

I have always enjoyed going to SAS conferences and seminars. So the opportunity to attend in London both Lauren Haworth's *VIEWS* Books-by-User event and the 2003 SAS User Forum was definitely not to be missed. Even if you missed these events, we have been able to include reports and extracts from both meetings in this issue, and we hope to be able to bring you more extracts from Lauren Haworth's ODS book in future issues of *VIEWS News*.

If you would like to contribute an article, or discuss the possibility of doing so, please send an email to me at newsletter@views-uk.org. A list of possible subjects for your articles can be found on the *VIEWS* web site, and anyone is very welcome to add to that list by sending emails with your own questions to newsletter@views-uk.org.

Philip R Holland (Newsletter Editor)

Membership of *VIEWS* is **free** and you can register for notification of all future *VIEWS* events by emailing us at membership@views-uk.org, making certain you include your name and postal address. If you would like to receive a free copy of the quarterly *VIEWS News* by email, please remember to also include your email address.

News - Stop Press!

Report on the *VIEWS* Books-By-User Event

On 18 November 2003 over 40 SAS programmers arrived at the Churchill Intercontinental in London, which was under heavy police guard, to hear Lauren Haworth talk about the Output Delivery System.

In contrast to the 'Yankee Go Home' placards she'd seen on her arrival (meant for George W Bush!), we gave her a very warm welcome. In return she presented extracts from her book, "Output Delivery System: The Basics", and 3 other papers, "ODS Tips and Tricks", "ODS for REPORT, TABULATE and PRINT" and "HTML for the SAS Programmer". At the end of the day, whether we were ODS users already, or just discovering it for the first time, we all went home wanting to persuade our colleagues that ODS would make their reporting tasks easier!

Philip R Holland (Newsletter Editor)

An extract from Lauren Haworth's book, "Output Delivery System: The Basics" can be found below in the "Did You Know?" section.

Did You Know?

If you have a useful hint or tip, please send it to the Editor and share it with the *VIEWS* membership.

Creating Standard Titles for Web Graphics

[SAS 8] Have you found that the titles created with web graphics are not as readable as other web-based reports, or just look different?

Using ODS statements it is possible to generate web pages containing GIF image files:

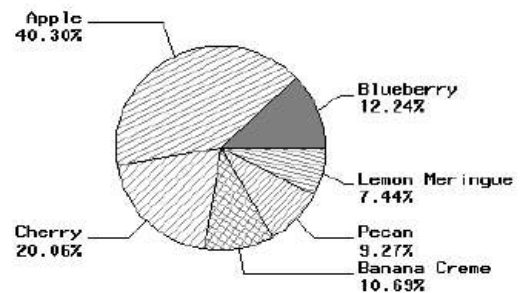
```
ODS HTML BODY='c:\temp\PieStats.htm'
      GPATH='c:\temp\' (URL=NONE);

GOPTIONS DEVICE=GIF XPIXELS=480 YPIXELS=360;

TITLE 'Pie Chart: Annual Sales by Flavor';
PROC GCHART DATA=PieStats;
  PIE PieType / SUMVAR=Sales OTHER=0
    MIDPOINTS='Blueberry' 'Apple' 'Cherry'
              'Banana Creme' 'Pecan'
              'Lemon Meringue'
  CFILL=GRAY VALUE=NONE PERCENT=ARROW
  SLICE=ARROW NOHEADING;
RUN;
QUIT;

ODS HTML CLOSE;
```

Pie Chart: Annual Sales by Flavor



With the addition of a single option, NOGTITLE, to the ODS HTML statement, the title is written to the web page, instead of the GIF file, which makes it more readable and uses the same ODS style characteristics as the other report titles:

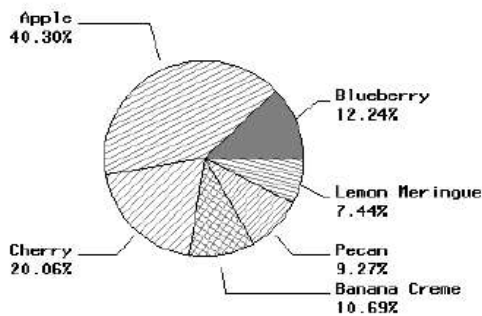
```

ODS HTML BODY='c:\temp\PieStats.htm'
      GPATH='c:\temp\' (URL=NONE) NOGTITLE;
GOPTIONS DEVICE=GIF XPIXELS=480 YPIXELS=360;
TITLE 'Pie Chart: Annual Sales by Flavor';
PROC GCHART DATA=PieStats;
  PIE PieType / SUMVAR=Sales OTHER=0
    MIDPOINTS='Blueberry' 'Apple' 'Cherry'
              'Banana Creme' 'Pecan'
              'Lemon Meringue'
    CFILL=GRAY VALUE=NONE PERCENT=ARROW
    SLICE=ARROW NOHEADING;
RUN;
QUIT;

ODS HTML CLOSE;

```

Pie Chart: Annual Sales by Flavor



Lauren Haworth, Genentech Inc.

(Reproduced from "Output Delivery System: The Basics")

Here We Go Loopy Do

There are many uses of DO loops in the SAS Data step, but few remember the ability to loop over letters or words in addition to numeric expressions.

The following example creates ten random integers for each of three values of a text string:

```

DATA work.loopydo;
  LENGTH segment $6;
  DO customer = 1 TO 10;
    DO segment = 'HIGH', 'MEDIUM', 'LOW';
      value = INT(RANUNI(0)*5);
      OUTPUT;
    END;
  END;
RUN;

```

Crucially here, the LENGTH statement is used to initialise the segment variable. Without this the variable **segment** would be initialised to length \$4, the length of the first value 'HIGH'.

Amadeus Software Consultancy Team

Getting Your IP Address and Connecting To Yourself

[SAS 8] Consider the case where you are developing some code at work which connects to another machine to run remotely, using

SAS/Connect. You may want to work on this at home, but you are not able to connect to that machine. You could start another SAS session on your home PC, and use the same name as your remote machine at work to avoid changing your code.

The following example demonstrates two useful techniques. Firstly a way to automatically get the IP address of the machine you are running on. This works for Windows 2000, and may require some changes for other systems. Secondly a way to signon to another session on your PC using a name of your choosing.

I use the IPCONFIG command through a pipe so I can read its output, which gives me my IP address. I use **@'IP Address'** to position the input pointer at the right place to read the IP address. I define all the characters I want to ignore as delimiters using **DLM=**. I finally put the parts of the IP address together and write them to a macro variable.

Now I make sure the SAS spawner program is running. This runs in the background and starts a new SAS session when I signon to the machine it is running on. As an example, the commands I use to invoke the spawner are:

```

cd "C:\Program Files\SAS Institute\SAS\V8"
spawner.exe -comamid tcp

```

Now I assign either my IP address or PC name to a macro variable which acts as the remote session id. When I signon using the name of that macro variable SAS will use the IP address (or PC name) to identify the system to connect to. The spawner then starts another SAS session, and I can **RSUBMIT** code to it:

```

*** Part 1 ***;

FILENAME cmd PIPE 'ipconfig';

DATA _NULL_;
  INFILE cmd DLM='.: ';
  INPUT @'IP Address' n1 n2 n3 n4 3.;
  ip_address = COMPRESS(
    PUT(n1, 3.) || '.' ||
    PUT(n2, 3.) || '.' ||
    PUT(n3, 3.) || '.' ||
    PUT(n4, 3.));
  CALL SYMPUT('ip', ip_address);
RUN;

%PUT My IP address is &ip;

```

```

*** Part 2 ***;

%LET london=&ip;
/*%LET london=homepc;
 * can alternatively use the PC name;*/

SIGNON london;

RSUBMIT london;
  PROC SETINIT;
  RUN;
ENDRSUBMIT;

```

Phil Mason, Wood Street Consultants

(Reproduced from "Phil Mason's Daily Tips")

Ask The Consultant

This part of VIEWS News is where you can get your technical questions answered. Send your questions to the Editor.

Referencing a Format within a Format

Q: Can you combine formats?

A: The following technique can prove very useful when defining a format:

```
PROC FORMAT;
  VALUE status 100 = 'Complete'
              200 = 'Proceeding'
              300 = 'Further Enquiries'
              400 = 'Rejected'
              OTHER = [monyy5.];
RUN;

PROC PRINT DATA=accounts NOOBS;
  FORMAT code status.;
RUN;
```

The output will look like this:

```
code
MAR03
Rejected
Further Enquiries
Proceeding
Complete
APR03
Rejected
Proceeding
Complete
MAR03
Rejected
Further Enquiries
Proceeding
```

Amadeus Software Consultancy Team

Reading Empty Tables

Q: How can you efficiently check if a dataset is empty?

A: There are occasions when you need to check if a table is empty or not. The SASHELP dictionary views contain all the information you need, but can be very slow to access. However, Data steps can be used to count records using the NOBS= option, but only work with empty tables if used in a way that looks wrong and generates warnings (see lines 14-18 below). It should be noted that the obvious syntax does not work with empty tables, but gives no errors at all (see lines 8-12 below)!

```
1  DATA empty;
2    SET sashelp.class (OBS = 0);
3  RUN;
```

NOTE: There were 0 observations read from the data set SASHELP.CLASS.

NOTE: The data set WORK.EMPTY has 0 observations and 5 variables.

```
4
5  %LET post_set = Not set;
6  %LET pre_set = Not set;
7
8  DATA _NULL_;
9    SET empty NOBS = count;
10   CALL SYMPUT('post_set', count);
11   STOP;
12  RUN;
```

NOTE: Numeric values have been converted to character values at the places given by: (Line): (Column).

10:26

NOTE: There were 0 observations read from the data set WORK.EMPTY.

```
13
14  DATA _NULL_;
15    CALL SYMPUT('pre_set', count);
16                                     -----
17                                     546
```

NOTE 546-185:

The variable count may be uninitialized.

```
16  STOP;
17  SET empty NOBS = count;
18  RUN;
```

NOTE: Numeric values have been converted to character values at the places given by: (Line): (Column).

15:25

```
19
20  %PUT post_set = &post_set;
post_set = Not set
21  %PUT pre_set = &pre_set;
pre_set = 0
```

Philip R Holland (Newsletter Editor)

(Based on an extract from "Small (DATA) steps to great things" presented at the 2003 SAS User Forum by Louise Clark, SAS UK)

Formats, Options, and Functions

This section is devoted to the description of useful, or unusual, SAS Formats, Options, and Functions.

The **JULIANw.** Informat can be used to read dates that have the layout YYDDD or CCYYDDD into SAS, where CC are century digits, YY are year within century digits and DDD are day within year digits.

The **GOPTION RESET=** will reset options to their defaults and/or cancels global statements. The **RESET=** option can take 3 values: (1)**RESET=ALL** sets all graphics options to defaults and cancels all global statements, (2)**RESET=GLOBAL** cancels all global statements (**AXIS**, **FOOTNOTE**, **LEGEND**, **PATTERN**, **SYMBOL**, and **TITLE**), without affecting options in the **GOPTIONS** statement, and (3)**RESET=statement-name** or **RESET=(statement-name1 statement-name2 ...)** which resets or cancels only the specified global statements.

[SAS 8] The **FDELETE()** SCL function can be used in a Data step to delete an external file, or an empty directory, associated with a file reference.

News

Report on the SAS User Forum in London

This year's venue for SAS User Forum 2003 on 15 October 2003 was the Paddington Hilton in London. Attendances were reported to be up on the first SAS User Forum in 2002 for London, and the event in Penrith was also expecting a high turnout. As last year the presentations were pitched between marketing and high-level technical, but there were rumours during the day that presenters had been instructed to include at least some SAS code in their presentations. I certainly saw code in all the presentations I attended, and there were also plenty of technical SAS staff in Knowledge Zone.

I was not totally happy about some features of the SAS User Forum. Firstly the slides were not very readable in the Main Auditorium, although all the slides from the presentations have since been published on the SAS UK web site. Secondly the two Hints and Tips sessions were scheduled in parallel streams and clashed, so, as the demand to attend one of the sessions exceeded the capacity of the room, that session was repeated. This, unfortunately, caused the cancellation of the Questions and Answers session at the end of the day, although the questions posted on the special PC during the event should have been answered individually by email by now.

Overall the SAS User Forum was not in competition with the *IEWS* Conference, and I believe that the two events will serve the different needs of the SAS community well.

Philip R Holland (Newsletter Editor)

An article based on a presentation from the 2003 SAS User Forum can be found above in the "Ask The Consultant" section.

In Brief

- Back issues of *IEWS News* are available from the *IEWS* web site.
- Please also note that members will now only receive notification of when the latest issue of *IEWS News* has been uploaded to the web site, and will no longer receive a copy of the newsletter by email. This is in response to comments by members about the size of emails received.
- Phil Mason now has a daily SAS tips newsletter, which can be requested by going to www.woodstreet.org.uk and then clicking on Tips. Previous tips can also be found on the web site. This month's article from Phil was taken from a tips newsletter.
- SAS users looking for contracts, jobs, services and products may find what they are looking for on the Sponsored Links web page at www.hollandnumerics.com/CSP.HTM.

Diary

*Are you organising an event that would be of interest to the *IEWS* readership? Let us know as we are interested in all non-profit making events related to SAS.*

January 2004

29 **Data Warehousing Explained**, Amadeus Software
-FREE!

See the Amadeus Software web site for further details.

February 2004

IEWS News 25th edition

24 **An Independent Overview of SAS Products**, Amadeus Software -FREE!

See the Amadeus Software web site for further details.

May 2004

IEWS News 26th edition

9-12 **SUGI**, Montreal, Canada

The SAS User Group International (SUGI) Conference is held each year and focuses on the technical aspects of SAS software.

19-20 **IEWS 2004 Conference**, Commonwealth Conference & Events Centre, Kensington, London

The *IEWS* Committee is looking for user papers to be written for the conference on technical SAS-related subjects.

23-26 **PharmaSUG**, San Diego, USA

PharmaSUG is held each year and is the world-wide pharmaceutical SAS users group meeting.

June 2004

15-17 **SAS User Forum International**, Copenhagen, Denmark

The SAS User Forum International (formerly SEUGI) is held each year and focuses on the more commercial aspects of SAS software.

August 2004

IEWS News 27th edition

November 2004

IEWS News 28th edition

*All *IEWS* event information will be posted and/or emailed to registered members of *IEWS*, and will include an event application form. Please send your queries about any *IEWS* events to events@views-uk.org, and don't forget to look at the web site for the latest news.*

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