

SSSSSSSSSSSS	MMM	MMM	GGGGGGGGGG	RRRRRRRRRR	TTTTTTTTTTTT	LLL		
SSSSSSSSSSSS	MMM	MMM	GGGGGGGGGG	RRRRRRRRRR	TTTTTTTTTTTT	LLL		
SSSSSSSSSSSS	MMM	MMM	GGGGGGGGGG	RRRRRRRRRR	TTTTTTTTTTTT	LLL		
SSS	MMMMM	MMMMM	GGG	RRR	RRR	LLL		
SSS	MMMMM	MMMMM	GGG	RRR	RRR	LLL		
SSS	MMMMM	MMMMM	GGG	RRR	RRR	LLL		
SSS	MMM	MMM	GGG	RRR	RRR	LLL		
SSS	MMM	MMM	GGG	RRR	RRR	LLL		
SSS	MMM	MMM	GGG	RRR	RRR	LLL		
SSS	MMM	MMM	GGG	RRR	RRR	LLL		
SSSSSSSSSS	MMM	MMM	GGG	RRRRRRRRRR	TTT	LLL		
SSSSSSSSSS	MMM	MMM	GGG	RRRRRRRRRR	TTT	LLL		
SSSSSSSSSS	MMM	MMM	GGG	RRRRRRRRRR	TTT	LLL		
	SSS	MMM	GGG	GGGGGGGG	RRR	RRR	LLL	
	SSS	MMM	GGG	GGGGGGGG	RRR	RRR	LLL	
	SSS	MMM	GGG	GGGGGGGG	RRR	RRR	LLL	
	SSS	MMM	GGG		GGG	RRR	RRR	LLL
	SSS	MMM	GGG		GGG	RRR	RRR	LLL
	SSS	MMM	GGG		GGG	RRR	RRR	LLL
SSSSSSSSSSSS	MMM	MMM	GGGGGGGG	RRR	RRR	LLL		
SSSSSSSSSSSS	MMM	MMM	GGGGGGGG	RRR	RRR	LLL		
SSSSSSSSSSSS	MMM	MMM	GGGGGGGG	RRR	RRR	LLL		

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SSSSSSSS MM MM GGGGGGG VV VV EEEEEEEEE CCCCCLCCC TTTTTTTTT 000000 RRRRRRRR
SSSSSSSS MM MM GGGGGGG VV VV EEEEEEEEE CCCCCCCC TTTTTTTTT 000000 RRRRRRRR
SS MMMM MMMM GG VV VV EE CC TT 00 00 RR RR
SS MMMM MMMM GG VV VV EE CC TT 00 00 RR RR
SS MM MM MM GG VV VV EE CC TT 00 00 RR RR
SSSSSS MM MM GG VV VV EEEEEEE CC TT 00 00 RRRRRRRR
SSSSSS MM MM GG GGGGGG VV VV EEEEEEE CC TT 00 00 RRRRRRRR
SS MM MM GG GGGGGG VV VV EE CC TT 00 00 RR RR
SS MM MM GG GG VV VV EE CC TT 00 00 RR RR
SS MM MM GG GG VV VV EE CC TT 00 00 RR RR
SSSSSSSS MM MM GGGGGG VV VV EEEEEEEEE CCCCCCCC TTT 00000C RR RR
SSSSSSSS MM MM GGGGGG VV VV EEEEEEEEE CCCCCCCC TTT 000000 RR RR

```

```

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
LLLLLLLLLL IIIIII SSSSSSSS
LLLLLLLLLL IIIIII SSSSSSSS

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SMGSVECTOR
Table of contents

- Entry vectors for SMGSHR.EXE

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16-SEP-1984 00:10:23 VAX/VMS Macro V04-00

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DECLARATIONS
SMGSHR Vector

SOR

LIB

COD

DEF

```

0000 1 .TITLE SMG$VECTOR - Entry vectors for SMGSHR.EXE
0000 2 .IDENT /1-009/ File: SMGVECTOR.MAR Edit: LEB1009
0000 3
0000 4
0000 5 :*****
0000 6 :*
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0000 24 :*
0000 25 :*
0000 26 :*****
0000 27 :
0000 28 :
0000 29 :++
0000 30 : FACILITY: Run-Time Library - Screen Management
0000 31 :
0000 32 : ABSTRACT:
0000 33 :
0000 34 : This module contains the entry vector definitions for the
0000 35 : VAX-11 Run-Time Library shareable image SMGSHR.EXE
0000 36 :
0000 37 : ENVIRONMENT: User mode, AST Reentrant
0000 38 :
0000 39 : AUTHOR: Steven B. Lionel, CREATION DATE: 29-April-1983
0000 40 :
0000 41 : MODIFIED BY:
0000 42 :
0000 43 : 1-001 - Original. SBL 29-April-1983
0000 44 : 1-002 - Change %SECT name to guarantee coming first. SBL 18-May-1983
0000 45 : 1-003 - Add SMG$LIST_KEY_DEFS and SMG$SET_DEFAULT_STATE. SBL 6-Sep-1983
0000 46 : 1-004 - Add screen mgmt. output routines. PLL 30-Jun-1983
0000 47 : 1-005 - Add new vectors. STAN 17-Jan-1983.
0000 48 : 1-006 - Add new entries for autobended routines, termtable routines
0000 49 : and for additional SMG routine - SMG$GET_CHAR_AT_PHYSICAL_CURSOR.
0000 50 : LEB 6-Mar-1984
0000 51 : 1-007 - Change name to SMG$INIT_TERM_TABLE_BY_TYPE (instead of BY NAME).
0000 52 : Also change name of SMG$DEL_TERM_DATA to SMG$DEL_TERM_TABLE.
0000 53 : Also change the way that the calls to the screen package are
0000 54 : done (are in reverse order) due to a BLISS bug.
0000 55 : LEB 8-Mar-1984
0000 56 : 1-008 - Add in entries for SMG$INVALIDATE_DISPLAY and SMG$GET_PHYSICAL_CURSOR
0000 57 : which replace the entries for SMG$DISABLE_BROADCAST_TRAPPING and

```



```

0230 232          VCALL  SMG$POP_VIRTUAL_DISPLAY
0238 233          VCALL  SMG$PUT_CHARS_HIGHWIDE
0240 234          VCALL  SMG$PUT_CHARS_WIDE
0248 235          VCALL  SMG$PUT_LINE_WIDE
0250 236          VCALL  SMG$READ_FROM_DISPLAY
0258 237          VCALL  SMG$RESTORE_PHYSICAL_SCREEN
0260 238          VCALL  SMG$SAVE_PHYSICAL_SCREEN
0268 239          VCALL  SMG$SET_PHYSICAL_CURSOR
0270 240
0270 241 :+
0270 242 : End of SMGSHR vector. All subsequent additions must be made
0270 243 : after this point.
0270 244 :-
0270 245
0270 246 :+
0270 247 : Add autobended routines (entries for old screen package now calling
0270 248 : SMG entry points) and TERMTABLE routines.
0270 249 :-
0270 250
0270 251 : Module SMG$DISPLAY_OUTPUT
0270 252
0270 253          VCALL  SMG$GET_CHAR_AT_PHYSICAL_CURSOR
0278 254
0278 255 : Module SMG$INTERFACE_TERM_TABLE
0278 256
0278 257          VCALL  SMG$INIT_TERM_TABLE
0280 258          VCALL  SMG$INIT_TERM_TABLE_BY_TYPE
0288 259          VCALL  SMG$GET_TERM_DATA
0290 260          VCALL  SMG$DEL_TERM_TABLE
0298 261
0298 262 :+
0298 263 : The following are the autobended routines.
0298 264 :-
0298 265
0298 266 : .TRANSFER SCR$ERASE          ; Obsolete
0298 267 : VCALL  SCR$ERASE_PAGE
0298 268 : VCALL  LIB$ERASE_PAGE
0298 269 :
0298 270 : VCALL  LIB$ERASE_LINE
0298 271 : VCALL  SCR$ERASE_LINE
0298 272 :
0298 273 : VCALL  LIB$PUT_LINE
0298 274 : VCALL  SCR$PUT_LINE
0298 275 :
0298 276 : VCALL  LIB$SET_CURSOR
0298 277 : VCALL  SCR$SET_CURSOR
0298 278 :
0298 279 : VCALL  LIB$PUT_SCREEN
0298 280 : VCALL  SCR$PUT_SCREEN
0298 281 :
0298 282 : .TRANSFER LIB$GET_SCREEN
0298 283 : VCALL  SCR$GET_SCREEN
0298 284 :
0298 285 : .TRANSFER LIB$DOWN_SCROLL
0298 286 : VCALL  SCR$DOWN_SCROLL
0298 287 :
0298 288 : .TRANSFER LIB$UP_SCROLL

```

SMG\$VECTOR
1-009

- Entry vectors for SMGSHR.EXE
SMGSHR Vector

E 5

16-SEP-1984 00:10:23
6-SEP-1984 11:47:33

VAX/VMS Macro V04-00
[SMGRTL.SRC]SMGVECTOR.MAR;1

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**F

```
0298 289 : VCALL SCR$UP_SCROLL
0298 290 :
0298 291 : VCALL LIB$SET_SCROLL
0298 292 : VCALL SCR$SET_SCROLL
0298 293 :
0298 294 : .TRANSFER LIB$SET_BUFFER
0298 295 : VCALL SCR$SET_BUFFER
0298 296 :
0298 297 : VCALL LIB$PUT_BUFFER
0298 298 : VCALL SCR$PUT_BUFFER
0298 299 :
0298 300 : VCALL LIB$SCREEN_INFO
0298 301 : VCALL SCR$SCREEN_INFO
0298 302 :
0298 303 : VCALL LIB$SET_OUTPUT
0298 304 : VCALL SCR$SET_OUTPUT
0298 305 :
0298 306 : .TRANSFER LIB$STOP_OUTPUT
0298 307 : VCALL SCR$STOP_OUTPUT
0298 308 :
0298 309 :
0298 310 :
0298 311 : .END
```

; End of module SMG\$VECTOR

SMG\$VECTOR
Symbol table

- Entry vectors for SMGSHR.EXE

F 5

16-SEP-1984 00:10:23 VAX/VMS Macro V04-00
6-SEP-1984 11:47:33 [SMGRTL.SRC]SMGVECTOR.MAR;1

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(3)

SMG\$ADD_KEY_DEF	*****	X	01	SMG\$PUT_CHARS_WIDE	*****	X	01
SMG\$ALLOW_ESCAPE	*****	X	01	SMG\$PUT_LINE	*****	X	01
SMG\$BEGIN_DISPLAY_UPDATE	*****	X	01	SMG\$PUT_LINE_WIDE	*****	X	01
SMG\$BEGIN_PASTEBOARD_UPDATE	*****	X	01	SMG\$PUT_PASTEBOARD	*****	X	01
SMG\$CANCEL_INPUT	*****	X	01	SMG\$PUT_VIRTUAL_DISPLAY_ENCODED	*****	X	01
SMG\$CHANGE_PBD_CHARACTERISTICS	*****	X	01	SMG\$PUT_WITH_SCROLL	*****	X	01
SMG\$CHANGE_RENDITION	*****	X	01	SMG\$READ_COMPOSED_LINE	*****	X	01
SMG\$CHANGE_VIRTUAL_DISPLAY	*****	X	01	SMG\$READ_FROM_DISPLAY	*****	X	01
SMG\$CHECK_FOR_OCCLUSION	*****	X	01	SMG\$READ_STRING	*****	X	01
SMG\$CONTROL_MODE	*****	X	01	SMG\$REPAINT_SCREEN	*****	X	01
SMG\$CREATE_KEY_TABLE	*****	X	01	SMG\$REPASTE_VIRTUAL_DISPLAY	*****	X	01
SMG\$CREATE_PASTEBOARD	*****	X	01	SMG\$RESTORE_PHYSICAL_SCREEN	*****	X	01
SMG\$CREATE_VIRTUAL_DISPLAY	*****	X	01	SMG\$RETURN_CURSOR_POS	*****	X	01
SMG\$CREATE_VIRTUAL_KEYBOARD	*****	X	01	SMG\$RING_BELL	*****	X	01
SMG\$CURSOR_COLUMN	*****	X	01	SMG\$SAVE_PHYSICAL_SCREEN	*****	X	01
SMG\$CURSOR_ROW	*****	X	01	SMG\$SCROLL_DISPLAY_AREA	*****	X	01
SMG\$DEFINE_KEY	*****	X	01	SMG\$SET_BROADCAST_TRAPPING	*****	X	01
SMG\$DELETE_CHARS	*****	X	01	SMG\$SET_CURSOR_ABS	*****	X	01
SMG\$DELETE_KEY_DEF	*****	X	01	SMG\$SET_CURSOR_REL	*****	X	01
SMG\$DELETE_LINE	*****	X	01	SMG\$SET_DEFAULT_STATE	*****	X	01
SMG\$DELETE_PASTEBOARD	*****	X	01	SMG\$SET_DISPLAY_SCROLL_REGION	*****	X	01
SMG\$DELETE_VIRTUAL_DISPLAY	*****	X	01	SMG\$SET_KEYPAD_MODE	*****	X	01
SMG\$DELETE_VIRTUAL_KEYBOARD	*****	X	01	SMG\$SET_OUT_OF_BAND_ASTS	*****	X	01
SMG\$DEL_TERM_TABLE	*****	X	01	SMG\$SET_PHYSICAL_CURSOR	*****	X	01
SMG\$DISABLE_UNSOLICITED_INPUT	*****	X	01	SMG\$SNAPSHOT	*****	X	01
SMG\$DRAW_LINE	*****	X	01	SMG\$UNPASTE_VIRTUAL_DISPLAY	*****	X	01
SMG\$DRAW_RECTANGLE	*****	X	01				
SMG\$ENABLE_UNSOLICITED_INPUT	*****	X	01				
SMG\$END_DISPLAY_UPDATE	*****	X	01				
SMG\$END_PASTEBOARD_UPDATE	*****	X	01				
SMG\$ERASE_CHARS	*****	X	01				
SMG\$ERASE_DISPLAY	*****	X	01				
SMG\$ERASE_LINE	*****	X	01				
SMG\$ERASE_PASTEBOARD	*****	X	01				
SMG\$FIND_CURSOR_DISPLAY	*****	X	01				
SMG\$FLUSH_BUFFER	*****	X	01				
SMG\$GET_BROADCAST_MESSAGE	*****	X	01				
SMG\$GET_CHAR_AT_PHYSICAL_CURSOR	*****	X	01				
SMG\$GET_DISPLAY_ATTR	*****	X	01				
SMG\$GET_KEY_DEF	*****	X	01				
SMG\$GET_PASTEBOARD_ATTRIBUTES	*****	X	01				
SMG\$GET_PHYSICAL_CURSOR	*****	X	01				
SMG\$GET_TERM_DATA	*****	X	01				
SMG\$HOME_CURSOR	*****	X	01				
SMG\$INIT_TERM_TABLE	*****	X	01				
SMG\$INIT_TERM_TABLE_BY_TYPE	*****	X	01				
SMG\$INSERT_CHARS	*****	X	01				
SMG\$INSERT_LINE	*****	X	01				
SMG\$INVALIDATE_DISPLAY	*****	X	01				
SMG\$LABEL_BORDER	*****	X	01				
SMG\$LIST_KEY_DEFS	*****	X	01				
SMG\$LOAD_KEY_DEFS	*****	X	01				
SMG\$MOVE_VIRTUAL_DISPLAY	*****	X	01				
SMG\$PASTE_VIRTUAL_DISPLAY	*****	X	01				
SMG\$POP_VIRTUAL_DISPLAY	*****	X	01				
SMG\$PUT_CHARS	*****	X	01				
SMG\$PUT_CHARS_HIGHWIDE	*****	X	01				

EXE

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! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes												
ABS	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE		
\$\$\$SMG\$VECTOR	00000298 (664.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	QUAD		

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	10	00:00:00.09	00:00:00.49
Command processing	81	00:00:00.43	00:00:04.84
Pass 1	75	00:00:01.99	00:00:05.06
Symbol table sort	0	00:00:00.06	00:00:00.07
Pass 2	73	00:00:00.83	00:00:02.31
Symbol table output	10	00:00:00.05	00:00:00.14
Psect synopsis output	1	00:00:00.02	00:00:00.04
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	250	00:00:03.49	00:00:12.95

The working set limit was 600 pages.
9297 bytes (19 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 83 non-local and 0 local symbols.
311 source lines were read in Pass 1, producing 28 object records in Pass 2.
2 pages of virtual memory were used to define 2 macros.

! Macro library statistics !

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/LIS=LIS\$:SMGVECTOR/OBJ=OBJ\$:SMGVECTOR MSRC\$:SMGVECTOR/UPDATE=(ENH\$:SMGVECTOR)

