

Efficient Use of SAS Institute's Technical Support

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ABSTRACT

In order to support the SAS[®] System effectively at your site, you must be familiar with the support services provided by SAS Institute. This paper discusses both types of support available:

- telephone support
- the Online Customer Support Facility.

Utilizing these services to their best advantage will make on-site support more efficient. In addition, Institute-supplied tools and services, such as the SAS Notes data set and the sample library, are discussed.

INTRODUCTION

Technical support for the SAS System is shared between SAS Institute and its installations. On-site SAS Software Representatives and Consultants are available to support the SAS user community, while the technical support staff at SAS Institute is available to provide support and maintenance for SAS software products. By understanding the organization of technical support at SAS Institute, the availability of support services, and the tools that we use to solve problems, you can support the SAS System more efficiently at your site.

ORGANIZATION OF THE TECHNICAL SUPPORT DIVISION

The Technical Support Division is divided into several departments. Each department is responsible for a particular support area. Some support areas are system related, such as:

- mainframe systems
- workstation systems
- minicomputer systems.

Others are product specific, such as:

- base SAS software and the macro facility
- graphics
- statistical products
- full-screen products
- C compiler products.

Within each support area, there are two levels of support. As you move among the levels, the consultants become more specialized. For example, a first-level graphics consultant works with both graph procedures and devices, while a second-level graph consultant specializes in either procedures or devices.

First-level consultants are the initial contact for the SAS user. These consultants have been exposed to many facets of the SAS System and have a working knowledge of the area they are supporting.

Second-level consultants are responsible for product support. This means that in addition to working with SAS users, they review and write SAS documentation, test problem fixes, and interact with development staff personnel to promote future enhancements to their product.

Telephone Support

The largest portion of our support services is telephone support. You can reach a consultant to report a new problem or question from 9:00 a.m. to 8:00 p.m. Eastern Time. You can reach a consultant to follow up on a problem that has been assigned a tracking number from 9:00 a.m. to 5:00 p.m. Eastern Time.

The telephone number for Technical Support is (919) 677-8008. (AmigaDOS[®] C Compiler users should call (919) 677-8009.) This number takes you immediately to a Technical Support receptionist who then directs your call to a first-level consultant for the area of the problem. Calls to this number are given higher priority than calls to other Institute numbers.

You should identify your problem as ONE of the following:

DATA step	DATA step statements and functions: syntax and logic
Base SAS procedures	All base SAS procedures (excluding system-dependent utilities and CPORT, CIMPORT, and SPELL listed later in this table) Conversion and transport engines
Macro facility	Macro statements and functions: syntax, logic, errors, and processing Macro variable references Macro system options Macro windows Autocall facility
Graphics procedures	SAS/GRAPH [®] procedures Annotate facility Map data sets Graphics catalogs DATA Step Graphics Interface Graphics Editor SAS/NVISION [®] software
Graphics devices and drivers	Graphics devices and drivers Device driver catalogs SAS/RTerm [®] software SASWTR external writer Interfaces with graphics, word processing, and desktop publishing software Protocol converter Terminal emulation
Full-screen products	SAS/AF [®] software SAS/ASSIST [®] software SAS/CALC [®] software SAS/EIS [®] software SAS/FSP [®] software SAS/PH-Clinical [®] software (non-statistical questions) The CPORT, CIMPORT, and SPELL procedures

	CBT courses
	Full-screen catalogs
	SCL
Statistics	All procedures in SAS/STAT [®] software
	JMP [®] software
	SAS/ETS [®] software
	SAS/IML [®] software
	SAS/INSIGHT [®] software
	SAS/LAB [®] software
	SAS/OR [®] software
	SAS/PH-Clinical software
	SAS/QC [®] software
C compiler	SAS/C [®] Compiler for 370/390
	SAS/C Compiler for AmigaDOS
Mainframe systems (CMS, MVS, VSE)	Mainframe and product installation or SETINIT
	The SQL procedure
	System-oriented SAS utility procedures:
	OPTIONS
	PDS, PDSCOPY
	RELEASE
	SORT
	SOURCE
	TAPECOPY, TAPELABEL
	Accessing external files
	SAS Display Manager System
	SAS system options
	VSAM processing
	SAS/ACCESS [®] interface to ADABAS [®]
	SAS/ACCESS interface to CA-DATACOM/DB [®]
	SAS/ACCESS interface to IDMS/R [®]
	SAS/DB2 [®] software
	SAS/DM [®] software
	SAS/IMS-DL/I [®] software
	SAS/SHARE [®] software
	SAS/SQL-DS [®] software
	SAS/TOOLKIT [®] software
Minicomputer systems (AOS/VS, PRIMOS, VMS)	Minicomputer and product installation or SETINIT
	The SORT and SQL procedures
	Accessing external files
	SAS Display Manager System
	SAS system options
	Interfaces to DIGITAL [®] software
	SAS/ACCESS interface to INGRES [®]
	SAS/ACCESS interface to ORACLE [®]
	SAS/ACCESS interface to Prime INFORMATION [®]
	SAS/ACCESS interface to Rdb/VMS [®]
	SAS/CPE [®] software
	SAS/SHARE software
	SAS/TOOLKIT software
Personal computers	PC DOS, Windows, or OS/2 [®] and product installation or SETINIT
	The SORT and SQL procedures
	Accessing external files
	SAS Display Manager System
	SAS system options
	SAS/ACCESS interface to OS/2 databases
	SAS/CONNECT [®] software
UNIX [®]	UNIX and product installation or SETINIT
	The SORT and SQL procedures
	Accessing external files
	SAS Display Manager System
	SAS system options

SAS/INSIGHT software (non-statistical questions)

JMP software Installation
 Accessing external files
 Applying patches
 Data manipulation.

Online Customer Support Facility

The Online Customer Support Facility is available to provide additional services beyond those available through standard telephone support. This service is available to you twenty-four hours a day, seven days a week. Any SAS user may be a registered user or can access the facility through a special guest account. Only SAS Software Representatives and Consultants can use the facility to track problems.

You can use the facility to

- download files including source and fixes
- upload requested source files
- receive information on available publications and education courses
- track problems and receive answers to tracked problems (only available to SAS Software Representatives and Consultants).

Additional SAS Support Tools

In addition to the services offered by the Technical Support Division, there are several other support tools and services available to you. They are

- SAS Notes
- sample library
- SUPPORT application
- SAS documentation
- SAS training.

SAS Notes

SAS Notes is a collection of information of particular use to SAS users and SAS Software Representatives. They contain:

- usage notes
- compatibility notes
- SAS programs for manipulating SAS Notes
- full-screen catalogs for displaying usage and compatibility notes.

Entries in the SAS Notes data set are outstanding problems, usage notes, and compatibility notes. You should use this data set to determine if the problems you are encountering have already been reported. An outstanding problem entry indicates a fix number, if one is currently available. The notes are the same notes that SAS Institute's technical support staff use to answer users' questions.

The compatibility notes are new for Release 6.06. Although every attempt has been made to make Version 5 and Version 6 of the SAS System compatible, there may be some SAS source code changes required. The compatibility notes contain information documenting

these circumstances. By default, they are loaded with the SAS Notes data set so they will be easy to locate.

Sample Library

The sample library is another support tool that is available to both SAS users and the Institute's technical support staff. This library is a data set where sample SAS programs are stored. For example, the GEOMEAN member of the sample library contains the SAS code necessary to calculate geometric means.

Each member of the sample library contains a header that gives

- member name
- title of program
- SAS products used
- operating system(s)
- keywords used by the index programs
- SAS procedures used
- name of any external data file that should be included.

SUPPORT Application

The SUPPORT application is a new SAS/AF application written for Version 6 of the SAS System that gives you the capabilities to

- browse the SAS Notes using the FSEDIT procedure (if SAS/FSP software is available)
- view the SAS Notes using base SAS software
- generate an index of the sample library members
- browse, edit, or execute the members of the sample library
- execute a tutorial that details major changes between Version 5 and Version 6.

For more information on the SAS Notes, sample library, Online Customer Support Facility, or the SUPPORT application, refer to SAS Technical Report U-114, *A Guide to the SAS Notes, Sample Library, and Online Customer Support Facility, Release 6.06*, and SAS Technical Report U-115, *A Guide to the SAS Notes, Sample Library, and Online Customer Support Facility for the UNIX Environment and Derivatives, Release 6.07*.

SAS Documentation

Another available support tool is SAS documentation. With Version 6, you are introduced to a new documentation structure. Basically, there are five main types of manuals:

- introductory guides
- reference guides
- usage guides
- syntax guides

- system-specific documents.

Introductory guides provide basic introductory information for the specific product.

The reference guides are the definitive reference for SAS statements and options. You should refer to these documents when you need complete syntax for a particular SAS statement.

The usage guides are meant to fill the gap between the introductory guide and the reference guide. These task-oriented manuals provide examples of specific applications.

The syntax guides will provide complete syntax for SAS statements in a quick reference format. These manuals replace the syntax cards located in previous SAS manuals.

In addition, there will be manuals written for specific applications.

For more information on the new library structure, see John Gough and Sean Gargan's paper, "The SAS Documentation Library for Release 6.06 Software," in the *SUGI 15 Proceedings*.

SAS Training

SAS Institute provides training for users of all levels of expertise for all SAS System applications. The training curriculum for Version 6 is geared to two audiences: new users and experienced Version 5 users.

New Version 6 courses include a course on making the transition to Version 6, courses on the REPORT and SQL procedures, and an advanced course on Screen Control Language (SCL).

CONCLUSION

As you can see, there is much help available for supporting the SAS System at your site. By using the Institute's telephone support, the Online Customer Support facility, the SAS Notes (usage notes and compatibility notes), SAS documentation, SAS training, and the new SUPPORT application, you can more effectively support the SAS System at your site.

SAS, SAS/ACCESS, SAS/AF, SAS/ASSIST, SAS/C, SAS/CPE, SAS/DMI, SAS/ETS, SAS/FSP, SAS/GRAPH, SAS/IML, SAS/IMS-DL/I, SAS/OR, SAS/QC, SAS/RTERM, SAS/SHARE, SAS/STAT, JMP, SAS/CALC, SAS/CONNECT, SAS/DB2, SAS/EIS, SAS/INSIGHT, SAS/LAB, SAS/NVISION, SAS/PH-Clinical, SAS/SQL-DS, and SAS/TOOLKIT are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. * indicates USA registration. OS/2 is a registered trademark or trademark of International Business Machines Corporation. AmigaDOS is a registered trademark or trademark of Commodore-Amiga, Inc.

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