


```

LL      000000  GGGGGGGG  EEEEEEEEE  VV      VV  EEEEEEEEE  NN      NN  TTTTTTTTTT
LL      000000  GGGGGGGG  EEEEEEEEE  VV      VV  EEEEEEEEE  NN      NN  TTTTTTTTTT
LL      00      00  GG      GG      EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      EEEEEEEE  VV      VV  EEEEEEEE  NN      NN  TT
LL      00      00  GG      GG      EEEEEEEE  VV      VV  EEEEEEEE  NN      NN  TT
LL      00      00  GG      GG      GG      GG  EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      GG      GG  EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      GG      GG  EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      GG      GG  EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      GG      GG  EE      EE      VV      VV  EE      EE      NN      NN  TT
LL      00      00  GG      GG      GG      GG  EE      EE      VV      VV  EE      EE      NN      NN  TT
LLLLLLLL 000000  GGGGGG  EEEEEEEEE  VV      VV  EEEEEEEEE  NN      NN  TT
LLLLLLLL 000000  GGGGGG  EEEEEEEEE  VV      VV  EEEEEEEEE  NN      NN  TT

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
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
LLLLLLLL IIIIII  SSSSSSSS
LLLLLLLL IIIIII  SSSSSSSS

```

```

1 0001 0 MODULE OPC$LOGEVENT (
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 *
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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 all the various and sundry general
37 0037 0 purpose utility routines used by OPCOM's request handlers.
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 V03-005 CWH3169 CW Hobbs 5-May-1984
54 0054 0 Second pass for cluster-wide OPCOM:
55 0055 0 - Add an explanation to DUMP_LOG_FILE and WRITE_LOG_FILE
56 0056 0 messages so that users won't bother us unless something
57 0057 0 is really wrong.

```

```

58 0058 0
59 0059 0
60 0060 0 V03-004 RSH0117 R. Scott Hanna 14-Mar-1983
61 0061 0 LOG_MESSAGE / Increase local buffer size to OPC$K_MAXMESSAGE.
62 0062 0
63 0063 0 V03-003 CWH3003 CW Hobbs 16-Sep-1983
64 0064 0 Increase size of local buffer, print blank line as separate
65 0065 0 records instead of using <CR><LF>.
66 0066 0
67 0067 0 V03-002 CWH3001 CW Hobbs 30-Jul-1983
68 0068 0 Various and sundry things to make OPCOM distributed
69 0069 0 across the cluster.
70 0070 0 V03-001 STJ3032 Steven T. Jeffreys, 05-Oct-1982
71 0071 0 Set GBLSTS_K_FLUSH_PENDING when writing to the logfile.
72 0072 0
73 0073 0 V02-002 STJ0160 Steven T. Jeffreys, 08-Feb-1982
74 0074 0 Jiggle the message size and pointer so that the 'bell'
75 0075 0 character on front of each message is not sent to the logfile.
76 0076 0
77 0077 0 --
78 0078 0
79 0079 1 BEGIN ! Start of LOGEVENT
80 0080 1
81 0081 1 LIBRARY 'SYS$LIBRARY:LIB.L32';
82 0082 1 LIBRARY 'LIB$OPCOMLIB';
83 0083 1
84 0084 1 FORWARD ROUTINE
85 0085 1 DUMP_LOG_FILE, ! Print a formatted dump of a buffer
86 0086 1 LOG_MESSAGE, ! Write a message to a log file
87 0087 1 LOG_MESSAGE_PUT, ! $PUT a single record of a message
88 0088 1 LOGEVENT_FAO_BUFFER, ! Local fao buffer routine
89 0089 1 WRITE_LOG_FILE; ! Write a string desc to a log file
90 0090 1
91 0091 1 BIND
92 0092 1 EXP1 = %ASCID 'OPCOM has noticed a condition which might be due to an internal error.',
93 0093 1 EXP2 = %ASCID 'It might also be explained by normal events, especially if nodes have just',
94 0094 1 EXP3 = %ASCID 'crashed or rebooted in a VAXcluster. Please bring this message to Digital's',
95 0095 1 EXP4 = %ASCID 'attention only if you are having problems with operator communications.';
96 0096 1
97 0097 1 MACRO
98 0098 1 PUT (DESC) = BEGIN
99 0099 1 BIND DSC = (DESC) : $block;
100 0100 1 LOGFILE_RAB [RAB$W_RSZ] = .DSC [DSC$W_LENGTH];
101 0101 1 LOGFILE_RAB [RAB$L_RBF] = .DSC [DSC$A_POINTER];
102 0102 1 $PUT (RAB = LOGFILE_PAB) ! Status is value of the block
103 0103 1 END %,
104 0104 1 PUT_EXPLANATION =
105 0105 1 BEGIN PUT (EXP1); PUT (EXP2); PUT (EXP3); PUT (EXP4); END
106 0106 1 %;
```

```

108 0107 1 GLOBAL ROUTINE DUMP_LOG_FILE (BUFF_DESC : $ref_bblock, ID_DESC : $ref_bblock) =
109 0108 1
110 0109 1
111 0110 1 ++
112 0111 1 Functional description:
113 0112 1 This routine will write a formatted hex dump to the operator log file.
114 0113 1 **
115 0114 1 ** This routine will be enhanced later to support mutliple log files.
116 0115 1 **
117 0116 1
118 0117 1 Input:
119 0118 1
120 0119 1 BUFF_DESC : Address of a string desc for buffer to be dumped
121 0120 1 ID_DESC : Explanatory text for dump
122 0121 1
123 0122 1 Implicit Input:
124 0123 1
125 0124 1 None.
126 0125 1
127 0126 1 Output:
128 0127 1
129 0128 1 None.
130 0129 1
131 0130 1 Implict output:
132 0131 1
133 0132 1 None.
134 0133 1
135 0134 1 Side effects:
136 0135 1
137 0136 1 None.
138 0137 1
139 0138 1 Routine value:
140 0139 1
141 0140 1 TRUE : If success
142 0141 1 <anything else> : If the log attempt failed
143 0142 1 --
144 0143 1
145 0144 2 BEGIN ! Start of DUMP_LOG_FILE
146 0145 2
147 0146 2 EXTERNAL
148 0147 2 GLOBAL STATUS : BITVECTOR, ! OPCOM global status flags
149 0148 2 LOGFILE_RAB : $bblock, ! RMS control structure
150 0149 2 LOGFILE_FAB : $bblock; ! RMS control structure
151 0150 2
152 0151 2 LOCAL
153 0152 2 BASE,
154 0153 2 LEFT,
155 0154 2 PTR,
156 0155 2 LCL_DESC : $ref_bblock,
157 0156 2 INTER : VECTOR [8, LONG],
158 0157 2 STATUS : LONG;
159 0158 2
160 0159 2 See if logging is enabled.
161 0160 2
162 0161 3 IF (NOT .GLOBAL_STATUS [GBLSTS_K_LOGGING_ENABLED])
163 0162 3 OR (.GLOBAL_STATUS [GBLSTS_K_LOGFILE_CLOSED])
164 0163 2 THEN

```

```

165 0164 2 RETURN (TRUE);
166 0165 2
167 0166 2 Format and print the message header
168 0167 2
169 0168 2 INTER [0] = 0; ! A blank line
170 0169 2 PUT (INTER);
171 0170 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID 'XXXXXXXXXX OPCOM !XD XXXXXXXXXXXX DUMP_LOG_FILE', 0));
172 0171 2 PUT_EXPLANATION;
173 P 0172 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID 'Buffer is !5UL (%X!XW) bytes -- '!AS''
174 0173 2 .BUFF_DESC [DSC$W_LENGTH], .BUFF_DESC [DSC$W_LENGTH], .ID_DESC));
175 0174 2
176 0175 2 Format the buffer, 32 bytes at a time
177 0176 2
178 0177 2 LEFT = .BUFF_DESC [DSC$W_LENGTH];
179 0178 2 PTR = .BUFF_DESC [DSC$A_POINTER];
180 0179 2 BASE = 0;
181 0180 2 WHILE .LEFT GTR 0
182 0181 2 DO
183 0182 2 BEGIN
184 0183 2
185 0184 2 Move the next chunk of data to the intermediate buffer
186 0185 2
187 0186 2 CH$COPY (MINU (.LEFT, 32), .PTR, 0, 32, INTER [0]);
188 P 0187 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID '!8(9XL) !32AF !XW',
189 P 0188 2 .INTER [7], .INTER [6], .INTER [5], .INTER [4],
190 P 0189 2 .INTER [3], .INTER [2], .INTER [1], .INTER [0],
191 0190 2 32, INTER [0], .BASE));
192 0191 2
193 0192 2 Move to the next chunk
194 0193 2
195 0194 2 BASE = .BASE + 32;
196 0195 2 PTR = .PTR + 32;
197 0196 2 LEFT = .LEFT - 32;
198 0197 2 END;
199 0198 2
200 0199 2 $FLUSH (RAB = LOGFILE_RAB);
201 0200 2
202 0201 2 RETURN (TRUE);
203 0202 1 END;

```

! End of DUMP_LOG_FILE

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

.PSECT \$SPLITS,NOWRT,NOEXE,2

63	69	74	6F	6E	20	73	61	68	20	4D	4F	43	50	4F	00000	P.AAB:	.ASCII	\OPCOM has noticed a condition which might
20	6E	6F	69	74	69	64	6E	6F	63	20	61	20	64	65	0000F			
					68	67	69	6D	20	68	63	69	68	77	0001E			
20	6E	61	20	6F	74	20	65	75	64	20	65	62	20	74	00028		.ASCII	\t be due to an internal error.\<0><0>
2E	72	6F	72	72	65	20	6C	61	6E	72	65	74	6E	69	00037			
													00	00	00046			
													010E0046	00048	P.AAA:	.LONG	17694790	
												00000000	0004C			.ADDRESS	P.AAB	
62	20	6F	73	6C	61	20	74	68	67	69	6D	20	74	49	00050	P.AAD:	.ASCII	\It might also be explained by normal eve\
20	79	62	20	64	65	6E	69	61	6C	70	78	65	20	65	0005F			
				65	76	65	20	6C	61	6D	72	6F	6E	0006E				

```

79 6C 6C 61 69 63 65 70 73 65 20 2C 73 74 6E 00078
20 65 76 61 68 20 73 65 64 6F 6E 20 66 69 20 00087
                                00 74 73 75 6A 00096
                                00 00098
                                010E004A 0009C P.AAC:
00000000' 000A0 .LONG 17694794
6F 62 65 72 20 72 6F 20 64 65 68 73 61 72 63 000A4 P.AAF:
6C 63 58 41 56 20 61 20 6E 69 20 64 65 74 6F 000B3 .ASCII \crashed or rebooted in a VAXcluster. PL\
                                6C 50 20 20 2E 72 65 74 73 75 000C2
73 69 68 74 20 67 6E 69 72 62 20 65 73 61 65 000CC .ASCII \ease bring this message to Digital's\
67 69 44 20 6F 74 20 65 67 61 73 73 65 6D 20 000DB
                                73 27 6C 61 74 69 000EA
                                010E004C 000F0 P.AAE:
00000000' 000F4 .LONG 17694796
20 79 6C 6E 6F 20 6E 6F 69 74 6E 65 74 74 61 000F8 P.AAH:
69 76 61 68 20 65 72 61 20 75 6F 79 70 66 69 00107 .ASCII \attention only if you are having problem\
                                6D 65 6C 62 6F 72 7C 20 67 6E 00116
72 6F 74 61 72 65 70 6F 20 68 74 67 77 20 73 00120 .ASCII \r with operator communications.\<0>
73 6E 6F 69 74 61 63 69 6E 75 6D 6D 6F 63 20 0012F
                                00 2E 0013E
                                010E0047 00140 P.AAG:
00000000' 00144 .LONG 17694791
50 4F 20 20 25 25 25 25 25 25 25 25 25 25 25 00148 P.AAJ:
25 25 25 25 25 20 20 44 25 21 20 20 4D 4F 43 00157 .ASCII \XXXXXXXXXX OPCOM !%D XXXXXXXXXXXX DU\
                                55 44 20 20 25 25 25 25 25 25 00166
                                00 45 4C 49 46 5F 47 4F 4C 5F 50 4D 00170
                                010E0033 0017C P.AAI:
00000000' 00180 .LONG 17694777
20 4C 55 35 21 20 73 69 20 72 65 66 66 75 42 00184 P.AAL:
2D 20 73 65 74 79 62 20 29 57 58 21 58 25 28 00193 .ASCII \Buffer is !5UL (%X!XW) bytes -- '!AS'\<0>
                                00 22 53 41 21 22 20 2D 001A2
                                00 00 001AA .ASCII <0><0>
                                010E0025 001AC P.AAK:
00000000' 001B0 .LONG 17694757
21 20 46 41 32 33 21 20 29 4C 58 39 28 38 21 001B4 P.AAN:
                                00 00 00 57 58 001C3 .ASCII \!8(9XL) !32AF !XW\<0><0><0>
                                010E0011 001C8 P.AAM:
00000000' 001CC .LONG 17694737
                                .ADDRESS P.AAN

```

```

EXP1= P.AAA
EXP2= P.AAC
EXP3= P.AAE
EXP4= P.AAG
DSC= P.AAA
DSC= P.AAC
DSC= P.AAE
DSC= P.AAG

```

```

.EXTRN GLOBAL STATUS, LOGFILE_RAB
.EXTRN LOGFILE FAB, SYSSPUT
.EXTRN SYSSFLUSH

```

```
.PSECT $CODE$,NOWRT,2
```

```
OFFC 00000
```

```
.ENTRY DUMP LOG FILE, Save R2,R3,R4,R5,R6,R7,R8,- R9,RT0,RT1 ; 0107
```

```
5B 0000' CF 9E 00002
5A 00000000G 00 9E 00007
```

```
MOVAB P.AAI, R11
MOVAB SYSSPUT, R10
```

Label	OpCode	OpType	OpMod	OpImm	OpReg	OpData	OpComment	OpAddr
	59	0000G	CF	9E	0000E		MOVAB LOGFILE_RAB, R9	
	5E		20	C2	00013		SUBL2 #32, SP	
03	0000G	CF	01	E0	00016		BBS #1, GLOBAL_STATUS, 2\$	016
			00F9	31	0001C	1\$:	BRW 6\$	
F7	0000G	CF	03	E0	0001F	2\$:	BBS #3, GLOBAL_STATUS, 1\$	0162
	22	A9	6E	D4	00025		CLRL INTER	0168
	28	A9	6E	B0	00027		MOVW DSC, LOGFILE_RAB+34	0169
		04	AE	DD	0002B		MOVL DSC+4, LOGFILE_RAB+40	
			59	DD	00030		PUSHL R9	
		6A	01	FB	00032		CALLS #1, SYSS\$PUT	
			7E	D4	00035		CLRL -(SP)	0170
			5B	DD	00037		PUSHL R11	
0000V	CF		02	FB	00039		CALLS #2, LOGEVENT_FA0_BUFFER	
	22	A9	60	B0	0003E		MOVW (R0), LOGFILE_RAB+34	
	28	A9	04	A0	00042		MOVL 4(R0), LOGFILE_RAB+40	
			59	DD	00047		PUSHL R9	
		6A	01	FB	00049		CALLS #1, SYSS\$PUT	
	22	A9	FECC	CB	B0	0004C	MOVW DSC, LOGFILE_RAB+34	
	28	A9	FEDO	CB	DD	00052	MOVL DSC+4, LOGFILE_RAB+40	
			59	DD	00058		PUSHL R9	
		6A	01	FB	0005A		CALLS #1, SYSS\$PUT	
	22	A9	FF20	CB	B0	0005D	MOVW DSC, LOGFILE_RAB+34	
	28	A9	FF24	CB	DD	00063	MOVL DSC+4, LOGFILE_RAB+40	
			59	DD	00069		PUSHL R9	
		6A	01	FB	0006B		CALLS #1, SYSS\$PUT	
	22	A9	FF74	CB	B0	0006E	MOVW DSC, LOGFILE_RAB+34	
	28	A9	FF78	CB	DD	00074	MOVL DSC+4, LOGFILE_RAB+40	
			59	DD	0007A		PUSHL R9	
		6A	01	FB	0007C		CALLS #1, SYSS\$PUT	
	22	A9	C4	AB	B0	0007F	MOVW DSC, LOGFILE_RAB+34	
	28	A9	C8	AB	DD	00084	MOVL DSC+4, LOGFILE_RAB+40	
			59	DD	00089		PUSHL R9	
		6A	01	FB	0008B		CALLS #1, SYSS\$PUT	
			08	AC	DD	0008E	PUSHL ID_DESC	0173
		52	04	AC	DD	00091	MOVL BUFF_DESC, R2	
		7E	62	3C	00095		MOVZWL (R2), -(SP)	
		7E	62	3C	00098		MOVZWL (R2), -(SP)	
			30	AB	9F	0009B	PUSHAB P.AAK	
0000V	CF		04	FB	0009E		CALLS #4, LOGEVENT_FA0_BUFFER	
	22	A9	60	B0	000A3		MOVW (R0), LOGFILE_RA 34	
	28	A9	04	A0	000A7		MOVL 4(R0), LOGFILE_RAB+40	
			59	DD	000AC		PUSHL R9	
		6A	01	FB	000AE		CALLS #1, SYSS\$PUT	
		56	62	3C	000B1		MOVZWL (R2), LEFT	0177
		57	04	A2	DD	000B4	MOVL 4(R2), PTR	0178
			58	D4	000B8		CLRL BASE	0179
			56	D5	000BA	3\$:	TSTL LEFT	0180
			51	15	000BC		BLEQ 5\$	
		50	56	DD	000BE		MOVL LEFT, R0	0186
		20	50	D1	000C1		CML R0, #32	
			03	1B	000C4		BLEQU 4\$	
		50	20	DD	000C6	4\$:	MOVL #32, R0	
		67	50	2C	000C9		MOVC5 R0, (PTR), #0, #32, INTER	
			6E		000CE			
			04	58	DD	000CF	PUSHL BASE	0190
				AE	9F	000D1	PUSHAB INTER	
				20	DD	000D4	PUSHL #32	

		0C	AE	DD	000D6		PUSHL	INTER		:
		14	AE	DD	000D9		PUSHL	INTER+4		:
		1C	AE	DD	000DC		PUSHL	INTER+8		:
		24	AE	DD	000DF		PUSHL	INTER+12		:
		2C	AE	DD	000E2		PUSHL	INTER+16		:
		34	AE	DD	000E5		PUSHL	INTER+20		:
		3C	AE	DD	000E8		PUSHL	INTER+24		:
		44	AE	DD	000EB		PUSHL	INTER+28		:
		4C	AB	9F	000EE		PUSHAB	P.AAM		:
0000V	CF		0C	FB	000F1		CALLS	#12, LOGEVENT_FAO_BUFFER		:
	22	A9	60	B0	000F6		MOVW	(R0), LOGFILE_RAB+34		:
	28	A9	04	A0	D0	000FA	MOVL	4(R0), LOGFILE_RAB+40		:
			59	DD	000FF		PUSHL	R9		:
	6A		01	FB	00101		CALLS	#1, SYSSPUT		:
	58		20	C0	00104		ADDL2	#32, BASE	0194	:
	57		20	C0	00107		ADDL2	#32, PTR	0195	:
	56		20	C2	0010A		SUBL2	#32, LEFT	0196	:
			AB	11	0010D		BRB	3\$	0180	:
			59	DD	0010F	5\$:	PUSHL	R9	0199	:
00000000G	00		01	FB	00111		CALLS	#1, SYSSFLUSH		:
	50		01	D0	00118	6\$:	MOVL	#1, R0	0201	:
			04	0011B			RET		0202	:

; Routine size: 284 bytes, Routine Base: \$CODE\$ + 0000

```

205 0203 1 GLOBAL ROUTINE LOG_MESSAGE (RQCB) =
206 0204 1
207 0205 1 ++
208 0206 1 Functional description:
209 0207 1
210 0208 1     This routine will write a message described by an MCB
211 0209 1     to the operator log file.
212 0210 1 **
213 0211 1 ** This routine will be enhanced later to support mutliple log files.
214 0212 1 **
215 0213 1
216 0214 1 Input:
217 0215 1
218 0216 1     RQCB           : Address of an RQCB data s*tructure
219 0217 1
220 0218 1 Implicit Input:
221 0219 1
222 0220 1     RQCB [RQCB_L_MCB] points to a valid MCB.
223 0221 1
224 0222 1 Output:
225 0223 1
226 0224 1     None.
227 0225 1
228 0226 1 Implicit output:
229 0227 1
230 0228 1     None.
231 0229 1
232 0230 1 Side effects:
233 0231 1
234 0232 1     None.
235 0233 1
236 0234 1 Routine value:
237 0235 1
238 0236 1     TRUE           : If success
239 0237 1     <anything else> : If the log attempt failed
240 0238 1 --
241 0239 1
242 0240 2 BEGIN                               ! Start of LOG_MESSAGE
243 0241 2
244 0242 2 MAP
245 0243 2     RQCB           : $ref_bblock;
246 0244 2
247 0245 2 EXTERNAL LITERAL
248 0246 2     MCB_K_TYPE;    ! MCB structure type
249 0247 2
250 0248 2 EXTERNAL
251 0249 2     GLOBAL_STATUS : BITVECTOR;      ! OPCOM global status flags
252 0250 2
253 0251 2 LOCAL
254 0252 2     ADR             : REF VECTOR [, BYTE], ! Adjusted address of string
255 0253 2     LEN             : LONG,             ! Adjusted length of string
256 0254 2     RECLEN         : LONG,             ! Adjusted length of single record
257 0255 2     CHAR            : BYTE,
258 0256 2     BUF             : VECTOR [OPCSK_MAXMESSAGE, BYTE],
259 0257 2     BUFP            : REF VECTOR [, BYTE],
260 0258 2     MCB             : $ref_bblock,     ! MCB data structure
261 0259 2     STATUS          : LONG;

```

```

262 0260 2
263 0261 2
264 0262 2 : Check for a valid MCB.
265 0263 2
266 0264 2 MCB = .RQCB [RQCB_L_MCB];
267 0265 3 IF (.MCB EQL 0) OR (.MCB [MCB_B_TYPE] NEQ MCB_K_TYPE)
268 0266 2 THEN
269 0267 2 RETURN (FALSE);
270 0268 2
271 0269 2 : See if logging is enabled.
272 0270 2
273 0271 3 IF (NOT .GLOBAL_STATUS [GBLSTS_K_LOGGING_ENABLED])
274 0272 3 OR (.GLOBAL_STATUS [GBLSTS_K_LOGFILE_CLOSED])
275 0273 3 OR ((.$bblock [RQCB [RQCB_L_OPTIONS], OPCSV_NOLOG]) AND
276 0274 3 (.$bblock [RQCB [RQCB_L_PRIVMASK1], PRV$V_OPER]))
277 0275 2 THEN
278 0276 2 RETURN (TRUE);
279 0277 2
280 0278 2 : Adjust the string. Remove any trailing control and space characters
281 0279 2
282 0280 2 LEN = .MCB [MCB_L_TEXTLEN];
283 0281 2 ADR = .MCB [MCB_L_TEXTPTR];
284 0282 2 IF .LEN LEQ 0
285 0283 2 THEN
286 0284 2 RETURN (TRUE);
287 0285 2 DECR I FROM .LEN-1 TO 0 : Remove all trailing control and space characters
288 0286 2 DO
289 0287 2 SELECTONE .ADR [I] OF
290 0288 2 SET
291 0289 2 [0 TO 32] : LEN = .LEN - 1; : Bad one, remove it
292 0290 2 [OTHERWISE] : EXITLOOP; : Good one, we are done looking
293 0291 2 TES;
294 0292 2 IF .LEN LEQ 0 : If we got rid of the whole string, we are done
295 0293 2 THEN
296 0294 2 RETURN (TRUE);
297 0295 2
298 0296 2 : Now get ready to filter the string. We will copy it to a local buffer, making some changes.
299 0297 2 : Ignore all control characters except tab and line-feed. Pass tab through, if see a line-feed
300 0298 2 : then write the record found up to the line-feed. Do not print zero-length lines.
301 0299 2
302 0300 2 STATUS = LOG_MESSAGE_PUT (0, BUF); : Put a single blank line before the message
303 0301 2 RECLN = 0;
304 0302 2 BUFP = BUF;
305 0303 2 WHILE .LEN GTR 0
306 0304 2 DO
307 0305 3 BEGIN
308 0306 3 CHAR = CHRCHAR_A (ADR);
309 0307 3 SELECTONE .CHAR OF
310 0308 3 SET
311 0309 3 :
312 0310 3 : Line feed, print the old record and start a new one
313 0311 3
314 0312 4 [10] : BEGIN
315 0313 4 IF .RECLN GTR 0
316 0314 4 THEN
317 0315 4 STATUS = LOG_MESSAGE_PUT (.RECLN, BUF);
318 0316 4 RECLN = 0;

```


		04	00060		RET				
		5E	DD	00061	8\$:	PUSHL	SP		0300
		7E	D4	00063		CLRL	-(SP)		
67		02	FB	00065		CALLS	#2, LOG_MESSAGE_PUT		
		53	D4	00068		CLRL	RECLN		0301
55		6E	9E	0006A		MOVAB	BUF, BUFP		0302
		52	D5	0006D	9\$:	TSTL	LEN		0303
		32	15	0006F		BLEQ	14\$		
54		86	90	00071		MOVB	(ADR)+, CHAR		0306
0A		54	91	00074		CMPB	CHAR, #10		0312
		12	12	00077		BNEQ	11\$		
		53	D5	00079		TSTL	RECLN		0313
		07	15	0007B		BLEQ	10\$		
	4008	8F	BB	0007D		PUSHR	#*M<R3,SP>		0315
67		02	FB	00081		CALLS	#2, LOG_MESSAGE_PUT		
		53	D4	00084	10\$:	CLRL	RECLN		0316
55		6E	9E	00086		MOVAB	BUF, BUFP		0317
		14	11	00089		BRB	13\$		0307
08		54	91	0008B	11\$:	CMPB	CHAR, #8		0322
		0F	1B	0008E		BLEQU	13\$		
0B		54	91	00090		CMPB	CHAR, #11		
		05	1F	00093		BLSSU	12\$		
1F		54	91	00095		CMPB	CHAR, #31		
		05	1B	00098		BLEQU	13\$		
		53	D6	0009A	12\$:	INCL	RECLN		0327
85		54	90	0009C		MOVB	CHAR, (BUFP)+		0328
		52	D7	0009F	13\$:	DECL	LEN		0331
		CA	11	000A1		BRB	9\$		0303
		53	D5	000A3	14\$:	TSTL	RECLN		0336
		0A	15	000A5		BLEQ	16\$		
	4008	8F	BB	000A7		PUSHR	#*M<R3,SP>		0338
67		02	FB	000AB		CALLS	#2, LOG_MESSAGE_PUT		
			04	000AE		RET			0340
		50	D4	000AF	15\$:	CLRL	R0		0341
			04	000B1	16\$:	RET			

; Routine Size: 178 bytes, Routine Base: \$CODE\$ + 011C

```

345 0342 1 GLOBAL ROUTINE LOG_MESSAGE_PUT (LEN, ADR) =
346 0343 1
347 0344 1 **
348 0345 1 Functional description:
349 0346 1
350 0347 1 Place the record in the log file.
351 0348 1 **
352 0349 1 ** This routine will be enhanced later to support multiple log files.
353 0350 1 **
354 0351 1
355 0352 1 Input:
356 0353 1
357 0354 1 LEN - Length of record
358 0355 1 ADR - Address of record
359 0356 1
360 0357 1 Implicit Input:
361 0358 1
362 0359 1 None.
363 0360 1
364 0361 1 Output:
365 0362 1
366 0363 1 None.
367 0364 1
368 0365 1 Implicit output:
369 0366 1
370 0367 1 None.
371 0368 1
372 0369 1 Side effects:
373 0370 1
374 0371 1 None.
375 0372 1
376 0373 1 Routine value:
377 0374 1
378 0375 1 TRUE : If success
379 0376 1 <anything else> : If the log attempt failed
380 0377 1 --
381 0378 1
382 0379 2 BEGIN ! Start of LOG_MESSAGE_PUT
383 0380 2
384 0381 2 EXTERNAL
385 0382 2 GLOBAL STATUS : BITVECTOR, ! OPCOM global status flags
386 0383 2 LOGFILE_RAB : $bblock, ! RMS control structure
387 0384 2 LOGFILE_FAB : $bblock; ! RMS control structure
388 0385 2
389 0386 2 LOCAL
390 0387 2 MESSAGE : LONG, ! Error message code
391 0388 2 STATUS : LONG;
392 0389 2
393 0390 2 Write the message to the logfile.
394 0391 2
395 0392 2 LOGFILE_RAB [RAB$W_RSZ] = .LEN;
396 0393 2 LOGFILE_RAB [RAB$L_RBF] = .ADR;
397 0394 2 GLOBAL STATUS [GBLSTS_K_FLUSH_PENDING] = TRUE;
398 0395 2 IF NOT (STATUS = $PUT (RAB = LOGFILE_RAB))
399 0396 2 THEN
400 0397 2 BEGIN
401 0398 2 !

```


LOGEVENT_FAO_BUFFER

```

420 0416 1 ROUTINE LOGEVENT_FAO_BUFFER (CTRSTR : REF VECTOR[2], ARGS : VECTOR [4]) = %SBTTL 'LOGEVENT_FAO_BUFFER'
421 0417 2 BEGIN
422 0418 2 ++
423 0419 2
424 0420 2 FUNCTIONAL DESCRIPTION:
425 0421 2
426 0422 2 This routine passes an ascii string through the FAO system service with any number of specified para
427 0423 2
428 0424 2 INPUTS:
429 0425 2
430 0426 2 ctrstr Address of FAO control string descriptor
431 0427 2 args Any number of additional arguments
432 0428 2
433 0429 2 IMPLICIT INPUTS:
434 0430 2
435 0431 2 none
436 0432 2
437 0433 2 OUTPUTS:
438 0434 2
439 0435 2 none
440 0436 2
441 0437 2 IMPLICIT OUTPUTS:
442 0438 2
443 0439 2 none
444 0440 2
445 0441 2 ROUTINE VALUE:
446 0442 2
447 0443 2 Address of formatted descriptor
448 0444 2
449 0445 2 SIDE EFFECTS:
450 0446 2
451 0447 2 none
452 0448 2 --
453 0449 2
454 0450 2 OWN
455 0451 2 desc : VECTOR [2, LONG],
456 0452 2 faobuf : VECTOR [512, BYTE]
457 0453 2 ;
458 0454 2
459 0455 2 desc [0] = 512; ! Set up result descriptor
460 0456 2 desc [1] = faobuf;
461 0457 2
462 0458 2 $faol (ctrstr=.ctrstr, outlen=desc, outbuf=desc, prmlst=args);
463 0459 2
464 0460 2 RETURN desc;
465 0461 1 END;

```

```

.PSECT $OWNS,NOEXE,2
0000 DESC: .BLKB 8
0008 FAOBUF: .BLKB 512
.EXTRN SYSSFAOL
.PSECT $CODE$,NOWRT,2

```


			0004	0000C	LOGEVENT	FAO_BUFFER:		
	52	0000'	CF	9E	00002	WORD	Save R2	: 0416
	62	0200	8F	3C	00007	MOVAB	DESC, R2	: 0455
04	A2	08	A2	9E	0000C	MOVZWL	#512, DESC	: 0456
		08	AC	9F	00011	MOVAB	FAOBUF, DESC+4	: 0458
			52	DD	00014	PUSHAB	ARGS	: 0460
			52	DD	00016	PUSHL	R2	: 0461
		04	AC	DD	00018	PUSHL	R2	: 0460
00000000G	00		04	FB	0001B	PUSHL	CTRSTR	: 0461
	50		62	9E	00022	CALLS	#4, SYSSFAOL	: 0460
			04	00025	MOVAB	DESC, R0		: 0461
					RET			: 0461

; Routine Size: 38 bytes. Routine Base: \$CODE\$ + 0202



```

: 467 0462 1 GLOBAL ROUTINE WRITE_LOG_FILE (DESC : $ref_bblock) =
: 468 0463 1
: 469 0464 1 |**
: 470 0465 1 | Functional description:
: 471 0466 1 |
: 472 0467 1 |     This routine will write a message described by simple string desc
: 473 0468 1 |     to the operator log file.
: 474 0469 1 | **
: 475 0470 1 | ** This routine will be enhanced later to support mutliple log files.
: 476 0471 1 | **
: 477 0472 1 |
: 478 0473 1 | Input:
: 479 0474 1 |
: 480 0475 1 |     DESC           : Address of a string desc
: 481 0476 1 |
: 482 0477 1 | Implicit Input:
: 483 0478 1 |
: 484 0479 1 |     RQCB [RQCB_L_MCB] points to a valid MCB.
: 485 0480 1 |
: 486 0481 1 | Output:
: 487 0482 1 |
: 488 0483 1 |     None.
: 489 0484 1 |
: 490 0485 1 | Implict output:
: 491 0486 1 |
: 492 0487 1 |     None.
: 493 0488 1 |
: 494 0489 1 | Side effects:
: 495 0490 1 |
: 496 0491 1 |     None.
: 497 0492 1 |
: 498 0493 1 | Routine value:
: 499 0494 1 |
: 500 0495 1 |     TRUE           : If success
: 501 0496 1 |     <anything else> : If the log attempt failed
: 502 0497 1 | --
: 503 0498 1 |
: 504 0499 2 BEGIN                               ! Start of WRITE_LOG_FILE
: 505 0500 2
: 506 0501 2 EXTERNAL
: 507 0502 2     GLOBAL_STATUS : BITVECTOR,           ! OPCOM global status flags
: 508 0503 2     LOGFILE_RAB  : $bblock,             ! RMS control structure
: 509 0504 2     LOGFILE_FAB : $bblock;           ! RMS control structure
: 510 0505 2
: 511 0506 2 LOCAL
: 512 0507 2     NULLDESC      : LONG;                 ! Only need length word
: 513 0508 2
: 514 0509 2 |
: 515 0510 2 | See if logging is enabled.
: 516 0511 2 |
: 517 0512 3 IF (NOT .GLOBAL_STATUS [GBLSTS_K_LOGGING_ENABLED])
: 518 0513 3 OR (.GLOBAL_STATUS [GBLSTS_K_LOGFILE_CLOSED])
: 519 0514 2 THEN
: 520 0515 2     RETURN (TRUE);
: 521 0516 2 |
: 522 0517 2 | Format and print the message header
: 523 0518 2

```

```

: 524      0519 2 NULLDESC = 0;
: 525      0520 2 PUT (NULLDESC);
: 526      0521 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID 'XXXXXXXXXX OPCOM !XD XXXXXXXXXXXX WRITE_LOG_FILE', 0));
: 527      0522 2 PUT_EXPLANATION;
: 528      0523 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID '!'AS'', .DFSC));
: 529      0524 2 $FLUSH (RAB = LOGFILE_RAB);
: 530      0525
: 531      0526 2 RETURN (TRUE);
: 532      0527 1 END;

```

! End of WRITE_LOG_FILE

```

50 4F 20 20 25 25 25 25 25 25 25 25 25 25 001D0 P.AAP: .ASCII \XXXXXXXXXX OPCOM !XD XXXXXXXXXXXX WR\
25 25 25 25 25 20 20 44 25 21 20 20 4D 4F 43 001DF
: 526      0521 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID 'XXXXXXXXXX OPCOM !XD XXXXXXXXXXXX WRITE_LOG_FILE', 0));
: 527      0522 2 PUT_EXPLANATION;
: 528      0523 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID '!'AS'', .DFSC));
: 529      0524 2 $FLUSH (RAB = LOGFILE_RAB);
: 530      0525
: 531      0526 2 RETURN (TRUE);
: 532      0527 1 END;

```

.PSECT \$SPLITS,NOWRT,NOEXE,2

```

DSC= P.AAA
DSC= P.AAC
DSC= P.AAE
DSC= P.AAG

```

.PSECT \$CODE\$,NOWRT,2

```

: 526      0521 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID 'XXXXXXXXXX OPCOM !XD XXXXXXXXXXXX WRITE_LOG_FILE', 0));
: 527      0522 2 PUT_EXPLANATION;
: 528      0523 2 PUT (LOGEVENT_FAO_BUFFER (%ASCID '!'AS'', .DFSC));
: 529      0524 2 $FLUSH (RAB = LOGFILE_RAB);
: 530      0525
: 531      0526 2 RETURN (TRUE);
: 532      0527 1 END;

```

```

03 0000G CF 01 E0 00011
F7 0000G CF 03 E0 0001A 1$:
22 A2 6E D4 00020 2$:
28 A2 6E B0 00022
63 01 FB 0002C
0000' CF 9F 00031
A1 AF 02 FB 00035
22 A2 60 B0 00039
28 A2 04 A0 D0 0003D
63 01 FB 00044
22 A2 0000' CF B0 00047
28 A2 0000' CF D0 0004D
63 01 FB 00053
22 A2 0000' CF B0 00058
28 A2 0000' CF D0 0005E

```

```

.ENTRY WRITE LOG FILE, Save R2,R3
MOVAB SYSSPOT, R3
MOVAB LOGFILE_RAB, R2
SUBL2 #4, SP
BBS #1, GLOBAL_STATUS, 2$
BRW 3$
BBS #3, GLOBAL_STATUS, 1$
CLRL NULLDESC
MOVW DSC, LOGFILE_RAB+34
MOVL DSC+4, LOGFILE_RAB+40
PUSHL R2
CALLS #1, SYSSPUT
CLRL -(SP)
PUSHAB P.AAO
CALLS #2, LOGEVENT_FAO_BUFFER
MOVW (R0), LOGFILE_RAB+34
MOVL 4(R0), LOGFILE_RAB+40
PUSHL R2
CALLS #1, SYSSPUT
MOVW DSC, LOGFILE_RAB+34
MOVL DSC+4, LOGFILE_RAB+40
PUSHL R2
CALLS #1, SYSSPUT
MOVW DSC, LOGFILE_RAB+34
MOVL DSC+4, LOGFILE_RAB+40

```

			52	DD	00064		PUSHL	R2		
			01	FB	00066		CALLS	#1, SYSSPUT		
22	A2	0000'	CF	B0	00069		MOVW	DSC, LOGFILE_RAB+34		
28	A2	0000'	CF	D0	0006F		MOVL	DSC+4, LOGFILE_RAB+40		
			52	DD	00075		PUSHL	R2		
			01	FB	00077		CALLS	#1, SYSSPUT		
22	A2	0000'	CF	B0	0007A		MOVW	DSC, LOGFILE_RAB+34		
28	A2	0000'	CF	D0	00080		MOVL	DSC+4, LOGFILE_RAB+40		
			52	DD	00086		PUSHL	R2		
			01	FB	00088		CALLS	#1, SYSSPUT		
		04	AC	DD	0008B		PUSH	DESC		0523
		0000'	CF	9F	0008E		PUSHAB	P.AAQ		
FF43	CF		02	FB	00092		CALLS	#2, LOGEVENT_FAO_BUFFER		
22	A2		60	B0	00097		MOVW	(R0), LOGFILE_RAB+34		
28	A2	04	A0	D0	0009B		MOVL	4(R0), LOGFILE_RAB+40		
			52	DD	000A0		PUSHL	R2		
			01	FB	000A2		CALLS	#1, SYSSPUT		
			52	DD	000A5		PUSHL	R2		0524
00000000G	00		01	FB	000A7		CALLS	#1, SYSSFLUSH		
	50		01	D0	000AE	3\$:	MOVL	#1, R0		0526
			04	000B1			RET			0527

; Routine Size: 178 bytes, Routine Base: \$CODE\$ + 0228

:	533	0528	1		
:	534	0529	1	END	! End of LOGEVENT
:	535	0530	0	ELUDOM	

PSECT SUMMARY

Name	Bytes	Attributes
\$SPLITS	540	NOVEC, NOWRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODE\$	730	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$OWNS	520	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	Symbols		Pages Mapped	Processing Time
	Total	Loaded Percent		
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	13 0	1000	00:01.8
_\$255\$DUA28:[OPCOM.OBJ]OPCOMLIB.L32;1	633	15 2	43	00:00.8

OPCSLOGEVENT
V04-000

LOGEVENT_FAO_BUFFER

N 1
16-Sep-1984 01:29:21
14-Sep-1984 12:50:43

VAX-11 Bliss-32 V4.0-742
[OPCOM.SRC]LOGEVENT.B32;1

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(6)

OP
VC

COMMAND QUALIFIERS

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

: Size: 730 code + 1060 data bytes
: Run Time: 00:18.2
: Elapsed Time: 01:01.1
: Lines/CPU Min: 1751
: Lexemes/CPU-Min: 23511
: Memory Used: 135 pages
: Compilation Complete

This image displays a grid of 144 small terminal window screenshots, arranged in 12 rows and 12 columns. Each window shows a different VAX/VMS utility or command-line interface. The windows are dimly lit, with the text appearing as light gray or white against a dark background. Some of the more prominent titles visible in the windows include:

- CLIMBX LIS
- CLUSREPLY LIS
- CLUSUTIL LIS
- DEBUG LIS
- CLUSCOMM LIS
- CLUSMSG LIS
- DEVICE LIS
- LOGEVENT LIS

The screenshots show various types of data, including lists of files, command prompts, and system status information. The overall appearance is that of a multi-screen terminal session from the VAX/VMS era.

