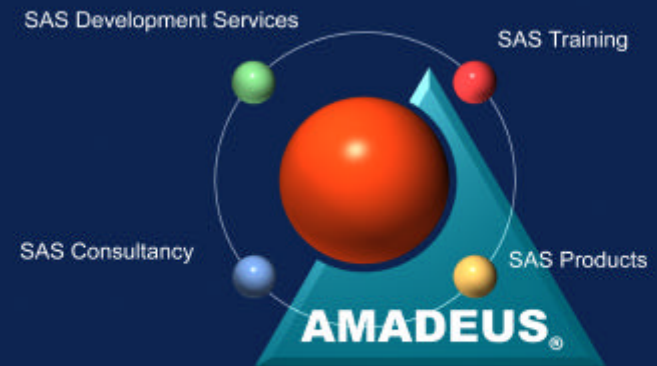




PRODUCING HTML OUTPUT

EASY AS ODS!

By Stephen Hanks

Overview



- HTML From ODS The Basics
- Using Different Styles
- Creating Your Own Style with Proc Template
- Using Cascading Style Sheets

HTML From ODS The Basics



■ ODS Statements

...

```
ODS LISTING CLOSE;
```

Stop the output
going to the
output window

```
ODS HTML BODY='C:\OUTPUT.HTM';
```

Name of
HTML file

```
PROC TABULATE ...;
```

```
RUN;
```

```
ODS HTML CLOSE;
```

Stop writing to
HTML file

```
ODS LISTING;
```

Write to Output
window again

...

Example 1

```
ODS LISTING CLOSE;
ODS HTML BODY='C:\OUTPUT.HTM';
Proc tabulate data=data.demog;
  class cars gender grade;
  var salary;
  table cars*gender
  all,grade*salary*mean=' ';
  title 'Average salary by
  grade, gender and number of
  motor cars';
Run;
ODS HTML CLOSE;
ODS LISTING;
```



Output From Example 1



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Address C:\OUTPUT.HTM Go Links

Average salary by grade, gender and number of motor cars

		GRADE	
		high	low
		SALARY	SALARY
CARS	GENDER		
0	F	22760.99	12109.21
	M	29119.73	10782.70
1	F	24709.01	12963.87
	M	25282.47	13103.59
2	F	33877.79	12453.84
	M	28808.94	11360.58

Done My Computer

Example 2

```
ODS LISTING CLOSE;  
ODS HTML BODY='C:\OUTPUT.HTM'  
           CONTENTS='C:\OUTPUT2.HTM'  
           FRAME='C:\OUTPUT3.HTM';  
Proc tabulate data=data.demog;  
  class cars gender grade;  
  var salary;  
  table cars all,gender  
        all,grade*salary*mean='  '  
  title 'Average salary by  
        grade, gender and number of  
        motor cars';  
  
RUN;
```

Have
Included a
contents
page and a
frame to
attach the 2
pages
together



Output From Example 2

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1. The Tabulate Procedure

- [Cross-tabular summary report](#)
- Table 1
 - [CARS 0](#)
 - [CARS 1](#)
 - [CARS 2](#)
 - [CARS 3](#)
 - [All](#)

Average salary by grade, gender and number of motor cars

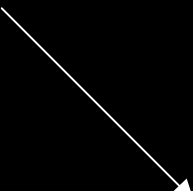
CARS 0

	GRADE	
	high	low
	SALARY	SALARY
GENDER		
F	22760.99	12109.21
M	29119.73	10782.70
All	27530.04	11265.07

Done My Computer

Example 3

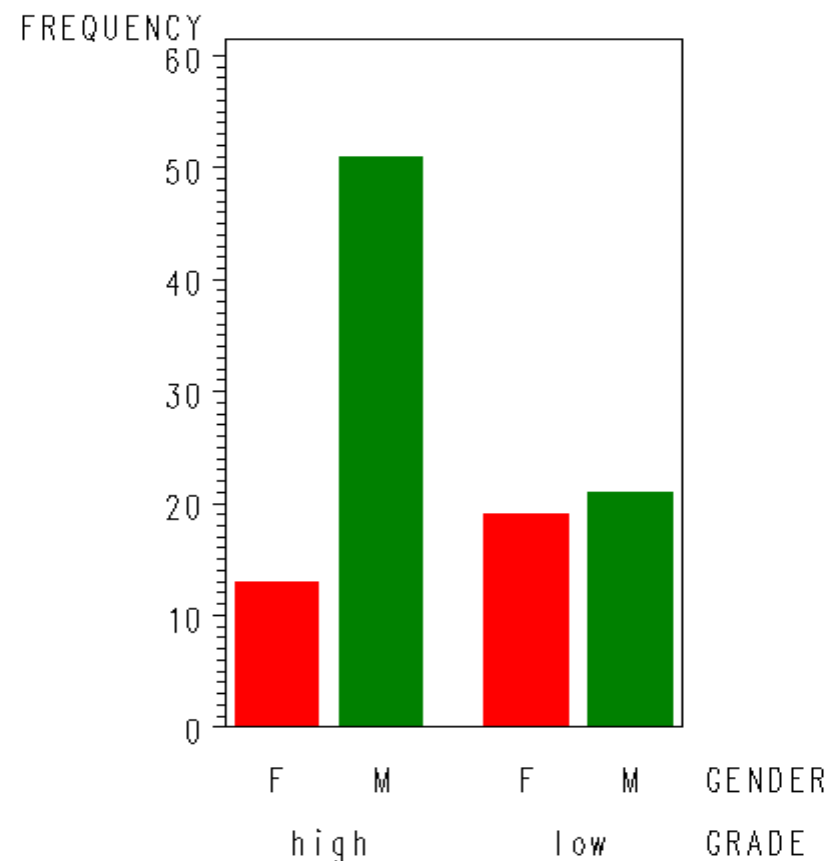
Can use any
outputting
procedures



```
ODS LISTING CLOSE;  
ODS HTML BODY='C:\OUTPUT.HTM';  
  
pattern1 c=red v=solid;  
pattern2 c=green v=solid;  
proc gchart data=data.demog;  
    title 'Staff Numbers by Grade and  
        Gender';  
    vbar gender / group=grade  
        subgroup=gender nolegend;  
quit;
```

Output From Example 3

Staff Numbers by Grade and Gender



Using Different Styles

- Use the style= option on the ODS statement to use different styles already available to us.
- Examples of existing styles
 - Default
 - Minimal
 - Brick
 - Beige
 - Brown

Example 4

```
ODS LISTING CLOSE;  
ODS HTML BODY='C:\OUTPUT.HTM'  
  style=brown; ←  
Proc template data=data.demog;  
  class cars gender grade;  
  var salary;  
  table cars all,gender  
  all,grade*salary*mean='  '  
  title 'Average salary by  
  grade, gender and number of  
  motor cars';
```

Using the
Style Brown

Output From Example 4

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Address C:\OUTPUT.HTM Go Links

Average salary by grade, gender and number of motor cars

CARS 0

	GRADE	
	high	low
	SALARY	SALARY
GENDER		
F	22760.99	12109.21
M	29119.73	10782.70
All	27530.04	11265.07

Done My Computer

Customising the Available Styles

- You may not like the styles provided by SAS or need your organisations colours and logo in the output.
- 3 Alternatives
 - ◆ Pass raw HTML to the File
 - ◆ Use Proc Template to create your own style
 - ◆ Use Cascading Style Sheets (CSS)

Proc Template

- Used to produce your own styles
- Steps needed to produce a stand-alone template (does not require a css)
 - ◆ Select a style to base your new style on
 - ◆ Output the code for that style using the source statement
 - ◆ Use define and edit statements to change existing style your new style

Proc Template

- ◆ Output the code for that style using the source statement

```
Proc template;  
    source='C:/style_code.txt';  
run;
```

Proc Template Example

```
ods path  
  sasuser.templat(update)  
  sashelp.tmplmst(read);
```

Define the
template stores to
use



```
proc template;  
  define style  
  customdefault;  
  parent=styles.default;
```

Define new style called
customdefault



Base style on
default style



Proc Template Example

```
replace color_list /
```

```
'fgB2' = cx0066AA      'fgB1' = cx000088
'fgA4' = cx100000      'bgA4' = cx000088
'bgA3' = cx0F2348      'fgA2' = cxFFFFFF
'bgA2' = cxB91D21      'fgA1' = cxFFFFFF
'bgA1' = cx990000      'fgA'  = cx000088
'bgA'  = cx0F2348;
```

Replace the colours
with new list



```
replace titlesandfooters /
```

```
foreground=cx7AA7C4
font=fonts("titlefont2")
font_size=6
preimage='C:\logo.bmp';
```

Replace header
options including
colour and adding
a logo



Proc Template Example

```
style header from header /  
    font_style=italic;  
style table from table /  
    rules=cols cellspacing=0  
    borderwidth=2;  
end;  
run;
```



Add new options on the
header and data

Proc Template Example

```
ODS LISTING CLOSE;  
ODS HTML BODY='C:\OUTPUT.HTM'  
  style=customdefault;
```

Use the new style in
the same way as
before

```
Proc template data=data.demog;  
  . . .  
run;  
ODS HTML close;
```

Output From Proc Template Example

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Address C:\OUTPUT.HTM Go Links

 *Average salary by grade, gender and number of motor cars*

CARS 0

	GRADE	
	high	low
GENDER	SALARY	SALARY
F	22760.99	12109.21
M	29119.73	10782.70
All	27530.04	11265.07

Done My Computer

Using CSS

- Using a CSS allows SAS users to use a standard style.
- Allows your style to change once the code has been written

CSS Example

```
ODS LISTING CLOSE;  
ODS HTML BODY='C:\OUTPUT2.HTM'  
    style=minimal  
    stylesheet='C:/style.css';  
Proc template data=data.demog;  
    . . .  
Run;  
ODS HTML CLOSE;  
ODS LISTING;
```

Use the
Cascading
Style Sheet



Output From CSS Example

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Address C:\OUTPUT.HTM Go Links >>

Average salary by grade, gender and number of motor cars

		GRADE	
		high	low
		SALARY	SALARY
CARS	GENDER		
0	F	22760.99	12109.21
	M	29119.73	10782.70
1	F	24709.01	12963.87
	M	25282.47	13103.59
2	F	33877.79	12453.84
	M	28808.94	11360.58
3	M		12800.66

My Computer

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Paper available with more detailed
code and examples at the Amadeus
stand