



HARTFORD AREA SAS® USERS GROUP

Volume 15, Issue 1	First Quarter, February 2003
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<p>The HASUG Flash is available for reading on the World Wide Web at http://www.hasug.org SAS is a registered trademark of SAS Institute Inc. Cary, North Carolina</p>

Notes From the Chairperson

Acting Chairperson:

Michael "Mad Doggy" Davis

Bassett Consulting Services, Inc.

Due to illness, I have taken over the remainder of the term that was served by Al Lavoie. We all would like to thank Al for embracing the job as chairperson and for all that he accomplished while in this position.

On the eve of HASUG's 20th anniversary, I have been afforded the privilege of sharing some reflections of our steering committee as we approach this milestone. We believe that this milestone is significant to the SAS user community for many reasons, including:

- HASUG may be the oldest local SAS User Group (SUG)
- As far as we know, HASUG is the only non-internal SUG that does not charge annual membership dues.
- There is no fee to attend our quarterly meetings or to receive our quarterly newsletter.
- The HASUG website (www.hasug.org) and distribution lists are free of commercials and pop-up advertisements.

I often speak at other SUGs and fully appreciate the difficulty of keeping a SUG going. For the benefit of others, I would like to share why we think that HASUG works so well.

Most important, we have an enormous amount of volunteer help. We try to remember that volunteer help is obtained through cooperation, not coercion. Volunteers are matched to the activities that they are comfortable undertaking. Everyone has the ability to make a valuable contribution. We always thank our volunteers for their help. Last, seeking perfection in SUG activities may hurt instead of help. Practice patience and tolerance.

Obtaining speakers is often the bane of SUGs. SAS has supplied at least one speaker, every year for as long as we can remember. Through the speaker sharing program, NESUG (Northeast SAS User Group) subsidizes the travel expenses of an out of area speaker each year. However, most of our presentations are homegrown. Extraordinarily talented and knowledgeable HASUG members have given some of those homegrown

presentations. They often speak at other SUGs and SAS conferences. However, we have also discovered that nearly anyone who has been using SAS for a while can give an informative and worthwhile presentation. When they hesitate, we remind them that the HASUG economic model requires that most of our presentations must be homegrown.

The role of our enlightened employers, who furnish meeting facilities, is another key to our success. Our generous sponsors are the reason that we can maintain an organization without the need for fees. At one time, employers also provided printing and postage for our newsletter. When economic times tightened, we took in a single one-page advertisement to cover the cost of distributing the newsletter. Later, we hit upon the solution of publishing the newsletter as an Adobe Acrobat (PDF) document. This allowed us to return to our entirely commercial-free model.

I can think of one major disappointment. Largely through the leadership of Peter Prause, HASUG once had the largest SAS consortium-training schedule of any SUG. However, the creation of public SAS training facilities and increased security concerns eliminated the viability of our consortium-training program. We envy those local SUGs that are able to field inexpensive SAS training opportunities and seek to increase the availability of inexpensive SAS training opportunities for our members.

HASUG is essentially the Connecticut SAS User Group. Our members come from all corners of Connecticut. In view of this, HASUG rotates meeting locations around the state in the hope that at least once per year, the meeting will be near each member and will encourage attendance from that part of the state.

We have successfully adopted a schedule that is consistent and predictable. HASUG meetings are scheduled for the third Thursday of each February, May, August, and November unless room availability or holidays dictate a shift. There is a newsletter published each quarter. Our newsletter, the HASUG Flash, is published each quarter in time for the next meeting.

(Continued on page 3)

(Chairperson's Column continued from page 2)

No one on our steering committee wants to let the others down. When someone has problems undertaking a task, others step in to help. At the danger of inadvertently slighting other members, two long-standing HASUG Steering Committee members are often cited as keys to our success. They are Charles "Birdman" Patridge and Michael "Mad Doggy" Davis.

Chuck Patridge is the embodiment of the concept "Pay It Forward". He created the first HASUG web site, whose basic design is still used today. He operates the SCONSIG web site, <http://www.sconsig.com>, which complements the HASUG web site and is a cornucopia of resources for SAS professionals. Recently, Chuck has taken over the editing of the Tips and Techniques section of the HASUG Flash.

My company sponsors the HASUG web site, <http://www.hasug.org> and I serve as web master. I take the lead in securing speakers for HASUG meetings. The genesis of my SUGI and NESUG conference papers stems from encouragement of my HASUG colleagues.

Without the friendship, encouragement, and support of my HASUG colleagues, I might not have had the courage to start on a new career as a SAS consultant nine years ago. I have received far more in benefit than the cost of my efforts. My family thanks and appreciates my generous colleagues. I hope to continue this fruitful collaboration for many years to come.

Meeting Announcement

The first quarter HASUG meeting for 2003 is to be held on **Thursday, February 20, 2003, 9:00 a.m. to 11:30 a.m. at Oxford Health Plans offices at 48 Monroe Turnpike in Trumbull, Connecticut.** Refreshments will be available at 8:30 a.m. Please pre-register for this meeting by completing the short pre-registration form found on http://www.hasug.org/next_mtg.htm. If questions, contact our host, Kevin Smith at 203-459-6145, or by email at KevSmith@oxhp.com.

The first presentation will be **"Big Brother for SAS/IntrNet® : Security and Tracking Agent" by Yadong Zhang, Muhammad Khan, and Kevin Smith, Oxford Health Plans.** The abstract for this presentation follows:

"With all the new laws that enforce the protection of the personnel information, security for web application has become mission critical. Since the operating system or the web server only enforces the security for SAS/IntrNet, we implemented a security and tracking agent – "The BIG Brother". This was accomplished by creating a user validation and a user activity database. Some basic JavaScript were also incorporated to validate the data parameters in the form."

Yadong Zhang is a Senior Healthcare Analyst with Oxford Health Plans. He has more than eight years experience programming SAS applications. Yadong specializes in application development in Base SAS, SAS/Intrnet and SAS/AF®. He has also worked on SAS system configuration, performance tuning and SAS/SPDS administration.

Muhammad Khan is a Senior Health Care Economics Analyst with Oxford Health Plans. He holds an MS degree in Agriculture Science and has 7 years of experience in using Base SAS and SAS/STAT.

Kevin Smith is a Senior Healthcare Analyst with Oxford Health Plans. He has been programming SAS applications for over five years. Kevin specializes in Base SAS and SAS/STAT. He holds an MBA from Sacred Heart University in Fairfield, Connecticut. in Health Care Administration.

The second presentation will be **"Reading External Files Using SAS Software" by Clinton S. Rickards, Purdue Pharma L.P.** The abstract for Clint's presentation follows:

"In the real world, most data are not stored in SAS data sets. Typical data repositories used by business and academia include legacy mainframe files, client/server relational database management systems, and simple text files on desktop computers. While we want to use SAS to examine, to analyze, to display, and to graph

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(Meeting Announcement continued from page 3)

this data, SAS works best with data stored in SAS data sets, not with data stored in their native forms."

"Fortunately, SAS has very powerful tools for reading a wide variety of external files, from the most rudimentary to the most complex. This paper is an updated and expanded version of similar papers presented by the author at previous SAS conferences and will introduce DATA Step techniques for reading standard external files not stored in data base management systems or proprietary file structures."

"This presentation begins with a brief overview of what to do before writing any code, followed by an examination of the SAS statements used to read an external file. Starting with very simple files, we will study programs that utilize more complicated features, including reading into arrays, multiple format files, variable length files, and multiple record files."

Clint Rickards has been using SAS since 1984, initially for reporting and analysis functions and later for warehousing and GUI application development. He has been active in HASUG, NESUG, and SUGI. Clint co-chaired NESUG '93 in Springfield, Massachusetts. He is currently the manager for infrastructure support in the Biostatistics and Data Operations department of Purdue and is responsible for supporting SAS users, SAS and non-SAS-based applications, and the general computing infrastructure.

Directions to this meeting appear on the last page of this newsletter.

Editorial and Production Staff

Editor	Janet Stuelpner
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Web master	Michael Davis
Contributors	Karol Katz
	Albert Lavoie
	Barbara Moss
	Charles Patridge
	Peter Prause

Calendar of Events

Future General Meetings and Conferences:

Future General Meetings and Conferences:

May 15, 2003	The Hartford, Hartford, CT
August 21, 2003	Bayer Corporation, West Haven, CT

HASUG Steering Committee Meetings:

March 20, 2003	Conference call, 11:30-12:30
May 15, 2003	Immediately after HASUG meeting
June 12, 2003	Conference call, 11:30-12:30

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.

HASUG Distribution List

This service is provided free of charge to all subscribers who wish to join the email notification process. In order to sign up for this service you need only point your browser to the HASUG web site, www.hasug.org and click on the icon "sign up for our mailing list". The icon is located below the list of previous newsletters .

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

HASUG Email

SCONSIG

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.

It is your decision to enter as much personal information as you wish to provide. **The only piece of data that is TRULY needed is your correct email address.** Any information you enter will not be displayed nor given out to any party, including the members of the steering committee. The only people who have direct access to the information are the HASUG and SCONSIG list administrators, Michael Davis and Charles Patridge.

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. If you should change the email address under which you subscribed, please sign up again with your new email address.

Typically an email notice is sent approximately 3 weeks before our next scheduled meeting, as well as a couple of days beforehand to remind people of the date, time and topics to be presented.

Hyperlinks of Interest

The SAS Consultants Special Interest Group's web site URL has changed. Edit the bookmarks on your favorite Brower 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>

SAS OnlineDoc is available from SAS on the World-Wide Web. To register to view SAS Version 8 OnlineDoc on the web, register at the following URL: <http://www.sas.com/v8doc>. To register to view SAS Version 9 Online Doc on the web, register at the following URL: <http://www.sas.com/v9doc>.

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>

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.

November HASUG Highlights

By Barbara Moss, CIGNA

The quarterly meeting of HASUG was held on November 14, 2002 at CIGNA in Bloomfield, CT. The opening presentation was entitled, "Enterprise Guide Version 2.0". Entertainingly presented by James Blaha of Pace University, this was an informative tour of a SAS Institute product offering from a user's perspective. This powerful Windows front end has found an ardent user in the speaker through its clarity of presentation and ease of use to access all kinds of data. Jim also revealed that this tool is the professional's secret behind producing application code rapidly.

"Enterprise Guide is a tool that if used properly can dramatically increase user productivity and assist in increasing your technology ROI. Rapid deployment of critical information in multiple formats (e.g. HTML, PDF, RTF) helps empower those power users who know their data to generate crucial ad hoc SAS reports on the fly without programmer intervention." - J. Blaha

The second presentation was, "Danger: MERGE Ahead! Warning: BY Variables with Multiple Lengths!" given by Bob Virgile of Robert Virgile Associates, Inc. Discussed were the unusual results that can occur when merging two seemingly similar data sets together, and why. The basic code seen below can achieve surprising results and unanticipated SAS warning messages in certain circumstances.

```
data combined;
  merge males females;
  by lastname;
run;
```

Mr Virgile's renowned "Problem Solving Contest" requires conference attendees to look past simple code and uncover the unexpected. His MERGE presentation, once again, made us think and reminded us to look beyond the expected in order to produce solid SAS code.

Continuing With Education...

Peter Prause, The Hartford

The SAS Institute Regional Training Center in Glastonbury, CT. is offering these courses through June 2003. Course information for these courses and many other non-local courses is available on the Internet at the SAS web site: www.sas.com. To register for a course or to get more information, phone SAS Institute at 1-800-333-7660.

SAS Macro Language	Feb 27-28
Accomplishing Tasks in SAS Using Enterprise Guide Software	Mar 5-6
Optimizing SAS Programs	Mar 19-20
SAS Programming I: Essentials	Mar 25-27
SAS Report Writing: A Programming Approach	Apr 9-10
Introduction to Programming Concepts Using SAS Software	Apr 24-25
SAS Programming II: Manipulating Data with the DATA Step	Apr 29-May 1
SAS Programming I: Essentials	May 20-22
SAS Macro Language	May 28-29
SAS Programming II: Manipulating Data with the DATA Step	Jun 4-6
SQL Processing with the SAS System	Jun 25-26
Changes & Enhancements to Version 9	Feb 24-25
Programming III: Advanced Techniques	Mar 3-5

Local SAS training is available at Destiny Corporation, of Wethersfield, CT. Below is a list of their scheduled classes through June 2003. You can reach Destiny at 1-800-787-2464 or at 860-721-1684, or send email to info@destinycorp.com. You can visit their web site at www.destinycorp.com.

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(Education, continued from page 6)

Enterprise Guide Software Introduction	Mar 10-11
Output Delivery System	Mar 24
Advanced Output Delivery System	Mar 25
Programming I: SAS Essentials	Apr 7-9
SQL Processing with SAS Software	Apr 14-15
Programming IV: Optimizing Programs in SAS Software	Apr 28-29
Programming II: Data Manipulation Using the Data Step	May 5-7
Enterprise Guide Software Introduction	May 19-20
Advanced Macros	May 26-27
Macros in SAS Software	Jun 9-11
Output Delivery System	Jun 23
Version 8 Changes and Enhancements	Jun 24

Destiny is currently offering a "Small Class SAS Special", for organizations that may not have enough people to fill a standard class size. For on site training at your facility, the minimum class size is 5 people, and the cost is as low as \$250 per student day including course materials. This offer is valid for classes scheduled through February 28, 2003. For details, contact Stew Silverberg at 1-800-787-2464 ext 13, or send an email to ssilverberg@destinycorp.com.

Book Review

Extending SAS Survival Analysis Techniques for Medical Research, 2nd Edition

By Alan Cantor
Order Number: 55504
ISBN: 1-55544-954-9
Cost: \$34.95

Reviewed by:

**Karol Katz, Dept. of EPH
Yale University School of Medicine**

Dr. Cantor 's Second Edition builds on all the definitions and methods found in the first edition. New topics include Early Stopping based on Conditional Power and Imputing Missing Values. Detailed information along with SAS procedures and macros are provided for each topic.

Exercises, appropriate for a graduate level Survival Statistics course, are also included throughout the book. I particularly appreciated the larger, easier to read, font. All issues that occur when analyzing Survival data in Clinical Trials are explained thoroughly and demonstrated using appropriate examples. This book can serve as a reference for a medical researcher and as a teaching tool.

Consultants' Special Interest Group (SCONSIG)

The SAS Consultants' Special Interest Group (SCONSIG) operates and maintains a web site located at 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 at

Charles_S_Patridge@prodigy.net

for further information.

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."

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(Tips and Techniques, continued from page 7)

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**TIPS IN BLUE ARE IN THIS NEWSLETTER,
ALL TIPS CAN BE LOCATED ON [HTTP://
WWW.SCONSIG.COM](http://www.sconsig.com)**

TIP00344 -
EMPTYYN macro - PURPOSE: Find NOBS for a SAS Dataset by Charles Patridge and Peter Crawford

TIP00345 -
[A sample program to search a SAS variable that contains possible strings to be selected by Charles Patridge](#)

TIP00346 -
Count the number of 1's 2's 3's etc in variable 'text' by Venky Chakravarthy and Jim Groeneveld

TIP00347 -
[Create a Calendar Using Proc Report \(Higher Quality\) vs Proc Calendar by Richard A. DeVenezia](#)

TIP00348 -
[How to find the last Friday of a month by Roland Rashleigh-Berry](#)

TIP00349 -
Figuring nearness between points on an ongoing basis by Michael Zdeb

TIP00350 -
"Toy" SAS Problem simulates Deal of 52 Playing Cards by Richard A. DeVenezia

TIP00351 -
[Obtaining the various parts of Date and Time by Ron Fehd](#)

TIP00352 -
Identify those cases where the right most character is a number and then output all the numbers and characters to left - Multiple Solutions by Roger Lustig, Venky Chakravarthy, and Ed Heaton

TIP00353 -
[How can I delete all the files that have 0 obser-](#)

[vations in a library by Gerhard Hellriegel](#)
TIP00354 -
[SAS Tip \(V8.2\): Exporting data to EXCEL by Philip Mason](#)

TIP00355 -
[How can I determine the number of variables in a data set? by SAS Institute Technical Support](#)

New Sample: Transferring Data Between SAS and Microsoft Products

This new sample in our Enterprise Integration Community demonstrates how to use Visual Basic Script and the SAS Integrated Object Model (IOM) OLE DB Data Provider to import and export data between a SAS data set and Microsoft Access and Excel.

Read more at <http://www.sas.com/rnd/eai/samples/VBoffice/>

[Extensive FAQ for the Base SAS TEMPLATE Procedure](#)

Whether it is changing the colors, fonts, margins, or other elements, there will come a time when you will want to alter the appearance of the HTML output you produce with the Output Delivery System. The TEMPLATE procedure can help. This extensive FAQ provides an overview of PROC TEMPLATE and what it can help you accomplish.

Read more at <http://www.sas.com/rnd/base/topics/templateFAQ/Template.html>

[SAS Q&A: Why do I keep getting missing variables?](#)

This Q&A comes to us compliments of the Research Triangle Park SAS Users Group listserv. Keith Brown from the University of North Carolina at Chapel Hill offered some helpful hints on using the TRUNCOVER option instead of MISCOVER. As he says, "If you are dealing with variable length data lines, TRUNCOVER can save you a lot of hair pulling."

Read more at http://www.sas.com/service/techtips/ts_qa/0210_missvariable.html

List of SAS Auto Extensions (Macros) by Ro-

(Continued on page 9)

(Tips and Techniques, continued from page 8)

land Rashleigh-Berry

<http://www.datasavantconsulting.com/roland/>

A Practical Approach to Improving System Performance

Many factors contribute to the performance of your SAS applications, including the code, data models, process design, and hardware and network architectures and configurations. How do you diagnose performance problems and determine effective solutions? This paper, by SAS' Tony Brown, suggests a step-by-step method that uses measurement tools for diagnosing problems and improving system performance.

Read more at: http://www.sas.com/rnd/scalability/papers/solve_perf.pdf

[SAS Q&A: How can I dynamically e-mail HTML output from ODS in a SAS program?](#)

To dynamically e-mail output from ODS in a SAS program, specify the EMAIL device on the FILENAME statement along with the e-mail address and any other e-mail options you like. But as SAS Technical Support Analyst Chevell Parker explains, if you don't change the TYPE= option on the FILENAME statement your output will display as a text file with the HTML tags as text. This Q&A includes sample code for changing the content to HTML, and also shows how to send the HTML output as an attachment.

Read more at http://www.sas.com/service/techtips/ts_qa/0210_htmloutput.html

SAS Q&A: Is there an easy way to create maps with tool tips using the GIF device driver?

This short sample code uses the HTMLVAR= option on the CHORO statement in the SAS/GRAPH GMAP procedure to create a graph with tool tips and drill-down capabilities using the GIF device driver. All you have to do is modify the FILENAME statement.

Read more at http://www.sas.com/service/techtips/ts_qa/0210_maptips.html

SAS FAQ: Some procedure results are arranged or formatted differently than the documentation or than they used to be. How can I fix

that?

This may be happening because the procedure is using a modified template to display its results. A template is part of the Output Delivery System (ODS) and it defines the appearance of tables in the procedure's results.

Read more at http://www.sas.com/service/techsup/faq/gen_sas/gen_sas2003.html

/* TIP 00345 ***/**

```
/*** TIP 00345 ***/
/*****
/* Author: Charles Patridge      */
/* A sample program to search a SAS */
/* variable that contains possible */
/* strings to be selected         */
/*****
```

```
data test;
  length string $50. ;
  string = 'Charles Patridge'; output;
  string = 'Steven Patridge'; output;
  string = 'Find Me'; output;
  string = 'Gotcha' ; output;
  string = 'Partridge'; output;
  string = 'Monce' ; output;
```

run;

```
proc sql;
  create table find as
  select *
  from test
  where upcase(string) contains 'CHARLES' or
        upcase(string) contains 'PARTRIDGE'
or
        upcase(string) contains 'PATRIDGE' or
        upcase(string) contains 'MONCE';
quit;
```

```
proc print data=find;
run;
```

/* end of tip 00345 ***/**

/* TIP 00347 ***/**

Author: Richard A. DeVenezia
Email: radevenz@IX.NETCOM.COM

Create a Calendar Using Proc Report (Higher Quality) vs Proc Calendar

```
%macro calendar_report (month, year);

data grid;
  date1 = mdy (&month,1,&year);
  date2 = intnx ('month', date1, 1) - 1;
  do date = date1 to date2;
```

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(Tips and Techniques, continued from page 9)

```
wim = intck ('week', date1, date);
dim = date-date1+1;
dow = weekday (date);
output;
end;
run;

proc format;
  value dayname
    1 = 'Sunday'
    2 = 'Monday'
    3 = 'Tuesday'
    4 = 'Wednesday'
    5 = 'Thursday'
    6 = 'Friday'
    7 = 'Saturday'
  ;
run;

options missing=' ';

proc report nowindows data=grid
  style (column) = { just=center cell-
height=50pt };
  column wim ("%sysfunc (mdy (&month,1,
&year), monname) &year" dow, dim) ;
  define wim / group noprint ;
  define dow / across ' ' for-
mat=dayname. order=internal;
  define dim / ' ';
run;
options missing='.';
%mend;

ods html file='c:\temp\calendar.html';
  %calendar_report (9,2002);

  data caldat;
  date=mdy(9,13,2002);
  subject='John Doe';
  visit='1 mos';
  duration=1;
  output;
  run;

  proc calendar data=caldat formchar
(12)=' ';
    start date;
    dur duration;
  run;
ods html close;

/** end of tip 00347 */

/** TIP 00348 */
Does anyone have a tip of how to find the last Friday
of a month?
```

Author: Roland Rashleigh-berry

Email: roland.rashleigh-berry@NTLWORLD.COM

Solution:

Use the date of the first of the following month and
apply this:

```
lastfri=intnx('week.6',date-1,0);
/** last Friday of the Month */

  data test;
  do i = 1 to 12;
    date = mdy( i, 01, 2002);
/** first day of following month */
    lastfri=intnx('week.6',date-1,0);
/** last Friday of the Month */
    put lastfri weekdate. date week-
date.;
  end;
  run;

/** end of tip 00348 */
```

/ TIP 00351 */**

tip mvvars of date and time

Obtaining the various parts of Date and Time

Author: Ron Fehd

```
%LET WEEKDATE = %sysfunc (date (),
weekdate29.) ;
%LET DATECCYY = %sysfunc (date (),
year4.) ;
%LET DATEMONTH = %sysfunc (date (),
MonName9.) ; %*September:9;
%LET DATE_MM = %sysfunc (date (),
Month2.) ; %*01:12;
%LET DATE_DD = %sysfunc (date (),
Day2.) ; %*01:31;
%LET DATE_DAY = %sysfunc (date (),
downname9.) ; %*Wednesday:9;
%LET DATEJUL = %sysfunc (date (),
julian7.) ; %*ccYYddd;
%LET DATEJULDAY= %sysfunc (date (),
julday3.) ; %*ddd;
%LET DATE_QTR = %sysfunc (date (),
qtr1.) ; %*1:4;
%LET TIME = %sysfunc (time (),
time8.0) ; %*HH:MM:SS;
%LET TIME_HH = %scan
(&TIME.,1,:) ;
%LET TIME_MM = %scan
(&TIME.,2,:) ;
%LET TIME_SS = %scan
(&TIME.,3,:) ;
%LET TIMEAMPM = %sysfunc (time (),
timeAMPMS.0) ; %*HH:MM AM;

%put Weekdate = &weekdate ;
%put DATECCYY = &dateccyy ;
```

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(Tips and Techniques, continued from page 10)

```
%put DATEMONTH = &datemonth ;
%put DATE_MM   = &date_mm   ;
%put DATE_DD   = &date_dd   ;
%put DATE_DAY  = &date_day  ;
%put DATEJUL   = &datejul   ;
%put DATEJULDAY= &datejulday;
%put DATE_QTR  = &date_qtr  ;
%put TIME      = &time      ;
%put TIME_HH   = &time_hh   ;
%put TIME_MM   = &time_mm   ;
%put TIME_SS   = &time_ss   ;
%put TIMEAMPM  = &timeampm  ;
```

Here is copy of the SAS log from above macro variables and their values:

```
24 %put Weekdate = &weekdate ; Week-
date = Wednesday, November 20, 2002
25 %put DATECCYY = &dateccyy ;
DATECCYY = 2002
26 %put DATEMONTH = &datemonth ; DATE-
MONTH = November
27 %put DATE_MM = &date_mm ;
DATE_MM = 11
28 %put DATE_DD = &date_dd ;
DATE_DD = 20
29 %put DATE_DAY = &date_day ;
DATE_DAY = Wednesday
30 %put DATEJUL = &datejul ; DATE-
JUL = 2002324
31 %put DATEJULDAY= &datejulday; DATE-
JULDAY= 324
32 %put DATE_QTR = &date_qtr ;
DATE_QTR = 4
33 %put TIME = &time ; TIME
= 15:24:01
34 %put TIME_HH = &time_hh ;
TIME_HH = 15
35 %put TIME_MM = &time_mm ;
TIME_MM = 24
36 %put TIME_SS = &time_ss ;
TIME_SS = 01
37 %put TIMEAMPM = &timeampm ;
TIMEAMPM = 3:24 PM
38
/**** end of tip 00351 ****/
```

****** TIP 00353 ******

How can I delete all the files that have 0 observations in a library?

Author: Gerhard Hellriegel

Maybe the question is:

How can I find out, which datasets in a library have 0 Obs and delete them...?

For that you can use the sashelp.vtable view:

Put it all in a macro, get the nobs of each dataset in the library and then use proc datasets with a macro loop to generate all deletes for the members with 0 obs.

Something like:

```
%macro delzero(lib=sasuser);
%let lib=%upcase(&lib);
proc sql;
  create table del as
  select memname from sashelp.vtable
  where memtype="DATA" and lib-
  name="&lib"
  and nobs=0;
quit;
%let no=0;
data _null_;
  set del;
  call symput("d"!!compress(pu
  (_n_,8.)),memname);
  call symput("no",_n_);
run;
/* then like Jim wrote... */
proc datasets lib=&lib nolist;
  %do i=1 %to &no;
    delete &&d&i;
  %end;
run; quit;
%mend delzero;
```

%delzero;

****** end of tip 00353 ******

****** TIP 00354 ******

From: Philip Mason
SASTip: Exporting data to EXCEL

With ODS (SAS v8.2) it's easy to export SAS data to EXCEL. This technique produces HTML, but we give our file an XLS suffix so that EXCEL will open it and automatically import the HTML into a spreadsheet.

```
**** Example 1 ****;
ods html file='c:\\test.xls' ;
proc print data=sashelp.class ;
run ;
ods html close ;
*****
```

This next one produces a comma separated file, which EXCEL (& other products) can import easily. Under windows the extension CSV is often associated with EXCEL and merely requires the

(Continued on page 12)

(Tips and Techniques, continued from page 11)

user to click on the file to start EXCEL and load the data.

```
**** Example 2 ****;
ods csv file='c:\\test.csv' ;
proc print data=sashelp.class ;
run ;
ods csv close ;
*****
```

[tested on windows 2000 under SAS 8.2 by Phil Mason]

/** end of tip 00354 */

/** TIP 00355 */

From SAS Institute Inc. Technical Support
SN-008743 - How can I determine the number
of variables in a data set?

You can programmatically determine the num-

ber of variables in a data set by using the following code:

```
data _null_;
set sashelp.vtable (where=
(libname='WORK' and memname='TEST'));
call symput('nvar',nvar);
run;
%put &nvar;
```

----- OR -----

```
proc sql noprint;
select nvar into :nvar
from dictionary.tables
where libname='WORK' and
memname='TEST';
quit;
```

----- OR -----

```
%let nvar=%sysfunc(attrn(%sysfunc(open
(work.test,i)),nvars));
```

/** end of tip 00355 */

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**Directions to:
Oxford Health Plans,
48 Monroe Turnpike
Trumbull, Connecticut**

FROM I-84 WEST:

- Take Exit 9 - bear left off the ramp and turn left at the stop light
- Follow Route 25 South to the intersection of Route 25 & Route 111
- Turn left on to Route 111 (Monroe Turnpike)
- At the first traffic light, turn right into Oxford's parking lot entrance.

FROM I-84 EAST:

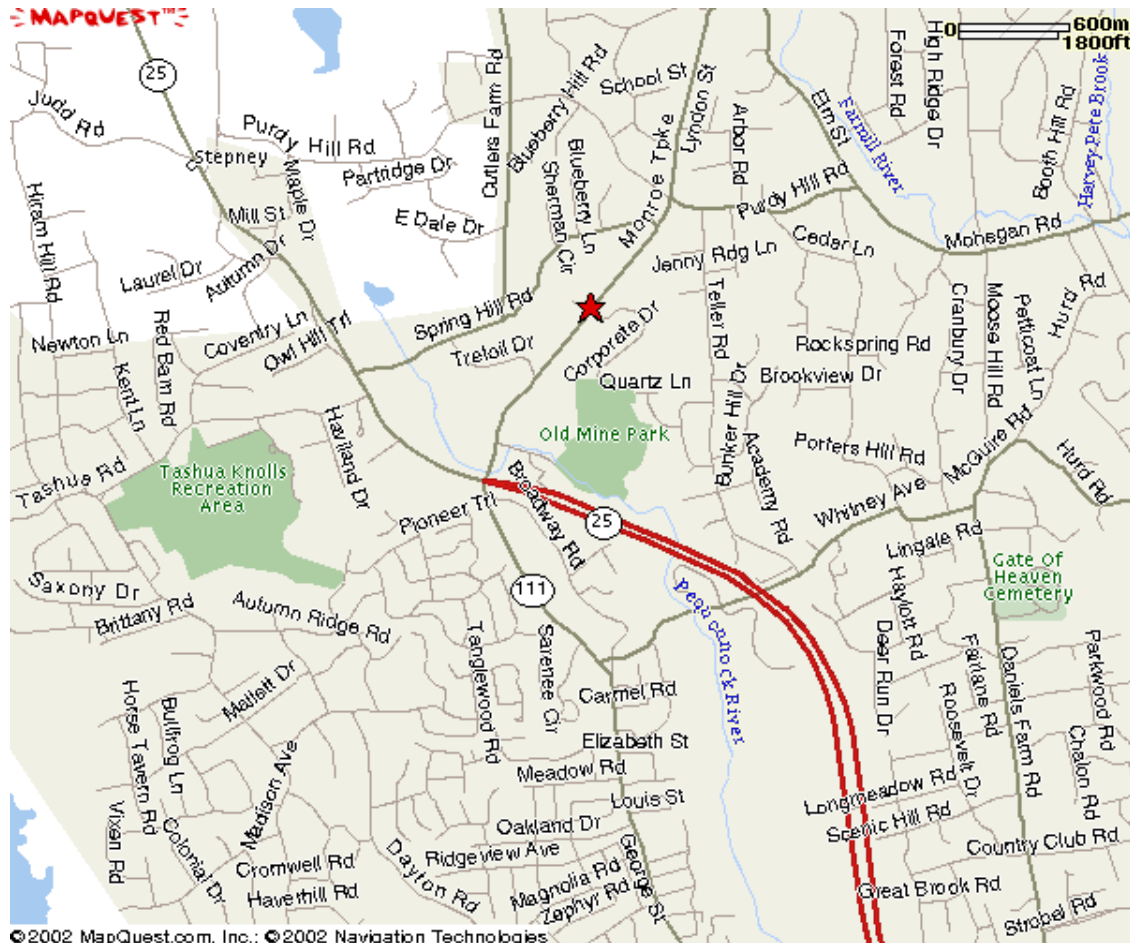
- Take Exit 9 - bear right off the ramp and turn left at the stop light
- Follow Route 25 South to the intersection of Route 25 & Route 111
- Turn left on to Route 111 (Monroe Turnpike)
- At the first traffic light, turn right into Oxford's parking lot entrance.

FROM I-95 NORTH or SOUTH:

- Take Exit 27A - Route 25/Route 8 connector.
- Follow route 25 North to the end of the 2 lane highway
- Make a right at the light on to Route 111 (Monroe Turnpike)
- At the first traffic light, turn right into Oxford's parking lot entrance.

FROM MERRITT PARKWAY NORTH or SOUTH:

- Take Exit 49N
- Continue on Route 25 North.
- Follow route 25 North to the end of the 2 lane highway
- Make a right at the light on to Route 111 (Monroe Turnpike)
- At the first traffic light, turn right into Oxford's parking lot entrance.



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