

## Paper 183-27

**Making the Most of Version 8 Features**

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**ABSTRACT**

Are you using version 8 the same way you used version 6? If you aren't taking advantage of the new language and interface features, this Hands-On workshop is for you.

Topics include:

- language enhancements such as long name support and new formats and functions
- procedure enhancements
- extensive Output capabilities
- data Set enhancements.

This overview of major new features will help you understand, and select other topics to explore. This workshop is beneficial for all SAS users who are getting started with Version 8.1 or 8.2.

**INTRODUCTION**

Programmers are on a tight schedule to produce results and thus often have little time to enhance their knowledge. The features added to Version 8 SAS are worth exploring! This Hands-On Workshop looks at recently added features in BASE SAS that are most beneficial to the typical SAS user.

This [overview paper](#) provides a snapshot of the concepts that will be presented in the detailed, hands-on workshop.

**HOW HAS PROGRAMMING CHANGED?**

SAS programmers are experts at expressing themselves in 8 characters or less! Column names and table names were limited to 8 characters in previous versions of SAS but in Version 8, the programmer can make use of 32 characters. Long name support includes columns, SAS files (tables and views), macro variables, and most catalog entries. Some naming is still limited to 8 characters, including librefs, filerefs, formats and informat.

Long label support in version 8 enables up to 256 characters for Column Labels and SAS file labels. This is extremely useful both for documentation and for report labeling.

Values of character data were previously limited to 200 characters, which meant that comment-type text had to be stored *creatively*. In version 8, a character data value can have a length up to 32K.

**FORMATS**

To improve the usability of user-defined formats, format [labels](#) can contain up to 32K characters. Many SAS date formats support [separator](#) specification so that you can view dates with slashes, dashes, blanks, or other desired separators

**HOW HAVE SAS DATA SETS CHANGED?**

In addition to long name, long label, and long value support, there are many other changes to the appearance and functionality of Version 8 SAS data sets.

**INTEGRITY CONSTRAINTS**

Integrity Constraints enable you to impose rules for controlling data modifications and additions, when data are modified in place using SAS. You can define integrity constraints for your data

using PROC DATASETS, or other approaches defined in Version 8. An audit trail can be produced to track changes, including [who](#) made the change and [when](#).

**GENERATION DATA SETS**

A generation group enables you to maintain historical versions of SAS data sets along with the base version (most current). Options control [how many versions](#) of the table are kept and [which version](#) to open and process.

**HOW HAVE INTERFACES CHANGED?**

Perhaps the most noticeable change in Version 8 is the Enhanced Editor. Color-coding of key words, step boundaries, text strings, etc. helps readability and error detection. Auto-indent makes code indentation effortless. And, when your program is extremely long, you can isolate a single step through [expanding](#) and [collapsing](#) steps.

**EXPLORER AND RESULTS WINDOWS**

The **Results** window enables easy access to the components of your output, so that you can navigate more easily through your results. The **Explorer** window provides access to all of your SAS files and also facilitates the creation of libraries, files, shortcuts, and more.

**HOW HAS OUTPUT CHANGED?**

SAS programmers are accustomed to standard SAS output (pre V8) including:

- *Line printer* format
- Limited font and style control
- Limited component selection.

In Version 6, html formatting macros helped to enhance the appearance and view-ability of output.

In Version 8, ODS (Output Delivery System) enables you to

- Fully customize your output
- Select components of the output to process
- Organize your output with a table of contents
- And lots more.

**CONCLUSION**

As you learn more about Version 8 SAS, you will find that there are numerous features that let you accomplish tasks more easily and efficiently. The new features examined by example in this hands-on workshop show you how to quickly apply the features to your daily work. This overview paper provides just a sample of the features that are available and a sample of the features that are explored in the Hands-On Workshop.

**CONTACT INFORMATION**

A [detailed Hands-On Workshop handout](#) is available at the scheduled presentation, or by contacting the author.

Your comments and questions are valued and encouraged. Contact the author at:

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