

Mastering the SAS® System Using Master Indexes

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ABSTRACT

Knowing information in today's time-squeezed, communications-crammed society is often less important than knowing where to find that information. Indexes, as pointers to information, have become our quick references to the world. Without them, we'd be hard-pressed to locate an unfamiliar street, find a good Italian restaurant while on vacation, or even resole our shoes at the leather repair shop in the newly opened mall.

For information about SAS software, you'll find everything you need in SAS Institute's four master indexes. The master indexes—to the SUGI *Proceedings* and to documentation for Version 5, Version 6, and the SAS/C® Compiler—are your maps to the SAS System. Used effectively, they enhance your computing power by directing you to information quickly and accurately, when you need it. Their clear, easy-to-use codes make them indispensable guides to all SAS software products.

This paper describes the four master indexes to SAS products, highlights their features, and forecasts new direction.

BACKGROUND

Master indexes to SAS System documentation are comprehensive alphabetic lists of key terms that originally appeared in the indexes of SAS manuals, technical reports, and training material.

The *Master Index to SAS System Documentation, Version 5 Edition*, published in 1987, references SAS procedures, options, and applications in close to 70 user's guides, operating system companions, applications guides, SAS Views, and technical reports, among others. The *Master Index to SAS System Documentation, Version 6, Second Edition*, first printed in 1987 as a guide to Release 6.01 documentation and updated and expanded in 1989 to include Release 6.03, contains similar references for more than 50 applications guides, technical reports, and educational material.

The *Master Index to SUGI Proceedings* differs slightly from the Version 5 and Version 6 indexes. Papers from SUGI conferences dating back to SUGI 6 in 1981 are indexed; biannual updates keep the *Proceedings* index current. In addition to a subject index referencing the SAS System, applications, and interfaces, the SUGI master index includes an index of authors whose papers have appeared in previous *Proceedings*.

SAS Technical Report C-108, *Master Index to SAS/C Compiler Documentation*, indexes the eight manuals documenting the SAS/C Compiler. Introduced last year, the SAS/C Compiler master index offers both a general index mirroring the entry types in the version master indexes and an auxiliary index comprehending all SAS/C Compiler functions and commands.

FEATURES

The master indexes to the SAS System are designed to increase your dexterity as a SAS software user. They do so with simple, readable codes, a logical ordering system, and entries that reference not only key terms but applications and tasks.

Codes

Master index codes make finding information easy for both novice and experienced SAS users. For the SAS/C Compiler, Version 5, and Version 6 master indexes, a code of up to five letters is assigned to each document. Codes relate logically to the documents they reference; for example, in the Version 5 index, the *SAS/OR® User's Guide, Version 5 Edition* is coded OR.

Numbers following the codes indicate the page or pages on which the information appears. Hyphenated numbers mean the referenced information continues over a range of pages.

SUGI master index entries list the year of the *Proceedings* and the page number of the referenced information, separated by a colon. Updated version master indexes also follow this form, separating the letter code from the page reference with a colon for added readability.

Legends for each index's codes appear on the inside covers, providing handy reference aids.

Entry Types

Any index lapses into neglect if it is not thorough. The four master indexes encompass all the elements of the SAS System. They reference SAS keywords, such as macros, functions, commands, procedures, and statements. They include tasks you can perform, such as sorting data sets and customizing displays. They list concepts from programming and other disciplines, such as the statistician's chi-squared distribution and the programmer's do while loop.

Especially helpful for users, the master indexes reference specific applications that enable you to tailor SAS software to your needs. For example, suppose, as a medical researcher, you want information about how to apply SAS software in your studies of epidemic diseases. The 1989 SUGI master index includes the following main entry:

medical research (epidemiology) applications 89:1077-1082

You turn to the referenced pages in the *Proceedings of the Fourteenth Annual SAS Users Group International Conference* and find a paper on using base SAS, SAS/FSP®, and SAS/GRAPH® software in epidemiologic investigations.

Entries that reference statements and options used in specific procedures are common. In this type of entry, the procedure name appears in parentheses as follows:

CTEXT= option
BLOCK statement (GCHART) GRAPH:324

This entry points to information on the CTEXT= option, which is used in the BLOCK statement of the GCHART procedure.

Each version master index comprises all the documentation for that version of the software, so users with large SAS libraries can reference their entire collection with one source. Other users may identify documentation they need while scanning the indexes.

Organization

The master indexes are organized into discrete sections and entries are sorted using simple guidelines, so you can find what you need when you need it.

Both the Version 5 master index and the Version 6 master index are divided into 27 sections, one for each letter of the alphabet and one additional section (for special characters in the Version 5 master index and for numbers in the Version 6). The SUGI master index's subject index also has 27 sections, one for each letter of the alphabet and one for special characters. Its author index alphabetizes the names of individuals whose papers appear in the different *Proceedings*.

Part 1 of the SAS/C Compiler master index, the general index, is divided into 33 sections: one for each letter of the alphabet; one for the numbers 0, 1, 2, 3, 4, and 8; and one for special characters. Part 2 lists all the SAS/C functions and commands alphabetically.

In each master index, entries appear alphabetically, ignoring initial and embedded characters. The %INPUT statement, for example, is alphabetized as though it were the INPUT statement, and the L\$CZSYN routine is alphabetized as though it were the LCZSYN routine.

A special character at the end of an entry is treated as an additional character and, thus, affects alphabetization. For example, a word followed by an equal sign succeeds the same word without the equal sign (for example, *baud rate* appears before *BAUD = option*).

Entries containing numbers preceded by only one letter appear at the end of all entries that begin with that letter. For example, *D2 function* follows *DYNAMIC value*. As a rule, numbers are alphabetized after letters.

Entries for key terms are listed by name. For example, look under *MEANS procedure* for information about that procedure. Entries for tasks are listed by the task if it is a computer-industry standard and by the keyword if it isn't. For example, for information on merging data sets, look under the main entry *merging SAS data sets*, but for information on sending files to a device, look under *files, sending to a device*.

Where appropriate, entries include cross-references. Cross-references are of two types, *See* and *See also*. *See* refers you to a synonym where entries for that subject are listed. For example, the main entry *messages from host* contains the cross-reference *See host messages* in the Version 6 master index. *See also* refers you to a related subject that may provide additional information. In the same index, the cross-reference *See also regression procedures* following the main entry *REG procedure* guides you to more information about the REG procedure.

USING THE INDEXES—THREE EXAMPLES

Example 1

As a new Version 6 SAS user, you've just completed the SAS Basics course and want to learn more about the different charts you can produce with the SAS System. You refer to your *Master Index to SAS System Documentation, Version 6, Second Edition* and look up the following entry:

CHART procedure

You find these codes listed after the main entry:

PG:69-95, PG:426, P171:241, SVRW:16

Referring to the code legend on the index's inside cover, you learn that PG stands for the *SAS Procedures Guide, Release 6.03 Edition* (which you have); P171 stands for *SAS Technical Report P-171, Changes and Enhancements to Base SAS Software for Personal Computers, Release 6.03*; and SVRW stands for *SAS Views: SAS Report Writing*.

Opening your copy of the *SAS Procedures Guide* to page 69, you discover a chapter outlining the different charts produced by the CHART procedure. Information about changes and enhancements to the procedure is listed on page 426.

The index also alerts you that additional information is available in the other documents cited in the main entry and in the 14 subentries.

Example 2

As a cartographer who uses SAS/GRAPH software to design maps, you're always interested in new mapping applications using the software. You know one of the best places to find current information about the SAS System is the latest *SUGI Proceedings*.

To find information in the *SUGI 14 Proceedings* about mapping with SAS/GRAPH software, you turn to the following main entry in the 1989 SUGI master index:

mapping 82:230

You scan the alphabetized subentries until you find the following:

SAS/GRAPH software 89:214-219

The index's preface tells you that the numbers preceding the colon refer to the year of the SUGI conference and the numbers following refer to the page numbers of that year's *Proceedings*. You flip to page 214 in the *SUGI 14 Proceedings* and find a paper describing how to take advantage of SAS/GRAPH software's mapping features.

Another way to find the same paper is to look under the main entry, *SAS/GRAPH software*, in the same SUGI master index. There, you scan the subentries until you find the following:

mapping 83:235, 85:201, 89:214-219

You can also look under the main entry *cartography* where the sub-entry *applications* leads you to the same page range, or under the main entry *applications* where the subentry *cartography* also references that information.

Example 3

As a statistician for a company that designs, administers, and scores aptitude tests, you need to develop some cumulative distribution function (CDF) plots to display scores as percentile groupings. The company licenses several software products from SAS Institute, including SAS/QC[®] and SAS/STAT[®] software, so you turn to the SAS System Version 6 master index for information. You find the following entry:

cumulative distribution function (CDF)
A106:3-4, PG:5-6, P179:50
See also cdf plots

After referring to the code legend, you realize that you have three sources of information: *SAS Technical Report A-106, Probability Plotting*; *SAS Procedures Guide, Release 6.03 Edition*; and *SAS Technical Report P-179, Additional SAS/STAT Procedures, Release 6.03 Edition*. There is also a cross-reference listed, so you locate the main entry *cdf plots* earlier in the index and find a slew of suben-

tries whose codes begin with the letters QC. You have found another source: *SAS/QC Software Reference, Version 6, First Edition*.

You continue to the next main entry, which is the following:

CDF= option, OUTPUT statement
(LIFEREG) STAT:648

You have uncovered a fifth source: the *SAS/STAT User's Guide, Release 6.03 Edition*. You can also determine from this entry that the information is in a section about the OUTPUT statement, which is used in the LIFEREG procedure.

FUTURE PLANS

In the future, SAS Institute plans to update its master indexes regularly to provide users the most current information about the software. Future editions will reference more educational material and more applications and tasks.

CONCLUSION

SAS Institute's master indexes bring the power and flexibility of the SAS System to new and experienced users with clear codes, simple organization, and comprehensive listings. At a glance, you can locate all the information you need to help you work faster and more efficiently.

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