



Preview

- Introduction to PROC TEMPLATE
- Style and Table definitions
- Tagsets and Statistical Graphs

How Life Has Changed?

- Version 7 introduced ODS
- Defaults of all output can now be modified
- All procedures have default templates
- Output data sets and procedures

Output Objects

- Data Component
 - Text and raw numbers
- Formatting Component
 - Formats the raw text and numbers

What is PROC TEMPLATE?

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Template Stores

- Templates and item stores
- Item stores are binary files
- Have the extension SAS7BITM
- Visible only through the template window

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Locating Templates

- Shipped templates stored in SASHELP
- Viewing templates
 - RMB on graphics icon
 - ODSTEMPLATE in task box

Template Statements

- DEFINE
- STYLE
- REPLACE
- EDIT
- TEST

Storing Templates

- SASUSER is the default update location
- The STORE= option
- The ODS PATH statement
 - PREPEND
 - APPEND
 - RESET

- The ODS PATH Show option

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Setting the Path

```
libname temp 'c:\test';  
ods path(prepend) temp.templat(update);  
ods path show;
```

Current ODS PATH list is:

1. TEST.TEMPLAT(UPDATE)
2. SASUSER.TEMPLAT(UPDATE)
3. SASHELP.TMPLMST(READ)

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Modifying Templates

- RMB click on template and select EDIT
- PROC TEMPLATE statement
 - EDIT- Modify an existing definition
 - DEFINE- Defining a new definition

Making Templates Available

```
Libname temp '//machine/public';  
Ods path(prepend) temp.template(update);
```

Users Autoexec:

```
Libname temp '//machine/public';  
Ods path(prepend) temp.template(read);
```

Managing Templates

```
PROC TEMPLATE  
LIST template/folder;  
  DELETE template;  
  SOURCE template;  
Run;
```

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Types of Templates

- **Style Templates**
 - Determines how to render the presentation aspect such as colors and fonts for the entire output
- **Style Element**
 - A collection of style attributes that apply to a piece of output
- **Table Templates**
 - A collection of style attributes that apply to a particular part of the output
- **Table Element**
 - A collection of column, header, or footer attributes

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- **ODS MARKUP Tagsets**
 - Is a collection of events that allow you to modify ODS output
- **Graphics**
 - Modify default Graphical ODS Output

STYLES

- | | |
|-----------------------|-----------------|
| ■ Modify fonts | ■ Effects |
| ■ Modify colors | ■ Add Text/HTML |
| ■ Height/Width | ■ Add Scripting |
| ■ Flyovers/Mouseovers | ■ Insert tags |
| ■ Traffic Lighting | ■ JavaScript |
| ■ Page Breaks | ■ Captions |
| ■ Images | ■ Linking |
| ■ Borders | ■ Justification |

```
PROC TEMPLATE;  
  DEFINE STYLE STYLES.TEST;  
    STYLE DATA;  
      FOREGROUND=RED;  
    END;  
  RUN;
```

Inheritance

Style Definition- an entire style definition is inherited which requires the PARENT= statement

Style Element- style elements inherit from other style elements and differs depending if the PARENT= statement is specified

Table Definition- entire table definitions are inherited which requires the PARENT= statement

Table Element- table elements inherit from other table ther table elements

Default Styles

- HTML - STYLES.DEFAULT
- RTF - STYLES.RTF
- PS/PDF - STYLES.PRINTER

Style-Element Inheritance

```
Proc template;  
  define style styles.newstyle;  
    style data /  
      foreground=red;  
      font_size=5;  
    style header from data /  
      background=green;  
  end;  
Run;
```

Style Definition & Element Inheritance

```
Proc template;
  define style styles.newstyle;
    parent=styles.default;
    style data /
      foreground=red;
    style header from header /
      background=green;
  end;
Run;
```

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Which element do I use?

- Using the Tagsets of the ODS MARKUP destination takes the guess work out

```
ods markup file="temp.html"
tagset=style_popup;
proc print data=sashelp.class;
run;
ods markup close;
```

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Table Templates

- Table templates describe how to display the raw text and numbers
- Definitions generated within a table
 - Table
 - Column
 - Header
 - Footer

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Table Templates

- Allows change of procedure defaults
- Most procedures have table templates
- Can be applied in the data step

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Common Modifications

- Share same cell
- Merge cells
- Compute new column
- Traffic Light
- Suppress duplicates
- Apply formats
- Span headers
- Translate values
- Apply in data step
- Rename object
- Drop output object
- Generate page break
- Add headers
- Rename objects

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Modifying Default Output

- ODS TRACE statement
- PROC TEMPLATE

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What is a Tagset?

- Tagsets and the ODS Markup Language
- A tagset is simply a collection of events
- Allows 100% modification of output

Tagsets shipped

- CSV
- LaTeX
- WML
- HTMLCSS
- ExcelXP
- Msoffice2K
- HTML4
- Named_type
- CSVALL
- ColorLaTeX
- Event_Map
- PHTML
- WMLIST
- IMODE
- CHTML
- Styles_Popup

Statistical Graphs

- Allows the creation of default high resolution graphs
- Only requires the ODS Graphics statement
- Most Stat procedures generate graphics
- Modification done using PROC TEMPLATE
- Only requires BASE SAS

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Review

- PROC TEMPLATE Concepts
- Style and Table Templates
- Tagsets and Statistical Graphs

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Questions

Contact Information

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Reference

PROC TEMPLATE & ODS FAQ

[Http://Support.sas.com/rnd/base](http://support.sas.com/rnd/base)