CHAPTER
20

The GOPTIONS Procedure

Overview

The GOPTIONS procedure provides information about the values of graphics options and the global statement definitions that are currently in effect in your session. The values displayed are either the defaults of the current device driver or user-defined values that have been assigned in your SAS session. You can use the GOPTIONS procedure to

□ list the current values of all of the graphics options, or of one specified option

□ display the values of all of the AXIS, FOOTNOTE, LEGEND, PATTERN, SYMBOL, and TITLE definitions that are currently in effect.

Note: Do not confuse the GOPTIONS procedure with the GOPTIONS statement. The GOPTIONS procedure lists the values that are defined in a GOPTIONS statement as well as in any other global statement definitions. See "GOPTIONS Statement" on page 182 for a list of the graphics options that you can set with the GOPTIONS statement. See Chapter 9, "Graphics Options and Device Parameters Dictionary," on page 301 for a complete description of each graphics option. △

The list of graphics options displays in the SAS LOG window and includes the names of the options, the current values, and a brief description of each one. You can use PROC GOPTIONS statement options to control what information is listed and where it appears in the LOG window. Output 20.1 on page 795 contains part of a sample LOG listing.

Output 20.1   Parital Output from the GOPTIONS Procedure

```
                    SAS/GRAPH software options and parameters
                 (executing in DMS Programming Environment environment)
NOADMGDF                         GDDM driver output an ADMGDF file
ASPECT=                          Aspect ratio (width/height) for software characters
NOAUTOCOPY                       Automatic hardcopy after display
NOAUTOFEED                       Automatic paper feed after plot
NOAUTOSIZE                       Change character cell size to preserve device
                                 catalog rows and columns
BAUD=                            Communications line speed
BINDING=NOBINDING                Binding edge
NOBORDER                         Draw a border around display or plot
CBACK=                           Background color
CBY=                             BY line color
CELL                             Hardware characters must be on cell boundaries
CHARACTERS                       Use hardware characters
CHARTYPE=                        Select hardware font
CIRCLEARC                        Use hardware circle/arc generator
NOCOLLATE                        Collate output
COLORS=( )                       Default color list
CPATTERN=                        Default pattern color
CSYMBOL=                         Default symbol color
CTEXT=                           Default text color
CTITLE=                          Default title, footnote and note color
DASH                             Use hardware dashed line generator
DASHSCALE=                       Dash pattern scale factor
DELAY=                           Animation delay time in milliseconds
DEVADDR=                         IBM Device address, qname, or node name
DEVICE=                          Default device driver
DEVMAP=DEFAULT                   Output character map for hardware text
DISPLAY                          Display graph on device
DISPOSAL=NONE                    Image animation disposal method
DRVINIT=                         Host command executed before driver initialization
DRVTERM=                         Host command executed after driver termination
NODUPLEX                         Duplex printing
NOERASE                          Erase graph upon completion
FASTTEXT                         Use quicker, less precise, integer font rendering
                                 routines; generally unsuitable for multiple device
                                 or templated replay situations.
```

Note: All of the graphics options that are displayed by the GOPTIONS procedure are described in Chapter 9, "Graphics Options and Device Parameters Dictionary," on page 301. △

Procedure Syntax

PROC GOPTIONS *< option(s)>*;

PROC GOPTIONS Statement

Lists the graphics options, and their values and descriptions in the LOG window. Optionally, it lists the currently defined global statements. By default, each listed item is displayed on a separate line.

Syntax

PROC GOPTIONS *<option(s)>*;

option(s) can be one or more options from the following categories:

- ☐ item request options
    - AXIS
    - FOOTNOTE
    - LEGEND
    - OPTION=*graphics-option*
    - PATTERN
    - SYMBOL
    - TITLE
- ☐ listing format options
    - CENTIMETERS
    - NOLIST
    - NOLOG
    - SHORT

Options

You can specify as many options as you want and list them in any order.

AXIS
A
requests a list of all current AXIS definitions. AXIS also lists the current values for all graphics options, unless you use the NOLIST option. If you have not defined any AXIS statements, the GOPTIONS procedure issues a message.

CENTIMETERS
CM
displays the values of the HORIGIN=, HSIZE=, PAPERFEED=, PAPERLIMIT=, VORIGIN=, and VSIZE= graphics options in units of centimeters (CM). These graphics options use units of IN or CM only, and their values are always stored as inches even if you specify CM. Therefore, the GOPTIONS procedure displays these values in inches, unless you specify the CENTIMETERS option.

Note: The CENTIMETERS option does not affect the graphics options that can use unit specifications of CELLS, CM, IN, PCT, and PT. △

FOOTNOTE
F
requests a list of all of the current FOOTNOTE and TITLE definitions. FOOTNOTE also lists the current values for all of the graphics options, unless you use the NOLIST option. If you have not defined any FOOTNOTE or TITLE statements, the GOPTIONS procedure issues a message.

Featured in: Example 1 on page 798

LEGEND

L

requests a list of all of the current LEGEND definitions. LEGEND lists the current values for all of the graphics options, unless you use the NOLIST option. If you have not defined any LEGEND statements, the GOPTIONS procedure issues a message.

NOLIST

N

suppresses the display of graphics options. Use the NOLIST option in conjunction with the appropriate statement request option when you want to list only the current AXIS, FOOTNOTE, LEGEND, PATTERN, SYMBOL, or TITLE definitions.

Featured in: Example 1 on page 798

NOLOG

displays the output in the OUTPUT window instead of the LOG window.

OPTION=*graphics-option*

requests information on the specified graphics option. For these options, requesting one displays the value of both:

- □ HSIZE= and VSIZE=
- □ HPOS= and VPOS=
- □ XMAX= and YMAX=
- □ XPIXELS= and YPIXELS=

PATTERN

P

requests a list of all of the current PATTERN definitions. PATTERN lists the current values for all of the graphics options, unless you use the NOLIST. If you have not defined any PATTERN statements, the GOPTIONS procedure issues a message.

SHORT

suppresses the descriptions of the graphics options and displays the graphics options values in an alphabetical list in paragraph form.

Featured in: Example 2 on page 799

SYMBOL

S

requests a list of all of the current SYMBOL definitions. SYMBOL lists the current values for all of the graphics options, unless you use the NOLIST. If you have not defined any SYMBOL statements, the GOPTIONS procedure issues a message.

TITLE

T

requests a list of all of the current TITLE and FOOTNOTE definitions. TITLE lists the current values for all of the graphics options, unless you use the NOLIST option. If you have not defined any FOOTNOTE or TITLE statements, the GOPTIONS procedure issues messages.

Examples

Example 1: Displaying TITLE and FOOTNOTE Statements

Procedure features:

This example uses the FOOTNOTE option to display the current definitions of both the FOOTNOTE and TITLE statements. It also uses the NOLIST option to suppress the list of graphics options. Output 20.2 on page 799 shows the listing that appears in the LOG.

Output 20.2 Using the NOLIST Option (GR20N01)

```
TITLE1 HEIGHT=6 COLOR=BLUE FONT=SWISSB 'Production Quality' ;
TITLE2 HEIGHT=4 COLOR=BLUE FONT=SWISSB 'January through June';

FOOTNOTE1 HEIGHT=3 COLOR=GREEN FONT=SWISS 'Data from SASDATA.QUALITY' ;

FOOTNOTE2 HEIGHT=3 COLOR=GREEN FONT=SWISS '* denotes approximations' ;
```

Clear all global statements.

```
goptions reset=global;
```

Define titles and footnotes.

```
title1 h=6 c=blue f=swissb 'Production Quality';
title2 h=4 c=blue f=swissb 'January through June';
footnote1 h=3 c=green f=swiss 'Data from SASDATA.QUALITY';
footnote2 h=3 c=green f=swiss '* denotes approximations';
```

Produce the listing. The NOLIST and FOOTNOTE options control the information that appears in the LOG window.

```
proc goptions nolist footnote;
run;
```

Example 2: Displaying Graphics Options without the Description

This example uses the SHORT option to display only the values of graphics options without the description of each graphics option. Output 20.3 on page 800 shows the listing that appears in the LOG window.

Output 20.3   Using the SHORT Option (GR20N02)

```
                    SAS/GRAPH software options and parameters
              (executing in DMS Programming Environment environment)
NOADMGDF ASPECT= NOAUTOCOPY NOAUTOFEED NOAUTOSIZE BAUD= BINDING=NOBINDING
BORDER CBACK= CBY= CELL CHARACTERS CHARTYPE= CIRCLEARC NOCOLLATE COLORS=( BLUE
GREEN RED ) CPATTERN=BLUE CSYMBOL= CTEXT=RED CTITLE=GREEN DASH DASHSCALE=
DELAY= DEVADDR= DEVICE= DEVMAP=DEFAULT DISPLAY DISPOSAL=NONE DRVINIT= DRVTERM=
NODUPLEX NOERASE FASTTEXT FBY= FCACHE=3 FILECLOSE= FILL FILLINC= FONTRES=NORMAL
FTEXT=SWISSB FTITLE= FTRACK=TIGHT GACCESS= GCLASS=G GCOPIES=(0, 20)
GDDMCOPY=FSCOPY GDDMNICKNAME= GDDMTOKEN= GDEST=LOCAL GEND= GEPILOG= GFORMS=
NOGOPT10 NOGOPT11 NOGOPT12 NOGOPT13 NOGOPT14 NOGOPT15 GOPTINT1=0 GOPTINT2=0
GOPTDBL1= GOPTDBL2= GOPTSTR1= GOPTSTR2= GOUTMODE=APPEND GOUTTYPE=INDEPENDENT
GPROLOG= GPROTOCOL= GRAPHRC GSFLEN= GSFMODE=PORT GSFNAME= NOGSFPROMPT GSIZE=
GSTART= GUNIT=PERCENT GWAIT= GWRITER=SASWTR HANDSHAKE= HBY=4  HORIGIN= HPOS=
HSIZE= HTEXT=3  HTITLE=6  INBIN= INTERPOL= ITERATION= NONINTERLACED
KEYMAP=DEFAULT LFACTOR= OFFSET= OFFSHADOW=(0.0625 in., -0.0625 in.) OUTBIN=
PAPERFEED= PAPERLIMIT= PAPERSIZE= PAPERTYPE= PENMOUNTS= PENSORT PIEFILL NOPCLIP
POLYGONCLIP POLYGONFILL POSTGEPILOG= POSTGRAPH= POSTGPROLOG= PPDFILE=
PREGEPILOG= PREGRAPH= PREGPROLOG= PROMPT PROMPTCHARS='000A010D05000000'X
RENDER=MEMORY RENDERLIB=WORK REPAINT= NOREVERSE NOROTATE SIMFONT= SPEED= NOSWAP
SYMBOL TARGETDEVICE= NOTRANSPARENCY TRANTAB= UCC= NOUSERINPUT NOV5COMP NOV6COMP
VORIGIN= VPOS= VSIZE= XMAX= XPIXELS= YMAX= YPIXELS=
```

Set the graphics environment. The values of the graphics options specified in this statement appear in the LOG listing.

```
goptions reset=global gunit=pct border
         ftext=swissb htitle=6 htext=3
         ctext=red cpattern=blue ctitle=green
         colors=(blue green red) hby=4;
```

Produce the listing. The SHORT option suppresses the display of the description of each graphics option.

```
proc goptions short;
run;
```