



|          |            |            |          |          |      |
|----------|------------|------------|----------|----------|------|
| GGGGGGGG | EEEEEEEEEE | TTTTTTTTTT | DDDDDDDD | DDDDDDDD |      |
| GGGGGGGG | EEEEEEEEEE | TTTTTTTTTT | DDDDDDDD | DDDDDDDD |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GG       | EEEEEEEE   | TT         | DD       | DD       |      |
| GG       | EEEEEEEE   | TT         | DD       | DD       |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GG       | EE         | TT         | DD       | DD       |      |
| GGGGGG   | EEEEEEEEEE | TT         | DDDDDDDD | DDDDDDDD | .... |
| GGGGGG   | EEEEEEEEEE | TT         | DDDDDDDD | DDDDDDDD | .... |
|          |            |            |          |          | .... |

|            |        |          |
|------------|--------|----------|
| 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 getdd ( IDENT = 'V04-000'
2 P 0002 0 %BLISS32[, ADDRESSING_MODE (EXTERNAL = LONG_RELATIVE,
3 0003 0 NONEXTERNAL = LONG_RELATIVE)]
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1 *****
8 0008 1 *
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26 0026 1 *
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
32 0032 1
33 0033 1 ABSTRACT: Attempts to read and recognize a display description.
34 0034 1
35 0035 1 ENVIRONMENT: Transportable
36 0036 1
37 0037 1 AUTHOR: R.W.Friday CREATION DATE: May, 1979
38 0038 1
39 0039 1
```

GETDD  
V04-000

Revision History

L 1  
16-Sep-1984 00:38:33  
14-Sep-1984 13:06:30

VAX-11 BLISS-32 V4.0-742  
DISK\$VMSMASTER:[RUNOFF.SRC]GETDD.BLI;1 Page 2 (2)

|   |    |      |   |                                                                                                                 |
|---|----|------|---|-----------------------------------------------------------------------------------------------------------------|
| : | 41 | 0040 | 1 | %SBTTL 'Revision History'                                                                                       |
| : | 42 | 0041 | 1 |                                                                                                                 |
| : | 43 | 0042 | 1 | MODIFIED BY:                                                                                                    |
| : | 44 | 0043 | 1 |                                                                                                                 |
| : | 45 | 0044 | 1 | 003 KFA00003 Ken Alden 15-Sep-1983                                                                              |
| : | 46 | 0045 | 1 | Changed the error message to RNFIDD "Illegal display descriptor"                                                |
| : | 47 | 0046 | 1 |                                                                                                                 |
| : | 48 | 0047 | 1 | 002 RER00002 Ron Randall 07-Mar-1983                                                                            |
| : | 49 | 0048 | 1 | Global edit of all modules. Updated module names, ids, copyright dates. Changed require files to BLISS library. |
| : | 50 | 0049 | 1 |                                                                                                                 |
| : | 51 | 0050 | 1 |                                                                                                                 |
| : | 52 | 0051 | 1 | --                                                                                                              |
| : | 53 | 0052 | 1 |                                                                                                                 |



GETDD  
V04-000

Module Level Declarations

M 1  
16-Sep-1984 00:38:33  
14-Sep-1984 13:06:30

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[RUNOFF.SRC]GETDD.BLI;1  
Page 3 (3)

```
: 55      0053 1 %SBTTL 'Module Level Declarations'
: 56      0054 1
: 57      0055 1
: 58      0056 1 TABLE OF CONTENTS:
: 59      0057 1
: 60      0058 1 INCLUDE FILES:
: 61      0059 1
: 62      0060 1 LIBRARY 'NXPORT:XPORT';      ! XPORT Library
: 63      0061 1 REQUIRE 'REQ:RNODEF';      ! RUNOFF variant definitions
: 64      0192 1
: 65      U 0193 1 %IF DSRPLUS %THEN
: 66      U 0194 1 LIBRARY 'REQ:DPLLIB';      ! DSRPLUS BLISS Library
: 67      0195 1 %ELSE
: 68      0196 1 LIBRARY 'REQ:DSRLIB';      ! DSR BLISS Library
: 69      0197 1 %FI
: 70      0198 1
: 71      0199 1
: 72      0200 1 EXTERNAL REFERENCES:
: 73      0201 1
: 74      0202 1 EXTERNAL LITERAL      !Error messages
: 75      0203 1 RNFIDD;
: 76      0204 1
: 77      0205 1 EXTERNAL
: 78      0206 1 FS01 : FIXED_STRING,
: 79      0207 1 IRA : FIXED_STRING;
: 80      0208 1
: 81      0209 1 EXTERNAL ROUTINE
: 82      0210 1 ERMS,
: 83      0211 1 GSLU,
: 84      0212 1 RSKIPS;
: 85      0213 1
```



```

87 0214 1 GLOBAL ROUTINE GETDD (DD_VALUE) =
88 0215 1
89 0216 1 ++
90 0217 1 FUNCTIONAL DESCRIPTION:
91 0218 1
92 0219 1     See the ABSTRACT for a general description.
93 0220 1
94 0221 1 FORMAL PARAMETERS:
95 0222 1
96 0223 1     DD_VALUE gets set to the value of the recognized display description.
97 0224 1
98 0225 1 IMPLICIT INPUTS:
99 0226 1
100 0227 1     Implicit input is the one-for-one correspondence
101 0228 1     between the list of valid display descriptors in the
102 0229 1     list DD, below, and the literals TCONVRT_XXXX_D
103 0230 1     defined in the file CONVRT.REQ.
104 0231 1     This makes it possible to use the index into DD as
105 0232 1     the display code that gets saved.
106 0233 1
107 0234 1 IMPLICIT OUTPUTS:      None
108 0235 1
109 0236 1 ROUTINE VALUE:
110 0237 1 COMPLETION CODES:
111 0238 1
112 0239 1     If a valid display description is recognized, a completion code value of +1 is returned.
113 0240 1     The value zero is returned if no display description is recognized. The value
114 0241 1     -1 indicates that the display description could not be recognized; in this case an
115 0242 1     error message is generated too.
116 0243 1
117 0244 1 SIDE EFFECTS:      None
118 0245 1 --
119 0246 1
120 0247 2 BEGIN
121 0248 2 LOCAL
122 0249 2     DISPLAY_CODE,
123 0250 2     GSLU_RESULT;
124 0251 2
125 0252 2     !Skip spaces and tabs before the display descriptor.
126 0253 2     RSKIPS (IRA);
127 0254 2
128 0255 2     !Now attempt to get a display descriptor.
129 0256 2     !First, initialize FS01, where the results will be returned.
130 0257 2     FS_INIT (FS01);
131 0258 2     !And now actually try to get the descriptor.
132 0259 2     GSLU_RESULT = GSLU (IRA, FS01);
133 0260 2
134 0261 2     !Distinguish between missing display code and one that
135 0262 2     !is given.
136 0263 2     IF .GSLU_RESULT EQL GSLU_NONE
137 0264 2     THEN
138 0265 2         RETURN 0
139 0266 2     ELSE
140 0267 2         !Try to recognize the display code supplied.
141 0268 2         BEGIN
142 0269 2         BIND
143 0270 2             DD = UPLIT (CH$PTR(UPLIT('D ')),           !Decimal
```



```
144 0271 3 CH$PTR(UPLIT('* ')), |can't be gotten at.
145 0272 3 CH$PTR(UPLIT('LU')), |All uppercase letters
146 0273 3 CH$PTR(UPLIT('LL')), |All lowercase letters
147 0274 3 CH$PTR(UPLIT('LM')), |Mixed case letters.
148 0275 3 CH$PTR(UPLIT('RU')), |Upper case Roman numerals
149 0276 3 CH$PTR(UPLIT('RL')), |Lower case Roman numerals
150 0277 3 CH$PTR(UPLIT('RM')), |Mixed case Roman numerals.
151 0278 3 CH$PTR(UPLIT('O ')), |Octal
152 0279 3 CH$PTR(UPLIT('H ')), |Hex
153 0280 3 : VECTOR;
154 0281 3
155 0282 3 !Assume the display name won't be found (i.e., illegal)
156 0283 3 DISPLAY_CODE = -1;
157 0284 3
158 0285 3 !Now, try to recognize the given code.
159 0286 3 !If the code is not recognized DISPLAY_CODE will contain the value
160 0287 3 !-1. This error is caught immediately afterwards.
161 0288 3 INCR I FROM 0 TO 9 DO
162 0289 3
163 0290 3 IF CH$EQL (.FS_LENGTH(FS01),
164 0291 3 .FS_START(FS01),
165 0292 3 2,
166 0293 3 .DD [.I],
167 0294 3 %C' ')
168 0295 3 THEN
169 0296 3 !User's display name has been recognized
170 0297 3 BEGIN
171 0298 3 !Remember the index into the table. It's the display code.
172 0299 3 DISPLAY_CODE = .I;
173 0300 3 EXITLOOP
174 0301 3 END;
175 0302 3 END;
176 0303 3
177 0304 3 !Make sure a valid display code will be set.
178 0305 3 IF .DISPLAY_CODE EQL -1
179 0306 3 THEN
180 0307 3 !User gave an invalid display name
181 0308 3 BEGIN
182 0309 3 ERMS (RNFIDD, .fs_start(FS01), .fs_length(FS01));
183 0310 3 RETURN -1
184 0311 3 END;
185 0312 3
186 0313 3 !Save value of display description, and return to user
187 0314 3 .DD VALUE = .DISPLAY_CODE;
188 0315 3 RETURN 1
189 0316 3
190 0317 1 END; !End of GETDD
```

```
.TITLE GETDD
.IDENT \V04-000\
.PSECT $PLITS,NOWRT,NOEXE,2
```

```
00 00 20 44 00000 P.AAB: .ASCII \D \<0><0>
00 00 20 2A 00004 P.AAC: .ASCII \* \<0><0>
00 00 55 4C 00008 P.AAD: .ASCII \LU\<0><0>
```



```
00 00 4C 4C 0000C P.AAE: .ASCII \LL\<0><0>
00 00 4D 4C 00010 P.AAF: .ASCII \LM\<0><0>
00 00 55 52 00014 P.AAG: .ASCII \RU\<0><0>
00 00 4C 52 00018 P.AAH: .ASCII \RL\<0><0>
00 00 4D 52 0001C P.AAI: .ASCII \RM\<0><0>
00 00 20 4F 00020 P.AAJ: .ASCII \O \<0><0>
00 00 20 48 00024 P.AAK: .ASCII \H \<0><0>
00000000' 00000000' 00000000' 00000000' 00000000' 00000000' 00028 P.AAA: .ADDRESS P.AAB, P.AAC, P.AAD, P.AAE, P.AAF, -
00000000' 00000000' 00000000' 00000000' 00000000' 00040 P.AAG, P.AAH, P.AAI, P.AAJ, P.AAK
```

DD=

```
P.AAA
.EXTRN RNFIDD, FS01, IRA
.EXTRN ERMS, GSLU, RSKIPS
```

.PSECT \$CODE\$,NOWRT,2

.ENTRY GETDD, Save R2,R3,R4,R5,R6,R7

MOVAB IRA, R7

MOVAB FS01, R6

PUSHL R7

CALLS #1, RSKIPS

CLRL FS01+12

MOVAB FS01+16, FS01

MOVL FS01, FS01+4

PUSHL R6

PUSHL R7

CALLS #2, GSLU

CMPL GSLU\_RESULT, #2

BEQL 5\$

MNEGL #1, DISPLAY\_CODE

CLRL I

MOVL DDCI, R0

CMPCS FS01+12, @FS01, #32, #2, (R0)

BNEQ 2\$

MOVL I, DISPLAY\_CODE

BRB 3\$

AOBLEQ #9, I, 1\$

CMPL DISPLAY\_CODE, #-1

BNEQ 4\$

PUSHL FS01+12

PUSHL FS01

PUSHL #RNFIDD

CALLS #3, ERMS

MNEGL #1, R0

RET

MOVL DISPLAY\_CODE, @DD\_VALUE

MOVL #1, R0

RET

CLRL R0

RET

; Routine Size: 126 bytes, Routine Base: \$CODE\$ + 0000

```
; 191      0318 1
; 192      0319 1 END
```

!End of module



GETDD  
V04-000

: 193

Module Level Declarations

0320 0 ELUDOM

D 2  
16-Sep-1984 00:38:33  
14-Sep-1984 13:06:30

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[RUNOFF.SRC]GETDD.BLI;1 Page 7 (4)

# PSECT SUMMARY

| Name     | Bytes | Attributes                                                 |
|----------|-------|------------------------------------------------------------|
| \$PLITS  | 80    | NOVEC,NOWRT, RD ,NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2) |
| \$CODE\$ | 126   | NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)  |

## Library Statistics

| File                                  | -----<br>Total | Symbols<br>Loaded | -----<br>Percent | Pages<br>Mapped | Processing<br>Time |
|---------------------------------------|----------------|-------------------|------------------|-----------------|--------------------|
| \$255\$DUA28:[SYSLIB]XPORT.L32;1      | 590            | 0                 | 0                | 252             | 00:00.1            |
| \$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1 | 1248           | 9                 | 0                | 86              | 00:00.3            |

## COMMAND QUALIFIERS

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

: Size: 126 code + 80 data bytes  
: Run Time: 00:04.2  
: Elapsed Time: 00:15.6  
: Lines/CPU Min: 4528  
: Lexemes/CPU-Min: 12778  
: Memory Used: 46 pages  
: Compilation Complete



0342

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