



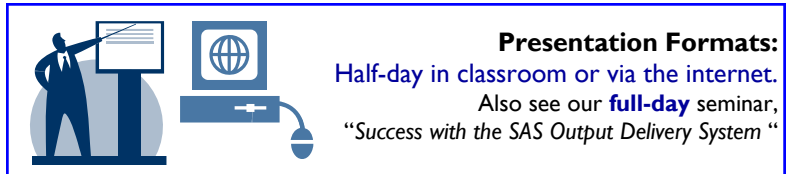
...Maximizing your investment in the SAS® System...  
and those in your organization who use it...

***This half-day session shows you how to start applying the Output Delivery System's (ODS) powerful abilities to create effective and compelling reports and analyses from the output generated by your SAS Procedure Steps.***

After taking this seminar you will be able to:

- Understand how ODS “works” within the overall SAS System
- Determine the names of the tables generated by your SAS Procedure Steps
- Select just the tables you want from your Procedure Steps
- Open and close ODS “destinations” during your program to control what output is going where.
- Save analyses and statistics from Procedure Step “runs” in SAS Data Sets using the OUTPUT Destination
- “Deliver” your reports and analyses to PDF, RTF and HTML files
- Control the appearance of your ODS-generated output with STYLE Templates
- Customize the appearance of PROC PRINT, REPORT and TABULATE output with ODS STYLE Statements
- Avoid tedious cutting and pasting to finalize your reports.

# Introduction to the SAS® Output Delivery System



## Presentation Formats:

Half-day in classroom or via the internet.  
Also see our **full-day** seminar,  
“Success with the SAS Output Delivery System”

## Overview

This half-day seminar shows you how take advantage of core capabilities in the Output Delivery System (ODS) which enhance the quality of your reports while saving you time and effort required to complete your project. After attending **Introduction to the SAS Output Delivery System** you will be able create visually appealing reports that “tell the story” in PDF, RTF and HTML file formats, as well as simplify the report generation process. [Our full-day “Success with the SAS Output Delivery System” session covers all the topics presented in this session plus additional in-depth treatment of other ODS functionalities.]

## Intended Audience

**Introduction to the SAS Output Delivery System** is designed for those who have a basic understanding of core SAS programming concepts such as Data Set, Data Step, Variable and Observation. It is also an appropriate for experienced SAS users who want to understand Output Delivery System basics

## Topics/Agenda

- **ODS Essentials:**
  - What is the Output Delivery System and How Does it Interact with other Parts of the SAS System?
  - Data Components, Table Tables and Style Templates
  - How to Learn the Names of ODS-generated Tables
  - Selecting (or Excluding) Tables During Procedure Step Execution
- **Learning Your “Destination”**
  - ODS “Destinations”
  - Opening and Closing ODS Destinations
  - Using the PERSIST Option with the OUTPUT Destination
- **Saving Procedure Step Results with the OUTPUT Destination**
  - Capturing Procedure output as SAS Data Sets
  - “Shaping” the ODS-generated Data Sets Using SAS Data Set Options
  - Working with Data Sets Created by the OUTPUT Destination
  - OUTPUT Destination-created Data Sets and Those Generated by the OUT= and OUTEST= options in SAS Analytic Procedures
- **Using ODS Style Templates to Control Output Appearance**
  - Specifying a Style Template with Your ODS Destination
  - Applying ODS Style Statements in PROCs PRINT, REPORT and TABULATE
- **Saving Your Output as PDF, RTF and HTML Files**
  - Core capabilities of the PDF, RTF and HTML Destinations
- **Traffic-Lighting Your Analyses and Reports with ODS**

## Contact Sierra Information Services For More Information:

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## About the Instructor

This seminar is written and presented by Andrew Karp, who started his own SAS Software consulting and training firm, Sierra Information Services, in 1994. Prior to starting Sierra he used SAS Software to manage and analyze data while holding positions with PriceWaterhouseCoopers, Federal Express Corporation, Pacific Gas & Electric Company and Kaiser Foundation Health Plan. A 25-year SAS user, Andrew is a SAS Certified Professional™ who has presented numerous training seminars to SAS users in the United States, England, Scotland, Belgium, Australia, New Zealand and the People's Republic of China.

He has served on the technical review teams for seven books published by SAS Institute and has been an invited speaker at thirteen consecutive SAS Global Forum/SAS User Group International conferences, as well as other events for SAS users in seven countries. Andrew earned undergraduate and graduate degrees from The George Washington University and taught SAS classes for UC Berkeley's Extension Division from 1989 to 1995. He has also been a visiting lecturer in the Dept. of Experimental Statistics at Louisiana State University and at the University of Auckland in New Zealand.

## About Sierra Information Services

Sierra Information Services is a **leading independent provider of SAS Software** consulting and training services. Our firm is based in the California Wine Country region north of San Francisco but travel both domestically and internationally to work with clients and present training seminars. Sierra offers clients a wide range of support, including SAS programming, data analysis/data mining with SAS tools, as well as the design and delivery of customized SAS Software training solutions tailored to the client's individual needs. Since its inception in 1994 Sierra has provided consulting and/or training services to, among others, Wells Fargo Bank, Bear Creek Corporation, Limited Brands, IBM, American Honda Motor Company, Lloyd's Bank/TSB, Capitol One Financial Services, Inc., the Sacramento Municipal Utilities District, Discover Financial Services, Inc., the US Department of Commerce and the US Federal Communications Commission. We have also provided consulting and training for numerous public and private sector entities in the United Kingdom, Belgium, Australia and New Zealand.

In addition to training solutions developed by Sierra's founder, Andrew Karp (see instructor's bio above), Sierra also works with other leading SAS experts to offer their training seminars around the United States. Sierra is proud to have other well-known experts such as Art Carpenter, Michael Raithel, and David Cassell present their training seminars under our auspices.

For the most current list of our public seminars, or to learn more about how Sierra can assist you and your organization, please visit our web site at [www.Sierrainformation.com](http://www.Sierrainformation.com) or call us a (707) 996 7380. We look forward to hearing from you soon!



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