

Testing and Validating SAS Programs

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Bio:

S. David Riba is CEO of JADE Tech, Inc., a SAS Alliance Partner who specializes in applications development, consulting and training in the SAS System. With 20 years of real world experience using SAS software, Dave has created, tested, and debugged a wide variety of SAS software applications. His major areas of interest are efficient programming techniques and applications development using the SAS System. Dave is a SAS Certified Professional.

Abstract:

"Act in haste and repent at leisure; code too soon, and debug forever." Raymond Kennington

Overheard at an interview for a SAS programming position: "But you don't have to test SAS programs!!!" As the interviewers quickly escort the confused candidate out the door, they recall how often it is assumed that a fourth generation language "does so much for you" that you don't have to test the code. The SAS system is easy to use, and the learning curve to productivity is relatively short. But SAS is just as easy to ABUSE. Programmers and analysts must not lose sight of the indisputable facts: data is seldom clean, logic is too often faulty, and fingers walk clumsily over keyboards. Condition codes are not an accurate indicator of successful programs.

Good debuggers make good programmers. And good analysts and problem-solvers make good programmers. And just because a SAS® program is free of errors, warnings, notes, and bugs does not guarantee that the program is doing what it is supposed to do. This paper addresses the process of debugging, testing and validating SAS programs and the tools available in the SAS language to facilitate the process. It covers techniques for ensuring that the logic and intent of the program is correct, that the requirements and design specifications are met, and that data errors are detected.

Since as much as 80% of a programmer's time is invested in testing and validation, it's important to focus on tools that facilitate correction of syntax, data, and logic errors in SAS programs. The presentation focuses on wide variety of SAS features, tips, techniques, tricks, and system tools that can become part of your routine testing methodology.