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Wake up your data with Graph'n'Go

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ABSTRACT

Graph'n'Go is a quick and easy way to visualize your data, from simple bar charts to complex, multi-graph dashboards. With a lot of the functionality being hard to find, this presentation aims to navigate the new user through GnG to find the hidden gems. These will enable the newcomer not only to produce graphs effectively, but will also teach them about SAS® programming.

INTRODUCTION

Google returns 10,800 results when searching for "Graph'n'Go" AND sas; however, "Enterprise Guide" AND sas returns 255,000. Why is there such a significant gap? Graph'n'Go is easy to use, powerful, flexible, and has functionality that Enterprise Guide doesn't. However, it must be noted that within the GnG graphs, colours and other parts are not as customisable as they are in EG. However, you are able output to SAS and modify the code.

This paper will show that GnG is a versatile and easy to use data visualisation tool that every analyst should become accustomed to using as part of their day-to-day activities.

GRAPH'N'GO BASICS

Available since SAS8, GnG does however require SAS/Graph. To get to it, go to Solutions and then Reporting; it will be the last option in that sub-menu.

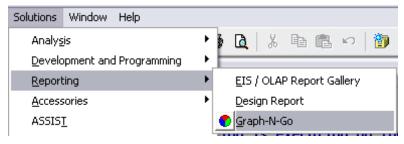


Figure 1. How to get to Graph'n'Go

The first dialog that appears is offering you documentation relevant to using Graph'n'Go – the aim of this poster is to hopefully allow you to use the functionality without having to read the documentation.

Once you have GnG open, the screen will look similar to Figure 2. The Model Work Area is where your tasks are created and modified, and the Viewer Work Area is the output.

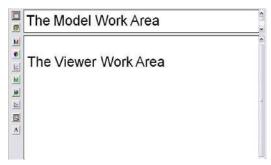


Figure 2. The two different Work Areas

AND THE ADVENTURE CONTINUES...

The types of graphs available are fairly standard. However, with these 6 graph types and 4 other options, a lot can be accomplished.



Figure 3. The graphs available in Graph'n'Go

GETTING STARTED

To get started, simply click and drag one of the options from the list above to the Model Work Area. When this is done, a Wizard will open up like this:

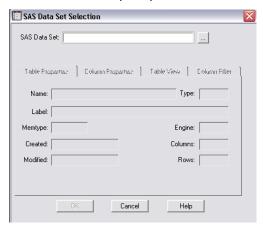


Figure 4. The SAS Data Set Selection

Click the "..." button at the top right to navigate to the dataset to be used.

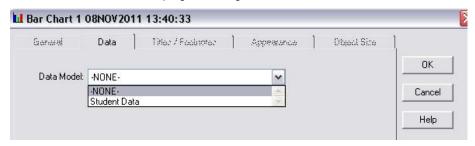


Figure 5. The SAS Data Model to be used

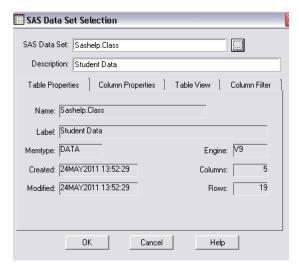


Figure 5. The SAS Data Set Selection with the CLASS dataset selected



Figure 6. What you will see in the Model Work Area

THE ADVENTURE CONTINUES...

Although a couple of steps have been skipped, none of them are too complicated. Once the data set has been selected, right click on the section of the Viewer Work Area that has the relevant graph. Select Data and then fill out the fields as shown below.

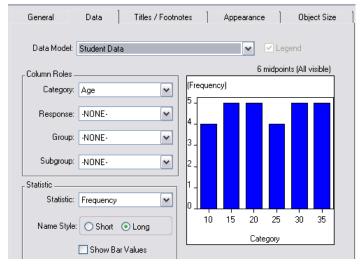


Figure 7. Filling out the relevant Graph data

You will then be able to go back to the graph and see what it looks like – if you decide the graph doesn't convey the message you want it to, right click on the graph, select Properties

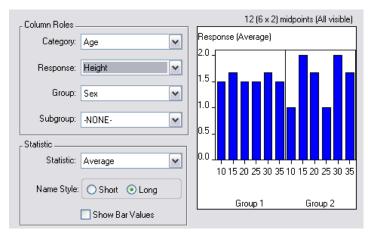


Figure 8. Changing some of the characteristics

Once you've gone through and selected different graphs to be generated and have put them on the same Work Space, you can have something that resembles Figure 9; a single snapshot of multiple ways to look at your data, all in a very clean presentation.

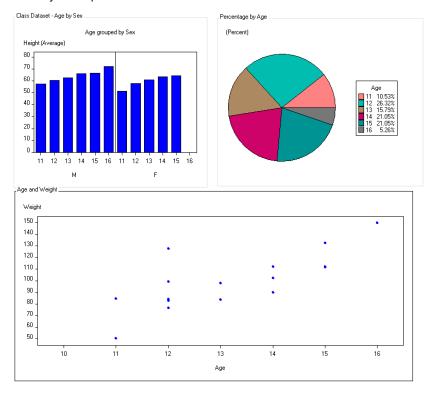


Figure 9. The completed set of graphs

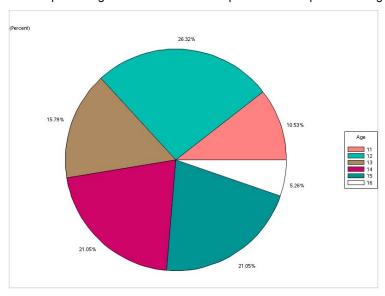
ALMOST THERE!

So you've created a wonderful series of graphs based on your data; but what happens if you want to modify the actual SAS that creates these images? Not a problem, simply right click on one of the graphs and select Export. You will be able to export the SAS code to a location you specify, and then open the file in Base SAS.

```
51 /* Set the Titles/Footnotes */
52 title4 justify=left color=CX000000 font="MS Sans Serif" height=8 pt "(Percent)";
55 /* Set the SAS/Graph device driver */
   * goptions device=JAVA xpixels=448 ypixels=374;
56
58
59 /* LEGEND1 specifies the pie legend */
60 legend1 across=1 cborder=CX000000
61
           label=(justify=center position=(top center) "Age")
62
           position=(middle right) value=(justify=left);
63
64∃proc gchart data=SASHELP.CLASS;
65
      pie AGE /
           type=PERCENT discrete angle=0 value=outside slice=none
67
           fill=solid otherlabel="Other"
           woutline=1 coutline=CX000000 ctext=CX000000
69
           noheading legend=legend1;
70 run;
71
   quit:
72
73
74 /* Reset all graphics options */
75 goptions reset=all;
```

Figure 10. A portion of the code for the Pie graph in Figure 9

When the code that has been created by Graph'n'Go is run in SAS, the Pie chart is generated and looks very similar to the one above. The only differences are the one slice has turned white (and changed accordingly in the legend) and the percentages are now outside the pie rather than part of the legend.



CONCLUSION

Graph'n'Go is a quick and easy way to get an understanding of your data. Multiple formats allow for sharing with others, including those that do not have SAS. For new users, one of the most important features is the generation of quality SAS-code in the background, allowing people to modify the code and see what the impact is. GnG is a feature of SAS that should not be under-utilized, and in fact should be the first stop for any new data set.

REFERENCES

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ACKNOWLEDGMENTS < HEADING 1>

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