of the
195 0194 2 ! original request RQCB if it was found.
196 0195 2
197 0196 2 FOUND = FALSE;
198 0197 2 OCD_INDEX = MAX_SCOPE;
199 0198 2 WHILE (NOT .FOUND) AND (.OCD_INDEX GEQ MIN_SCOPE) DO
200 0199 2 BEGIN
201 0200 2 ! Scan the OCD list for each class of operator
202 0201 2
203 0202 2 OCD = .OCD_VECTOR [(OCD_INDEX - 1) * 2]; ! Get first OCD address
204 0203 2 OCD_COUNT = .OCD_VECTOR [(OCD_INDEX - 1) * 2 + 1]; ! Get # of OCDs in the list
205 0204 2 WHILE (NOT .FOUND) AND (.OCD_COUNT GTR 0) DO
206 0205 2 BEGIN
207 0206 2
208 0207 2 ! Scan the request list for each OCD.
209 0208 2
```



```
210 0209 4 !
211 0210 4 RQST_COUNT = .OCD [OCD_W_RQSTCOUNT]; ! Get # of requests in list
212 0211 4 RQST_RQCB = .OCD [OCD_L_RQSTFLINK]; ! Get first RQST_RQCB address
213 0212 4 WHILE (NOT .FOUND) AND (.RQST_COUNT GTR 0) DO
214 0213 5 BEGIN
215 0214 5 !
216 0215 5 ! Check the reply mailbox and the requestid for equality.
217 0216 5 !
218 0217 6 IF (.RQCB [RQCB_W_REPLYMBX] EQL .RQST_RQCB [RQCB_W_REPLYMBX])
219 0218 6 AND (.RQCB [RQCB_L_RQSTID] EQL .RQST_RQCB [RQCB_L_RQSTID])
220 0219 5 THEN
221 0220 6 BEGIN
222 0221 6 FOUND = TRUE; ! This is it.
223 0222 6 RQCB [RQCB_L_OCD] = .OCD; ! Note that we found it
224 0223 6 END ! Save OCD address
225 0224 5 ELSE
226 0225 6 BEGIN
227 0226 6 RQST_COUNT = .RQST_COUNT - 1; ! Not found. Try the next RQCB
228 0227 6 RQST_RQCB = .RQST_RQCB [RQCB_L_FLINK]; ! Decrement request count
229 0228 5 END; ! Get address of next RQCB
230 0229 4 END;
231 0230 4 OCD_COUNT = .OCD_COUNT - 1; ! Decrement OCD count
232 0231 4 OCD = .OCD [OCD_L_FLINK]; ! Get address of next OCD
233 0232 3 END;
234 0233 3 OCD_INDEX = .OCD_INDEX - 1; ! Try next operator class
235 0234 3 END;
236 0235 2 !
237 0236 2 ! Finish up.
238 0237 2 !
239 0238 2 IF NOT .FOUND
240 0239 2 THEN
241 0240 3 BEGIN
242 0241 3 !
243 0242 3 ! Get set to tell the requestor the bad news.
244 0243 3 !
245 0244 3 MESSAGE_VECTOR [0] = OPC$_NOSUCHRQST;
246 0245 3 MESSAGE_VECTOR [1] = 0;
247 0246 3 FORMAT_MESSAGE (.RQCB, MESSAGE_VECTOR);
248 0247 3 END
249 0248 2 ELSE
250 0249 3 BEGIN
251 0250 3 !
252 0251 3 ! Inform all interested operators that the request is canceled.
253 0252 3 ! Log the cancelation notice, and remove the request from the data base.
254 0253 3 !
255 0254 3 MESSAGE_VECTOR [0] = OPC$_RQSTCAN; ! Set message code
256 0255 3 IF .%bblock [RQCB [RQCB_L_RQ_OPTIONS], OPC$_RQSTDONE]
257 0256 3 THEN
258 0257 3 MESSAGE_VECTOR [0] = OPC$_RQSTDONE; ! Set alternate status code
259 0258 3 MESSAGE_VECTOR [1] = 0; ! Set # of message arguments
260 0259 3 MESSAGE_VECTOR [2] = .RQST_RQCB [RQCB_L_RQSTNUM]; ! Set message argument
261 0260 3 DEALLOCATE RQCB (.RQCB); ! Dispose of the request control block
262 0261 3 REMQUE (.RQST_RQCB, RQCB); ! Remove the request from the database
263 0262 3 OCD = .RQST_RQCB [RQCB_L_OCD]; ! Get the OCD address
264 0263 3 OCD [OCD_W_RQSTCOUNT] = .OCD [OCD_W_RQSTCOUNT] - 1;
265 0264 3 FORMAT_MESSAGE (.RQCB, MESSAGE_VECTOR);
266 0265 3 !
```



```

: 267      0266 3      ! Send it to everyone else in the cluster. Inform all interested operators that the
: 268      0267 3      ! request is canceled. Log the cancelation notice.
: 269      0268 3      !
: 270      0269 3      CLUSMSG RQCB SEND (-1, CLM, CANCEL, .RQCB);
: 271      0270 3      NOTIFY LISTED_OPERATORS (.RQCB);      ! Notify the interested operators
: 272      0271 3      LOG_MESSAGE (.RQCB);      ! Log the event
: 273      0272 2      END;
: 274      0273 2      !
: 275      0274 2      ! Send the message to the requestor.
: 276      0275 2      !
: 277      0276 2      SEND_REPLY (.RQCB);
: 278      0277 2      DEALLOCATE_RQCB (.RQCB);
: 279      0278 2      !
: 280      0279 1      END;

```

! End of CANCEL_HANDLER

```

.TITLE  OPC$CANCEL
.IDENT  \V04-000\

```

```

.EXTRN  CHECK_REQUEST, CLUSMSG_CONV_CLM_RQCB
.EXTRN  CLUSMSG_RQCB_SEND
.EXTRN  DEALLOCATE_RQCB
.EXTRN  DUMP_LOG_FILE, FORMAT_MESSAGE
.EXTRN  LOG_MESSAGE, NOTIFY_LISTED_OPERATORS
.EXTRN  SEND_REPLY, OCD_VECTOR
.EXTRN  MAX_SCOPE, MIN_SCOPE

```

```

.PSECT  $CODE$,NOWRT,2

```

```

                                01FC 00000
                                CF 9E 00002
                                18 C2 00007
                                58 0000G CF 9E 00002
                                5E 18 C2 00007
                                3F 04 BC B1 0000A
                                01 1A 0000E
                                04 00010
                                5E DD 00011 1$:
                                04 AC DD 00013
                                0000G CF 02 FB 00016
                                01 50 E8 0001B
                                52 04 0001E
                                2E 6E D0 0001F 2$:
                                A2 B5 00022
                                01 12 00025
                                04 00027
                                51 38 A2 9E 00028 3$:
                                50 68 A2 9E 0002C
                                60 61 D1 00030
                                2F 13 00033
                                2A 32 A2 02 E0 00035
                                02 A0 02 A1 B1 0003A
                                04 12 0003F
                                04 1F 31 A2 E8 00041
                                04 AE 0005807C 8F D0 00045 4$:
                                08 AE D4 0004D
                                04 AE 9F 00050
                                52 DD 00053
                                68 02 FB 00055

```

```

.ENTRY  CANCEL_HANDLER, Save R2,R3,R4,R5,R6,R7,R8      : 0095
MOVAB   FORMAT_MESSAGE, R8
SUBL2   #24, SP
CMPW    @BUFFER_DESC, #63
BGTRU   1$
RET
PUSHL   SP
PUSHL   BUFFER_DESC
CALLS   #2, CHECK_REQUEST
BLBS    R0, 2$
RET
MOVL    RQCB, R2
TSTW    46(R2)
BNEQ    3$
RET
MOVAB   56(R2), R1
MOVAB   104(R2), R0
CMLPL   (R1), (R0)
BEQL    5$
BBS     #2, 50(R2), 5$
CMPW    2(R1), 2(R0)
BNEQ    4$
BLBS    49(R2), 5$
MOVL    #360572, MESSAGE_VECTOR
CLRL    MESSAGE_VECTOR+4
PUSHAB  MESSAGE_VECTOR
PUSHL   R2
CALLS   #2, FORMAT_MESSAGE

```

```

: 0152
: 0158
: 0166
: 0174
: 0176
: 0178
: 0179
: 0182
: 0183
: 0184

```


	0000G	CF	52	DD	00058	PUSHL	R2	0185
			01	FB	0005A	CALLS	#1, SEND_REPLY	0186
			52	DD	0005F	PUSHL	R2	0196
			00D5	31	00061	BRW	16\$	0197
			55	D4	00064	CLRL	FOUND	0198
	50	00000000G	8F	D0	00066	MOVL	#MAX_SCOPE, OCD_INDEX	0203
	70		55	E8	0006D	BLBS	FOUND, 13\$	0204
	00000000G	8F	50	D1	00070	CMPL	OCD_INDEX, #MIN_SCOPE	0205
			4F	19	00077	BLSS	12\$	0210
51	50		01	78	00079	ASHL	#1, OCD_INDEX, R1	0211
	53	0000GCF	41	D0	0007D	MOVL	OCD_VECTOR-8[R1], OCD	0212
	57	0000GCF	41	D0	00083	MOVL	OCD_VECTOR-4[R1], OCD_COUNT	0217
	38		55	E8	00089	BLBS	FOUND, 11\$	0218
			57	D5	0008C	TSTL	OCD_COUNT	0221
			34	15	0008E	BLEQ	11\$	0222
	56	3A	A3	3C	00090	MOVZWL	58(OCD), RQST_COUNT	0226
	54	3C	A3	D0	00094	MOVL	60(OCD), RQST_RQCB	0227
	22		55	E8	00098	BLBS	FOUND, 10\$	0230
			56	D5	0009B	TSTL	RQST_COUNT	0231
			1E	15	0009D	BLEQ	10\$	0233
2E	A4	2E	A2	B1	0009F	CMPL	46(R2), 46(RQST_RQCB)	0238
			10	12	000A4	BNEQ	9\$	0244
64	A4	64	A2	D1	000A6	CMPL	100(R2), 100(RQST_RQCB)	0245
			09	12	000AB	BNEQ	9\$	0246
	55		01	D0	000AD	MOVL	#1, FOUND	0254
24	A2		53	D0	000B0	MOVL	OCD, 36(R2)	0255
			E2	11	000B4	BRB	8\$	0257
			56	D7	000B6	DECL	RQST_COUNT	0258
	54		64	D0	000B8	MOVL	(RQST_RQCB), RQST_RQCB	0259
			DB	11	000BB	BRB	8\$	0260
			57	D7	000BD	DECL	OCD_COUNT	0261
	53		63	D0	000BF	MOVL	(OCD), OCD	0262
			C5	11	000C2	BRB	7\$	0263
			50	D7	000C4	DECL	OCD_INDEX	0264
			A5	11	000C6	BRB	6\$	0269
	15		55	E8	000C8	BLBS	FOUND, 13\$	0270
04	AE	00058044	8F	D0	000CB	MOVL	#360516, MESSAGE_VECTOR	0271
		08	AE	D4	000D3	CLRL	MESSAGE_VECTOR+4	0272
		04	AE	9F	000D6	PUSHAB	MESSAGE_VECTOR	0273
			52	DD	000D9	PUSHL	R2	0274
	68		02	FB	000DB	CALLS	#2, FORMAT_MESSAGE	0275
			50	11	000DE	BRB	15\$	0276
04	AE	00058084	8F	D0	000E0	MOVL	#360580, MESSAGE_VECTOR	0277
	08	58	A2	E9	000E8	BLBC	88(R2), 14\$	0278
04	AE	000581DB	8F	D0	000EC	MOVL	#360925, MESSAGE_VECTOR	0279
		08	AE	D4	000F4	CLRL	MESSAGE_VECTOR+4	0280
0C	AE	70	A4	D0	000F7	MOVL	112(RQST_RQCB), MESSAGE_VECTOR+8	0281
			52	DD	000FC	PUSHL	R2	0282
0000G	CF		01	FB	000FE	CALLS	#1, DEALLOCATE_RQCB	0283
	6E		64	0F	00103	REMQUE	(RQST_RQCB), RQCB	0284
	53	24	A4	D0	00106	MOVL	36(RQST_RQCB), OCD	0285
		3A	A3	B7	0010A	DECW	58(OCD)	0286
		04	AE	9F	0010D	PUSHAB	MESSAGE_VECTOR	0287
		04	AE	DD	00110	PUSHL	RQCB	0288
	68		02	FB	00113	CALLS	#2, FORMAT_MESSAGE	0289
			6E	DD	00116	PUSHL	RQCB	0290
			03	DD	00118	PUSHL	#3	0291

OPC\$CANCEL
V04-000

I 1
16-Sep-1984 01:17:58
14-Sep-1984 12:50:36

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[OPCOM.SRC]CANCEL.B32;1 Page 8
(2)

0000G	7E	01	CE	0011A	MNEGL	#1, -(SP)	:
	CF	03	FB	0011D	CALLS	#3, CLUSMSG_RQCB_SEND	:
		6E	DD	00122	PUSHL	RQCB	: 0270
0000G	CF	01	FB	00124	CALLS	#1, NOTIFY_LISTED_OPERATORS	:
		6E	DD	00129	PUSHL	RQCB	: 0271
0000G	CF	01	FB	0012B	CALLS	#1, LOG_MESSAGE	:
		6E	DD	00130	PUSHL	RQCB	: 0276
0000G	CF	01	FB	00132	CALLS	#1, SEND_REPLY	:
		6E	DD	00137	PUSHL	RQCB	: 0277
0000G	CF	01	FB	00139	CALLS	#1, DEALLOCATE_RQCB	:
		04	0013E	RET			: 0279

; Routine Size: 319 bytes, Routine Base: \$CODE\$ + 0000


```

282 0280 1 GLOBAL ROUTINE CANCEL_CLM_HANDLER (BUFFER_DESC : $ref_bblock, CLM : $ref_bblock, LEN) : NOVALUE =
283 0281 1
284 0282 1 ++
285 0283 1 Functional description:
286 0284 1
287 0285 1 This routine is the handler for all CANCEL messages received by OPCOM from other nodes.
288 0286 1
289 0287 1
290 0288 1 Input:
291 0289 1
292 0290 1 BUFFER_DESC - pointer to message from remote node, including $SENDPR header
293 0291 1 CLM - pointer to CLMRQCB structure
294 0292 1 LEN - length of LEN
295 0293 1
296 0294 1 Implicit Input:
297 0295 1
298 0296 1 None.
299 0297 1
300 0298 1 Output:
301 0299 1
302 0300 1 None.
303 0301 1
304 0302 1 Implicit output:
305 0303 1
306 0304 1 Some accounting data will be updated
307 0305 1 to reflect the receipt of the message.
308 0306 1
309 0307 1 Side effects:
310 0308 1
311 0309 1 None.
312 0310 1
313 0311 1 Routine value:
314 0312 1
315 0313 1 None.
316 0314 1 --
317 0315 1
318 0316 2 BEGIN ! Start of CANCEL_CLM_HANDLER
319 0317 2
320 0318 2 LOCAL
321 0319 2 RQCB : $ref_bblock, ! RQCB data structure
322 0320 2 MCB : $ref_bblock, ! MCB data structure
323 0321 2 OCD : $ref_bblock, ! OCD data structure
324 0322 2 RQST_RQCB : $ref_bblock, ! Request RQCB
325 0323 2 OCD_COUNT : LONG, ! Count of OCD in an OCD list
326 0324 2 OCD_INDEX : LONG, ! Index into OCD_VECTOR
327 0325 2 RQST_COUNT : LONG, ! Count of requests in a list
328 0326 2 MESSAGE : LONG, ! Message code
329 0327 2 FOUND : LONG, ! Boolean
330 0328 2 STATUS : LONG;
331 0329 2
332 0330 2
333 0331 2 Check the version number of the message. If the message is from any other version,
334 0332 2 simply ignore it.
335 0333 2
336 0334 2 IF .CLM [CLM_B_DS_VERSION] NEQ CLMRQCB_K_DS_VERSION
337 0335 2 THEN
338 0336 2 RETURN DUMP_LOG_FILE (.BUFFER_DESC, %ASCII 'CLM__CANCEL mismatch');
```



```
339 0337 2 |
340 0338 2 | Allocate an RQCB and convert the message RQCB into the new RQCB
341 0339 2 |
342 0340 2 | IF NOT CLUSMSG_CONV_CLM_RQCB (.CLM, RQCB)
343 0341 2 | THEN
344 0342 2 |     RETURN DUMP_LOG_FILE (.BUFFER_DESC, ascid_INVALIDRQCB);
345 0343 2 |
346 0344 2 | Locate the request in the database. The entire database must be
347 0345 2 | searched, as the responsibility for the request may have been bounced
348 0346 2 | around by the operators, and the request may not be in an obvious place.
349 0347 2 | When the search is done, RQST_RQCB will contain the address of the
350 0348 2 | original request RQCB if it was found.
351 0349 2 |
352 0350 2 | FOUND = FALSE;
353 0351 2 | OCD_INDEX = MAX_SCOPE;
354 0352 2 | WHILE (NOT .FOUND) AND (.OCD_INDEX GEQ MIN_SCOPE) DO
355 0353 3 | BEGIN
356 0354 3 |     | Scan the OCD list for each class of operator
357 0355 3 |
358 0356 3 |     OCD = .OCD_VECTOR [(OCD_INDEX - 1) * 2];           ! Get first OCD address
359 0357 3 |     OCD_COUNT = .OCD_VECTOR [(OCD_INDEX - 1) * 2 + 1]; ! Get # of OCDs in the list
360 0358 3 |     WHILE (NOT .FOUND) AND (.OCD_COUNT GTR 0) DO
361 0359 4 | BEGIN
362 0360 4 |     | Scan the request list for each OCD.
363 0361 4 |
364 0362 4 |     RQST_COUNT = .OCD [OCD_W_RQSTCOUNT];           ! Get # of requests in list
365 0363 4 |     RQST_RQCB = .OCD [OCD_L_RQSTFLINK];             ! Get first RQST_RQCB address
366 0364 4 |     WHILE (NOT .FOUND) AND (.RQST_COUNT GTR 0) DO
367 0365 5 | BEGIN
368 0366 5 |     | Check the reply mailbox and the requestid for equality.
369 0367 5 |
370 0368 5 |     IF (.RQCB [RQCB_W_REPLYMBX] EQL .RQST_RQCB [RQCB_W_REPLYMBX])
371 0369 6 |     AND (.RQCB [RQCB_L_RQSTID] EQL .RQST_RQCB [RQCB_L_RQSTID])
372 0370 6 |     THEN
373 0371 6 |         BEGIN
374 0372 6 |             FOUND = TRUE;           ! This is it.
375 0373 6 |             RQCB [RQCB_L_OCD] = .OCD; ! Note that we found it
376 0374 6 |             END;                   ! Save OCD address
377 0375 6 |         ELSE
378 0376 6 |             BEGIN
379 0377 6 |                 RQST_COUNT = .RQST_COUNT - 1; ! Not found. Try the next RQCB
380 0378 6 |                 RQST_RQCB = .RQST_RQCB [RQCB_L_FLINK]; ! Decrement request count
381 0379 6 |                 END; ! Get address of next RQCB
382 0380 5 |             END;
383 0381 5 |         END;
384 0382 4 |     OCD_COUNT = .OCD_COUNT - 1; ! Decrement OCD count
385 0383 4 |     OCD = .OCD [OCD_L_FLINK]; ! Get address of next OCD
386 0384 4 |     END;
387 0385 3 |     OCD_INDEX = .OCD_INDEX - 1; ! Try next operator class
388 0386 3 |     END;
389 0387 2 |
390 0388 2 | Finish up.
391 0389 2 |
392 0390 2 | IF NOT .FOUND
393 0391 2 | THEN
394 0392 2 |
395 0393 2 |
```



```
! End of CANCEL_CLM_HANDLER
```

PC	Op	OpC	OpD	OpE	OpF	OpG	OpH	OpI	OpJ	OpK	OpL	OpM	OpN	OpO	OpP	OpQ	OpR	OpS	OpT	OpU	OpV	OpW	OpX	OpY	OpZ	OpAA	OpAB	OpAC	OpAD	OpAE	OpAF	OpAG	OpAH	OpAI	OpAJ	OpAK	OpAL	OpAM	OpAN	OpAO	OpAP	OpAQ	OpAR	OpAS	OpAT	OpAU	OpAV	OpAW	OpAX	OpAY	OpAZ	OpBA	OpBB	OpBC	OpBD	OpBE	OpBF	OpBG	OpBH	OpBI	OpBJ	OpBK	OpBL	OpBM	OpBN	OpBO	OpBP	OpBQ	OpBR	OpBS	OpBT	OpBU	OpBV	OpBW	OpBX	OpBY	OpBZ	OpCA	OpCB	OpCC	OpCD	OpCE	OpCF	OpCG	OpCH	OpCI	OpCJ	OpCK	OpCL	OpCM	OpCN	OpCO	OpCP	OpCQ	OpCR	OpCS	OpCT	OpCU	OpCV	OpCW	OpCX	OpCY	OpCZ	OpDA	OpDB	OpDC	OpDD	OpDE	OpDF	OpDG	OpDH	OpDI	OpDJ	OpDK	OpDL	OpDM	OpDN	OpDO	OpDP	OpDQ	OpDR	OpDS	OpDT	OpDU	OpDV	OpDW	OpDX	OpDY	OpDZ	OpEA	OpEB	OpEC	OpED	OpEE	OpEF	OpEG	OpEH	OpEI	OpEJ	OpEK	OpEL	OpEM	OpEN	OpEO	OpEP	OpEQ	OpER	OpES	OpET	OpEU	OpEV	OpEW	OpEX	OpEY	OpEZ	OpFA	OpFB	OpFC	OpFD	OpFE	OpFF	OpFG	OpFH	OpFI	OpFJ	OpFK	OpFL	OpFM	OpFN	OpFO	OpFP	OpFQ	OpFR	OpFS	OpFT	OpFU	OpFV	OpFW	OpFX	OpFY	OpFZ	OpGA	OpGB	OpGC	OpGD	OpGE	OpGF	OpGG	OpGH	OpGI	OpGJ	OpGK	OpGL	OpGM	OpGN	OpGO	OpGP	OpGQ	OpGR	OpGS	OpGT	OpGU	OpGV	OpGW	OpGX	OpGY	OpGZ	OpHA	OpHB	OpHC	OpHD	OpHE	OpHF	OpHG	OpHH	OpHI	OpHJ	OpHK	OpHL	OpHM	OpHN	OpHO	OpHP	OpHQ	OpHR	OpHS	OpHT	OpHU	OpHV	OpHW	OpHX	OpHY	OpHZ	OpIA	OpIB	OpIC	OpID	OpIE	OpIF	OpIG	OpIH	OpII	OpIJ	OpIK	OpIL	OpIM	OpIN	OpIO	OpIP	OpIQ	OpIR	OpIS	OpIT	OpIU	OpIV	OpIW	OpIX	OpIY	OpIZ	OpJA	OpJB	OpJC	OpJD	OpJE	OpJF	OpJG	OpJH	OpJI	OpJJ	OpJK	OpJL	OpJM	OpJN	OpJO	OpJP	OpJQ	OpJR	OpJS	OpJT	OpJU	OpJV	OpJW	OpJX	OpJY	OpJZ	OpKA	OpKB	OpKC	OpKD	OpKE	OpKF	OpKG	OpKH	OpKI	OpKJ	OpKK	OpKL	OpKM	OpKN	OpKO	OpKP	OpKQ	OpKR	OpKS	OpKT	OpKU	OpKV	OpKW	OpKX	OpKY	OpKZ	OpLA	OpLB	OpLC	OpLD	OpLE	OpLF	OpLG	OpLH	OpLI	OpLJ	OpLK	OpLL	OpLM	OpLN	OpLO	OpLP	OpLQ	OpLR	OpLS	OpLT	OpLU	OpLV	OpLW	OpLX	OpLY	OpLZ	OpMA	OpMB	OpMC	OpMD	OpME	OpMF	OpMG	OpMH	OpMI	OpMJ	OpMK	OpML	OpMM	OpMN	OpMO	OpMP	OpMQ	OpMR	OpMS	OpMT	OpMU	OpMV	OpMW	OpMX	OpMY	OpMZ	OpNA	OpNB	OpNC	OpND	OpNE	OpNF	OpNG	OpNH	OpNI	OpNJ	OpNK	OpNL	OpNM	OpNN	OpNO	OpNP	OpNQ	OpNR	OpNS	OpNT	OpNU	OpNV	OpNW	OpNX	OpNY	OpNZ	OpOA	OpOB	OpOC	OpOD	OpOE	OpOF	OpOG	OpOH	OpOI	OpOJ	OpOK	OpOL	OpOM	OpON	OpOO	OpOP	OpOQ	OpOR	OpOS	OpOT	OpOU	OpOV	OpOW	OpOX	OpOY	OpOZ	OpPA	OpPB	OpPC	OpPD	OpPE	OpPF	OpPG	OpPH	OpPI	OpPJ	OpPK	OpPL	OpPM	OpPN	OpPO	OpPP	OpPQ	OpPR	OpPS	OpPT	OpPU	OpPV	OpPW	OpPX	OpPY	OpPZ	OpQA	OpQB	OpQC	OpQD	OpQE	OpQF	OpQG	OpQH	OpQI	OpQJ	OpQK	OpQL	OpQM	OpQN	OpQO	OpQP	OpQQ	OpQR	OpQS	OpQT	OpQU	OpQV	OpQW	OpQX	OpQY	OpQZ	OpRA	OpRB	OpRC	OpRD	OpRE	OpRF	OpRG	OpRH	OpRI	OpRJ	OpRK	OpRL	OpRM	OpRN	OpRO	OpRP	OpRQ	OpRR	OpRS	OpRT	OpRU	OpRV	OpRW	OpRX	OpRY	OpRZ	OpSA	OpSB	OpSC	OpSD	OpSE	OpSF	OpSG	OpSH	OpSI	OpSJ
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	0000G	CF	04	AC	DD	00025	2\$:	PUSHL	BUFFER DESC	:	
				02	FB	00028		CALLS	#2, DUMP_LOG_FILE	:	
					04	0002D		RET		:	
		50	00000000G	55	D4	0002E	3\$:	CLRL	FOUND	:	0350
		53		8F	D0	00030		MOVL	#MAX_SCOPE, OCD_INDEX	:	0351
		69		6E	D0	00037		MOVL	RQCB, R3	:	0371
	00000000G	8F		55	E8	0003A	4\$:	BLBS	FOUND, 11\$	:	0352
				50	D1	0003D		CMPL	OCD_INDEX, #MIN_SCOPE	:	
				4F	19	00044		BLSS	10\$	:	
51		50		01	78	00046		ASHL	#1, OCD_INDEX, R1	:	0357
		52		0000GCF	41	D0	0004A	MOVL	OCD_VECTOR-8[R1], OCD	:	
		57		0000GCF	41	D0	00050	MOVL	OCD_VECTOR-4[R1], OCD_COUNT	:	0358
		38		55	E8	00056	5\$:	BLBS	FOUND, 9\$	:	0359
				57	D5	00059		TSTL	OCD_COUNT	:	
				34	15	0005B		BLEQ	9\$	:	
		56		3A	A2	3C	0005D	MOVZWL	58(OCD), RQST_COUNT	:	0364
		54		3C	A2	D0	00061	MOVL	60(OCD), RQST_RQCB	:	0365
		22			55	E8	00065	6\$:	BLBS	FOUND, 8\$	0366
					56	D5	00068	TSTL	RQST_COUNT	:	
					1E	15	0006A	BLEQ	8\$	:	
2E	A4		2E	A3	B1	0006C		CMPL	46(R3), 46(RQST_RQCB)	:	0371
					10	12	00071	BNEQ	7\$	:	
64	A4		64	A3	D1	00073		CMPL	100(R3), 100(RQST_RQCB)	:	0372
					09	12	00078	BNEQ	7\$	:	
		55			01	D0	0007A	MOVL	#1, FOUND	:	0375
24	A3				52	D0	0007D	MOVL	OCD, 36(R3)	:	0376
					E2	11	00081	BRB	6\$	:	0371
					56	D7	00083	7\$:	DECL	RQST_COUNT	0380
		54			64	D0	00085	MOVL	(RQST_RQCB), RQST_RQCB	:	0381
					DB	11	00088	BRB	6\$	:	0366
					57	D7	0008A	8\$:	DECL	OCD_COUNT	0384
		52			62	D0	0008C	MOVL	(OCD), OCD	:	0385
					C5	11	0008F	BRB	5\$	:	0359
					50	D7	00091	9\$:	DECL	OCD_INDEX	0387
					A5	11	00093	BRB	4\$	:	0352
		0E			55	E8	00095	10\$:	BLBS	FOUND, 11\$	0392
			0000'		CF	9F	00098	PUSHAB	P.AAC	:	0398
			04		AC	DD	0009C	PUSHL	BUFFER DESC	:	
	0000G	CF			02	FB	0009F	CALLS	#2, DUMP_LOG_FILE	:	
					1F	11	000A4	BRB	12\$	:	0392
					53	DD	000A6	11\$:	PUSHL	R3	0406
	0000G	CF			01	FB	000A8	CALLS	#1, NOTIFY_LISTED_OPERATORS	:	
					53	DD	000AD	PUSHL	R3	:	0407
	0000G	CF			01	FB	000AF	CALLS	#1, LOG_MESSAGE	:	
					53	DD	000B4	PUSHL	R3	:	0408
	0000G	CF			01	FB	000B6	CALLS	#1, DEALLOCATE_RQCB	:	
		6E			64	OF	000BB	REMQUE	(RQST_RQCB), RQCB	:	0412
		52			A4	D0	000BE	MOVL	36(RQST_RQCB), OCD	:	0413
			24		A2	B7	000C2	DECW	58(OCD)	:	0414
			3A		6E	DD	000C5	12\$:	PUSHL	RQCB	0419
	0000G	CF			01	FB	000C7	CALLS	#1, DEALLOCATE_RQCB	:	
					04	000CC		RET		:	0421

; Routine Size: 205 bytes, Routine Base: \$CODE\$ + 013F

OPC\$CANCEL
V04-000

N 1
16-Sep-1984 01:17:58
14-Sep-1984 12:50:36

VAX-11 Bliss-32 V4.0-742
DISK\$VM\$MASTER:[OPCOM.SRC]CANCEL.B32;1 Page 13 (4)

: 425 0422 1 END
: 426 0423 0 ELUDOM

! End of CANCEL

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	524	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPI,ALIGN(2)
\$PLITS	64	NOVEC,NOWRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPI,ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	8	0	1000	00:01.8
\$255\$DUA28:[OPCOM.OBJ]OPCOMLIB.L32;1	633	22	3	43	00:00.9

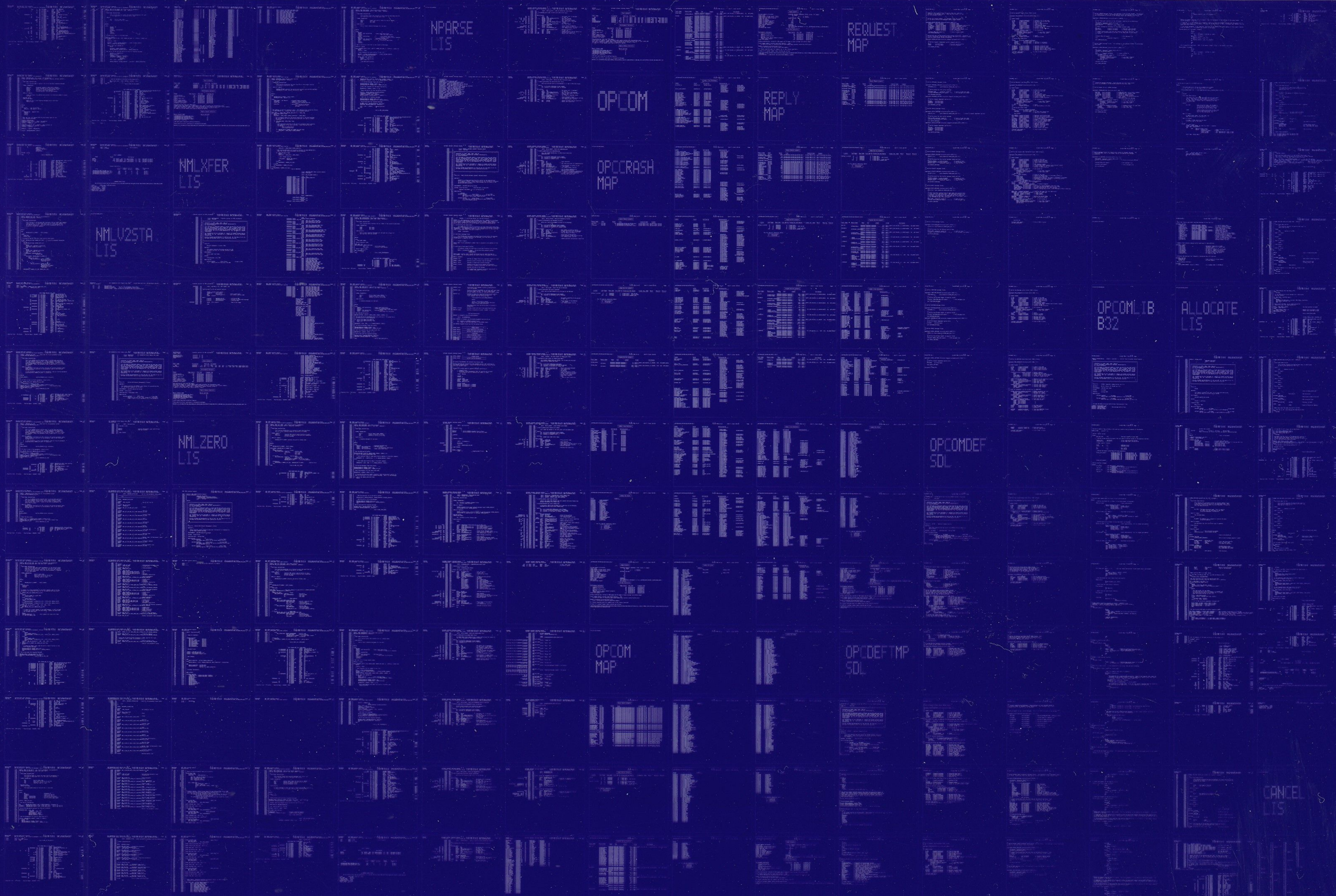
COMMAND QUALIFIERS

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

: Size: 524 code + 64 data bytes
: Run Time: 00:13.2
: Elapsed Time: 00:47.0
: Lines/CPU Min: 1930
: Lexemes/CPU-Min: 1309
: Memory Used: 132 pages
: Compilation Complete

0288 AH-BT13A-SE
VAX/VMS V4.0

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0289 AH-BT13A-SE
VAX/VMS V4.0

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