Quick and Complete Statistical Analyses Using SAS Enterprise Guide

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ABSTRACT

SAS Enterprise Guide (EG) is a powerful Microsoft Windows client application that provides a guided user-friendly mechanism to exploit the power of SAS and perform complete data analysis quickly. SAS Enterprise Guide also delivers many statistical, graphical, analytical and reporting tasks, as well as wizard-based analytical steps. In this step-by-step tutorials, I will demonstrate the main features of EG for performing simple statistical applications such as ANOVA and linear regression models and advanced models such as mixed and generalized linear models. Interment links are included here where interested readers can download the video files and watch these video tutorials in windows media player.

INTRODUCTION

SAS Enterprise Guide (EG) is a powerful Microsoft Windows thin client application with an enhanced graphical user interface to SAS that provides a guided steps to maximize the power of SAS and publish dynamic reports by allowing transparent access SAS. Only SAS EG integrates the extensive array of analytics with the power of SAS software in an efficient, friendly graphical user interface application. SAS users can quickly adapt to changing organizational needs with distribution mechanisms that make reporting and analytics available to the masses. SAS EG also provides a guided tasks to visually access data across the enterprise on multiple platforms, operating systems and databases, in conjunction with access to advanced analytics and other SAS capabilities. It provides easy access to various types of data, ready-to-use tasks for analysis and reporting, and statistical analyses. Some of the main features of EG are:

- A process flow diagram facility lets SAS users organize, view and maintain their projects visually.
- SAS EG also assist the SAS users in many reporting, graphical and analytical tasks, as well as wizard-based tasks.
- Users can create, update, subset and join tables themselves without involving IT specialists using a powerful, graphical Query Builder.
- Advanced users can create programs that produce tables and charts that can be easily embedded in other SAS applications and easily and securely shared.
- SAS EG also can interface with a local or remote server installation of Version 8 or 9 of the SAS for Windows, as well as remote Unix or mainframe SAS servers.
- SAS EG's scheduling feature can automate the analytical process and schedule reports to run at regular intervals that can be automatically distributed via several channels.
- EG also allows multiple projects to be combined and scheduled as one job to simplify administration and queue management.
- Also, projects can be transferred easily from one client to another.

SAS EG for statistical analysis and business analyst

Developing statistical models and reports can take a large amount of a analysts's time, since many SAS statistical procedures require some programming knowledge. This often increases training costs and can slow down the decision-making process immensely. Therefore, statisticians need an application that is easy to use and one that also supports a wide range of powerful statistical capabilities. Using wizards and tasks, statisticians can import variety of data format, run exploratory analysis, build a variety of statistical models, apply appropriate transformations, examine the model's assumptions and validity, and compare and contrast the various methods. All this can be achieved without writing SAS codes. Once the data is in the required format, the analyst can proceed to the next phase of the analysis: reporting and graphical examination.

A tutorial on using SAS EG for Statistical analysis and reporting

Using the SAS version 9.13 and the EG 4.1, the following features of EG will be demonstrated in the 50 min tutorial. Any interested users can view the video files of the tutorials in Windows media player by visiting the authors page. The web links will become active after the conference.

Module 1: Introduction to SAS EG

Module 2: Importing various data files.

Module 3: Exploratory data analysis

Module 4: Predictive modeling: - General Linear modeling

Module 5: Predictive modeling: - Logistic regression modeling

Module 6: Mixed model analysis - Running in code mode

Module 7: Publishing the results

Instructions for viewing video files:

- Right click the above link, download and save it in a folder.
- Double click and run the *.Exe file. This will add a "CODEC" to your computer first.
- Save the extracted *.AVI file in a user-specified folder.
- View this Video file in Microsoft Media player in a full screen mode.

Suggested Reading

1) SAS institute (2008) The SAS enterprise Guide (Fact sheet) http://www.sas.com/technologies/bi/query_reporting/guide/factsheet.pdf
2) Charles Hallahan and Linda Atkinson (2006) Introduction to SAS® Enterprise Guide® 4.1 for Statistical Analysis SUGI 31Paper 109-31
3) Linda E. Lucek SAS Enterprise Guide: Data Manipulation, Reports,& Statistical ProceduresTechnical Advisory Group Customer Support Services Northern Illinois University
4) Susan J. Slaughter and Lora D. Delwiche (2006) Summary Tables in SAS® Enterprise Guide®PROC TABULATE Made Easy SUGI 30 Paper 179-30
5) Susan J. Slaughter and Lora D. Delwiche (2008) Writing Code in SAS® Enterprise Guide SGF2008 Paper 184-2008
6) Slaughter, S. J. & Delwiche, L. D. (2006). The Little SAS Book for Enterprise Guide 4.1. SAS Institute, Cary, NC.
7) Slaughter, S. J. & Delwiche, L. D. (2007). Dynamic Projects in SAS Enterprise Guide: How to Create and Use Parameters. Proceedings of the SAS Global Forum Conference, Orlando, SAS Institute, Cary, NC, paper no.**115-2007.**
8) Marje Fecht and Rupinder Dhillon **(2008) A "SAS® Programmer's" Guide to SAS® Enterprise Guide®** Proceedings of the SAS Global Forum Conference, Orlando, SAS Institute, Cary **NC Paper 110-2007**

CONTACT INFORMATION

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