Online Documentation of the SAS® System: Release 6.11 and Beyond
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ABSTRACT
The Institute has made a major change in product documentation with Release 6.11. Reference documentation is being migrated online, with the complete reference library available by the next major release of the SAS System. This paper accompanies a demo that will present online documentation available in Release 6.11. This release includes major portions of base SAS and SCL documentation, host information, FRAME documentation, and selected portions of documentation from other products. During the demo, Kathy will also answer some frequently-asked questions about the future of online documentation and you will be invited to contribute your comments about Release 6.11 online documentation and your ideas about future directions.

INTRODUCTION
SAS Institute is committed to providing quality documentation to assist you in accomplishing your programming and applications development tasks. More and more, you request that we meet those needs by providing documentation online. In Release 6.11 of the SAS System, you will have online access to a variety of reference dictionaries, host information, how-to information, and tutorials. A complete online reference library will be available for the next major release. The following sections detail online documentation available in Release 6.11 for:
- base SAS software
- SAS/AF® software (including Screen Control Language)
- SAS/ACCESS® software
- SAS/TRADER® software.

BASE SAS SOFTWARE ONLINE DOCUMENTATION
Documentation that applies to all hosts and some documentation that applies to a specific host are now available online. The online base SAS information includes:
- SAS Language: Reference, Version 6, First Edition dictionary chapters with links to changes and enhancements and host-specific information
- complete reference information for PROC REPORT
- reference information specific to the Microsoft Windows, UNIX, and OS/2® environments.

SAS Language: Reference
The online version of SAS Language: Reference provides you with detailed reference information on SAS language elements. It also contains introductory conceptual information to assist you with understanding various SAS conventions.

One of the ways you access this online document is to select:
1. Help in the PROGRAM EDITOR window
2. SAS System from the Help menu
3. ONLINE DOCUMENTATION in the Help window.
4. SAS Online Language Reference in the SAS Online Documentation window.

Language-element topics contain (where applicable): syntax, a detailed description of the element, examples, comparisons to related elements, and cross references to related information. Hypertext links make related information that is also online available to you with a single click of the mouse.

There are keywords associated with each topic, so you can use it to assist you with finding the information you need.

When you click on the Host Information button, you access information on host dependencies for the current language element. Host dependencies appear for the host that your SAS session is currently running on.

You access changes and enhancements information by clicking on the Update Information button. The update information you access is grouped by release.

PROC REPORT Documentation
PROC REPORT online documentation provides complete information on how to use PROC REPORT in either a windowing or a non-windowing environment.

One of the ways you access this online document is to select:
1. Help in the PROGRAM EDITOR window
2. SAS System from the Help menu
3. ONLINE DOCUMENTATION in the Help window
4. PROC REPORT in the SAS Online Documentation window.

From the REPORT:Index window, you can access:
- introductory information about PROC REPORT,
- detailed syntax. Statements and options are linked to more detailed explanations of how and when to specify them.
- a list of PROC REPORT windows. Each window name is a link to details about the window.
- a list of PROC REPORT concepts that assist you in understanding how PROC REPORT functions. Each concept is linked to detailed information.
- a list of how-to topics. Each topic is linked to step-by-step information on how to accomplish a particular reporting task.
- examples that use PROC REPORT to accomplish particular reporting tasks. Tasks highlighted in the examples are listed so that you can decide which example most closely fits your need. Examples include both code and output.
- changes and enhancements information for Release 6.11.

Windows Environment Documentation
The latest version of the SAS Companion for the Microsoft Windows Environment is now available online when you select SAS Companion from the Help menu in the PROGRAM EDITOR window. This document describes host dependencies to consider when you run the SAS System under Windows and explains how to integrate SAS System and Windows features so that you can maximize your productivity.

Information specific to the Windows environment is also accessible when you select the Host Information button in online SAS Language: Reference topics.
UNIX Environment Documentation

Information specific to the UNIX environment is available when you select SAS Companion from the Help menu in the PROGRAM Editor window. From the window that appears when you make this selection, you link to details about particular language elements, or you access detailed information about UNIX-specific changes and enhancements that occurred in Releases 6.10 and 6.11 of the SAS System.

You can also access information specific to the UNIX environment by selecting the Host Information button in online SAS Language: Reference topics.

SAS/AF SOFTWARE ONLINE DOCUMENTATION

Documentation is now available online for several major components of SAS/AF software. The following sections describe how you can access detailed reference information about Screen Control Language (SCL) and FRAME entries and usage information about developing applications with SAS/AF software.

SCL Documentation

Select the following to access SCL documentation:
1. Help in the PROGRAM EDITOR window
2. SAS System from the Help menu
3. ONLINE DOCUMENTATION in the Help window
4. Application Development with SAS/AF Software in the SAS Online Documentation window.
5. Screen Control Language under the Reference heading in the SAS Online Documentation window.

After making the preceding selections, you have the opportunity to link to an SCL dictionary, a list of SAS language elements you can use with SCL, a list of SCL debugger commands, and an explanation of how to use SAS System return codes in your SCL programs.

The reference dictionaries in the SCL documentation provide complete reference information for the elements that compose SCL and for many of the elements commonly used with SCL. You access syntax for and a description of the SCL element in addition to an example of its use and a list of related topics and elements. Hypertext links ensure that related topics are only a mouse-button click away.

FRAME Documentation

Documentation for SAS/AF FRAME Entries is divided into several categories; however, you access all of the documents from the same initial path. Select the following to access the FRAME online documentation:
1. Help in the PROGRAM EDITOR window
2. SAS System from the Help menu
3. ONLINE DOCUMENTATION in the Help window
4. Application Development with SAS/AF Software in the SAS Online Documentation window.

Classes and Methods Documentation

These topics provide complete reference information for FRAME entry classes and methods. You access syntax information, a detailed description of the class or method, explanations of common arguments, examples, and related topics and elements. As in our other online documentation, these topics contain hypertext links to assist you with finding related information.

Build Window Commands Documentation

These topics address Build window commands as they relate to FRAME entries. You receive command syntax and a detailed description of how and when to use the command.

Catalog Entry Types Documentation

These topics offer you detailed reference information about the catalog entry types that apply to developing applications using FRAME entries. There is introductory information about the catalog entry types in addition to details about the specific windows (and the fields in those windows) that apply to particular catalog entry types.

Usage Documentation

The SAS/AF FRAME entry usage documentation available to you online:
□ introduces you to object-oriented design and programming
□ describes the tools FRAME entries provide and how to use them
□ explains how to extend existing FRAME objects using SCL code.

The documentation is highly modular and offers you examples to help illustrate the concepts being discussed.

SAS/ACCESS INTERFACE TO SYBASE AND SQL SERVER DOCUMENTATION

Extensive documentation on the SAS/ACCESS interface to SYBASE and SQL Server is available when you select:
1. Help in the PROGRAM EDITOR window
2. SAS System from the Help menu
3. ONLINE DOCUMENTATION in the Help window
4. SAS/ACCESS to SYBASE and SQL Server in the SAS Online Documentation window.

In this document you will find detailed information on topics such as:
□ the basics of SAS/ACCESS software
□ background information about the SYBASE and SQL Server interface and its uses
□ the ACCESS and DBLOAD procedures and the SQL procedure Pass-Through facility
□ database administrator information, including topics such as data security.

The document is modular and hypertext links connect related topics.

SAS/TRADER DOCUMENTATION

If you have installed SAS/TRADER software on your system, you can access online documentation for the product by selecting:
1. Help in the PROGRAM EDITOR window
2. SAS System from the Help menu
3. ONLINE DOCUMENTATION in the Help window
4. How to... with SAS/TRADER in the SAS Online Documentation window.
The SAS/TRADER documentation provides you with introductory information on the product as well as step-by-step instructions on how to perform common tasks.

ONLINE DOCUMENTATION PLANS BEYOND RELEASE 6.11

For releases following Release 6.11, we will be evaluating each SAS product and determining how best to document it. The products will not necessarily all be documented the same way. One idea we are considering is enhancing the documentation by adding wizards to assist with tasks such as assigning libraries.

The following sections describe documentation approaches we are exploring with respect to a new desktop environment. Note that the product and the documentation are still very much under development; both may change radically by the time they are released.

Accessing Future Online Documentation

Given a desktop environment such as that shown in Display 1, there are several paths to online documentation. Which path you select depends on the scope of your documentation needs.

Display 1  Desktop Environment — Main Window

If you were new to the desktop environment and were unfamiliar with the tasks available to you or with which area of the interface addressed your task, you could select the open-book icon in the top right corner of the display to access documentation that addresses the desktop environment as a whole. Selecting the open-book icon takes you to the Contents window shown in Display 2.

Display 2  Contents Window

Perhaps more typically, however, you will already have begun a particular task when you discover a need to access the documentation. Suppose you are in the desktop environment and need to write a SAS program. You select Writing SAS Programs from the window shown in Display 1, and the PROGRAM EDITOR window appears so that you can begin entering your code. Part way through your program, you realize that you have a question about the syntax for a base procedure, so you open the Help menu in the PROGRAM EDITOR window, as shown in Display 3.

Display 3  Help Menu

When you select Base SAS from the menu, the Contents window appears as shown in Display 2. Though the interface is consistent with that shown in the previous scenario, the information accessed through the interface is different.

Accessing Specific Information via the Contents Window

The Contents window (shown in Display 2) provides a consistent interface to context-sensitive information. Throughout your session, you have continuous access to documentation that applies to the task area you are working. For times when it isn’t obvious to you which selection will provide the information you need, a search facility and keyword index are available.
Training and User Support Services

Getting Started

When you select **Getting Started**, you access introductory information or a tutorial about your task. This information should (as the selection implies) help you get started using the software productively.

How To

Selecting **How To** takes you to a list of tasks. Each task is hyperlinked to specific step-by-step instructions for accomplishing the task. How-to topics can be anything from how to write SAS programs to how to draw a bar chart for your data. Depending on the how-to topic you select, you may select both the task and whether you want to perform the task interactively or by submitting SAS statements.

Examples

When you select **Examples** from the Contents window, you access a set of examples that relates to the task you are performing or to the product you are using. To help you find the example that relates most specifically to your needs, there is an examples search facility. You enter a keyword or syntax element and the system searches for examples that contain what you have entered. The examples consist of code, output, and separately accessible explanations of the code sections and output. In other words, you see the example code and output, but you access the explanations of the code and output via a link from an icon.

Syntax

Selecting **Syntax** from the Contents window enables you to access detailed syntax information. For example, base SAS syntax information includes details about the language elements (CALL routines, data set options, statements, and so on), procedures, macros, and error messages. When you select a procedure to get syntax information about, you receive details about the purpose of the procedure, the general form of the procedure statements, and a table of which statements you should use to complete a particular task. From the statements, you can link to specific lists of options. You also have access to overview information, procedure concepts, and examples that use the procedure.

Information Warehouse

The **Information Warehouse** selection is discussed later in "Accessing the SAS Information Warehouse."

What’s New

What’s New links you to information about the latest features in the product.

How to Use Help and Tell Us About Doc

Finally, through the **How to Use Help and Tell Us About Doc** selections, respectively, you have constant access to information on how to use the online documentation and to instructions for providing feedback to SAS Institute about the documentation.

Accessing Examples

In addition to the Examples selection available from the Contents window described previously, an example library is accessible from multiple places in the desktop environment and documentation. Here are just a few of the paths to the example library:

- Select **Example Library** from the main desktop environment window, shown in Display 1.
- Select **Example Library** from the Help menu in the PROGRAM EDITOR window.
- Select **Example Library** from the Information Warehouse window, shown in Display 4.

The Example Library window enables you to access examples from a variety of SAS software products.

Accessing the SAS Information Warehouse

When you select **Information Warehouse** from either the main window of the desktop environment or from the Contents window, the Information Warehouse window appears as shown in Display 4.

![Information Warehouse Window](image)

**Display 4 Information Warehouse Window**

This window offers you yet another path to online SAS documentation and the example library.

Accessing Information on Other SAS Resources

Select **Other SAS Resources** from the main window of the desktop environment or from the Help menu in the PROGRAM EDITOR window to access information about technical support, publications sales, and your marketing representative.

ONLINE INFORMATION VIEWERS

In response to customer demand, we will be offering the online reference library via third-party or host-based viewers. Final decisions about target viewers have not been made; however, we do expect to provide online information to UNIX users via Helpplus (developed at SAS Institute) and to PC users via WinHelp.

We want to provide support for viewers that are popular with you, our users, so please contact us about your needs. We will not be able to support all possible viewers immediately; we will need to prioritize support efforts based on demand.
CONCLUSION - WE WANT YOUR FEEDBACK ABOUT ONLINE DOCUMENTATION

Remember that the future online documentation discussed here and the documentation you see in the demo are a prototype that may look very different from the product actually released. We will be working with SAS users to research many aspects of the online reference library, from usability to packaging and licensing issues. There are many outstanding decisions about how the library will be implemented. If you have ideas or suggestions about our online information plans, please let us know. We would like to add you to our database of users who are interested in this issue.

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