

Getting Started with SAS® Add-in for MicroSoft® Office Product

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ABSTRACT:

With the SAS Add-In for Microsoft Office product, users have transparent access to SAS for data access, reporting and analytics directly from within Microsoft Office products. Using menus and toolbars, users can access SAS from Excel, PowerPoint, Word, and Outlook email. The results can be directly distributed via Office products using native Office functionality. This paper looks at some of the functionality of the SAS Add-in for Microsoft Office product as it helps users as they begin their AMO journey.

INTRODUCTION:

This paper is divided into three sections: 1. Using the SAS Add-in with Excel, 2. Using the SAS Add-in with Word, and 3. Using the SAS Add-in with Power Point. As appropriate, each of these sections will discuss: accessing data, analyzing data, running stored processes.

1. Using the SAS Add-in with EXCEL

When you open Microsoft Excel, there will be a SAS tab that is the starting point for doing SAS things in this environment.

- a. The **SAS Data** icon allows you to open (access) SAS dataset directly into Excel
- b. The **Tasks** icon allows you to open and run SAS Tasks. The tasks are organized just like the are in SAS Enterprise Guide.
- c. The **Reports** icon allows you to run Stored process.

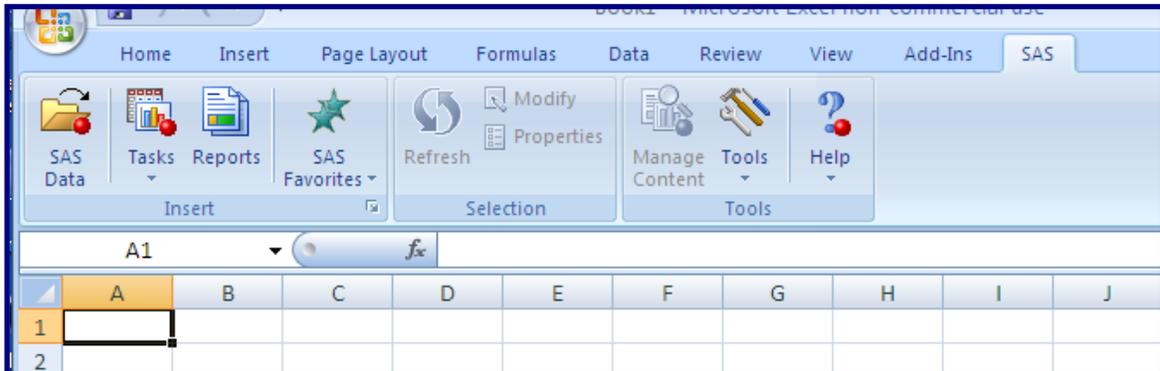


Figure 1.

All of the above activities are under the supervision of SAS servers. Different versions of Excel have icons that look similar to those in Figure 1.

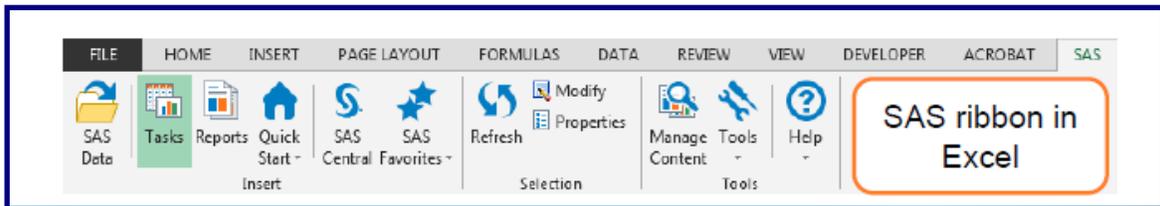


Figure 2.

1.a. Accessing Data:

To access a SAS dataset, do the following:

- Select SAS Data - this opens the View SAS Data window.

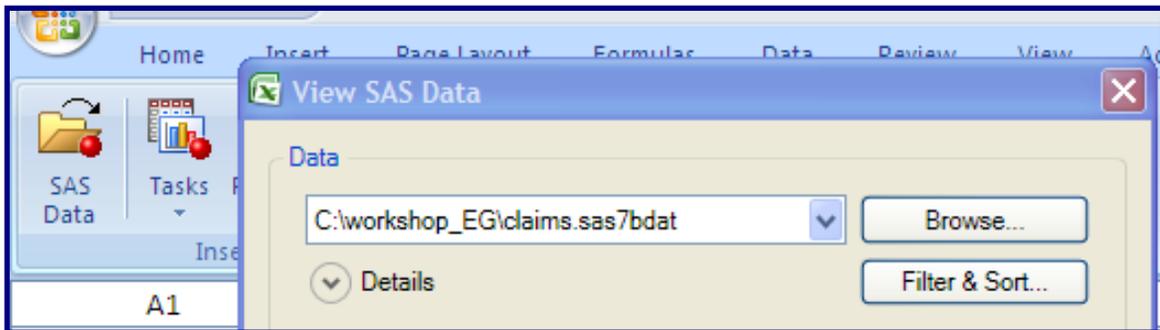


Figure 3.

- Select the Browse button to find the desired dataset, then select **Open**.
- On the next window, you can select a **Filter & Sort** button - this opens the **Modify Data Source** window.

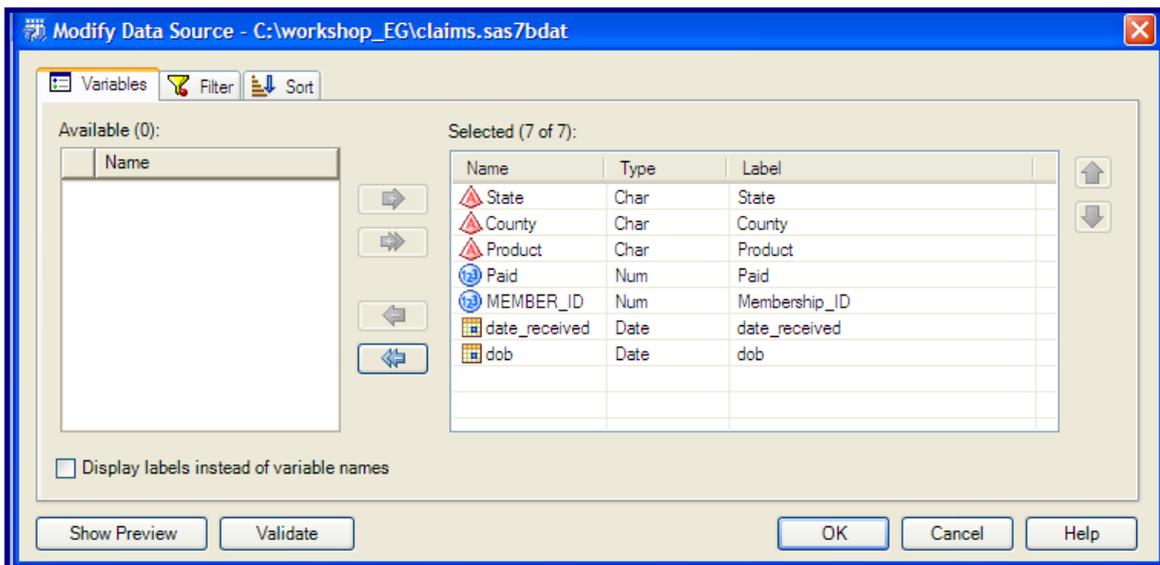


Figure 4.

- From this window, you can specify the columns you want by selecting the **Variables** tab.
- Select the **Filter** tab to build a filter. Since there can be an unlimited number of rows in a SAS dataset, you might want to filter the data.
 - Next, select the **Sort** tab to sort the data. In this example we pointed and clicked to create a filter that is translated to: where county = 'DADE'
 - then select OK until the data appears in the spreadsheet (Figure 5).

	A	B	C	D	E	F	G	H	I	J
1		State	County	Product	Paid	MEMBER_ID	date_received	dob		
2	1	FL	DADE	WMR	105.54	20150	16Feb2005	28Apr1937		
3	2	FL	DADE	WMR	50	20150	15Feb2005	09Jan1915		
4	3	FL	DADE	WMC	53.91	20150	04Feb2005	21Jun1995		
5	4	FL	DADE	WMC	0	20150	11May2005	14Jul1994		
6	5	FL	DADE	WMC	6	20150	22Feb2005	14Feb1952		
7	6	FL	DADE	WMR	0	20150	22Feb2005	17Jul1914		
8	7	FL	DADE	WMC	22.14	20180	19Jan2005	23Aug1984		

Figure 5.

1.b. Analyzing Data:

In Excel, data can be analyzed using the same tasks available in Enterprise Guide. In Excel, select the Tasks icon to see the **categories** of Tasks

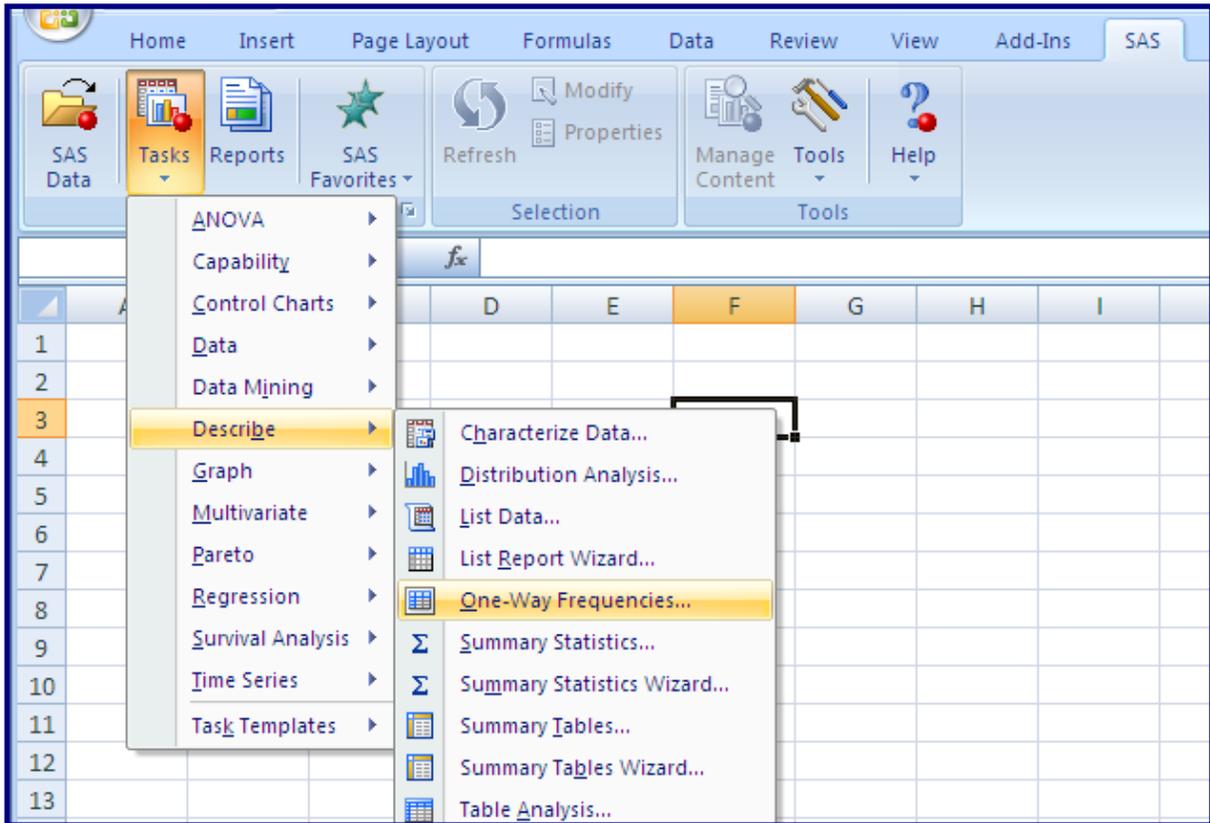


Figure 6.

In this example, the **Describe** category is selected, then the **One-Way Frequencies...** task. In Enterprise Guide, data is selected first, then the task. In Excel, the task is selected first, then the data. So, once the task is selected, a **Choose Data** window opens allowing the user to then select the data. As soon as data is selected, a SAS Add-in window opens...

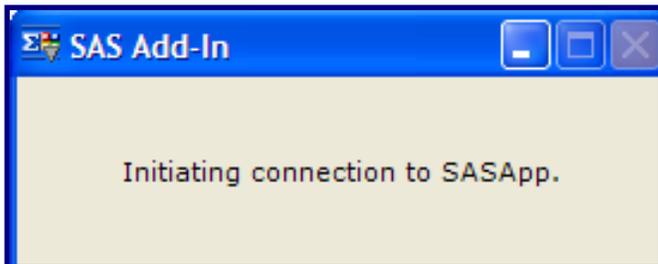


Figure 7.

... indicating that the SASApp server is initializing. Once the connection has been made to the server, the **One-Way Frequency** task window opens.

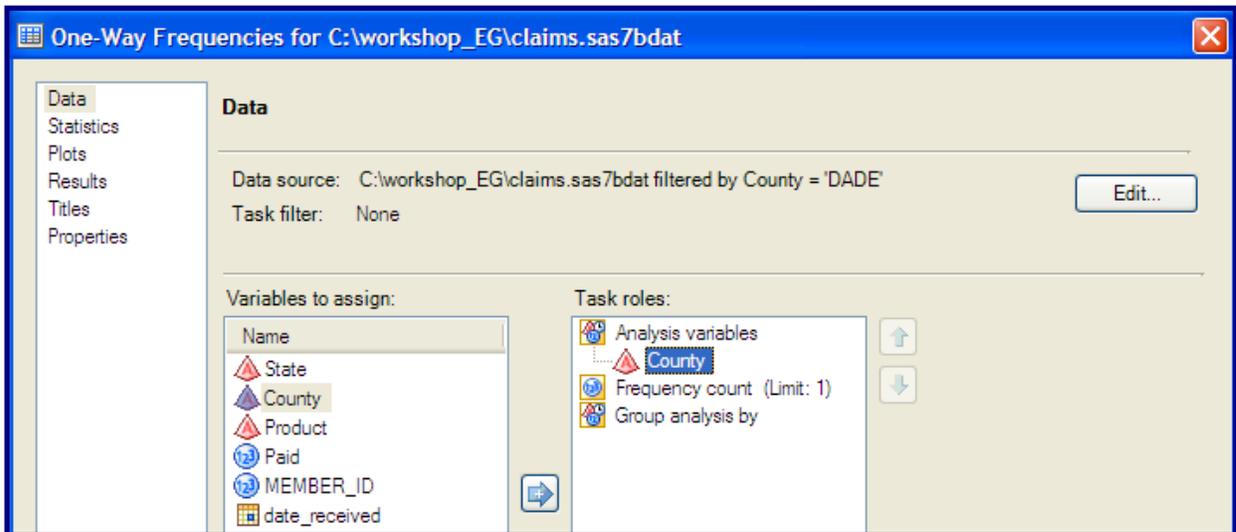


Figure 8.

Drag **County** and drop it on Analysis variables and select **Run**.

	A	B	C	D	E	F	G	H
1	One-Way Frequencies							
2								
3	Results							
4								
5	County	Frequency	Percent	Cumulative Frequency	Cumulative Percent			
6	DADE	454	100.00	454	100.00			
7								

Figure 9.

Note: the data has been filtered so that only one county exists.

1.c. Running a Stored Process:

In Excel, select **SAS --> Reports**. Expand the folders to get to the **SAS Folders --> Products --> then SAS Intelligence Platform --> Samples**. Next, select the **Year to Date Budget** Stored Process. Then select **Open**.

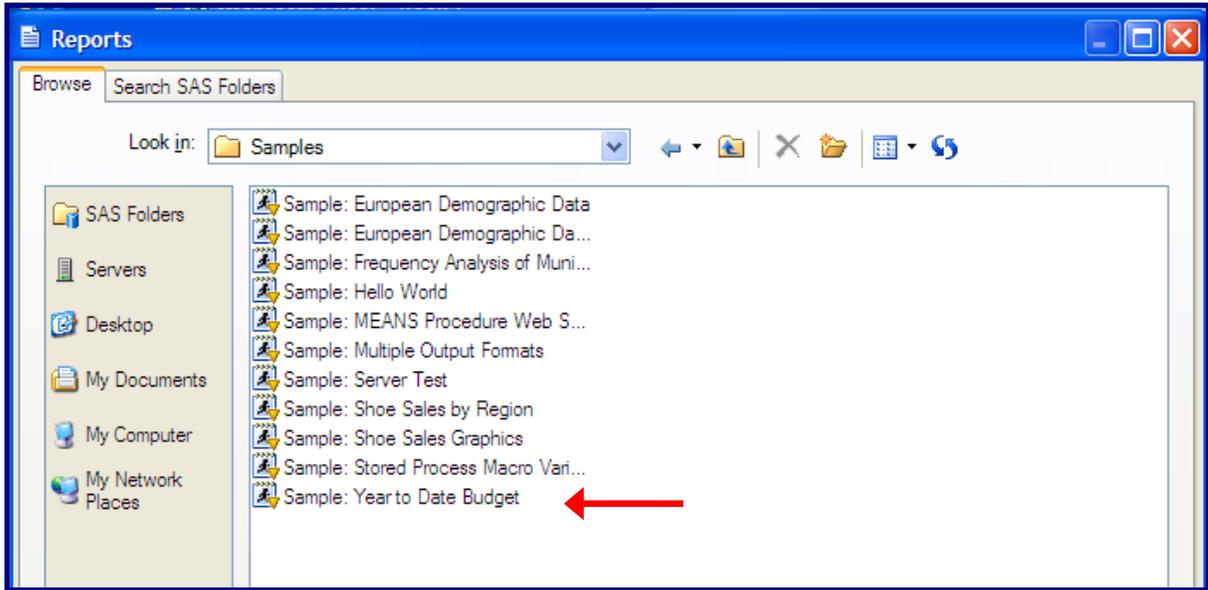


Figure 10.

The Stored Process results are streamed back to the spreadsheet.

The screenshot shows an Excel spreadsheet with the following data:

	city	date	revenue	cityno	dept	Week of the Month	Week of the Month	Day of the Week
6	Chicago, IL	1-Jan-97	\$911	1	100	1	6	WEDNESDAY
7	Chicago, IL	2-Jan-97	\$492	1	100	1	6	THURSDAY
8	Chicago, IL	3-Jan-97	\$613	1	100	1	6	FRIDAY
9	Chicago, IL	6-Jan-97	\$337	1	100	2	5	MONDAY
10	Chicago, IL	7-Jan-97	\$578	1	100	2	5	TUESDAY
11	Chicago, IL	8-Jan-97	\$396	1	100	2	5	WEDNESDAY
12	Chicago, IL	9-Jan-97	\$1,329	1	100	2	5	THURSDAY
13	Chicago, IL	10-Jan-97	\$844	1	100	2	5	FRIDAY
14	Chicago, IL	13-Jan-97	\$171	1	100	3	4	MONDAY
15	Chicago, IL	14-Jan-97	\$1,150	1	100	3	4	TUESDAY
16	Chicago, IL	15-Jan-97	\$530	1	100	3	4	WEDNESDAY
17	Chicago, IL	16-Jan-97	\$578	1	100	3	4	THURSDAY

Figure 11.

2. Using the SAS Add-in with Word

When you open Microsoft Word, there will be a SAS tab that is the starting point for doing SAS things in this environment.

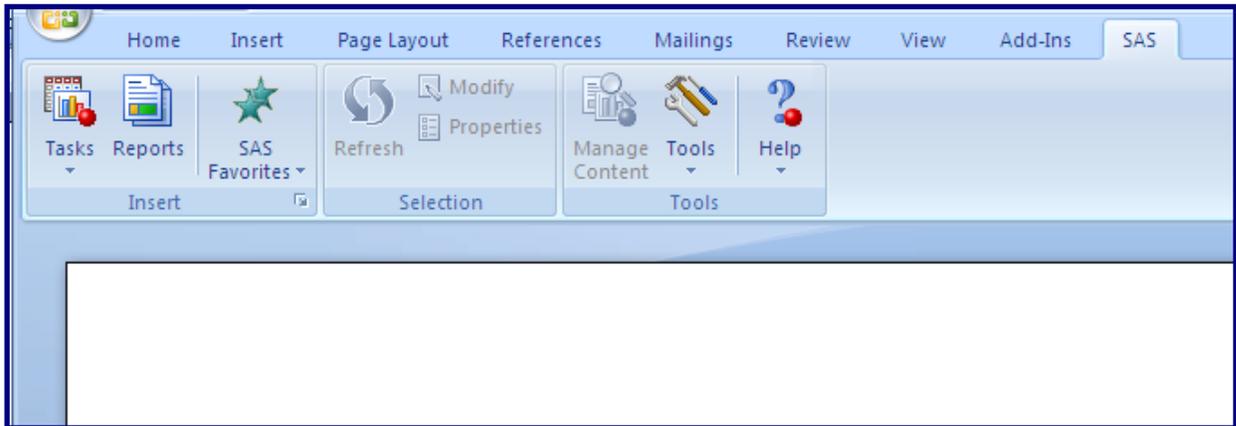


Figure 12.

2.a. Accessing Data:

There really is not an elegant way to open SAS data in Word. However, there are ways that you can see data in Word by running various tasks. One of the best tasks to use is the List Data Task which shows the rows and columns of a SAS dataset.

2.b. Analyzing Data (Running Tasks):

From the SAS tab, select the downward arrow next to the Tasks icon. Then select the Describe category, then the List Data task.

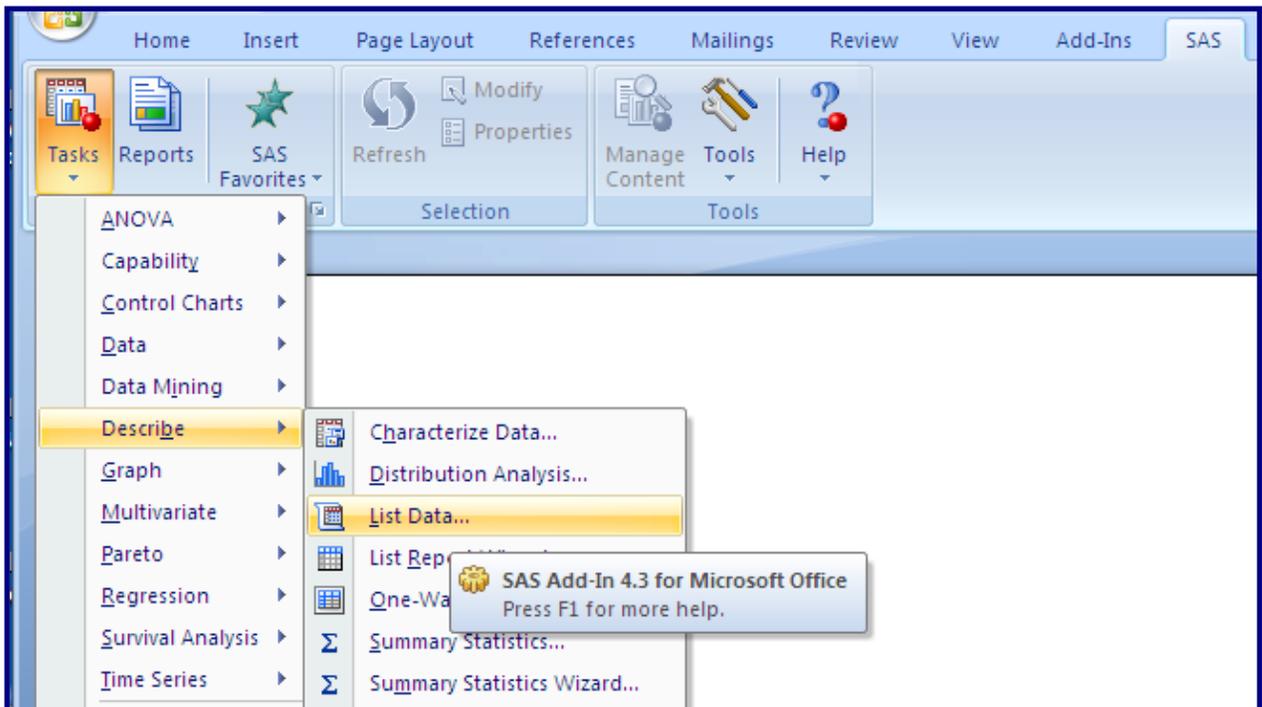


Figure 13.

A window opens asking you to select a dataset. After selecting a dataset, the List Data task opens. Select the variables you want by dragging them from the variables to assign column to the task roles area. Drop them on the List variables task. Use the options area to control how many rows to print.

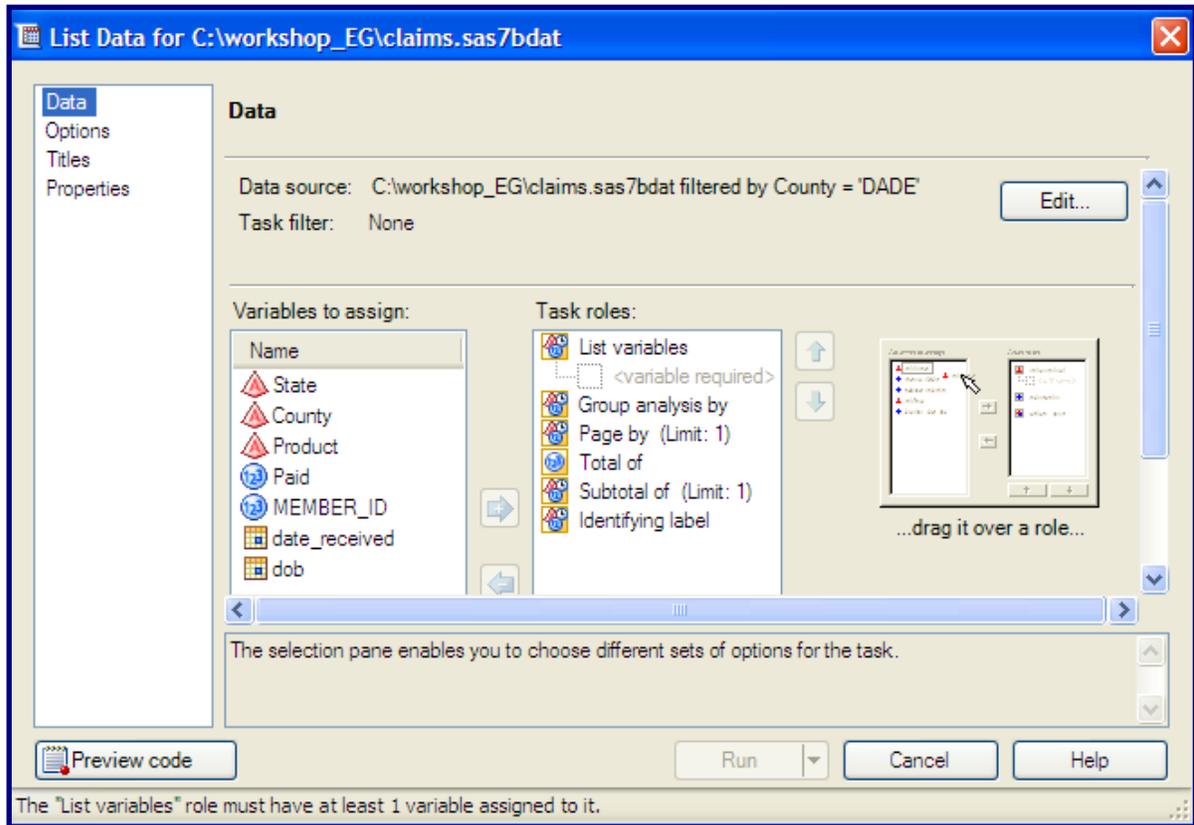


Figure 14.

Next, select **Run**. It will be ungrayed as soon as all the necessary items have been selected.

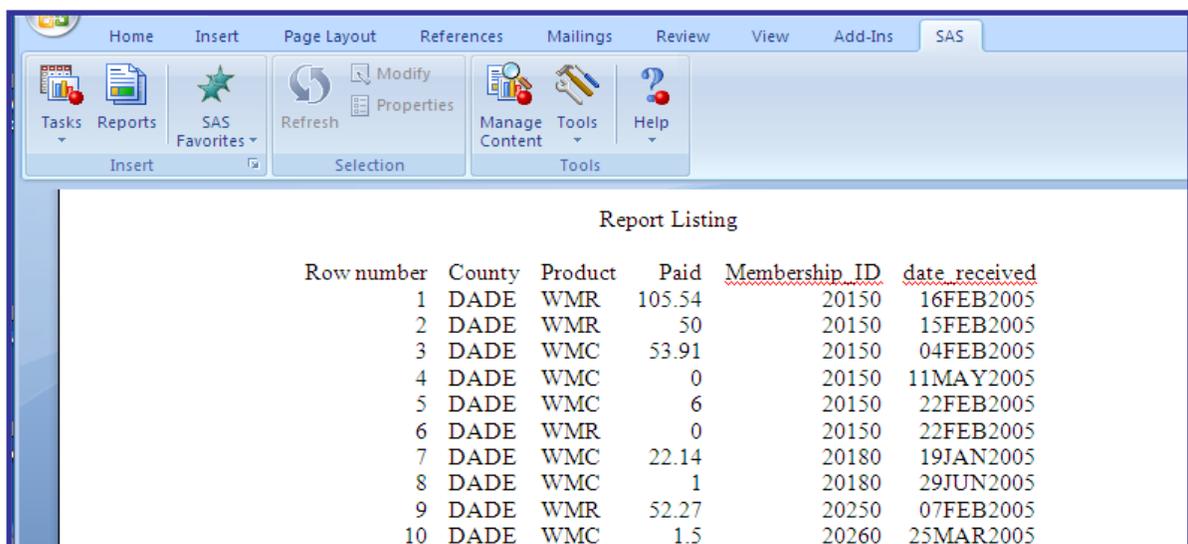


Figure 15.

2.c. Running a Stored Process:

In Word, select **SAS --> Reports**. When the Reports window opens, browse to find the Stored Process you want to run.

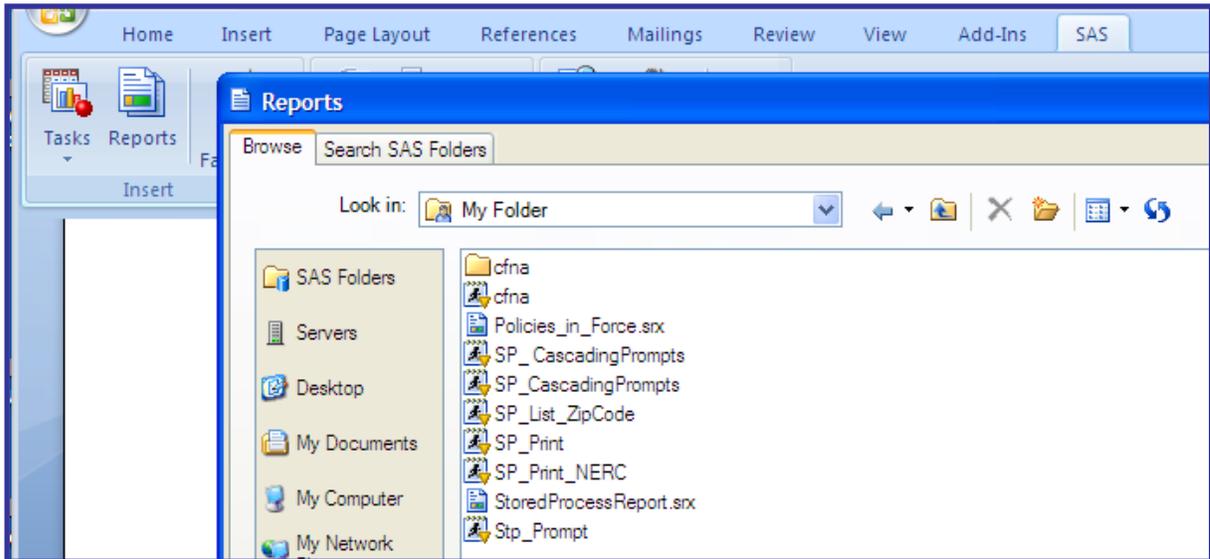


Figure 16.

Once the Stored Process is selected, select **Open**. The Stored Process runs and generates the report below.

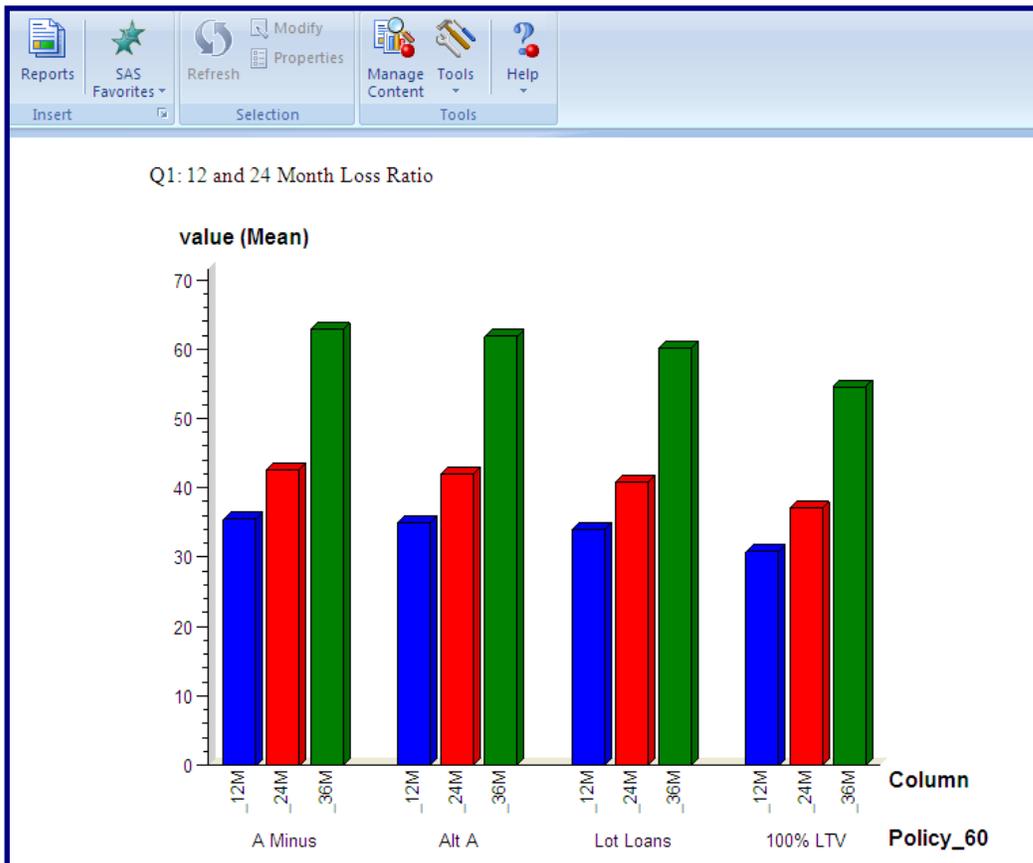


Figure 17.

3. Using the SAS Add-in with Powerpoint

When you open Microsoft Powerpoint, there will be a SAS tab that is the starting point for doing SAS things in this environment .

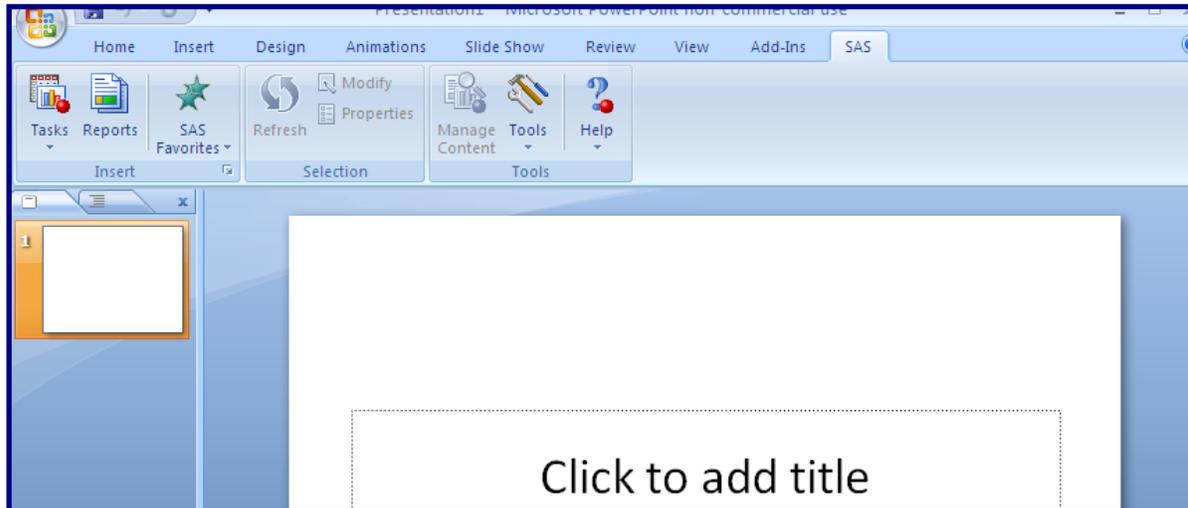


Figure 18.

3.a. Accessing Data:

There really is not an elegant way to open SAS data in Powerpoint. However, there are ways that you can see data in Word by running various tasks. One of the best **tasks** to use is the List Data Task which shows the rows and columns of a SAS dataset. You can access tasks through the Task icon. This is pretty much the same as in Word and Excel.

3.b. Analyzing Data (Running Tasks):

From the SAS tab, select the downward arrow next to the Tasks icon. This is the same path as in Word. Then select the the desired task category, then the specific task.

3.c. Running a Stored Process:

In Word, select **SAS --> Reports**. When the Reports window opens, browse to find the Stored Process you want to run. This is the same process as in Word.

CONCLUSION

The Add-in for Microsoft Office product from SAS Institute offers users a new way to do SAS. If the Microsoft world is your comfort zone, then you can stay in your comfort zone and do SAS processes.

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