


```

RRRRRRRR      QQQQQQ      SSSSSSSS      TTTTTTTTTT      MM      MM      AAAAAA      IIIIII      NN      NN
RRRRRRRR      QQQQQQ      SSSSSSSS      TTTTTTTTTT      MM      MM      AAAAAA      IIIIII      NN      NN
RR      RR      QQ      QQ      SS      TT      MMMM      MMMM      AA      AA      II      NN      NN
RR      RR      QQ      QQ      SS      TT      MMMM      MMMM      AA      AA      II      NN      NN
RR      RR      QQ      QQ      SS      TT      MM      MM      AA      AA      II      NNNN      NN
RRRRRRRR      QQ      QQ      SSSSSS      TT      MM      MM      AA      AA      II      NNNN      NN
RRRRRRRR      QQ      QQ      SSSSSS      TT      MM      MM      AA      AA      II      NN      NN
RR      RR      QQ      QQ      SS      TT      MM      MM      AAAAAAAAAA      II      NN      NNNN
RR      RR      QQ      QQ      SS      TT      MM      MM      AAAAAAAAAA      II      NN      NNNN
RR      RR      QQ      QQ      SS      TT      MM      MM      AA      AA      II      NN      NN
RR      RR      QQ      QQ      SS      TT      MM      MM      AA      AA      II      NN      NN
RR      RR      QQ      QQ      SSSSSSSS      TT      MM      MM      AA      AA      IIIIII      NN      NN
RR      RR      QQQQ      QQ      SSSSSSSS      TT      MM      MM      AA      AA      IIIIII      NN      NN

```

```

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
LLLLLLLLLLLL      IIIIII      SSSSSSSS
LLLLLLLLLLLL      IIIIII      SSSSSSSS

```

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

:

```

1 0001 0 MODULE opc$rqstmain ( %TITLE 'REQUEST command main module' %SBTTL 'Copyright notice'
2 0002 0
3 0003 0 LANGUAGE (BLISS32),
4 0004 0 IDENT = 'V04-000',
5 0005 0 MAIN = rqstmain_main
6 0006 0 ) =
7 0007 0
8 0008 0
9 0009 0 *****
10 0010 0 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
11 0011 0 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *
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25 0025 0 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
26 0026 0 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
27 0027 0 *
28 0028 0 *****
29 0029 0
30 0030 0 ++
31 0031 0 FACILITY:
32 0032 0
33 0033 0 REQUEST command
34 0034 0
35 0035 0 ABSTRACT:
36 0036 0
37 0037 0 This module contains the top level logic for the DCL REQUEST command.
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 CW Hobbs, macro module REQUEST.MAR used as guide
46 0046 0
47 0047 0 Creation date:
48 0048 0
49 0049 0 22-Aug-1983
50 0050 0
51 0051 0 Revision history:
52 0052 0
53 0053 0 V03-003 CWH3003 CW Hobbs 18-May-1984
54 0054 0 Add a . to the check for request pending.
55 0055 0
56 0056 0 V03-002 CWH3169 CW Hobbs 5-May-1984
57 0057 0 Second pass for cluster-wide OPCOM:

```

OPC\$RQSTMAIN
V04-000

REQUEST command main module
Copyright notice

M 11
16-Sep-1984 01:47:25 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:50:54 [OPCOM.SRC]RQSTMAIN.B32;1

Page 2
(1)

: 58
: 59
: 60
: 61
: 62

0058 0 !
0059 0 !
0060 0 !
0061 0 !
0062 0 !--

- If a reply is requested (\$ REQUEST /REPLY), then return
the operator response code. This restores the behaviour
of the V3 macro program.

```

: 64      0063 1 BEGIN                                %SBTTL 'Start of rqstmain'
: 65      0064 1
: 66      0065 1 LIBRARY 'SYSSLIBRARY:LIB.L32';
: 67      0066 1 LIBRARY 'LIBS:OPCOMLIB';
: 68      0067 1
: 69      0068 1 FORWARD ROUTINE
: 70      0069 1     rqstmain_ctrlc_ast : NOVALUE,      ! Handle control c ast
: 71      0070 1     rqstmain_init,                ! Initializations
: 72      0071 1     rqstmain_main,                ! Entry point, main routine
: 73      0072 1     rqstmain_setmode_qio : NOVALUE,   ! Set up control c ast
: 74      0073 1     rqstmain_wait_reply;          ! Wait for reply from opcom
: 75      0074 1
: 76      0075 1 EXTERNAL ROUTINE
: 77      0076 1     share_lookup_oper_bit,        ! Convert text string to operator bit number
: 78      0077 1     share_trnlog : NOVALUE;        ! Recursively translate a name
: 79      0078 1
: 80      0079 1 LITERAL
: 81      0080 1     mb_buf_siz = 256;
: 82      0081 1     message_buf_siz = 512;
: 83      0082 1
: 84      0083 1 OWN
: 85      0084 1     dvi_terminal_buf : $bvector [max_dev_nam],
: 86      0085 1     dvi_terminal_len, : Length of terminal name
: 87      0086 1     dvi_terminal_ptr  : INITIAL (dvi_terminal_buf),
: 88      0087 1     dvi_devchar      : $bblock [4],
: 89      0088 1     dvi_items        : VECTOR [7, LONG] PRESET (
: 90      0089 1         [0] = (dvi$devchar^16 OR 4),
: 91      0090 1         [1] = dvi_devchar,
: 92      0091 1         [2] = 0,
: 93      0092 1         [3] = (dvi$fulldevnam^16 OR max_dev_nam),
: 94      0093 1         [4] = dvi_terminal_buf,
: 95      0094 1         [5] = dvi_terminal_len,
: 96      0095 1         [6] = 0),
: 97      0096 1     jpi_prcnam_buf   : $bvector [max_dev_nam],
: 98      0097 1     jpi_prcnam_len,
: 99      0098 1     jpi_prcnam_ptr   : INITIAL (jpi_prcnam_buf),
100     0099 1     jpi_items         : VECTOR [4, LONG] PRESET (
101     0100 1         [0] = (jpi$prcnam^16 OR max_dev_nam),
102     0101 1         [1] = jpi_prcnam_buf,
103     0102 1         [2] = jpi_prcnam_len,
104     0103 1         [3] = 0),
105     0104 1     mb_chan,
106     0105 1     mb_iosb           : VECTOR [4, WORD],
107     0106 1     mb_buffer         : $bvector [mb_buf_siz],
108     0107 1     tt_chan,
109     0108 1     tt_iosb           : VECTOR [4, WORD],
110     0109 1     text              : $dyn_str_desc,
111     0110 1     message           : $bblock [message_buf_siz], ! Buffer to build message for sndopr
112     0111 1     message_desc      : VECTOR [2, LONG] PRESET ([1] = message);
113     0112 1
114     0113 1 ! Define ascii text descriptors once
115     0114 1
116     0115 1 BIND
117     0116 1     ascid_P1           = %ASCID 'P1',
118     0117 1     ascid_REPLY       = %ASCID 'REPLY',
119     0118 1     ascid_SYSCOMMAND  = %ASCID 'SYSSCOMMAND',
120     0119 1     ascid_TO         = %ASCID 'TO';

```

```

: 122 0120 1 GLOBAL ROUTINE rqstmain_ctrlc_ast : NOVALUE = %SBTTL 'rqstmain_ctrlc_ast'
: 123 0121 1
: 124 0122 1 :++
: 125 0123 1 : Functional description:
: 126 0124 1 :
: 127 0125 1 : Handle a control c ast from the terminal.
: 128 0126 1 :
: 129 0127 1 : Input:
: 130 0128 1 :
: 131 0129 1 : None.
: 132 0130 1 :
: 133 0131 1 : Implicit Input:
: 134 0132 1 :
: 135 0133 1 : None.
: 136 0134 1 :
: 137 0135 1 : Output:
: 138 0136 1 :
: 139 0137 1 : None.
: 140 0138 1 :
: 141 0139 1 : Implicit output:
: 142 0140 1 :
: 143 0141 1 : None.
: 144 0142 1 :
: 145 0143 1 : Side effects:
: 146 0144 1 :
: 147 0145 1 : None.
: 148 0146 1 :
: 149 0147 1 : Routine value:
: 150 0148 1 :
: 151 0149 1 : None.
: 152 0150 1 :--
: 153 0151 1
: 154 0152 2 BEGIN ! Start of rqstmain_ctrlc_ast
: 155 0153 2
: 156 0154 2 LOCAL
: 157 0155 2 prmt : $bvector [128],
: 158 0156 2 dsc : VECTOR [2, LONG] PRESET ([0] = 128, [1] = prmt),
: 159 0157 2 status;
: 160 0158 2
: 161 0159 2 BIND
: 162 0160 2 buf = (message [opc$t_request_text] + 2 + .dvi_terminal_len) : $bvector;
: 163 0161 2 :
: 164 0162 2 : Get the prompt string
: 165 0163 2 :
: 166 0164 2 IF NOT (status = $getmsg (msgid=opc$_rqst_prompt, msglen=dsc, bufadr=dsc, flags=0))
: 167 0165 2 THEN
: 168 0166 2 $signal_stop (.status);
: 169 0167 2 :
: 170 0168 2 : Get the response from the user, read it into the message right after the terminal name.
: 171 0169 2 :
: 172 P 0170 2 status = $qiow (efn=1, chan=.tt_chan, func=io$_readprompt, iosb=tt_iosb,
: 173 0171 2 p1=buf, p2=256, p5=.dsc [1], p6=.dsc [0]);
: 174 0172 2 IF .status
: 175 0173 2 THEN
: 176 0174 2 status = .tt_iosb [0];
: 177 0175 2 IF NOT .status
: 178 0176 2 THEN

```

```

179 0177 2    $signal_stop (.status);
180 0178 2    :
181 0179 2    : If ^Z, then cancel the request, otherwise send the message to the operator
182 0180 2    :
183 0181 2    IF (.tt_iosb [2]) <0,8,0> EQL %X'1A'
184 0182 2    THEN
185 0183 2    BEGIN
186 0184 2    message [opc$b_rqstcode] = opc$x_cancel;
187 0185 2    message [opc$w_request_length] = 0;
188 0186 2    message_desc [0] = $byteoffset (opc$t_request_text);
189 0187 2    IF NOT (status = $sndopr (msgbuf=message_desc, chan=.mb_chan))
190 0188 2    THEN
191 0189 2    $signal_stop (.status);
192 0190 2    END
193 0191 2    ELSE IF .tt_iosb [1] EQL 0
194 0192 2    THEN
195 0193 2    RETURN rqstmain_ctrlc_ast ()          ! Try again if no input
196 0194 2    ELSE
197 0195 2    BEGIN
198 0196 2    LOCAL
199 0197 2    add;
200 0198 2    add = (2 + .dvi_terminal_len + .tt_iosb [1]);
201 0199 2    message [opc$w_request_length] = .add;
202 0200 2    message_desc [0] = $byteoffset (opc$t_request_text) + .add;
203 0201 2    IF NOT (status = $sndopr (msgbuf=message_desc, chan=0))
204 0202 2    THEN
205 0203 2    $signal_stop (.status);
206 0204 2    rqstmain_setmode_qio ();          ! Reenable the AST
207 0205 2    END;
208 0206 2
209 0207 2 RETURN;
210 0208 1 END;          ! End of rqstmain_ctrlc_ast

```

.TITLE OPC\$RQSTMAIN REQUEST command main module
.IDENT \V04-000\

.PSECT \$PLITS,NOWRT,NOEXE,2

```

00 00 31 50 0000 P.AAB: .ASCII \P1\<0><0>
010E0002 00004 P.AAA: .LONG 17694722
00000000' 00008 .ADDRESS P.AAB
00 00 00 59 4C 50 45 52 0000C P.AAD: .ASCII \REPLY\<0><0><0>
010E0005 00014 P.AAC: .LONG 17694725
00000000' 00018 .ADDRESS P.AAD
00 44 4E 41 4D 4D 4F 43 24 53 59 53 0001C P.AAF: .ASCII \SYS$COMMAND\<0>
010E000B 00028 P.AAE: .LONG 17694731
00000000' 0002C .ADDRESS P.AAF
00 00 4F 54 00030 P.AAH: .ASCII \T0\<0><0>
010E0002 00034 P.AAG: .LONG 17694722
00000000' 00038 .ADDRESS P.AAH

```

.PSECT \$OWNS,NOEXE,2

00000 DVI_TERMINAL_BUF:
.BLKB 64
00040 DVI_TERMINAL_LEN:

```

00000000' 00044 DVI_TERMINAL_PTR: .BLKB 4
                                .ADDRESS DVI_TERMINAL_BUF
00048 DVI_DEVCHAR:
00020004 0004C DVI_ITEMS: .BLKB 4
                                .LONG 131076
00000000' 00050 .ADDRESS DVI_DEVCHAR
00E80040 00000000' 00054 .LONG 0, 15204416
00000000' 00000000' 0005C .ADDRESS DVI_TERMINAL_BUF, DVI_TERMINAL_LEN
00000000' 00064 .LONG 0
00068 JPI_PRCNAM_BUF: .BLKB 64
000A8 JPI_PRCNAM_LEN: .BLKB 4
00000000' 000AC JPI_PRCNAM_PTR: .ADDRESS JPI_PRCNAM_BUF
031C0040 000B0 JPI_ITEMS: .LONG 52166720
00000000' 00000000' 000B4 .ADDRESS JPI_PRCNAM_BUF, JPI_PRCNAM_LEN
00000000' 000BC .LONG 0
000C0 MB_CHAN: .BLKB 4
000C4 MB_IOSB: .BLKB 8
000CC MB_BUFFER:
001CC TT_CHAN: .BLKB 256
001D0 TT_IOSB: .BLKB 4
0000 001D8 TEXT: .WORD 8
02 0E 001DA .BYTE 14, 2
00000000' 001DC .LONG 0
001E0 MESSAGE: .BLKB 512
00# 003E0 MESSAGE_DESC: .BYTE 0[4]
00000000' 003E4 .ADDRESS MESSAGE

```

```

ASCID_P1= P.AAA
ASCID_REPLY= P.AAC
ASCID_SYSCOMMAND= P.AAE
ASCID_TO= P.AAG

```

```

.EXTRN SHARE_LOOKUP_OPER_BIT
.EXTRN SHARE_TRNLOG, SYS$GETMSG
.EXTRN LIB$STOP, SYS$QIOW
.EXTRN SYS$SNDOPR

```

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

```

003C 00000 .ENTRY RQSTMAIN_CTRLC_AST, Save R2,R3,R4,R5
55 00000000G 00 9E 00002 MOVAB SYS$SNDOPR, R5
54 0000' CF 9E 00009 MOVAB MESSAGE_DESC, R4
5E FF7C CE 9E 0000E MOVAB -132(SP), SP
7E 80 8F 9A 00013 MOVZBL #128, DSC
04 AE 08 AE 9E 00017 MOVAB PRMPT, DSC+4
52 FE1E C4 9E 0001C MOVAB MESSAGE+30, R2
52 FC60 C4 C0 00021 ADDL2 DVI_TERMINAL_LEN, R2
                                7E 7C 00026 CLRQ -(SP)
                                08 AE 9F 00028 PUSHAB DSC
                                0C AE 9F 0002B PUSHAB DSC

```

```

: 0120
:
: 0156
:
: 0160
:
: 0164
:

```

00000000G	00	000582BB	8F	DD	0002E	PUSHL	#361147	
	53		05	FB	00034	CALLS	#5, SYSSGETMSG	
	50		50	DD	0003B	MOVL	R0, STATUS	
			53	E9	0003E	BLBC	STATUS, 1\$	
			6E	DD	0C041	PUSHL	DSC	0171
		08	AE	DD	00043	PUSHL	DSC+4	
			7E	7C	00046	CLRQ	-(SP)	
	7E	0100	8F	3C	00048	MOVZWL	#256, -(SP)	
			52	DD	0004D	PUSHL	R2	
			7E	7C	0004F	CLRQ	-(SP)	
		FDF0	C4	9F	00051	PUSHAB	TT_IOSB	
			37	DD	00055	PUSHL	#55	
		FDEC	C4	DD	00057	PUSHL	TT_CHAN	
			01	DD	0005B	PUSHL	#1	
00000000G	00		0C	FB	0005D	CALLS	#12, SYSSQIOW	
	53		50	DD	00064	MOVL	R0, STATUS	
	57		53	E9	00067	BLBC	STATUS, 4\$	0172
	53	FDF0	C4	3C	0006A	MOVZWL	TT_IOSB, STATUS	0174
	4F		53	E9	0006F	BLBC	STATUS, 4\$	0175
	1A	FDF4	C4	91	00072	CMPB	TT_IOSB+4, #26	0181
			1C	12	00077	BNEQ	2\$	
FE00	C4		0E	90	00079	MOVW	#14, MESSAGE	0184
		FE1A	C4	B4	0007E	CLRQ	MESSAGE+26	0185
	64		1C	DD	00082	MOVL	#28, MESSAGE_DESC	0186
		FCE0	C4	DD	00085	PUSHL	MB_CHAN	0187
			54	DD	00089	PUSHL	R4	
	65		02	FB	0008B	CALLS	#2, SYSSNDOPR	
	53		50	DD	0008E	MOVL	R0, STATUS	
	2D		53	E9	00091	BLBC	STATUS, 4\$	
			04		00094	RET		0189
	52	FDF2	C4	3C	00095	MOVZWL	TT_IOSB+2, R2	0191
			06	12	0009A	BNEQ	3\$	
FF5F	CF		00	FB	0009C	CALLS	#0, RQSTMAIN_CTRLC_AST	0193
			04		000A1	RET		
50	52	FC60	C4	C1	000A2	ADDL3	DVI_TERMINAL_LEN, R2, R0	0198
	50		02	C0	000A8	ADDL2	#2, ADD	
FE1A	C4		50	B0	000AB	MOVW	ADD, MESSAGE+26	0199
	64	1C	A0	9E	000B0	MOVAB	28(R0), MESSAGE_DESC	0200
			7E	D4	000B4	CLRL	-(SP)	0201
			54	DD	000B6	PUSHL	R4	
	65		02	FB	000B8	CALLS	#2, SYSSNDOPR	
	53		50	DD	000BB	MOVL	R0, STATUS	
	0A		53	E8	000BE	BLBS	STATUS, 5\$	
			53	DD	000C1	PUSHL	STATUS	0203
00000000G	00		01	FB	000C3	CALLS	#1, LIB\$STOP	
			04		000CA	RET		
0000V	CF		00	FB	000CB	CALLS	#0, RQSTMAIN_SETMODE_QIO	0204
			04		000D0	RET		0208

; Routine Size: 209 bytes, Routine Base: \$CODE\$ + 0000

```

212 0209 1 GLOBAL ROUTINE rqstmain_init = %SBTTL 'rqstmain_init routine'
213 0210 1
214 0211 1 ++
215 0212 1 Functional description:
216 0213 1
217 0214 1 This is the initialization routine for REQUEST. Various common initializations are done.
218 0215 1
219 0216 1 Input:
220 0217 1
221 0218 1 None.
222 0219 1
223 0220 1 Implicit Input:
224 0221 1
225 0222 1 Command values from CLI routines.
226 0223 1
227 0224 1 Output:
228 0225 1
229 0226 1 None.
230 0227 1
231 0228 1 Implicit output:
232 0229 1
233 0230 1 None.
234 0231 1
235 0232 1 Side effects:
236 0233 1
237 0234 1 None.
238 0235 1
239 0236 1 Routine value:
240 0237 1
241 0238 1 None.
242 0239 1 --
243 0240 1
244 0241 2 BEGIN ! Start of rqstmain_init
245 0242 2
246 0243 2 LOCAL
247 0244 2 status;
248 0245 2
249 0246 2 Initialize the message
250 0247 2
251 0248 2 NOTE: We are using an internal interface to OPCOM which is subject to change!
252 0249 2
253 0250 2 CH$FILL (0, opc$k_request_min_size, message); ! Init all fixed fields to zero
254 0251 2 message [opc$b_rqstcode] = opc$x_request;
255 0252 2 message [opc$b_scope] = opc$k_system;
256 0253 2
257 0254 2 Do a $GETJPI to get information about the current process
258 0255 2
259 0256 3 IF NOT (status = $getjpi (itmlst=jpi_items))
260 0257 2 THEN
261 0258 2 $signal_stop (.status);
262 0259 2
263 0260 2 Do a $GETDVI to get the name of the command terminal.
264 0261 2
265 0262 3 IF NOT (status = $getdvi (de/nam=ascid_SYSCOMMAND, itmlst=dvi_items))
266 0263 2 THEN
267 0264 2 $signal_stop (.status);
268 0265 2

```

```

269 0266 2 ! If sys$command is a terminal, assign a channel
270 0267 2
271 0268 2 IF .dvi_devchar [dev$v_trm]
272 0269 2 THEN
273 0270 2 BEGIN
274 0271 2 IF NOT (status = $assign (devnam=dvi_terminal_len, chan=tt_chan))
275 0272 2 THEN
276 0273 2 $signal_stop (.status);
277 0274 2 END
278 0275 2
279 0276 2 ! If sys$command is not a terminal, then substitute the process name for the terminal name
280 0277 2
281 0278 2 ELSE
282 0279 2 BEGIN
283 0280 2 dvi_terminal_len = .jpi_prcnam_len;
284 0281 2 dvi_terminal_ptr = .jpi_prcnam_ptr;
285 0282 2 END;
286 0283 2
287 0284 2 ! If /TO is requested, then set the attention bitmask to those operators
288 0285 2
289 0286 2 IF cli$get_value (ascid_TO, text)
290 0287 2 THEN
291 0288 2 BEGIN
292 0289 2
293 0290 2 DO
294 0291 2 $bblock [message [opc$l_attnmask1], 0, share_lookup_oper_bit (text), 1, 0] = 1
295 0292 2 UNTIL
296 0293 2 NOT cli$get_value (ascid_TO, text);
297 0294 2
298 0295 2 END
299 0296 2 ELSE
300 0297 2 BEGIN
301 0298 2 message [opc$l_attnmask1] = known_attn_mask1;
302 0299 2 message [opc$l_attnmask2] = known_attn_mask2;
303 0300 2 END;
304 0301 2
305 0302 2 ! If /REPLY is requested, create a mailbox
306 0303 2
307 0304 2 IF cli$present (ascid_REPLY)
308 0305 2 THEN
309 0306 2 BEGIN
310 0307 2 IF NOT (status = $crembx (chan=mb_chan, maxmsg=mb_luf_siz, bufquo=2*mb_buf_siz, promsk=%X'FF'))
311 0308 2 THEN
312 0309 2 $signal_stop (.status);
313 0310 2 END;
314 0311 2
315 0312 2 ! Move the terminal (process) name and reply text, if any
316 0313 2
317 0314 2 cli$get_value (ascid_P1, text); ! Get the parameter, null is fine
318 0315 2 CH$COPY (.dvi_terminal_len, .dvi_terminal_ptr,
319 0316 2 2, UPLIT BYTE (' '), .text [dsc$w_length], .text [dsc$a_pointer], 0,
320 0317 2 message_buf_siz-$byteoffset (opc$t_request_text), message [opc$t_request_text]);
321 0318 2 message [opc$w_request_length] = .text [dsc$w_length] + 2 + .dvi_terminal_len;
322 0319 2 message_desc [0] = .message [opc$w_request_length] + ! Set total length
323 0320 2 $byteoffset (opc$t_request_text);
324 0321 2
325 0322 2 RETURN .status;

```



```

328 0324 1 GLOBAL ROUTINE rqstmain_main =                %SBTTL 'rqstmain_main routine'
329 0325 1
330 0326 1
331 0327 1 ++
332 0328 1 Functional description:
333 0329 1     This is the main routine for REQUEST.  When REQUEST is started, control is transfered here.
334 0330 1
335 0331 1 Input:
336 0332 1     None.
337 0333 1
338 0334 1 Implicit Input:
339 0335 1     None.
340 0336 1
341 0337 1
342 0338 1 Output:
343 0339 1     None.
344 0340 1
345 0341 1 Implicit output:
346 0342 1     None.
347 0343 1
348 0344 1 Side effects:
349 0345 1     None.
350 0346 1
351 0347 1 Routine value:
352 0348 1     None.
353 0349 1
354 0350 1
355 0351 1 --
356 0352 1 BEGIN                                ! Start of rqstmain_main
357 0353 1
358 0354 1 LOCAL
359 0355 1     status;
360 0356 1
361 0357 1     Perform common initializations
362 0358 1
363 0359 1     rqstmain_init ();
364 0360 1
365 0361 1     Send the message to OPCOM
366 0362 1
367 0363 1     IF NOT (status = $sndopr (msgbuf=message_desc, chan=.mb_chan))
368 0364 1     THEN
369 0365 1         $signal_stop (.status);
370 0366 1
371 0367 1     If we are expecting a reply, then wait for it
372 0368 1
373 0369 1     IF .mb_chan NEQ 0
374 0370 1     THEN
375 0371 1         DO
376 0372 1             status = rqstmain_wait_reply ()
377 0373 1         UNTIL
378 0374 1             .status NEQ 0;
379 0375 1
380 0376 1
381 0377 1
382 0378 1
383 0379 1
384 0380 1 RETURN .status;

```

OPCSRQSTMAIN
V04-000

REQUEST command main module
rqstmain_main routine

K 12
16-Sep-1984 01:47:25
14-Sep-1984 12:50:54

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

Page 13
(5)

: 385 0381 1 END;

! End of rqstmain_main

			0000	00000	.ENTRY	RQSTMAIN MAIN, Save nothing	:	0324
FEB4	CF		00	FB 00002	CALLS	#0, RQSTMAIN_INIT	:	0363
		0000'	CF	DD 00007	PUSHL	MB_CHAN	:	0367
		0000'	CF	9F 0000B	PUSHAB	MESSAGE_DESC	:	
00000000G	00		02	FB 0000F	CALLS	#2, SYSSNDOPR	:	
	51		50	D0 00016	MOVL	R0, STATUS	:	
	0A		51	E8 00019	BLBS	STATUS, 1\$:	
			51	DD 0001C	PUSHL	STATUS	:	0369
00000000G	00		01	FB 0001E	CALLS	#1, LIB\$STOP	:	
				04 00025	RET		:	
		0000'	CF	D5 00026 1\$:	TSTL	MB_CHAN	:	0373
			0A	13 0002A	BEQL	3\$:	
0000V	CF		00	FB 0002C 2\$:	CALLS	#0, RQSTMAIN_WAIT_REPLY	:	0376
	51		50	D0 00031	MOVL	R0, STATUS	:	
			F6	13 00034	BEQL	2\$:	0378
	50		51	D0 00036 3\$:	MOVL	STATUS, R0	:	0380
				04 00039	RET		:	0381

; Routine Size: 58 bytes, Routine Base: \$CODE\$ + 0216

OPCSRQSTMAIN
V04-000

REQUEST command main module
rqstmain_setmode_qio

M 12
16-Sep-1984 01:47:25
14-Sep-1984 12:50:54

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

Page 15
(6)

00000000G	00	0C	FB	0001B
	7E	01	7D	00022
	00058089	8F	DD	00025
00000000G	00	03	FB	0002B
		04		00032

CALLS	#12, SYSSQIOW
MOVQ	#1, -(SP)
PUSHL	#3, 0585
CALLS	#3, LIBSSIGNAL
RET	

:
:
: 0420
:
:
: 0423

; Routine Size: 51 bytes, Routine Base: \$CODE\$ + 0250

```

: 430      0424 1 GLOBAL ROUTINE rqstmain_wait_reply =           %SBTTL 'rqstmain_wait_reply routine'
: 431      0425 1
: 432      0426 1 !++
: 433      0427 1 Functional description:
: 434      0428 1
: 435      0429 1     This routines waits for a reply from OPCOM
: 436      0430 1
: 437      0431 1 Input:
: 438      0432 1
: 439      0433 1     None.
: 440      0434 1
: 441      0435 1 Implicit Input:
: 442      0436 1
: 443      0437 1     None.
: 444      0438 1
: 445      0439 1 Output:
: 446      0440 1
: 447      0441 1     None.
: 448      0442 1
: 449      0443 1 Implicit output:
: 450      0444 1
: 451      0445 1     None.
: 452      0446 1
: 453      0447 1 Side effects:
: 454      0448 1
: 455      0449 1     None.
: 456      0450 1
: 457      0451 1 Routine value:
: 458      0452 1
: 459      0453 1     None.
: 460      0454 1 !--
: 461      0455 1
: 462      0456 2 BEGIN                                           ! Start of rqstmain_wait_reply
: 463      0457 2
: 464      0458 2 LOCAL
: 465      0459 2     status;
: 466      0460 2
: 467      0461 2     Enable the ast on control c
: 468      0462 2
: 469      0463 2 rqstmain_setmode_qio ();
: 470      0464 2
: 471      0465 2     Read from the mailbox
: 472      0466 2
: 473      0467 2 status = $qiow (efn=2, chan=.mb_chan, func=io$_readvblk, iosb=mb_iosb, p1=mb_buffer, p2=mb_buf_siz);
: 474      0468 2 IF .status
: 475      0469 2 THEN
: 476      0470 2     status = .mb_iosb [0];
: 477      0471 2 IF NOT .status
: 478      0472 2 THEN
: 479      0473 2     $signal_stop (.status);
: 480      0474 2
: 481      0475 2     Display the mailbox message on the terminal
: 482      0476 2
: 483      0477 2 $signal (opc$_opreply, 2, .mb_iosb [1]-8, mb_buffer [8]);
: 484      0478 2
: 485      0479 2     If the code is RQSTPEND, then we should continue, return 0 so the outer routine will loop
: 486      0480 2

```

```

: 487 0481 3 IF .(mb_buffer [2]) <0,16,0> EQL (opc$_rqstpend AND %X'FFFF')
: 488 0482 2 THEN
: 489 0483 2 RETURN 0;
: 490 0484 2 ;
: 491 0485 2 ; Request is done, force OPCOM facility code back into the high word and return the
: 492 0486 2 ; status from the reply
: 493 0487 2 ;
: 494 0488 2 (mb_buffer [4]) <0,16,0> = sts$m_inhib_msg^-16 OR opc$_facility;
: 495 0489 2 RETURN .(mb_buffer [2]);
: 496 0490 2 ;
: 497 0491 1 END;

```

! End of rqstmain_wait_reply

			0004 0000	.ENTRY	RQSTMAIN_WAIT_REPLY, Save R2	: 0424
			CF 9E 00002	MOVAB	MB_IOSB, R2	
	C2	AF	00 FB 00007	CALLS	#0, RQSTMAIN_SETMODE_QIO	: 0463
			7E 7C 0000B	CLRQ	-(SP)	: 0467
			7E 7C 00J0D	CLRQ	-(SP)	
		7E	8F 3C 0000F	MOVZWL	#256, -(SP)	
		08	A2 9F 00014	PUSHAB	MB_BUFFER	
			7E 7C 00017	CLRQ	-(SP)	
			52 DD 00019	PUSHL	R2	
			31 DD 0001B	PUSHL	#49	
		FC	A2 DD 0001D	PUSHL	MB_CHAN	
			02 DD 00020	PUSHL	#2	
00000000G	00		0C FB 00022	CALLS	#12, SYS\$QIOW	
	06		50 E9 00029	BLBC	STATUS, 1\$: 0468
	50		62 3C 0002C	MOVZWL	MB_IOSB, STATUS	: 0470
	0A		50 E8 0002F	BLBS	STATUS, 2\$: 0471
00000000G	00		50 DD 00032 1\$:	PUSHL	STATUS	: 0473
			01 FB 00034	CALLS	#1, LIB\$STOP	
			04 0003B	RET		
		10	A2 9F 0003C 2\$:	PUSHAB	MB_BUFFER+8	: 0477
	7E	02	A2 3C 0003F	MOVZWL	MB_IOSB+2, -(SP)	
	6E		08 C2 00043	SUBL2	#8, (SP)	
			02 DD 00046	PUSHL	#2	
		00058091	8F DD 00048	PUSHL	#360593	
00000000G	00		04 FB 0004E	CALLS	#4, LIB\$SIGNAL	
8021	8F	0A	A2 B1 00055	CMPW	MB_BUFFER+2, #32801	: C481
			0B 13 0005B	BEQL	3\$	
	0C	A2	8F B0 0005D	MOVW	#4101, MB_BUFFER+4	: 0488
	50	0A	A2 D0 00063	MOVL	MB_BUFFER+2, R0	: 0489
			04 00067	RET		
			50 D4 00068 3\$:	CLRL	R0	: 0491
			04 0006A	PET		

; Routine Size: 107 bytes, Routine Base: \$CODE\$ + 0283

OPC\$RQSTMAIN
V04-000

REQUEST command main module
rqstmain_wait_reply routine

C 13
16-Sep-1984 01:47:25 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:50:54 [OPCOM.SRC]RQSIMAIN.B32;1

Page 18
(8)

OPC
V04

: 499 0492 1 END
: 500 0493 0 ELUDOM

! End of rqstmain

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	1000	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$PLITS	62	NOVEC, NOWRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODES	750	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	32	0	1000	00:01.9
_\$255\$DUA28:[OPCOM.OBJ]OPCOMLIB.L32;1	633	19	3	43	00:00.9

COMMAND QUALIFIERS

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

: Size: 750 code + 1062 data bytes
: Run Time: 00:17.1
: Elapsed Time: 01:03.5
: Lines/CPU Min: 1733
: Lexemes/CPU-Min: 22245
: Memory Used: 137 pages
: Compilation Complete

SCREENSHOT 1	SCREENSHOT 2	SCREENSHOT 3	SCREENSHOT 4	SCREENSHOT 5	SCREENSHOT 6	SCREENSHOT 7	SCREENSHOT 8	SCREENSHOT 9	SCREENSHOT 10	SCREENSHOT 11	SCREENSHOT 12
SCREENSHOT 13	SCREENSHOT 14	SCREENSHOT 15	SCREENSHOT 16	SCREENSHOT 17	SCREENSHOT 18	SCREENSHOT 19	SCREENSHOT 20	SCREENSHOT 21	SCREENSHOT 22	SCREENSHOT 23	SCREENSHOT 24
SCREENSHOT 25	SCREENSHOT 26	SCREENSHOT 27	SCREENSHOT 28	SCREENSHOT 29	SCREENSHOT 30	SCREENSHOT 31	SCREENSHOT 32	SCREENSHOT 33	SCREENSHOT 34	SCREENSHOT 35	SCREENSHOT 36
SCREENSHOT 37	SCREENSHOT 38	SCREENSHOT 39	SCREENSHOT 40	SCREENSHOT 41	SCREENSHOT 42	SCREENSHOT 43	SCREENSHOT 44	SCREENSHOT 45	SCREENSHOT 46	SCREENSHOT 47	SCREENSHOT 48
SCREENSHOT 49	SCREENSHOT 50	SCREENSHOT 51	SCREENSHOT 52	SCREENSHOT 53	SCREENSHOT 54	SCREENSHOT 55	SCREENSHOT 56	SCREENSHOT 57	SCREENSHOT 58	SCREENSHOT 59	SCREENSHOT 60
SCREENSHOT 61	SCREENSHOT 62	SCREENSHOT 63	SCREENSHOT 64	SCREENSHOT 65	SCREENSHOT 66	SCREENSHOT 67	SCREENSHOT 68	SCREENSHOT 69	SCREENSHOT 70	SCREENSHOT 71	SCREENSHOT 72
SCREENSHOT 73	SCREENSHOT 74	SCREENSHOT 75	SCREENSHOT 76	SCREENSHOT 77	SCREENSHOT 78	SCREENSHOT 79	SCREENSHOT 80	SCREENSHOT 81	SCREENSHOT 82	SCREENSHOT 83	SCREENSHOT 84
SCREENSHOT 85	SCREENSHOT 86	SCREENSHOT 87	SCREENSHOT 88	SCREENSHOT 89	SCREENSHOT 90	SCREENSHOT 91	SCREENSHOT 92	SCREENSHOT 93	SCREENSHOT 94	SCREENSHOT 95	SCREENSHOT 96
SCREENSHOT 97	SCREENSHOT 98	SCREENSHOT 99	SCREENSHOT 100	SCREENSHOT 101	SCREENSHOT 102	SCREENSHOT 103	SCREENSHOT 104	SCREENSHOT 105	SCREENSHOT 106	SCREENSHOT 107	SCREENSHOT 108
SCREENSHOT 109	SCREENSHOT 110	SCREENSHOT 111	SCREENSHOT 112	SCREENSHOT 113	SCREENSHOT 114	SCREENSHOT 115	SCREENSHOT 116	SCREENSHOT 117	SCREENSHOT 118	SCREENSHOT 119	SCREENSHOT 120
SCREENSHOT 121	SCREENSHOT 122	SCREENSHOT 123	SCREENSHOT 124	SCREENSHOT 125	SCREENSHOT 126	SCREENSHOT 127	SCREENSHOT 128	SCREENSHOT 129	SCREENSHOT 130	SCREENSHOT 131	SCREENSHOT 132