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Point-and-Click Style Editing in SAS® Enterprise Guide®

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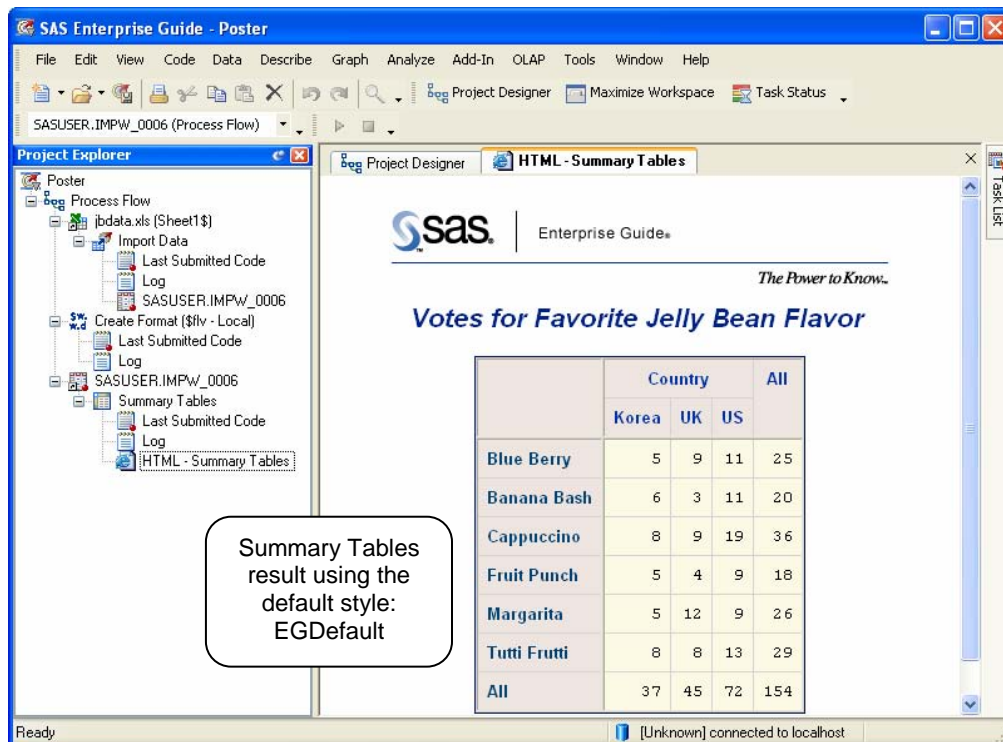Susan J. Slaughter, Avocet Solutions, Davis, CA

ABSTRACT

SAS comes with a variety of styles that you can choose to change the overall look of your HTML results. If you can't find the exact style you need, then you can use the Style Manager in SAS Enterprise Guide to easily make modifications to existing styles. The Style Manager uses a point and click interface for selecting style attributes including: font size, style and color, background or banner images, and background colors and borders. Styles created in SAS Enterprise Guide can be used both within SAS Enterprise Guide and in programs written using SAS.

INTRODUCTION

All results produced by SAS in HTML format have a style. The style controls the overall look of the result: the text color, font and size, background colors and images, and borders. There are many styles to choose from when producing HTML results, but sometimes the available styles just aren't quite right. It is possible to create your own styles from scratch, but it is faster to find a style that is close to what you want, and make changes to that style. The TEMPLATE procedure in SAS is one way to edit styles, but an easier method is to use the Style Manager in SAS Enterprise Guide. You can only edit HTML styles using the Style Manager. SAS Enterprise Guide ships with Base SAS for Windows, and is a Windows only product. All examples in this paper were produced using SAS Enterprise Guide 4.1, but the Style Manager in SAS Enterprise Guide 3.0 is similar and styles created in 3.0 can be used in 4.1 and vice versa.

THE DEFAULT STYLE

Unless you specify an alternate style, any HTML result you produce in SAS or SAS Enterprise Guide will use the default style. The default style for SAS is slightly different from the default style used by SAS Enterprise Guide. Here is the result of running a Summary Tables task showing the default style for SAS Enterprise Guide 4.1: EGDefault.
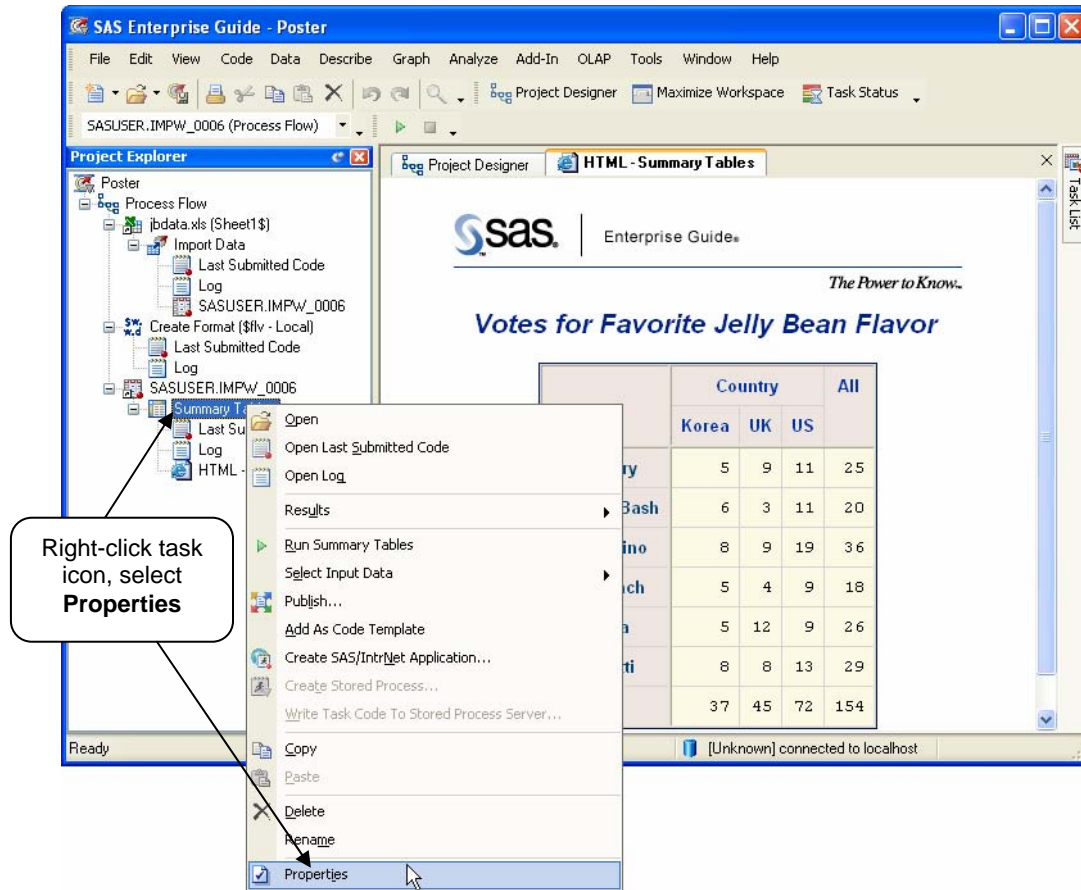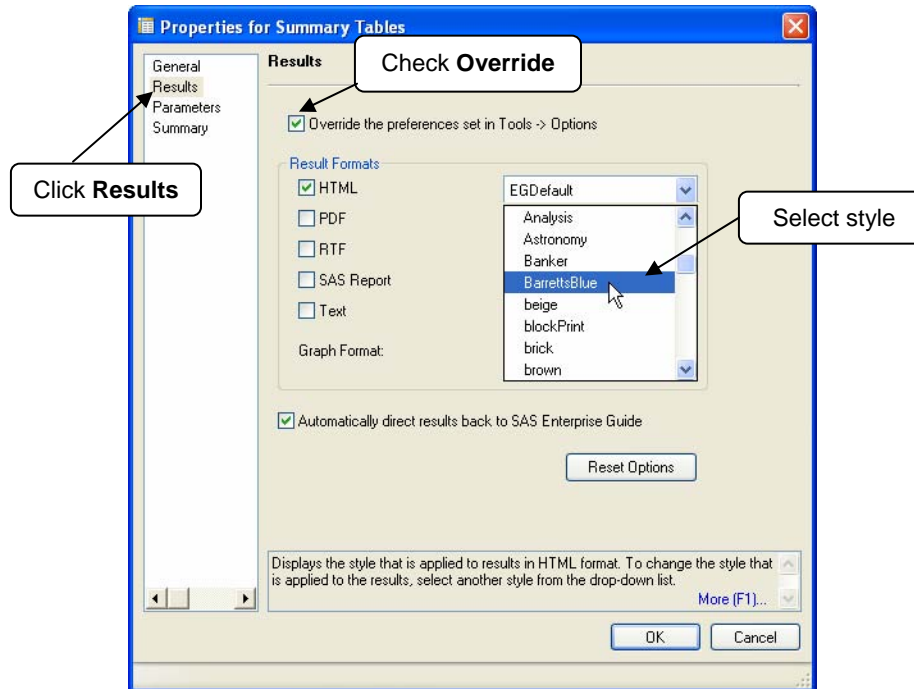

Summary Tables result using the default style: EGDefault

CHANGING THE STYLE

To change the style used for a particular task in SAS Enterprise Guide, right-click the task icon in the Project Explorer or Project Designer and select **Properties**. You can also change the style used for all tasks in the Options window (select Tools ► Options).

Click **Results** in the list of options on the left side of the Properties window to open the Results page. Check **Override the preferences set in Tools -> Options**, and select the desired style, BarrettsBlue for this example, from drop-down list next to HTML. Click **OK**.

To see the result of the Summary Tables task using the style you selected, you can rerun the task by right-clicking the task icon and selecting **Run** *task-name* (Run Summary Tables in this example).
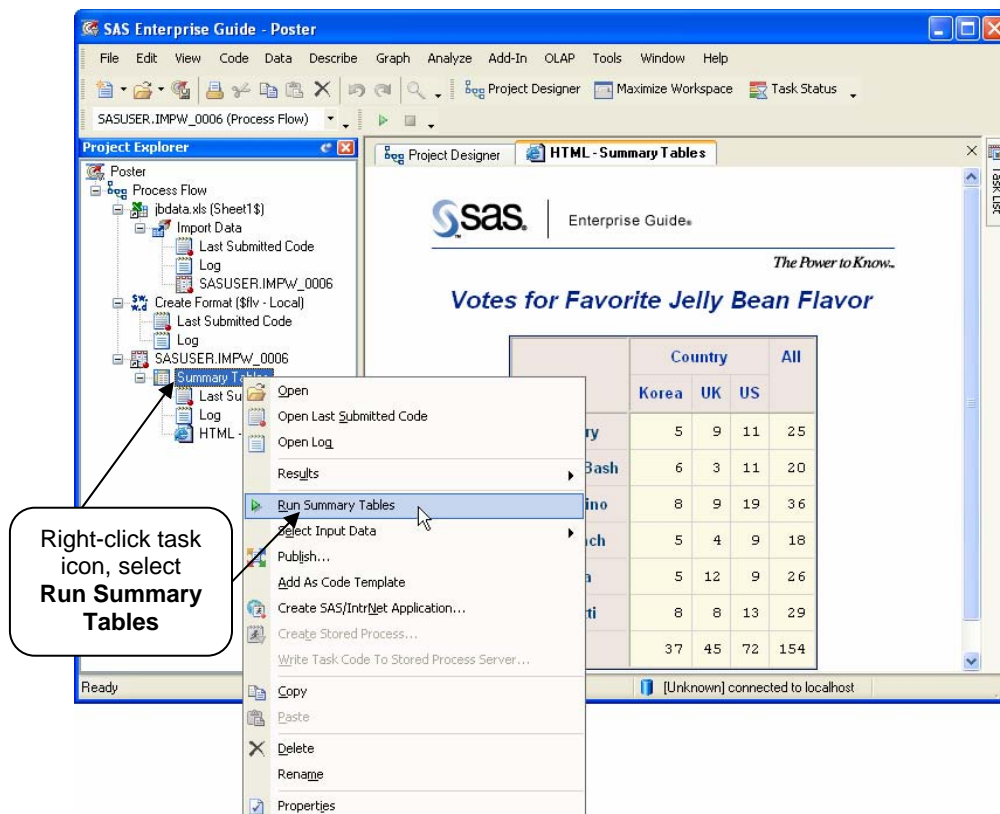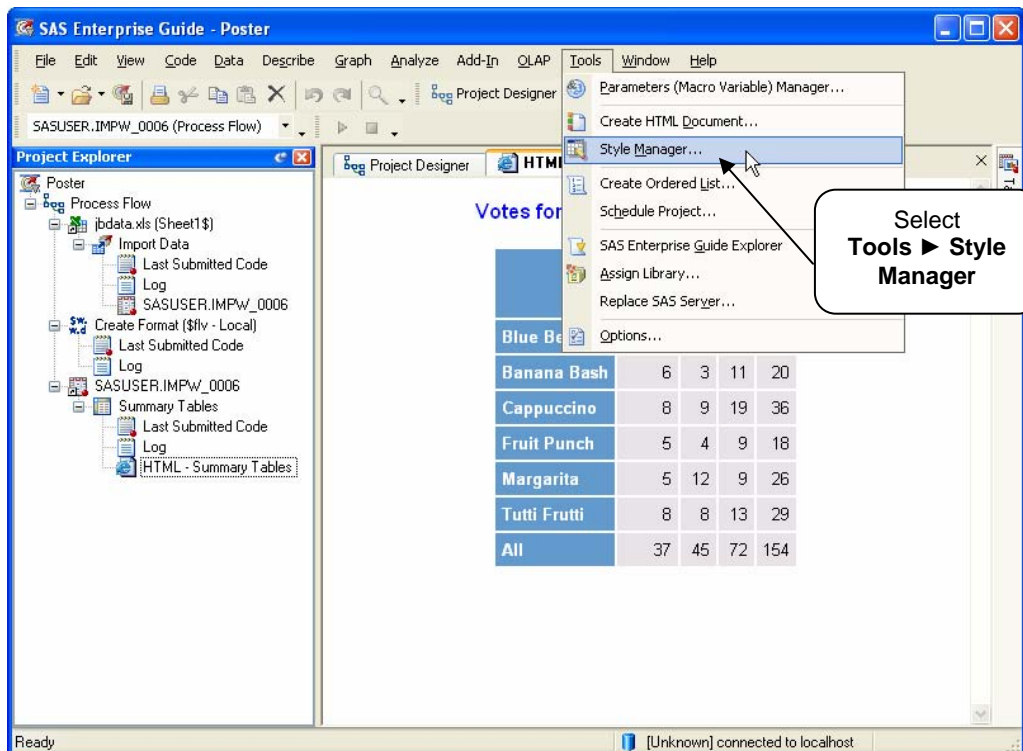
Here is the result using the Barrettsblue style.
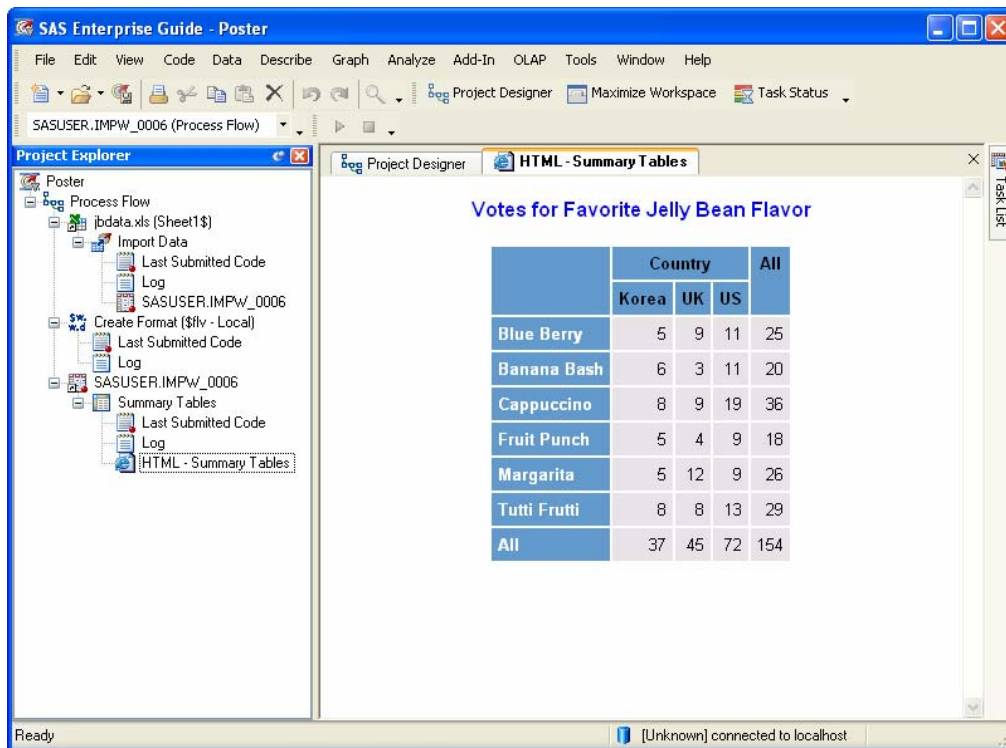
OPENING THE STYLE MANAGER

The Style Manager in SAS Enterprise Guide allows you to preview built-in styles and also make changes to copies of existing styles. Open the Style Manager by selecting **Tools ► Style Manager**.

MAKING A COPY OF THE STYLE

You cannot directly edit the styles that come with SAS. Instead, make a copy of the style and then edit the copy. Select the style you wish to edit, then click **Create a Copy**. The Save Style As window will appear. In this window you can specify a name and storage location for the copy of the style.
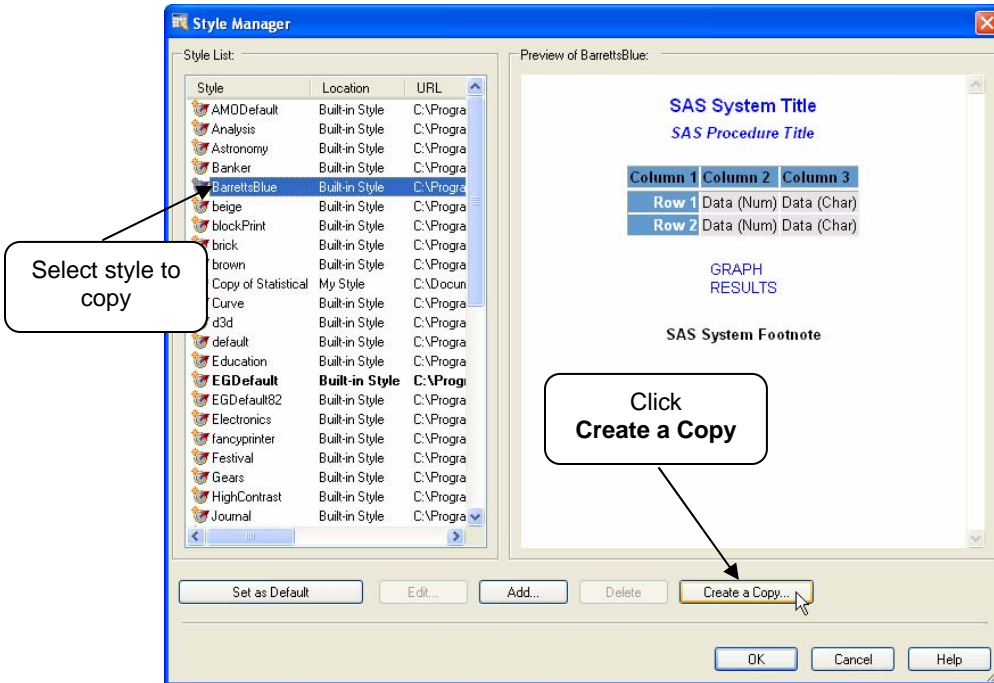

To edit the copy of the style you just created, select the style from the Style List and click **Edit**.


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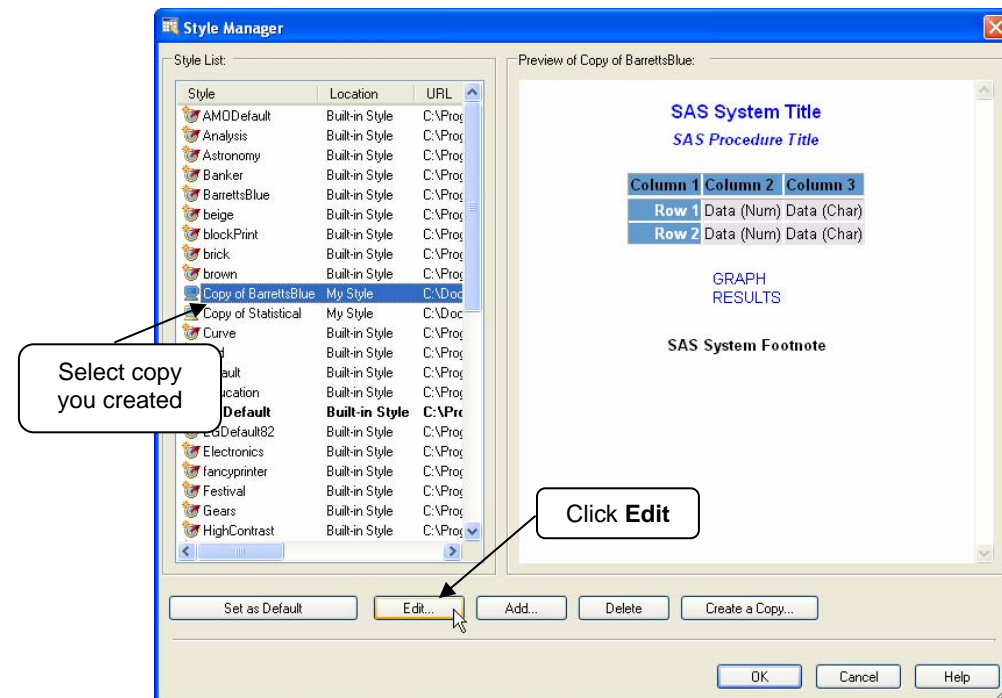
CHOOSING STYLE ELEMENTS AND CHANGING ATTRIBUTES

Choose style elements to edit by either clicking the element in the area on the left side of the Style Editor window, or selecting the element from the drop-down list under **Active element**.

Select the desired attributes for the element from the area on the right. For text elements, you can select the font, size, style, color, background color and alignment. A preview of the text will appear at the bottom of the window. When you are finished, click **OK**.
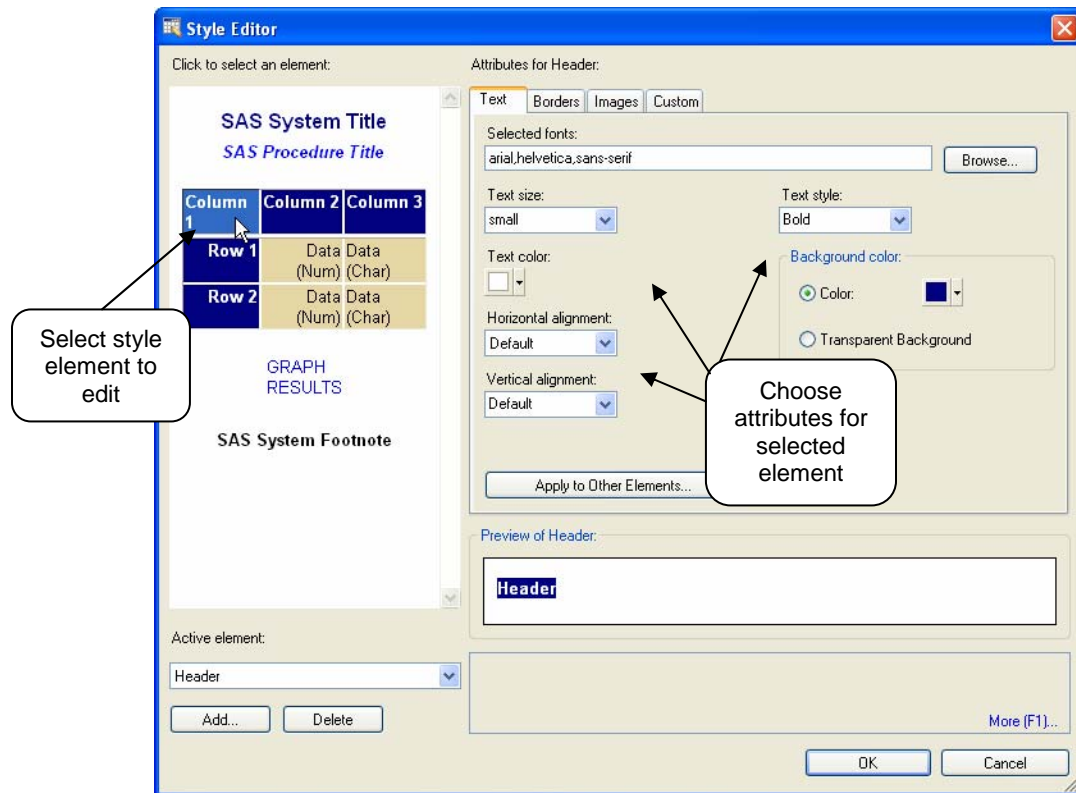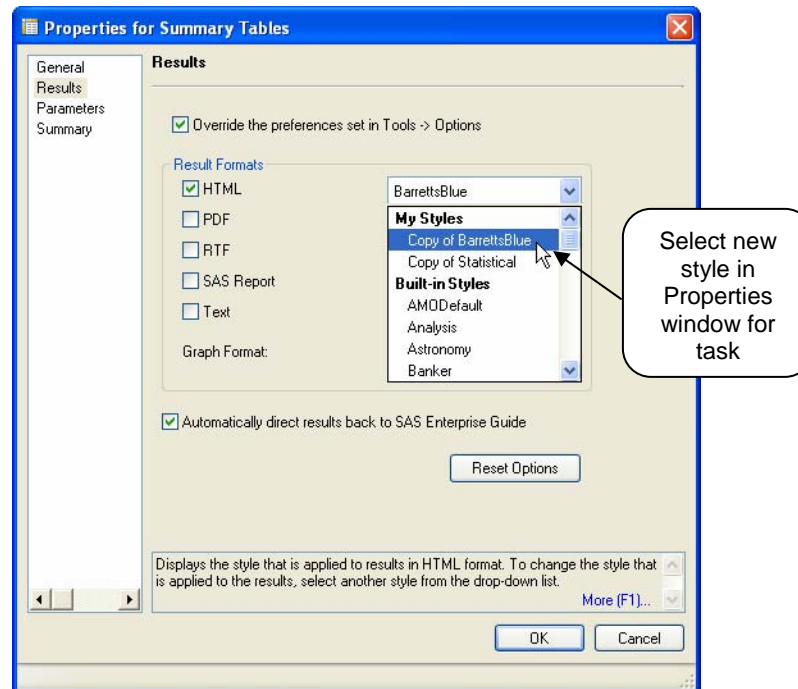
After clicking OK, a preview of the style will appear in the Style Manager window. For this example, the System Title has been given a dark blue color, the Header element (labeled Column1, Column2, Column3) has been changed to a dark blue background with white text. The Row Header element (labeled Row1, Row2) has been changed to a dark blue background to match the Header background. And the Data element background has been changed to a light brown color. Click **OK**.
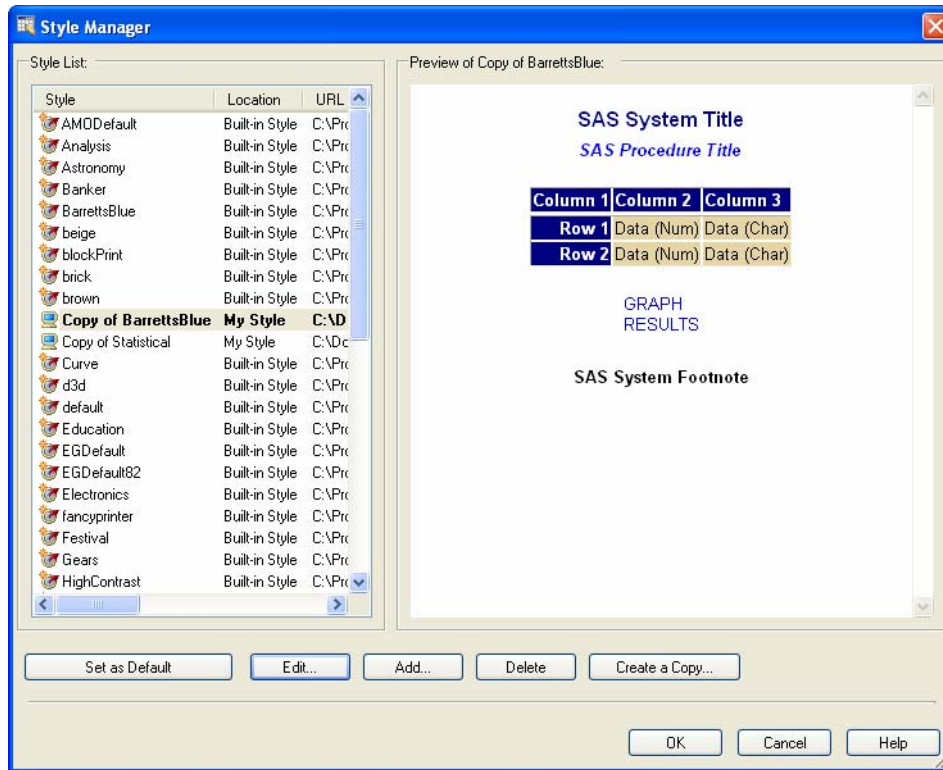
APPLYING THE NEW STYLE

Apply the new style to your result the same way you do for any other styles. Right-click the task icon and select **Properties**. Click **Results**, and choose the new style from the drop-down list next to **HTML**. Note that the new style appears under the **My Styles** heading.
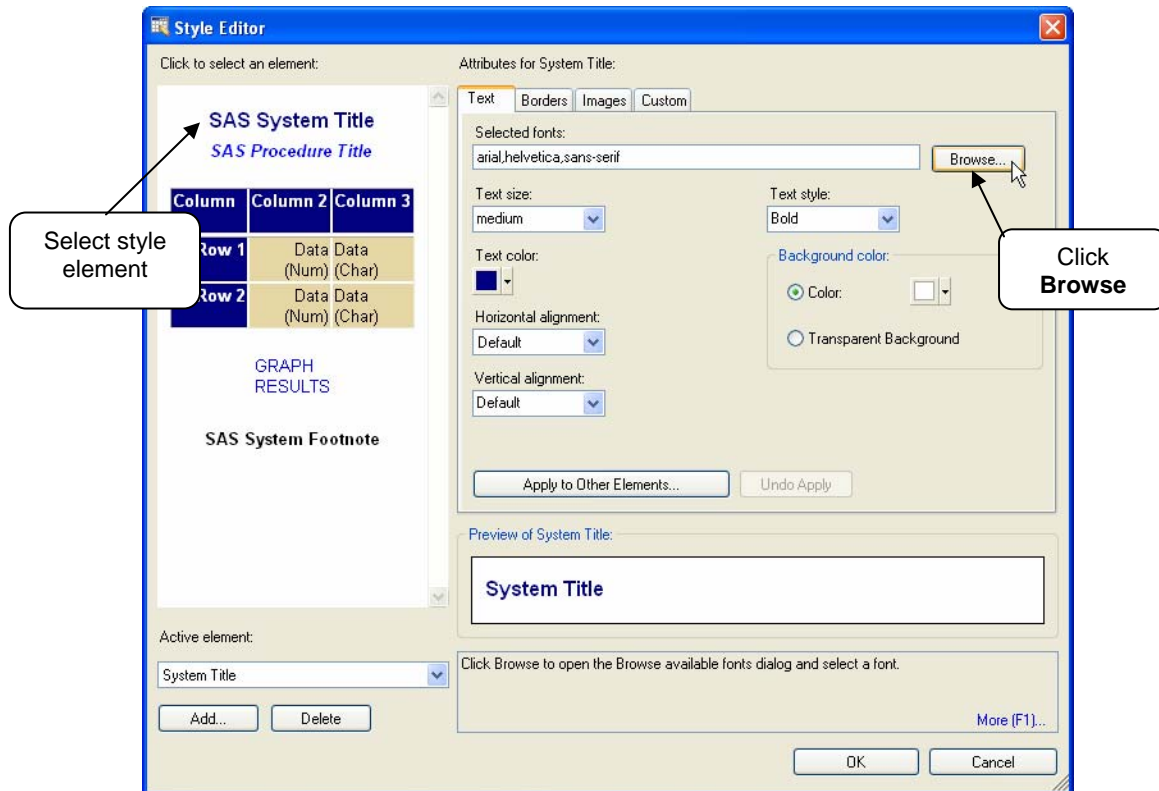

After rerunning the task this is what the result looks like with the new style.

SELECTING FONTS

To change fonts, select the desired text element in the Style Editor window, then click the **Browse** button.

This opens the Browse Available Fonts window. Because the same fonts are not necessarily available to all people who may view the HTML file, a list of fonts is specified instead of just a single font. Move the desired font from the **Available fonts** list to the **Selected fonts** list. Then move the font to the top of the list. If that font is available to the viewer, then that font will be used. Click **OK**.
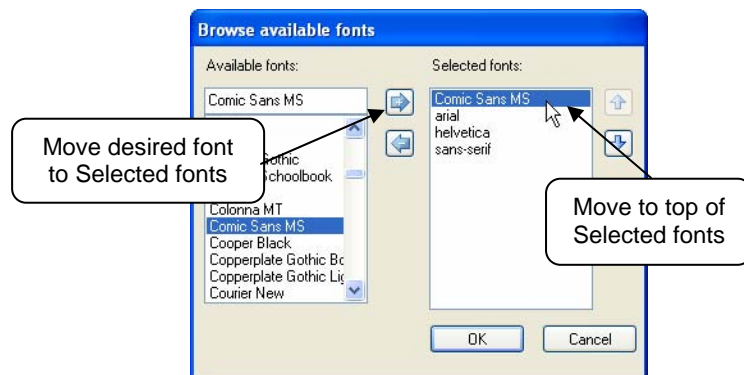
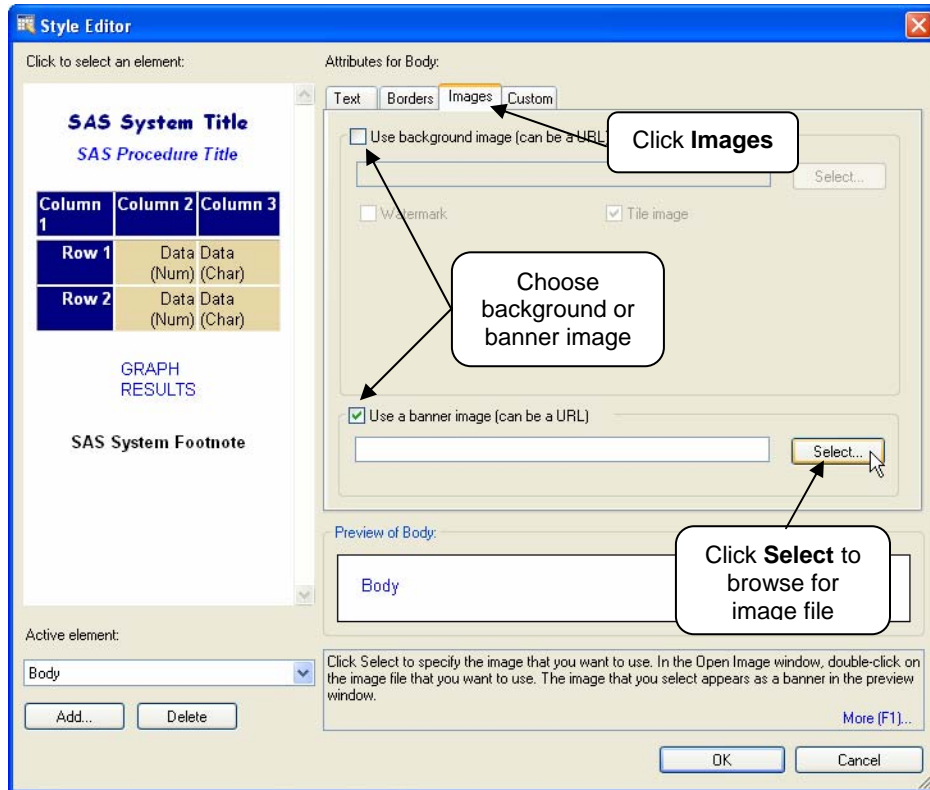After rerunning the task, here is the result with new font, Comic Sans MS, for the System Title.

ADDING IMAGES

To add images to your style, click the **Images** tab in the Style Editor window. You can choose to add background or banner images to your style. Click **Select** to browse for image files in either JPG, or GIF formats or you can enter a URL for the image location. Note that banners are not supported in SAS Add-in for Microsoft Office and images are not embedded in HTML results.

Here is the result with a banner image.

USING THE NEW STYLE IN A SAS PROGRAM

Styles created in SAS Enterprise Guide can also be used in SAS programs. In the ODS HTML statement, add the STYLESHEET= option and specify the style sheet in the URL= option. You must precede the file path and name with **file:**. If you have any spaces in the path or file name, substitute **%20** for the spaces.

```
ODS HTML FILE='C:\SGF2007\FavoriteVotes1.html'
    STYLESHEET=(URL="file:\\\C:\Documents%20and%20Settings\Lora\Application%20Data\
        SAS\BI%20Clients\Styles\Copy%20of%20BarrettsBlue.css");

PROC TABULATE DATA=Votes FORMAT=3.;
    CLASS Country /ORDER=UNFORMATTED MISSING;
    CLASS Flavor /ORDER=UNFORMATTED MISSING;
    FORMAT Flavor $FLV.;
    TABLE Flavor={LABEL=''} ALL,
        Country* N={LABEL=''} ALL* N={LABEL=''};
RUN;

ODS HTML CLOSE;
```

> Use STYLESHEET= option on ODS HTML statement
> Insert %20 for spaces in file name

Here is what the HTML file looks like generated by running the above program in SAS 9.1.3. Note that the banner image does not appear in this result.

Votes for Favorite Jelly Bean Flavor				
	Country			All
	Korea	UK	US	
Blue Berry	5	9	11	25
Banana Bash	6	3	11	20
Cappuccino	8	9	19	36
Fruit Punch	5	4	9	18
Margarita	5	12	9	26
Tutti Frutti	8	8	13	29
All	37	45	72	154

Background images will display with no extra effort on your part, but banner images require an extra step to make them appear. There are several ways to do this – see SAS Technical FAQ (4168). The following method adds the HEADTEXT option to the ODS HTML statement. Note that for the image file path you don't add %20 for spaces.

```
ODS HTML FILE='C:\SGF2007\FavoriteVotes.html'
    STYLESHEET=(URL="file:\\\C:\Documents%20and%20Settings\Lora\Application%20Data\
        SAS\BI%20Clients\Styles\Copy%20of%20BarrettsBlue.css")
    HEADTEXT='<div style="text-align:center">
        <img src="c:\The Jellybean Images\Banner3bean.jpg"></div>';


PROC TABULATE DATA=Votes FORMAT=3.;
        CLASS Country /ORDER=UNFORMATTED MISSING;
        CLASS Flavor /ORDER=UNFORMATTED MISSING;
        FORMAT Flavor $FLV.;
        TABLE Flavor={LABEL=''} ALL,
            Country* N={LABEL=''} ALL* N={LABEL=''};
RUN;

ODS HTML CLOSE;
```

> For banner images,
> Use HEADTEXT= option on ODS HTML statement
>
> **DO NOT** insert %20 for spaces in file name

Here is the result including the banner image.
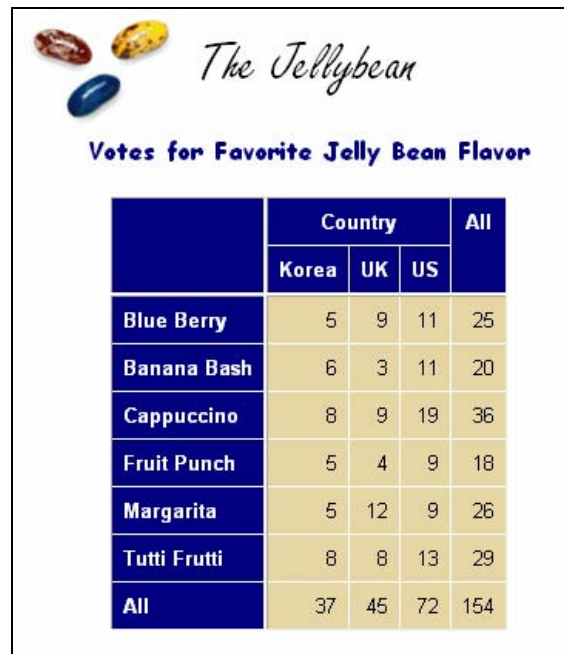
CONCLUSIONS

The Style Manager in SAS Enterprise Guide is a great visual tool for editing SAS styles. Styles created using the Style Manager can be used in SAS Enterprise Guide, and by adding a few extra options to your ODS HTML statement, they can also be used in SAS programs.

REFERENCES

SAS Technical FAQ # 4168. http://support.sas.com/faq/041/FAQ04168.html

Slaughter, Susan J. and Lora D. Delwiche. 2006. *The Little SAS Book for Enterprise Guide 4.1.* Cary, NC: SAS Institute Inc.

ABOUT THE AUTHORS

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