

# Version 9 Changes and Enhancements

Duration: 2 days

CEUs: 1.2

## AUDIENCE

All users of SAS Software.

## BENEFITS

This course is designed to show all of the differences available in Version 9 of SAS Software. The primary goal of Version 9 is to provide support for a new level of computing that supports faster execution of applications, centralized access of data and support of the latest computing technology. The new SAS Open Metadata Architecture is designed to allow all registered data in an organization to be centrally managed and accessed. The SAS Management Console will offer one point of control for all SAS servers and applications in the organization. The new multi-threaded architecture is automatically turned on to support most procedures that sort and summarize data. The Output Delivery System has been enhanced to support many new styles of markup, along with custom markup tag sets. SAS also supports the industry standard Application Response Measurement (ARM) protocol for monitoring SAS processes. Cross Environment Data Access (CEDA) is still supported on all operating systems. SAS Version 9 is designed to better support ADA 508 handicapped standards. This course is designed to discuss as many issues as possible, from the installation of SAS to the finer aspects of operating under the new release.

## PREREQUISITES

Previous knowledge of SAS is required.

## COURSE TOPICS

### ***Installation of SAS***

- ♦ Configuration File Changes
- ♦ SETINIT Changes
- ♦ Display Manager Changes
- ♦ Enhanced Interface
- ♦ Pull down Menu Selections
- ♦ Online Help Facility
- ♦ Explorer Window

### ***Data Set Properties Viewer***

- ♦ List View Copy Command - DMCOPY LSV
- ♦ Catalog Properties Viewer
- ♦ Object/Class Properties Viewer
- ♦ Filename Viewer
- ♦ New Access to My Computer Icon
- ♦ Results Window
- ♦ ODS Document Viewer
- ♦ SAS/Connect Monitor
- ♦ Return of the V6 Windows

### ***Data and Catalog Migration***

### ***New Formats and Informat***

### ***Any Date Informat***

### ***DATESTYLE Option***

### ***New Functions and Options***

### ***Perl Regular Expressions and Pattern Matching***

### ***Optimized Joins***

### ***Resetting the SAS Date on Output***

### ***Putlog Statement***

### ***New Data Step Object Dot Syntax***

- ♦ DECLARE Statement
- ♦ Hash Table for Lookups

### ***New SAS Architectures***

- ♦ Multi-Threaded Architecture
- ♦ Scalable Performance Data Architecture

### ***New/Enhanced Procedures***

CONTENTS, COPY, EXPORT, FORMAT, FREQ, IMPORT, MEANS, PRTDEF, PRTEXP, REGISTRY, REPORT, SORT, SUMMARY, SQL, TABULATE, TIMEPLOT, UNIVARIATE

## ***Application Response Measurement (ARM)***

### ***Macro Changes***

#### ***ODS Enhancements***

XML, CHTML, CSV, CSVALL, DOC  
BOOK, DOCUMENT, HTMLCSS,  
IMODE, LATEX, MARKUP, PCL,  
TROFF, WML, WMLLIST

#### ***New ODS Options***

- ♦Columns Option
- ♦Margin and Indent Options
- ♦Text Options
- ♦Orientation Option
- ♦Page X of Y Support

#### ***New ODS Styles***

#### ***Decimal Alignment***

#### ***Atlas Utility***

#### ***SAS/Connect Changes and Enhancements***

- ♦Cross Environment Data Access (CEDA)
- ♦Libref Inheritance
- ♦%SYSLPUT CONNECTREMOTE= Option
- ♦Remote Library Services
- ♦MP CONNECT and Piping

#### ***SAS/Graph Changes and Enhancements***

#### ***New Procedures***

- ♦GBARLINE
- ♦GAREABAR
- ♦MAPIMPORT
- ♦Style Uniformity
- ♦Support for the ANNOTATE= option
- ♦Server Side Rendering
- ♦Colors
- ♦Java Applets Supported by SAS/Graph
- ♦Treeview Java Applet
- ♦Constellation Java Applet
- ♦Java Applet CHORO Map
- ♦Java Applet DRILLMAP
- ♦Java Applet DRILMAP3

#### ***SAS Management Console***

## ***Enterprise Guide***

- ♦SAS Version 9 / DMS Support
- ♦Program Editing Enhancements
- ♦Function Keys
- ♦Version 9 Graphs
- ♦Open Metadata Repository (OMR)
- ♦BIP Integration Support
- ♦Stored Processes
- ♦Intelligent Query Integration
- ♦XML Integration
- ♦Queries and Tasks
- ♦APIs
- ♦Workflow Enhancements
- ♦Automation Interface
- ♦New Tasks
- ♦User Defined Code
- ♦Naming Task Tables
- ♦Task Data Sorting
- ♦User Defined CSS

Software Used: Base SAS, SAS/CONNECT,  
SAS/ACCESS software and Enterprise Guide  
Software