A Short SASsy Overview of SAS® Tech Support and SAS-L JoAnn Matthews, Highmark Blue Cross/Blue Shield, Pittsburgh, PA

ABSTRACT

Sooner or later, SAS_® users will face an issue that seems impossible to solve. This SASsy paper will demonstrate the use of two resources for SAS users: SAS Institute's Tech Support and SAS-L.

SAS Institute is committed to user support. SAS's Technical Support is one resource that can be used. Customer needs for immediate technical support are met by phone, fax or e-mail. In addition, SAS Institute offers free subscriptions to e-newsletters, RSS feeds and Blogs.

SAS-L is another powerful resource for SAS users. Founded in 1986, SAS-L is one of the oldest and most successful programming-oriented Listserv lists. Populated by SAS users, and independent of SAS Institute, SAS-L affords users the opportunity to communicate with some of the best and brightest SAS programmers around the globe, with virtually instantaneous peer-to-peer exchange.

INTRODUCTION

New users of SAS software may not be aware of the myriad of resources that are available to them free of charge, from SAS Institute. SAS is committed to the success of the SAS community. SAS offers free technical assistance, free blogging sites, free subscription to newsletters, and the latest resource, SAScommunity.org, a web-based resource. SAS also offers FAQ and example programs. SAS users can also subscribe to free e-Newsletters.

One powerful resource that is not officially a SAS offering is SAS-L. This list-serve was created by users and is maintained by users. SAS-L provides users from around the world the opportunity to communicate with other users, with the speed of their Internet Service provider (ISP).

When a user faces that issue that seems unsolvable, there are a number of free resources available. This paper will discuss SAS's Technical Support and SAS-L.

SAS TECHNICAL SUPPORT

New users of SAS software may not be aware of the extent to which SAS Institute is committed to the success of the SAS user community. If you visit the SAS Technical Support page on the SAS web site, the mission of SAS's Technical Support is to "help customers make the best use of our software products through effective and responsive support, active advocacy, and a broad and flexible range of self-help resources."

SAS's Technical Support staff offer unlimited telephone support, access to support services on the Customer Support Web site, and e-mail support. And they do not just provide guidance with syntax. SAS Technical Support staff can solve all manner of issues such as what appropriate SAS procedure to use, specific questions you might have about features, options and limitations of a procedure. They can provide references for formulas, statistical techniques, provide unlimited guidance to interpret your output, and provide statistical advice on a case-by-case basis. And best of all, there is no additional charge for any of these services - all are considered part of your licensing agreement.

SAS SUPPORT ON THE WEB

If you have Internet access, point your browser to htpp://support.sas.com. Under "Support", click on "Submit a Problem". See Figure 1.

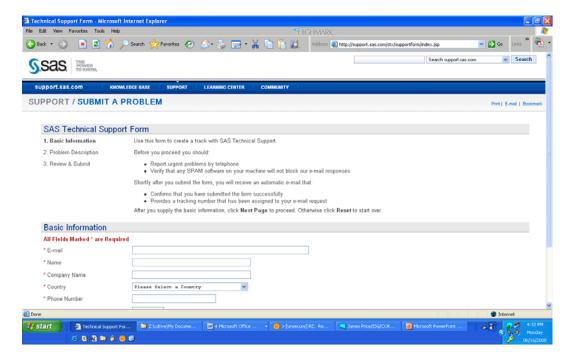


Figure 1

Be sure to complete all required fields including Company Site Number and Company Name. This information is required anytime you contact Technical Support. It is easy to identify as it appears at the top of every log. See Figure 2.

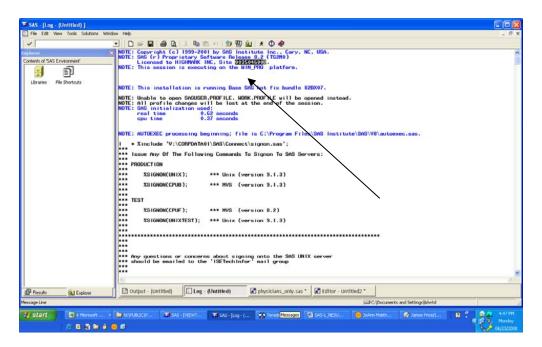


Figure 2

Once you have successfully submitted your issue on the web, you will receive a confirmation e-mail from SAS. See Figure 3.

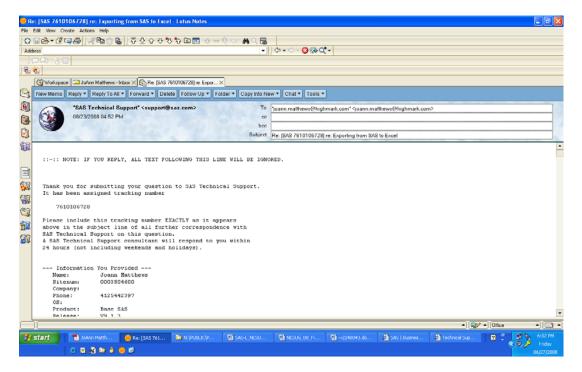


Figure 3

In addition to having the capability of submitting a problem, there are many other resources available for problem resolution. On the "Knowledge Base/Papers" page, a user can access SAS technical papers that will help to accomplish a goal. See Figure 4.

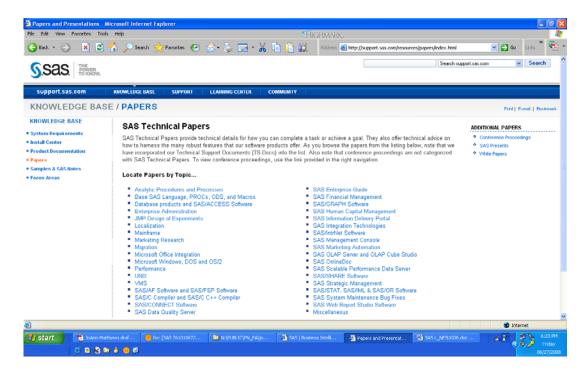


Figure 4

Click on any topic and you will find a huge number of papers to pick from, like "Better Hashing in SAS 9.2" or "How to Add A Little Spice to your PDF Output" - only two of the many papers on this page. See Figure 5.

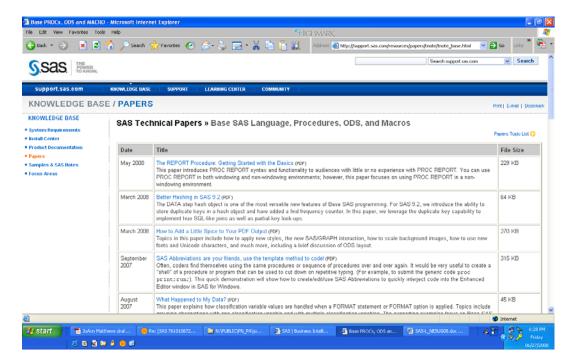


Figure 5

On this same Knowledge Base page, you can point to "Samples and SAS Notes." This page has samples of most of the procedures that are used in SAS, along with a full description of the procedure, sample data, and output.

Click on "Samples & SAS Notes" on the left hand navigation. See Figure 6.

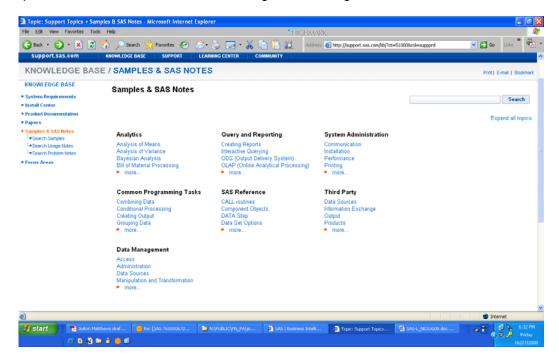


Figure 6

Now, point to "Combining Data" and open the paper entitled "Combine data sets based upon similar values." There you will see a number of tabs. See Figure 7.



Figure 7

If you click on the "Full Code" tab, you will see the syntax. If you click on the "Results" tab, you will see the output that the code created. See Figure 8.

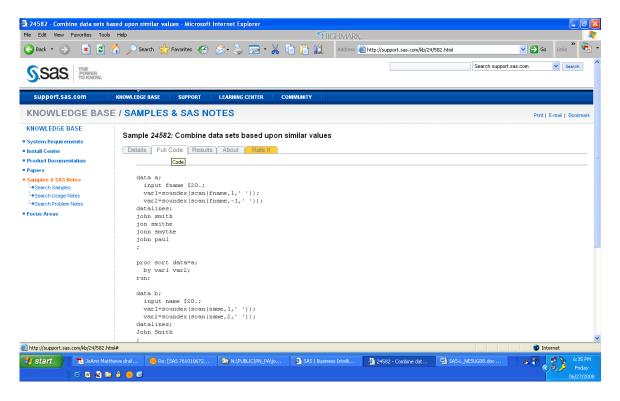


Figure 8

There are very rich resources available on these SAS Support pages. Be curious and explore.

SAS TECHNICAL ASSISTANCE VIA E-MAIL

If you prefer, you can contact SAS's Technical Support either by phone, or e-mail. The Electronic Mail Interface to Technical Support can be reached by sending a message to: support@sas.com.

E-mails to this address must be in a very specific format. See Figure 9.

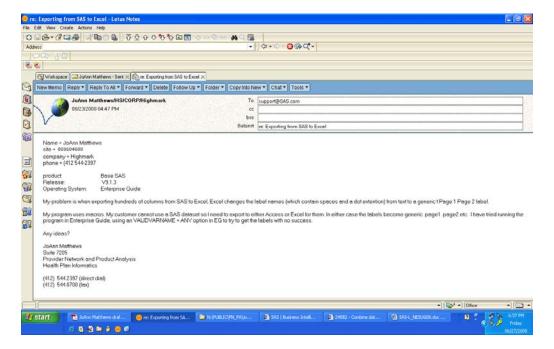


Figure 9

Once SAS receives your request, you will receive a confirmation e-mail from SAS with a tracking number. See Figure 10.

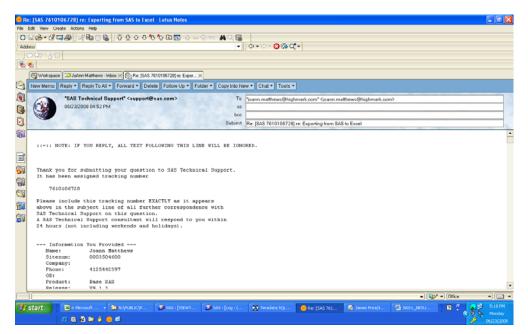


Figure 10

SAS TECHNICAL ASSISTANCE VIA PHONE AND FAX

If you prefer a more traditional method, you can reach a friendly voice at 919-677-8008, between 9 AM and 8 PM Eastern time, Monday through Friday. Or you can fax your question to Technical Assistance. That fax number is 919-677-4444. As with any Technical Support communication, whether phone, fax or e-mail, you will need to identify your company site number and company name.

SAS-L - The ListServe

SAS-L is another powerful free resource that is available to SAS users. SAS-L is not provided by SAS, but rather a peer-to-peer list serve that was developed at the University of Georgia by users. SAS-L provides users the ability to communicate with some of the best and brightest SAS users in the world via the internet. ListServ software controls electronic mailing lists that allow those who have subscribed to the list a forum to participate in discussions or send and receive e-mail about a specific topic. This ListIServ automatically distributes e-mail messages from one member of a list to all other members on that list. Think of a ListServ as a kind of electronic mail facility, if you will, that allows subscribers to the LISTSERV to participate in electronic discussion groups on any of thousands of subjects.

If you have an interest in a particular subject, chances are excellent that there is a discussion group on that subject. There are more than 50,000 ListServ's, out of the 199,000 catalogued on the CataList website.³ At present, the University of Georgia supports 1,800 such newsgroups or lists for their university administration.

What makes SAS-L so exciting is that is it a rich forum for sharing knowledge. SAS-L is an excellent tool, and one that every SAS programmer should take advantage of. What better way to share knowledge than on SAS-L? SAS-L is not just valuable for the new user who is trying to solve a syntax or coding issue. Seasoned SAS programmers are also encouraged to share their expertise and knowledge with other SAS-L participants, and keep the free flow of ideas and information. Those of you who have expertise in SAS programming and syntax can subscribe to SAS-L and participate in the sharing of knowledge that is the foundation of this LISTSERV. In the process you would be helping other SAS programers worldwide gain a better understanding of the intricacies of the SAS language.

In his excellent paper on SAS-L from SUGI 25, "A Personal View of SAS-L as a Teaching Tool", lan Whitlock talks about the strength of the SAS-L LISTSERV as an excellent teaching tool and the wealth of topics and advice that SAS-L provides. Of course, he also cautions that a participant must be able to recognize a good solution from a bad one, but also suggests that SAS-L is self-correcting in that the group participating on SAS-L sees when poor advice is given, and jumps in to the discussion to clarify.

Therefore, if you are a new user or someone who enjoys sharing your expertise, SAS-L can be a rich and valuable experience. Whether a new user or not, the value of SAS-L is apparent after you have tried to research syntax using a standard SAS manual. Often times, trying to find information in a manual can be daunting. Sometimes, just figuring out where to look is the major stumbling block. You may know what you want to do, but not how it is referenced in the manual. Most software manuals are not particularly "user friendly." In the time it takes to open the manual and begin the arduous process of scanning the index, a SAS user can search the archives in Google, or post a question via the SAS-L list-serve and receive a quick answer.

Why reinvent the wheel? There are SAS experts, waiting to solve SAS_® problems, or showcase their SAS knowledge, for the world to see. Your question will be answered almost immediately, and by several SAS experts, with possibly several solutions. You can then pick the solution that makes the most sense to you.

So how does SAS-L work? Originally SAS-L messages were sent over electronic bulletin boards, in the days prior to the Internet. Now, topics of interest to the SAS user world are sent via the internet via e-mail LISTSERV servers. SAS-L is a "peered" list, which means that it resides on a number of list servers, and messages on one server will be sent to all LISTSERV servers. This is a very powerful feature of a ListServ. The ListServ is also "gated" to a newsgroup called comp.soft-sys.sas, which means you can access SAS-L in several ways; 1) either subscribing to the LISTSERV, 2) viewing newsgroups, or lastly, and the most easily accessible way, 3) via the internet on Google.com. Google is a search engine that has archived 20 years of Usenet messages on a site called Google Groups. This website mirrors the ListServ.

HOW TO SUBSCRIBE TO SAS-L

You can subscribe officially to SAS-L by sending a message to: listserv.uga.edu. or listserv@listserv.vt.edu, or listserv.uga.edu. The subject line should have "subscribe SAS-L" followed by a space and your first and last name. No other message should be added to the body of the e-mail. See Figure 11.

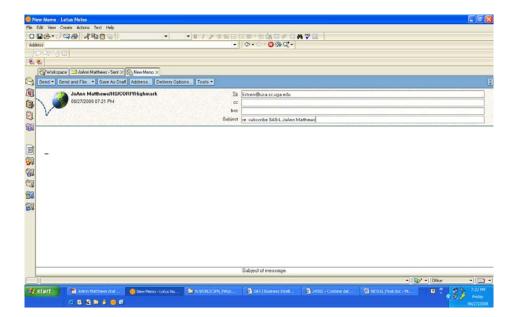


Figure 11

If you deviate at all from this format, the subscription will not be processed. If you have typed the subject line correctly, and your subscription is processed, you will receive an e-mail confirmation from the ListServ with instructions on how to confirm the subscription. This e-mail will explain how to leave the list, and how to communicate with all others on the list. See Figure 12.

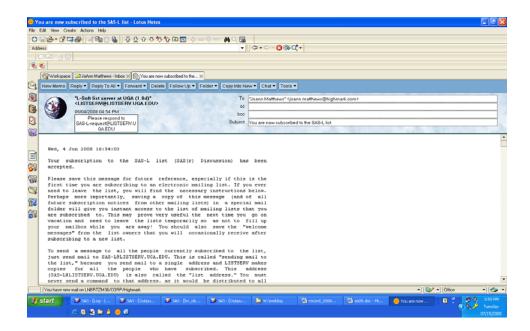


Figure 12

To send a message to all the others on the ListServ, simply send a message to <u>SAS-L@LISTSERV.UGA.EDU</u>. This is the "Sending" address or the "list address." Whatever is typed within the body of the e-mail will be distributed to everyone else on the ListServ. Be cautious as something quite personal could be broadcast to the entire ListServ, if someone is careless.

And be sure to never send "commands" to the "list address" - <u>SAS-L@LISTSERV.UGA.EDU</u>, as those commands will be distributed to everyone who has subscribed! For example, if you want to unsubscribe to SAS-L, you would send a "command" to the ListServ to perform this action. In this example, the command is SIGN-OFF SAS-L. Because some users have no control over the content of the "Subject" line, the command to the ListServ is sent in the body of the e-mail message, not on the "Subject" line. See Figure 13.

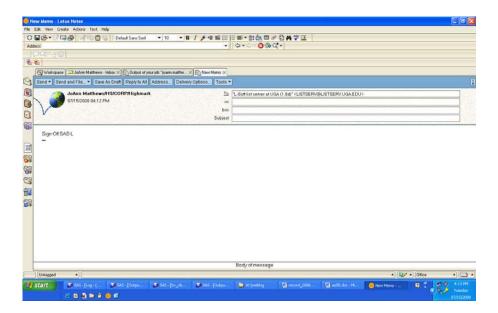


Figure 13

If you accidentally forget to delete your signature from the e-mail, you will be unsubscribed but the confirmation e-mail will display all other text as error messages. The ListServ will try to interpret any other text as an action or a "command" to be performed. See Figure 14.

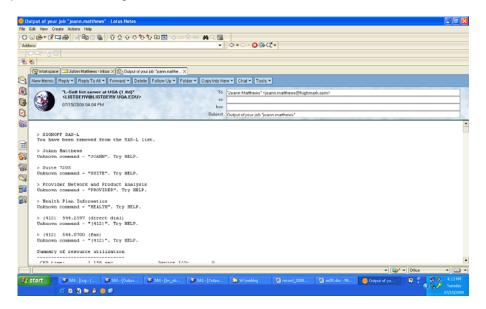


Figure 14

To see a complete list of commands that can be used, send an "INFO REFCARD" command to the listserv.uga.edu address. Or you can get a list of archive files by sending an "INDEX SAS-L" command. For more information about commands, you can send a "INFO DATABASE" command.

The only disadvantage of being a subscriber is that you will receive many messages each day. When a regular subscriber to SAS-L sends a message to the list-serve with a question, a copy of that message is sent to every subscriber to the service, virtually instantaneously, depending on the speed of the server. At present there are several thousand subscribers to SAS-L. Those messages accumulate quickly in your e-mail box, and unless you are diligent and delete messages regularly, you may exceed your disk quota on your e-mail server.

ACCESSING SAS-L VIA NEWSGROUPS

Another option is to be a "casual" subscriber to SAS-L by using newsgroups. This way you can access the information unofficially, without actually subscribing. In order to do this you will need to configure your browser to access the newsreader in your browser, either Netscape Messenger, or Outlook Express, in Microsoft's Explorer. The name of the newsgroup is comp.soft-sys.sas.

The advantage of being a casual SAS-L "browser" rather than a subscriber is that your e-mail quota does not get filled with the large number of e-mails that are sent each day via the Listerv. For some users, this is an important distinction. Instructions for setting up newsgroups in your environment are more complicated and require knowledge of the name of the news server.

ACCESSING SAS-L ON GOOGLE

Lastly, you can access information on SAS-L via the Google search engine at www.google.com. Google mirrors the Usenet discussion forum, and contains all postings on SAS-L. Thus, you can search the archives easily, and even post a message. Go to the website, and search for SAS-L. You can subscribe or unsubscribe on Google by pointing your browser to http://www.listserv.uga.edu. Here you will find an interface to subscribe or unsubscribe. See Figure 15.



Figure 15

Google is not the only place where SAS programmers can share resources. In an excellent paper at SUGI 27, Wei Cheng talks about other resources that are available on the internet, including how to search SAS-L using other

search engines and detailed information on ListServs. There is even a reference to the General User's Guide to LISTSERV, so that you can learn to use LISTSERVs correctly.

SUMMARY

SAS is committed to providing SAS users technical support, whether accessed by e-mail, fax, phone, or web. SAS-L is a peer-to-peer list serve software that also can be used as a power resource. Whether you access SAS-L via the internet, by simply doing a search on Google, through newsgroups, or via a subscription, the beauty of SAS-L is the speed with which responses appear. Difficult coding questions are usually solved by "SAS-L experts" quickly. And more often than not, there are several solutions. Thus, a new user can pick the solution that makes the most sense to him.

But the true beauty of this facility is the vicarious fun that one can have following the threads. The brilliant and resultant humor are well worth the amount of time that is invested in cleaning up unwanted e-mail messages.

While SAS-L is "officially" independent of SAS Institute, SAS Institute frequently monitors SAS-L to ensure accuracy of the information that is being disseminated. SAS employees, however, are not encouraged to communicate via SAS-L. This is a list-serve for the SAS community, not SAS Institute.

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- 7. Cheng, Wei, Internet and Web Resources for SAS Programmers and Statisticians, SAS Users Group International 27, paper 239-26, 2002.

CONTACT INFORMATION

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