

Paper CC-029

Six Cool Things You Can Do In Display Manager

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ABSTRACT

Many people use Display Manager but don't realize how much work it can actually do for you. Display Manager can help you research data issues, write code for you, transform data to and from SAS®, and even some things you probably shouldn't use. Learn a few tips to make your Display Manager experience more productive.

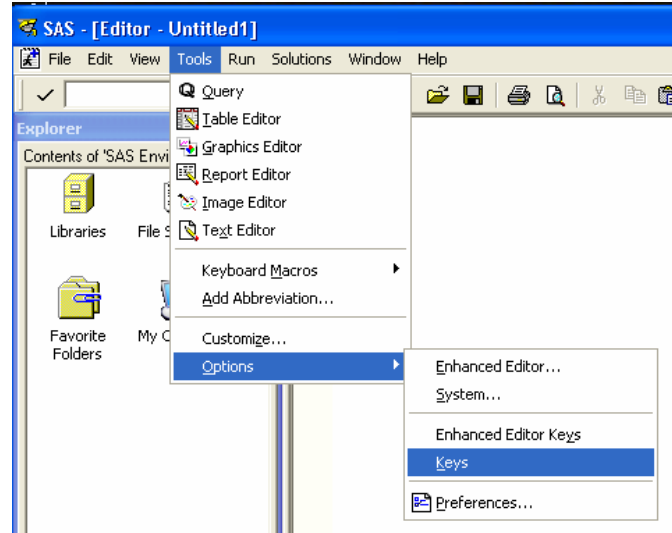
INTRODUCTION

A lot of us use Display Manager as our interface/tool to programming and running jobs using SAS. There are a significant amount of tools included in the software package. Some can be extremely helpful if you know where to find them or that they're even available. This paper will include the following six tips. 1) Use the Tool Option Keys to customize your sessions. 2) Explore how to research data in SAS datasets, letting Display Manager do the work without having to write any SAS code. 3) Create elaborate graphs and save the source code without having to understand SAS/Graph. 4) View all available Style Templates for ODS. 5) Import and Export non SAS data. 6) A surprise.

CUSTOMIZE YOUR SESSION

The best way to perform your programming job is to make mundane tasks as simple as possible. Just as it's important to write efficient code, customizing your Display Manager Software to work streamline will allow you to spend more time on the important parts of programming. There are already some tools available you can use and opportunities to create your own.

Just like your Windows software has keys to shortcuts, so does Display Manager. To see the predefined shortcuts for Display Manager select Tools from the menu bar > Options > Keys.



This will list all the predefined shortcut keys. F9 will also take you directly to the list of Keys. From this window, you can remove, add, and alter commands to be used. There are 24 currently undefined keys.

One of my favorites is to be able to toggle between Display Manager (DM) windows with the ease of toggling between Windows programs using alt/tab. I chose F12 and CTL F12 to move between DM windows.

F12 nextwind
CTL F12 prevwind

RESEARCH SAS DATASETS

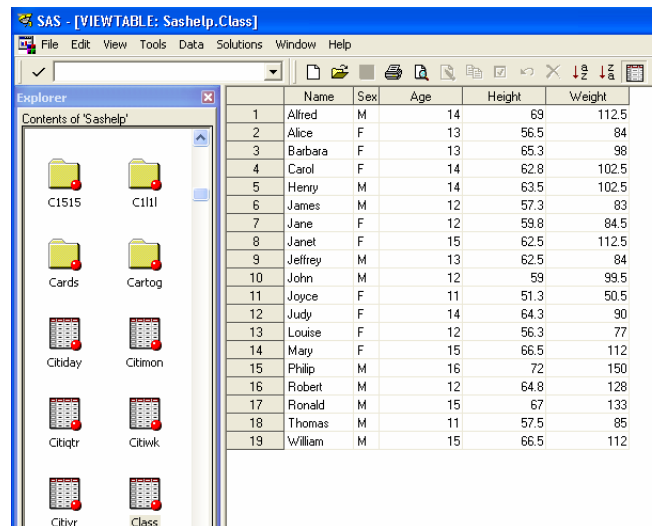
We all know that there is much more involved to programming in SAS than sitting down and writing code. Understanding the underlying data, debugging, and researching issues requires “playing” with the data. The traditional method of researching data usually requires Frequencies, data steps to subset, and sending the results to the output window for review. Even then, you may get burdened down with programming errors. There’s a simple easy tool within DM that will allow you to manipulate SAS datasets.

Suppose you would like to see only the males that are 15 years and older in the dataset. If you were programming it, you’d have to write the following code.

```
data test; set sashelp.class;
  if Sex = 'M';
  if Age ge 15;
run;
proc print data=test;
run;
```

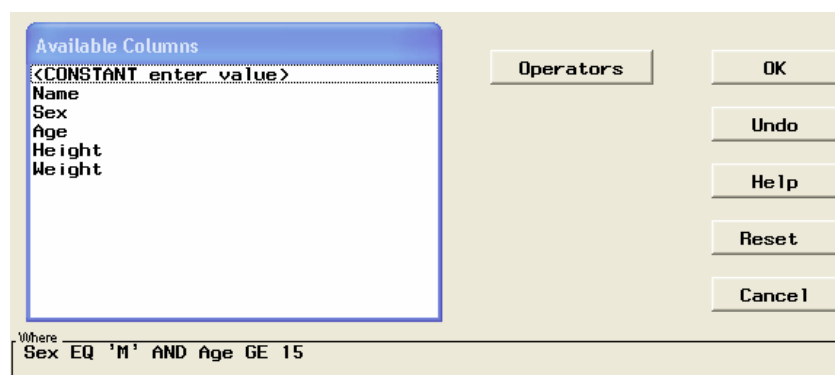
This works fine, but you end up with work datasets and output in your Output window. If you want to subset further, you have to add additional code and run it again. The tools available in DM allow you to perform the same tasks without writing code or having to create more data and output.

The first step is to open the SAS dataset you are interested in evaluating. The below example uses the dataset sashelp.Class. You can open it by double clicking on the dataset from the Explorer window.



	Name	Sex	Age	Height	Weight
1	Alfred	M	14	69	112.5
2	Alice	F	13	56.5	84
3	Barbara	F	13	65.3	98
4	Carol	F	14	62.8	102.5
5	Henry	M	14	63.5	102.5
6	James	M	12	57.3	83
7	Jane	F	12	59.8	84.5
8	Janet	F	15	62.5	112.5
9	Jeffrey	M	13	62.5	84
10	John	M	12	59	99.5
11	Joyce	F	11	51.3	50.5
12	Judy	F	14	64.3	90
13	Louise	F	12	56.3	77
14	Mary	F	15	66.5	112
15	Philip	M	16	72	150
16	Robert	M	12	64.8	128
17	Ronald	M	15	67	133
18	Thomas	M	11	57.5	85
19	William	M	15	66.5	112

Selecting Data, then Where, provides an interactive window that allows you to perform many of the same functions as you would use writing the code. You can either input values or allow this tool to look up distinct values. This allows you to perform sub setting tasks by only pointing and clicking.



Available Columns

<CONSTANT enter value>

Name
Sex
Age
Height
Weight

Operators

OK

Undo

Help

Reset

Cancel

Where
Sex EQ 'M' AND Age GE 15

After clicking "OK" the following information is provided.

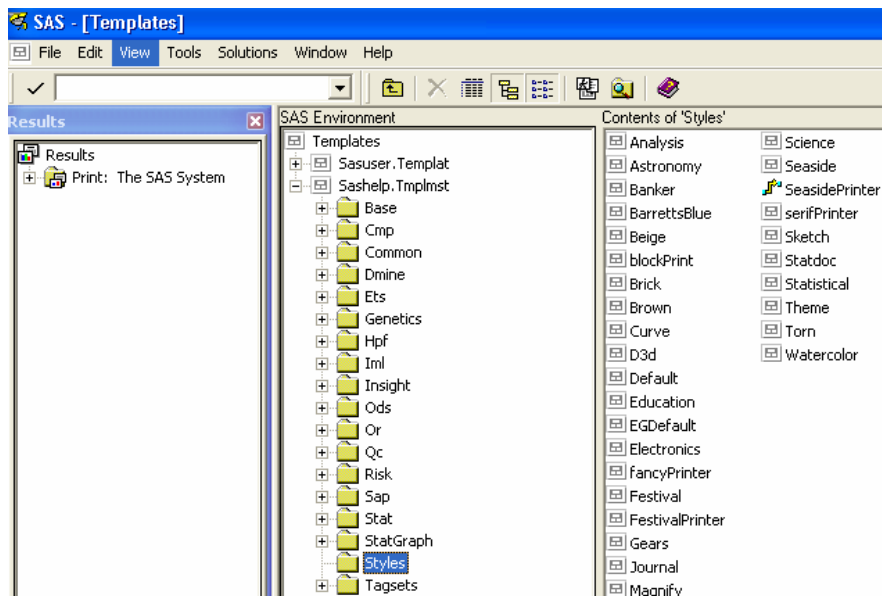
	Name	Sex	Age	Height	Weight
15	Philip	M	16	72	150
17	Ronald	M	15	67	133
19	William	M	15	66.5	112

If you want to continue trying additional subsets, simply click on Data > Where and your original restrictions are still available and may be modified. If you want to start fresh click on Data > Where Clear. There is even an opportunity to save the results to a new dataset.

This is an easy, self explanatory tool that allows for swift exploration of SAS dataset.

VIEW STYLE TEMPLATES FOR ODS

Have you wanted to view all the style templates available with your SAS software package? There's an easy way to view, alter, and see the proc template code using Display Manager. While in the Results window of DM, simply click on View > Templates > Sashelp.Tmplmst and double click on Styles. A List of all the predefined templates is presented. You may then double click on any one of the Styles to view the actual Proc Template associated with each. You can use this code to alter a standard template into your own custom template.



```
proc template;
  define style Styles.BarrettsBlue;
    parent = styles.default;
    replace fonts
      "Fonts used in the default style" /
      'FooterFont' = ("Arial, Helvetica, serif",3,Bold)
      'TitleFont2' = ("Arial, Helvetica, sans-serif",3,Bold Italic)
      'TitleFont' = ("Arial, Helvetica, sans-serif",4,Bold)
      'StrongFont' = ("Arial, Helvetica, sans-serif",3,Bold) '
  ;
  ;
Etc.
```

If you would like to view the results of a template, simply submit the following SAS code to quickly get a feel for the look and Style of each. The Style Barrettsblue is used in this example.

```
data dataset1;
  var1 = 'Hello'
  var2 = 100;
run;

ods html style = barrettsblue
  file='c:\test.htm';

proc print data=dataset1;
run;

ods html close;
```

In the Results Viewer window, the style of Barrettsblue will show the following:

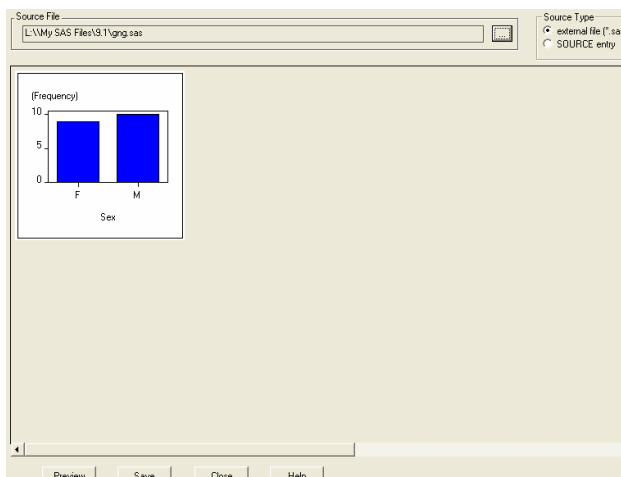
The SAS System

Obs	var1	var2
1	Hello	100

CREATE STYLISH GRAPHS AND SOURCE CODE

Creating graphs in SAS has never been easier than using Graph-N-Go in Display Manager. One doesn't have to learn Proc Gchart before creating impressive graphs. The end results are not only the graph but the SAS source code that generates it. This code may be used in future programs or altered easily without having to know all the intricacies of SAS/Graph.

To create a Graph in Graph-N-Go, simply click on Solutions from the toolbar > Reporting > Graph-N-Go. There is a helpful tutorial that will get you started.



Once you've created the graph to your liking, to save the source code, right click on the graph selecting Export > Source file. You can then select the location to save the file. Below is the code generated from the graph shown above.

```

/* Set the SAS/Graph options */
goptions reset=all
      ctext=CX000000 ftext="MS Sans Serif" htext=8 pt
      colors=(CX0000FF CXFF0000 CX008080 CX00FF00
              CXFF00FF CXFFFF00 CX00FFFF CX800000
              CX008000 CX800080 CX000080 CX808000
              CXFFFFFF CX808080 CXC0C0C0 CX000000);

/* Set the SAS/Graph device driver */
* goptions device=JAVA xpixels=250 ypixels=250;

/* AXIS1 describes axis for Category variable SEX */
/* AXIS2 describes axis for Response statistic FREQ */
axis1 minor=none label=("Sex") ;
axis2 minor=none label=("(Frequency)")
      order=(0 to 10 by 5) ;

proc gchart data=SASHELP.CLASS;
  vbar SEX /
    type=FREQ
    maxis=axis1 frame cframe=CXFFFFFFF
    woutline=1 coutline=CX000000 caxis=CX000000
    raxis=axis2 ;
run;
quit;

```

IMPORT AND EXPORT EXTERNAL FILES INTO/OUT OF SAS DATASETS

Being able to communicate with the non SAS world transferring data requires importing and exporting of data in and out of SAS. Proc Import and Proc Export are the tools we use in SAS to perform this task. Display Manager has a handy tool that does this for us without having to know all the nuances of these two Procs. From within any part of Display Manager click from the Tool bar File > Import or File > Export. Display Manager has a very capable Wizard to execute this task. At the end of the Wizard, you are given the option to save the source code generated behind the scenes. This code may be used in the future in code so the wizard is not always needed. The resulting source code is an example of a saved export of SAS data into Excel.

```

PROC EXPORT DATA= SASHELP.CLASS
      OUTFILE= "L:\class.xls"
      DBMS=EXCEL REPLACE;
      SHEET="class";
RUN;

```

SSSHHHH, DON'T TELL YOUR MANAGER THIS IS AVAILABLE

Solutions > Accessories > Games



The *secret* here is not to have the above window maximized. Otherwise, you won't see the game.

CONCLUSION

This is by no means the only "Cool Things you can do in Display Manager". There are a number of tutorials within Display Manager to guide you through the basics of many of the tools. SAS Help has documented uses for all the possible selections. You never know when you might come across a new handy tool in Display Manager to make your job easier.

REFERENCES

SAS Help Online Docs

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