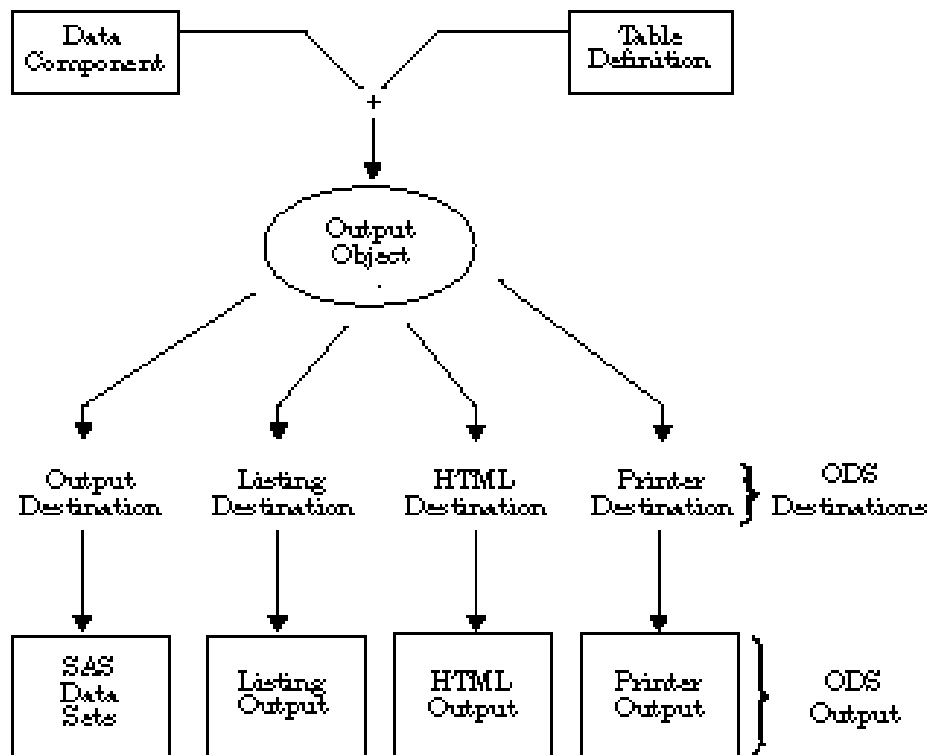


ODS

What is it? Output Delivery System – A method that allows you to keep your existing processes and jazz up the results. You surround your program with ODS statements that direct the output to better looking formats.

How does it work?

See [The Complete Guide to the SAS Output Delivery System](#)



Types of output:

HTML – Looks good, can't be easily altered, but it encounters problems when it hits the U of R firewall. Can define a directory with links to sub pages.

Post script (.ps) -Formatted for laser printer. Can view online with Ghost view which is freeware.

Rich Text Format (RTF) – Can be opened and edited with Word. Some remote sites need coaching on setting up their PC to interpret the extension.

PDF – New in version 8,2

How do you use ODS?

```
options orientation=portrait;
libname stylein '/u/develop/standard/styles/templates';
ods path stylein.stds(read) sasuser.templat(read) sashelp.tmplmst(read);
ODS printer file='test.ps' style=ctcc_std;
ODS rtf file='test.rtf' style=ctcc_rtf;
Proc report .....
Run;
Ods printer close;
Proc freq .....
Run;
Ods rtf close;
```

Output -> One post script file named test.ps containing the proc report output
One rtf file named test.rtf containing both the proc report and the proc freq output

What is a style?

A style defines the output properties– fonts, colors, etc

```
libname styleout 'templates';
```

```
proc template;
```

```
  define style ctcg_html / store=styleout.stds;
```

```
  style fonts /
```

```
    "cellfont"=("arial, helvetica", 4, medium roman)
```

```
    "headingfont"=("arial, helvetica", 5, bold roman)
```

```
    "titlefont"=("arial, helvetica", 4, bold roman);
```

```
  style colors /
```

```
    "light"=white
```

```
    "medium"=CXffd700
```

```
    "dark"=cx000088
```

```
    "bright"=black;
```

```
  style cellcontents /
```

```
    background=colors("dark")
```

```
    foreground=colors("light")
```

```
    font=fonts("cellfont");
```

```
  style header /
```

```
    background=colors("medium")
```

```
    foreground=colors("dark")
```

```
    font=fonts("headingfont");
```

```
  style systemtitle /
```

```
    background=colors("light")
```

```
    foreground=colors("dark")
```

```
    font=fonts("titlefont");
```

```
  style footer from systemtitle /
```

```
    font_size=3;
```

```
  style table /
```

```
    /* BACKGROUNDIMAGE='psg_smaller.jpg' */
```

```
    cellspacing=5
```

```
    borderwidth=10
```

```
    bordercolorlight=colors("medium")
```

```
    bordercolordark=colors("dark");
```

```
end;
```

```
run;
```

Setting attributes for fields on a report:

```
proc report data=formmsg4 headline center missing split=?' nowindows
  style(header)=[font=("Times",10pt,Bold)]
  style(column)=[cellwidth=.7in font=("Times",10pt)];
where msg contains 'missing' and status not in ('N','T','A', 'D', 'X', 'R' );
columns rsite_no rsubj_no tsite_no tsubj_no rndob visit_no crf_no comments
status;
```

```
define rsite_no / order noprint;
define tsite_no / display width=4 'Site';
define rsubj_no / order noprint;
define tsubj_no / display width=10 'Subject?Number';
define rndob/display width=8 'NDOB';
define visit_no/display width=6 'Visit?Number';
define crf_no/display format=$frm_nam. width=28 'Form Name'
  style(column)=[cellwidth=2in font=("Times",10pt)];
define comments / display width=10 'Comments'
  style(column)=[cellwidth=2in];
more defines ....
```

Samples:

Questions or sample code available lpreston@mct.rochester.edu