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Online Docs and Help: Tips for Old Dogs and New Pups

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ABSTRACT

Who says you can't teach an old dog new tricks? Are you an "old dog" that is at a loss without your paper manual? Are you a "new pup" that is just totally overwhelmed? This presentation covers some helpful tips that the authors learned while trying to get used to reaching for the mouse instead of the bookshelf when they needed to look up something. Both SAS OnlineDoc® and SAS® System Help will be covered. One question that will be discussed - why do you need both?

INTRODUCTION

I've been using SAS since way back in the days of punched cards. I actually LIKE my nice, familiar manuals. Now the boss wants me to use all of these newfangled online gizmos instead. Are they really worth it?

Brave new world, or comfy old one?

We do feel your pain. Some of us remember the good old days, back before computer viruses and database marketing, when the documentation for the entire SAS system fit into one reasonably-sized volume. In fact, we understand that some veteran SAS users still possess their copies of the SAS 79 manual. (We really aren't sure whether they are actually using the manuals or hope to sell them for a large profit on eBay sometime down the road.)

Time marches on, however. And, let's face it, it's been a long time since SAS software has been small and simple enough for the documentation to fit into a single book. The many enhancements to SAS over the years have made it a much more powerful tool, but at the same time a more complex one. As the capabilities of the software expanded, so too did the documentation.

Up until a few years ago, SAS Institute used to include one printed copy of each manual whenever it shipped a new product or new software release. Since the male member of the authoring team for this paper was the person at Westat who had overall responsibility for SAS-related issues, such as fielding questions about the capabilities of infrequently-used products, he felt compelled to hold onto all of these manuals in case someone might need them. The end result: over 5 feet of bookshelf space occupied by Version 6 software documentation. He has no desire to repeat this experience for Version 8.

So, if nothing else, the electronic documentation that is now available is invaluable just for dealing with the sheer physical size of the documentation in its printed form. This should be particularly appreciated by consultants or other frequent travelers: your laptop now can hold all of the documentation as well as the software itself.

We hope that this paper will help you make effective use of these modern tools. In the remaining sections, we'll spotlight some of the key changes between the Version 6 and Version 8 help systems, point out some other useful sources of information for getting started, and then describe some useful tips and tricks for taking full advantage of the SAS System Help and the OnlineDoc.

Note that all of the specific examples and screen shots in this paper were produced using SAS running under Windows 98. Most of them should be applicable to other versions of Windows, and some (but not all) will also be relevant to those of you who are running SAS with other operating systems. The examples and tricks also assume that you are using the default access methods for both systems: Microsoft HTML Help for the SAS System Help, and a Java-enabled browser for the OnlineDoc. Other ways of accessing the information in both systems are available, but with some loss of functionality.

THE LEAP FROM VERSION 6 TO VERSION 8

I did play around a little with the Help menu items in Version 6 of SAS. Are there big differences in Version 8?

In a word, yes.

Although Version 6 users shouldn't have a lot of trouble adapting to Version 8, the Help menu items are different in the two versions, as are the underlying help system technologies that are used.

The Help menu for SAS 6.12 is illustrated below. The main menu entries are "Extended help" and "SAS system". Both of these bring up the main Help Topics dialog, with tabs for Contents, Index, and Find. (Try as we might, we haven't been able to find any difference between the "Extended help" and "SAS system" entries.) From any of these tabs, you eventually get to individual help display pages, which with any luck will have the information you were looking for.
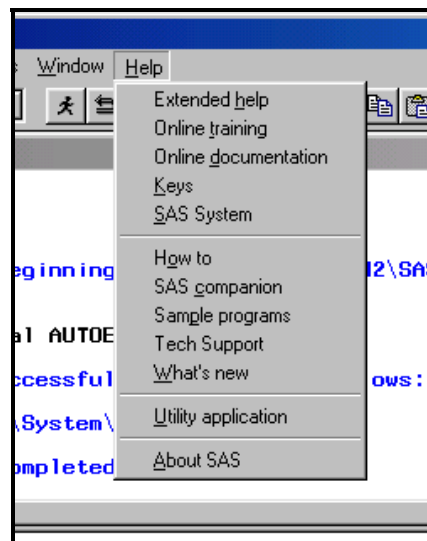

Figure 1. Help menu items in SAS 6.12.

The "Online training" item will bring up SAS/TUTOR® if you have it licensed, while selecting "Online documentation" brings up an initial (and very incomplete) attempt to bring some elements of the SAS manuals online. Several of the other menu items, such as "How to" and "SAS companion," simply provide an expedited way of getting to some of the individual "books" that are among those that show up in the Contents tab of the main Extended Help screen.

For Version 6, "Microsoft Windows Help" is the underlying technology used. The "Find" tab was always an annoying feature

of this system. When you first use the software, you have to wait for it to create an index of all the words in the help system. Moreover, the indexing process was not at all intelligent -- "all" words included "a" and "the", not to mention all of the variable names used in the sample programs. Nor was the indexing smart enough to combine differently-capitalized versions of the same word, so you wind up with separate entries for "compress", "Compress", and "COMPRESS" (not to mention "the", "The", and "THE"). All in all, not one of Microsoft's better efforts.

Version 8, which will be covered in more detail later in this paper, uses a much different set of Help menu items (see figure below), as well as different technology for the system itself. The list of menu items begins with "SAS System Help" and ends with "About SAS System." Several other items are in-between.
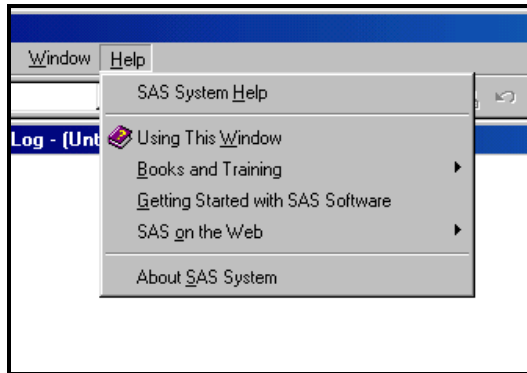

Figure 2. Help menu items in SAS 8.2.

"Using This Window" is a nice feature: as the name implies, it brings you into the section of the SAS System Help that provides information about the active window -- Explorer, Log, Enhanced Editor, or whatever. "Getting Started with SAS Software" brings up a tutorial section within the SAS System Help that explains the SAS workspace and illustrates how to perform some basic tasks in a point-and-click fashion.

The other two items use cascading menus to access additional types of information. "SAS on the Web" takes you to your choice of several key pages at the SAS Institute web site (assuming of course that you are connected to the Internet), while "Books and Training" allows you to access either SAS OnlineTutor® (if it's licensed) or the SAS OnlineDoc.

Fortunately, the "missing" items from the Version 6 Help menu (mostly) haven't been lost in Version 8, just relocated:

Version 6 Help menu item	Version 8 equivalent
Keys	In Options submenu under Tools
How to	Various -- mainly in the "SAS Software Tutorials" book
SAS companion	"Using SAS Software with Your Operating Environment" book in the Contents tab
Sample programs	"Sample SAS Programs and Applications" book
Tech Support	In the "SAS on the Web" Help submenu
What's new	"What's New in ..." items in the "Welcome to the SAS System" book
Utility application	Apparently no longer supplied in this form

TO "HELP" OR TO "DOC"
OK, you've been talking about the "SAS System Help" and the "OnlineDoc", and you promised to tell me what the difference is. So what gives?

Well, we're not exactly sure. Much of the content of the two systems is identical. It seems as though the SAS System Help is primarily an evolution of the online Help found in Version 6 of SAS, while the OnlineDoc represents a concerted effort to focus on electronic rather than hardcopy delivery of "traditional" SAS manuals.

While basic syntax is covered in both systems, the OnlineDoc frequently has more detailed and conceptual information. For instance, the OnlineDoc has entire chapters on using DDE and accessing external DLLs when running SAS under Windows, while the SAS System Help mentions these topics only briefly (although it does refer the user to the OnlineDoc for additional information). Similarly, the OnlineDoc for PROC TABULATE contains an extensive overview and discussion of terminology, both of which are missing from the SAS System Help.

On the other hand, in Version 8 at least, one big advantage of the SAS System Help is that it has more current information. If you want to know the syntax of statements or options that were added in Version 8.1 or 8.2 of SAS, you have to use the SAS System Help, since the OnlineDoc was not updated for these incremental releases.

The details of the user interface are what really differentiate the two systems. To some extent, the choice between the HTML Help interface used in the SAS System Help and the browser-based Java applet used by the OnlineDoc is a matter of personal preference. However, each system offers certain concrete advantages.

Favorites. The main advantage of the SAS System Help interface is that it's much easier to mark often-used locations so that you can go back to them easily ("Favorites"). This is very easy to do in the SAS System Help. It's possible in the OnlineDoc, but only with a cumbersome and non-intuitive procedure. We describe how to do this in both systems later in the paper, so you can judge for yourself.

Indexing. Although it's more difficult to save Favorites with the OnlineDoc, the implementation of this interface does have several advantages over the SAS System Help. While both systems let you use an index to find things in the documentation, the indexing feature is much better implemented in the OnlineDoc than in SAS System Help. The Master Index for the OnlineDoc lets you quickly get to the section of the index beginning with a particular letter, and each index entry includes a code indicating what manual the entry is found in. The OnlineDoc also lets you browse through the index of a single manual -- so, if you want to look for something specifically in the context of SAS macro, you can easily restrict yourself to the index entries in the SAS Macro Language Reference. In contrast, all the SAS System Help lets you do is to either find (by typing) or scroll to a particular entry in a single index list. Its index also seems to be less complete: we were not successful in finding an entry for the KEYLABEL statement in PROC TABULATE, for instance.

Searches. Similarly, the Search facility in OnlineDoc is much more flexible (not to mention faster) than its counterpart in the SAS System Help. As with indexing, you can either search the entire OnlineDoc, subsections of the documentation (e.g., just documentation for Base SAS), or just particular books. In addition to just searching for an individual word, you can choose to find all entries containing any of the words you specify, all of the words, or the exact phrase. There is also a syntax for specifying advanced search criteria. As an additional bonus, the search results are grouped by manual, with a shaded icon used

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to highlight the most relevant results.

In the SAS System Help, the Search capabilities are much more limited. You cannot limit the sections of the help information that are searched, and you can't specify the type of search that is done. (If you enter more than one word, only those pages containing all of the words listed are returned.) The results are returned in alphabetical order by the name of the page, which makes it almost impossible to separate the wheat from the chaff when a large number of hits are found.

Navigation. Finally, the OnlineDoc offers more in the way of built-in hyperlinks for navigation. Nearly all pages have links for Chapter Contents (or Book Contents), Previous, and Next at the top and bottom. This feature makes it extremely easy to sequentially work your way through a topic, such as all of the options for a particular statement. The OnlineDoc seems to do a better job of linking to examples and to information outside the current topic. For instance, the discussion of procedure syntax for PROC REPORT in the OnlineDoc includes links to ODS documentation, statements that can be used in multiple procedures, and global statements. To be completely honest, though, neither system implements hyperlinking nearly as fully as it should. The PROC REPORT syntax page just mentioned also lists all of the procedure's statements, both alphabetically and by function, but neither list includes hyperlinks to the full documentation of the statements. Here the SAS System Help actually does a better job.

GETTING THE LAY OF THE LAND
Is there anyplace else I should check for more tips on how best to use these systems?

Both the OnlineDoc and SAS System Help include information about how to make best use of the system. It's well worth a few minutes of your time to take a look at this material.

For the OnlineDoc, just use the Help tab. You can click on the "Quick Tour" button for a brief but complete presentation of the system. Or, you can select from among the various specific topics listed. If you like having full control of your searches, select "using an advanced query" to get a full explanation of the conventions used for logic operators, proximity conditions, and threshold conditions.

To get (brief) information about using the SAS System Help, select the Contents tab, expand "Welcome to the SAS System" (the first topic listed), then expand "Getting Help in SAS Software".

The SUGI 25 paper by Jim Ashton, Sean Gargan, and Dee Stribling provides a useful overview of getting SAS information online, including the SAS System Help and OnlineDoc.

The SAS Institute web site has a nice summary of the OnlineDoc at http://www.sas.com/service/doc/cdrom/v8pdf/faq.html. It notes, among other things, that the OnlineDoc contains over 21,000 pages of reference documentation from 45 books (which, not incidentally, would cost over $2,000 in printed format).

BEST NEW TRICKS -- "HELP" DIVISION
So, what are some good tricks for using the SAS System Help?

Oops -- that IS what we promised, isn't it? Here are several, from the simple to the complex.

MARKING YOUR TERRITORY WITH "FAVORITES"

There is some bad news and some good news about the SAS System Help. The bad news is that it's not always easy to find certain key locations: you may need to do quite a bit of navigating. The good news is that, once you've found an interesting page, you don't have to go to all that trouble again to get back to it later. That is, if you take advantage of the Favorites tab.

Let's say, for instance, that you frequently need to check on the syntax of the procedures in Base SAS (don't we all). You've heard through the grapevine that all of the PROCs are listed on a single page, in linkable form, and you set out to find that page.
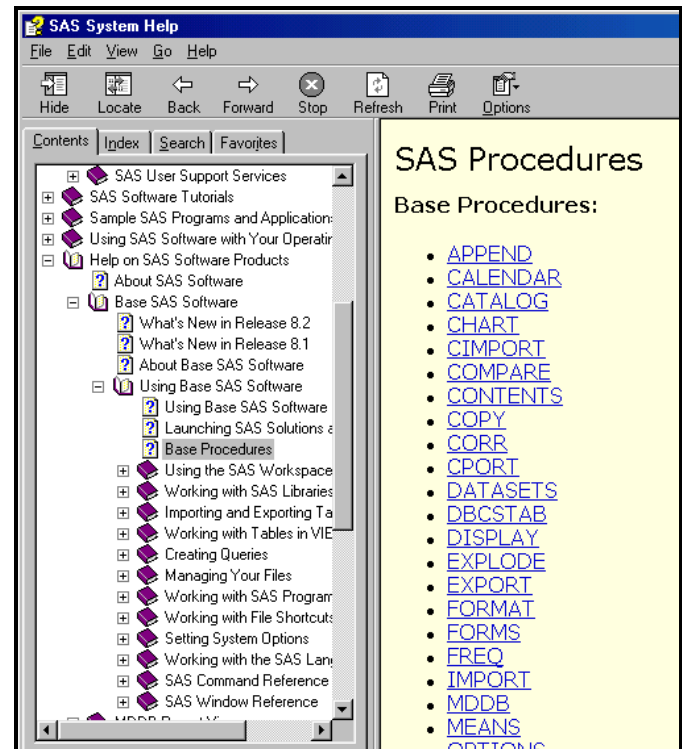

Figure 3. List of Base SAS Procedures.

Now, wasn't that fun? Drilling all the way down to find that nugget was a fair amount of work -- there must be an easier way. (Apparently this particular exercise comes up a lot -- the path to this page is documented in SAS Note SN-001643.) Fortunately, the SAS System Help provides a simple way of flagging important pages for easy access later. Just find the page once, then click on the Favorites tab. Ideally the Current Topic text box at the bottom will contain a meaningful label for the page (although sometimes it may just contain a cryptic URL-type address). No matter -- if you don't find the current label sufficiently mnemonic for you, simply change it, then click the Add button. Presto, you're set! The next time you get into the SAS System Help and need to get to that page, just click on the Favorites tab, then double-click on one of the topics you've saved to go directly to that page.
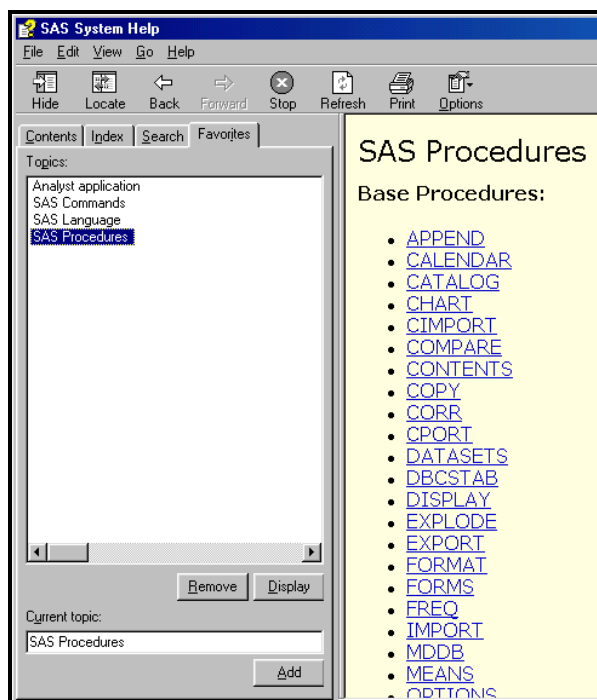
Figure 4. Using the Favorites tab.

IGNORE THE "LOCATE" BUTTON

Both of us were mightily puzzled by the Locate button, and the corresponding item in the View menu labeled Locate Topic in Contents. Our theory was that the button was intended to synchronize the arrangement of the Contents tree on the left with the topic currently showing on the right. Occasionally this worked, but more often it didn't seem to do much of anything at all.

The folks at SAS Institute Technical Support were kind enough to explain what was going on. Our theory about what Locate was supposed to do was in fact correct. The problem is that most individual pages within the SAS System Help do not correspond directly to Table of Contents entries -- so if one of these pages is the current topic, Locate doesn't do anything.

So, save yourself some frustration and just leave Locate alone.

MAKING THE BEST OF SEARCH

As we discussed above, the search facilities in the SAS System Help are not nearly as flexible as those in the OnlineDoc, particularly in terms of controlling how the search is carried out when you enter multiple keywords. You can, however, use quotation marks to search for a specific phrase. If you enter *missing value* (with no quotation marks) into the search keyword box, the system will find all pages that contain both of the words you specified, but not necessarily next to each other. If you're only interested in "missing value" as a phrase, you can surround it with double quotation marks in the text entry box so that the search engine will only return pages containing that phrase.

LET YOUR FINGERS DO THE WALKING

Some of us "old dogs" still find that the best way to get from Point A to Point B sometimes is just to type a little, rather than pointing and clicking. Fortunately for us geezers, the SAS command bar allows us some useful shortcuts into the SAS System Help.

Simply typing HELP is equivalent to selecting the Using This Window item from the Help menu (or pressing the F1 key, or clicking the Help icon on the standard toolbar). The real fun comes when you type something after HELP.

For instance, this is a great way to hone in on help for a particular SAS product. Type HELP SAS/GRAPH, for instance, and you will magically be transported directly to the main help page for SAS/GRAPH® software.

You can also get directly to the help information for a particular SAS procedure, if you know the secret. The intuitive HELP PROC MEANS, unfortunately, doesn't work. HELP MEANS PROCEDURE, however, does. Abbreviating PROCEDURE to PROC will work with some, but not all, procedures. (Don't ask us why -- we didn't design it. Nor can we guarantee that even the full form works with all PROCs.)

The Help information for the SAS System Help suggests that you can also follow the word HELP with certain other key words, such as FORMATS or FUNCTIONS. Most of these work (although SYSTEMOPTIONS didn't seem to).

KEEPING EVERYTHING IN CONTEXT

If, like us, you often need help with SAS procedure syntax, you can also get context-sensitive help from the Enhanced Editor window. So, if you've just typed in PROC TABULATE and now find yourself at a loss, simply make sure the cursor is somewhere within the word TABULATE, and press the F1 key. This will not only bring up the SAS System Help, but will bring you to the main page for the PROC in question.

On occasion this technique will work with SAS keywords other than procedure names, but don't count on it.

HAVE IT YOUR WAY® (PART 1)

We've already talked about the most important way you can customize your SAS System Help experience, which is to add your most-used pages to the list in your Favorites tab. This section will cover two other ways you can set things up to get quick access to especially pertinent sections of the help material. Both of these take advantage of the capability of adding an argument to the HELP command.

Defining a key. As you may know, the SAS Display Manager lets you assign one or more commands to function keys or certain other keystroke combinations. Thus, in addition to having the F1 key by default bring up help for the current window, you can define other key combinations to get to particular portions of the SAS System Help. Maybe you would like to be able to press F12 and be sent directly to the main help page for PROC TABULATE. Simply type KEYS in the command bar to bring up the Keys window, type HELP TABULATE PROCEDURE in the Definition area opposite F12, and issue the File, Save command. That's all there is to it!

Defining a Toolbar button. In a similar fashion, you can associate a HELP command string with a button on your Toolbar. Select Customize from the Tools menu, activate the Customize tab, and click the Add Tool button. Type HELP TABULATE PROCEDURE into the Command text box, and enter appropriate text for the Help Text (which shows up in the message area at the lower left of the SAS window when the cursor is pointing to the tool) and the Tip Text (which displays a short button description when you place the cursor over the toolbar button). Click the Change Icon button to select an appropriate icon. If you like, use the Up and Down arrows to change the location of your button on
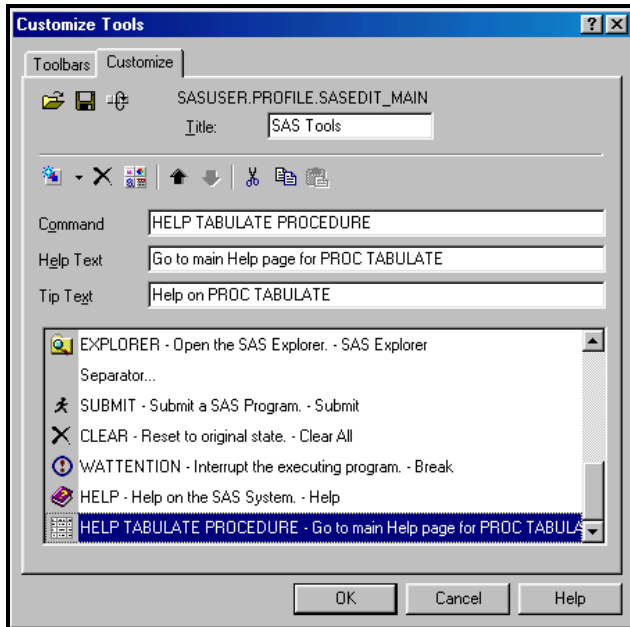
the toolbar. Click OK, and you're done!

Figure 5. Adding a new Toolbar button.

HAVE IT YOUR WAY (PART 2)

Warning Warning Warning -- the following section is for intrepid and advanced users only! Messing with your SAS configuration file or with the properties of your SAS icon is not for the faint of heart. Whatever you do, be sure to make a backup copy first. (We, the authors, cannot be held responsible for any direct or consequential damages!)

Adding items to the SAS Help menu. If adding keyboard shortcuts or toolbar buttons doesn't meet your needs (or satisfy your craving for adventure), you can actually add items to the SAS Help menu in order to easily access specific sections within Help. Using this technique, you don't have to remember which keystrokes you assigned, or which toolbar icon stands for a particular favorite Help page: you simply pull down the Help menu and select what is presumably a clearly-labeled item. Furthermore, you can get to ANY page within the SAS System Help, not just those that can be reached via a HELP command argument.
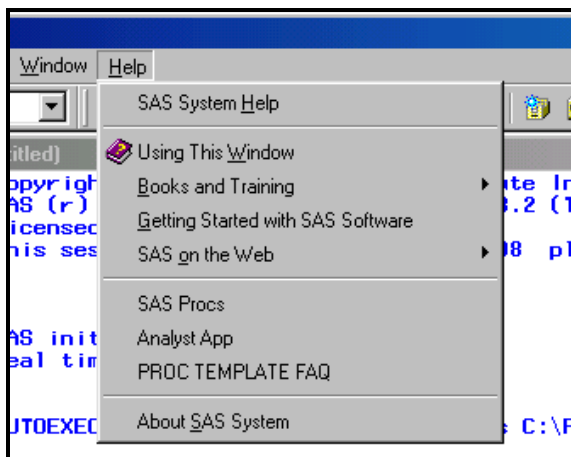

Figure 6. Customized Help menu.

The HELPREGISTER system option is the way to do this. Like some other SAS options, HELPREGISTER must be specified at SAS invocation or in your SAS configuration file: it cannot be used in an OPTIONS statement. One way to do this is to add the HELPREGISTER information to the end of the command line for your SAS icon, although you wind up with a very long command line that is cumbersome to view and edit. A more reasonable choice is to specify this option in a configuration file. A complete discussion of the ins and outs of SAS configuration files is well beyond the scope of this paper, but you can look it up in OnlineDoc. (The SAS System Help contains only a limited discussion of this topic.)

HELPREGISTER requires 2 arguments, although you will more often use it with three or four:

1. Menu string -- Quoted text string, which will be displayed in the menu.
2. Help file location -- The physical file or URL containing the desired help information.
3. Help string -- Quoted text string, which will appear on the status line when the menu item is highlighted
4. Topic -- The specific section within the help file that you want to display.

Let's take a quick look at a set of 3 HELPREGISTER entries as they might appear in a configuration file:

```
-helpregister
 "SAS Procs"
 F:\sas82\SAS\core\help\base.chm
 "SAS Procedures Index"
 "/base.hlp/sashelp_index.htm"

-helpregister
 "Analyst App"
 F:\sas82\SAS\core\help\analyst.chm
 "Help for the Analyst Application"
 "/analyst.hlp/main_contents.htm"

-helpregister
 "PROC TEMPLATE FAQ"
 http://www.sas.com/rnd/base/topics/
      templateFAQ/Template.html
 "FAQ for PROC TEMPLATE"
```

The first two entries add menu items that point to specific locations within the SAS System Help, while the third example points to a file on the SAS Institute web site. (In real life, the complete URL needs to go on a single line.) When using standard HTML files, the Topic argument can specify an anchor name (e.g. Inherit) to point to a specific location within the document.

OK, I understand that, but how do I figure out the Help File Location and Topic within the SAS System Help?

Under Windows, the SAS system help is stored as HtmlHelp compiled help (.chm) files. Particular topic pages within these files are referenced using a path-type location that closely resembles a partial URL.

To figure this out for a particular topic, navigate to the topic of interest in the SAS System Help, right-click somewhere on the right pane, and select Properties. You should get a dialog window that looks something like this:
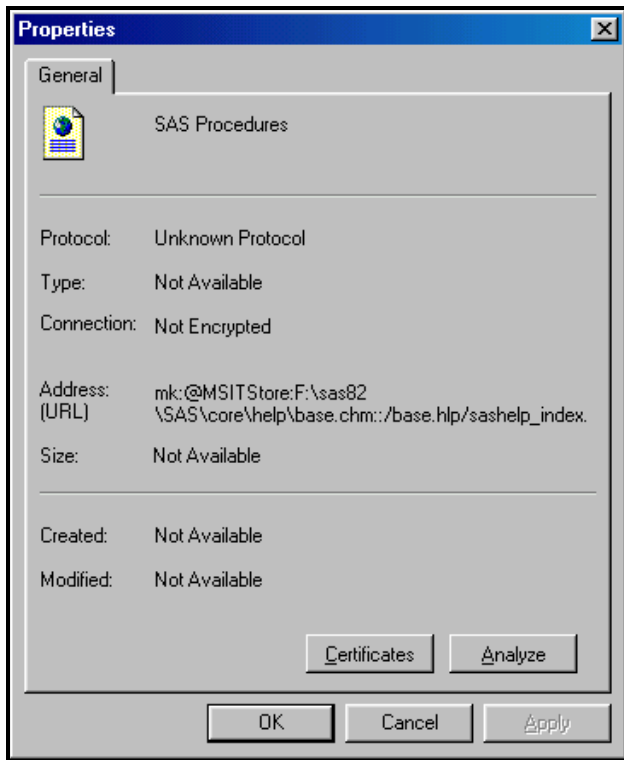
Figure 7. Finding the address of a Help page.

We are interested in the section labeled Address: (URL).
Highlight the **entire** contents of that field -- you will almost
certainly need to scroll to get the whole thing -- press Ctrl-C to
copy it to the clipboard, and paste it into your text editor. You will
get something like the following:

```
mk:@MSITStore:F:\sas82\SAS\core\help\base.chm
::/base.hlp/sashelp_index.htm
```

This starts out with some stuff at the beginning that you don't
need to worry about (the `mk:@MSITStore:`). The portion after
that up to the two colons is the Help File Location, which
becomes the second argument of your HELPREGISTER
specification. The section after the two colons represents the
Topic, which is argument #4 for HELPREGISTER.

A couple other minor notes are worth mentioning. At least with
the machine we were trying things out on, the SAS System Help
window that came up for our customized Help menu entries
lacked a menu bar, although there was a menu bar in the SAS
System Help application started up by the built-in menu items
(such as SAS System Help). Second, the SAS System Help and
the OnlineDoc information for HELPREGISTER suggest some
shortcuts that can be used when specifying the file location.
These didn't work for us: we had to specify the exact location of
the help file to get things to work.

BEST NEW TRICKS -- "DOC" DIVISION
*My head is spinning. How about some nice easy tricks for the
OnlineDoc?*

We'll try.

STARTING OFF ON THE RIGHT FOOT

While you can easily get to the OnlineDoc from within SAS itself
(just select Books and Training, SAS OnlineDoc from the Help
menu), many of us operate in an environment where we don't
necessarily have interactive SAS running at all times on our
computers. (In fact, some folks may run SAS only on a server
and not use it on the desktop at all.) We may be much more
likely to keep our web browsers running all day, however.
Therefore, it makes a lot of sense to save the URL of the opening
page of the OnlineDoc in the list of Favorites (or bookmarks) in
your browser. This lets you get to the documentation quickly,
without having to open up SAS if it's not already running.

GETTING USED TO THE INDEX

Although the indexing provided with the OnlineDoc is quite
flexible, the interface can be a little confusing until you get used
to it. This is because things work differently, depending on
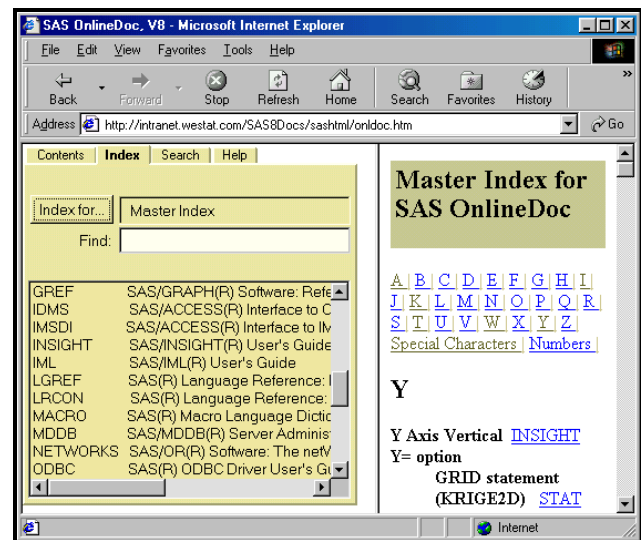whether you are using the Master Index, or the index for an
individual book.

Figure 8. Using the Master Index.

When you are using the Master Index (see figure above), the
actual index entries appear in the right-hand pane of the window.
The entries are grouped into pages by starting letter, with a link to
the page for each letter at the top of each set of entries. Once
you're on the proper page, you can scroll until you find what
you're looking for, or take advantage of your browser's Find
command.

Each index entry includes a link, which is the abbreviation of the
book that contains the entry. The scrollable area in the left pane
contains a cross-reference list of abbreviations and book titles.
Thus, looking at the entry for "Y Axis Vertical" above, we see that
this entry is from the "INSIGHT" manual, which the left pane tells
us represents the SAS/INSIGHT® User's Guide. You can type
into the Find box on the left to scroll the list of abbreviations and
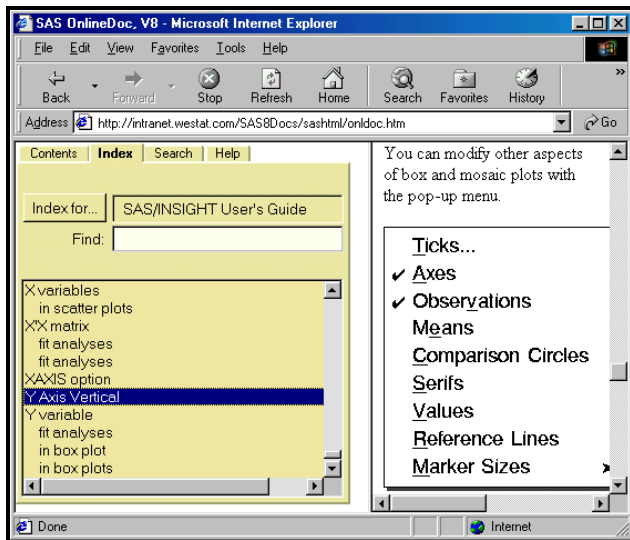manuals to the proper place.

Figure 9. Using the index for a specific book.

To use the index for a particular book, click on the "Index for..." button, navigate to the desired manual, and click OK. (To return to the Master Index, click on the button and then click on the icon for Master Index.) In this mode, the index entries are in the left pane rather than on the right: to find a particular entry, either start typing text in the Find box or use the vertical scroll bar. Once you find a useful entry, click on it and the desired information will appear in the right-hand pane. (Before you click on any entries, the right pane still contains whatever was there before, which can be somewhat confusing.)

USE LOWERCASE TEXT FOR SEARCHES

If you want the OnlineDoc search facility to find all occurrences of your keyword(s) regardless of capitalization, be sure to enter them in all lower case. Words containing any capital letters are treated as case-sensitive. For instance, entering "PACKED" produces 8 matches, while "Packed" produces 22, and "packed" results in 79.

Of course, there are times when you may actually want your search to be case-sensitive. In particular, you can take advantage of the SAS documentation convention of putting language keywords in all uppercase. Searching for "REMOVE", for instance, produces a manageable 26 hits, while searching for "remove" results in 200 matches (which seems to be the most that the system will return per search).

ADVANCED SEARCHES

The OnlineDoc's Search tab provides considerable flexibility in specifying your searches. Using the "Look for:" dropdown box, you can specify whether you want to find all pages with "at least one word in list," or just those with "all the words in list." You can also choose to treat your entry as a "phrase" or an "advanced query."

The advanced query feature lets you include keywords and parentheses in your queries to specify logic, proximity, and threshold conditions. Let's say you want to find out what features SAS software has related to calendars, other than those in PROC CALENDAR or some other PROC. You could try specifying an advanced query like *calendar AND NOT (proc OR procedure)* to eliminate the many PROC CALENDAR hits that a simple search for *calendar* would produce. Don't forget to specify "advanced query" in the "Look for:" box.

You can use wildcard characters in any OnlineDoc search, not just in advanced queries. An asterisk represents zero or more characters, while a question mark matches exactly one character. You may not begin a word with a wildcard character, however.

TAKE ADVANTAGE OF THE NAVIGATION

The OnlineDoc provides quite a few handy ways of getting around. Depending on the task and your own personal preferences, either Contents, Index, or Search can be a good way to get started. Beyond that, the first page in each book and chapter generally provide a very nice overview of its contents, with links to each subsection or topic.

As we noted above, most of the individual topic pages have links for Chapter Contents (or Book Contents), Previous, and Next at the top and bottom, which makes it very easy to move sequentially through a related set of material. And, of course, you can always use the Back button in your browser to retrace the steps you followed to get to a particular place.

SAVING FAVORITE PAGES WITH ONLINE DOC

We saw in our discussion of the SAS System Help how easy it was to quickly return to often-needed pages of information, once they had been added to the Favorites tab. Unfortunately, there is no Favorites tab in the OnlineDoc, so that simple approach is not available to us. Of course, we are operating in a browser environment, so the browser itself has a "Favorites" or "Bookmarks" facility that we ought to be able to use. Because the OnlineDoc uses HTML frames, however, even that is not a simple undertaking. Just following the usual Add Favorites procedure does not work reliably.

We have had more success with the (albeit much more convoluted) procedure below:

1. Save the page as a Favorite the way you normally would. Be sure to give it a meaningful and unique name.
2. Right-click on the page in question (right pane) and select Properties from the pop-up menu.
3. Drag over the entire Address field to highlight it, and press Ctrl-C to copy the URL to the Clipboard.
4. Click OK to close the Properties dialog, and select Organize Favorites from the Favorites menu.
5. Navigate to the item you just added, right-click it, and select Properties.
6. Delete the current contents of the URL field and hit Ctrl-V to paste in the URL that you just copied to the Clipboard.
7. Click OK, then Close.

When you use one of these Favorites items, the topic will fill the entire browser, rather than just the right pane, so you will not have immediate access to the Contents, Index, and Search tabs. We recommend that you add the "home page" of the OnlineDoc to your Favorites in the normal manner, so that you can select it at any point to return to the normal HTML frame environment.

If you usually keep your Windows desktop visible, an easier approach is to right-click on the page of interest and select Create Shortcut from the pop-up menu. This will create a shortcut on your desktop, which you can double-click later to get back to the desired page. As with the first technique we described, the topic will then fill the entire browser. Unfortunately, the shortcut file will get a meaningless name when created (e.g., z0309877.htm), so you will want to go back to the shortcut file before you forget what it is and give it a more meaningful name. The main disadvantage of this approach, for us anyway, is that it is much less convenient to access desktop shortcuts, as opposed to ones that are actually on the Favorites

menu.

SHARE YOUR DISCOVERIES

The technique described above for getting the "full URL" of an individual topic page within the right-hand pane of the OnlineDoc can also be used if you'd like to share a useful page with others, either in an e-mail or in some other document. (Of course, the others with whom you're sharing will have to either be running the OnlineDoc from the same intranet or have an identical local installation for the URL to work.) Simply follow steps 2 and 3 above, and when you're done paste the URL into your message or document.

IT'S EVERYWHERE, IT'S EVERYWHERE!

Let's say you wake up some night at 3 AM with a blinding flash of inspiration that may solve the nagging SAS problem you've been working on for days. You just need to check one thing in the documentation ... but of course, that's on your intranet at work. You know you won't be able to get back to sleep without confirming that your idea will work -- what's a SAS programmer to do?

Well, if you have a home computer and an Internet connection, you're in luck. Just point your browser at www.sas.com/v8doc. This page will let you register for free access to the OnlineDoc from the SAS Institute web site, for those times when you're at home or otherwise away from your usual copy of the online documentation.

PROCURE THE PDF

One legitimate complaint that many folks have about HTML is that printing is not its strong suit. For one thing, page breaks are usually pretty arbitrary. More importantly, while it's relatively easy to print off a single page from a web browser, it's tedious in the extreme to print off an entire set of related pages if you need offline access.

The version of the OnlineDoc that is shipped with SAS software comes in HTML format. You can also purchase (for a very reasonable price) a separate CD-ROM that contains the same material in Adobe's Portable Document Format (PDF) files, one file per book chapter. Since Acrobat Reader makes it very easy to print an entire chapter, or even a subset of consecutive pages, this is certainly a worthwhile investment if you haven't completely achieved a paperless state of mind.

PEACEFUL COEXISTENCE
Well, you started out telling me about these fancy electronic, paperless tools, and now you're telling me to get the material in PDF so I can print some of it out. Are we going around in circles here?

Not necessarily.

Just because SAS now has some innovative ways of getting information electronically doesn't mean you have to abandon hardcopy entirely. Maybe you'd like to print out the table of contents for some of the electronic manuals you refer to most often, or make a paper copy of a few key reference pages so you can keep them close at hand. Particularly with the PDF edition of the OnlineDoc, it's very easy to print out an entire chapter's worth of material so you can take a look at it at home or while traveling (not while driving please!).

Also, don't forget that you can, if you like, purchase a printed copy of nearly all of the SAS manuals that are included in the OnlineDoc.

NOT QUITE UTOPIA
The SAS OnlineDoc overview claims that "you can locate information quickly and easily." I beg to differ.

Let's say, for example, you are new to SAS and you've been told to "impute the missing values by carrying the last value forward." How easy will it be to figure out how to do this using the OnlineDoc?

To be honest, probably not very easy. Using "impute," "missing values," "carry forward," and "last value" as search strings (asking to find both words but not necessarily as a phrase) wouldn't produce anything very useful. You might eventually have more success by going to the Contents tab, drilling your way down to *Statements* in *SAS Language Reference: Dictionary,* and then taking a look at the statement names. Seeing RETAIN might suggest that this could be the key to your assignment. (Of course, if you had known from the beginning that you needed to use RETAIN and just needed to figure out the details, things would have been much easier.)

It's probably fair to say that the information that can be located most "quickly and easily" in the SAS System Help and the OnlineDoc is that which relates to particular statements and other elements of the SAS language. Other information that is more conceptual certainly is included in the OnlineDoc -- for example, in the *SAS Language Reference: Concepts* book. To make the best use of this information, it pays to become familiar with the different manuals that are available through the Contents tab, and with the chapters of the ones that are most relevant to you. You may want to bookmark or even to print out a couple of the key Contents page for easy reference.

Still, the SAS System Help and OnlineDoc should not be viewed as the best or only way to figure out how to do things in SAS -- there are certainly many other alternatives for learning SAS software in general, or figuring out how to accomplish a particular task. After all, according to the FAQ for the OnlineDoc on the SAS Institute web site, "Research shows that the best type of technical information to put on CD-ROM is the reference material --- dictionary- or encyclopedia-style information. Users indicate that they prefer hardcopy format for how-to and example-type technical material."

CONCLUSION
The SAS System Help and the SAS OnlineDoc have come a long way from Version 6 to Version 8, and we expect that the electronic help and documentation features will be even better in Version 9 of the SAS system. Whether you're an "old dog" or a "new pup," learning some of the basic tips and more advanced tricks for using these systems should significantly improve your efficiency and productivity in using SAS software.

DISCLAIMER
All opinions stated are the opinions of the authors and may not reflect the opinions or intent of SAS Institute.

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