



## HARTFORD AREA SAS® USERS GROUP

Volume 22 Issue 1

First Quarter, February 2010

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The HASUG Flash is available for reading on the World Wide Web at

<http://www.hasug.org>

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## **Chairperson's Notes**

(Karol Katz, Yale University)

As I write this I look forward to tomorrow, the beginning of 2010, and the start of a new decade. I wish all our members, and prospective members, a Happy and Healthy New Year. The past decade, the "Oughts" brought to us so many innovations, it is almost impossible to keep up with the technological advances. How would I drive from here to there without my "GPS". In SAS, version 9.2 added many new features. I particularly like the ODS Graphics which produce the same regression and scatter plots I previously generated using SAS/Graph with minimal coding.

HASUG celebrated a 20<sup>th</sup> anniversary in 2003 and has remained a strong and active volunteer organization. Whether as a speaker, a member of a "coders corner" panel, arranging for a host site for a meeting, maintaining the website and email lists, or contributing to the Flash, our HASUG newsletter, our volunteers are the secret of our success.

May is the month for HASUG elections. Chuck Patridge has agreed to serve as Chairperson for next year. We invite you to become more involved by joining our Steering Committee. Please let any of our Steering Committee members know if you're interested, and help contribute to HASUG's continued success. May is also the month of our annual voluntary raffle which provides funds to maintain [www.hasug.org](http://www.hasug.org), our website. If you have something you wish to donate to our raffle, let us know.

An important comment, made at the past steering committee meeting, about

common courtesy during presentations bears repeating. As well as following the standard request to turn off cell phones, or set to vibrate, it is important to save personal conversations for times other than during a speaker's presentation. Your voice may disturb members intent on hearing the speaker. Our presenters deserve an attentive audience.

Upcoming soon is the SAS Global Forum, April 11th - 14th, 2010 in Seattle, Washington. If you get the opportunity to attend you sure will gain SAS knowledge and have a chance to meet and network with SAS users from the US and abroad. I have attended several in the past, when the event was named SUGI, and always came home with new SAS skills.

I hope you can attend our February 25 meeting. We are planning an excellent program. One thing we can't control is the weather. If a storm is predicted, a decision whether or not to cancel will be made 24 hours prior to the meeting. See further information located on page 5.

## **November Meeting Highlights**

(Janet Stuelpner, SAS Institute)

The November 2009 meeting was held at Pfizer, Inc. in New London. We had two excellent presentations that were very well received by the audience.

Our first speaker was Rene Laurecot from Pfizer. His presentation was titled, "A SAS Application: PK/PD Support Automated Quality Checking". Rene started out talking about why quality checking is important and how in recent history the checking can be used.

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Then he launched into his PK/PD quality check macro. Before getting into the code, he talked about the features of the application and an overview of the requirements to run the macro.

The first page produced is a summary page about how many checks were successful, how many were skipped or were informative. Rene showed some examples of what the output looks like for some checks. Along with SAS, there is Visual Basic code to capture the variable list table. He also gave some ideas about what the future path is going to be for this application and how it can be expanded to include other clinical data.

Our second presentation was given by Keith Burns and Gaurav Agrawal from WellPoint and was titled, "SAS BI 9.2 Implementation: Work, Challenges & Success". First Keith gave the background about the environment and what the goals were for a migration to BI. WellPoint is a multi-state organization and has the challenge of getting the data from PC to a server and sharing the data. They noted they are the first organization to migrate to SAS 9.2 BI Server.

Next Gaurav talked about the upgrade to new hardware and gave us a detailed look at the hardware and software architecture and where all of this is located at their Richmond, Virginia site. They are currently doing development in 9.2 and will be doing a conversion to production in the next several months.

## CALENDAR OF EVENTS

### Future General Meetings and Conferences:

February 25, 2010

Yale Health Systems, New Haven, CT

April 11-14, 2010

SAS Global Forum, Seattle WA

May 13, 2010

Bristol-Myers Squibb, Wallingford, CT

### HASUG Steering Committee Meetings:

February 25, 2010

Immediately after HASUG meeting

March 18, 2010

Conference call 11:30-12:30

May 13, 2010

Immediately after HASUG meeting

## NEXT HASUG MEETING ANNOUNCEMENT

Our next meeting is on:

**Thursday, February 25, 2010**

at

**Yale Health Systems**

**300 George St**

**New Haven, CT**

**from 9:00 am to noon**

*Registration will be open until 4:00pm on Wednesday, Feb 24th.*

*Coffee to be served, & time for conversation, beginning at 8:30.*

Our topics and Speakers are:

**"Building the Better Macro: Best Practices for the Design of Reliable, Effective Tools"**

**Frank Diloiro, CodeCrafters, Inc.**

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The SAS® macro language has power and flexibility. When badly implemented, however, it demonstrates a chaos-inducing capacity unrivalled by other components of the SAS System. It can generate or supplement code for practically any type of SAS application, and is an essential part of the serious programmer's tool box. Collections of macro applications and utilities can prove invaluable to an organization wanting to routinize work flow and quickly react to new programming challenges. But the language's flexibility is also one of its implementation hazards. The syntax, while sometimes rather baroque, is reasonably straightforward and imposes relatively few spacing, documentation, and similar requirements on the programmer. In the absence of many rules imposed by the language, the result is often awkward and ineffective coding. Some amount of self-imposed structure must be used during the program design process, particularly when writing systems of interconnected applications. This paper presents a collection of macro design guidelines and coding best practices. It is written primarily for programmers who create systems of macro-based applications and utilities, but will also be useful to programmers just starting to become familiar with the language.

**Frank DiIorio** is President of CodeCrafters, Inc., a consulting firm specializing in pharmaceutical applications and SAS training. A SAS programmer since 1975, he is the author of "SAS Applications Programming: A Gentle Introduction" and "Quick Start to Data Analysis with SAS." He is a frequent speaker at local, regional, and

international SAS conferences, delivering at last count over 200 presentations. Frank is past President of the SouthEast SAS Users Group, and was co-chair of its 1994 and 1996 conferences. He continues to be active in the regional and local SAS user groups and was a co-founder of the Research Triangle CDISC Users Group. A born and bred New Yorker, he lived in North Carolina from 1974 until 2008, when he returned to his Yankee roots, relocating to Philadelphia.

### **“Leverage Your Programming with Code Generation”**

**Paulette Staum, Paul Waldron  
Consulting**

Are you tired of writing the same program over and over? Sometimes you can write a macro to generate programs. Sometimes you can use a query window or an Enterprise Guide task to generate code. Sometimes you need to generate programs more flexibly. You can multiply your effectiveness by using the DATA step to create text files of SAS statements. When is this worthwhile? Which methods are best for different types of problems? We'll look at techniques for creating variable labels in depth. Then we'll look at other examples more broadly: changing the types of variables, generating reports, compiling macros, generating data validation programs based on a set of rules, and handling ODS output data sets when their structure varies depending on the input data.

**Paulette Staum** is President of Paul Waldron Consulting.

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She uses SAS® for data management and statistical analysis. Her experience is in the areas of pharmaceutical and social science research. Her primary interest is the development of tools for efficient programming.

## Meeting Cancellation Policy and Notification

Discussions will take place prior to a HASUG meeting when predicted weather might cause travel hardships. The conditions for both the site location and attendee distances will be considered. The HASUG Steering Committee will share information regarding any delay of a meeting via the HASUG email distribution list (versus the list of attendees). An email will address a cancellation also. Additionally, in the event of a cancellation of a HASUG meeting look/listen for the announcement on the following:

### LOOK:

- [www.wtic.com](http://www.wtic.com)
- [www.965tic.com](http://www.965tic.com)
- [www.wrch.com](http://www.wrch.com)

### LISTEN:

WTIC AM NewsTalk 1080  
reads all categories on the air.  
(Other stations read only  
schools.)

**Note: There is no affiliation  
with a TV station.**

## Continuing With Education...

(Peter Praise)

**The SAS Institute Regional Training Center** in Glastonbury, CT is offering the following courses. Course

information for these courses and many other non-local courses is available on the Internet at the [support.sas.com](http://support.sas.com) web site. To register for a course or to get more information, phone SAS Institute at 1-800-333-7660.

|                                                         |                 |
|---------------------------------------------------------|-----------------|
| SAS Report Writing 1: Using Procedures and ODS          | Mar 10 - 12     |
| SAS Programming 1: Essentials                           | Mar 15 - 17     |
| SAS Programming 2: Data Manipulation Techniques         | Mar 31 - Apr 02 |
| SAS Programming 3: Advanced Techniques and Efficiencies | Apr 07 - 09     |
| SAS Macro Language 1: Essentials                        | Apr 15 - 16     |
| SAS Programming 1: Essentials                           | May 12 - 14     |
| SAS Macro Language 2: Developing Macro Applications     | May 24 - 25     |
| SAS Enterprise Guide 1: Querying and Reporting          | Jun 03 - 04     |
| SAS Programming 2: Data Manipulation Techniques         | Jun 09 - 11     |
| SAS SQL 1: Essentials                                   | Jun 17 - 18     |

When time and distance are an issue, SAS Institute offers Live Web classes and self-paced e-learning to help you get the training you need while accommodating your busy schedule. Call for more details.

**Destiny Corporation** is offering Instructor Assisted Virtual SAS® training courses in their Rocky Hill, CT office. A live instructor, in person, will support and answer all questions. The attendees are provided the supporting Online Virtual Course and materials. The Online Course is valid for 1 year from course dates.

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Please visit the Destiny Corporation website for more training dates. To register for a course or to get more information, please contact Destiny on 1-800-7-TRAINING or [www.destinycorp.com](http://www.destinycorp.com).

## Tips & Techniques

(Charles Patridge, ISO Innovative Analytics)

**Tips from, “SASCOMMUNITY.org”.** Many of these tips have links to read more. Please use the URL.

[http://www.sascommunity.org/wiki/Tip\\_of\\_the\\_Day:May 25](http://www.sascommunity.org/wiki/Tip_of_the_Day:May_25)

You can read files from web sites directly into your SAS programs by using the URL Access Method on the FILENAME statement.

```
filename seercode URL
"http://www.seer.cancer.gov/siterecode/i
cdo3_d01272003/index.txt";
data siterecode;
infile seercode trunccover;
input @1 bigline $char256.;
run;
```

Oh, and you can also read a web site's HTML pages as if they, themselves, were data files... should you ever have the urge to do so.

[http://www.sascommunity.org/wiki/Tip\\_of\\_the\\_Day:May 23](http://www.sascommunity.org/wiki/Tip_of_the_Day:May_23)

The Enhanced Editor comes with a large number of pre-defined shortcut keys. A couple of favorites are <ctrl+/> to comment a line of code and <alt + while dragging the LMB> to highlight a block of code. See all the defined shortcuts

while the editor is active by going to <tools> => <options> => <enhanced editor keys>

[http://www.sascommunity.org/wiki/Tip\\_of\\_the\\_Day:May 13](http://www.sascommunity.org/wiki/Tip_of_the_Day:May_13)

Phonetic algorithms can be useful in situation where the names are spelled differently by the same person. In this situation, it is critical that phonetic algorithms are used for de-duplication purposes.

```
/*EXAMPLE OF SOUNDEX
PHONETIC APPLICATION*/
```

```
DATA _NULL_;
```

```
/*A CASE WHERE THE NAME IS
THE SAME BUT SPELLED
DIFFERENTLY*/
```

```
NAME1 = "IAN";
NAME2 = "IAIN";
```

```
/*A DIRECT STRING COMPARISON
IN THIS CASE WILL FAIL*/
```

```
IF NAME1 = NAME2 THEN PUT
"NAME1 = NAME2 IS TRUE.";
ELSE PUT "NAME1 = NAME2 IS
FALSE.";
```

```
/*A SOUNDEX STRING
COMPARISON IN THIS CASE WILL
SUCCEED*/
```

```
IF SOUNDEX(NAME1) =
SOUNDEX(NAME2) THEN PUT
"NAME1 = NAME2 IS TRUE.";
```

```
ELSE PUT "NAME1 = NAME2 IS
FALSE.";
RUN;
```

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[http://www.sascommunity.org/wiki/Tip\\_of\\_the\\_Day:April\\_27](http://www.sascommunity.org/wiki/Tip_of_the_Day:April_27)

You can launch SAS programs from within a SAS program and suspend execution of the launching SAS program until the launched SAS programs complete their execution. Doing this, you can control the execution sequence of your SAS programs if/when you do not want to depend entirely upon an OS's scheduling software (e.g. CRON on UNIX and Linux, Windows Scheduler on Windows, etc.).

For example, in your BIGPROGRAM.SAS, you could have the following code:

```
systask command "sas  
your_clever_program1.sas"  
taskname=program1;
```

```
systask command "sas  
your_clever_program2.sas"  
taskname=program2;
```

```
waitfor _all_ program1 program2;
```

/\* Other SAS code that processes the data sets created by the two aforementioned programs \*/Note that the `_all_` option states that your program is to wait for both `program1` `_AND_` `program2` to complete before resuming execution. As an alternative, you could have coded `_any_`, which would have your program resume the moment either `program1` `_OR_` `program2` completed execution.

## HASUG EMAIL DISTRIBUTION LIST

This service is provided free of charge to all who wish to subscribe to the email notification process. In order to sign up for this service, you need to point your browser to the HASUG web site, <http://www.hasug.org>, and click the hyperlink, "Join HASUG Email List".

Your name and email address are not displayed nor given out to any party, including members of the HASUG steering committee. Only the list administrators have access to subscription information. Only List administrators will be able to send out email messages to the HASUG members.

If you should change your email address under which you subscribed, you will need to unsubscribe with your old email address, and then re-subscribe using your new email address. Typically, a notice is sent approximately 3 weeks before meetings, as well as a couple of days beforehand to remind people of the date, time, and location.

To subscribe to the HASUG list you will need to follow the following steps:

1. From the HASUG website pick "Join HASUG Email List". Enter your email address and click on the SUBSCRIBE button. You will receive an email from [oreply@googlegroups.com](mailto:oreply@googlegroups.com).
2. Open the email and click on the confirmation URL in the email.

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3. There are no questions to answer. Just click on "Apply to this Group" .
4. You will receive an email saying you have been added to the distribution list.

You must complete steps 1-3 to be added to the list.

### **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.

### **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, Stamford 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.

## HASUG Steering Committee

| <u>Name</u>              | <u>Organization</u>         | <u>Telephone</u> | <u>E-Mail</u>                  |
|--------------------------|-----------------------------|------------------|--------------------------------|
| Kathleen Alber           | Service National Corp       | (203) 315-4312   | kalber@1fbusa.com              |
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| Jim Blaha                | The Hartford                |                  | James.Blaha@hotmail.com        |
| Robert Clauss            |                             | (860) 559-9604   | robertclauss@comcast.net       |
| Cindy Johnson            | Bristol-Myers Squibb        | (203)-677-6547   | gjcj372@comcast.net            |
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| Barbara Moss             | The Hartford                | (860) 547-7396   | barbara.moss@ thehartford.com  |
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| Peter Prause             |                             | (860) 521-6487.  | prausewh@gmail.com             |
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## **Directions to Yale New Haven Health Systems**

### **300 George Street, New Haven, CT**

#### **I-95 traveling north or south**

Exit 47 to Route 34 west to Exit 2. Take second right onto York Street and take the next right onto George Street. 300 George Street is located on the right between York and College Streets.

#### **I-91 traveling south**

Exit 1 to Route 34 west to Exit 2. Take second right onto York Street, and take the next right onto George Street. 300 George Street is located on the right between York and College Streets.

#### **Wilbur Cross Parkway (Rte. 15) traveling south**

Exit 59 immediately after tunnel. Right at end of ramp. Merge left onto Whaley Avenue at light. Stay on Whaley until you see signs for Yale-New Haven at Park Street. Turn right onto Park and go to George Street (one-way). Turn left onto George Street and 300 George Street is located on the right between York and College Streets..

#### **Merritt Parkway (Rte. 15) traveling north**

Exit 57 to Route 34 east into New Haven. Right onto Ella T. Grasso Boulevard (Rte. 10) and left onto South Frontage Road (Legion Ave.). Follow hospital and Rte. 34 signs. Pass hospital on your right and turn left onto York Street. At the second light, turn right onto George Street. 300 George Street is located on the right between York and College Streets.

#### **Route 1 (Boston Post Road) traveling east**

At Ella T. Grasso Boulevard (Rte. 10), turn left and go to the next light (S. Frontage Road or Legion Ave.) Turn right and follow to York Street (hospital on the right). Turn left onto York Street and at the second light, turn right onto George Street. 300 George Street is located on the right between York and College Streets.

#### **Bus Stops/Routes:**

300 George Street is located about two blocks from the city's major transfer point for all routes at the New Haven Green (Temple & Chapel). Nearest bus stop is located at the corner of Temple and Crown streets. Call or [e-mail](#) CT Transit Telephone Information Center for times: **(203) 624-0151**.

#### **Bus from Train:**

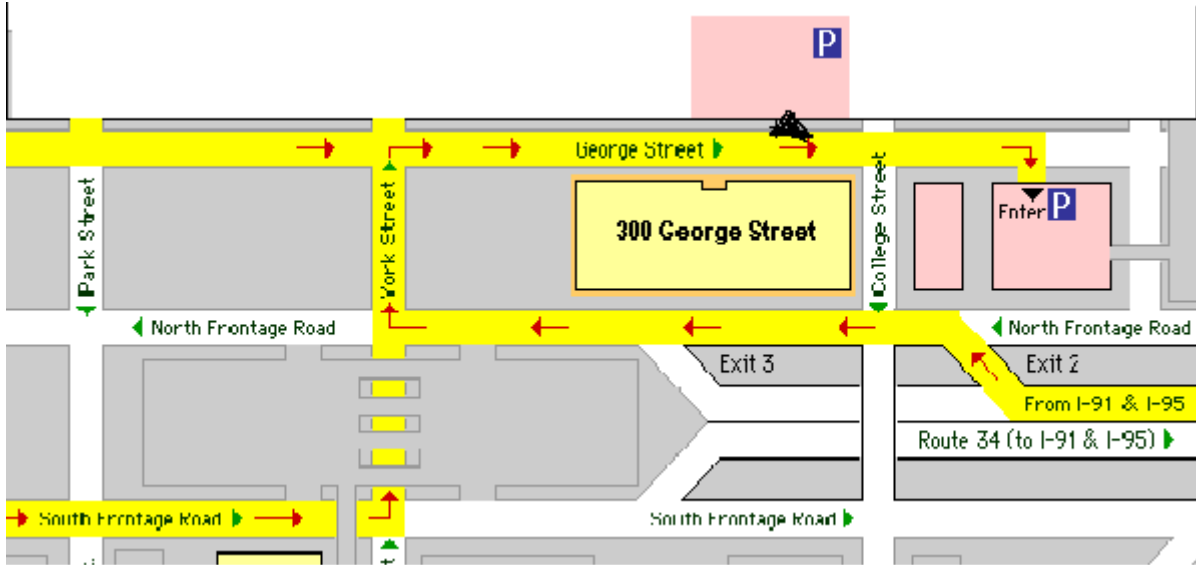
See schedule below street map.

#### **Best parking:**

**ProPark public parking.** Lot directly across the street from 300 George Street. The rate is \$5 per hour.

**Temple Medical Garage.** Connected to Temple Medical Building, located on the corner of Temple Street and George Street. Enter garage from George Street. The rate is \$3 for first hour and \$2 each additional

**Local Street Map:**



**Take the train to Union Station, New Haven for the Feb 25 HASUG meeting  
 Free! 89-Union Station Shuttle Monday through Friday  
 Every 20 minutes**

| Shuttle                     | Schedule                      |
|-----------------------------|-------------------------------|
| Leave union station stop *1 | Arrive Temple & George stop*6 |
| 7:40                        | 7:50                          |
| 8:00                        | 8:10                          |
| 8:20                        | 8:30                          |
| 8:40                        | 8:50                          |
| 9:00                        | 9:10                          |

**Walk back to College & George(2 short blocks)**

|                        |                       |
|------------------------|-----------------------|
| Temple & George stop*6 | union station stop *1 |
| 11:30                  | 11:35                 |
| 11:50                  | 11:55                 |
| 12:10                  | 12:15                 |
| 12:30                  | 12:35                 |
| 12:50                  | 12:55                 |
| 1:10                   | 1:15                  |
| 1:30                   | 1:35                  |

**For map SEE :**

**[http://www.cttransit.com/PDFs/FREESHUTTLE\\_UNION\\_STATION.pdf](http://www.cttransit.com/PDFs/FREESHUTTLE_UNION_STATION.pdf)**