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MWSUG 18
MidWest SAS® Users Group Conference
October 28-30, 2007
Downtown Marriott, Des Moines
A Harvest of Fresh Ideas to Help You Grow!

Dear Fellow SAS® Users:

Welcome to the 18th annual MidWest SAS® Users Group conference. We hope that the conference will prove to be a valuable opportunity for you to learn new tools and techniques and to network with other SAS® users. We have been overwhelmed with the response to this conference! At this writing, we are expecting more than 300 attendees, making this one of the largest gatherings of Midwest SAS® users ever! THANK YOU!!!

All conference sessions will be held on either the 2nd or 3rd floor of the Downtown Marriott. 2nd floor meeting rooms are identified as Salon A through Salon H. 3rd floor meeting rooms are identified by the name of an Iowa town such as Des Moines, Dubuque, Davenport, Council Bluffs, etc. So if a session you want to attend is taking place in a room with a Salon name, you'll know you need to be on the Second floor, and if the session is taking place in a room with a Town name, you'll know you need to be on the Third floor. Use this handy key:

```
proc format;
  value $Room2Floor
    'Salon' = 'Second Floor'
    'Town'  = 'Third Floor';
run;
```

For those of you who are first time attendees, a “first timers” session will be held on Sunday afternoon from 5:30-6:00PM in the Dubuque Hall. Using the handy key above, you'll know this is on the Third floor. This session is geared toward first-time conference goers, and is designed to help you get the most out of your conference experience. We'll highlight the opportunities that are available to you, give you some tips for planning your conference days, and answer questions that you may have.

The conference kicks off with the opening session on Sunday evening at 7:00PM in Salons D & E. The Keynote Speaker is Jim Metcalf, R&D Director, Business Intelligence Query and Reporting at SAS Institute. Jim's presentation is titled “SAS® BI Is For You Too!”. Don't miss it! A social reception will follow the opening session.

Beginning Monday morning at 8:00AM and continuing through Tuesday afternoon, there is a full schedule of presentations for you to choose from. Refer to the presentation abstracts in this Program Guide to help you decide how to spend your time. In addition to presentations, classes and hands on workshops, you'll want to set aside some time for:

- The SAS® Demo room, where you can see SAS® software in action, ask questions, and learn how you can use SAS® to solve problems.
- Destiny's Virtual Learning Café, where you can get in-depth, self-paced training – free of charge.
- Monday afternoon SAS User Appreciation Reception in the Des Moines Hall from 5:00-6:00PM.
- Monday evening dinner at the Iowa Historical Museum – buses will provide transportation between the hotel and the museum from 6:00PM until 10:00PM.

Included in this program guide is an overview of the conference schedule and a complete listing of presentation abstracts. See page 31 for some Useful Conference Information which includes details on all of the meals, receptions and snacks that are included with your conference registration.

Best regards,

Delayne Stokke and John Xu
2007 Conference Co-Chairs

2007 Conference Schedule at a Glance

Sunday, October 28

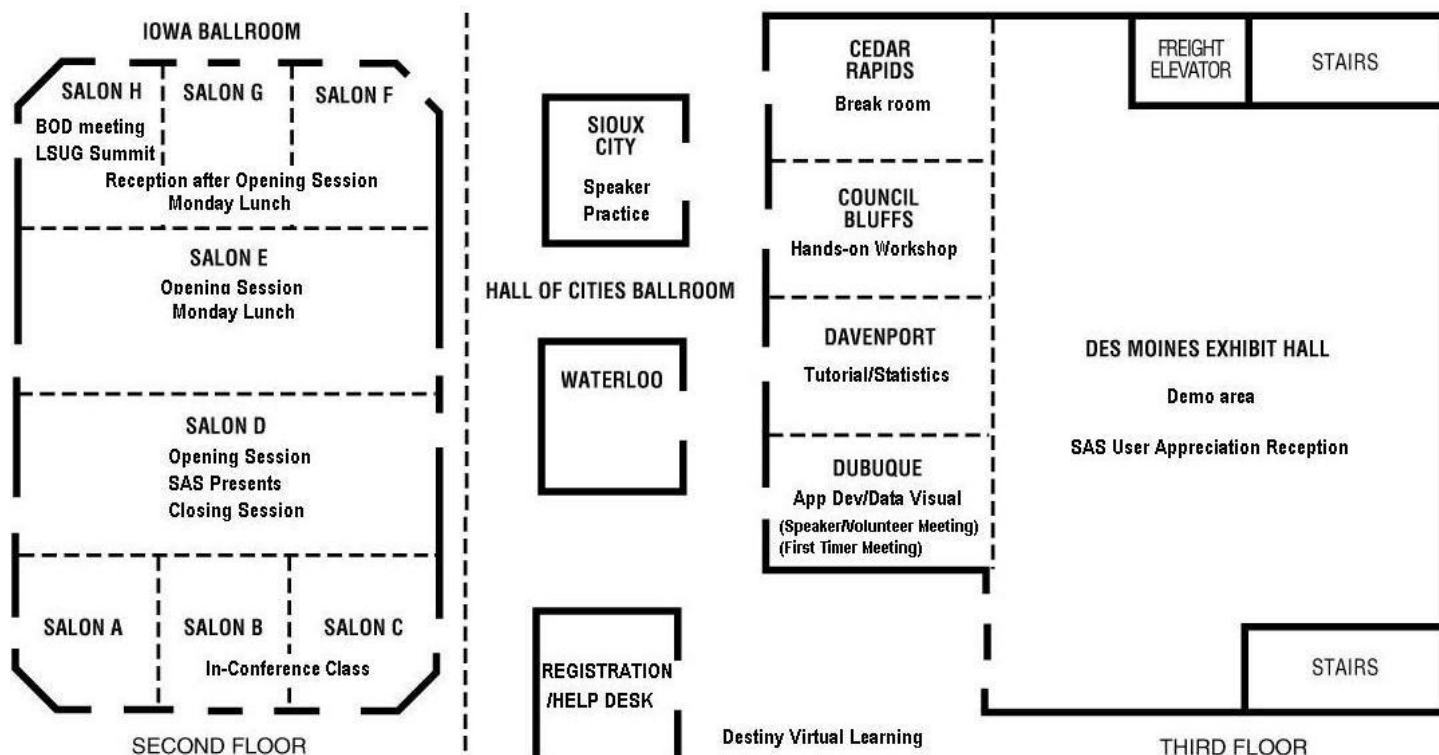
1:00 p.m. - 5:00 p.m. Registration and Information Desk Open, 3rd Floor
 5:00 p.m. - 5:30 p.m. Speaker and Volunteer Meeting - Dubuque
 5:30 p.m. - 6:00 p.m. First Timers Session - Dubuque
 7:00 p.m. - 8:00 p.m. Opening Session and Keynote Address - Salon D&E
 8:00 p.m. - 10:00 p.m. Reception - Salons FGH

Monday, October 29

7:30 a.m. - 9:00 a.m. Continental Breakfast, outside Cedar Rapids
 7:30 a.m. - 11:30 a.m. Registration & Information Desk Open, 3rd Floor
 8:00 a.m. - 5:00 p.m. Destiny Virtual Learning Café Open, 3rd Floor
 8:00 a.m. - 11:30 a.m. Speaker Presentations, Training Courses and Hands-on Workshops
 9:00 a.m. - 11:30 a.m. SAS Demo Area and Vendor Displays Open, Des Moines Hall
 11:30 a.m. - 1:00 p.m. Buffet Lunch sponsored by Smith Hanley. Salons EFGH.
 1:00 p.m. - 4:00 p.m. Registration & Information Desk Open, 3rd Floor
 1:00 p.m. - 5:00 p.m. Speaker Presentations, Training Courses and Hands-on Workshops
 1:00 p.m. - 6:00 p.m. SAS Demo Area/Vendor Displays Open, Des Moines Hall
 5:00 p.m. - 6:00 p.m. SAS User Appreciation Reception - Demo Area - Des Moines Hall
 6:00 p.m. - 10:00 p.m. Monday Night Social Event at State Historical Museum, dinner catered by Baratta's. Buses run between Hotel and Museum from 6:00 p.m. until 10:00 p.m.

Tuesday, October 30

7:30 a.m. - 9:00 a.m. Continental Breakfast, outside Cedar Rapids
 7:30 a.m. - 11:30 a.m. Registration & Information Desk Open, 3rd Floor
 8:00 a.m. - 3:00 p.m. Destiny Virtual Learning Café Open, 3rd Floor
 8:00 a.m. - 11:30 a.m. Speaker Presentations, Training Courses and Hands-on Workshops
 9:00 a.m. - 12:00 p.m. SAS Demo Area and Vendor Displays Open, Des Moines Hall
 11:30 a.m. - 1:00 p.m. Lunch - on your own - a restaurant guide is included at the back of this book.
 12:30 p.m. - 3:30 p.m. In Conference Class - SAS/Graph - Salons B & C
 1:00 p.m. - 3:00 p.m. Registration & Information Desk Open, 3rd Floor
 1:00 p.m. - 3:00 p.m. Speaker Presentations and Hands-on Workshops
 3:00 p.m. - 3:30 p.m. Afternoon snacks served outside Salon D
 3:30 p.m. - 4:15 p.m. Closing Ceremony



is a long term sponsor of Mid West SAS Users Group and Iowa SAS Users Group.

Contact John Xu by phone at 515-778-4093 or by email johnxu@1st-consulting.com for your consulting and training needs.

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email: dw1@mwsug.org

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Patsy Harbour
SAS Institute, Inc.
patsy.harbour@sas.com

Local User Groups

SAS Institute maintains a list of local user groups in the MidWest region on the SAS Institute Web site:

<http://www.sas.com/usergroups/namerica/mwsug.hspl>. In-house groups are not included here. If we have missed an active local group, please send a message to an MWSUG board member with the appropriate contact information.

ILLINOIS

CENTRAL ILLINOIS SAS USER GROUP

Wei-Shin (James) Wang
email: dhs9004@dhs.state.il.us
URL: <http://www.cisug.org>

NORTHERN ILLINOIS SAS USERS GROUP

Desheng (Ben) Xu
email: dxu@niu.edu
URL: <http://www.nisug.com>

WINDY CITY SAS USERS GROUP

Zeke Torres
email: info@wcsug.org
URL: <http://www.wcsug.org>

INDIANA

CENTRAL INDIANA SAS USER GROUP

D.J. Penix
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SW INDIANA SAS USERS GROUP

Rebecca Whitehouse
phone: (812) 468-5017
email: Rwhitehouse@agfinance.com

IOWA

IOWA SAS USERS GROUP

Zhuan (John) Xu
email: johnxu@1st-consulting.com
URL: <http://www.iowasasuser.org>

KANSAS and MISSOURI

KANSAS CITY AREA SAS USERS GROUP

Stephanie Schaller
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MICHIGAN

MICHIGAN SAS USERS GROUP

Kenneth M. Schmidt
email: ks@misug.org
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MINNESOTA

TWIN CITIES AREA SAS USER GROUP

Donalee Wanna
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URL: <http://www.tcasug.org>

NORTH DAKOTA

RED RIVER VALLEY USERS GROUP

Carol Drechsel
email: Carol_Drechsel@mail.und.nodak.edu
<http://www.und.nodak.edu/org/rvrsug/>

OHIO

CANTON, AKRON, MASSILLON SUG

Gina Losue
email: gina@qlx.com

CENTRAL OHIO SAS UG (COSUG)

Paula Adkins
email: PAdkins@checkfree.com
URL: <http://www.geocities.com/cosug>

CLEVELAND SAS USER GROUP

Mary MacDougall
email: clevesug@adelphia.net
<http://www.spssoft.com/clevesug/index.html>

GREATER CINCINNATI SAS UG

George J. Hurley
email: george.j.hurley@chase.com

WISCONSIN

WISCONSIN SAS USERS GROUP

Steve First
email: sfirst@sys-seminar.com

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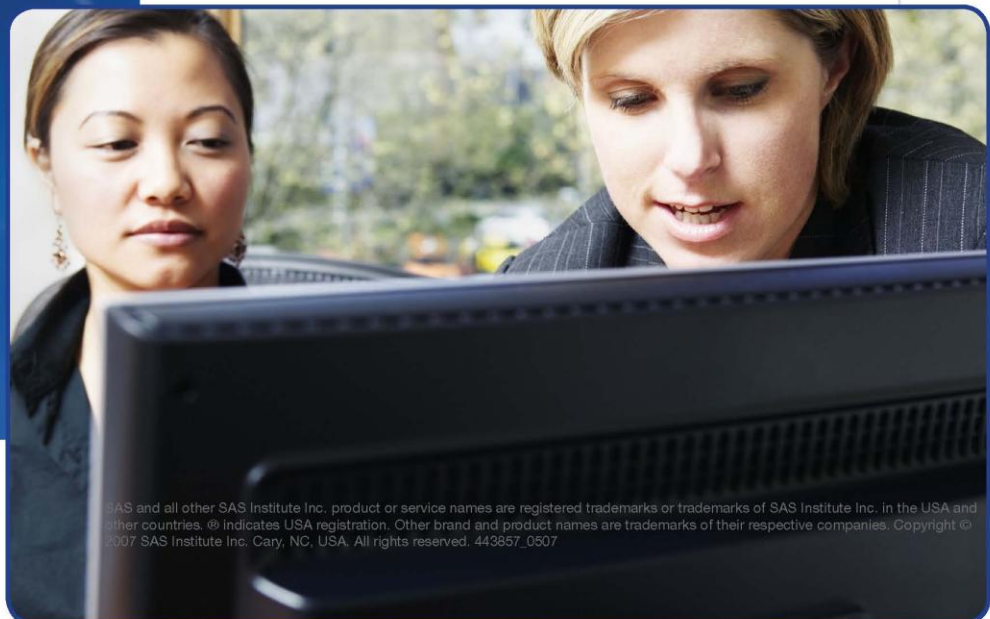
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Sunday Evening Opening Session Keynote Address
"Keynote: SAS® BI is For You Too!"

Jim Metcalf

R&D Director

Business Intelligence Query and Reporting

Are you a programmer? Have you been programming in SAS since garage décor was in vogue? What does a 30-year old company do for it's encore? We invest a billion dollars and 5000 developer years in a whole new line of software designed to make you more valuable!



Biography

As R&D director of BI query and reporting, Metcalf and his team of developers work to engineer SAS BI query and reporting products – SAS® Web Report Studio, SAS® Information Delivery Portal, SAS® Information Map Studio and SAS® Management Console.

Prior to this role, he was director of SAS Technology Product Management and was actively involved in the release of SAS®9, widely considered the most important software release in SAS history.

Since joining SAS in 1993, Metcalf has served as a software tester for SAS/AF® software and as a software developer for SAS/EIS® software, SAS® Financial Management, SAS® Risk Dimensions® and SAS® OLAP Server.

Prior to joining SAS, Metcalf worked for the Royal Dutch Shell Group of Companies, exploring for oil in the deepwater Gulf of Mexico. While there, he was deepwater leasehold strategist, responsible for selecting well locations and planning Shell's deepwater leasehold disposition. He holds bachelor's and master's degrees in geophysics from the University of Oklahoma, and has been a SAS programmer since 1983.

Sunday, October 28th at 7:00 pm
Salons D and E (2nd Floor)
Social Reception Immediately Follows





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Enjoy the Conference!



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PRESENTATION ABSTRACTS

These are listed in order of presentation time within each section.

APPLICATIONS DEVELOPMENT

A02 Passing Data Set Values into Application Parameters (Monday, 8:00am – 08:20am, Dubuque)

Lingqun Liu, University of Michigan, Ann Arbor

Although passing data set values into application parameters is a common programming task, it can be tricky in some circumstances and may require special techniques depending on the designs of the applications. This paper covers two of these techniques. One is automating the generation and execution of SAS code which pass data set values into macro-type application parameters. Another is using CALL EXECUTE routine within a DATA step. Examples are used to illustrate these two methods. The target audience of this paper is SAS application developers who are very familiar with the SAS Macro Facility.

Biography

Lingqun (Quinn) Liu is a SAS certified advanced programmer. He joined the University of Michigan Kidney Epidemiology and Cost Center (KECC) as a programmer/analyst since 2004. His major areas of responsibility at KECC include developing and maintaining a national database using SAS and Oracle, creating analytical files for research projects, automating and visualizing data presentations with SAS, providing SAS programming technique support to fellow staff, etc. He earned an M.A in Mathematics with concentration in Computer Science at Eastern Michigan University.

A01 SAS-with-Excel Application Development: Tools and Techniques (Monday, 8:30am – 9:20am, Dubuque)

LeRoy Bessler (invited speaker)

The commonest non-SAS tool for data presentation, and working with data, is Microsoft Excel. Other people may want your SAS report formatted as a spreadsheet. Dynamic Data Exchange (DDE) can empower and augment your use of SAS with Excel. You can develop SAS programs to load worksheets, and to format them without point-and-click. Almost anything that you can do directly in Excel can also be done using DDE commands from your SAS program. You can access Excel data, even to the level of a specific cell, row or column, part of a row or column, or set of contiguous rows or columns, or can work with an entire worksheet. Then you can write, read, or format data. You can also insert SAS graphs into Excel, either one or multiple per worksheet, optionally resize it or them, and with or without a companion table of data. Why would you want to produce Excel output from SAS? You can create a hands-off production job to be automatically scheduled by the computer to access and analyze the data, load the spreadsheet, format it, and attach the report to a SAS-dispatched email message. In any case, if you find yourself preparing the same Excel report over and over, why not automate it? The intended audience is all levels of SAS users.

Biography

A SAS user since 1978, Dr. LeRoy Bessler has special interests in: Software-Intelligent application development for reliability, reusability, maintainability, and extendability; and communication-effective design and construction of web pages, graphs, tables, maps, spreadsheets, and reporting systems. He has shared his knowledge and experience with SAS users at conferences since 1987 throughout the USA and in Montreal, Dublin, London, and Heidelberg, and has organized one regional and numerous subregional SAS users conferences in the North Central USA since 1989. At Assurant Health, LeRoy supports the SAS users, SAS server, SAS software, and SAS analytical database, provides internal consulting and occasional training, and sometimes gets to do application development—especially if it involves SAS/GRAPH, ODS, highly formatted Excel reporting, web information delivery, or tools to support the SAS server and its users.

A03 Table Lookups...You Want Performance? (Monday, 9:30am – 10:20am, Dubuque)

Rob Rohrbough, Rohrbough Systems Design, Inc.,

Over the years SAS software has provided many ways of accessing data related to a table or file. They range from match merges, to SQL joins and the use of indices, to formats (yes, formats), to the hash object. Each serves its own purpose in different contexts. This paper will give you a review of many of them with examples and syntax, and it will discuss their advantages and disadvantages. We will look at performance considerations and discuss the new Hash Object introduced to the Data Step in SAS 9.1.3.

Biography

Rob is founder and President of Rohrbough Systems Design, Inc., an Omaha, Nebraska based consultancy and SAS® Affiliate since 1996. Before founding RSD, Rob has held positions from GPS developer to senior account representative to quality assurance manager. RSD specializes in SAS-based systems related to the health care industry. Rob's experience includes development, speaking, and teaching about those systems and SAS. Systems developed include medical review, program integrity, and fraud & abuse detection for Medicare intermediaries, as well as ranking, market penetration, and profile reporting for hospitals and epidemiological reporting. He has spoken at conferences including the Medicare Annual Conference on Statistics, NebSUG, and the South Dakota SAS Users Group. He actively supports SUGI and is spearheading the Nebraska SAS Users Group.



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it's in there.*

*You just can't
seem to find it.*

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APPLICATIONS DEVELOPMENT - CONTINUED

A04 Simple Rules to Remember When Working with Indexes (Monday, 10:30am – 11:20am, Dubuque)

Kirk Paul Lafler, Software Intelligence Corporation, Spring Valley, CA (Invited speaker)

SAS users are always interested in learning techniques related to improving data access. One way of improving information retrieval from a SAS data set or table is to create and use an index. An index consists of one or more columns that are used to uniquely identify each row within a table. Functioning as a SAS object containing the values in one or more columns in a table, an index may be defined as numeric, character, or a combination of both. This presentation will emphasize the rules that users should know when creating and using indexes to make information retrieval more efficient.

Biography

Kirk Paul Lafler is consultant and founder of Software Intelligence Corporation and has been programming in SAS since 1979. As a SAS Certified Professional and SAS Institute Alliance Member (1996 – 2002), Kirk provides IT consulting services and training to SAS users around the world. Kirk has written four books including PROC SQL: Beyond the Basics Using SAS (SAS Institute. 2004), and more than two hundred peer-reviewed articles in professional journals and SAS User Group proceedings. He has also been an Invited speaker at more than two hundred SAS user group conferences and meetings at the International, Regional and Local level. His popular SAS Tips column, "Kirk's Korner of Quick and Simple Tips", appears regularly in the BASAS, HASUG, SANDS, SAS, SESUG, and WUSS Newsletters and Web sites.

A05 FreqLibname: A Data Review Routine For All Memnames in a Libname (Monday, 1:00pm – 1:50pm, Dubuque)

Ronald J. Fehd, Centers for Disease Control and Prevention, Atlanta, GA, USA

The SAS® Include statement is simple, yet powerful. This paper reviews Fehd [3, sgf2007.028] FreqAll data review program which produces a shortened data review report of frequencies of each variable in a data set. It provides routines using call execute and %include to produce the same report for every data set in libref. This is another in the Journeyman's Tools series.

Biography

Ronald Fehd has a B.S. in Computer Science, and has attended SAS User Group conferences since 1989. Since 1997 he has presented over a dozen papers on macro usage, programming theory, and Hands On Workshops on list processing. He is the macro maven on SAS-L, the international online SAS listserve; to which he has posted over 4,000 messages since 1997. In 2001 and 2003 he was voted Most Valuable SAS-L Contributor. He is the author of several packages on the SAS Community wikipedia. His 20 years of SAS experience includes 15 years as a data manager; he is currently tech support for SAS on the HelpDesk at Centers for Disease Control in Atlanta.

A06 Problems encountered converting from a Legacy reporting system to data warehouse reporting utilizing SAS BI tools (Monday, 2:00pm – 2:20pm, Dubuque)

Kate Glover, Sinclair Community College

Overview: Sinclair Community College is a state funded educational institution. Because much of the college's funding is based on the information provided, accuracy and timeliness of reporting is critical.

Current Structure: The current processes include capture of all related information from the legacy system on both the 14th day of the term and the 30th day of the term. After the 30th day capture, data is reconciled to select only those students who meet state qualifications for funding. After reconciliation is complete, reports are generated and submitted electronically to the state.

Proposed Structure: The capture process is being rewritten in SAS 9.1 while reports are being recreated to run in Enterprise Guide 4.0. Exception reporting will facilitate identification of bad or missing data, reducing the time required to finalize reports and submit to the Board of Regents.

Biography

Kate Glover is currently a Report Analyst in Research, Analytics, and Reporting at Sinclair Community College. She has been using SAS for just over two years, using Enterprise Guide 4, Base SAS 9.1, and Information Map Studio 3.1. Kate has been working at Sinclair for over 15 years in many capacities, including instruction, special projects, training, and now analytics and reporting. She earned her B.S. in Organizational Management from Wilberforce University and her M.A. in Organizational Management from University of Phoenix.

A07 Design and implementation of operational dashboards on SAS information delivery portal

(Monday, 2:30pm – 2:50pm, Dubuque)

Grace Jiang, RCI

This paper demonstrates detailed examples of the design and implementation of operational dashboards on SAS information delivery portal in RCI (Resort Condominium International). With techniques of processing data from different sources with SAS ETL tools, outputting a variety of stylized formats with SAS ODS, publishing packages to SAS WEBDAV server, and customizing portal pages to accommodate different end users, information are organized to be shared across company and supports effective decision making on SAS BI (Business Intelligence) platform. Automated reports, graphs, stored processes are accessible to the whole company via a single website. This paper also provides some practical tips to create html files in Microsoft Visio, publish these non SAS contents to SAS WEBDAV server, and link them together with SAS contents through SAS portal.

Biography

Grace Jiang has a bachelor's degree in Information Systems and Decision Science and dual degree in Computer Science. After working in IT department of China Construction Bank for 3 year, she pursued master's degree in Industrial Engineering at Purdue University. After graduation, Grace joined RCI as Operations Research Analyst. Her SAS experience goes back to 2002. Grace maintained an information system for auditing developed by SAS 6.0. She also had quite good practice at school when taking statistics classes. In RCI, her main duty is to develop applications, tools, and reports with SAS EG.

APPLICATIONS DEVELOPMENT - CONTINUED

A08 Collaborate with SAS Users Around the World with sasCommunity.org (Monday, 3:00pm – 3:50pm, Dubuque)

Kirk Paul Lafler, Software Intelligence Corporation, Spring Valley, CA (Invited speaker)

Charles Edwin Shipp, Shipp Consulting

sasCommunity.org is an exciting and new collaborative online community for SAS users worldwide. This presentation explores a few of the exciting features found in this virtual community. Topics include a Wiki-based web site where anyone can add or change content on any page on the web site, the exchange of ideas on the Blogger's Corner, viewing scheduled and unscheduled events, using the built-in search facility to locate all Wiki-content, reading and responding to specific forum topics, and much more.

Biography

Kirk Paul Lafler is consultant and founder of Software Intelligence Corporation and has been programming in SAS since 1979. As a SAS Certified Professional and SAS Institute Alliance Member (1996 – 2002), Kirk provides IT consulting services and training to SAS users around the world. Kirk has written four books including PROC SQL: Beyond the Basics Using SAS (SAS Institute. 2004), and more than two hundred peer-reviewed articles in professional journals and SAS User Group proceedings. He has also been an Invited speaker at more than two hundred SAS user group conferences and meetings at the International, Regional and Local level. His popular SAS Tips column, "Kirk's Korner of Quick and Simple Tips", appears regularly in the BASAS, HASUG, SANDS, SAS, SESUG, and WUSS Newsletters and Web sites.

A09 How to implement security system using SAS (Monday, 4:00pm – 4:20pm, Dubuque)

David Wells, Sinclair Community College

This paper is presenting a case study of how Sinclair Community College has implemented security in SAS. At Sinclair Community College, we have fairly complex security needs. This includes merging information from both our Student Information System (SIS) and our Active Directory (AD) system. The merged information includes user information (i.e., their network ID, name, and school ID), their groups and any privileged information that the user can view (i.e., their budget information).

Biography

David Wells is the Database and SAS Administrator at Sinclair Community College. He has a Master's degree in Computer Science from Wright State University (1998) and an MBA, also from Wright State University (2006). David has over 25 years working with computers, over three years administering SAS BI Applications, and is a SAS Certified Advanced Programmer for SAS9. This work has been mostly in programming and database administration with significant involvement in security and security systems over the years.

A10 Develop, create and deploy sample custom tasks in Enterprise Guide (Monday, 4:30pm – 4:50pm, Dubuque)

Steve Gunawan, RCI

Enterprise Guide is a terrific tool that allows you to access the powerful analytics and data manipulation offerings of SAS. With the advent of tasks within EG, you no longer need to recall the syntactic details of every proc, rather you can use a wizard-like menu to choose parameters and let the task generate the code. This has allowed SAS to rival the likes of Excel in terms of ease of use, and has opened the door to a much larger user community. In addition to the out-of-the box tasks, users can now extend EG by developing custom task solutions that are tailored to the specific needs of their organization or industry. In this talk we will discuss the tools required to develop custom tasks, create and deploy a sample custom task, and discuss some of the uses of such tasks at RCI.

Biography

Steve is originally from Indonesia and came to the U.S. for his college degree. He attended Purdue University in 2000 – 2006 to complete his Bachelor's in Computer Engineering and Master's in Industrial Engineering. Upon graduation, he joined the Revenue Management team of RCI, where he had his first encounter with SAS. In his free time Steve enjoys taking pictures with his digital camera and cooking, especially spicy food.

A11 Writing Testing-Aware Programs that Self-Report when Testing Options are True

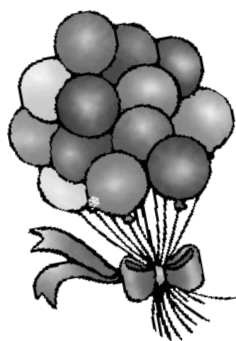
(Tuesday, 1:30pm – 2:20pm, Davenport)

Ronald J. Fehd, Centers for Disease Control and Prevention, Atlanta, GA, USA

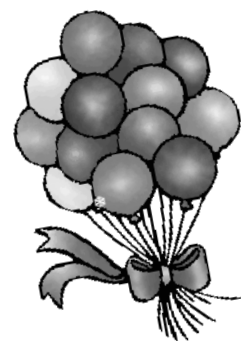
Program development proceeds through four phases: investigation, development, unit testing, and integration testing. Testing typically consumes 50% of project resources. Any programming effort spent in support of testing may significantly reduce project costs and help ensure the delivery of the project's product: a set of tested and integrated programs. This paper examines the architectural issues of writing SAS programs that are testing-aware: that have a variable testing whose default value is false, which can be reset to true based on the values of options and which write information to the log when testing is true. Topics covered include options used for testing, both command-line and used-anywhere; example code for data step, includes and macro programs used any of module, routine, or subroutines.

Biography

Ronald Fehd has a B.S. in Computer Science, and has attended SAS User Group conferences since 1989. Since 1997 he has presented over a dozen papers on macro usage, programming theory, and Hands On Workshops on list processing. He is the macro maven on SAS-L, the international online SAS listserve; to which he has posted over 4,000 messages since 1997. In 2001 and 2003 he was voted Most Valuable SAS-L Contributor. He is the author of several packages on the SAS Community wikipedia. His 20 years of SAS experience includes 15 years as a data manager; he is currently tech support for SAS on the HelpDesk at Centers for Disease Control in Atlanta.



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DATA VISUALIZATION AND GRAPHICS

D01 Chart Smart: Design and Build SAS Graphs That Inform and Influence (Tuesday, 9:00am – 9:50am, Dubuque) *LeRoy Bessler (invited speaker)*

This tutorial on effective visual communication presents design principles, examples, and coding solutions for making the best use of those precious resources: the time and attention of your information audience. You will learn how to create graphic images for quick and easy inference that are combined with precise data values (not visual estimates) for reliable inference. The design principles are software-independent, but the solutions are derived from twenty-seven years of real-world SAS graphic application development experience. Come see The Power to Show.

Biography

A SAS user since 1978, Dr. LeRoy Bessler has special interests in: Software-Intelligent application development for reliability, reusability, maintainability, and extendability; and communication-effective design and construction of web pages, graphs, tables, maps, spreadsheets, and reporting systems. He has shared his knowledge and experience with SAS users at conferences since 1987 throughout the USA and in Montreal, Dublin, London, and Heidelberg, and has organized one regional and numerous subregional SAS users conferences in the North Central USA since 1989. At Assurant Health, LeRoy supports the SAS users, SAS server, SAS software, and SAS analytical database, provides internal consulting and occasional training, and sometimes gets to do application development—especially if it involves SAS/GRAPH, ODS, highly formatted Excel reporting, web information delivery, or tools to support the SAS server and its users.

D02 Graphs to Aid in Spectral Analysis (Tuesday, 10:00am – 10:20am, Dubuque) *David Meek*

This paper is intended for those very familiar with the discrete Fourier transform and PROC SPECTRA from SAS/ETS. Through a macro the procedure is called and the output variables are used to develop three diagnostic graphs and a montage of them. The first graph displays the log10 of the spectra, a Hanning weight interpolation of the spectra, and the 95% confidence bands of the spectra, all versus the log10 of the frequency. The second graph overlays two related plots. The first displays the spectra versus the wave number as a black point plot to be read using the black left-hand vertical axis. The second displays the periodogram fraction (i.e., normalized) versus the wave number as a gray-scale needle plot to be read using the gray right-hand vertical axis. The third graph displays the normalized cumulative periodogram with its 95% acceptance limits versus wave number. An optional table with spectral test is also available. A well-known data set will be used to generate an example set of graphs.

Biography

The presenter is a statistician with the USDA Agricultural Research Service. He is involved with all aspects of research from planning to publishing. He has used SAS throughout most of his 28 years of service.

D03 SAS Graphs for BlackBerry, iPhone, PowerPoint, Word, Web/HTML, PDF, or RTF (Tuesday, 10:30am – 11:20am, Dubuque) *LeRoy Bessler (invited speaker)*

This paper provides tips, techniques, and tools needed for ad hoc graphs for presentations, or needed for production graphs for management reporting or a performance tracking “dashboard”: how to select the best device driver and the right options, depending on the purpose; how to design, create, and deliver graphs to a BlackBerry, iPhone, or any other small screen email device; how to create graphs direct-to-disk for subsequent manual insert to Microsoft PowerPoint or Microsoft Word; how to “right-size” graphs for those destinations; how to package and “right-size” graphs for web/HTML, PDF, and RTF; why and how to use ALT text for web graphs; and how to create graphs directly in a set of PowerPoint slides. The ideas, insights, and practical experience can help you to best exploit the versatile power of SAS/GRAPH and ODS.

Biography

Refer to above section.

D04 SAS/Graph Annotate Macro Tutorial (Tuesday, 1:00pm – 1:20pm, Dubuque) *Kathy Shelley, Department of Statistics, Iowa State University*

The utility of SAS/Graph is for production graphs that are run repeatedly at regular intervals. Because the graphs are produced from a programming language, their design can be totally controlled and reproduced. The Annotate Macros enable one to easily program labels to enhance and clarify the default graphs. This tutorial will empower the user to automatically label graph components with a small number of SAS program statements. Examples will include scatter/line plots, bar charts, and box plots. The concepts can be extended to enable one to create labels for maps such as county, state or country names, city names or statistics such as population, education, income, etc.

Biography

Kathy began using SAS in 1979 and has spent most of her time in the Data Step and SAS-Graph. The first Iowa State SAS Windows license is housed in the Department of Statistics and she administers this license. They are the only licensing group on campus that installs free copies of SAS for ISU students. The Statistical Computing group has been involved in projects that have used SAS extensively. They do quite a bit of macro programming and data re-organization. Currently, Kathy is developing introductory SAS tutorials for Iowa State.

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DATA VISUALIZATION AND GRAPHICS - CONTINUED

D05 Multi-Media Wizardry: How To Make ODS Outputs That “Dance and Sing”

(Tuesday, 1:30pm – 2:20pm, Dubuque)

LeRoy Bessler (invited speaker)

Augmenting simple, static, passive output should not dilute, obstruct, or distract from the message in and the meaning of your data. Some animation can be used to provide an essential data presentation function, rather than decoration or amusement. Audio can be a useful, extra, concurrent communication channel. And there are other multi-media options. For web pages, this paper shows you how to add audio (including background audio, which does not require launch of a media player on all or part of your screen), video, animation, a marquee ("traveling text", which is what you sometimes see at the bottom of a television news broadcast), and custom-sized images. For PDF documents, this paper shows you how to: include pop-up text (possibly data-dependent); create hyperlinks (possibly data-dependent) to audio clips, video clips, and animated graphics outside your PDF document; and imbed and re-size images. For RTF documents, there is no facility to add pop-up notes, and the handling of images and hyperlinks to external media files is analogous to that for other ODS output, but the distinguishing, special-effect possibility presented here is animated text. Though not really multi-media, it is important to see how the popular use of 3D graphics can impede, and even distort, communication. Acceptable use of 3D is demonstrated. The topics presented in this paper do not require the use of PROC TEMPLATE. This presentation is suitable for users with little or no ODS experience.

Biography

A SAS user since 1978, Dr. LeRoy Bessler has special interests in: Software-Intelligent application development for reliability, reusability, maintainability, and extendability; and communication-effective design and construction of web pages, graphs, tables, maps, spreadsheets, and reporting systems. He has shared his knowledge and experience with SAS users at conferences since 1987 throughout the USA and in Montreal, Dublin, London, and Heidelberg, and has organized one regional and numerous subregional SAS users conferences in the North Central USA since 1989. At Assurant Health, LeRoy supports the SAS users, SAS server, SAS software, and SAS analytical database, provides internal consulting and occasional training, and sometimes gets to do application development—especially if it involves SAS/GRAPH, ODS, highly formatted Excel reporting, web information delivery, or tools to support the SAS server and its users.

D06 Graphs to Aid in Concordance Analysis (Tuesday, 2:30pm – 3:00pm, Dubuque)

David Meek, USDA Agricultural Research Service

This poster is intended to aid in the assessment of concordance between two variables via a macro procedure. A montage of with two statistical graphs is generated. The first is a variant on a mean-difference plot, the second is a variant on a bivariate plot. An optional table with popular test statistics including the mean bias error and the concordance correlation coefficient is also available. A published data set will be used to generate an example pair of graphs.

Biography

The presenter is a statistician with the USDA Agricultural Research Service. He is involved with all aspects of research from planning to publishing. He has used SAS throughout most of his 28 years of service.

HANDS-ON WORKSHOPS

HOW01 Macro Basics: Show Me How to Code Less

(Monday, 8:00am – 9:50am, Council Bluffs)

Dana Rafiee, Destiny Corporation

Get hands-on experience understanding how macros can be used and created in SAS software. We will use macro variables and macro statements such as Call Symput and Symget, %macro, %mend, and %let. Learn to write macros for existing code and make your programs simpler and more efficient

Biography

Dana Rafiee is an IT Principal, Sr. Systems Designer, and Sr. SAS Instructor for Destiny Corporation. He has over 20 years experience training individuals on all aspects of SAS Software including Version 9. He also consults in the areas of applications development and design in 4th Generation Languages, Operating Systems, Networking, and Communications. Dana has been a consultant, systems designer, and trainer on many applications development projects and implementations for several clients. He has worked with the latest technology available within SAS Version 9 and supported a large number of clients. His expertise brings together an understanding of system configurations, web-based delivery and optimization, efficient access to relational databases, and decision support tools.

HOW02 How Can I Merge Without Sorting?

(Monday, 10:00am – 11:50am, Council Bluffs)

Dana Rafiee, Destiny Corporation

Build your SAS tool kit with this workshop of different techniques for combining files without sorting. Topics include Merge, Format, Index, SQL, Macro, and Arrays.

Biography

Refer to above section.

HANDS-ON WORKSHOPS - CONTINUED

HOW03 ODS Basics: Let's Understand How to Write ODS Code (Monday, 1:00pm – 2:50pm, Council Bluffs)

Dana Rafiee, Destiny Corporation

The Output Delivery System has been available in SAS since Version 7. Isn't it time you understood how simple it is and why it can make your presentations better. We'll discuss how to take simple output and create PDFs, RTFs, HTML and more. We'll investigate the use of Styles and modifying that dreaded Template.

Biography

Dana Rafiee is an IT Principal, Sr. Systems Designer, and Sr. SAS Instructor for Destiny Corporation. He has over 20 years experience training individuals on all aspects of SAS Software including Version 9. He also consults in the areas of applications development and design in 4th Generation Languages, Operating Systems, Networking, and Communications. Dana has been a consultant, systems designer, and trainer on many applications development projects and implementations for several clients. He has worked with the latest technology available within SAS Version 9 and supported a large number of clients. His expertise brings together an understanding of system configurations, web-based delivery and optimization, efficient access to relational databases, and decision support tools.

HOW04 Tabulate Basics: Why My Brain Doesn't Work That Way (Monday, 3:00pm – 4:50pm, Council Bluffs)

Dana Rafiee, Destiny Corporation

For so many years, people have struggled with Proc Tabulate. They usually don't get it or copy someone else's code and think there is some type of magic to this process. In this workshop, we will drink the Tabulate Kool-Aid. You will find creating cross-tabulations to be simple, fun and actually make sense.

Biography

Refer to above section.

HOW05 List Processing Basics: Creating and Using Lists of Macro Variables

(Tuesday, 8:00am – 9:50am, Council Bluffs)

Art Carpenter, California Occidental Consultants

Ronald J. Fehd, Centers for Disease Control and Prevention, Atlanta, GA, USA

List Processing or dynamic programming techniques free up your programming time by eliminating hard-coded parameter values. List values can be obtained directly from information you already have, and there is more than one way to do it! Commonly, the list is stored as series of macro variables or as a macro variable with a series of values, or even as values, in a data set. This hands-on workshop paper compares and contrasts the basic methods of treating variable values as parameters and placing them into repetitive code. Our target audience is for intermediate macro language users who are new to the use of lists and dynamic programming issues.

Biographies

Art Carpenter's publications list includes three books, and over five dozen papers and posters presented at SUGI, and various regional and local user group meetings. Art has been using SAS since 1976 and is a SAS Certified ProfessionalTM. Through California Occidental Consultants he teaches SAS courses and provides contract SAS programming support nationwide.

Ronald Fehd has a B.S. in Computer Science, and has attended SAS User Group conferences since 1989. Since 1997 he has presented over a dozen papers on macro usage, programming theory, and Hands On Workshops on list processing. He is the macro maven on SAS-L, the international online SAS listserve; to which he has posted over 4,000 messages since 1997. In 2001 and 2003 he was voted Most Valuable SAS-L Contributor. He is the author of several packages on the SAS Community wikipedia. His 20 years of SAS experience includes 15 years as a data manager; he is currently tech support for SAS on the HelpDesk at Centers for Disease Control in Atlanta.

HOW06 Dynamic Projects in SAS® Enterprise Guide® - How to Create and Use Parameters

(Tuesday, 10:00am – 11:50am, Council Bluffs)

Lora D. Delwiche, University of California, Davis, CA

Susan J. Slaughter, Avocet Solutions, Davis, CA

SAS Enterprise Guide allows you to define parameters, and then use those parameters in your project. Parameters are simply macro variables. When you run a project containing parameters, SAS Enterprise Guide prompts you to assign values to those macro variables. Using parameters, you can create a project, and then customize it at the time you run it. In SAS Enterprise Guide 4.1, there are three ways to use parameters: as a variable name in a task, in the filter condition of a query, or in SAS code. This paper covers all three types of parameters, showing how to define parameters, how to insert them in your project, and then how to run the final project using the parameters.

Biography

Susan J. Slaughter and Lora D. Delwiche have been using SAS since 1983. Susan got her start in graduate school and has used SAS in a variety of business and academic settings. Lora learned SAS on the job and has enjoyed helping others learn SAS ever since. In 1992, Susan and Lora teamed up to write The Little SAS Book: A Primer, now in its third edition, which quickly became a popular item on SAS users' bookshelves. Their most recent book is The Little SAS Book for Enterprise Guide 4.1. They have presented numerous papers at local, regional, and international SAS user group meetings. Susan currently works as a consultant through her company, Avocet Solutions, while Lora works in research at the University of California, Davis.



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Output Delivery System

SQL Processing with SAS Software

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MWSUG 2007 has invited Destiny Corporation to return with their Virtual Learning Café. The Café offers conference attendees the ability to access over 400 SAS topics and lessons.

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For more information about Destiny Corporation and these SAS courses, please visit www.vdestiny.com.

HANDS-ON WORKSHOPS - CONTINUED

HOW07 Creating Multi-Sheet Excel Workbooks the Easy Way with SAS (Tuesday, 1:00pm – 2:50pm, Council Bluffs) *Vince Del Gobbo, SAS Institute*

Transferring data and analytical results between SAS and Microsoft Excel can be difficult, especially when SAS is not installed on a Windows platform. This talk discusses using new XML support in Base SAS 9.1 software to create multi-sheet Microsoft Excel workbooks (versions 2002 and later). You will learn step-by-step techniques for quickly and easily creating attractive multi-sheet Excel workbooks that contain your SAS output. Many "tips and tricks" associated with the ExcelXP ODS tagset will be divulged. Most importantly, the techniques that are presented in this talk can be used regardless of the platform on which SAS software is installed, including a mainframe! The use of SAS server technology is also discussed. Although the title is similar to a paper presented at SUGI 31, this talk contains new and revised material not previously presented by this author.

Biography

Vince DelGobbo is a Senior Systems Developer in the Web Tools group at SAS. This group is responsible for the SAS/IntrNet Application Dispatcher and SAS Stored Processes. He has worked on the HTML Formatting Tools, the SAS Design-Time Controls and the ExcelXP ODS tagset, and is developing new Web and server-based technologies, as well as integrating SAS output with Microsoft Office. Vince has been a SAS Software user since 1982, and joined SAS in 1992.

IN CONFERENCE CLASSES

ICC1 Introduction to Enterprise Guide (Monday, 8:00am – 10:50am, Salons B & C) *Ben Cochran, Bedford Group (Invited Speaker)*

This course introduces the student to Enterprise Guide, a new product which is a point and click interface to the power and functionality of the SAS system. Enterprise Guide gives the student query tools to access the data needed, analyze the data, and then generate all kinds of reports and graphs from the data... all in a very easy to use interface. This product is a great introduction to the SAS system

Biography

After more than 11 years with SAS Institute in the Professional Services (as an Instructor) and Marketing Departments (as Marketing Manager for the SAS/EIS product), Ben Cochran left to start his own consulting and SAS Training business in the fall of 1996 – The Bedford Group. As an affiliate member of SAS Institute's Alliance Partner Program, Ben has been involved in many teaching and consulting projects over the last 10 years. Ben has authored and presented several papers at SUGI and regional user groups on a variety of topics since 1988.

ICC2 How to Use SAS Enterprise Miner to Solve Business Problems (Monday, 1:00am – 3:50am, Salons B & C) *Morgan C. Wang, Department of Statistics and Actuarial Science, University of Central Florida (Invited Speaker)*

Enterprise Miner is an excellent tool of data mining provided by SAS Institute. How to use it effectively and how to use it to solve business problems? We use simple examples through health care industry to illustrate.

Biography

Morgan C. Wang received his Ph.D. in 1991. Since then he has been with UCF, where he is currently the Director of Institute of Statistics and Data Mining and Professor of the Department of Statistics and Actuarial Science. He has published a book (Integrating Results through Meta-Analytic Review Using SAS Software, SAS Institute, 1999), and over 50 papers in referee journals and conferences on topics including interval analysis, meta-analysis, and data mining. He was the first prize-winner in Data Mining Competition of the 11th SIGMOD KDD conference in 2004 and the first prize winner in Data Visualization Contest of SUGI 25 conference in 2000, and was given invited talks for more than fifty times for American Statistical Association, Society for Industrial and Applied Mathematics, Iranian Statistics Association, and many universities around the world. Dr. Wang is an active consultant in data mining and business intelligence. His consulting clients include Walt Disney Company, Blue Cross and Blue Shield of Florida, AAA Auto Club South, Sodexho Campus Services, Florida Department of Health, Institute of Simulation and Training, University of Central Florida, InCharge, and United Space Alliance.

ICC3 Output Delivery System (ODS) Tips and Tricks (Tuesday, 8:00am – 10:50am, Salons B & C) *Kirk Paul Lafler, Software Intelligence Corporation, Spring Valley, CA (Invited speaker)*

Are you looking for ways to improve the way your SAS® output appears? Output Delivery System (ODS) can help turn tired-looking output into great looking information with a purpose. ODS introduces exciting new features for your output. Gone are the days when the only available formatting choice are boring output listings containing lifeless monospace fonts. Using built-in format engines, ODS provides SAS users with a powerhouse of new and exciting capabilities to produce "quality" and publishable output. This presentation will show users how to select only the output of interest using selection lists. Users will then see how ODS is used to send selected output to open output destinations including RTF, MS Excel spreadsheets, PDF, HTML, SAS data sets, XML, as well as traditional output.

Biography

Kirk Paul Lafler is consultant and founder of Software Intelligence Corporation and has been programming in SAS since 1979. As a SAS Certified Professional and SAS Institute Alliance Member (1996 – 2002), Kirk provides IT consulting services and training to SAS users around the world. Kirk has written four books including PROC SQL: Beyond the Basics Using SAS (SAS Institute, 2004), and more than two hundred peer-reviewed articles in professional journals and SAS User Group proceedings. He has also been an Invited speaker at more than two hundred SAS user group conferences and meetings at the International, Regional and Local level. His popular SAS Tips column, "Kirk's Korner of Quick and Simple Tips", appears regularly in the BASAS, HASUG, SANDS, SAS, SESUG, and WUSS Newsletters and Web sites.

IN CONFERENCE CLASSES – CONTINUED

ICC4 Quick Results With SAS/GRAPH® Software

(Tuesday, 12:30pm – 3:20pm, Salons B & C)

Art Carpenter, California Occidental Consultants

This half day seminar is designed for students who are familiar with the DATA and PROC steps of base SAS and who want to learn how to use SAS/GRAPH software to produce presentation quality graphs. The course will discuss various aspects of the construction of graphs and will include discussion of plotting and graphing procedures. Statements and options used to enhance the appearance of the graphs will be presented.. Course topics will include:

Graphics Options and Settings

Graphical options for Titles and Footnotes

Using PROC GPLOT

AXIS Statements

SYMBOL Statements

LEGEND Statements

Overlaying Plots

Using PROC GCHART

Redisplaying Graphs Using GREPLAY

An Introduction to the ANNOTATE Facility

Producing graphs for inclusion into word processing documents

Biography

Art Carpenter's publications list includes three books, and over five dozen papers and posters presented at SUGI, and various regional and local user group meetings. Art has been using SAS since 1976 and is a SAS Certified Professional™. Through California Occidental Consultants he teaches SAS courses and provides contract SAS programming support nationwide.



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SAS PRESENTS

SAS01 Identifying and Overcoming Common Data Mining Mistakes Using Enterprise Miner

(Monday, 8:30am – 9:20am, Salon D)

Doug Wielenga, SAS Institute

Due to the large amount of data typically involved, data mining analyses exacerbate some common modeling problems and create a fair number of new ones. These problems can greatly increase the time it takes to develop useful models and hamper the development of potentially superior models. This paper discusses how to identify and overcome several common modeling mistakes using Enterprise Miner. The paper starts by providing insights into common issues in data preparation and then follows the data flow of a typical predictive modeling analysis through setting variable roles, creating and using data partitions, performing variable selection, replacing missing values, building different types of models, comparing resulting models, and scoring those models. The paper concludes by discussing common issues with cluster analysis and association/sequence analysis. Applying these techniques can greatly decrease the time it takes to build useful models and improve the quality of the models that are created.

Biography

Doug attended Baylor University where he received master's degrees in both Mathematics and Statistics. He has worked with SAS customers for over 11 years providing analytical support as a trainer and consultant. He currently is providing support as a technical support statistician.

SAS02 Best Practices for Managing Predictive Models in a Production Environment

(Monday, 9:30am – 10:20am, Salon D)

Robert Chu, SAS Institute

The widespread use of predictive analytics has enabled organizations to more accurately predict their business outcomes, improve business performance and increase profitability. As the sheer number of these models in the overall portfolio increases coupled with growing requirements to demonstrate external compliance, it is imperative the organization implements sound model management practices. Model management is not a one time activity but an essential business process. Models must be well developed and validated to demonstrate they are working as expected. Outcomes analysis is also necessary to insure the scores derived from applying the model to new data are accurate and to verify model performance remains satisfactory. SAS-based strategies for effectively managing predictive models in a production environment will be presented along with an introduction to a new product, Model Manager 2.1 for SAS 9.1.3.

Biography

Robert Chu is the Senior Manager of SAS Model Manager R&D group. He holds several patents issued by USPTO regarding predictive model deployment. He represented SAS Institute in three data mining standards working groups, including the group that publishes PMML specifications. He holds degrees in Statistics and Computer Science.

SAS03 New SAS Statistical Software: Just Over the Horizon (Monday, 10:30am – 11:20am, Salon D)

Bob Derr, SAS Institute

The next SAS release provides major new functionality to statisticians. Bayesian analyses comes to the PHREG, LIFEREG, and GENMOD procedures in SAS/STAT software. Survey data analysis procedures offer variance computations based on Jackknife and BRR methods. The new EFFECT statement provides more modeling options in procedures such as MIXED, QUANTREG, and GLMSELECT. In addition, ODS statistical graphics becomes production, and dozens of new graphics are available in many of the statistical procedures, from FREQ to GLM to GLIMMIX. Modifying these graphics on the fly is simple with the new interactive graphics editor. New procedures in SAS/GRAPH have been developed specifically for the statistician. Stat Studio, a programmable successor to SAS/INSIGHT, provides high-end data analysts with access to dynamic graphics, results from SAS/STAT, and an extended SAS/IML language with which to program their own algorithms. This talk will focus on some of the important new additions in SAS for statisticians and data analysts. In addition, it will provide a sneak peak at several new experimental procedures.

Biography

Bob Derr became a SAS user in 1988 while employed at the Bureau of Labor Statistics. He received his PhD in Statistics at UNC-Chapel Hill in 1999. He has been employed at SAS since 1994 and currently develops software for logistic regression, categorical data analysis, and multiple comparison tests.

SAS04 User Written DATA Step Functions (Monday, 1:00pm – 1:50pm, Salon D)

Jason Secosky, SAS Institute

For years, users have requested the ability to write functions in DATA step syntax. The day has come when this is possible. In SAS®9, PROC FCMP, provides the ability to write functions using DATA step syntax. In SAS 9.2, these functions can be called from DATA step. This paper will introduce how to write functions with PROC FCMP, how these functions are invoked from a DATA step, and caveats to be aware of when calling PROC FCMP functions from DATA step.

Biography

Jason Secosky is a Principal Software Developer at SAS and is responsible for extending and maintaining the DATA step language as well as the new multi-threaded TSPL Table Server language. He has been at SAS since 1997. Prior to working at SAS, Jason received a B.S. in Computer Engineering from the University of California, San Diego and a M.S. in Computer Science from the University of Washington.

SAS PRESENTS - CONTINUED

SAS05 Adapting your SAS Programs into the SAS 9 Paradigm (Monday, 2:00pm – 2:50pm, Salon D)

Cynthia Zender, SAS Institute, SAS Institute

Do you want to convert existing SAS programs for use as SAS Stored Processes? Would you like to learn how to convert and adapt your existing SAS programs so that they can be executed from selected SAS Business Intelligence client applications? Topics in this paper include: basic program conversion to a SAS stored process, conversion of SAS/GRAPH programs, use of macro variables in program conversion, streaming versus transient output from stored processes, and permanent result packages.

Biography

Cynthia Zender has been with SAS since 1996 as an instructor and course developer. She currently serves as the Team Lead for the Report Writing and Output Delivery System curriculum. She has over 25 years' experience programming and reporting with SAS in a number of different industries such as Education, Public Utility, and Telecom. Cynthia is a frequent speaker at SGF and at regional user groups. She has recently finished a Live Web course based on her SUGI presentation: "Counting the Ways to Excel" and co-authored the Business Intelligence Stored Process course.

SAS06 Getting Started with the DATA Step Hash Object (Monday, 3:00pm – 3:50pm, Salon D)

Jason Secosky, SAS Institute

A time consuming part of many SAS® programs is looking up a value from one data set in another data set. SAS 6 lookup methods, like SET with KEY= or a format, are good for many applications. However, in SAS 9, there is a better tool, the DATA Step hash object. The hash object provides a fast, easy way to perform lookups without sorting or indexing. This paper introduces the hash object, examines a few common hash object methods, compares SAS 6 techniques with the hash object, and builds rules of thumb for when to apply this new technology to your programs.

Biography

Jason Secosky is a Principal Software Developer at SAS and is responsible for extending and maintaining the DATA step language as well as the new multi-threaded TSPL Table Server language. He has been at SAS since 1997. Prior to working at SAS, Jason received a B.S. in Computer Engineering from the University of California, San Diego and a M.S. in Computer Science from the University of Washington.

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SAS PRESENTS – CONTINUED – HALF-DAY SEMINAR AND STATISTICS TUTORIAL

SAS08 Half-Day Seminar: Modernizing Your SAS Code, or How to Avoid Becoming a SAS Dinosaur

(Tuesday, 8:00am – 11:20am, Salon D)

Warren Repole, SAS Institute

New features of the SAS programming language often permit the replacement of complex algorithms and clunky workarounds with more elegant code. Some enhancements support the creation of more efficient solutions. Occasionally, optimal techniques have existed for a while, but they have been overlooked or underutilized. Whether you are a SAS programmer with many years of experience or a novice user who is responsible for maintaining legacy programs, implementing updated approaches may allow you to streamline your SAS applications, expedite the development and debugging process, and minimize future maintenance of the code. This seminar covers a wide range of discrete tasks with programming solutions involving the DATA step, Base SAS procedures, formats and functions, SAS macro language, SAS/GRAPH, and the SAS/ACCESS interface to PC files. While some of the solutions exploit SAS9 enhancements, many of them rely on features introduced in earlier SAS releases. The examples are adapted from Warren Repole's book, *Don't Be a SAS® Dinosaur: Modernize Your SAS Code*, scheduled for publication in 2007.

Biography

Warren Repole began using SAS software in 1979 through the Statistics department at the University of Florida. Warren has presented at SAS users group meetings since 1985 and has taught SAS classes since 1992. He joined the Rockville, Maryland SAS Training Center as an instructor in 1994. His specialties include DATA step and macro programming, SAS/GRAPH, SAS/IntrNet, and SAS9 BI technologies. Warren currently holds the SAS Certified Advanced Programmer for SAS9 credential.

SAS09 Statistics Tutorial: Introduction to Logistic Regression (Tuesday, 1:00pm – 2:50pm, Salon D)

Bob Derr, SAS Institute

Logistic regression is one of the basic modeling tools for a statistician or data analyst. This tutorial focuses on the basic methodology behind logistic regression and discusses parameterization, testing goodness of fit, and model evaluation using the LOGISTIC procedure. In addition, the tutorial addresses exact methods and their applications. The tutorial focuses on binary response models, but direction for handling nominal and ordinal responses is also presented. Numerous examples are provided. Upcoming new features in PROC LOGISTIC will be briefly discussed. Attendees should have a solid foundation in regression.

Biography

Bob Derr became a SAS user in 1988 while employed at the Bureau of Labor Statistics. He received his PhD in Statistics at UNC-Chapel Hill in 1999. He has been employed at SAS since 1994 and currently develops software for logistic regression, categorical data analysis, and multiple comparison tests.

Monday Night Social Event



Following the SAS® User Appreciation Reception in the Demo Room from 5 to 6 pm, make plans to join us for a Night at the Museum. Buses will be outside the hotel lobby to provide transportation between the hotel and the Iowa Historical Museum between 6 and 10 pm.



Take this opportunity to network with your peers, talk with SAS® insiders and maybe learn a bit about Iowa's history.

Dinner will be a buffet catered by Baratta's featuring
Bruschetta, Antipasti, Fresh Fruit Tray, Italian Salad,
Chicken Cacciatore, Lasagna Penne with Red Sauce,
Vegetable Medley, Rolls and Butter, Cannoli, and
Coffee and Iced Tea

STATISTICS AND DATA ANALYSIS

S01 Analyzing Survey Data Using Decision Trees (Tuesday, 8:00am – 8:50am, Davenport)

Morgan C. Wang, Department of Statistics and Actuarial Science, University of Central Florida (Invited Speaker)

Most survey questionnaires include many problems with answers are rank ordered. For example, attitude toward a special event can be ranked from excellent to poor. Although one can assign a numerical score to each level of these ranked categories, summarizing these numerical values using arithmetic do not make any sense. This presentation introduces how to use decision trees to analyze this type of data.

Biography

Morgan C. Wang received his Ph.D. in 1991. Since then he has been with UCF, where he is currently the Director of Institute of Statistics and Data Mining and Professor of the Department of Statistics and Actuarial Science. He has published a book (Integrating Results through Meta-Analytic Review Using SAS Software, SAS Institute, 1999), and over 50 papers in referee journals and conferences on topics including interval analysis, meta-analysis, and data mining. He was the first prize-winner in Data Mining Competition of the 11th SIGMOD KDD conference in 2004 and the first prize winner in Data Visualization Contest of SUGI 25 conference in 2000, and was given invited talks for more than fifty times for American Statistical Association, Society for Industrial and Applied Mathematics, Iranian Statistics Association, and many universities around the world. Dr. Wang is an active consultant in data mining and business intelligence. His consulting clients include Walt Disney Company, Blue Cross and Blue Shield of Florida, AAA Auto Club South, Sodexho Campus Services, Florida Department of Health, Institute of Simulation and Training, University of Central Florida, InCharge, and United Space Alliance.

S07 Improving Credit Scoring by Generalized Additive Model (Tuesday, 8:00am – 8:50am, Dubuque)

Wensui Liu, Brighton, MI

Logistic Regression has been widely used in the financial service industry for credit scoring models. Despite its advantages in easy interpretation and low computing cost, Logistic Regression is under the criticism of failure to model the nonlinear features of the predictors effect on the dependent variable and therefore might lead to unsatisfactory results. Modern statistical techniques such as Neural Network and Projection Pursuit Regression have been proven successful in the nonlinear modeling. However, this success comes with the price of interpretability. Introduced by Hastie and Tibshirani, Generalized Additive Model provides the ability to detect the nonlinear patterns without sacrificing interpretability. The purpose of this paper is to introduce Generalize Additive Model as a promising alternative to Logistic Regression for credit scoring. The modeling strategies for both Logistic Regression and Generalized Additive Model with SAS/STAT are investigated to guide readers from Logistic Regression through Generalized Additive Model. The comparison of predictive performance of the two modeling techniques shows the superiority of the Generalized Additive Model. We hope that statistical analysts will be able to implement Generalize Additive Model with SAS/STAT in real business world by following the practical guidance outlined in this paper.

Biography

Wensui is currently working for ChoicePoint Precision Marketing as Statistical Project Manager in database analytics group. He has 8 years experience with statistical modeling and data mining in finance, healthcare, and marketing industries. His current interests are in statistical computing, non-parametric modeling, time series analysis, count data modeling, and latent-class modeling. His paper 'Improve Credit Scoring by Generalized Additive Model' was presented in Data Mining Section of SUGI07 and 'Count Data Models in SAS' has been submitted to Statistics Section of SUGI08. WenSui holds master degrees in Applied Statistics and Econometrics from University of Cincinnati.

S02 How to Use RANDOM and REPEATED Statements in Modeling Covariance Structures in Proc Mixed – Results from a Simulation Study (Tuesday, 9:00am – 9:20am, Davenport)

Charlie Liu, Dachuang Cao, Peiqi Chen, Tony Zagar, Lilly Research Laboratory, Eli Lilly and Company

Proc Mixed, a SAS procedure based on mixed model methodology, has been widely used for longitudinal data analyses since its release in 1992. It provides the convenience in modeling the covariance structure using RANDOM and REPEATED statements, with the RANDOM statement modeling between subject variation at the same time points and REPEATED within subject variation between different time points. However, the proper use of either or both of RANDOM and REPEATED statements depends on the covariance structure and might not be fully understood by the users. This paper studies the proper use of the RANDOM and REPEATED statements in Proc Mixed for the three most commonly used covariance structures - unstructured (UN), compound symmetry (CS), and auto-regressive (AR(1)). The consequences with over- or under-specifying the covariance structures are also discussed. Based on the mathematical formula and the simulation study results, only REPEATED statement is recommended for UN, and CS. For AR(1), if the variance for the random between subject effect is significant, both RANDOM and REPEATED statements are recommended; otherwise, only REPEATED can be used for proper modeling.

Biography

Charlie Liu, Ph.D., assistant senior statistician at Eli Lilly and Company, has more than 10 years of experience in SAS programming with statistical data analyses. He worked in several universities and research organizations before joining Lilly in 2005 and has rich experience in conference presentations. Dachuang Cao, Ph.D., received a doctorate in statistics from Purdue University in 2004. She joined Lilly as a research scientist in 2004 and has served as a project statistician for endocrine compounds.

STATISTICS AND DATA ANALYSIS - CONTINUED

S03 Fit Your Data into the Freq Procedure and More (Tuesday, 9:30am – 9:50am, Davenport)

Dachao Liu, Lilly Research Laboratory, Eli Lilly and Company

Normally, the freq procedure with the weight statement can take a data set with at least three variables and four observations in each run. But sometimes the data set is so formed that each time we have to use the freq procedure with the weight statement to pick up only two observations and three or four variables from that data set. And that data set can have hundreds of thousands of observations. Because of this, we have to make use of the index variables in title statement to track which block the data in question is referred to. This paper will discuss how to use proper data steps and the freq procedure with the weight statement to run that kind of data set. This technique is so useful that it may be developed into a new statement like the weight statement itself to be used in the freq procedure. This paper is intended for those familiar with the data step like array and prior experience with SQL to create a macro variable.

Biography

Prior to the full-time job at Lilly, Liu had worked five years as a graduate assistant using SAS. Liu received a Master degree in Statistics in 1998 at Northern Illinois University. Starting 2000, he has worked as a statistical analyst and programmer at Northwestern University. Liu uses SAS daily at work. He contributed a paper entitled 'How to Use Summary Statistics as Raw Data to Do Basic Statistical Analysis' at MWSUG 2006 conference in Detroit. He has many co-authored papers published in medical research journals.

S06 Using the WHO Drug Dictionary for Reporting Clinical Trials (Tuesday, 10:00am – 10:20am, Davenport)

Thomas E Peppard, deCODE Genetics, Brighton, MI

This paper will introduce the application of the WHO Drug dictionary to the analysis of clinical trial data. It will summarize the structure of the dictionary, including PROC SQL example code to describe the relationships among the dictionary tables. Next the paper will provide example data summaries using different components of the tables. Finally, the author will discuss SAS coding strategies for implementation, including how to manage dictionary updates.

Biography

Tom Peppard has been Assistant Director of Statistics, Programming & Data Management at deCODE Genetics since Sept 2006. He has worked as a statistician and SAS programmer in the pharmaceutical industry since 1995. Tom received his M.S. in statistics from Western Michigan University, and a B.S. in mathematics from John Carroll University.

S05 Enhance Survey Data Analysis using Text Mining (Tuesday, 10:30am – 11:20am, Davenport)

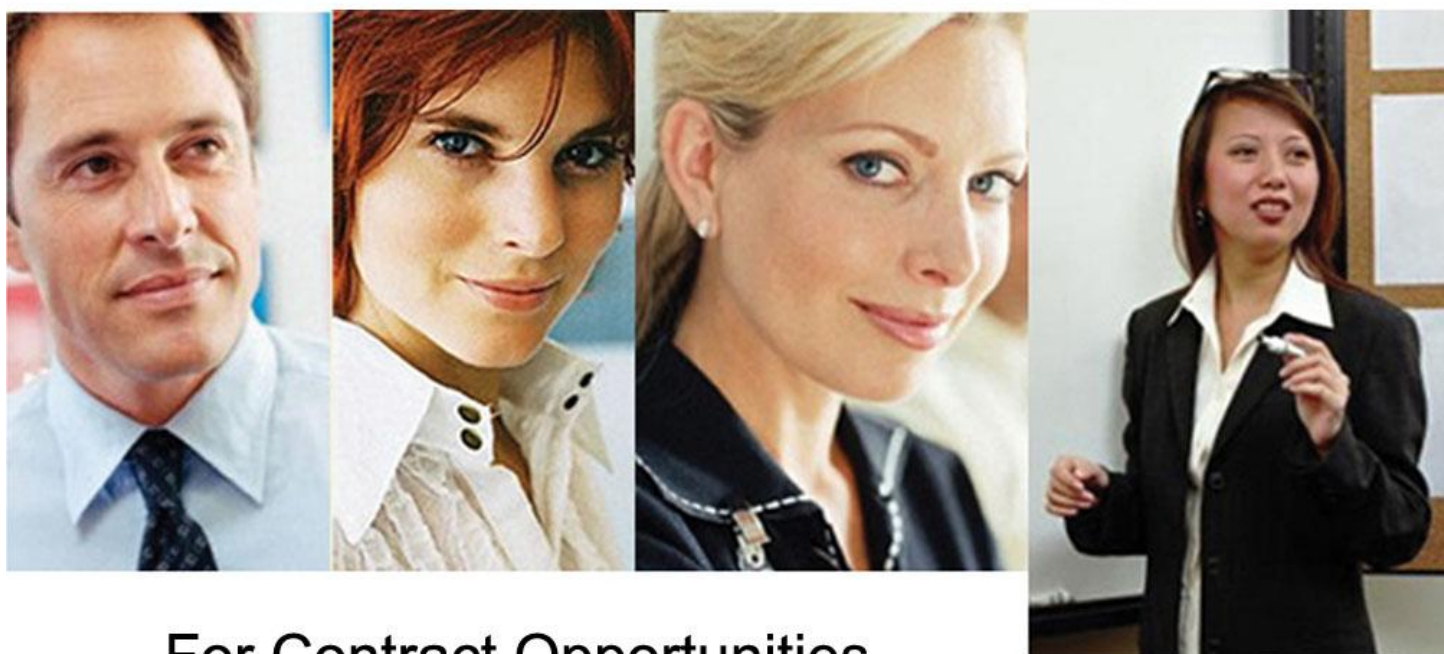
Morgan C. Wang, Department of Statistics and Actuarial Science, University of Central Florida (Invited Speaker)

Most survey questionnaires include many open ended problems. Traditional, we ignored this type of information. However, this part of information can be used through text mining. This presentation explains how to use text mining to covert open-ended questions into a sequence of variables that can be analyzed using traditional statistics technique.

Biography

Morgan C. Wang received his Ph.D. in 1991. Since then he has been with UCF, where he is currently the Director of Institute of Statistics and Data Mining and Professor of the Department of Statistics and Actuarial Science. He has published a book (Integrating Results through Meta-Analytic Review Using SAS Software, SAS Institute, 1999), and over 50 papers in referee journals and conferences on topics including interval analysis, meta-analysis, and data mining. He was the first prize-winner in Data Mining Competition of the 11th SIGMOD KDD conference in 2004 and the first prize winner in Data Visualization Contest of SUGI 25 conference in 2000, and was given invited talks for more than fifty times for American Statistical Association, Society for Industrial and Applied Mathematics, Iranian Statistics Association, and many universities around the world. Dr. Wang is an active consultant in data mining and business intelligence. His consulting clients include Walt Disney Company, Blue Cross and Blue Shield of Florida, AAA Auto Club South, Sodexo Campus Services, Florida Department of Health, Institute of Simulation and Training, University of Central Florida, InCharge, and United Space Alliance.





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TUTORIALS & SOLUTIONS

T01 Exploring DICTIONARY Tables and SASHELP Views (Monday, 8:00am – 8:50am, Davenport)

Kirk Paul Lafler, Software Intelligence Corporation, Spring Valley, CA (Invited speaker)

SAS® users can quickly and conveniently obtain useful information about their SAS session with a number of read only SAS data views called DICTIONARY tables or SASHELP views. At any time during a SAS session, information about currently defined system options, libnames, table names, column names and attributes, formats, indexes, and more can be accessed and captured. This paper explores the purpose of DICTIONARY tables and views, how they are accessed, and what information is available to SAS users. Attendees will learn how these important tables and views can be accessed and applied using real-world scenarios.

Biography

Kirk Paul Lafler is consultant and founder of Software Intelligence Corporation and has been programming in SAS since 1979. As a SAS Certified Professional and SAS Institute Alliance Member (1996 – 2002), Kirk provides IT consulting services and training to SAS users around the world. Kirk has written four books including PROC SQL: Beyond the Basics Using SAS (SAS Institute, 2004), and more than two hundred peer-reviewed articles in professional journals and SAS User Group proceedings. He has also been an Invited speaker at more than two hundred SAS user group conferences and meetings at the International, Regional and Local level. His popular SAS Tips column, "Kirk's Korner of Quick and Simple Tips", appears regularly in the BASAS, HASUG, SANDS, SAS, SESUG, and WUSS Newsletters and Web sites.

T02 SAS Macros for Quick Summary Report and Uppercase All Variables (Monday, 9:00am – 9:20am, Davenport)

Craig Balog, Cleveland Clinic

This paper presents two simple and basic macros that can be used by any SAS® programmer. The first macro, %FREQCHK, shows the frequency for all categorical variables in a given data set using the SAS FREQ procedure. The second macro, %UPPER, simply uppercases all variables in one or more SAS data sets. Both macros are simple to use and are a tremendous help and timesaver when programming.

Biography

Craig Balog is a Senior SAS programmer working for the Cardiology Department at the Cleveland Clinic. His work has focused on clinical trials data as well as numerous internal research projects. He has been programming in SAS for 10 years. Areas of expertise include working in the SAS data step, macros, arrays, and UNIX. His expertise in the use and creation of macros has been an enormous contribution to his employer that has saved numerous man hours for he and his colleagues.

T04 Advanced PROC REPORT: Doing More in the Compute Block (Monday, 9:30am – 10:20am, Davenport)

Art Carpenter, California Occidental Consultants (Invited Speaker)

One of the unique features of the REPORT procedure is the Compute Block. This PROC step tool allows the use of most DATA step statements, and through the use of the compute block you can modify existing columns, create new columns, write text, and more! This provides SAS programmer a level of control and flexibility that is unavailable in virtually all other procedures. Along with the flexibility comes complexity and the complexity often thwarts us as we try to write increasingly interesting compute blocks. The complexity of the compute block includes number of column identification and timing issues that can confound the PROC REPORT user. Of course to make matters even more interesting, there can be multiple compute blocks that interact with each other and these can execute for different portions of the report table. This tutorial will discuss the essential elements of compute block, its relationship to the processing phases, and how it interacts with temporary variables and other compute blocks. We will discuss timing issues and naming conventions through a series of examples.

Biography

Art Carpenter's publications list includes three books, and over five dozen papers and posters presented at SUGI, and various regional and local user group meetings. Art has been using SAS since 1976 and is a SAS Certified Professional™. Through California Occidental Consultants he teaches SAS courses and provides contract SAS programming support nationwide.

T05 Using SAS® to Control and Automate a Multi SAS Program Process (Monday, 10:30am – 11:20am, Davenport)

Patrick Halpin, dunnhumby USA, Cincinnati, OH

Often times a project is comprised of many SAS® programs that need to run in a given order. Additionally, the SAS programs are dependent on previous SAS programs completing. One way to accomplish and automate this task is to use "Done" files and the SLEEP command in SAS. "Done" files are files that are created when a SAS program finishes. SAS programs dependent on previous jobs finishing look for those "Done" files to be created. Once the "Done" files are created the next SAS job in the process will start.

Biography

Patrick Halpin is currently a manager in the data solutions group for the information delivery team. He has been using SAS since 1996 and is a certified base and advanced SAS programmer. Patrick has spent the past three years working at dunnhumbyUSA, a consulting firm in the retail industry. His work has focused on pricing and elasticity, statistical analysis, modeling, optimizations, and reporting. He also had experience in the banking, gaming (Harrah's Entertainment), and transportation (FedEX) industry. Patrick earned his B.S. in mathematics at Elizabethtown College and his M.S. in Mathematics/Operations Research at The College of William and Mary.

TUTORIALS & SOLUTIONS - CONTINUED

T06 “Backup Early, Backup Often” - Backup Your SAS® Programs using SAS Display Manager®

(Monday, 1:00pm – 1:20pm, Davenport)

Paul D. McDonald, MBA, Overland Park, Kansas

This is a quick tip on how to put a special “button” on your SAS Toolbar in SAS Display Manager that can allow you to quickly backup your SAS programs to unique date-time-stamped files in PC SAS.

Biography

Paul D. McDonald, MBA, is a SAS Certified Professional and independent SAS Programming Consultant living in Overland Park, Kansas. You can visit Paul's website at <http://www.spikeware.com/> for more information.

T07 SAS Data Integration Studio – A primer (Monday, 1:30pm – 1:50pm, Davenport)

Paulinda E. Pangaldan, Idea Integration

This tutorial is intended for an end user or developer who is interested in consolidating and managing a data repository sourced from various systems, databases and file formats using SAS Data Integration Studio. These main features of SAS DI Studio will be discussed :a) designing or capturing metadata for source data, b) designing or importing metadata for target tables, c) creating ETL jobs using three basic process flows (File Extract, Table Loader, SQL Join) and d) deploying completed process flows for scheduling. Prerequisites: Prior knowledge of Base SAS and SAS BI terminology (i.e metadata repository) is helpful but not required.

Biography

Paulinda E. Pangaldan is a Senior Technical Director from Idea Integration, a SAS Alliance member. She is a specialist in the development of Data Warehouse/Data Mart or Data Store architecture, involving data integration and the consolidation of data from multiple sources, platforms, and formats. For over 15 years, she has used SAS and Oracle technologies as an independent Systems Consultant.

T08 44 Tricks with the Format Procedure (Monday, 2:00pm – 2:50pm, Davenport)

Ben Cochran, Bedford Group (Invited Speaker)

If the output from your SAS programs is a cake, then FORMATS are the icing. Often times SAS users generate adequate reports, but feel as if there is something lacking. While there are dozens and dozens of pre-packaged formats that ship with the SAS system, there can not possibly be a format for every possible need. However, included in the SAS system is the FORMAT procedure, which is a tool for creating customized formats. This paper illustrates how to create customized formats. Users will learn how to create the formats for both character as well as numeric variables, and how to use them to solve a number of problems.

Biography

After more than 11 years with SAS Institute in the Professional Services (as an Instructor) and Marketing Departments (as Marketing Manager for the SAS/EIS product), Ben Cochran left to start his own consulting and SAS Training business in the fall of 1996 – The Bedford Group. As an affiliate member of SAS Institute's Alliance Partner Program, Ben has been involved in many teaching and consulting projects over the last 10 years. Ben has authored and presented several papers at SUGI and regional user groups on a variety of topics since 1988.

T09 How to Use Proc SQL Select into for List Processing (Monday, 3:00pm – 3:50pm, Davenport)

Ronald J. Fehd, Centers for Disease Control and Prevention, Atlanta, GA, USA

The SAS® Include statement is simple, yet powerful. This paper reviews Fehd [3, sgf2007.028] FreqAll data review program which produces a shortened data review report of frequencies of each variable in a data set. It provides routines using call execute and %include to produce the same report for every data set in libref. This is another in the Journeyman's Tools series.

Biography

Ronald Fehd has a B.S. in Computer Science, and has attended SAS User Group conferences since 1989. Since 1997 he has presented over a dozen papers on macro usage, programming theory, and Hands On Workshops on list processing. He is the macro maven on SAS-L, the international online SAS listserv; to which he has posted over 4,000 messages since 1997. In 2001 and 2003 he was voted Most Valuable SAS-L Contributor. He is the author of several packages on the SAS Community wikipedia. His 20 years of SAS experience includes 15 years as a data manager; he is currently tech support for SAS on the HelpDesk at Centers for Disease Control in Atlanta.

T10 Using 22 Easy Tricks with ODS to Generate Colorful Reports (Monday, 4:00pm – 4:50pm, Davenport)

Ben Cochran, Bedford Group (Invited Speaker)

This paper looks at some very easy tricks that the user can do with the Output Delivery System (ODS) to add a great deal of color to ordinary reports. Specifically, this paper looks at using ODS with the PRINT, FREQ, TABULATE, and REPORT procedures. The presentation takes a step by step approach to show the user how almost every facet of a report can be controlled by the ODS system using these quick and easy methods.

Biography

Refer to previous section.

TUTORIALS & SOLUTIONS - CONTINUED

T11 “Backup From The Startup” - Keep a Constant Backup Your SAS® Logs and Listing Output from SAS Display Manager® in Microsoft Windows (Tuesday, 1:00pm – 1:20pm, Davenport)

Paul D. McDonald, MBA, Overland Park, Kansas

This is a quick tip on how to create a simple Microsoft Windows batch file utility to start up SAS Display Manager and create unique data-time-stamped logs and listing output every time you start up SAS.

Biography

Paul D. McDonald, MBA, is a SAS Certified Professional and independent SAS Programming Consultant living in Overland Park, Kansas. You can visit Paul's website at <http://www.spikeware.com/> for more information.

T13 Translating Microsoft Character Date-Time Strings to SAS DATETIME Variables - Reading Microsoft Date-Time Stamped Logs in SAS (Tuesday, 2:30pm – 2:50pm, Davenport)

Paul D. McDonald, MBA, Overland Park, Kansas

This is a quick tip on how to read in Microsoft's standard date-time strings into a SAS data set. The given solution is a simple data step method.

Biography

Refer to previous section.

SAS Training Courses

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1. **SAS I:** An Introduction to the SAS System - (2 or 3 Days)
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4. Manipulating Data With Functions and Arrays – (1 Day)
5. Introduction to the SAS Macro Facility - (1 Day)
6. **SAS III:** Advanced and Efficient SAS Programming (1 or 2 Days)
7. An Introduction to SQL - (1 Day)
8. Advanced SQL Processing - (1 Day)
9. Introduction to Enterprise Guide 3.0 or 4.1 – (1 Day)
10. SAS Enterprise Business Intelligence Implementation Training (2 Days total).
 - a. Getting Started with SAS OLAP Cube Studio
 - b. Getting Started with SAS Information Map Studio
 - c. Getting Started with SAS Web Report Studio
 - d. Getting Started with SAS Information Delivery Portal
 - e. Getting Started with SAS Add-in for Microsoft Office
 - f. Getting Started with SAS Data Integration Studio

All courses are a combination of lectures, demonstrations, and hands-on workshops. Lecture notes, handouts, and workshop materials are provided for students.

Our instructor, Ben Cochran, has been teaching SAS courses since 1986, is formerly a SAS Institute Instructor, and is a SAS Certified Professional. For more information email us or call 919.741.0370.

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Open Sunday

1. Quizno's – 7th & Locust – open 11:00 Sun.
Sarpino's Pizza – 319 7th St.
2. Centro – 1011 Locust – Italian fine dining, pizza
3. 801 Steak and Chop House – fine dining, steaks
4. Splash – 3rd & Locust - fine dining – seafood
5. Zen Sushi & Noodle Bar – 4th & Walnut
Azalea Restaurant & Lounge – 4th & Walnut
6. Cosmopolitan Lounge – Suites at 800 Locust
7. Forty Three – 10th and Walnut – fine dining
8. Raccoon River Brewing Company – 200 10th St.
9. King Ying Low – 223 4th St.
10. Monihan's Speakeasy / Iowa Room – Savery Hotel
11. Domino's Pizza – 401 Grand Ave. (515)288-3030

Open Saturday (not Sunday)

Beggar's Banquet - 1301 Locust - deli / vegetarian
Coney Island – skywalk 5th & Locust - grill

Monday-Friday Lunch only

12. Locust Mall Food Court – lower level – 7th and Locust
13. Palmer's Deli – skywalk – Kaleidescope mall
14. Kaleidescope Mall Food Court – 6th and Walnut
15. South Union Bread Café – 1007 Locust - sandwiches
16. Pablo's Taqueria – 6th Ave skywalk
17. Crave Italian American – street level – 218 6th Ave.
18. Funky Pickle – deli – street level 7th & Grand
19. Winston's – skywalk Ruan II – Pizza and Sandwiches
20. Battani's Pizza – Capital Square off Walnut
Azteca - Capital Square skywalk level – Mexican
Junko Japanese Café and Coffee - Capital Square
21. Mustard's BBQ – adjacent to Public library

Coffee

22. Timbuktu – skywalk – EMC building, 7th and Walnut
23. Amici – street level - 6th and Mulberry
24. Starbucks – 1011 Locust – southeast of library
25. Freidrich's – skywalk, Kaleidescope mall

Court Avenue

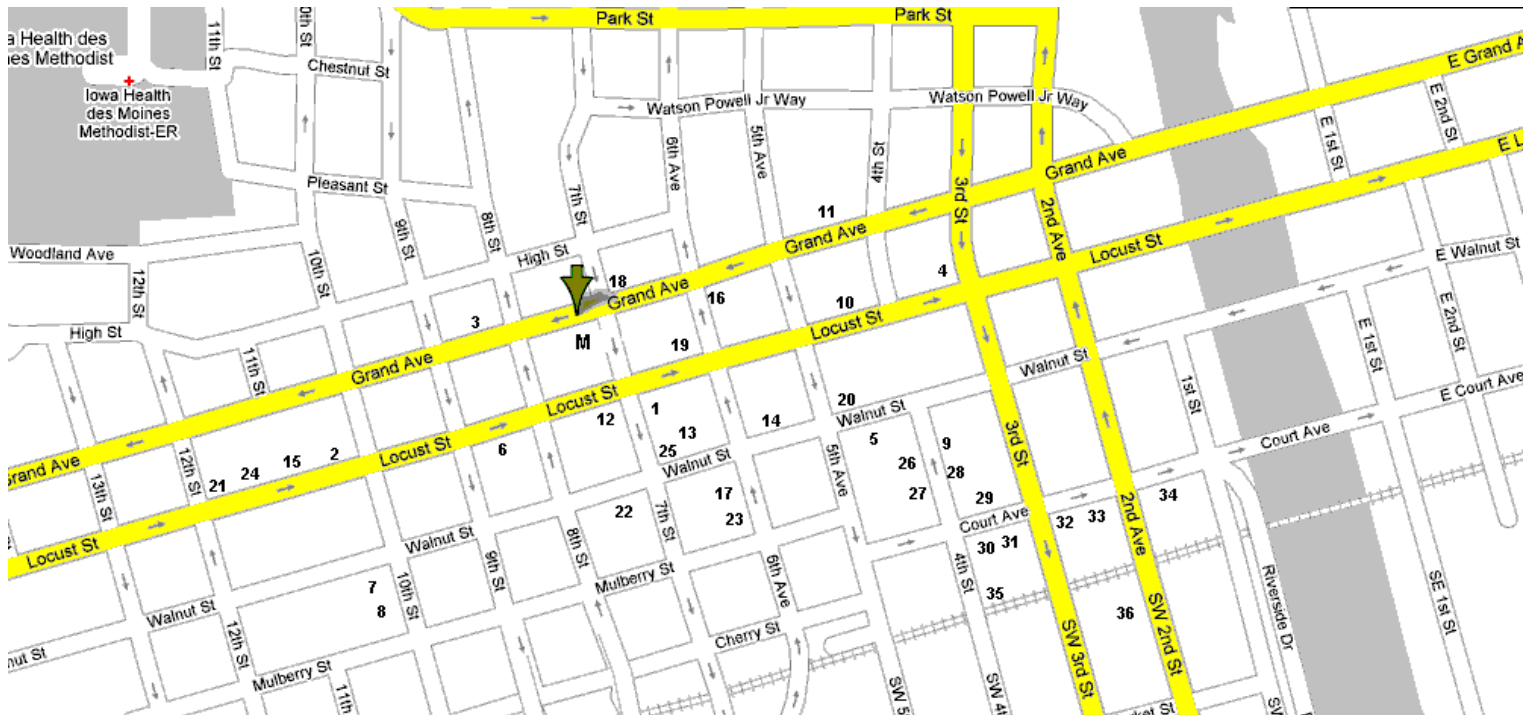
26. The Lift Lounge (no smoking) – 222 4th St.
27. Royal Mile Pub / Red Monk upstairs – 210 4th St.
28. Trattoria – 207 4th St. - Italian
29. Court Ave. Restaurant and Brewing Company
30. Spaghetti Works
31. Johnny's Hall of Fame – American food
32. Liar's Club
People's on Court
Legend's Bar & Grill
33. Judge Roy Bean's – Italian / American restaurant
34. Buzzard Billy's Flying Carp Café – Cajun
35. Hessen Haus – German bar
36. El Bait Shop – 105 micro-brews on tap
High Life Lounge – 60's theme bar

East Village

Grand Piano Bar – 506 E. Grand Ave
The Continental Lounge – 428 E. Locust
Lucca – East Village - 420 E. Locust – fine dining
Village Market – 325 E. 5th St.
Olympic Flame – Greek – East Village – 514 E. Grand Ave.
Ban Thai – 215 East Walnut
Noodle Zoo – 601 East Locust
Baby Boomers Diner – 313 East Locust

Delivery

Domino's Pizza – 401 Grand Ave. (515)288-3030
Jimmy Johns – (515)271-5566



Des Moines Downtown Restaurant Guide (Use number on the map to find location, M=Marriott Hotel)

EXHIBIT AND DEMO ROOM

Be sure to visit the popular Exhibit and Demo Room in the Des Moines Hall on the third floor. Hours are Monday from 9:00 a.m. to noon and 1:00 to 6:00 p.m. and Tuesday from 9:00 a.m. to noon. SAS staff will be on hand to discuss and demonstrate the latest software and services available. Stop by the demo stations to meet SAS developers, demos of SAS solutions, or to ask questions about SAS software. Talk with representatives from SAS service areas such as Publications, Certification and Training, Education, SAS Alliance Partners, Technical Support, and Executive and User Events. While visiting the Demo Room, be sure to register for valuable giveaways.

In addition, the Publications booth in the Demo Area will offer a 20% discount on all SAS documentation ordered at MWSUG 18. Stop by the booth to browse the latest in SAS documentation.

SAS USER APPRECIATION RECEPTION

Join us on Monday afternoon from 5:00 to 6:00 pm in the Demo Room for a SAS User Appreciation Reception. Enjoy complimentary food and beverages while you visit with conference attendees and SAS staff.

USEFUL CONFERENCE INFORMATION

First timers meeting: All may attend this special welcome to first-time attendees. It will be held on Sunday from 5:30 to 6:00 p.m in the Dubuque room on the 3rd floor. Bring all of your questions.

Opening Session on 2nd Floor, Salons D&E, 7-8pm on Sunday: Listen for special announcements and hear Jim Metcalf, our Keynote speaker from SAS R&D. Following the opening session is a reception and mixer. You'll find 2 drink tickets for this event in your conference bag – good for your choice of beer, wine, soft drinks or water. Plenty of food should be available! We are planning a *Fajita Station* (Carved Beef Flank and Julienne Chicken Breast with Refried Black Beans, Diced Tomato, Onion, Shredded Lettuce, Roasted Tomato Salsa, Guacamole, Cheddar Cheese and Sour Cream), plus an assortment of cheeses, Potato Chips, Tortilla Chips, Pretzels with Onion Dip, Salsa and Dill Mustard.

Continental Breakfast will be served on both Monday and Tuesday mornings beginning at 7:30 on the 3rd floor.

This will include Fresh Assorted Juices, Sliced Seasonal Fruit, Assorted Bagels with Cream Cheeses, Assorted Muffins, Danish, Croissants and Pecan Sticky Buns Regular and Decaf Coffee, Soft Drinks and Bigelow Teas.

Mid-morning drinks will be served in the Demo Room (3rd Floor) beginning at 9:30am.

Monday Luncheon: Monday lunch is included in your conference registration. Join us in Salons E, F, G & H on the 2nd floor for a buffet-style luncheon. You may choose to sit with "Birds of a Feather" at a designated BOF table to enjoy a lively discussion around a specific topic.

Monday SAS User Appreciation Reception: 5-6pm in the Demo Room on 3rd floor.

Enjoy some light snacks and a beverage. You'll find 2 drink tickets for this event in your conference bag – good for your choice of beer, wine, soft drinks or water.

Monday Dinner: Dinner will be provided on the Monday evening at the State Historical Museum. Buses will run between the Hotel (just outside the lobby), and the Historical Museum between 6pm and 10pm. Enjoy a relaxing time with new and old friends. Our buffet menu includes:

Bruschetta
Antipasti
Fresh Fruit Tray
Italian Salad
Chicken Cacciatore
Lasagna
Penne with Red Sauce
Vegetable Medley
Rolls and Butter
Cannoli
Coffee and Iced Tea

Tuesday Lunch:

You are on your own for lunch on Tuesday. See the restaurant guide on the opposite page to help you decide. If the weather is windy, rainy, cold, or snowy, you might want to stay indoors. If that's the case, you'll want to choose a location on the skywalk.

Tuesday Afternoon Snacks will be served outside Salon D on the 2nd floor.

Exchange contact info with your new SAS friends while you enjoy Popcorn, Warm Soft Pretzels, Mini Corn Dogs with Spicy Mustard, Cracker Jacks, Peanuts and Assorted Candy Bars, Coffee, Soft Drinks and Bottled Water.

Closing Session: Come bid farewell to your colleagues at the closing ceremonies on Tuesday. Listen to final announcements and be eligible for prizes, and meet next year's Conference Committee.

Emergency Messages during the Conference: If you need to be reached, have your contact call Des Moines Marriott Downtown and leave a message. Be sure that the caller identifies you as an MWSUG conference attendee. An MWSUG contact will be paged and every attempt will be made to find you.

Job Openings / Positions Wanted: There will be a 3-ring binder available for job openings or position wanted announcements. This notebook will be available near the registration desk on the 3rd floor. The announcements must be in an 8.5 x 11 plastic sleeve that can be placed in the notebook. Business cards or flyers may be included provided they are in an 8.5 x 11 plastic sleeve. There is no charge for placing announcements in the notebook. We reserve the right to remove announcements placed elsewhere at the conference.



Great Talent! Great Company!

JPMorgan Chase & Co. (NYSE: JPM) is a leading global financial services firm with assets of \$1.4 trillion and operations in more than 50 countries. The firm is a leader in investment banking, financial services for consumers, small business and commercial banking, financial transaction processing, asset management, and private equity. A component of the Dow Jones Industrial Average, JPMorgan Chase has its corporate headquarters in New York and its U.S. retail financial services and commercial banking headquarters in Chicago. Under its JPMorgan and Chase brands, the firm serves millions of consumers in the United States and many of the world's most prominent corporate, institutional and government clients.

RETAIL FINANCIAL SERVICES

Retail Financial Services consists of Regional Banking (including consumer and small business banking, community development and education, and finance), Mortgage Banking and Auto Finance. Our extensive network of more than 3,000 banking centers in 17 states makes us the fourth-largest retail branch network in the United States. We are one of the industry's leading providers of mortgages and home equity loans and, with nearly 4 million accounts, we are the largest U.S. non-captive originator of auto loans and leases.

CHASE CONSUMER BANKING OPPORTUNITIES:

JPMorgan Chase is looking for mid- to-senior level SAS users and professionals.

Functional Titles: SAS programmers, Data Analysts, Senior Marketing Analysts, Analysts, Marketing Database Analysts, Statistical Modeling Analysts, Consumer Risk Modeling Analysts, Consumer Risk Modeling Manager, Statistical Modeling Manager and more!

Job Location: Our positions are primarily located in our Columbus, Ohio Corporate Center.

Contact: **Kristin Miller**, Executive Recruiter, e-mail: Kristin.A.Miller@jpmchase.com

Please visit our company Web site to view all of our current openings at <https://careers.jpmorganchase.com>

Compensation Information:

JPMorgan Chase offers an exceptional benefits program and a highly competitive compensation package.

JPMorgan Chase is an Equal Opportunity and Affirmative Action Employer, M/F/D/V.



Thanks for attending this year's conference!
See You Next Year in Indianapolis, October 12-14, 2008.
Conference Co-Chairs: Cindy Lee, D.J. Penix



Notes:

