

# Topic: Why SAS® Enterprise Guide Might be Your Key to Data Integration

## Case Studies in SAS® Integration



# Welcome to the Case Study!

## Today's Lecture

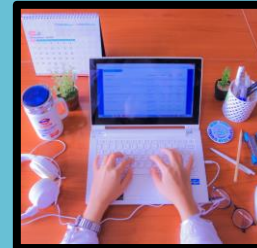
- SAS Enterprise Guide (EG) was invented in the 1990s. Some SAS shops adopted it, and some did not.
- Those who did like it a lot, but those who didn't don't see the point.
- Today, we will consider the use-case for EG and data integration in SAS



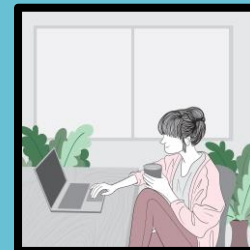
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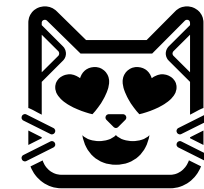
# What is SAS Enterprise Guide (EG)?

- It's actually an interface that has been around a long time in SAS
- It versions separately from SAS base/STAT
- It helps you manage your code, set up data pipelines, and run tasks in a more automated way
- Programmers either adopted EG and now they use it all the time – or they haven't and find it awkward

Analysis and Reporting  
Made Easier using  
Enterprise Guide

By Sunil Gupta

<https://buff.ly/46XwuBz>





# SAS Enterprise Guide for...just using SAS!

- Here is a screen shot from the white paper of the interface
- You will recognize the PROCs
- You can set them up as tasks
- The interface lets you set up jobs to run in order – including data steps (needed to transform data before you do some of these tasks)

## Enterprise Guide Task List





# What are the Different Functions of SAS EG?

- Can help you write reports – automatically generate PROC TAB code
- White paper focuses on using EG to program data and report pipelines
- If you adopt EG, you are “in for a penny, in for a pound”
- ...but it can do amazing things if you do adopt it!

Table 1.1 Sales Statistics by Product

		Product Sales			
		Unit Totals	Dollar Totals	Average (Mean)	Min
Product Category	Product				
Shoes	Boots	5,382	\$35,900	\$1,496	\$-1,400
	Shoes	4,180	\$41,800	\$1,742	\$100
Slippers	Slippers	8,360	\$41,800	\$1,742	\$0
Total		17,922	\$119,500	\$1,660	\$-1,400

Report generated from EG menus

```
LIBNAME EC100003 "D:\EG";

PROC TABULATE
  DATA=ec100003.SALES_DATA

  OUT=SASUSER.TAB8157 (LABEL="Table 1.1 Sales Statistics by Product") ;
  VAR sales quantity;
  CLASS category /      ORDER=UNFORMATTED;
  CLASS product /      ORDER=UNFORMATTED;
  TABLE /* Row Dimension */
    category*
      product
  ALL={LABEL='Total'},
        /* Column Dimension */
        quantity='*sum=Unit Totals'*f=comma6.
        sales='Product Sales'*
          (sum='Dollar Totals'*f=dollar8. mean='Average (Mean)'*f=dollar8.
min='Min'*f=dollar8.)
        ;

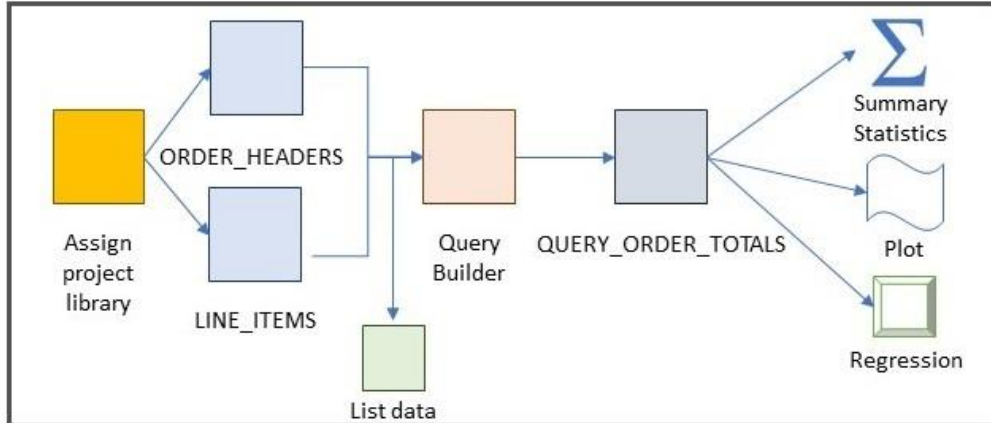
RUN;
```

Code SAS EG wrote

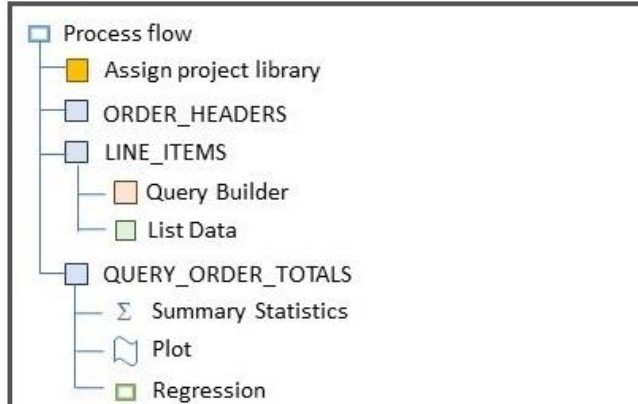


# EG Interface for Data Integration

## Process Flow



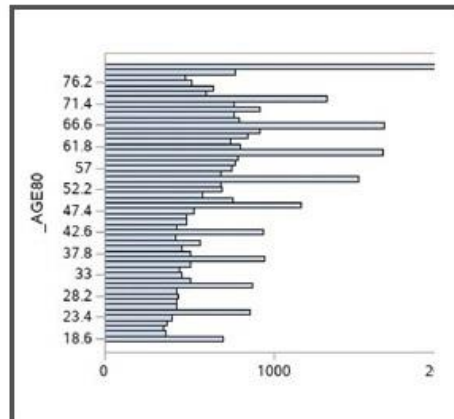
## Project Tree



## Tasks

- ▶ ANOVA
- ▶ Capability
- ▶ Control Charts
- ▶ Data
- ▶ Data Mining
- ▶ Describe

## Results



## Program

```
data brfss_b
  set brfss_a;
  array comorbid_native_list CM1-CM11;
  array comorbid_flag_list FL1-FL11;
  array comorbid_grp_list GR1-GR11;
  do i=1 to dim(comorbid_native_list);
    if comorbid_native_list{i} = 1 then comorbid_flag_list{i} = 1;
    else comorbid_flag_list{i} = 0;
  end;
  do i=1 to dim(comorbid_native_list);
    if i < 11 then do;
      comorbid_grp_list{i} = comorbid_native_list{i};
      if comorbid_native_list{i} gt 2 then do;
```

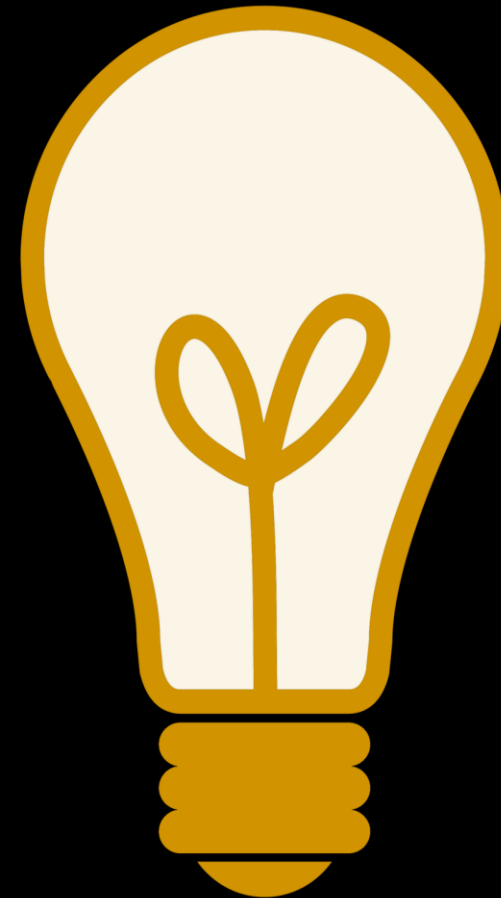
- Diagram from my book, “**Mastering SAS Programming for Data Warehousing**”
- EG has a lot of functionality for organizing multiple tasks – including imports from ODBC connections!
- Previous lecture – SAS Access Component





# Take Home Messages about EG for SAS Data Integration

- If your SAS shop has not adopted EG, don't do it just for the purpose of data integration
- But if you are an EG shop, depending on your situation, you may be able to use EG for data integration from external data sources
- **Example:** Importing in a small reporting dataset each month from a local SQL server to help run reports out of your SAS server





# Questions?

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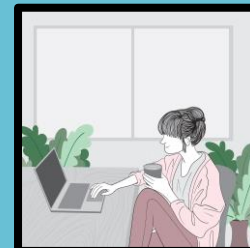
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