



Document Composition Facility: Text Programmer's Quick Reference

SX26-3723-5

Fifth Edition (March 1985)

This edition contains information from and makes obsolete SX26-3723-4; it also contains information from the Document Composition Facility: SCRIPT/VS Language Reference, SH35-0070-2.

Changes are made periodically to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest IBM System/370 and 4300 Processors Bibliography, GC20-0001, for editions that are applicable and current.

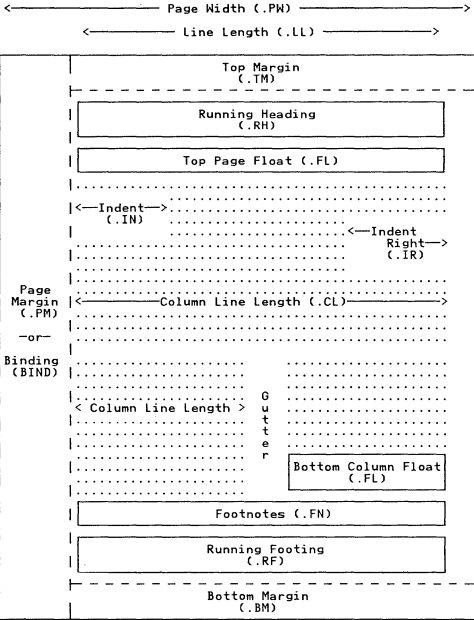
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Option	Parameters	Description
BIND	(bind) (obind ebind)	Shift the page to the right. SCRIPT/VS system symbol: P, &#BE
CHARS	(font1 ... font4)	Specify up to four fonts. More than four external font-id's may be specified for page printer logical devices; however, formatting is <u>not</u> limited to the fonts so specified. SCRIPT/VS system symbol: &#CHAR()
CONTINUE		Continue processing after a non-severe error occurs.
CTF		Prepare output in STAIRS/VS Condensed Text Format.
DDUT		Allows the redefinition of a SCRIPT/VS utility file to a non-utility file.
DEST	(station-id)	Specify a remote output station. (Valid only in TSO.)
DEVICE	(devtype)	Specify a logical output device.
FILE	[(fileid)]	Specify a disk file for output. (Not valid in ATMS-III.)
FONTLIB	[[filetype] [filemodel]]	Specify a font library.
INDEX		Enable the .PI [Put Index] control word. SCRIPT/VS system symbol: &#INDX
LIB	(libname ...) (opnum ...)	Specify symbol and macro libraries. (Only one in TSO; up to eight in CMS and ATMS-III.)
MESSAGE	[(DELAY [ID] [TRACE])]	Control message printing.
NOCONT		Terminate processing after an error occurs.
NODDUT		Disallows the redefinition of a SCRIPT/VS utility file to a non-utility file.
NOPROF		Suppress the profile.
NOSEGLIB		Suppress the segment library.
NOSPIE		Prevent entering SPIE exit routines. (Valid only in CMS and TSO.)
NOWAIT		Prevent prompting for paper adjustment. (Valid only for typewriter terminals in CMS and TSO.)
NUMBER		Print file name and line number. Ignored for page printers.
OPTIONS	[(fileid)]	Specify a file that contains SCRIPT options. (Valid only in CMS and ATMS-III.)
PAGE	[[[PROMPT] [[FROM] p [TO] q] [[FROM] p FOR n] [[FROM] p ONLY]]]	Print pages selectively. (PROMPT is valid only in CMS and TSO.)
PRINT	[(copies,class, fcb,ucs)]	Produce printer output. In CMS will take advantage of virtual 3800 support in the VM/SP System Product. (Suboptions are valid only in TSO.)
PROFILE	[(fileid)]	Specify a profile. (A file to be imbedded before the primary input file is processed.)
QUIET		Suppress formatter identifier message.
SEARCH	(libname) (opnum ...)	Specify a library in TSO. Specify the default filetype for imbed and append files in CMS. Specify operator number in ATMS-III.
SEGLIB		Specify a page segment library.
SPELLCHK		Enable the .SV [Spelling Verification] control word.
STOP		Print separate pages at the terminal. (Valid only for typewriter terminals in CMS and TSO.)
SYOFF		Disables the .SY [System Command] control word. SYOFF is the default. Applicable only in the TSO and CMS environments only.
SYON		Enables the .SY [System Command] control word after SYOFF is specified. Applicable only in the TSO and CMS environments.
SYSVAR	(n value ...)	Set symbol values for &#SYSVARn.
TERM		Display the output at a user's terminal.
TLIB	(libname ...)	Specify spelling checking and hyphenation libraries. (Valid only in CMS.)
TWOPASS		Prepare with two formatting passes, and produce output on the second pass. SCRIPT/VS system symbol: &#TWO
UNFORMAT		Print all input lines without formatting. Ignored for page printers. SCRIPT/VS system symbol: &#UNF
UPCASE		Fold lowercase letters to uppercase before printing.
@user-option	[(sub-options...)]	User-defined options, which must begin with the character "@". (Valid only in CMS.)



SCRIPT/VS Terms for Parts of the Page.

Logical Device Type	Real Device Type	Lines per Inch	Page Size		Margins			Line Length	Class of Device
			Width	Length	Bind	Top	Bottom		
TERM 2741 3270	(¹) 2741 3270	6	8.5i	11 i	2	.5i	.5i	6i	
1403N6 1403N8 1403N6 1403N8 1403N6S 1403N8S 1403SW (²) STAIRS	1403	6 8 6 8 6 8 6 6	8.5i 8.5i 13.5i 13.5i 13.5i 13.5i 8.5i 13.5i	11 i 11 i 11 i 11 i 8.5i 8.5i 11 i 11 i	li	.5i	.5i	6i	
3800N6 3800N8 3800N12 3800H6 3800H8 3800N12 3800N6S 3800N8S 3800N12S 3800H6S 3800H8S 3800N12S	3800	6 8 12 6 8 12 6 8 12 6 8 12	8.5i 8.5i 8.5i 13.5i 13.5i 13.5i 11 i 11 i 11 i 13.5i 13.5i 13.5i	10 i 10 i 10 i 10 i 10 i 10 i 7.5i 7.5i 7.5i 7.5i 7.5i 7.5i	li	0	0	6i	line devices
38PPN 38PPH 38PPNS 38PPWS	3800-3	(³)	8.5i 13.5i 11 i 13.5i	10 i 10 i 7.5i 7.5i	li	0	.125i	6i	
38PPW90 38PPNS90 38PPW270			10 i 7.5i 10 i	13.5i 11 i 13.5i	.5i	.5i	.5i	6i	
3820A 3820A90 3820A180 3820A270 3820L 3820A4 3820B4 3820B5	3820	(³)	8.5i 8.5i 8.5i 8.5i 8.5i 210mm 257mm 182mm	11 i 11 i 11 i 11 i 14 i 297mm 364mm 257mm	li	.5i	.5i	6i	page printers
4250A 4250B 4250L 4250A3 4250A4	4250	(³)	8.5i 11 i 8.5i 297mm 210mm	11i 17i 14i 420mm 297mm	li	.5i	.5i	6i	

¹ The physical device type corresponding to the TERM logical device can be either 2741 or 3270, depending upon the actual terminal type.

² This is a 12-pitch device; all other 1403 devices are 10-pitch.

³ The linespacing for page printers is determined by the .LS [Line Spacing] control word and the fonts used in the document.

Date and Time ¹		
&SYSYEAR	Year of the century	00 - 99
&SYSMONTH	Month of the year	01 - 12
&SYSDAYOFM	Day of the month	01 - 31
&SYSDAYOFW	Day of the week	1 - 7 ("1" is Sunday)
&SYSDAYOFY	Day of the year	001 - 366
&SYSHOUR	Hour of the day	00 - 23
&SYSMINUTE	Minute of the hour	00 - 59
&SYSSECOND	Second of the minute	00 - 59
Output Device Characteristics		
&\$LDEV	Logical output device ²	1-8 characters
&\$OUT	Output destination	TERM, PRINT, FILE
&\$PDEV	Physical output device	1403, 2741, 3270, 38PP, 3800, 3820, 4250
SCRIPT Command Options		
&\$BE	Even bind ^{3 4}	0 - nnn
&\$BO	Odd bind ^{3 4}	0 - nnn
&\$CHAR(n)	Fonts ⁵	1 - 4 characters
&\$DCF	SCRIPT/VS Release level	3.0
&\$INDX	Indexing ⁶	0, 1
&\$LIB	Macro library available ⁶	0, 1
&\$PARM	Command options ⁷	8 - 256 characters
&\$PASS	Current pass number	1, 2
&\$PRT	Current page print switch	ON, OFF
&\$SYS	Environment	CMS, TSO, VS2, VSE, CICS
&\$THO	THOPASS option in effect ⁶	0, 1
&\$UNF	Unformatted output ⁶	0, 1
Page Characteristics		
&\$BE	Bind Even (BIND)	0 - nnn
&\$BM	Bottom margin (.BM) ⁸	0 - nnn
&\$BO	Bind Odd (BIND)	0 - nnn
&\$CL	Column line length (.CL) ⁹	1 - nnn
&\$FM	Footing margin (.FM) ⁸	0 - nnn
&\$IN	Left indention (.IN) ⁹	0 - nnn
&\$IR	Right indention (.IR) ⁹	0 - nnn
&\$LC	Internal line counter ^{8 10}	0 - nnn
&\$LL	Line length (.LL) ⁹	0 - nnn
&\$OF	Offset (.OF) ⁹	0 - nnn
&\$PL	Page length (.PL) ⁸	1 - nnn
&\$PW	Page width (.PW) ⁹	1 - nnn
&\$TM	Top margin (.TM) ⁸	0 - nnn
SCRIPT/VS Formatter Parameters		
&\$BS	Backspace Character	hexadecimal 16
&\$CONT	Continuation character ¹¹	one character
&\$CW	Control word separator ¹¹	(default: ";")
&\$C256	Identity vector	256 characters
&\$EGML	GML end-tag delimiter ¹¹	(default: "::")
&\$ENV	Formatting environment	BODY,FL,FN,KP,RF,RH, IBP,AR,FNL
&\$FNAM	Current input file name	eight characters
&\$GML	GML tag delimiter ¹¹	(default: ":")
&\$KP	Keep in process	ON, OFF
&\$LNUM	Last line number read	0 - nnn
&\$LST	Line Started	0,1
&\$PN	Page number ¹²	1 - nnn
&\$PS	Page number symbol ¹¹	(default: "&")
&\$RB	Required Blank ¹¹	(default: hexadecimal 41)
&\$RET	Return code from .SY ¹³	0 - nnn
&\$SU	Symbol substitution enabled	ON, OFF
&\$TAB	Tab Character	hexadecimal 05
&\$TAGD	GML delimiter of last tag	&\$GML, &EGML
&\$VR	Vertical rules in effect	ON, OFF
<p>¹ These symbols may contain leading zeros. They can be eliminated with a .SE [Set Symbol] control word: ".se SYSHOUR = &SYSHOUR + 0".</p> <p>² Set by the DEVICE option of the SCRIPT command.</p> <p>³ Set by the BIND option of the SCRIPT command and the .PM [Page Margins] control word.</p> <p>⁴ The system symbol values are represented in character spaces, regardless of the space units used in setting them. The maximum value depends upon the logical output device.</p> <p>⁵ Set by the CHARS option of the SCRIPT command. This is a symbol array; element 0 contains the number of fonts specified and elements 1, 2, ... contain the names of the fonts specified.</p> <p>⁶ "1" indicates the command option was specified; "0" indicates it was not specified.</p> <p>⁷ This is the SCRIPT command options list. In CMS, the command options list is tokenized (divided into eight character fields separated by blanks and parentheses) and truncated at 32 tokens (256 characters).</p> <p>⁸ These values are represented in line spaces, regardless of the space units used in setting them. The maximum value depends upon the logical output device.</p> <p>⁹ The values of these symbols are represented in character spaces, regardless of the space units used in setting them. The maximum value depends upon the logical output device.</p> <p>¹⁰ The value of the symbol &\$LC is the number of lines remaining in the current column, excluding unplaced keeps, floats, footnotes, widow zones and partial lines.</p> <p>¹¹ Set by the .DC [Define Character] control word.</p> <p>¹² &\$PN contains the numeric portion of the current page number. The page number as substituted can be obtained with the control word ".se x = &".</p> <p>¹³ In CMS, any possible return code value. In TSO, "0" to indicate the command was stacked for execution after SCRIPT/VS terminates. In ATMS-III, "0" to indicate the control word was ignored. In batch, "-3" to indicate that .SY is not supported.</p>		

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
00																	0F
10																	1F
20																	2F
30																	3F
40											¢	.	<	(	+	|	4F
50	&										!	\$	*	)	;	~	5F
60	- /										:	,	%	'	>	?	6F
70											:	#	@	'	=	"	7F
80		a	b	c	d	e	f	g	h	i		{	≤	(	+	†	8F
90		j	k	l	m	n	o	p	q	r		}	≥	)	±	■	9F
A0	- °	s	t	u	v	w	x	y	z		L	Γ	[	≥	•		AF
B0	°	1	2	3	4	5	6	7	8	9	J	Γ	]	≠	-		BF
C0		A	B	C	D	E	F	G	H	I		⊥	T				CF
D0		J	K	L	M	N	O	P	Q	R			\$				DF
E0		S	T	U	V	W	X	Y	Z			†	†				EF
F0	0	1	2	3	4	5	6	7	8	9							FF
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	

1403 Translate Table

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F		
00																	0F	
10																	1F	
20																	2F	
30																	3F	
40												¢	.	<	(+		4F
50	&											!	\$	*)	;	~	5F
60	- /											:	,	%	'	>	?	6F
70												:	#	@	'	=	"	7F
80		a	b	c	d	e	f	g	h	i		{	≤	(	+	†	8F
90		j	k	l	m	n	o	p	q	r		}	≥	)	±	■	9F
A0		s	t	u	v	w	x	y	z		L	Γ	[	≥	•		AF
B0	°	1	2	3	4	5	6	7	8	9	J	Γ	]	≠	-		BF
C0		A	B	C	D	E	F	G	H	I		⊥	T				CF	
D0		J	K	L	M	N	O	P	Q	R			\$				DF	
E0	\	S	T	U	V	W	X	Y	Z			†	†				EF	
F0	0	1	2	3	4	5	6	7	8	9	|						FF	
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F		

3800 Translate Table

Text Fonts	Highlight Fonts	Special Fonts
GT10 Gothic (10-pitch) GT12 Gothic (12-pitch) GT15 Gothic (15-pitch)	GB10 Gothic Bold GB12 Gothic Bold GI12 Gothic Italic	GR10 Gothic Reverse GP12 Proportional
ST10 Serif (10-pitch) ST12 Serif (12-pitch) ST15 Serif (15-pitch)	SI10 Serif Italic SI12 Serif Italic SB12 Serif Bold	RT10 Roman Text SO12 Serif Overstruck

Complete 3800 Printing Subsystem Model 1 and Model 3 operating in compatibility mode (MVS only) Fonts Provided with SCRIPT/VS

Active Environment			
Parameter	Control Word	Initial Setting	Symbol
Baseline	.SB	0	
Capitalization	.UC, .UP	OFF	
Column balancing	.BC	ON	
Continuation character	.DC CONT	(null)	&&CONT
Control word separator	.DC CW	"."	&&CW
Current font	.BF, .DF, .PF	(1)	
Column definition	.CD	Single column	
Centering (2)	.CE	OFF	
Column line length	.CL	Line length	&&CL
Conditional sections	.CS	INCLUDE	
Font save stack	.BF, .PF	empty	
Linespacing	.LS	(1)	
Formatting mode	.FO, .NF, .FV	.FO ON EXTEND	
GML tag delimiters	.DC GML	"::"	&&GML,
		"::"	&&EGML
Horizontal space	.ES, .IC, .WS	(1)	
Indentation	(3)	0	&&IN
Page number symbol	.DC PS	"&"	&&PS
Revision code, adjust	.RC	OFF, 2	
Right adjustment	.RI	OFF	
Right indentation	.IR	0	&&IR
Spelling verification	.SV	ON	
Tab setting	.TP	5 10 15 ... 80	
Terminal input (2)	.TE	OFF	
Underscoring	.UC, .US	OFF	
	.UD	ON	

Page Environment			
Parameter	Control Word	Initial Setting	Symbol
Bottom margin	.BM	(1)	&&BM
Hyphenation	.HY	OFF	
Page length	.PL	(1)	&&PL
Page margins	.PM	(1)	&&BD, &&BE
Page numbering mode	.PN	Arabic	
Page width	.PW	(1)	&&PW
Symbol substitution (2)	.SU	ON	&&SU
Top margin	.TM	(1)	&&TM

Translate Tables			
Parameter	Control Word	Initial Setting	Symbol
Input translation	.TI	Identity	
Output translation	.TR	Identity	
Uppercase translation	.TU	a-z -> A-Z	

¹ These parameters' initial settings are based on the logical output device.

² The number of lines remaining, or ON or OFF, is saved.

³ The composite current indentation is determined from the .IN, .IL, .UN, and .OF control word values. These values are individually saved.

The SCRIPT/VS Formatting Environment

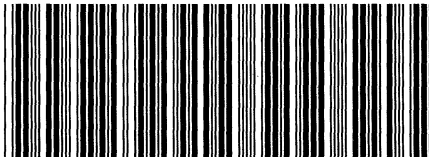
Attribute	Function
&a'	Converts a numeric character string ¹ to a "base-26" lowercase alphabetic "number."
&A'	Converts a numeric character string ¹ to a "base-26" uppercase alphabetic "number."
&AD'	Returns the depth of the material now in the specified <u>named</u> area.
&DH'	Converts a space designation ¹ to an equivalent number of horizontal device units.
&DV'	Converts a space designation ¹ to an equivalent number of vertical device units.
&E'	Verifies the existence of a symbol; the value is 1 if the symbol has been set; 0 if not.
&L'	Yields the length of a character string ¹ .
&r'	Converts a numeric character string ¹ into a lowercase roman numeral.
&R'	Converts a numeric character string ¹ into an uppercase roman numeral.
&SW'	Returns the width of a named segment.
&SD'	Returns the depth of a named segment.
&T'	Yields the type of the current value of a symbol. The type is either "N" for numeric or "C" for character.
&U'	Converts a lowercase character string to uppercase.
&V'	Yields the current value of a symbol.
&W'	Yields the measured length of a character string ¹ in figure spaces of the current font. If you want the length of a character string in device units, use &DV' or &DH' in combination with &W'.
&X'	Converts a hexadecimal notation into a character string ¹ .

¹ The character string or space designation may be the value of a symbol.

Attributes of a Symbol's Value



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Ctl Wd	Parameters	Description
...	label [input line]	Set Label: Inserts a line that can be used as the target of a .GO control word.
.AA	tag [apf [(rules)]] [apf [(rules)]]	Associate APF: Maps a GML tag to the macro or control word that processes it, and gives the attribute scanning rules for the tag.
.AN	x test y input-line "test" can be: lt le eq ne gt ge < <= = -= > >=	And: Tests the relationship between "x" and "y". When the test is satisfied and the most recently processed .IF, .AN, or .OR was also satisfied, SCRIPT/VS processes the input-line.
.AP	{name}{file-id} {token1 ... token14}	Append: Allows an additional file to be appended to the file just processed.
.AR	areaname [ON] [TOP] [REPLACE] [DELETE] [OFF] [PUT]	Area Begin: Specifies a group of lines to be kept in a <u>named</u> area for subsequent placement on a page.
.BC	[ON|OFF]	Balance Columns: Causes SCRIPT/VS to attempt to balance the columns by distributing text when a page eject occurs or when the column definition is changed.
.BF	{fontname} ... [=]	Begin Font: Causes SCRIPT/VS to use a new font. More than one font may be given; the first valid font listed will be used. Default: Restarts the current font.
.BL		Blank Line: Results in one line of vertical space; is generated by SCRIPT/VS and executed whenever a blank line is processed.
.BM	[v|+v|-v]	Bottom Margin: Specifies the amount of space in the bottom margin area. Causes a break. Initial Setting: logical device dependent. Default: Restores the initial setting. SCRIPT/VS system symbol: &\$BM
.BR		Break: Prevents the concatenation of the following text line with preceding text.
.BX	[NEW|SET|OFF] [rulename] [rulename LEFT|h|RIGHT|/] [CAN] [CHAR cname]	Box: Draws horizontal and vertical lines around subsequent output text.
.CB		Column Begin: Causes an eject to the next column (or next page).
.CC	[v]	Conditional Column Begin: Causes a column eject if less than a specified amount of space remains in the column. Default: .CC causes a column eject unless there is no data in the current column.
.CD	[n [h1 ... h9]]	Column Definition: Specifies the number of columns on the page and the position of each column. Initial Setting: One column at position 0.
.CE	[|n|ON|OFF] input-line	Center: Centers text lines between the current left and right margins.
.CL	[@|h|+h|-h]	Column Line Length: Specifies the width of each column (all columns are the same width). SCRIPT/VS system symbol: &\$CL
.CH		Comment: Identifies a comment line.
.CP	[v]	Conditional Page Eject: Causes a page eject if less than a specified amount of space remains on the page. Default: .CP causes a page eject unless there is no data on the current page.
.CS	n [INCLUDE|IGNORE] n [ON|OFF]	Conditional Section: Allows conditional inclusion of input in the formatted output. Initial Setting: All conditional sections included.

Ctl Wd	Parameters	Description
.CT	[input-line]	Continued Text: Appends the input-line to the previous input text without an intervening word space.
.DA	areaname h [v] [PAGE] [BODY] [SECTION] [FONT fontname] [WIDTH h] [DEPTH v] [ROTATE rotation]	Define Area: Defines a <u>named</u> area.
.DC	[parameter char ...[OFF]	Define Character: Defines the characters for special functions. Parameters: ASEP: Array element separator characters CONT: Line continuation character (&\$CONT) CW: Control word separator (&\$CW) GML: GML tag delimiter (&\$GML, &\$EGML) IXB: Index term blanks IXI: Index term nulls STOP: End-of-sentence characters PUNC: Punctuation characters PS: Page number symbol (&\$PS) RB: Required blank (&\$RB) WORD: Word delimiter characters MCS: Markup content separator character Initial Settings: ASEP: , 40 GML: : : : PS: & CONT: none STOP: . ! ? : RB: 41 CW: ; PUNC: - ' IXB: none IXI: none MCS: .
.DD	name [[LIB|DD|DSN file-id]	Define Data File-id: Specifies the file-id of a file to be used with the .IM [Imbed], .AP [Append] or .WF [Write To File] control words, or with utility files.
.DF	fontname [US|UP|UC|STOP] OS RPT n[OS CHAR c] BOX cname] FONT [font-id]] TYPE [[description]]] CODEPAGE cp-id	Define Font: Defines internal fonts composed of external font characteristics and line formatting functions.
.DH	n [options]	Define Head Level: Defines the format and characteristics of the section headings produced by the .Hn control words. Default: Restores initial settings.
.DL	name [name] ...	Dictionary List: Names spelling checking and hyphenation dictionaries.
.DM	name [/line|.../line[/ x[LIB|OFF] name [/line[/ x[OFF] [name ON] [OFF]	Define Macro: Defines a macro using text, SCRIPT/VS control words, and special symbols. Macros may be defined inline without prefixing each line of the macro with a .DM [Define Macro] control word.
.DR	rulename [WEIGHT h] [FONT fontname]	Define Rule: Defines <u>named</u> rules of varying thickness.
.DS		Doublespace Mode: Causes subsequent output lines to be doublespaced.
.DU	(ADD|DEL) word ...	Dictionary Update: Adds words to or deletes words from an addenda dictionary, which is used to supplement a SCRIPT/VS main dictionary for spelling verification and hyphenation.
.DV	[symname] [Font fontname] [Baseline b] [/string[/ [symname] [Text] [/string[/]	Define Variable: Defines and assigns value to text variables.
.EC	input line	Execute Control: Executes the input line as a control word even if there is a macro of the same name.
.EF	[CLOSE]	End of File: Simulates an end of file condition.
.EL	[input-line]	Else: Processes the input-line if the most recently executed .IF, .AN, or .OR control word was <u>not</u> satisfied.
.EM	input line	Execute Macro: Executes the input line as a macro even if macro substitution is off.
.EQ		Equation: A reserved control word.

Ctl Wd	Parameters	Description
.ES	[NORMAL [h]] [BY [f]]	Extra Space: Controls the formatting of multiple blanks by specifying the width of the extra spaces.
.FL	[ON|OFF|DUMP] [TOP|BOTTOM] [COL|PAGE] [ODD|EVEN] [ORDER]	Float: Delimits a group of lines to be kept together and placed at the top or bottom of a column or page.
.FN	[ON|OFF|LEADER]	Footnote: Saves formatted text and prints it at the bottom of the page in single-column format.
.FO	[ON|OFF] [LEFT|RIGHT|CENTER INSIDE|OUTSIDE] [EXTEND|TRUNC|FOLD]	Format Mode: Controls concatenation and justification of input lines. Initial Setting: ON EXTEND
.FV	[TOP] [CENTER] [BOTTOM] [JUSTIFY]	Format Vertically: Specifies whether text is to be vertically justified. Also may be used to specify if text is to be at the top, bottom, or center of the columns if it is not justified. Initial Setting: TOP
.GO	[TO] label	Go To: Causes SCRIPT/VS to locate the input line identified with "label" and resume processing with that input line.
.GS	[parameters]	GML Services: Provides a variety of functions helpful in writing APFs, including attribute scanning and symbol manipulation.
.HR	[rulename] [LEFT] [TO] [RIGHT] [h1] [TO] h2] [h1 FOR length]	Horizontal Rule: Places a horizontal rule in the current column.
.HW	text-word	Hyphenate Word: Specifies hyphenation points for a word that might need to be hyphenated during formatting.
.HY	parameters	Hyphenate: Controls the SCRIPT/VS automatic hyphenation function and expansion and compression ranges. Initial Settings: OFF LADDER = 2 MAXPT = 2 MINPT = 4 MINWORD = 6 RANGE = 1.0 Default: Initial setting.
.Hn	[text-line]	Head Level n: Formats a section heading according to default characteristics supplied for the heading.
.IC	[ESPACE [h]] [-h]]	Intercharacter Space: Controls the insertion of extra space between characters. Ignored for line devices. Initial Setting: 0 Default: Restores initial setting.
.IE	(H|l|2|3) string	Index Entry: Formats an index entry when generated by the .IX [Index] control word.
.IF	x test y [input-line] "test" can be: lt le eq ne gt ge < <= = -= > >=	If: Tests the relationship between "x" and "y". When the test is satisfied, SCRIPT/VS processes the input-line. Otherwise, SCRIPT/VS ignores the input-line. "x test y" can also be: SYSPAGE eq|ne EVEN|ODD SYSOUT eq|ne PRINT|TERM|PAGE
.IL	[@|h|+h|-h]	Indent Line: Indents the next output line the specified amount of horizontal space. Initial Setting: 0
.IM	{name}(file-id) [token1 ... token14]	Imbed: Processes the named file at this point.
.IN	[@|h|+h|-h] [FOR v1] [AFTER v2] [NOBREAK]	Indent: Specifies the amount of space subsequent output lines are to be indented from the current left margin. May cause a break. SCRIPT/VS system symbol: &\$IN Initial Setting: 0
.IR	[@|h|+h|-h] [FOR v1] [AFTER v2] [NOBREAK]	Indent Right: Specifies the amount of space subsequent output lines are to be indented from the current right margin. May cause a break. SCRIPT/VS system symbol: &\$IR Initial Setting: 0
.IS	[h] [- h] TO h [MINIMUM h2] BLANK BREAK ABSOLUTE	Inline Space: Inserts a specified amount of horizontal white space into the current line.

Ctl Mtd	Parameters	Description
.IT	[QN|OFF|ALL| CTL|GML|MAC|SUB| SNAP|STEP|RUN] Response to STEP: (null) PRE input-line REP input-line STK input-line	Input Substitution Trace: Provides a trace of processing for each SCRIPT/VIS control word and macro, as well as symbol substitution. When .IT STEP is in effect, the user responds interactively. Initial Setting: OFF.
.IX	[_ln] [name|control|/]	Index: Generates an index from terms previously specified with the .PI control word.
.KP	[QN|FLOAT|DELAY| INLINE|v|v + v|OFF]	Keep: Ensures that a group of output lines are kept together in the same column. SCRIPT/VIS system symbol: &\$KP
.LB		Leading Blank: Causes a break.
.LI	[_ln|ON|OFF| input-line]	Literal: Ensures that input lines are treated as text lines by SCRIPT/VIS (used when a text input line begins with a period). Initial Setting: OFF.
.LL	[h|h]-h]	Line Length: Specifies the length of lines in running headings and running footings. SCRIPT/VIS system symbol: &\$LL Initial Setting: logical device dependent. Default: Restores initial setting.
.LO	[v]	Lead-Out: Identifies a place in a column where a specified amount of extra vertical white space may be placed during vertical justification.
.LS	[parameters]	Line Spacing: Controls the depth of lines of text. Also controls allowable ranges of compression and expansion for vertical justification. Initial Settings: NORMAL - font dependent BY - 1.0 RANGE - 1.0 Default: Restores initial setting.
.LT		Leading Tab: Causes a break.
.LY	[QN|OFF|SYM|MAC]	Library: Specifies whether a library is to be used to resolve symbol and macro definitions. Use the LIB option to identify the libraries. Initial setting: OFF.
.MC		Multicolumn Mode: Restores column definition saved by a previous .SC [Single Column Mode] control word.
.ME	[input-line]	Macro Exit: Ends a macro and returns control to the macro's caller. The input-line is processed as though it were part of the macro's caller.
.MG	[/code]/message[/]	Message: Produces a message similar in format to the SCRIPT/VIS error messages.
.MS	[QN|OFF]	Macro Substitution: Causes SCRIPT/VIS to recognize and process macros. Initial Setting: OFF Default: ON
.NF	[ON] [EXTEND] [OFF] [FOLD] [LEFT] [TRUNC] [CENTER] [RIGHT] [INSIDE] [OUTSIDE]	No Formatting: Cancels or restores concatenation of input lines and justification of output lines. Initial Setting: OFF EXTEND Default: ON
.NL		Null Line: Causes a break.
.OC	{line}'string'}	Output Comment: Specifies data that is to be inserted into the output document as it is, as an output comment. Ignored for page printers.
.OF	[_h|h]-h]	Offset: Causes a hanging indentation (a paragraph in which the indentation of the first line is unchanged and subsequent lines are indented to the offset value.) SCRIPT/VIS system symbol: &\$OF Initial Setting: 0
.OR	x test y [input-line] "test" can be: lt le eq ne gt ge < <= = == > >=	Or: Tests the relationship between "x" and "y". When the test is satisfied or the most recently executed .IF, .AN, or .OR was also satisfied, SCRIPT/VIS processes the input-line.

Ctl Wd	Parameters	Description
.PA	[n|+n|-n] [NOSTART] [ODD|EVEN] [ON|OFF]	Page Eject: Causes a page eject, and can set the page number of the new page. Default: Ejects to next sequential page.
.PF		Previous Font: Causes the last stacked font to become the current font.
.PI	[START|END|ORDER|REF] [KEY /k1/k2/k3/ /t1[/t2[/t3[/pn]]]	Put Index: Puts a multi-level term in the index.
.PL	[v|+v|-v]	Page Length: Specifies the amount of space, including top and bottom margins, for each output page. Initial Setting: Logical device dependent. Default: Initial Setting. SCRIPT/VS system symbol: &\$PL
.PM	[h] [h2] [NOBIND] [+h] [+h2] [-h] [-h2]	Page Margins: Overrides page binding set with BIND option of the SCRIPT command unless NOBIND parameter was specified. Initial Setting: Logical device and binding dependent. Default: Initial Setting. SCRIPT/VS system symbols: &\$B0, &\$BE
.PN	[n|ON|OFF|OFFNO| ARABIC|ROMAN|ALPHA| NORM|FRAC| PREF string]	Page Numbering Mode: Controls external and internal page numbering. Initial Setting: Arabic numerals from 1. SCRIPT/VS system symbol: &\$PN
.PT	input-line	Put Table of Contents: Places the input line (which may be a control word, macro, GML tag, symbol, or line of text) into the file used to accumulate table of contents entries (DSMUTOC).
.PW	[h] [+h] [-h]	Page Width: Specifies the width of the logical page, including the page margin (binding). Initial Setting: Logical device dependent. Default: Initial setting. SCRIPT/VS system symbol: &\$PW
.PX	[c] [OFF] [NULL] [/string[/]]	Prefix: Specifies that lines read from input files that begin with specific control characters be prefixed with given character strings.
.QQ		Quick Quit: Causes SCRIPT/VS processing to terminate immediately without completing the current page.
.QU		Quit: Causes SCRIPT/VS processing to terminate after completing the current page.
.RC	n [ON|OFF|ON|OFF|c] * c ADJUST 2|h	Revision Code: Specifies a revision code symbol that is to be printed to the left of the output line that contains updated material.
.RD		Read Terminal: Allows user to type in one or more text lines while a file is being formatted.
.RE	[envname]	Restore Environment: Restores environments that have been previously saved with the .SA [Save Environment] control word. Environments may be restored by <u>name</u> .
.RF	[ON|OFF|CANCEL] [ODD|EVEN] [CANCEL|SUP|RES] [EXECUTE]	Running Footing: Specifies input lines that are to be saved as a running footing and processed at the bottom of each appropriate page.
.RH	[ON|OFF|CANCEL] [ODD|EVEN] [CANCEL|SUP|RES] [EXECUTE]	Running Heading: Specifies input lines that are to be saved as a running heading and processed at the top of each appropriate page.
.RI	[_l|n|ON|OFF] input-line]	Right Adjust: Produces output lines that are unconcatenated input lines aligned with the right-hand margin.
.RN	[ON|OFF]	Reference Numbers: Numbers output lines serially in body of page. Ignored for page printers. Initial Setting: OFF.

Ctl Wd	Parameters	Description
.RV	symname [[=']]	Read Variable: Allows user to assign a value to a symbol name by entering it at the terminal in response to an interactive request made while SCRIPT/VS is processing the input file.
.SA	[envname]	Save Status: Saves the current values and parameters of the formatting environment. Environments may be saved by <i>name</i> .
.SB	[0] [v] [+v] [-v]	Shift Baseline: Specifies that subsequent text is to be placed above or below the normal baseline. Ignored for line devices. Initial Setting: 0 Default: Return current baseline to normal baseline.
.SC		Single-Column Mode: Causes SCRIPT/VS to save the current column definition and format subsequent input lines in a single column.
.SE	symname{n} 'qstring' symname{n} = [symvalue] [&] [SUBSTR str start length [INDEX str] [str2] symname{n} OFF symname LIB	Set Symbol: Defines a symbol name and assigns a value to it.
.SI	segname [WIDTH h] [DEPTH v] [INLINE]	Segment Include: Identifies a segment to be included in the document at the current column position. Ignored for line devices.
.SK	[_][v] [A] [C] [P]	Skip: Specifies the amount of space to insert before the next text output line. No lines are inserted if the .SK occurs at the top of a page or column.
.SO	[DOC name] [PID naa] [OPR number] [RPW password] [DPW password]	STAIRS Output: Specifies information for STAIRS/VS CTF output.
.SP	[_][v] [A] [C] [P]	Space: Specifies the amount of space to insert before the next text output line. The specified number of lines are inserted even when the .SP occurs at the top of a page or column.
.SS		Single-Space Mode: Causes subsequent output lines to be single-spaced.
.SU	[_][n][ON|OFF] line]	Substitute Symbol: Controls the substitution of symbols with their previously assigned values. SCRIPT/VS system symbol: &#SU Initial Setting: ON
.SV	[ON|OFF] [NOADD] [NOSTEM] [NUM]	Spelling Verification: Defines the start and functions of the SCRIPT/VS spelling verification function. Enabled with the SPELLCHK option. Initial Setting: ON.
.SX	[F|C] /lpart/fill/rpart/	Split Text: Produces an output line of three parts: "left" is aligned with the current left margin; "right" is aligned with the current right margin; "fill" is centered or repeated between the two strings.
.TC	[_][n] [name|control|/]	Table of Contents: Imbeds the table of contents file (DSMUTTOC), which consists of table of contents entries automatically generated by the .Hn control words, and entries inserted with the .PT [Put Table of Contents] control word. Use the THOPASS option if the table of contents is not at the back of the document.
.TE	[_][n][ON|OFF]	Terminal Input: Allows user to enter lines interactively from the terminal when the file is formatted.

SCRIPT/VS Control Word Summary (Part 6 of 7)

Ctl Wd	Parameters	Description
.TH	[input-line]	Then: Processes the input-line if the most recently executed .IF, .AN, or .OR control word was satisfied.
.TI	[s t ...]	Translate Input: Specifies character translations to be performed on input lines before SCRIPT/VS processing begins. Initial Setting: No translate is in effect. Default: Restores the initial setting.
.TM	[v|v|-v]	Top Margin: Specifies the amount of space in the top margin area. SCRIPT/VS system symbol: &\$TM Initial Setting: Logical device dependent. Default: Restores the initial setting.
.TP	[SET|ADD|DEL] [[f/h] [LEFT|CENTER| RIGHT|CHAR c]	Tab Position: Specifies tab settings and allows text to be left-, center-, right-, or character-aligned at each tab position. Default: Clears the tab table.
.TR	[s t ...]	Translate Character: Specifies character translations to be performed on output. Default: Restores the initial output translate table.
.TS	s [/string/|OFF|IGNORE]	Translate String: Translates a single character into a string.
.TU	[s t ...]	Translate Uppercase: Specifies character translations to be performed for capitalization. Initial Setting: No translate is in effect. Default: Restores the initial setting.
.TY	input-line	Type On Terminal: Types the input line on the user's terminal during formatting.
.UC	[|n|ON|OFF| input- line]	Underscore and Capitalize: <u>UNDERSCORES AND CAPITALIZES</u> one or more subsequent input lines. Initial Setting: OFF Default: 1
.UD	[ON|OFF] [rulename] [v] [-v]	Underscore Definition: Determines whether blanks will be underscored when the .UC and .US control words are used. Initial Setting: ON Default: Restores the initial setting.
.UN	[0|h|+h|-h]	Undent: Causes the next output line's indentation to change. It is moved to the left of the current left margin. Initial Setting: 0 Default: 0
.UP	[|n|ON|OFF| input-line]	Uppercase: Prints one or more subsequent input lines in UPPERCASE characters. Initial Setting: OFF Default: 1
.US	[|n|ON|OFF| input-line]	Underscore: Prints one or more subsequent input lines with <u>underscoring</u> characters. Initial Setting: OFF Default: 1
.UW	[word word ...]	Unverified Words: Generated by spelling verification for unverified words.
.VR	[rulename] [h|LEFT|RIGHT] [L|ALIGN] [CENTER|R|ALIGN] [OFF]	Vertical Rule: Place vertical rules in the column. SCRIPT/VS system symbol: &\$VR
.WF	[|n|ON|OFF| TAG IMBED|ERASE| input-line]	Write to File: Writes one or more input lines to the output file DSMUTWTF. IMBED: imbeds file DSMUTWTF. ERASE: erases file DSMUTWTF.
.WS	[NORMAL [h] [BY [f]]]	Word Space: Controls the width of word spaces. Initial Setting: Dependent on default wordspace value of the current font. Default: Restores the initial setting.
.WZ	[ON|OFF]	Widow Zone: Turns widow processing on or off. Initial Setting: ON Default: ON

Space Unit	Specified As	Examples
Centimeter	aCM	4.25cm 2,54cm 15cm
Character (Horizontal)	a	5 12.5 1,33
Cicero	nCp	c12 (12 didot points) 2c3 (2 Ciceros and 3 points) c1.5 (1.5 didot points)
Device Unit (Horizontal)	nDH	10dh 600dh
Device Unit (Vertical)	nDV	10dv 600dv
Em-space (Horizontal)	aMH -or- aM	6mh 6m .33mh .33m
Em-space (Vertical)	aMV	1mv .5mv
Inch	aI	3.5i 6,5i .75i
Line (Vertical)	a	2 3.5 1,75
Millimeter	aMM	12.7mm 25,4mm 100mm
Pica	nPp	p6 (6 points) 3p2 (3 picas and 2 points) p1.5 (1.5 points)

Where:

a is a number of centimeters, characters, ems, inches, lines, or millimeters. The number may be fractional, with up to two decimal positions, and either a period (.) or comma (,) can be used to separate the integral and fractional portions of the number.

n is a number of whole cicerros, picas, or device units.

p is a number of points. (There are twelve points in a cicero or pica, and 72 points in an inch.)

Space Units Notation

	.H0	.H1	.H2	.H3	.H4	.H5	.H6
New page for heading		yes					
Section breaks around heading		yes					
Heading alignment		out- side	left	left	left		
Space before heading	0	0	0	0	0	0	0
Skip before heading	0	0	3	3	3	1	1
Space after heading	0	5	2	2	2	0	0
Heading underscored		yes	yes		yes	yes	yes
Heading capitalized		yes	yes	yes		yes	
Break before heading		yes	yes	yes	yes		
Table of Contents entry	yes	yes	yes	yes			
Table of Contents only	yes						
Skip before T.O.C. entry		yes					
T.O.C. indentation	0	0	0	2	4	6	8
Automatic hyphenation	0	yes	yes	yes	yes	yes	yes
Hanging indent	0	no	no	no	no	no	no

The .DH [Define Head Level] control word is specified as
.dh n options
where "n" is the head-level being defined, and "options" are:

BR, NBR Cause a break after heading
PA, NPA Start a new page for the heading
TC, NTC Create table of contents entry for the heading
TO, NTO Table of contents entry only
TS, NTS Skip before table of contents entry
UP, NUP Capitalize the heading
US, NUS Underscore the heading
DOT, NODOT Separate table of contents entry from page number with "dot-leader"
NUM, NONUM Number heading with decimal section number
SECT, NOSECT Place heading in a single column section
AUTOHY, NOHY Make heading automatically eligible for hyphenation
CENTER Center the text of a heading
LEFT Left justify the text of a heading
INSIDE Align the text of a heading against the inside margin
OUTSIDE Align the text of a heading against the outside margin
RIGHT Right align the text of a heading
NOHANG Do not format a multiple line heading in hang indent style
HANG n Format a multiple line heading in hang indent style
HANG AUTO Automatically format a multiple line heading in hang indent style
FONT fontname Specify font to be used for the heading
SPBF v Amount of space to precede the heading
SKBF v Amount of space to be skipped before the heading
SPAF v Amount of space to follow the heading
TCIN h Amount of indentation for table of contents entry
TFONT fontname Specify the font for table of contents entry