



**HARTFORD AREA SAS® USERS GROUP**

|                           |                                   |
|---------------------------|-----------------------------------|
| <b>Volume 14, Issue 3</b> | <b>Third Quarter, August 2002</b> |
|---------------------------|-----------------------------------|

*Table of Contents*

|  |             |
|--|-------------|
| <b>Note from the Chairman</b>                                | <b>2</b>    |
| <b>Meeting Announcement</b>                                  | <b>2-3</b>  |
| <b>Book Review</b>   | <b>3</b>    |
| <b>Recruiting Policy</b>                                     | <b>4</b>    |
| <b>Sponsorship Policy</b>                                    | <b>4</b>    |
| <b>HASUG Email Distribution List</b>                         | <b>4-5</b>  |
| <b>May Highlights</b>  | <b>5</b>    |
| <b>Continuing with Education</b>                             | <b>5-6</b>  |
| <b>Calendar of General Meetings and Conferences</b>          | <b>6</b>    |
| <b>Calendar of Steering Committee Meetings</b>               | <b>6</b>    |
| <b>Editorial and Production Staff</b>                        | <b>6</b>    |
| <b>Consultants Special Interest Group</b>                    | <b>6</b>    |
| <b>Hyperlinks of Interest</b>                                | <b>6-7</b>  |
| <b>Tips and Techniques, Disclaimer</b>                       | <b>7</b>    |
| <b>Tips and Techniques</b>                                   | <b>7-11</b> |
| <b>Directions to August meeting at LEPH, Yale, New Haven</b> | <b>11</b>   |
| <b>Steering Committee</b>                                    | <b>12</b>   |

|   |
|---|
| <p>The HASUG Flash is available for reading on the World Wide Web at <a href="http://www.hasug.org">http://www.hasug.org</a><br/>SAS is a registered trademark of SAS Institute Inc. Cary, North Carolina</p> |
|---|

## Note from the Chairperson

**Albert Lavoie**  
**Bristol-Myers Squibb**

As the newly elected chairperson, allow me to introduce myself. My name is Albert Lavoie. I am presently employed at Bristol-Myers Squibb as a SAS Clinical Trials Programmer. I have been with BMS for more than five years and have been a member of the HASUG Steering Committee for eight years.

I would like to acknowledge the hard work of all of the past chairpersons whose dedication has set challenging standards for me to follow. My goal over the next two years is to continue the legacy of informative and creative quarterly HASUG meetings.

As you know, we elect (or re-elect) the members of the Steering Committee at the May meeting every year. Most of the members who served on the board last year were re-elected to their posts. We are lucky to have a new member of the committee. I would like to welcome James Blaha of Pace University as the newest member. I am looking forward to working with him and the rest of the Steering Committee to produce future issues of the Flash and provide exciting programs for our membership.

This month we have an interesting program consisting of the new hidden treasures found in Version 8. Several people will share some tips and interesting new features. Currently, the Steering Committee is busy planning for several exciting presentations for the rest of this year and the year to come. We are always looking for SAS professionals to share their ideas and experiences. Looking ahead to this fall, Robert Virgile, a respected SAS instructor will be joining us to give a presentation. Watch for the details in the next issue of the Flash.

---

## Meeting Announcement

The third quarter meeting is to be held on **Thursday, August 15 from 9 a.m. to 11:30 a.m. at the Laboratory of Epidemiology and Public Health (LEPH) Building, Yale University, 60 College Street, in New Haven, CT 06510.** Refreshments will be available at 8:30 a.m. Please pre-register for this meeting by completing the short pre-registration form. There is a link to this

form on the HASUG web site, <http://www.hasug.org>, that can be found on the next meeting page. In the comment section, please let us know if you would like to eat lunch, at your own expense, with the HASUG Steering Committee. If questions, contact our host, Karol Katz at 203-764-4338, or by email at [Karol.Katz@yale.edu](mailto:Karol.Katz@yale.edu).

The theme of the meeting is **SAS V8 Treasurers Uncovered**. We are departing from our regular format to introduce many short tips that were found by our presenters while using the newer versions of SAS. Below is a list of the topics to be presented and a short biography of our speakers (where available).

### Charles Patridge, The Hartford

1. ***"Proc Format and Summary - creating new summaries/statistics with ease."***
2. ***"A few Gotchas (Sunken Treasures) when going to V8 and how to deal with them"***
  - Proc Transpose and/or Contents
  - Autocall Libraries - changing paths in mid-stream
  - SAS V8 Datasets now store data differently than V6 (Proc Contents)

Chuck has been using SAS since 1979 in various positions, companies and consulting assignments. He is currently at The Hartford. In addition, he operates his own company (PDPC, Ltd.) specializing in SAS and "fuzzy merge" applications as well as statistical analysis in a variety of industries. His area of SAS expertise lies in BASE, STAT, AF, FSP, Macros, and ETS. He is the original founder of HASUG in 1983 and currently a member of its steering committee, founder and director of SCONSIG (SAS Consultant Special Interest Group), creator and Webmaster for SCONSIG web site. He has presented numerous papers and speaking engagements to HASUG, BASUG, NYASUG, NESUG, DCSUG and SUGI as well as presentations at the Institute for Graphic Communications.

### Janet Stuelpner, Citigroup

***"Libname: Start Your Engines!!!"*** shows how a libname associates a library reference with a SAS data library. An engine is a part of SAS software that reads from or writes to a file. New in version 7 is the ability to assign a libref to a DBMS like DB2 or Oracle. This paper will show you how to do it and explore the benefits and pitfalls of its use.

*(Continued on page 3)*

(Meeting Announcement, continued from page 2)

Janet provides training and programming support in the areas of clinical trials, outcomes research and the financial industry. Janet has several degrees in the sciences. She has been a SAS user for over 21 years on many different platforms. Originally a systems programmer, she has now turned her focus to teaching DB2 SQL and SAS. She is a section chair at NESUG, on the HASUG steering committee and has been a presenter at users groups at all levels.

**Michael Davis, Bassett Consulting Services**  
“ODS PDS Destination” shows how get started using what may prove to be a popular format for Version 8 Output.

Michael Davis is Vice President of Bassett Consulting Services, Inc., a SAS Alliance Silver Member<sup>™</sup>. An independent consultant since 1994, he previously worked for Blue Cross & Blue Shield of Connecticut and the Connecticut Hospital Association. A SAS user since 1985, Michael specializes in developing custom web-enabled and full-screen decision support systems using SAS/IntrNet<sup>®</sup>, SAS/AF<sup>®</sup> FRAME, and other SAS products, including SAS/Warehouse Administrator<sup>®</sup>. He is a past chairman of the Hartford Area SAS User Group and is a frequent presenter at NESUG and SUGI. Michael also serves on the Board of Directors for the Connecticut and Fairfield-Westchester Chapters of the Independent Computer Consultants Association.

Other presentations scheduled for this meeting include:

**“PROC TRANSPOSE and PROC CONTENTS”** by Peter Prause, The Hartford

**“Enhanced Editor Features: Keyboard Shortcuts, Keyboard Macros and Abbreviations”** by Robert Kajcik, Bristol Myers Squibb

**“SAS/GRAPH V8 Enhancements”** by Karol Katz, Yale University

Driving and parking directions, along with a detailed map appear at the end of this newsletter. If it would be more convenient to travel to this

meeting by train, there is a free bus labeled BIOMED that leaves from the front of the New Haven Railroad Station (Union Station) at 7:56, 8:21, and 8:51 a.m. and goes to 333 Cedar Street, the entrance to the Yale Medical School, a ten minute walk to the meeting. To walk to the meeting from the bus, turn right and walk to the corner of Cedar Street and Congress Avenue. Turn left and bear left (Congress Street becomes College). LEPH, 60 College Street, is on the left. There is a return bus at 11:30 a.m., noon, and every half hour. You must call to request a return bus ride.

---

## Book Review

### Using SAS in Financial Research

By: Juha-Pekka Kallunki, John Broussard, and Ekkehart Boehmer

Order No.: 57601

ISBN: 1-59047-039-7

List price: 23.95USD

As reviewed by Charles Patridge, The Hartford

As stated in the description of the book, this SAS book by users is for knowledgeable researchers, graduate students and financial practitioners. The authors do an excellent presentation introducing their audience in how to use SAS to analyze 10 specific examples of financial topics:

- Chapter 2 - Random Walking or Walking Randomly: Using SAS to Conduct Variance Ratio Testing of Asset prices
- Chapter 3 – Analyzing Winners and Losers: Using SAS to test the Overreaction Hypothesis
- Chapter 4 – Cross-Sectional approach to the empirical test of the Capital Asset Pricing Model
- Chapter 5 – Event Studies
- Chapter 6 – Effective Use of SAS Macros: An application to event studies
- Chapter 7 – Association types of Studies: Investigating the Price-Earnings Relationship
- Chapter 8 – Predicting Bankruptcy from Financial Distress Characterization Models

(Continued on page 4)

*(Book Review, continued from page 3)*

Chapter 9 – Using Accounting information to Forecast Market Performance  
Chapter 10 – Analysis of Transaction Data

It was refreshing to find the authors provided a summary of each example's topic explaining the output from the various SAS PROCs used and the statistical interpretation with respect to the hypothesis being tested in simple to understand language. In addition, the actual SAS code is listed, highlighted and illustrated in such a way as to make it easy for people to start using SAS quickly and easily to do their financial and statistical analysis.

Being an applied mathematician and statistician (without a formal education and limited experience in economics or the Stock Market), I found the book enlightening in some of the inner philosophies of Economics and Stock Market Trading Practices. For those people that are involved in these careers and must perform financial research, I would highly recommend this book as a valuable asset to their financial tools. I would recommend this book, especially in the early stages of their careers when most have to perform such analysis using computer software to perform the statistical analyzes.

---

### The HASUG Recruiting Policy

HASUG's primary mission is to provide a forum for SAS professionals to meet and share experiences. HASUG also recognizes that searching for new employment opportunities is a normal activity when professionals meet. Since we depend on our respective employers to support HASUG by providing time for members to attend, prepare presentations, and provide meeting facilities, we do not wish to jeopardize those relationships we have all nurtured.

Therefore, when attending any of our quarterly meetings, we request that all parties engaged in recruiting activities be "professional and discreet", and suggest that such activities be carried outside and after our meetings. Those seeking or offering positions may display materials at a location designated by HASUG at each quarterly meeting. The materials may include resumes, job openings, contract opportunities, business cards, etc. None of the

materials may include salary information. All such materials left after the meeting will be discarded. Violators of this policy may be asked to leave the meeting.

For other recruiting opportunities, please see the SAS CONSIG article elsewhere in this newsletter or visit [www.sconsig.com](http://www.sconsig.com).

---

### The HASUG Sponsorship Policy

All parties are encouraged and welcome to attend our quarterly HASUG meetings scheduled during the months of February, May, August, and November of each year. Usually these meetings are scheduled the 3rd Thursday from 9:00 am to noon at various locations throughout Connecticut. Past locations have included Hartford, Meriden, Middletown, Norwalk, Glastonbury, and New Haven. We are always looking for new hosts within the state of Connecticut. If you feel your organization can host a meeting of up to 70 or so people, please contact one of the Steering Committee members.

---

### Change to HASUG Distribution List

The HASUG Email List Distribution has changed within the past year. In most aspects, the process and privacy issues remain the same as before. The only obvious difference is when you sign up to be a member in the HASUG.org web site, you will see you have two choices to select which list to join (HASUG Email or SCONSIG). You are able to join either or both Email Lists at the same time by MARKING the CHECK BOXes to the left of each list.

#### Select your interests

|                          |                    |
|--------------------------|--------------------|
| <input type="checkbox"/> | <b>HASUG Email</b> |
| <input type="checkbox"/> | <b>SCONSIG</b>     |

Both SCONSIG and HASUG share the cost to make this feature available to its respective members, and both lists are separate and independent from each other.

If you were already a member prior to this change, your membership has been automatically transferred to the new list, and you do not

*(Continued on page 5)*

(HASUG Distribution List, continued from page 4)

have to do anything. However, in case you have changed your email address recently, your membership is automatically purged from either list due to bounced emails.

The List automatically checks for valid email addresses and if any should become invalid, your membership is cancelled without notice as your email address is no longer valid, hence no way to contact you.

---

## May HASUG Highlights By Cindy Johnson

On May 24, 2002 we convened for our second quarterly HASUG meeting at Purdue Pharma in Stamford, CT. After a wonderful breakfast, we entered the state of the art auditorium to listen to Michael Davis, Bassett Consulting Services, Inc. present "**Understanding SAS/Warehouse Administrator**". Michael's presentation included the following:

- a description of Data Warehousing
- reasons why Data Warehousing is used
- the strengths of the SAS ©Warehouse Administrator as a data warehouse tool

The audience learned much about this topic through this excellent talk.

The second part of the meeting was devoted to two product demonstrations from outside vendors. The first speaker during this section of the meeting was Dana Rafiee from Destiny Corporation. He demonstrated a product called **ASAP™** that was developed by ComplementSoft™. **ASAP** is a visualization tool which does documentation, flowcharting, etc. This tool is inexpensive and is currently used by some of the major pharmaceutical companies.

The second speaker was David Ward, InterNext. David completed our meeting by presenting **Onyx**, a generic solution to running the SAS System on the web without SAS/INTRNET™. **Onyx** is an advanced multi-threaded application server running in Java. It provides a transparent and load-balanced way to process SAS requests. See the HASUG web site for David's handout.

During the meeting, Steering Committee Member

elections took place. All members of the current Steering Committee were voted in for another year. The Steering Committee has a new member. He is James Blaha from Pace University.

---

## Continuing With Education... Peter Prause, The Hartford

The SAS Institute Regional Training Center in Glastonbury, CT is offering these courses through December 2002. Course information for these courses and many other non-local courses is available on the SAS Internet web site [www.sas.com](http://www.sas.com). To register for a course or to get more information, phone SAS Institute at 1-800-333-7660.

|  |              |
|--|--------------|
| SAS Programming I: Essentials                              | Jul 30-Aug 1 |
| SAS Programming II: Manipulating Data with the DATA Step   | Aug 6-8      |
| SAS Programming III: Advanced Techniques                   | Aug 21-22    |
| Introduction to Programming Concepts Using SAS Software    | Sep 5-6      |
| Optimizing SAS Programs                                    | Sep 18-19    |
| SAS Programming I: Essentials                              | Sep 24-26    |
| SAS Report Writing: A Programming Approach                 | Oct 9-10     |
| Accomplishing Tasks in SAS Using Enterprise Guide Software | Oct 16-17    |
| SAS Programming II: Manipulating Data with the DATA Step   | Oct 29-31    |
| SAS Macro Language   | Nov 6-7      |
| SAS Programming I: Essentials                              | Nov 19-21    |
| SQL Processing with the SAS System                         | Dec 18-19    |

Local SAS training is available at Destiny Corporation, of Wethersfield, CT. Below is a list of their scheduled classes through December

(Continued on page 6)

*Continuing with Education, continued from page 5)*

2002. You can reach Destiny at 1-800-787-2464 or at 860-721-1684. You can also send email to [info@destinycorp.com](mailto:info@destinycorp.com). For more information, you can visit their web site at [www.destinycorp.com](http://www.destinycorp.com).

|   |            |
|---|------------|
| Macros in SAS Software                                | July 29-31 |
| SQL Processing with SAS Software                      | Aug 12-13  |
| Introduction to Programming Using SAS Software        | Sep 9-10   |
| Programming I: SAS Essentials                         | Sep 23-25  |
| Programming II: Data Manipulation Using the Data Step | Oct 7-9    |
| Programming III: Advanced Techniques                  | Oct 28-29  |
| Programming IV: Optimizing Programs in SAS Software   | Nov 4-5    |
| Macros in SAS Software                                | Nov 18-20  |
| SQL Processing with SAS Software                      | Dec 2-3    |
| Changes & Enhancements to Version 9                   | Dec 9-10   |

Please visit the Destiny and SAS Institute web sites for the latest information

---

## Calendar of Events

### Future HASUG Meetings and SAS Conferences of Interest:

|              |                           |
|--------------|---------------------------|
| Aug 15, 2002 | Yale Univ., New Haven, CT |
| Sep 29, 2002 | NESUG, Buffalo, NY        |
| Nov 14, 2002 | Cigna, Bloomfield, CT     |

### HASUG Steering Committee Meetings:

|              |                              |
|--------------|------------------------------|
| Aug 15, 2002 | Immediately after HASUG mtg. |
| Sep 12, 2002 | Conference call, 11:30-12:30 |
| Nov 14, 2002 | Immediately after HASUG mtg. |
| Dec 19, 2002 | Conference call, 11:30-12:30 |

## Editorial and Production Staff:

|              |   |
|--------------|---|
| Editor       | Janet Stuelpner   |
| Layout       | Rene Laurencot<br>Michael Davis   |
| Member Lists | Charles Patridge  |
| Webmaster    | Michael Davis   |
| Contributors | Michael Davis<br>Cindy Johnson<br>Al Lavoie<br>Charles Patridge<br>Peter Prause |

---

## Consultants' Special Interest Group (SCONSIG)

The SAS Consultants' Special Interest Group (SCONSIG) operates and maintains a web site located at [www.sconsig.com](http://www.sconsig.com). This site lists employment opportunities, contracts, vitas, resumes, and companies seeking SAS professional talent. It is updated weekly. You are encouraged to visit that web site or to contact Charles Patridge. E-mail:

[Charles\\_S\\_Patridge@prodigy.net](mailto:Charles_S_Patridge@prodigy.net)

for further information.

---

## Hyperlinks of Interest

The SAS Consultants Special Interest Group's web site URL has changed. Edit the bookmarks on your favorite Browser to point to:

<http://www.sconsig.com>

Read Past SUGI Proceedings Online at:  
(link supplied by Curtis Smith):

<http://www.sas.com/usergroups/sugi/proceedings/index.html>

Information about the SAS Users Group International (SUGI), including information about the 2003 conference in Seattle can be found at:

<http://www.sas.com/usergroups/sugi/sugi28/index.html>

*(Continued on page 7)*

(Hyperlinks, continued from page 6)

Links to see webcasts from SUGI 27 in Orlando:  
[http://www.sas.com/news/feature/15apr02/sugi\\_webcast.html](http://www.sas.com/news/feature/15apr02/sugi_webcast.html)

SAS OnlineDoc is available from SAS on the World-Wide Web. To register to view SAS OnlineDoc on the web, register at the following URL:

<http://www.sas.com/v8doc>

NorthEast SAS Users Group Conference, to be held Sept 29-Oct2, 2002 in Buffalo, NY  
To Register:  
<http://www.nesug.info/A558C0/NESUG.nsf?OpenDatabase>

Some of the papers and other handouts distributed at recent HASUG meetings can be found at the following two web sites:

<http://www.hasug.org>  
<http://www.bassettconsulting.com>

---

## Tips and Techniques from SCONSIG

### Disclaimer:

"Each tip included here addresses a problem, and presents a use of one or more SAS concepts. Use it to stimulate your thinking and help you on your way to solving your own problem. Some tips may or may not work in your environment or with your version of the SAS Software, and you should use these tips with this in mind. Neither HASUG nor contributing Author (s) should be held responsible for any direct and/or indirect damage to you or your applications from using these free tips."

**SAS, SAS/ACCESS, SAS/CONNECT, SAS/FSP, SAS/GRAPH, SAS/IntrNet, and SAS/STAT are registered trademarks of SAS Institute Inc., Cary, North Carolina**

**TIPS IN BLUE ARE IN THIS NEWSLETTER  
ALL TIPS CAN BE LOCATED AT  
[HTTP://WWW.SCONSIG.COM](http://WWW.SCONSIG.COM)**

An Introduction to Exporting SAS/GRAPH Output to Microsoft Office

This SAS Technical Support document includes in-depth information about the different graphics formats and destinations you can use to export Release 8.2 SAS/GRAPH output to Microsoft Office 97, 2000 and XP. General topics are discussed, and each available format is examined individually. Several examples show how to generate the output.

**Read more at <http://ftp.sas.com/techsup/download/technote/ts674/ts674.html>**

SAS Q&A: Why do some of my values get truncated when I read in a delimited file?  
In Versions 7 and 8 of the SAS System, by default the Import Wizard, the IMPORT procedure and the External File Interface (EFI) scan 20 records to determine variable attributes. If you have a value that is longer than those found in the first 20 records of your file, that value will be truncated. Follow these steps from SAS Technical Support to change the default behavior.

**Read more at [http://www.sas.com/service/techsup/faq/data\\_step/readwrit1819.html](http://www.sas.com/service/techsup/faq/data_step/readwrit1819.html)**

SN-007347 - How to programmatically open a file in a new Enhanced Editor

**<http://www.sas.com/service/techsup/unotes/SN/007/007347.html>**

### Tipped Off: Bookmarks in Your PDF File

With ODS HTML output, you can generate a table of contents to help you locate the results you're looking for in a lengthy report. With ODS PDF output, you also get a table of contents. The PDF format supports the creation of bookmarks, which are displayed in a window to the left of the main PDF file. By clicking on a bookmark, you can jump directly to the correct output page. This little ditty from Lauren Haworth's book, "Output Delivery System: The Basics," demonstrates how easy it is. (.pdf)

**Read more at [http://www.sas.com/service/doc/pdf/58087\\_pg80.pdf](http://www.sas.com/service/doc/pdf/58087_pg80.pdf)**

### SAS Bits & Bytes: Practicing Good Data Hygiene

Manually entering or editing data without using audit checks is certain to introduce data errors. In this Bits & Bytes column, Melinda Thielbar dis-

(Continued on page 8)

*(Continued from page 7)*

cusses adding integrity constraints that allow you to set rules about what values are entered in a field and what conditions an observation must meet to be added to a data set.

Read more at <http://www.sas.com/service/techtips/bitsandbytes/datahygiene.html>

## **SAS/IntrNet Software: A Roadmap**

SAS/IntrNet software lets you quickly and easily build dynamic Web applications and distribute them worldwide. This white paper provides an overview of SAS/IntrNet with guidelines for choosing the best combination of components for your applications. Access this paper from our White Paper download area. (.pdf)

Read more at <http://www.sas.com/apps/whitepapers/whitepaper.jsp>

Is there a way to create a separate macro variable for each value of a string?

<http://www.sas.com/service/techsup/faq/macro/macro1812.html>

## **Quick Tip: Building Drill-Down SAS Applications** **By Kirk Paul Lafler & Charles Edwin Shipp**

<http://www.sas.com/service/techtips/quicktips/drilldown.html>

SN-006806 - How to submit multiple SAS programs, in batch or interactively by SAS Institute

<http://www.sas.com/service/techsup/unotes/SN/006/006806.html>

Tipped Off: Selecting Output for Multiple Procedures  
If you are running a series of models or tables, keeping the output from all your procedures can become an unwieldy task. This brief selection from Lauren Haverth's popular book, "Output Delivery System: The Basics," shows how to use SELECT or EXCLUDE within ODS to build concise summary reports from your output results. (.pdf)

Read more at [http://www.sas.com/service/doc/pdf/58087\\_pg128.pdf](http://www.sas.com/service/doc/pdf/58087_pg128.pdf)

## **Quick Tip: Calculating Age in Years and**

## **Days**

We recently ran a tip titled, "Two New SAS Data Functions for Version 8" that explained how to find the number of years between two dates using the YRDIF function. The following tip from Venky Chakravarthy, a frequent contributor to the SAS-L listserv, builds on that idea and explains how to calculate the number of years and days between any two dates using the DATDIF function.

Read more at [http://www.sas.com/service/techtips/quicktips/age\\_0302.html](http://www.sas.com/service/techtips/quicktips/age_0302.html)

## **Reading Delimited Text Files into SAS**

Delimited files are raw data files that use characters such as commas, vertical pipes and semi-colons to separate data values. This note from SAS Technical Support explains some of the newer options available for reading these files into SAS, as well as demonstrating the use of older options that are still helpful.

Read more at <http://ftp.sas.com/techsup/download/technote/ts673.html>

## **SAS Q&A: How Can I Determine if a Variable is Present Within a Data Set?**

There are several DATA step functions that can be used in conjunction with the %SYSFUNC macro function to determine if a variable exists in a SAS dataset.

Read more at <http://www.sas.com/service/techsup/faq/macro/macro1806.html>

## **SN006964 How to print line numbers with your SAS program**

<http://www.sas.com/service/techsup/unotes/SN/006/006964.html>

## **SN000721 How to run SAS V7 and V8 with DMS mode (V6 style) in the windows environment**

<http://www.sas.com/service/techsup/unotes/SN/000/000721.html>

David Ward posted this most excellent method to gen-

*(Continued on page 9)*

(Continued from page 8)

erate .csv files from a SAS dataset:  
`dm "dexport library.dataset 'c:path-to-my-file.csv' replace";`

SAS Version 8 Technical Note: Short filename extensions versus long filename extensions

<http://www.sas.com/service/techsup/unotes/SN/002/002555.html>

## How do I make the SAS Explorer window look like the Windows Explorer window?

Read SI's technical note on how to do this  
<http://www.sas.com/service/techsup/unotes/SN/006/006939.html>

Submitting multiple SAS programs, in batch or interactively

see SAS Technical Notes to see an example on how to do this using the %include statement.  
<http://www.sas.com/service/techsup/unotes/SN/006/006806.html>

**TIP00325 - Example of using ODS MARKUP and TAGSET (release 8.2 is required) by Victor Bos**

**TIP00326 - How to convert a Vsam file to a SAS dataset by Michael A. Raithel**

**TIP00327 - How to replace a string in a file using SAS code by Don Stanley**

**TIP00328 - Equally and unequally spaced Orthogonal polynomial contrasts using PROC REG of SAS/STAT by Winston Groenewald**

**TIP00329 - Issues and comments about moving SAS production code from V6 to V8 by Quentin McMullen, Arthur Tabachneck, F.J. Kelley, Venky, Dennis Diskin, Charles Patridge**

**TIP00330 - Significant Digits, Numeric 101 by SAS Institute**

**TIP00331 - Scan function and delimiter issues by Paul Dorfman and Peter Crawford**

**TIP00332 - Scanning and Counting Words in a String by Ian Whitlock and Charles Patridge**

**TIP00333 - Proc Access (Full Screen Product) - Convert V6.12 Oracle Views to V8.2 Oracle Views with minimum effort in OpenVMS environment by Charles Patridge**

/\*\* TIP 00331 \*\*/

Scan function and delimiter issues

I have a character variable that contains values like: "CASH ORD". When I print the variable, there seems to be a space between the two words. However, when I use the scan function to separate the cell into its components I get the following values.

```
scan(var,1)= CASH ORD (I expected to get only CASH)
scan(var,2)= blank (I expected to get ORD).
```

So, it seems that the delimiter embedded in CASH ORD is not a space like it seems to be. It is also not any of the delimiters that are the default of the scan function.

My question is how to separate these values. If I use the scan function, how do I find out which delimiter is embedded there?

Solution #1:

By Peter Crawford

Email: [peter.crawford@DB.COM](mailto:peter.crawford@DB.COM)

[how about using compress to remove from VAR, the letters and numbers you would expect/allow in words,](#)

```
%let alpha = qwertyuiopasdfghjklzxcvbnm;
%let expect =&alpha%upcase(&alpha)
1234567890;
```

**\*\*\* extend as necessary with non-alpha- numerics that you would accept in words ..... possibly hyphen, quotes and "\_";**

```
delims = compress( var, "&expect" );
```

leaving only characters to be treated as delimiters. If no tab characters or other unwanted punctuation are present you will only have blank as delimiters.

(Continued on page 10)

(Continued from page 9)

```
word1 = scan( var, 1, delims );  
word2 = scan( var, 2, delims );
```

Be careful if you need to adapt the delims variable into a macro environment. Special character codes are used for macro quoting. You don't need any confusion between your unprintable characters between words, and macro quotes.

**Solution #2:**

**By Paul Dorfman**

**Email: Paul.Dorfman@BCBSFL.COM**

If you are in ASCII, the bytes showing as clear invisibles are (in hex) 00, 30, 32, 1e, 20, and a0. It is easy to check by running this:

```
data _null_ ;  
do j = 0 to 255 ;  
  b = byte(j) ;  
  put b +1 b $hex2. ;  
end ;  
run ;
```

If you are under EBCDIC, the clear invisibles are 00, 40, 41, FF, so the delimiter string should be '004041ff'x. Suppose it is the ASCII, therefore, just use '001e203032a0'x as a delimiter. Let us check it out:

```
1 data _null_ ;  
2 retain dlm '001e203032a0'x ;  
3 do mid = '00'x,'1e'x,'20'x,'30'x,'32'x,'a0'x ;  
4 s = 'cash' || mid || 'ord' ;  
5 one = scan( s, 1, dlm ) ;  
6 two = scan( s, 2, dlm ) ;  
7 put one= two= ;  
8 end ;  
9 run ;
```

```
one=cash two=ord  
one=cash two=ord  
one=cash two=ord  
one=cash two=ord  
one=cash two=ord  
one=cash two=ord  
/*** end of tip 00331 ***/  
  
/*** TIP 00332 ***/  
I'm scanning some text with the following program:
```

I'm scanning some text with the following program:

```
data events (keep=plaintiff conference trial pre-  
trial);  
set iq.alsevents;
```

```
do i=1 to 10;  
word=lowercase(scan(evnttext,i);  
select (word);  
when ('plaintiff') plaintiff=sum(plaintiff,1);  
when ('conference') conference=sum(conference,1);  
when ('trial') trial=sum(trial,1);  
when ('pretrial') pretrial=sum(pretrial,1);  
otherwise;  
end;  
end;  
run;
```

Can anyone suggest how I can look for variations of words? For example, I need to look for plaintiff, pltf, pla., pltf's and pretrial and pre-trial. Also, is there a way to keep pretrial or pre-trial from being counted as trial too?

Is there an easy way to count up the number of unique keywords. I know how to do a count but I want to see how many different keywords had a number of 1 or more for each of the events. So, if eventtext 1 had plaintiff=1, conference=2, trial=1, and pretrial=0 the number of keyword hits would be 3. Likewise, is there a way to count zero hits (in the above example that would be 1)?

**Author: Charles Patridge**

**Email: Charles\_S\_Patridge@prodigy.net**

I think this will answer your multiple questions but check out Count to make sure.

```
data alsevents;  
length evnttext $100. ;  
evnttext = 'plaintiff is guilty'; output;  
evnttext = 'pltf is excused and pretrial is cancelled.' ; output;  
evnttext = 'pla. is innocent and does not need trial' ; output;  
evnttext = "pltf's argument is false." ; output;  
evnttext = 'pre-trial is set for another date'; output;  
evnttext = 'pretrial is denied, fire his lawyer.' ; output;  
evnttext = 'trial lawyer is Chuck Patridge' ; output;  
run;
```

(Continued on page 11)

```

data events (keep=plaintiff confrnce trial pretrial
count);
set elsevnts;
length word $ 100. ;
do i = 1 to 100;
  word = lowercase(scan(evnttext,i,' ')); /*** use only
blanks as delimiters ***/
  if word eq ' ' then goto nomore;
  if word in ('plaintiff', 'pltf', 'pla.', "pltf's" ) then
plaintiff + 1;
  if word in ('pre-trial', 'pretrial' ) then
pretrial + 1;
  if word in ('trial') then trial + 1;
  if word in ('conference') then confrnce + 1;
end;
nomore:
count = sum(of plaintiff confrnce trial pretrial);
run;

```

Author: Ian Whitlock  
Email: IanWhitlock@westat.com

Here is a revision to your program that I think answers all of your questions. I explicitly put in the default list of separators with "-" removed so that "pre-trial" would be treated as a word. This may mess other things up. For example, "conference-room C" will no longer be counted under CONFERENCE.

```

data events (keep=plaintiff conference trial pre-
trial);
set iq.elsevents;

do i=1 to 10;
  word=lowercase(scan(evnttext,i,".<(+&!$*);
^/,%|");
  select (word);
    when ('plaintiff', 'pltf', 'pla.', "pltf's")
      plaintiff=sum(plaintiff,1);
    when ('conference') conference=sum
      (conference,1);
    when ('pretrial', 'pre-trial') pretrial=sum
      (pretrial,1);
    when ('trial') trial=sum(trial,1);
    otherwise;
  end;
end;
distinctcnt = sum(plaintiff>0,conference>0,
pretrial>0,trial>0) ;
nohitcnt = sum(plaintiff=0,conference=0,
pretrial=0,trial=0) ;
run;

```

You may want to add

```

  plaintiff = 0 ;
  conference = 0 ;
  pretrial = 0 ;
  trial = 0 ;
before the DO-loop.
/*** end of tip 00332 ***/

```

---

## Driving Directions to August 15 Meeting

Yale Parking will provide free parking in a Yale Lots 47 and 98. These lots are only a few blocks from LEPH. Go to the Next Meeting Announcement at:

<http://www.hasug.org>

and click on the link and print the required YSM Parking Pass. Leave this pass on your car's dashboard.

**From I-95 North or South**, take Exit 47 to Route 34 West to Exit 2, College Street. Turn left at the first light and straight through the next light. College Street curves to the right and becomes Congress Avenue. Once on Congress Avenue, at the second light, turn left onto Howard Avenue. Turn left onto Washington Avenue to reach either of the two parking lots.

**From I-91 South**, take Exit 1 to Route 34 West to Exit 2, College Street. Follow the remaining directions under From I-95 North or South.

**From South on Merritt Parkway**, take Exit 57 onto Route 34 East (Derby Avenue) towards New Haven. Route 34 becomes George Street. At the intersection of George Street and College Street, turn right at the light. Go through the next two lights. College Street curves to the right and becomes Congress Avenue. Once on Congress Avenue, at the second light, turn left onto Howard Avenue. Turn left onto Washington Avenue to reach either of the two parking lots.

**From North on Wilbur Cross Parkway**, take Exit 58 onto Route 34 East (Derby Avenue) towards New Haven. Route 34 becomes George Street. Follow the remaining directions under From South on Merritt Parkway

## Map to LEPH, 60 College Street, New Haven, CT 06510



### HASUG Steering Committee

| Name                          | Organization         | Telephone      | E-Mail                             |
|-------------------------------|----------------------|----------------|------------------------------------|
| James Alling                  | Bristol-Myers Squibb | (860) 447-2253 | jtalling2001@yahoo.com             |
| Jim Blaha                     | Pace University      | (914) 923-2634 | jblaha@pace.edu                    |
| Barbara Moss                  | CIGNA                | (860)226-1504  | Barbara.Moss@CIGNA.com             |
| Michael Davis                 | Bassett Consulting   | (203) 562-0640 | michael@bassettconsulting.com      |
| Bernard Dubb                  | Online Associates    | (860)-487-1917 | kb1dgy@yahoo.com                   |
| Miguel Hernandez              | Independent          | (203) 882-8080 | mahernandezjr@hotmail.com          |
| Cindy Johnson                 | Independent          | (203)-484-0244 | cynthia.johnson@snet.net           |
| Karol Katz                    | Yale University      | (203) 764-4338 | Karol.Katz@yale.edu                |
| Rene Laurencot                | Pfizer               | (860) 686-1574 | rene_e_laurencot@groton.pfizer.com |
| Albert Lavoie,<br>Chairperson | Bristol-Myers Squibb | (203) 677-6166 | albert.lavoie@bms.com              |
| Tom Mansfield                 | Purdue Pharma        | (203) 937-5126 | Tom.Mansfield@pharma.com           |
| Chuck Patridge                | The Hartford         | (860) 547-6644 | Charles_S_Patridge@prodigy.net     |
| Peter Prause                  | The Hartford         | (860) 547-7484 | Peter.Prause@thehartford.com       |
| Janet Stuelpner               | Citibank             | (718) 248-5814 | jstuelpner@usa.net                 |
| Gerald Zuckier                | Bayer                | (203) 624-0940 | GZuckier@alum.mit.edu              |