Paper 186-27

SAS® with Style: Creating your own ODS Style Template

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➢ ABSTRACT

Once you've started using the Output Delivery System, you'll quickly discover that your taste in output design probably doesn't coincide with the built in ODS styles shipped with SAS software. To create output with more panache, you need to create your own style template. This workshop will take you step by step through the process of creating a custom style for your output.

You'll learn how to make minor modifications, and how to give your output a complete makeover. If you'd like all of your SAS output to be in hot pink on an acid green background with a gigantic script font, this workshop will show you how! Or, if you'd just like to make the output smaller and use colors that coordinate with your company logo, you can do that too.

The workshop will walk through the TEMPLATE procedure, showing how you can redefine the default style elements and attributes to customize fonts, colors, and borders to suit your own personal or corporate style. You'll be given a basic style template that you can customize during the workshop and then take home to try out on your ODS output.

The workshop is aimed at beginning to intermediate ODS users, and is based on SAS version 8.

➢ INTRODUCTION

ODS styles are a huge topic, and there's no way to cover them in depth in this format. This workshop will take a fast-track approach. We'll cover just enough of the syntax to get you started. Then, we'll use a sample style template that can be edited to modify color, fonts, spacing, rules, and borders.

This will allow you customize most aspects of your output. However, to truly control the look of your output, plan on taking a much more in-depth course.

➢ USING THE STYLE= OPTION

You may not have realized it, but whenever you issue an ODS command you are using a style definition. By default, ODS uses a standard style for each output destination. When you issue an ODS statement like:

```
ods html body='body.html';
```

You're really issuing the following:

```
ods html body='body.html'
         style=Default;
```

So if you wish to switch to another style, all you have to do is add a STYLE= option and specify the name of a different style. However, the only choices you have are the standard styles shipped with your SAS software.

➢ PROC TEMPLATE

To truly change the look of your output, you need to create your own style. This is done by using the TEMPLATE procedure. This new procedure has statements that allow you to define every aspect of a style.

However, if we had to specify every aspect of every new style, we'd spend all of our time typing PROC TEMPLATE code. A complete style definition could run to hundreds of lines of code.

To make our life easier, we have the PARENT statement. It allows a new style to be based on an existing style. Then you can add lines of code for only those things you want to change.

➢ THE EXAMPLE PROGRAM

Rather than try to explain all of the statements and syntax available for PROC TEMPLATE, let's just look at our example program (Appendix A). This program creates a new custom style.

The first section of code sets up the name of the style (Custom) and indicates that it will be based on the Default style.

```
proc template;
  define style Styles.Custom;
  parent = Styles.Default;
```

The next section of code sets up a list of font names and assigns them characteristics. This list is used later in the program as a shorthand way to specify fonts.

```
style fonts from fonts /
  'TitleFont'=("Arial,Helvetica,Helv",14pt,Bold Italic)
  'TitleFont2'=("Arial,Helvetica,Helv",12pt,Bold Italic)
  'StrongFont'=("Arial, Helvetica, Helv",12pt,Bold)
  'EmphasisFont'=("Arial,Helvetica,Helv",10pt,Italic)
  'headingFont'=("Arial, Helvetica, Helv",12pt,Bold)
  'docFont'=("Arial, Helvetica, Helv",11pt)
  'footFont'=("Arial, Helvetica, Helv",8pt);
```

This style statement is used to supply attributes to the style element called "fonts". By using the "from fonts" syntax, we are overwriting and adding attributes to an existing style element. In this case, we are setting up seven font names and their characteristics. See Appendix B for a reference on how and where each font name is used.

Each attribute includes three characteristics in parentheses. Commas separate each characteristic. The first thing we specify is the typeface. In this example, you will see that each font name has a list of three typefaces. This is done to take advantage of one of the features of HTML output. Our first choice font is listed first; the other two are alternates in case the person browsing our web page does not have the first choice font.

The next section of code is very similar to the font style element. Instead of a list of font names, this one is a list of font colors. In this case a replace statement is used since we're going to replace the entire list.

```
replace color_list /
  'fgB2' = blue     /* links */
  'fgB1' = darkmagenta  /* visited links */
  'fgA1' = black    /* table cell foreground */
  'bgA3' = lightgrey    /* table cell background */
  'bgA1' = lightgrey    /* table background */
  'fgR'  = darkblue /* row header foreground */
  'bgR'  = darkgray /* row header background */
  'fgA2' = darkblue /* column header foreground */
  'bgA2' = darkgray /* column header background /
  'bgP'  = white    /* page background */
  'fgA'  = navy     /* foreground: other */
  'bgA'  = white    /* background: other */;
```

The cryptic color names like 'fgA1' and 'bgP' are used by the style definition to apply these colors to various parts of the output.

The next section of code sets up the style element that controls rules, borders, and spacing for all tables. Since virtually all ODS output is in the form of tables, this is an important style element.

```
replace Output from Container /
  frame = void /* outside borders */
  rules = none /* internal borders */
  borderwidth = 1pt /* width of borders and rules */
  bordercolor = color_list('fga1') /* border color */
  cellpadding = 7pt /* space around cell contents */
  cellspacing = 0pt /* space between table cells */;
```

Unlike the previous sections, this one is not a list of names to be used elsewhere. This element lists the actual style attributes and applies settings.

The next section of code will not be covered in this workshop. It uses the colors and fonts to modify a number of other style elements. Just ignore the style statements for Body, Contents, Data, SystemTitle, SystemFooter, RowHeader, and Header.

In addition to this section that modifies some style elements, there are dozens of other style statements that are "included" in our style. Those elements are part of the Default style, and are included by way of the PARENT statement at the beginning of our PROC TEMPLATE. (If you'd like to see the full Default style, issue a PROC TEMPLATE with a single statement: "source styles.default;" and a RUN. This will dump the full definition to the log. For the purposes of this workshop, you don't need to understand the last section of code, or the code in the Default style. We're just going to work with the top parts.

At the end of the example PROC TEMPLATE are two more lines of code. These end the style definition that began with the DEFINE STYLE statement, and run the procedure.

```
  end;
run;
```

After the PROC TEMPLATE, the example program includes some code to run a sample procedure so we can see what our style looks like. This code starts with some options settings.

```
options nodate nonumber;
ods noptitle;
ods proclabel 'Frequencies';
```

The OPTIONS statement gets rid of dates and page numbers. The first ODS statement turns off the standard procedure titles ("The FREQ Procedure") so they don't clutter up our output. The second ODS statement is used to control the procedure labels in the HTML table of contents. Instead of the default title "The FREQ Procedure", our table of contents will use "Frequencies".

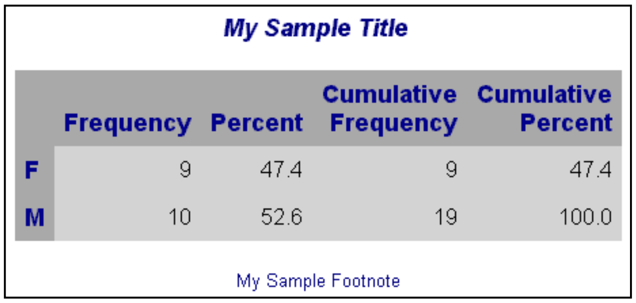
The remaining lines of example code are a simple PROC FREQ, and the ODS statements needed to create HTML, RTF, and PDF output (so we can see how the style works with each output destination).

```
ods html file='a:\body.html'
    contents='a:\cont.html'
    frame='a:\frame.html' style=Custom;
ods rtf file='a:\body.rtf' style=Custom;
ods pdf file='a:\body.pdf' notoc style=Custom;
        title 'My Sample Title';
        footnote 'My Sample Footnote';
        proc freq data=sashelp.class;
           tables sex;
        run;
ods html close;
ods rtf close;
ods pdf close;
```

The only important thing to note here is the style=Custom option on each ODS statement. This calls our newly created style and applies it to each output file.

That's it for the sample program. It's a very simple example of customizing a style, but it can be very powerful, as you'll see later.

Before going any further, try running this sample program. Be sure you have a floppy in the A: drive before you run the program. Then open each of the output files (a:\frame.html, a:\body.rtf,[1] and a:\body.pdf) to see how the style looks right now.



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

If you've used the Default style before, you'll realize that right now the Custom style doesn't look very different from Default. The remainder of this workshop will be devoted to customizing the style.

➢ CHANGING THE TYPEFACES

The first thing we will learn how to modify is the fonts. We'll be working with the fonts style element. To change the font in part of your output, all you have to do is use PROC TEMPLATE to modify the font definition that applies to that part of your output. Appendix B lists each of the font names, and where they apply.

For each font name, we can modify three characteristics. The first is the typeface. To make a change, simply replace the typefaces listed between quotes with typefaces of your choice. Keep in mind that the person receiving your output will need to have the same fonts in order to view the web page, RTF file, or PDF file[2] properly. You want to pick fonts that are commonly available. Appendix C lists some good font combinations to try.

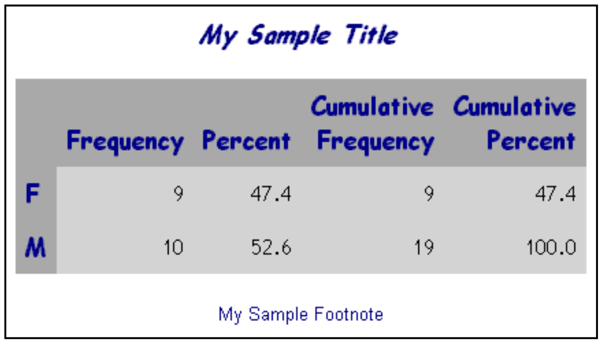
Using the sample program, try changing the typefaces used in the fonts style element. Before doing this, you may want to save the sample program using a different name so that you can go back if you make a mistake. Try changing a couple of the typefaces and then re-running the program. Check the three output types to see how the change affected HTML, RTF, and PDF output.

One warning: always close the RTF and PDF output before re-running the program. Otherwise the job will fail because the files are open and cannot be modified. For this reason, it is sometimes easier to work with HTML only while you are developing a new style. You can leave the web page open, and just use the refresh button on the browser to see each new version of the output. You can always check the RTF and PDF output when you are done with your modifications.

A sample modification:

```
style fonts from fonts /
  'TitleFont' = ("Comic Sans MS, Arial, Helvetica",
                 14pt,Bold Italic)
  'TitleFont2' = ("Comic Sans MS, Arial, Helvetica",
                 12pt,Bold Italic)
  'StrongFont' = ("Comic Sans MS, Arial, Helvetica",
                 12pt,Bold)
  'EmphasisFont' = ("Comic Sans MS, Arial, Helvetica",
                   10pt,Italic)
  'headingFont' = ("Comic Sans MS, Arial, Helvetica",
                   12pt,Bold)
  'docFont' = ("Trebuchet MS, Arial, Helvetica",
               12pt)
  'footFont' = ("Arial, Helvetica, Helv",
               8pt);
```

The resulting output:



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

➢ CHANGING THE FONT SIZES, WEIGHTS, AND STYLES

Now that we've got the typefaces we want, we can turn to the font sizes. You may have noticed that the default HTML output from ODS uses very large fonts. Our example style has been set up with somewhat smaller fonts already. You can choose to keep them this size, or make them larger or even smaller.

The Default style uses the same font specification for titles and footnotes. Our example style uses a different setting for each, so that you can have large titles and small footnotes.

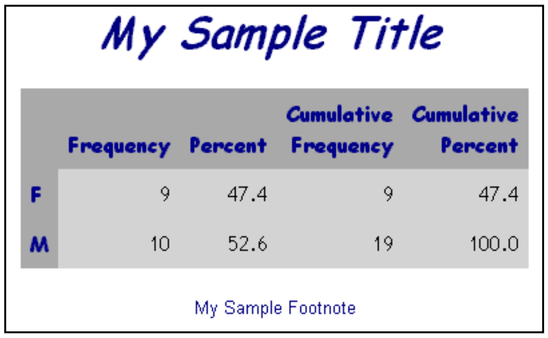
Try making some of the fonts bigger or smaller and see how this affects the output.

[1] To see how the RTF version really looks, you'll need to use print preview in Word. Otherwise the titles/footnotes will not look right.
[2] As of version 8.2, SAS does not embed fonts in PDF documents. Hopefully in the future this functionality will be added, allowing the use of any font in PDF output.

A sample modification:

```
style fonts from fonts /
  'TitleFont' = ("Comic Sans MS, Arial, Helvetica",
                 18pt,Bold Italic)
  'TitleFont2' = ("Comic Sans MS, Arial, Helvetica",
                 12pt,Bold Italic)
  'StrongFont' = ("Comic Sans MS, Arial, Helvetica",
                 12pt,Bold)
  'EmphasisFont' = ("Comic Sans MS, Arial, Helvetica",
                 10pt,Italic)
  'headingFont' = ("Comic Sans MS, Arial, Helvetica",
                 11pt,Bold)
  'docFont' = ("Trebuchet MS, Arial, Helvetica",
                 10pt)
  'footFont' = ("Arial, Helvetica, Helv",
                 8pt);
```

The resulting output:



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

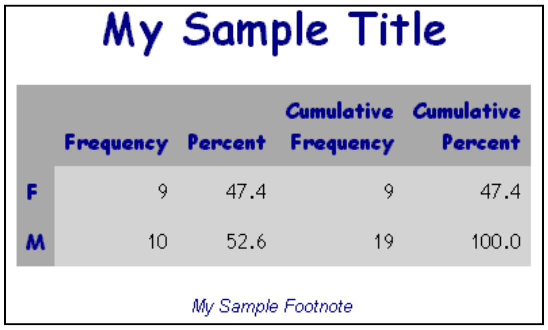
The other thing you can change about fonts is the font weight (Medium, Bold, Light) and the font style (Italic, Roman, Slant). You may also be able to control the font width, though few fonts honor settings like Compressed or Expanded. To use any of these settings, just list the appropriate keyword(s) after the font size specification. Generally, the only two settings that you'll want to add are Bold and/or Italic. If you leave this setting blank, the fonts are set to Medium Roman.

Try changing some of these settings to see what happens.

A sample modification:

```
style fonts from fonts /
  'TitleFont' = ("Comic Sans MS, Arial, Helvetica",
                 18pt, Italic)
  'TitleFont2' = ("Comic Sans MS, Arial, Helvetica",
                 12pt, Italic)
  'StrongFont' = ("Comic Sans MS, Arial, Helvetica",
                 12pt,Bold)
  'EmphasisFont' = ("Comic Sans MS, Arial, Helvetica",
                 10pt,Italic)
  'headingFont' = ("Comic Sans MS, Arial, Helvetica",
                 11pt,Bold)
  'docFont' = ("Trebuchet MS, Arial, Helvetica",
                 10pt)
  'footFont' = ("Arial, Helvetica, Helv",
                 8pt, Italic);
```

The resulting output:



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

➢ CHANGING THE COLORS

Changing the fonts is a fairly subtle thing. This next section lets you make big bold changes to your output. This section considers the color scheme.

ODS allows you to set the foreground (text) colors and background colors of every part of your output. These colors are set by defining a color scheme in the colors style element.

In the example program, each color is identified by name. Appendix D lists the color names you can use. This gives you a palette of 216 colors. This is a list of web-safe colors. You also have the option of specifying custom colors by using their RGB values given in hexadecimal. For example, white would be cxFFFFFF, and black would be cx000000 (the "cx" tells SAS that the following value is a hexadecimal color). For the purposes of this workshop, let's stick to the named colors.

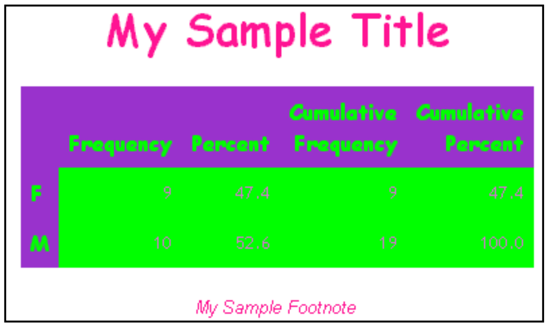
When you modify these colors, notice that some of the names start in "fg" and represent foreground colors. Others start in "bg" and represent background colors. These colors work in pairs, and you need to be sure that you pick pairs of colors that will be readable. For example, pink foreground text on a red background would be a problem.

Try creating a new color scheme. See how it looks. For this example, you will want to look at the RTF and PDF output as well as the HTML. Colors may be used somewhat differently between the destinations.

A sample modification:

```
replace color_list /
  'fgB2' = blue
  'fgB1' = darkmagenta
  'fgA1' = orchid
  'bgA3' = lime
  'bgA1' = white
  'fgR'  = lime
  'bgR'  = darkorchid
  'fgA2' = lime
  'bgA2' = darkorchid
  'fgA'  = deeppink
  'bgA'  = white
  'bgP'  = white;
```

The resulting output:



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

If you're not very creative, there's a web site that will help you design an attractive color scheme. Go to http://www.colorschemer.com/online/ and click on a color that you like. The web site will generate a group of 16 related colors that create an attractive color scheme.[3] You can then copy down the hex codes for these colors and use them in your style.

Another way to pick colors for your scheme is to use colors from your corporate logo. Ask your graphics department for the correct color codes. They should be able to give you the RGB values (you can find an RGB/hex converter on the web).

➢ CHANGING THE TABLE RULES AND BORDERS

The next thing we will modify is the table rules and borders. The lines around the table and between rows and columns are controlled by two attributes: rules and frame.

The frame attribute specifies whether there will be any lines around the outside of your tables. The frame is currently set to void, which means there will be no lines around the table. Another setting to try is box, which puts a line around the entire table. There are also settings that let you have borders top and bottom, both sides, or any individual edge.

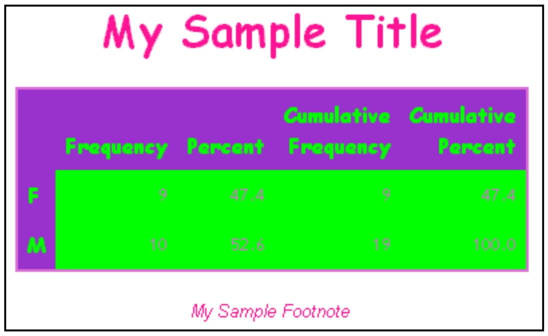
Try changing the frame setting. Don't worry about the line width or color right now; we'll get to that later.

A sample modification:

```
replace Output from Container /
  frame = box
  rules = none
  borderwidth = 1pt
  bordercolor = color_list('fga1')
  cellpadding = 7pt
  cellspacing = 0pt;
```

[3] Note: the site only works with Internet Explorer.

The resulting output is below. This change is a little hard to see, but lines have been added around the table.



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

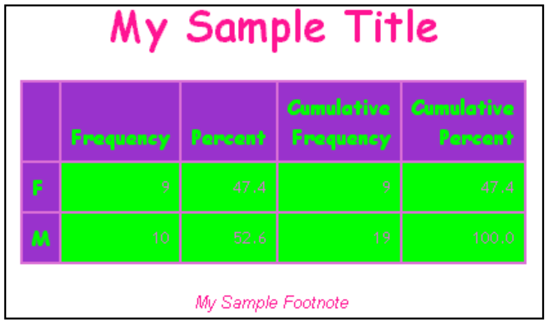
The rules attribute controls the lines that appear inside your tables. This attribute is currently set to none, so there are no lines at all. Other settings to try are all and group. All turns on all possible lines, creating a table grid. Group puts a border between row and column headers and footers and the rest of the table body. Other settings include rows and cols, which include only row dividers or column dividers.

Try changing the rules setting. You may also want to experiment with combinations of frame and rules settings.

A sample modification:

```
replace Output from Container /
  frame = box
  rules = all
  borderwidth = 1pt
  bordercolor = color_list('fga1')
  cellpadding = 7pt
  cellspacing = 0pt;
```

The resulting output:



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

Now that you have all of the lines you want, we can look at the width and color for those lines. These are controlled by the borderwidth and bordercolor attributes.[4] Don't forget that neither of these settings will have any effect unless you've specified some lines for your table. With frame=void and rules=none, the border width and color are irrelevant.

[4] Warning: these settings work much better in Internet Explorer than Netscape. Your HTML output may not look the same in the two browsers.

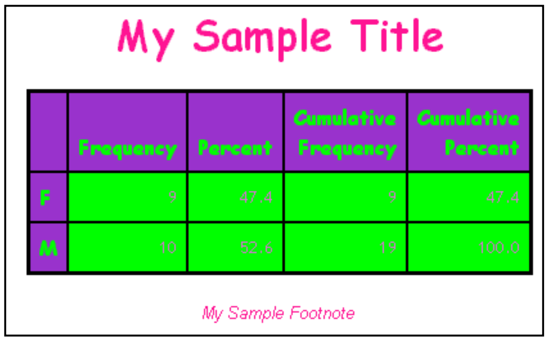
Borderwidth is simply the line width. Use a number followed by “pt” to set the width in points. Bordercolor is assigned using a color from your list above. Note the syntax here: it uses the color_list element name, followed by the name of one of the items in that element (in quotes and inside parentheses). You can also just use a color name or code.

Try experimenting with the border width and color. If your custom style will not have any lines, go ahead and turn on frame=box and rules=all so that you can at least see how they work. You can reset frame and rules later.

A sample modification:

```
replace Output from Container /
  frame = box
  rules = all
  borderwidth = 2pt
  bordercolor = black
  cellpadding = 7pt
  cellspacing = 0pt;
```

The resulting output:



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

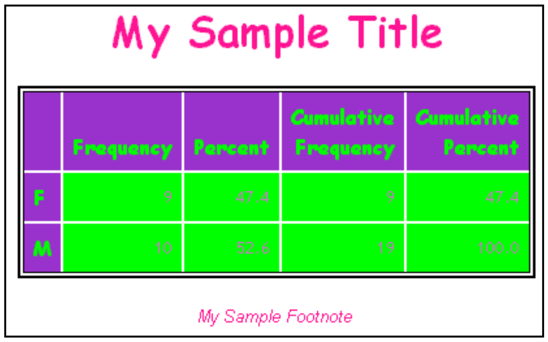
Finally, there’s one more attribute that affects table borders. This one is not so obvious. The cellspacing attribute controls spacing between the table cells. If cellspacing is set to a number greater than zero, there will be a gap between the table cells. The reason this affects borders is that it allows the table background to show through. This gives you a different way to create a table border. You can set rules=none and then use cellspacing to expose a different color as a border.

Make sure that color_list item “bgA1” is set to a color that is different from “bgA3”. This will ensure that your table background color is distinct from your table cell color. And then set rules=none to get rid of the cell borders. Now change the cellspacing setting to 1. Rerun the sample program and see what happens.

A sample modification:

```
replace Output from Container /
  frame = box
  rules = none
  borderwidth = 2pt
  bordercolor = black
  cellpadding = 7pt
  cellspacing = 2pt;
```

The resulting output is shown below. The cells all appear to have white borders because the table background color is set to white.



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

You may like this look, or maybe you won’t. But it’s an option worth trying.

➢ CHANGING THE TABLE SPACING

The final thing we will modify is the table spacing. This is the amount of space that is left between table cell contents (your results) and the top, bottom, left, and right sides of the cell. To make your table readable, you want a large value. But to squeeze more information on the page, you probably want a smaller value.

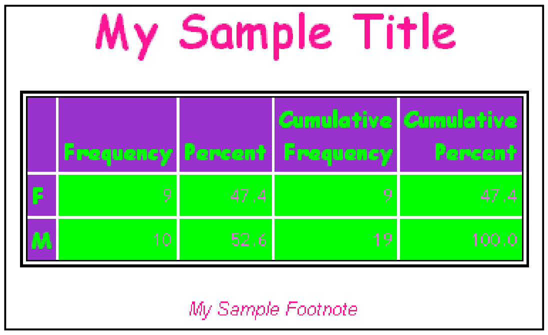
The attribute that controls this spacing is called cellpadding. The example program uses a value of 7, which puts a fair amount of space around each value. To save space, you could go down to about 3 without losing any readability.

Experiment with various values to see what you like. One thing to note here is that you have to have the same amount of space on all sides.

A sample modification:

```
replace Output from Container /
  frame = box
  rules = none
  borderwidth = 2pt
  bordercolor = black
  cellpadding = 3pt
  cellspacing = 2pt;
```

The resulting output is shown below. If you look closely, you can see the change from the previous output.



My Sample Title

	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	9	47.4	9	47.4
M	10	52.6	19	100.0

My Sample Footnote

➢ SAVING YOUR STYLE

Once you've created your custom style, you can save the program that created. This will allow you to regenerate it at any time.

But you don't need to run this PROC TEMPLATE every time you want to use your new style. SAS has saved the style for you in the sasuser library.

If this style is for you alone, this will work just fine. But if you want to share your style, you will need to make a couple of changes.

First, set up a libname for your custom style in a commonly accessible area. Then, you'll need to learn about the ODS PATH statement, which you can use to route your custom style to this libname. Other users can set up the same ODS PATH statement in their programs to reference this libname and access your style.

➢ CONCLUSIONS

This workshop has been a short cut to using some basic style functionality. If you just need to quickly modify a style, this may be enough.

However, this template only allows you to modify certain aspects of your output. You may find that you want to control other aspects. To do that, you're going to have to learn a lot more about PROC TEMPLATE syntax.

➢ RESOURCES

PROC TEMPLATE documentation is in the References chapter of:

> *Guide to the Output Delivery System* in SAS Online Doc, version 8, ©1999, SAS Institute Inc., Cary, NC, USA.

Preliminary documentation of new features and sample programs can be found at:

> http://www.sas.com/rnd/base/index-ods-resources.html.

My book on ODS has a number of chapters on modifying ODS styles:

> Haworth, Lauren, *Output Delivery System: The Basics*, ©2001, SAS Institute Inc., Cary, NC, USA.

➢ ACKNOWLEDGEMENTS

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➢ CONTACTING THE AUTHOR

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APPENDIX A

```
proc template;
  define style Styles.Custom;
  parent = Styles.Default;
      style fonts from fonts /
          'TitleFont' = ("Arial, Helvetica, Helv",14pt,Bold Italic)
          'TitleFont2' = ("Arial, Helvetica, Helv",12pt,Bold Italic)
          'StrongFont' = ("Arial, Helvetica, Helv",12pt,Bold)
          'EmphasisFont' = ("Arial, Helvetica, Helv",10pt,Italic)
          'headingFont' = ("Arial, Helvetica, Helv",12pt,Bold)
          'docFont' = ("Arial, Helvetica, Helv",11pt)
          'footFont' = ("Arial, Helvetica, Helv",8pt);
      replace color_list /
          'fgB2' = blue     /* links */
          'fgB1' = darkmagenta  /* visited links */
          'fgA1' = black        /* table cell foreground */
          'bgA3' = lightgrey    /* table cell background */
          'bgA1' = lightgrey    /* table background - shows through if cellspacing>0 */
          'fgR'  = darkblue /* row header foreground */
          'bgR'  = darkgray /* row header background */
          'fgA2' = darkblue /* column header foreground */
          'bgA2' = darkgray /* column header background */
          ‘bgP’  = white        /* page background */
          'fgA'  = navy         /* foreground for everything else: notes, proc titles, ... */
          'bgA'  = white        /* background for everything else: notes, proc titles, ... */;
      replace Output from Container /
          frame = void /* outside borders: void, box, above/below, vsides/hsides, lhs/rhs */
          rules = none /* internal borders: none, all, cols, rows, group */
          borderwidth = 1pt /* the width of the borders and rules */
          bordercolor = color_list('fga1') /* the color of the borders and rules */
          cellpadding = 7pt /* the space between table cell contents and the cell border */
          cellspacing = 0pt /* the space between table cells, allows background to show */;
      * Leave code below this line alone ;
      style Body from Body /
          background = color_list('bgP');
      style Contents from Contents /
          background = color_list('bgP');
      style Data from Data /
          font = fonts("docFont");
      style SystemTitle from SystemTitle /
          font = fonts("TitleFont");
      style SystemFooter from SystemFooter /
          font = fonts("footFont");
      style RowHeader from Header /
          font = fonts("headingFont");
      style Header from Header /
          font = fonts("headingFont");
  end;
run;

options nodate nonumber;
ods noptitle;
ods proclabel 'Frequencies';
ods html file='a:\body.html' contents='a:\cont.html' frame='a:\frame.html' style=Custom;
ods rtf file=’a:\body.rtf' style=Custom;
ods pdf file=’a:\body.pdf' notoc style=Custom;
       title 'My Sample Title';
       footnote 'My Sample Footnote';
       proc freq data=sashelp.class;
          tables sex;
       run;
ods html close;
ods rtf close;
ods pdf close;
```

APPENDIX B

Font Style	Portion of Output it Controls
TitleFont	Titles generated with TITLE statement
TitleFont2	Titles for procedures ("The ________ Procedure")
StrongFont	Strong (more emphasized) table headings and footers, page numbers
EmphasisFont	Titles for table of contents and table of pages, emphasized table headings and footers
headingFont	Table column and row headings and footers, by-group headings
docFont	Data in table cells
footFont	Footnotes generated with FOOTNOTE statement

APPENDIX C

"Safe" fonts[5,6]
Times New Roman, Times
Arial, Helvetica
Arial Black, Arial, Helvetica
Book Antigua, Times New Roman, Times
Courier New, Courier
Comic Sans MS, Arial, Helvetica
Verdana, Arial, Helvetica
Impact, Arial Black, Helvetica
Georgia, Times New Roman, Times
News Gothic MT, Arial, Helvetica
Tahoma, Arial, Helvetica
Trebuchet MS, Arial, Helvetica

[5] Although these fonts are fairly safe, good alternate fonts have also been listed for each item. Also, this list is based on standard Windows fonts. If you have a lot of Mac users, you may want to list some Mac fonts like Chicago, Geneva, Helvetica, Monaco, New York, Times and Palatino as alternatives.
[6] Two very unsafe fonts are SAS Monospace and SAS Monospace Bold.

APPENDIX D

White	Cornsilk	Antiquewhite	Seashell	Linen	Ivory	Floralwhite
Snow	Azure	Mintcream	Ghostwhite	Honeydew	Aliceblue	Beige
Oldlace	Bisque	Moccasin	Wheat	Navajowhite	Blanchedalmond	Tan
Gray	Lightgrey	Darkgray	Dimgray	Gainsboro	Silver	Whitesmoke
Black	Darkslategray	Slategray	Lightslategray	Lemonchiffon	Khaki	Darkkhaki
Brown	Sienna	Chocolate	Saddlebrown	Sandybrown	Burlywood	Peru
Red	Tomato	Darkred	Indianred	Mistyrose	Lavenderblush	Firebrick
Crimson	Maroon	Peachpuff	Goldenrod	Darkgoldenrod	Palegoldenrod	Lavender
Orange	Darkorange	Orangered	Forestgreen	Greenyellow	Lime	Lightgoldenrodyellow
Yellow	Lightyellow	Gold	Springgreen	Darkolivegreen	Olive	Limegreen
Green	Lightgreen	Darkgreen	Mediumseagreen	Mediumspringgreen	Palegreen	Olivedrab
Lawngreen	Chartreuse	Yellowgreen	Paleturquoise	Darkseagreen	Aquamarine	Mediumaquamarine
Teal	Lightseagreen	Seagreen	Darkblue	Mediumturquoise	Turquoise	Darkturquoise
Darkcyan	Cyan	Lightcyan	Mediumslateblue	Lightskyblue	Skyblue	Deepskyblue
Blue	Lightblue	Mediumblue	Steelblue	Darkslateblue	Powderblue	Cornflowerblue
Royalblue	Dodgerblue	Slateblue	Plum	Cadetblue	Mediumorchid	Darkorchid
Navy	Midnightblue	Lightsteelblue	Mediumvioletred	Orchid	Thistle	Rosybrown
Purple	Mediumpurple	Indigo	Fuchsia	Palevioletred	Magenta	Darkmagenta
Violet	Darkviolet	Blueviolet	Salmon	Deeppink	Coral	Lightcoral
Pink	Lightpink	Hotpink	Lightsalmon	Darksalmon		