

Titles and footnotes are obvious targets for in-line formats. The syntax for in-line formatting for **procedural** output will vary by procedure and destination. However, this is not true of in-line formatting for titles and footnotes for the most part (some HTML tagsets require different syntax.) In-line formatting of titles and footnotes is also not limited to PROC PRINT, PROC REPORT and PROC TABULATE (one example on the poster is SAS/GRAPH.) However, you may run into conflicts with the style templates for other procedures. The table below is a chart of title and footnote attributes I have tested successfully. There are quite a few other possibilities using ODS ESCAPECHAR to explore!

Attribute	Syntax	Destinations*	
		Printer	HTML
Bold	title1 bold "Bold Title" ;	x	x
Italic	title1 italic "Italic Title" ;	x	x
Font Face	title1 font=Arial "Specify Arial Font" ;	x	x
Font Color	title1 color=red "Specify Font Color Red" ;	x	x
Background Color	title1 bcolor=red "Specify Background Color Red" ;		x
Font Size (Height)	title1 height=8pt "Specify Font Size 8 pt" ; <i>NOTE: Font height may be specified in Points, Inches and Centimeters, as well as the relative sizes for HTML (Height=1 through 7).</i>	x	x
Link	title1 link="http://www.yourwebsite.com/" "Name of your web site"; <i>NOTE: The behavior of the link is different between Printer (RTF/PDF/Printer) and HTML destinations. HTML has click-through behavior while you must CNTL-click for printer destinations.</i>	x	x
Justification	title1 justify=center "Center Justification"; <i>NOTE: Short versions j=l/c/r, just=left/center/right.</i>	x	x
Animation	title3 "{\animtext2 This title is animated}"; <i>NOTE: There are 6 standard animation formats which can be specified as \animtext1-\animtext6.</i>	x	
Underline (RTF only))	<i>Must be used with ODS ESCAPECHAR.</i> Ods escapechar "^"; title '\ul Underlined Title \ul0'	x	
Pre/Post Images	<i>Must be used with ODS ESCAPECHAR.</i> Ods escapechar "^"; title1 '^S={preimage="logo.gif"}' "Title text";	x	x
Super/Subscripts	<i>Must be used with ODS ESCAPECHAR.</i> Ods escapechar "^"; title1 "Table 1. Number^{super*} of participants";	x	x

In-line formats may be "stacked" and changed mid-stream in a title or footnote. Some tagsets are more problematic than others in applying in-line formats in titles (for example the HTML destinations.) Always check your output carefully!

Please contact the author, louise_hadden@abtassoc.com, for full code samples.

More resources:

SGF 2007 Papers and Presentations by Eric Gebhart, Vince Delgobbo, and Cynthia Zender of SAS®

SGF 2007 Papers and Presentations by Lauren Haworth, Wendi Wright and Leroy Bessler

Earlier (SUGI) Papers on Doin' it in Style by Ray Pass and Sandy McNeill, Scott Huntley of SAS®, Wayne Hester of SAS®, and Chevell Parker of SAS®
support.sas.com - it's great!

PROC FONTREG allows you to register other fonts in your SAS installation. In order to specify a custom font in in-line formatting, the font must be available in your system library (usually in your windows\fonts subdirectory on the PC platform) and registered via PROC FONTREG. While the Klingon font may be frivolous, the example serves to illustrate that custom fonts can be obtained and used in SAS® reporting. If a client requires a custom font for their reports, this is the way to access it in SAS.

```
proc fontreg msglevel=verbose;
  fontpath %sysget(systemroot)
    \fonts";
run;
```

This piece of code will attempt to register **all** fonts found in your fonts subdirectory. Here are the abbreviated results in the SAS log:

NOTE: The font Klingon (Style: Regular, Weight: Normal) has been added to the SAS Registry at [CORE\PRINTING\FREETYPE\FONTS\<ttf>Klingon]. Since it is a TRUETYPE font, it must be referenced as <ttf> Klingon in SAS. The font resides in file C:\WINDOWS\fonts\Klingon.TTF.

TIP: to obtain the oh-so-desirable Klingon (or any other font), search the internet for free fonts. Download the font(s) into your system fonts subdirectory and run PROC FONTREG as above. (You may need to have your sys admin do this if you don't have administrator rights. But it is well worth groveling!)

TIP: use custom fonts only with the PDF destination/tagset which embeds fonts, unless you know the system on which a file is displayed has that particular font resident. Otherwise, the font will be replaced by something mundane.

Modifying Procedural Output

In-line formatting of procedural output can be used with three procedures: PROC PRINT, PROC REPORT and PROC TABULATE. Each procedure has a different syntax for applying in-line formats. Some, but not all, of this syntax also varies with the output destination.

Procedure	Element	Destination	Attribute
PROC PRINT	HEADER, VAR	PRINTER	Bold, Italic, Font Size, Font Color, Font Face, Background Color, Text Wrapping, Text Rotation*, Pre and Post Images, Super and Sub Scripts, Links, Justification
		HTML	Bold, Italic, Font Size, Font Color, Font Face, Background Color, Text Wrapping, Text Rotation, Pre and Post Images, Super and Sub Scripts, Links, Justification, HTMLSTYLE
PROC REPORT	HEADER, REPORT, LINES, COLUMNS, ROWS***	PRINTER	Bold, Italic, Font Size, Font Color, Font Face, Background Color, Text Wrapping, Text Rotation*, Pre and Post Images, Super and Sub Scripts, Links, Justification, Cell Width, Cell Padding, Vertical Justification
		HTML	Bold, Italic, Font Size, Font Color, Font Face, Background Color, Text Wrapping, Text Rotation, Pre and Post Images, Super and Sub Scripts, Links, Justification, Cell Width, HTMLSTYLE
PROC TABULATE	TABULATE, VAR, TABLE, CLASS, CLASSLEV, BOX	PRINTER	Bold, Italic, Font Size, Font Color, Font Face, Background Color, Text Wrapping, Text Rotation*, Pre and Post Images, Super and Sub Scripts, Links, Justification, Cell Width
		HTML	Bold, Italic, Font Size, Font Color, Font Face, Background Color, Text Wrapping, Text Rotation, Pre and Post Images, Super and Sub Scripts, Links, Justification, Cell Width, HTMLSTYLE

*Text rotation for RTF can be done within SAS with a macro to convert RTF codes. Text rotation for HTML destinations can be done using HTMLSTYLE=.

***Rows in PROC REPORT can be selectively formatted (for example, shaded or bolded) by using a non-printing formatting variable, computed in a data step or on the fly in PROC REPORT.

Modifying ODS Text Fields

ODS text fields are available for printer destinations only (RTF, PDF, Printer). The syntax for in-line formatting of ODS text fields is similar to the syntax for modifying procedural output. The code below (used inside a ODS RTF statement and with ODS ESCAPECHAR='^') centers the title and assigns the font to be used (Klingon!)

```
ods rtf text="^S={outputwidth=100% just=c font_face=Klingon} this is
Klingon";
```

ODS RTF / PROC REPORT

```
proc report nowd data=table5 spacing=8
  style(report)={cellpadding=3pt vjust=b}
  style(lines)={just=left font_face=Arial}
  style(header)={just=center font_face=Arial font_weight=bold
    font_size=8pt} ls=176;
  columns fmtvar ('Main Partner ^{super **}' ('Sex' count1 colper1)
    ('Unprotected Sex^{super ****}' count2 colper2) ) count boldit;
  define boldit / display '' noprint;
  define count / style(COLUMN)={just=c font_face=Arial
    font_size=8pt cellwidth=100 asis=on}
  style(HEADER)={just=c font_face=Arial font_weight=bold
    font_size=8pt cellwidth=100 asis=on};
  compute boldit;
  if (boldit eq 1) then call define(_row_, "STYLE",
    "STYLE={FONT_WEIGHT=BOLD}"); /* bolds rows */
endcomp;
```

ODS HTML4 / PROC PRINT

```
proc print data=table1 noobs label uniform split=""
  style(header)={font_face=Arial font_size=1
    font_weight=bold justify=left};
  var xlab xval / style={justify=left font_size=1};
  var totaln wttotaln / style={font_size=1};
  var totper / style={font_size=1
    htmlstyle="vnd.ms-excel.numberformat:0.0%"};
  var chisqp / style={font_size=1 foreground=sigf
    htmlstyle="vnd.ms-excel.numberformat:0.0000"};
```

Note: HTMLSTYLE attribute syntax is dependent on what tagset and/or version of MS Excel® you are using. For example, htmlstyle="mso-rotate:90; height:100pt" can be used to rotate text for more recent versions of Excel.

ODS RTF / PROC TABULATE

```
proc tabulate data=anal missing format=20.
  style={bordercolor=black borderwidth=1 cellwidth=75
    font=("Times New Roman",7pt,Normal)};
  var counter ... /
  s={bordercolor=black borderwidth=2 cellwidth=75
    font=("Times New Roman",7pt,Bold)};
  class region distsz3 /
  s={background=lightblue bordercolor=black borderwidth=2
    font=("Times New Roman",8pt,Bold)};
  classlev region distsz3 /
  s={background=lightblue bordercolor=black borderwidth=2
    font=("Times New Roman",8pt)};
  tables all={label='TOTAL' s={font=("Times New
    Roman",8pt,Bold)
    foreground=white background=blue}} region,
    counter*(sum=' 'f=comma9.)
  / box={s={bordercolor=black borderwidth=2
    background=lightblue
    preimage='logo.jpg'}};
```

Please contact the author, louise_hadden@abtassoc.com, for full code samples.