

BASUG, the Boston Area SAS® Users Group, presents**"SAS® Report Writing with PROC REPORT" by Chris Yindra****Tuesday, February 23, 1999, 9:00 AM to 4:30 PM****The Ramada Inn, Middlesex Canal Park Road, Woburn MA**

Registration and admission: BASUG is offering this valuable class *only to its members* for the low price of \$45. The instructor's course notes are included in the price. Seating is limited! Complete and mail the [registration form](#) below as soon as you can. Payment must be enclosed to reserve a seat. If you or your company have not yet paid dues to BASUG for 1999, you may do so on the same form.

The Instructor: Chris Yindra has spent several years developing courses, instructing and consulting in SAS and CA-EASYTRIEVE PLUS® software. He has been invited to speak at the last five SAS Users Group International (SUGI) conferences and at several regional SAS conferences. Chris' consulting work lends strength to his classroom instruction by providing experienced insight when answering student questions. He has authored courseware for SAS/ASSIST®, SAS Macros, SAS Reporting, SAS for Windows, SAS SQL, and SAS/AF®. Paper topics presented at various SAS users groups are: Advanced Features of PROC REPORT, SAS Reporting Systems, Advanced Macro Concepts, %SYSFUNC, and various workshops.

Chris conducted the SQL Programming course for BASUG in 1997. He is currently developing a health care reporting system for HEDIS reporting.

Course background: This course introduces PROC REPORT, the powerful new SAS report writer that adds many new features and flexibility to report formatting. PROC REPORT allows for the building of reports through batch statements or interactively via a screen painter. This course emphasizes the batch language, but on request will also overview the windowing interactive environment. Students will learn to create detail and summary reports along with customized reports using advanced features.

Course objectives: Upon completion, the student will be able to efficiently generate sophisticated detail and summary reports, override the default report formats, add computed columns, include calculated values and text in summary lines, and calculate percentages.

Course outline:

- **Overview:** features, prompt mode, non-windowing
- **Basic Report:** syntax, COLUMN, HEADERS
- **DEFINE and COMPUTE** statements
- **Sorting and Formatting:** ORDER, FORMAT
- **Grouping:** BREAK, subtotals, BY statement, GROUP statement, SUMMARIZE, COMPUTE BEFORE
- **Multiple Statistics**
- **Multi-Column Reports:** ACROSS, ROW TOTAL, RBREAK, PANEL, wide reports

Who should attend: People who need to become more productive creating reports using SAS. This course is designed for both the experienced SAS user as well as users who have not extensively used the SAS System, but have some computer programming experience and have had an introduction to the basics of the SAS language.

Prerequisites: Invoking the SAS System on your operating system, creating SAS data sets in the DATA step, and accessing SAS data sets in procedure steps.

Notes: Continental breakfast will be available at 8:30. There will be mid-morning and mid-afternoon snacks. Lunch is not included. In the event of inclement weather, if the Woburn public schools cancel class, so shall we.

Directions (and a map): The Ramada Inn is at the interchange of routes 128 and 38. From I-93, take route 128/I-95 south for two exits to route 38. Go south on 38. The first road on the right immediately after leaving the 128 cloverleaf is Middlesex Canal Park Road.

Public transportation: [MBTA bus route #134](#) stops right at the Ramada's road. It leaves Wellington Station (Orange Line) at 8:10 AM, getting you to the Ramada by 8:50.

Registration Form for the BASUG February 23, 1999 PROC REPORT Class

Please return this form with a check or company PO made payable to "BASUG".
BASUG's federal tax ID# is 04-2964625.
Questions? E-mail us at basug@world.std.com.

1. PROC REPORT Class Registration Fee - - - - - \$ 45.00
2. BASUG Individual (\$16) or Corporate (\$60) Dues for 1999 - - - - _____
3. Total Enclosed - - - - - _____

Mail to:
BASUG
c/o Abt Associates Inc.
Mike Murphy
55 Wheeler St
Cambridge MA 02138

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Boston Area SAS Users Group

Q1/99 Meeting Notice

Wednesday, March 24, 1999

9:00 - Noon

SAS® Institute, Boston regional office

Prudential Tower

800 Boylston St, Suite 1500

Boston, MA

Our March meeting features four talks on core SAS topics aimed at the beginning to intermediate SAS programmer. As usual, a number of SAS-related door prizes will be given away at the end of the meeting.

This meeting is open to BASUG members and those who would like to learn more about the group. During the meeting, there will be ample opportunity for both new and former members [to enroll for 1999](#). Our dues are only \$16 per year per person, or \$60 for all users at one site.

Attendance is limited and pre-registration is required: contact **Karin Collier** (SAS Institute/Boston) by **Monday, March 22** at:

- Tel: 617-262-4201 x241
- Fax: 617-262-4253
- E-mail: saskmc@wnt.sas.com

We thank SAS Institute Inc for hosting this meeting and Eric Garnick and Thiru Satchi for coordinating it. For questions regarding the meeting, contact Eric (617-563-4260) or Thiru (617-832-3432)

Schedule

- | | |
|--------------|---|
| 8:30 | Continental breakfast compliments of SAS Institute |
| 9:00 | "The Dirty Dozen: Twelve Common Programming Mistakes" by Bob Virgile , Robert Virgile Associa |
| 9:45 | "Changing the Dynamics of the UPDATE Statement Using NOMISSINGCHECK" by Mary Singelai |
| 10:00 | "An SQL List Macro to Retrieve Data from Large SAS/DB2 Databases" by Thiru Satchi, Blue Cross of Massachusetts |
| 11:00 | "Longitudinal Data Techniques: Looking Across Observations" by Ron Cody, Robert Wood Johnson |

Abstracts and Bios

"The Dirty Dozen: Twelve Common Programming Mistakes" by Bob Virgile , Robert Virgile Associates

As programmers begin using the SAS software, their programs often contain many of the same types of mistakes. A seemingly innocuous error, such as omitting a semicolon, may generate results ranging from an obvious error message to an impossible to decipher error message to destroying an existing dataset. This paper covers typical errors made at an introductory level, including those which produce no error message but still generate the wrong result.

***Bob Virgile** is a SAS veteran, having participated in every NESUG and many SUGI, MWSUG, PharmaSUG, NYASUG, and SESUG conferences. Besides presenting papers, Bob creates the problem-solving contests for SUGI and NESUG, and has published two books through SAS Institute. Bob also has been teaching an outstanding series of SAS classes since 1983.*

"Changing the Dynamics of the UPDATE Statement Using NOMISSINGCHECK" by Mary Singelais, Bell Atlantic

With SAS Release 6.11, a new option was introduced in conjunction with the UPDATE statement. It's called NOMISSINGCHECK, and it can alter the dynamics of the UPDATE statement. With NOMISSINGCHECK, every field on the transaction data set is applied to the master file, whether a value exists or not. Using the NOMISSINGCHECK option may provide a solution that fits your application's unique set of requirements. This presentation will review the UPDATE procedure, demonstrate how to include the NOMISSINGCHECK option, explain how the option works, and outline effective applications for applying this option.

***Mary Singelais** is a Systems Engineer with the Performance Assurance Group of Bell Atlantic's Data Center, Network and Distributed Resources Portfolio. She is currently the lead SAS developer responsible for technical support for a dynamic Intranet report application, using SAS Intranet software and SAS publishing tools for the web. Ms. Singelais holds a BA degree in Communication Studies and a certificate in Programmer Training Development.*

"An SQL List Macro to Retrieve Data from Large SAS/DB2 Databases" by Thiru Satchi, Blue Cross and Blue Shield of Massachusetts

The SQL Pass-Through facility in the SAS/Access interface software is a tool to retrieve data from DB2 Relational Database Management System (RDMS) tables and to convert them into a SAS dataset. This paper demonstrates the benefits of using this feature, along with a macro that converts a SAS dataset into a list of key values. If these key variables are indexed in a DB2 table, the macro will significantly decrease the required programming and computer processing time.

***Thiru Satchi** has been a Research Analyst for over five years at Blue Cross and Blue Shield of Massachusetts in the Health Services Evaluation Department and teaches SAS Classes for Blue Cross Employees. Prior to that , he was Adjunct Faculty for more than eight years at Wentworth Institute of Technology as a Statistics Lecturer in the Mathematics Department . Before making the move to Blue Cross he worked for three years at Travelers Insurance in the Property and Casualty Division. He has presented an earlier version of this paper at NESUG.*

"Longitudinal Data Techniques: Looking Across Observations" by Ron Cody, Robert Wood Johnson Medical School

One of the most difficult tasks for a SAS® programmer is to perform operations across multiple observations. For example, you may have a data set of patient visits, with a variable number of visits per patient and the data for each visit stored in a separate observation. Some of the techniques for working with such data include the RETAIN statement, FIRST. and LAST. logical variables, the LAG function, and the use of multiple SET statements (each with a separate FIRSTOBS= option). Other techniques for summarizing data for each patient (such as the number of visits, the mean and median of some variables) involve procedures such as PROC FREQ, PROC MEANS and PROC

UNIVARIATE to output summary data sets. This talk will demonstrate and discuss these techniques.

***Dr. Ron Cody** is an Associate Professor in the department of Environmental and Community Medicine at the Robert Wood Johnson Medical School, Piscataway, New Jersey. He has been a SAS user for more than 20 years and is the author of Applied Statistics and the SAS® Programming Language (fourth edition), published by Prentice Hall. Along with Ray Pass, he has written a book called SAS® Programming by Example, a book of annotated SAS examples, published by the SAS Institute as part of their Books by Users series. His most recent books, also published by the SAS Institute, are The SAS Workbook, and the SAS Workbook: Solutions. He is currently under contract with the SAS Institute for a book on data cleaning techniques. Ron has presented invited papers for numerous local, regional, and national SAS conferences.*

Directions

From the Massachusetts Turnpike:

Follow the Mass Pike eastbound into Boston. Take exit 22 (Copley Square/Prudential Center) and follow signs for Prudential Center. This will take you directly into the Prudential Center Garage. The Mass Pike is accessible from Route 128/95.

From Route 93 Northbound/Southeast Expressway:

Exit Route 93 at exit 18 (Massachusetts Avenue). Follow the signs for Mass. Ave. through the construction area. Turn right on the access road. Turn right onto Mass. Ave. and follow it for approximately 2 miles to Boylston Street. Take a right onto Boylston Street. The Prudential Center Garage is 3/4 mile on the right.

From Route 93/1 Southbound:

Exit onto Storrow Drive West and follow until the Copley Square exit on the left. Take a right onto Beacon Street and follow until Exeter Street. Take a left onto Exeter Street and follow 4 blocks. The Prudential Center Garage will be on the right.

From Route 95/1 Southbound:

Exit onto Route 93 South and follow direction above.

Parking:

Parking is available at the Prudential Center Garage for \$19 for 4 – 10 hours. There are other, less expensive parking lots in the area. If you plan to drive, try to get into the city early to avoid traffic and find a place to park.

Public Transportation

MBTA buses, commuter trains, and the Green and Orange subway lines are all within a five-minute walk from Prudential Center.

Green Line access: Prudential Center stop on Huntington Avenue, Copley station on Boylston Street at Dartmouth Street Hynes/ICA station on Newbury Street at Mass. Ave.

Orange Line: Back Bay station (indoor walking access available through Copley Place to Prudential Center/Tower)

Commuter rail: Back Bay station (indoor walking access available through Copley Place to Prudential

Center/Tower)

BASUG, the Boston Area SAS® Users Group, presents**"SAS® SQL Programming" by Dana Rafiee****Monday, July 19, 1999, 9:00 AM to 5:00 PM****Blue Cross/Blue Shield of Massachusetts, 100 Summer Street, Boston MA****Registration and Admission**

This special training class is open to BASUG members only. The course fee is \$35. Seats are limited to 90 people. Complete and mail the [registration form](#) as soon as you can. There will be no on-site registration. Payment must be enclosed to reserve a seat. BASUG will e-mail a registration confirmation letter to you. Due to limited seating and security reasons, please bring the paid invoice with you to the class on July 19th.

Cancellation has to be made to Sophie Lo in writing before July 12th to get a refund.

If you are not a BASUG member and would like to attend the class, simply send in the appropriate dues (member fee and course fee) together with your course registration form.

For questions about the class, seating availability, or your registration, contact Sophie Lo at Sophie.Lo@med.va.gov.

For questions about membership, contact Peter Gaccione at gaccione@hcp.med.harvard.edu.

For information about the meeting location, contact Thiru Satchi at tsatchi@bcbsma.com.

Logistics

The class will be held on Monday, July 19, 1999 from 9:00 to 5:00 at Blue Cross/Blue Shield of Massachusetts, 100 Summer Street in downtown Boston. A free continental breakfast will be available from 8:30am to 9:00am. Beverage and snacks are provided during the morning and the afternoon breaks. Lunch and dinner are not included. The confirmation receipt is required at the door. Seats are available at the first come/first serve basis. Please join us from 8:30am to 5:00pm.

Instructor's Biography

Dana Rafiee is a recognized authority in SAS Software on multiple operating systems. He has many years of experience in applications development and design in 4th Generation Languages, Operating Systems, Communications, Consulting, and Training. His specific areas of expertise include SAS, MVS, JCL, IBM Utilities, CMS, TSO, and ISPF.

Mr. Rafiee has worked as a trainer and consultant for several hundred firms over the past 13 years. He is also an active member of all of the Regional SAS User Groups and speaks regularly at these conferences and at SUGI. Mr. Rafiee conducts more than 40 different training seminars and workshops in various topics in SAS and in TSO/ISPF, CMS, MVS JCL and Utilities. He earned his BS degree in 1984 at the University of Hartford and his MBA degree with a concentration in MIS from the same school in 1986.

Course Description

This course teaches how SQL excels over conventional methods in performing data management tasks. Proc SQL is covered in depth as it relates to working with SAS data files.

Course Outline:**I. Introduction**

- Introduction to Proc SQL

- Concepts
- The SAS Data Model

II. Selecting Data

- The Select Statement
- Controls and Enhancements
- Analysis on Groups
- Nested Subqueries
- Syntax Summary

III. Combining Data

- Inner Joins
- Outer Joins
- Complex Queries
- Set Operations

IV. Creating Data

- Creating Tables, Views, and Indexes
- Changing Data in Tables
- Changing the Structure of Tables
- Further Topics

Prerequisites:

Fundamentals of the SAS System or equivalent understanding.

Target Audience:

This course is designed for SAS Software users who want to learn Structured Query Language concepts and relate those concepts to their data.

Software Used:

Base SAS Software

Directions:

Public Transportation:

The best way to get to the class is to take the MBTA to downtown Boston. BC/BS is on Summer Street, no more than a 5 minute walk from the Downtown Crossing station (Red and Orange lines), the State Street station (the Blue line), Park Street station (the Green line), and South Station (commuter rail).

Note: If you plan to drive, try to get into the city early to avoid traffic and find a place to park.

Parking:

The most convenient parking is at the Owl Parking lot (located directly behind BC/BS). The parking fees for most parking lots around the BC/BS are around \$15 to \$20 a day. The following driving directions are to this lot.

Take the expressway South to exit 22: South Station. (Entrance is just before the tunnel.) Proceed to the set of lights at the top of the ramp. Go through the set of lights and bear to the right. Proceed to the next set of lights. Go straight through, continuing through two more sets of lights. Owl Parking will be on the right.

Take the expressway North to the Downtown/Chinatown Mass. Pike exit. Bear left following the Downtown exit sign. Proceed to the bottom of the ramp. Go straight onto Lincoln Street. Proceed to the set of lights and Owl Parking will be on the left after the lights.

Take the Mass. Pike East to the South Station/Chinatown exit. Follow the Kneeland Street/ Chinatown sign. At the bottom of the ramp, take a left. Take a right at the set of lights onto Lincoln Street. Proceed to the set of lights and Owl Parking will be on the left after the lights.

Please return this form with a check
or company PO made payable to "BASUG".
BASUG's federal tax ID# is 04-2964625.
Questions? E-mail us at Sophie.Lo@med.va.gov.

- | | |
|---|--------------------|
| 1. SQL Class Registration Fee | - - - - - \$ 35.00 |
| 2. BASUG Individual (\$16)
or Corporate (\$60) Dues for 1999 | - - - - - _____ |
| 3. Total Enclosed | - - - - - _____ |

Mail to:
BASUG
C/o Management Science Group
H. Sophie Lo
VA Medical Center, Bld. 12, 2nd Floor
200 Springs Road
Bedford, MA 01730

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"Webifying SAS[®]: An Overview of the Technologies for Web Based Information Delivery"

What: Next BASUG Meeting

When: Friday, December 3, 1999, 8:30 AM to 12:30 PM

Where: Wyndham Garden Hotel, 30 Wheeler Road, Burlington, MA
(*map below*)

RSVPs: Required. Please send an e-mail to: webmaster@basug.org

Agenda:

- 8:30 - Coffee and registration
- 9:00 - "Overview: 30,000 ft View of the Tools and Approaches to Putting SAS on the Web"
- 10:00 - "A Case Study of Static Web Publishing with the SAS System"
- 11:00 - "A Tour of Dynamic Webapplications with the SAS System"

Contact: Elizabeth Axelrod, (617) 349-2458,
elizabeth_axelrod@abtassoc.com

[Here is a link](#) to Greg Barnes Nelson's Web site tutorial, "[Bringing Data to the Web](#)".

9:00 to 10:00 AM - "Overview: 30,000 ft View of the Tools and Approaches to Putting SAS on the Web" by Greg Barnes Nelson and Mike Zdeb

- HTML
 - SAS Output formatting tools
 - Output Delivery System
 - SAS/IntrNet
Application Dispatcher
htmSQL
 - AppDev Studio
webAF
webEIS
-

10:00 to 11:00 AM - "A Case Study of Static Web Publishing with the SAS System" by Mike Zdeb

The New York State Health Department maintains an intranet site known as the Health Information Network (HIN). The HIN is to provide information to and receive information from county health departments. One portion of this web site is devote to data used by counties to prepare a health planning document known as a community health assessment (CHA). SAS is used to prepare all the material on CHA portion of the HIN. DATA _NULL_ reporting is used to write tables in HTML, and SAS/GRAPH is used to produce graphics (bar charts and maps) in postscript that is later converted to PDF files.

This is an example of not using any of the SAS-supplied web tools to create web postings. Both HTML and PDF files are common file structures used on the web. Custom, data step programming was used since it was easier to create the exact output desired rather than tailoring the output to fit the SAS tools provided to create output for web posting.

Some of the ODS tools provided in Version 8 are now being used to produce maps that contain links to HTML tables. These links show 10-year time trends in the data posted in the tables created using the custom, data step programming. In addition to the ODS tools, Version 8 also provides a PDF graphics driver that eliminates the need to convert SAS/GRAPH postscript output to PDF using other, non-SAS software.

11:00 AM to 12:00 Noon - "A Tour of Dynamic Web Applications with the SAS System" by Greg Barnes Nelson

In this hour, we will explore some of the SAS IntrNet based tools for information delivery. Here we will walk through a simple application as we move it from SAS/AF to SAS/IntrNet to webAF showing the power and flexibility of SAS as a web development tool.

This session is meant to show what SAS is capable of and where these tools fit into an overall web framework. Code and samples pages will be available for download and step by step instructions on how to use them in your organization will be provided.

***Mike Zdeb** is a research scientist in the Division of Family Health at the New York State Department of Health and an Assistant Professor in the epidemiology program at the School of Public Health at the State University of NY at Albany. He conducts research on public health topics using the various databases maintained by the health department. Mike specializes in the area of computer graphics and the computer- assisted mapping of health data. He has been a SAS user for over ten years and has presented papers on many occasions for local SAS user groups, NESUG, and SUGI.*

***Greg Barnes Nelson** is a Social Psychologist by training and a technologist at heart. His company, STATPROBE Technologies, develops web based information systems for research oriented companies. He is currently writing a book on exploiting SAS in server based environments. He serves on the steering, planning and executive committees of regional and international SAS user groups and just*

chaired the SouthEast SAS Users Group Conference in Mobile, Alabama.



Directions:

- From route 128, get off at Exit 32B.
- Turn LEFT at end of ramp.
- Turn LEFT at next set of lights (onto Wheeler Road).
- Wyndham Garden Hotel is on the LEFT.

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