Efficient Use of SAS Institute's Technical Support
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ABSTRACT
In order to effectively support the SAS System 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 (OCSF).

Utilizing these services to their best advantage will make on-site support more efficient. In addition, Institute supplied tools, such as the Usage 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 more efficiently support the SAS system 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. These support areas can be system related, such as:

- mainframe systems
- PC and workstation systems
- minicomputer systems

Or they can be 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 consultants that support users. 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 an operating 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. EST. 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. EST.

The telephone number for Technical Support is (919) 677-8008. 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.

You may choose any area listed below:

- DATA step problems with SAS DATA step programming
- graphics questions about any SAS/GRAPH procedure or graphics device, the Annotate facility, or the DATA Step Graphics Interface (DSGI), regardless of operating system
- base SAS questions concerning any base SAS procedure or the macro facility, regardless of operating system
- mainframe systems questions regarding the installation of the SAS System on a mainframe, interfaces to databases, performance, system options, display manager, or system interfaces
- minicomputer systems questions regarding the installation of the SAS System on a minicomputer, interfaces to databases, performance, system options, display manager, or system interfaces
- PC and workstation systems questions regarding the installation of the SAS System on a PC or workstation, interfaces to databases, performance, system options, display manager, or system interfaces
- full-screen products questions regarding SAS/AF, SAS/FSP, and SAS/ASSIST software, or Screen Control Language, regardless of operating system
- C Compiler products questions regarding the SAS/C Compiler product, libraries, or utilities.

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 OCSF to track problems.
You can use the OCSF 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 (not available when using the guest account).


Additional information can be found in SAS Technical Report U-112, A Guide to the SAS Notes, Sample Library, and Online Customer Support Facility, Release 6.06.

Additional SAS Support Tools
In addition to the Technical Support Division, there are several other support tools available to you. They are

• SAS Notes
• sample library
• SUPPORT application
• SAS documentation

SAS Notes
SAS Notes is a collection of information regarding Usage Notes. Contained are

• Usage Notes
• compatibility notes
• SAS programs for manipulating Usage Notes
• full-screen catalogs for displaying Usage and compatibility notes

Entries in the Usage 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 investigate problems.

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 will be some SAS source code changes required. The compatibility notes contain the information regarding these circumstances. By default, they are loaded with the Usage Note 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 code is stored. For example, the ALPHA member of the sample library contains the SAS code necessary to compute an alpha factor analysis.

Each member of the sample library contains a header that gives

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

Support Application
An index to the sample library is provided through the SUPPORT application. This 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
• customize the colors for this application.

For more information on the SAS Notes, sample library, Online Customer Support Facility or the SUPPORT application, reference SAS Technical Report U-112.

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
• usage guides
• reference guides
• syntax guides
• system-specific documents.

Introductory guides provide basic introductory information for the specific product.

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 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 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.
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, and the new SUPPORT application, you can effectively support the SAS System at your site.