CHAPTER

19

System Options

System Options in the CMS Environment

Portable SAS system options are documented in *SAS Language Reference: Dictionary.* Only the system options that are CMS-specific or that have host-specific aspects are documented in this section. However, "Summary Table of SAS System Options" on page 308 includes all SAS system options that are available under CMS.

The table specifies the default values for all options and describes when and where each option can be specified: at SAS initialization, in the SAS configuration file, or in the SAS OPTIONS statement, for example.

For information about using SAS system options under CMS, see "Specifying System Options in the SAS Command" on page 14.

ALTLOG=

Specifies a destination for a copy of the SAS log

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

ALTLOG=*destination*| NOALTLOG

destination
can have the following values under CMS:

PRINTER
specifies that a copy of the SAS log is to be sent to the default printer.

TERMINAL
specifies that a copy of the SAS log is to be sent to the terminal.

file-specification
identifies the file in one of the following forms. Refer to "Identifying an External File" on page 60 for additional details.

'*filename <filetype <filemode | SFS-directory | *>>*'
specifies the filename, filetype, and filemode, respectively. An SFS directory may be specified instead of a filemode. If filetype is omitted, SAS assumes a filetype of SASLOG.

fileref
specifies a logical name to be associated with an external file. This name consists of one- to eight-characters and is not enclosed in quotes. The name must have been assigned externally using a CMS FILEDEF command.

See Also

□ "Routing to External Files with SAS System Options" on page 87
□ *SAS Language Reference: Dictionary*

ALTPRINT=

Specifies a destination for a copy of the SAS procedure output file

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

ALTPRINT=*destination* | NOALTPRINT

destination
>   can have the following values under CMS:

PRINTER
>   specifies that a copy of the SAS print file is to be sent to the default printer.

TERMINAL
>   specifies that a copy of the SAS print file is to be sent to the terminal.

file-specification
>   identifies the file in one of the following forms. Refer to "Identifying an External File" on page 60 for additional details.

>   '*filename <filetype <filemode | SFS-directory | *>>*'
>>   specifies the filename, filetype, and filemode, respectively. An SFS directory may be specified instead of a filemode. If the filetype is omitted, SAS assumes a filetype of LISTING.

>   *fileref*
>>   specifies a logical name to be associated with an external file. This name consists of one- to eight-characters and is not enclosed in quotes. The name must have been assigned externally using a CMS FILEDEF command.

Details

Specifying NOALTPRINT is like issuing ALTPRINT=DUMMY or FILEDEF ALTPRINT DUMMY, which is less efficient than the default of none.

See Also

- □ "Routing to External Files with SAS System Options" on page 87
- □ *SAS Language Reference: Dictionary*

AUTOEXEC=

Specifies the autoexec file to be used

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

AUTOEXEC=*file-specification* | (*filespec-1 ... filespec-n*) | NOAUTOEXEC

file-specification
> identifies the file in one of the following forms. Refer to "Identifying an External File" on page 60 for additional details.

> '*filename <filetype <filemode | SFS-directory | *>>*'
> > specifies the filename, filetype, and filemode, respectively. If the filetype is omitted, SAS assumes a filetype of "SAS".

> *fileref*
> > specifies a logical name to be associated with an external file. This name is a one- to eight-character name that is not enclosed in quotes.

NOAUTOEXEC
> tells SAS software not to search for an autoexec file.

See Also

- □ *SAS Language Reference: Dictionary*
- □ "Autoexec Files" on page 16

BLKSIZE=

Specifies the size of a contiguous buffer for each open SAS file

Default: 16,384

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

BLKSIZE=MIN | MAX | *n* | *n*K | *n*M | *n*G | *hex*X

MIN
> specifies the minimum block size, equal to 0 bytes

MAX
> specifies the maximum block size, equal to 32,768 bytes

n
> specifies a number of bytes in integer decimal notation

*n*K
> specifies a number of kilobytes (1 kilobyte=1,024 bytes)

*n*M
> specifies a number of megabytes (1 megabyte = 1,048,576 bytes)

*n*G
> specifies a number of gigabytes (1 gigabyte = 1,073,741,824 bytes)

*hex*X
> number of bytes in hexadecimal notation

Details

BLKSIZE (block size) is a library attribute that is appropriated at the time the library is assigned. The only way to change the value of BLKSIZE for a member in an allocated SAS data library is to specify the BLKSIZE= option in the DATA statement for that member.

By specifying the minimum size of the initial buffer allocated for each SAS data set member, the BLKSIZE= option helps refine the use of storage for SAS files without having to specify the BUFSIZE= and BUFNO= options explicitly. Specifying BLKSIZE= is the equivalent of dynamically setting the value of the BUFNO= option based on the observation length in the data set.

The BLKSIZE= option enables you to designate a constant amount of memory dedicated to obtaining buffers. SAS allocates the number of buffers specified by the BUFNO= option, each the size specified by the BUFSIZE= option, regardless of the value of the BLKSIZE= option. (The BUFNO= and BUFSIZE= options are described later in this section.) The BLKSIZE= option determines the number of extra buffers that can be allocated from the memory that remains (from the number of bytes specified by the BLKSIZE= option) after the number of buffers specified by the BUFNO= option are obtained.

You can determine the number of extra pages (buffers) by making the following calculation:

($block$-$size$ − ($number$-of-$buffers$* $buffer$-$size$))/ $buffer$-$size$

where *block-size* is determined by the value of the BLKSIZE= option, *number-of-buffers* is the value of the BUFNO= option, and *buffer-size* is the value of the BUFSIZE= option.

For example, suppose you have three members in a library named TEST.A, TEST.B, and TEST.C. A has a page size (specified by the BUFSIZE= option) of 2K; B, 4K; and C, 8K. Assume that BUFNO= is set to 6, and BLKSIZE= is set to 32K (32,768 bytes). SAS not only allocates six 2K buffers to process TEST.A, but in addition it allocates ten extra 2K buffers from the 20K that remains from the 32K area of memory; thus, a "bonus" number of buffers, 16 in all, helps speed up the processing of TEST.A. When processing TEST.B, SAS allocates two extra 4K buffers in addition to the six initial 4K buffers: (32K − (6 * 4K))/4K. When processing TEST.C, SAS allocates the six 8K buffers, as designated by the values of the BUFNO= and BUFSIZE= options, and uses a total of 48K.

By specifying BLKSIZE=32K, you reserve a 32K area of memory that can be used to obtain excess buffers to help improve performance. These excess buffers are in addition to the number of buffers specified by the BUFNO= option. The value of the BLKSIZE= option is ignored for any data sets whose buffer size multiplied by the number of buffers is greater than the BLKSIZE= option value.

Comparison

The value specified in the BLKSIZE= system option is in effect for an entire session unless it is overridden by the BLKSIZE= option in the LIBNAME statement or the BLKSIZE= data set option.

BUFNO=

Specifies the number of buffers to use for each SAS data set

Default: 1

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: maximum number of buffers

Syntax

BUFNO=*number-of-buffers*

number-of-buffers
specifies a value from 1 to the maximum number of buffers, technically 2,147,483,647 in the CMS environment. The practical limit is lower, depending on the size of the buffer and the virtual machine.

Details

The buffer number is not a permanent attribute of the data set and is valid only for the current SAS session or job.

To reduce input/output operations on a small data set and speed up execution time, allocate one buffer for each memory page of data to be processed. This technique is most effective if you read the same observations several times during processing.

See Also

□ "BLKSIZE=" on page 255

□ *SAS Language Reference: Dictionary*

BUFSIZE=

Specifies permanent buffer size for output SAS data sets

Default: 0

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: maximum buffer size

Syntax

BUFSIZE=*number-of-bytes*

number-of-bytes
specifies the number of bytes of storage in 1K increments. The number of bytes can have a value from 0 to the maximum value buffer size, technically 2,147,483,647 in the CMS environment. The practical limit depends on the number of buffers and the size of the virtual machine.

If the value is 0, SAS chooses an operating environment default that is optimal for the SAS data set. If any value that you specify is not adequate, SAS automatically rounds up to the next valid buffer size for the data set.

Details

The BUFSIZE= option is valid only for output data sets, that is, data sets named in the DATA statement of a DATA step or in the OUT= option of a SAS procedure.

The buffer size, or page size, determines the size of the input/output buffer SAS uses when transferring data during processing. A page is the number of bytes of data that SAS moves between external storage and memory in one logical I/O operation. Once specified, the buffer size is a permanent attribute of the data set, and the specified buffer size is used whenever the data set is processed. To change the buffer size, you must use a DATA step to copy the data set and specify a new buffer size or use the SAS default.

Using the BLKSIZE=, BUFNO=, and BUFSIZE= options can speed up execution time by reducing the number of times SAS has to read from or write to the storage medium. However, the improvement in execution time comes at the cost of increased memory consumption.

See Also

□ *SAS Language Reference: Dictionary*

CAPSOUT

Specifies whether all output to print files is to be converted to uppercase

Default: NOCAPSOUT
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

CAPSOUT | NOCAPSOUT

CAPSOUT
　specifies that all output to print files is to be converted to uppercase.

NOCAPSOUT
　specifies that output to print files is to remain mixed-case.

CATCACHE=

Specifies how many SAS catalogs to keep in cache memory

Default: 0
Valid in: configuration file, SAS invocation
CMS specifics: syntax, usage

Syntax

CATCACHE=MIN | MAX | *n* | *n*K | *hex*X

MIN
  specifies the minimum number of catalogs (0).

MAX
  specifies the maximum number of catalogs (32,767).

n
  specifies an integer number of catalogs.

*n*K
  specifies an integer to be multiplied by 1,024 to specify the number of catalogs.

*hex*X
  specifies the number of catalogs in hexadecimal notation.

Details

The CATCACHE= option is set to 0 by default. A value of 0 optimizes the use of SAS memory resources. However, if memory is not a constraint on your system, you might want to increase the value of the CATCACHE= option under certain circumstances.

CBUFNO=

Specifies the number of extra page buffers to use for each SAS catalog

Default: 0
Valid in: configuration file, SAS invocation, OPTIONS command, OPTIONS window
CMS specifics: default, range of values

Syntax

CBUFNO=MIN | MAX | *n* | *hex*X

MIN
  specifies the minimum number of extra page buffers (0).

MAX
  specifies the maximum number of extra page buffers (20).

n
  specifies an integer number of extra page buffers.

*hex*X
  specifies the number of extra page buffers in hexadecimal notation.

CHARTYPE=

Specifies a character cell size to use on the IBM 3290 terminal

Default: 1 (IBM 3290), 0 (other terminals)

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

CHARTYPE=*cell-size* | *screen-size*

cell-size
   specifies the character set number for an IBM 3290 terminal. Values are 1 for a 6 x 12 cell and 2 for a 9 x 16 cell.

screen-size
   specifies the screen size for other (EDS) terminals. Values are 1 for a primary screen size and 2 for an alternate screen size.

Details

For an IBM 3290 terminal, the CHARTYPE= option specifies which character cell size to use. For other Extended-Data-Stream (EDS) terminals, it specifies which screen size to use. This option corresponds to the CHARTYPE option in SAS/GRAPH software.

   A value of 0 indicates that the CHARTYPE= option is not applicable to the terminal you are using.

See Also

   □ "Improving Screen Resolution on an IBM 3290 Terminal" on page 330

CLEANUP

Specifies whether to attempt to recover from an out-of-resources condition

Default: CLEANUP

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: default, usage

Syntax

CLEANUP | NOCLEANUP

CLEANUP
   specifies that SAS software should attempt to recover from an out-of-resources condition.

NOCLEANUP
   specifies that SAS software should not attempt to recover from an out-of-resources condition.

Details

By default, the requestor window is displayed only when SAS is invoked in interactive windowing mode or in interactive line mode. In other methods of running SAS software, when a resource-critical situation arises, SAS software performs automatic continuous cleanup. If not enough resources are recovered, SAS software responds as if you had specified NOCLEANUP.

See Also

□ *SAS Language Reference: Dictionary*

CONFIG=

Specifies the name of the configuration file to be used when SAS software is invoked

Default: SASV8 CONFIG *
Valid in: SAS invocation
CMS specifics: all

Syntax

CONFIG='<*filename filetype filemode | SFS-directory>*' | NOCONFIG

'***filename filetype filemode | SFS-directory***'
   specifies the complete CMS file id of an external file. The file id must be enclosed in quotes. If only the filename is specified, the quotes may be omitted. If filemode or SFS directory is omitted, * is assumed. If filetype is omitted, CONFIG is assumed.

NOCONFIG
   tells SAS not to use any configuration file.

Details

If you do not want any configuration file used, including the default, specify NOCONFIG in the SAS command.

See Also

□ "Configuration Files" on page 15
□ *SAS Language Reference: Dictionary*

COPIES=

Specifies the number of copies to make during printing

Default: 1

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: maximum value

Syntax

COPIES=*n* | MIN | MAX | *hex*X

n
  specifies the number of copies in terms of bytes.

MIN
  sets the minimum number of copies to 1.

MAX
  sets the maximum number of copies to 254.

*hex*X
  specifies the number of copies to a hexadecimal.

Details

In the CMS environment, the maximum value of the COPIES= option is 255.

See Also

□ *SAS Language Reference: Dictionary*

CPSP

Specifies whether the CMS SAS interface issues CP SPOOL commands

Default: NOCPSP
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

CPSP | NOCPSP

CPSP
  tells the CMS SAS interface to issue CP SPOOL commands for the virtual printer.

NOCPSP
  tells the CMS SAS interface not to issue CP SPOOL commands to the virtual printer. Use NOCPSP when you are running SAS in a CMS batch environment to prevent spooling commands issued by SAS from interfering with those issued by CMS batch facilities.

DB2CMTRLSE

Controls the ability to maintain or release a user ID's SQL/DS connection through a COMMIT WORK

Default: DB2CMTRLSE
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

DB2CMTRLSE | NODB2CMTRLSE

DB2CMTRLSE
  issues a COMMIT RELEASE, which closes your SQL/DS connection.

NODB2CMTRLSE
  issues a COMMIT WORK, which maintains your SQL/DS connection.

Details

DB2CMTRLSE enables you to maintain or release an SQL/DS connection for a given userid beyond a SAS procedure's execution. It is a convenient way to maintain connections that require SQL/DS passwords.

DBCS

Enables double-byte character support

Default: NODBCS
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

DBCS | NODBCS

DBCS
  uses two bytes for each character in the set.

NODBCS
  does not use two bytes for each character in the set.

Details

DBCS indicates that all text, input, output, and data should be processed as if it is encoded in a double-byte character set. Double-byte character sets are used to represent text written in languages other than English.

See Also

□ "DBCSLANG=" on page 264
□ "DBCSTYPE=" on page 265

DBCSLANG=

Specifies the language of the double-byte character set

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

DBCSLANG=*language-name*

language-name
specifies one of the following double-byte character sets:

CHINESE
Simplified Chinese language as used in the People's Republic of China.

HANZI
Alias for CHINESE.

JAPANESE
Japanese language.

KATAKANA
Japanese language with Katakana.

KOREAN
Korean language.

TAIWANESE
Taiwanese differs from traditional Chinese, but it uses the same characters.

UNKNOWN
Set automatically when an invalid value is specified.

Details

All values of DBCSLANG= require that you specify DBCSTYPE=IBM.

See Also

☐ "DBCS" on page 263
☐ "DBCSTYPE=" on page 265

DBCSTYPE=

Specifies the encoding sequence for double-byte character sets

Default: IBM
Valid in: configuration file, SAS invocation
CMS specifics: *encoding_method*

Syntax

DBCSTYPE=*encoding_method*

encoding_method
specifies the following encoding method for double-byte character sets:

IBM
Specifies the IBM encoding method.

See Also

☐ "DBCS" on page 263
☐ "DBCSLANG=" on page 264

DEFWORKUNIT

Specifies whether or not to use a unique CMS work unit for each output file in the Shared File System

Default: NODEFWORKUNIT
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

DEFWORKUNIT | NODEFWORKUNIT

DEFWORKUNIT
specifies that a single work unit is to be used for all files in the Shared File System. Fewer IUCV connections to the SFS server are used.

NODEFWORKUNIT
specifies that a unique CMS work unit is to be used for each output file in the Shared File System. This allows the SAS session to have better control over each SFS file opened for output.

DEVICE=

Specifies a terminal device driver for SAS/GRAPH software

Default: none
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: device list

Syntax

DEVICE=*device-driver-name*

Details

To see the list of available device drivers, you can use the GDEVICE procedure. If you are using a windowing environment, submit the following statements:

```
proc gdevice c=sashelp.devices;
run;
```

This displays a list of device drivers that you can scroll through.

If you are running SAS in interactive line mode or noninteractive mode, use the following statements to write the device list to the Output Window:

```
proc gdevice c=sashelp.devices nofs;
list _all_;
run;
```

See Also

☐ *SAS Language Reference: Dictionary*

ECHO=

Specifies a message to be displayed when SAS is invoked

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

ECHO='*text*'

'*text*'

    specifies a message to be displayed when SAS is invoked. The *text* string must be enclosed in quotation marks and must fit on one line. You can have as many ECHO='*text*' lines as you want. The message is displayed on the screen before the SAS session begins. The message is not written to the log. The maximum length of *text* is 256 characters.

EMAILSYS=

Specifies the name of the CMS pipeline stage used for electronic mail

Default: SASMAIL

Valid in: configuration file, SAS invocation, OPTIONS statement

CMS specifics: all

Syntax

EMAILSYS=*stage-specification*

stage-specification

    names the CMS REXX pipeline stage used to send electronic mail from within SAS. Specify the pipeline stage as follows:

       '*filename < filetype < filemode>>*'

    If the filetype is omitted, SAS uses the filetype REXX. If the filemode is omitted, SAS uses an asterisk (*). Quotation marks are required around the entire specification if anything more than a filename is specified.

Details

SAS sends all electronic mail through an external CMS pipeline stage written in REXX. The name of the pipeline stage is SASMAIL REXX, which is located on the SAS system disk.

See Also

- □ "FILENAME" on page 227
- □ "Sending E-Mail from Within SAS" on page 69

ENGINE=

Specifies the default access method to use for SAS libraries

Default: BASE

Valid in: configuration file, SAS invocation
CMS specifics: *engine-name*

Syntax

ENGINE=*engine-name*

engine-name
   can take the following values under CMS:

   BASE | V8 | specifies the engine for accessing random-access SAS data
   V7 | V6   libraries.

   V5   specifies the engine for read-only access to Version 5 SAS data
                      libraries.

See Also

   □ "How SAS Assigns an Engine When No Engine Is Specified" on page 45
   □ *SAS Language Reference: Dictionary*

FILCLR

Clears all CMS FILEDEF commands at SAS session termination

Default: NOFILCLR
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

FILCLR | NOFILCLR

FILCLR
   specifies that all FILEDEF commands except those that are issued with the PERM
   option are to be cleared at session termination.

NOFILCLR
   specifies that no user-created FILEDEF commands are to be cleared at session
   termination.

FILSZ

Specifies whether SAS software passes the SIZE= option to the host sort program

Default: NOFILSZ

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

FILSZ | NOFILSZ

FILSZ

   specifies that the system sort utility supports the FILSZ parameter. SAS uses the
FILSZ= system option in the SORT control statement that it generates and passes it
to the sort utility program. The FILSZ parameter is more efficient than the SIZE
parameter. This option is ignored if you use SORTPGM=SAS or the SORT procedure.

NOFILSZ

   specifies that the system sort utility does not support the FILSZ argument. SAS
generates the SIZE= option in the SORT control statement that it generates and
passes to the sort utility program.

Details

If a program product sort utility is installed that supports the FILSZ parameter,
specifying the FILSZ= system option increases the sort efficiency.

FORTG=

Names a text library to be made global by SAS software

Default: none

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

FORTG=*text-library-specification*

text-library-specification

   is the filename of a CMS file with a filetype of TXTLIB.

Details

The FORTG= system option can be used to identify a FORTRAN text library to SAS so
that the library members can be called from within SAS.

   This system option is available for compatibility with earlier releases of SAS software
and is generally not used.

FSBCOLOR

Specifies whether to use window background colors on vector graphics devices

Default: NOFSBCOLOR

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

FSBCOLOR | NOFSBCOLOR

FSBCOLOR
> enables you to set the background color in your SAS windows. For example, if you specify FSBCOLOR when you invoke SAS, you can issue commands such as the following in any SAS window:

> ```
> color back blue
> ```

> Use the FSBCOLOR option only on vector graphics devices. The FSBCOLOR system option is ignored if you specify it on a program symbols device, and you will receive an error message if you try to set the background color of a window.

NOFSBCOLOR
> specifies that no background colors are to be used. This is the default value (even on vector graphics devices).

Details

Some terminals, such as the IBM 3279, the PC 3270 emulators, and the Tektronix 4205, are called *program symbols* devices. This type of device does not allow you to set the background color of individual windows; the background color is always black. Other terminals, called *vector graphics* devices, allow you to set the background color. Examples of such terminals are the IBM 3179, 3192, and 3472 terminals.

FSBORDER=

Specifies what type of symbols are to be used for window borders, scroll bars, and similar elements

Default: BEST

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

FSBORDER=BEST | PS | APL | NONE

BEST

indicates that SAS chooses, based on the type of terminal that you are using, which symbols are to be used.

PS

indicates that programmed symbols are to be used.

APL

indicates that APL symbols are to be used.

NONE

indicates that no symbols are to be used.

Details

Non-Extended Data Stream (non-EDS) terminals can draw window borders only with the hardware character set of the device. In this case, the value of the FSBORDER= option is irrelevant.

FSDEVICE=

Specifies the terminal device driver

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

FSDEVICE=*device-name*

device-name

is the name of a windowing device driver.

Details

See "Terminal Support in the CMS Environment" on page 328 for a list of all devices that are supported for terminal-based interactive windowing under CMS.

See Also

□ *SAS Language Reference: Dictionary*

FSMODE=

Specifies the full-screen data stream type for a terminal

Default: IBM

Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

FSMODE=*data-stream-type*

data-stream-type
　　is the name of an acceptable data stream type, including the following:
　　　　□ IBM
　　　　□ FACOM or FUJITSU specifies the F6683 data stream, which can be used for
　　　　　　F6683 and F6653 terminals.
　　　　□ HITAC or HITACHI specifies the T560/20 data stream, which can be used for
　　　　　　T560/20, H2020, and H2050 terminals.

Details

An incorrect setting of this option can cause a data stream program check or a system
abend.

FULLSTIMER

Writes all system performance statistics to the SAS log

Default: NOFULLSTIMER
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

FULLSTIMER | NOFULLSTIMER

FULLSTIMER
　　writes all system performance statistics to the SAS log.

NOFULLSTIMER
　　tells SAS not to write system performance statistics to the SAS log.

Details

Under CMS, the FULLSTIMER system option specifies whether extended performance
statistics of your computer system are to be collected and displayed after each step.
They include the following:
　　□ real time
　　□ user CPU time
　　□ system CPU time

□ memory task switches.

Note: This option should be specified for performance analysis only. Specifying the FULLSTIMER option for all programs will affect performance. △

See Also

□ "STIMER" on page 301
□ *SAS Language Reference: Dictionary*

GHFONT=

Specifies the default graphics hardware font for vector graphics devices that support stroke precision in the vector graphics symbol set

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

GHFONT=*font-specification*

font-specification
 is site-specific. See your system administrator for a complete list of fonts that are available to you. Examples of values for *font-specification* are

F6X9	specifies characters that are 6 pixels wide and 9 high.
F9X12	specifies characters that are 9 pixels wide and 12 high.
I6X9	specifies an italic font with characters that are 6 pixels wide and 9 high.

Details

The GHFONT= option specifies the default hardware font in graphics and applies only to vector graphics devices that support stroke precision in the vector graphics symbol set (for example, IBM terminals such as 3179G, 3192G, and 3472G). This option is used with SAS software products such as SAS/INSIGHT software, in which you can specify a smaller font and display more information in the tables.

HELPLOC=

Specifies the itemstore that contains SAS System Help

Default: HELPDOC
Valid in: configuration file, SAS invocation

CMS specifics: use of itemstores

Syntax

HELPLOC=*itemstore* | *libref.itemstore* | *libref.itemstore-1, ...itemstore-n*

itemstore
    specifies the itemstore name, which is assumed to be in the library specified by the SASHELP= system option (SASHELP * by default) when no other libref is specified.

libref.itemstore
    specifies an itemstore or series of itemstores in a library other than specified in the SASHELP= system option.

libref.itemstore-1, ...itemstore-n
    specifies a series of itemstores that will be parsed in the order listed for the occurrence of a named item.

Details

The HELPLOC= system option identifies itemstores containing user-defined help. SAS resolves help links by searching through an ordered list of itemstores that begins with the latest specification of HELPLOC= and always ends with the default value HELPDOC. The default value is the name of the itemstore in the SASHELP library that contains all SAS Help information.

When a new itemstore is identified by specifying a new value for the HELPLOC= system option, SAS adds that new specification to the head of a list of specifications made previously in the current SAS session. The default value of HELPDOC is always retained at the end of the list of specifications, thereby ensuring the availability of SAS Help.

The following example shows how SAS constructs the ordered list of itemstores in response to multiple specifications of the HELPLOC= system option:

```
proc options option=helploc;
options helploc=userhlp1;
proc options option=helploc;
options helploc=userhlp2;
proc options option=helploc;
run;
```

The LOG window shows that the value of the HELPLOC= system option changes from HELPDOC to USERHLP1, HELPDOC and then to USERHLP2, USERHLP1, HELPDOC.

See Also

- □ "SASHELP=" on page 287
- □ "ITEMS" on page 204
- □ "Using Online Help" on page 106
- □ *SAS Language Reference: Dictionary*

LEAVE=

Specifies the bytes of memory to leave unallocated

Default: 0

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

LEAVE=MIN | MAX | *n* | *n*K | *n*M | *n*G | *hex*X

MIN
 specifies the minimum number of bytes (0)

MAX
 specifies the maximum number of bytes (2,147,483,647)

n
 specifies an integer number of bytes

***n*K**
 specifies a number of kilobytes (1 kilobyte = 1,024 bytes)

***n*M**
 specifies a number of megabytes (1 megabyte = 1,048,576 bytes)

***n*G**
 specifies a number of gigabytes (1 gigabyte = 1,073,741,824 bytes)

***hex*X**
 specifies a number of bytes in hexadecimal notation

Details

The LEAVE= system option prevents SAS from allocating a portion of your USER memory region, which is reserved for concurrent execution of external programs and for operating environment cleanup in the event of an abnormal termination of SAS. External programs could include a sort package, an X command, or a REXX exec invoked from the SAS interface to REXX, for example.

If the value of MEMSIZE= is greater than your entire memory allocation, and if LEAVE=0, SAS can allocate the entire region, leaving no room to execute concurrent programs. Specifying a nonzero value for LEAVE= ensures that the specified amount of memory will always be reserved, regardless of the size of your memory allocation or the value of MEMSIZE=.

The amount of memory reserved with LEAVE= depends on the amount of memory required to run concurrent external programs.

See Also

□ "MEMSIZE=" on page 278

LINESIZE=

Specifies the line size of SAS procedure output

Default: terminal width; 132 (batch)
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: default

Syntax

LINESIZE=MIN | MAX | *n* | *hex*X

MIN
specifies the minimum line size (64).

MAX
specifies the maximum line size (256).

n
specifies an integer line size.

*hex*X
specifies a line size in hexadecimal notation.

See Also

□ *SAS Language Reference: Dictionary*

LOG=

Specifies a destination to which the SAS log is written when executing SAS programs in batch or noninteractive mode

Default: LOG=TERMINAL for interactive line mode, LOG=*program-name* SASLOG for noninteractive mode, LOG=LOG window for SAS windowing environment
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

LOG=*destination*

destination
> can have the following values under CMS:

> PRINTER
>> specifies that the SAS print file be sent to the default printer.

> TERMINAL
>> specifies that the SAS print file be sent to the terminal.

> *file-specification*
>> identifies an external file using the following syntax:

>> '*filename <filetype <filemode | SFS-directory | *>>*'
>>> specifies the filename, filetype, and filemode, respectively. If the filetype is omitted, SAS assumes a filetype of "SAS".

>> *fileref*
>>> specifies a logical name to be associated with an external file. This name is a one- to eight-character name that is not enclosed in quotes. This name must have been assigned using the CMS FILEDEF command.

Details

The LOG= system option is valid in interactive line mode and noninteractive mode. It is ignored if the SAS windowing environment is invoked.

If you do not want a log written, specify NOLOG. NOLOG is ignored in the SAS windowing environment.

See Also

- □ "ALTLOG=" on page 253
- □ "Routing to External Files with SAS System Options" on page 87
- □ *SAS Language Reference: Dictionary*

MAPS=

Specifies a list of catalogs in which to search for the SAS/GRAPH map data sets

Default: MAPS

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: *library-specification*

Syntax

MAPS='*library-specification*' | ('*library-specification-1*' ...'*library-specification-n*')

'***library-specification***'
> specifies a physical name (enclosed in quotation marks), in the following form:

'< *filetype*> *SFS-directory | minidisk*'

where *filetype* specifies the SAS Maps library, and *SFS-directory | minidisk* is the CMS minidisk or SFS directory on which the MAPS library resides.

('*library-specification-1*' ...'*library-specification-n*')
specifies a concatenated list of MAPS libraries. Filetypes are required in each library specification.

Details

The MAPS library can be specified as a single library or as a concatenated list of libraries, which enables you to create your own map libraries and append them to the library provided with SAS. SAS searches for members throughout all libraries, following the order of the libraries in the concatenated list.

Concatenated library specifications require an explicit filetype. Without a filetype, SAS will not be able to locate individual members within the specified library.

See Also

☐ *SAS Language Reference: Dictionary*

MEMSIZE=

Specifies the limit on the total amount of memory to be used by SAS software

Default: 0
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

MEMSIZE=MIN | MAX | *n* | *n*K | *n*M | *n*G | *hex*X

MIN
specifies the minimum number of bytes (0).

MAX
specifies the maximum number of bytes (2,147,483,647 bytes).

n
specifies an integer number of bytes.

*n*K
specifies a number of kilobytes (1 kilobyte = 1,024 bytes).

*n*M
specifies a number of megabytes (1 megabyte = 1,048,576 bytes).

*n*G
specifies a number of gigabytes (1 gigabyte = 1,073,741,824 bytes).

*hex*X
specifies a number of bytes in hexadecimal notation.

Details

By default, the MEMSIZE= option has a value of 0 bytes, which means that SAS allocates memory up to the maximum amount available. Once SAS programs are loaded into memory, they are not deleted until that memory is needed for another purpose. This behavior allows multiple processes and consecutive procedure invocations within each process without requiring the program to be reloaded each time. However, if there is no upper limit on virtual memory usage, memory is not freed for reuse even when programs that are stored there are no longer needed. Explicitly specifying a MEMSIZE limit reduces this problem. MEMSIZE=8M has proven to be a reasonable value in most batch applications. Interactive applications that use multiple SAS components such as SAS/AF software and SAS/GRAPH software should set MEMSIZE=16M.

See Also

□ "LEAVE=" on page 275

MSG=

Specifies the path of the SAS message directory

Default: none

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

MSG='*directory-specification*' | ('*dir-spec* | '...' *dir-spec n*)

directory-specification
   identifies one or more directories in one of the following forms. Refer to "Identifying an External File" on page 60 for additional details.

'*filemode* '| '*SFS-directory*'
   specifies the filemode or the SFS directory.

MSGCASE

Specifies whether all messages in the message file are uppercase

Default: NOMSGCASE

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

MSGCASE | NOMSGCASE

MSGCASE
  specifies that all messages in the message file are to be uppercase.
NOMSGCASE
  specifies that messages in the message file are to be mixed case.

See Also

  □ *SAS Language Reference: Dictionary*

NEWS=

Specifies a file that contains messages to be written to the SAS log

Default: none
Alias: SASNEWS=
Valid in: configuration file, SAS invocation
CMS specifics: alias, operating environment behavior

Syntax

NEWS=*file-specification*

file-specification
  identifies the file in one of the following forms. Refer to "Identifying an External
  File" on page 60 for additional details.

  '*filename filetype <filemode | SFS-directory | *>*'
    specifies the filename, filetype, and filemode or SFS directory, respectively.

Details

Specify NONEWS if you do not want SAS to write the NEWS file to the SAS log.

See Also

  □ *SAS Language Reference: Dictionary*

NULLEOF

Specifies that a null line can signal the end-of-file when the input file is coming from the terminal

Default: NONULLEOF

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

NULLEOF | NONULLEOF

NULLEOF
   specifies that a null line signals the end-of-file when the input file is coming from the terminal.

NONULLEOF
   specifies that the ENDSAS statement must be used to signal the end of the input file. If a null line is encountered, SAS continues (in interactive mode).

Details

The NULLEOF system option causes SAS to accept a null line as an end-of-file signal in addition to the ENDSAS statement when the input file is assigned to the terminal. This option is ignored in the SAS windowing environment.

OPLIST

Controls whether to write the settings of SAS software options to the SAS log

Default: NOOPLIST

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

OPLIST | NOOPLIST

OPLIST
   writes the settings of SAS software options to SAS log.

NOOPLIST
   does not write the settings of SAS software options to SAS log.

PAGESIZE=

Specifies the number of printed lines per page of SAS output

Default: terminal-page setting for interactive modes; 60 for noninteractive or batch mode

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: default value

Syntax

PAGESIZE=MIN | MAX | *n* | *n*K | *hex*X

MIN
   specifies the minimum page size (15 lines).

MAX
   specifies the maximum page size (32,767 lines).

n
   specifies an integer page size.

*n*K
   specifies an integer to be multiplied by 1,024 to specify the page size.

*hex*X
   specifies page size in hexadecimal notation.

Details

Under CMS, the default for the interactive modes (SAS windowing environment and interactive line mode) is your terminal-page size setting. For noninteractive and batch modes, the default is 60 lines per page. For all modes, the valid values for this option range from 15 to 32,767.

See Also

   □ *SAS Language Reference: Dictionary*

PFKEY=

Specifies which set of 12 programmed function keys is to be considered primary

Default: PRIMARY
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

PFKEY=*pfkey-set*

pfkey-set
   specifies which set of function keys is the primary set.
      Acceptable values for *pfkey-set* are

PRIMARY
  specifies that the primary set of keys is PF13 through PF24.

ALTERNATE
  specifies that the primary set of keys is PF1 through PF12.

12
  specifies that settings for PF1 through PF12 exactly match those for PF13 through PF24.

CUA
  specifies that the primary set be F13 through F24, as defined by the CUA (the IBM Common User Access). CUAPRI is an alias for the CUA value.

CUAALT
  specifies that the primary set be F1 through F12, as defined by the CUA.

CUA12
  specifies that F1 through F12 exactly match F13 through F24, as defined by the CUA.

PLIO=

Specifies the name of a text library to be made global for SAS

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

PLIO=*text-library-specification*

text-library-specification
  is the filename of a CMS file that has a filetype of TXTLIB.

Details

The PLIO= system option can be used to identify a PL/I text library to SAS so that the library members can be called from within SAS.
  This system option is available for compatibility with earlier releases of SAS software and is generally not used.

PRINT=

Specifies the destination for SAS output when executing SAS programs in batch or noninteractive mode

Default: TERMINAL for interactive line mode; CMS *program-name* LISTING for noninteractive mode; OUTPUT window for the SAS windowing environment

Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

PRINT=*destination*

destination
can be any of the following under CMS:

LOG
directs procedure output and log output to the same file.

PRINTER
specifies that the SAS print file be sent to the default printer.

TERMINAL
specifies that the SAS print file be sent to the terminal.

file-specification
identifies the file in one of the following forms. Refer to "Identifying an External File" on page 60 for additional details.

'*filename <filetype <filemode | SFS-directory | *>>*'
specifies the filename, filetype, and filemode or SFS directory, respectively. If the filetype is omitted, SAS assumes a filetype of LISTING.

fileref
specifies a logical name to be associated with an external file. The name consists of 1–8 characters that are not enclosed in quotes. The fileref must have been previously assigned using a CMS FILEDEF command.

Details

The PRINT= system option is valid in interactive line mode and noninteractive mode. It is ignored if the SAS windowing environment is invoked.

If you do not want a procedure output file written, specify NOPRINT. NOPRINT is ignored in the SAS windowing environment.

See Also

□ "ALTPRINT=" on page 253
□ *SAS Language Reference: Dictionary*

PROCLEAVE=

Specifies an amount of memory to leave unallocated for normal termination of a procedure

Default: 8096
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

PROCLEAVE=MIN | MAX | *n* | *n*K | *n*M | *n*G | *hex*X

MIN
   specifies the minimum number of bytes (0).

MAX
   specifies the maximum number of bytes (2,147,483,647 bytes).

n
   specifies an integer number of bytes.

***n*K**
   specifies a number of kilobytes (1 kilobyte = 1,024 bytes).

***n*M**
   specifies a number of megabytes (1 megabyte = 1,048,576 bytes).

***n*G**
   specifies a number of gigabytes (1 gigabyte = 1,073,741,824 bytes).

***hex*X**
   specifies a number of bytes in hexadecimal notation.

Details

If SAS software encounters an out-of-memory condition during procedure execution, the PROCLEAVE= option ensures that enough memory is available for the procedure to close data sets and perform other necessary cleanup during procedure termination.

See Also

   □ *SAS Language Reference: Dictionary*

RTRACE=

enables collection of data on SAS file I/O

Default: NONE
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

RTRACE=NONE | ALL

NONE
   causes SAS software to log no file I/O activity.

ALL
   causes SAS software to log all file I/O activity.

See Also

   □ "RTRACELOC=" on page 286

RTRACELOC=

Specifies the pathname of the file to which RTRACE information is written

Default: none
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

RTRACELOC=*file-specification*

file-specification
   identifies the file in one of the following forms. Refer to "Identifying an External
   File" on page 60 for additional details.

   '*filename filetype <filemode | SFS-directory | *>*'
      specifies the filename, filetype, and filemode or SFS directory, respectively.

   fileref
      specifies a logical name to be associated with an external file. This name is a one-
      to eight-character name that is not enclosed in quotes.

   fileref(member)
      gives the fileref of an external file, which is a CMS MACLIB. The member name
      given must be enclosed in parentheses.

See Also

   "RTRACE=" on page 285

SASAUTOS=

Specifies an aggregate external file that contains the automatic call source macros

Default: SASAUTOS
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: *library-specification*, operating environment behavior

Syntax

SASAUTOS=*aggregate-specification* | ('*aggregate-specification-1*,
      ...'*aggregate-specification-n*')

aggregate-specification
>   can be a the name of a MACLIB or SFS directory, or a fileref associated with a MACLIB or SFS directory, or a DDname associated with a MACLIB. For details, see "Identifying an External File" on page 60 .

Details

To use the autocall facility, the SAS system option MAUTOSOURCE must be in effect.

See Also

□ *SAS Language Reference: Dictionary*

SASHELP=

Specifies the location of the SASHELP library

Default: SASHELP *

Valid in: configuration file, SAS invocation

CMS specifics: *library-specification*, operating environment behavior

---

Syntax

SASHELP='*library*' | ('*library-1*' ...'*library-n*')

'***library***'
>   specifies a physical name (enclosed in quotation marks), in the following form:

>   '<*filetype*>*filemode* | *SFS-directory* | *

>   where *filetype* specifies the SAS help library, and *filemode* | *SFS-directory* | * is the disk on which the SASHELP library resides.

('***library-1***' ...'***library-n***')
>   specifies a concatenated list of help libraries. The filetype SASHELP must be specified in each library specification in the concatenation.

Details

The SASHELP library can be specified as a single library or as a concatenated list of libraries, which enables you to create your own help libraries and append them to the library provided with SAS. SAS searches for members through all libraries, following the order of the libraries in the concatenated list.

  Concatenated library specifications require an explicit filetype of SASHELP. Without the filetype, SAS will not be able to locate individual members within the specified library.

  The SASHELP library can be stored in a CMS saved segment for improved system performance. The implementation of saved segments takes place at SAS installation

time, as described in the installation instructions for the SAS System in the CMS environment.

SAS uses the SASHELP library in a saved segment only if all of the following conditions are true:

☐ The SAS Supervisor is installed in segements.

☐ The SSEG system option is specified.

☐ The SERIES= system option is specified with a valid value.

When SASHELP is stored in a saved segment, the host pathname (displayed by a LIBNAME LIST statement or PROC CONENTS, for example) will be SAS*x*HELP SG, where *x* is the value of the SERIES= system option.

See Also

☐ "HELPLOC=" on page 273

☐ *SAS Language Reference: Dictionary*

☐ SAS installation instructions for the CMS environment

SASLIB=

Identifies a text library to be made global by SAS

Default: none

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

SASLIB=*text-library-specification*

text-library-specification
   is the filename of a CMS file that has a filetype of TXTLIB.

SASLOAD=

Specifies a CMS library of load modules to be concatenated to the beginning of the SAS software load library

Default: none

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

SASLOAD='*load-library-specification*'

'*load-library-specification*'
> is the name of a CMS LOADLIB. It must be enclosed in quotation marks.

Details

The SASLOAD= system option can be specified more than once. The order in which you specify the load libraries determines the order in which the modules are resolved.
  The filetype must be LOADLIB. The filemode can be a specific minidisk or an accessed SFS mode letter, or an explicit SFS directory, or '*' to search the standard CMS search mode.

```
sasload='sasaf loadlib *'
sasload='sasets loadlib b'
```

SASUSER=

Specifies the name of the SASUSER library

Default: SASUSER *filemode-first-R/W-disk*
Valid in: configuration file, SAS invocation
CMS specifics: *library-specification*

Syntax

SASUSER=*library-specification*

library-specification
> is either a logical name or a physical name. If it is a logical name (no quotes), SAS looks for a FILEDEF for that name and uses the logical name as the SASUSER library name and the disk mode specified in the FILEDEF as the disk on which the SASUSER library resides. If it is a physical name (enclosed in quotation marks), then SAS expects it to be in the following form:
>
> "<*ft*> *fm*"
>
> where *ft* is an optional specification of the name of the SASUSER library, and *fm* is the disk on which the SASUSER library resides.

See Also

  □ *SAS Language Reference: Dictionary*

SEQENGINE=

Specifies the access method the SAS software uses for SAS libraries in tape format when an engine name is not explicitly stated in a LIBNAME statement

Default: V7SEQ

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

SEQENGINE=*engine-name*

engine-name
can have the following values under CMS:

TAPE
: specifies the engine for accessing sequential SAS data sets in the latest tape format.

    Any new SAS library name beginning with the letters 'TAPE' is created as sequential format. This is true if no LIBNAME statement (or FILEDEF command) is specified with a physical name of 'TAP*x*'. Therefore, if 'TAP*x*' is specified as the physical name, then a sequential library on tape results. If 'TAP*x*' is *not* specified as the physical name, then a sequential format on disk results.

V8TAPE
: specifies the engine for accessing sequential SAS data sets in the Version 8 tape format.

V7TAPE or V7SEQ
: specifies the engine for accessing sequential SAS data sets in the Version 7 tape format.

V6TAPE or V6SEQ
: specifies the engine for accessing sequential SAS data sets in the Version 6 tape format.

V5TAPE or V5SEQ
: specifies the engine for accessing read-only sequential SAS data sets in the Version 5 tape format.

See Also

□ "How SAS Assigns an Engine When No Engine Is Specified" on page 45

SERIES=

Specifies the series of discontiguous saved segments (DCSS) that contain SAS software

Default: none

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

SERIES=*series*

series
   is a letter from A to Z, or an integer from 0 to 9, that identifies the series of discontiguous saved segments that contain SAS software on your computer system.

Details

Once your installation has installed SAS software in segments, this option should be added to the SASV8SYS CONFIG file.

   Note: In order for DCSS to be used, both the SERIES= and SSEG system options must be specified. △

See Also

   □ "SSEG" on page 300

SET=

Defines an environment variable

Default: none
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SET=*'<group>variable=value'*

group
   specifies an optional logical group of CMS environment variables. The default group is SAS.

variable
   specifies the name of the CMS environment variable.

value
   specifies the value of the CMS environment variable.

Details

Environment variables for CMS SAS are saved in the GLOBALV SAS group. The duration of the CMS environment variables that are set by SAS depends on the next IPL.

   The following example assigns a CMS environment variable to the GLOBALV MYGROUP group, executes an X statement to set a second environment variable in the same group and uses SYSGET functions to fetch the values:

```
options set='mygroup myvar=myvalue';
x 'globalv select mygroup set var2 xstatement';

data _null_;
```

```
      x=sysget('mygroup myvar');
      put x=;
      y="%sysget(mygroup var2)";
      put y=;
   run;
```

The SAS log shows:

```
x=myvalue
y=XSTATEMENT
```

See Also

- "Accessing System Variables" on page 10
- %SYSGET in "Macro Functions" on page 179
- X statement in *SAS Language Reference: Dictionary*

SIODISK=

Forces all WORK files from a SAS program or session to be written to the specified disk

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

SIODISK=*disk-specification*

disk-specification
   is the CMS filemode letter or an SFS directory name.

SORTCUT=

Specifies the number of observations above which the external sort program is selected when the SORTPGM=BEST system option is specified

Default: 2500
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORTCUT=MIN | MAX | *n* | *n*K | *n*M | *n*G | *hex*X

MIN
specifies the minimum number of observations (0).

MAX
specifies the maximum number of observations (2,147,483,647).

n
specifies an integer number of observations.

*n*K
specifies a number of observations that is to be multiplied by 1,024.

*n*M
specifies a number of observations that is to be multiplied by 1,048,576.

*n*G
specifies a number of observations that is to be multiplied by 1,073,741,824.

*hex*X
specifies a number of observations in hexadecimal notation.

Details

If the number of observations in the SAS data set being sorted is greater than the cut-over value, then the external host sort program is used; otherwise, the internal SAS sort is used.

SORTCUTP=

Specifies the data set size (in bytes) above which the sort program is selected when the SORTPGM=BEST option is specified

Default: 0
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORTCUTP=MIN | MAX | *n* | *n*K | *n*M | *n*G | *hex*X

MIN
specifies the minimum number of bytes (0).

MAX
specifies the maximum number of bytes (2,147,483,647).

n
specifies an integer number of bytes.

*n*K
specifies a number of kilobytes (1 kilobyte = 1,024 bytes).

*n*M
specifies a number of megabytes (1 megabyte = 1,048,576 bytes).

*n*G
> specifies a number of gigabytes (1 gigabyte = 1,073,741,824 bytes).

*hex*X
> specifies a number of bytes in hexadecimal notation.

Details

If the value of SORTCUTP is zero, the option is ignored.

SORTEQOP

Controls whether SAS software passes the EQUALS option to the host sort program by default

Default: SORTEQOP
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORTEQOP | NOSORTEQOP

SORTEQOP
> specifies that SAS should pass the EQUALS option to the host sort program by
> default.

NOSORTEQOP
> specifies that SAS should not pass the EQUALS option by default. Use
> NOSORTEQOP if your host sort does not support the EQUALS option or if you do
> not want EQUALS as your default.

Details

The EQUALS option specifies that observations with identical BY variable values are to
retain the same relative positions in the output data set as in the input data set.
NOEQUALS specifies that this restriction is not necessary.

   Either setting of this option can be overridden by specifying the EQUALS or
NOEQUALS option in the PROC SORT statement.

SORTLIB=

Specifies a TXTLIB to be searched when a sort utility's services are requested

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

SORTLIB=*text-library-specification*

text-library-specification
    is the filename of a CMS TXTLIB that contains the system sort utility.

    The following table lists the possible values for this argument:

Specify SORTLIB=	When SORTPGM=	Sort used
CASORT$C	SORT/CASMA001	CA-SORT
PLSRTLIB	SORT/IERRCO00*	PLSORT
DFSRTLIB	SORT	DFSORT
VMSLIB	SORT	VMSORT
SYNCSORT	SORT	SYNCSORT

* Note that the last three characters in the sort program name SORT/IERRCO00 are the letter O, followed by two zeros.

Details

The SORTLIB= system option names a TXTLIB to be made global for use when the SORTPGM= system option is specified as BEST, HOST, or a value other than SAS. This option should be set in the SASV8SYS CONFIG file when SAS software is installed.

See Also

    □ "SORTPGM=" on page 297

SORTLIST

Controls whether the LIST option is passed to the host sort program by default

Default: NOSORTLIST
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORTLIST | NOSORTLIST

SORTLIST
    specifies that SAS software should pass the LIST option to the host sort program.

NOSORTLIST
    specifies that SAS software should not pass the LIST option by default. Use
NOSORTLIST if your host sort does not support the LIST option or if you do not
want to pass the LIST option.

Details

The SORTLIST system option controls whether SAS passes the LIST option to the host
sort program by default. SORTLIST is ignored unless SORT31PL is in effect. The
interpretation of the LIST option is entirely up to the host sort program; it has no effect
on SAS.
    You can override NOSORTLIST with the LIST option in the PROC SORT statement.

SORTMSG

Specifies whether messages from the host sort utility will be displayed

Default: NOSORTMSG

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

SORTMSG | NOSORTMSG

SORTMSG
    specifies that SAS software should request the host sort program to display all
messages.

NOSORTMSG
    specifies that SAS software should request the host sort program to display only
critical messages.

Details

NOSORTMSG can be overridden by the MESSAGE option in the PROC SORT
statement.

SORTNAME=

Specifies the name of the host sort utility

Default: none

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

SORTNAME=*host-sort-program*

SORTPARM=

Specifies a string to be appended to the OPTION statement that is passed to the host sort program

Default: none
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORTPARM='*string*'

string
   contains valid parameters for the host sort program.

Details

The SORTPARM system option specifies a string to be appended to the OPTION
statement that is passed to the host sort program, enabling the user to specify options
unique to the particular host sort program being used. The SORTPARM value is used
only if the SORT31PL system option is in effect.

   The value of the string is not interpreted by SAS but is simply passed through to the
host sort program. The value must be something that the host sort program allows
following the OPTION keyword, and it must not conflict with any option set by SAS.

SORTPGM=

Specifies the name of the host sort program

Default: BEST
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORTPGM=*sort-utility-name* | BEST | HOST | SAS

sort-utility-name
specifies the entry name into an accessible sort utility. This can be a member of the TXTLIB that is specified in the SORTLIB= option.

BEST
specifies to use either the sort utility supplied by SAS or the host sort utility, if available, depending on which is better suited for the data. BEST is based on the number of observations to be sorted. To use SORTPGM=BEST, the entry name of the utility must be SORT, and the SORTLIB= system option must be set appropriately.

HOST
specifies to use the host sort utility available under CMS. To use SORTPGM=HOST, the entry name of the utility must be SORT and the SORTLIB= system option must be set appropriately.

SAS
specifies the sort utility supplied by SAS, which is more efficient for sorting small files than invoking a CMS sort utility.

Details

The host sort utility might be more suitable than the SAS-supplied sort utility for data sets that contain a large number of observations.

To use SORTPGM=BEST or SORTPGM=HOST when the entry name of the sort utility is not SORT, use the SORTNAME= system option to specify the entry name.

See Also

□ "SORTNAME=" on page 296
□ *SAS Language Reference: Dictionary*

SORTSIZE=

Specifies the SIZE parameter that SAS is to pass to the sort utility

Default: MAX
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: maximum sort size

Syntax

SORTSIZE=MAX | SIZE | MIN | *n* | *n*K | *n*M | *n*G

MAX
specifies that the characters MAX are to be passed to the system sort utility. This causes the sort utility to size itself. Not all sort utilities support this feature.

SIZE
specifies that the sort is to use the total amount of free space in the virtual machine minus the amount that is specified by the LEAVE= option in the PROC SORT statement.

MIN

   specifies that the characters MIN are to be passed to the system sort utility. This causes the sort utility to size itself. Not all sort utilities support this feature.

n

   specifies a number of bytes of memory to pass to the sort utility. If *n* is 0, the sort uses the default that was defined when it was installed.

*n***K**

   specifies a number of kilobytes of memory to pass to the sort utility.

*n***M**

   specifies a number of megabytes (1 megabyte = 1,048,576 bytes) to pass to the host sort utility.

*n***G**

   specifies a number of gigabytes (1 gigabyte = 1,073,741,824 bytes) to pass to the host sort utility.

See Also

   □ *SAS Language Reference: Dictionary*

SORTSUMF

Specifies whether the host sort utility supports the SUM FIELDS=NONE control card

Default: NOSORTSUMF
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORTSUMF | NOSORTSUMF

SORTSUMF

   specifies that the host sort utility supports the SUM FIELDS=NONE control card. If the SORTSUMF option is specified and the SORT procedure is invoked with the NODUPKEY parameter, the host sort utility can be used.

NOSORTSUMF

   specifies that the host sort utility does not support the SUM FIELDS=NONE control card. If NOSORTSUMF is specified and the SORT procedure is invoked with the NODUPKEY parameter, the SAS sort utility will be used.

SORT31PL

Controls whether SAS software calls the host sort program by using the extended (31-bit) plist or standard (24-bit) plist

Default: NOSORT31PL
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SORT31PL | NOSORT31PL

SORT31PL
  specifies that SAS software will call the host sort program using the extended (31-bit) plist.

NOSORT31PL
  specifies that SAS software will call the host sort program using the standard (24-bit) plist.

Details

If you are using SORT31PL, you must use NOSORTMSG if your host sort program does not support the PRINT=ALL option.

  If you are using SORT31PL and your host sort is configured to display all messages by default, you might need to specify SORTPARM='PRINT=CRITICAL' to suppress messages.

SSEG

Specifies whether the SAS supervisor and procedures are to be used from discontiguous saved segments (DCSS) or from the load library

Default: NOSSEG
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

SSEG | NOSSEG

SSEG
  specifies that the SAS supervisor and procedures are to be used from discontiguous saved segments.

NOSSEG
  specifies that the SAS supervisor and procedures are to be used from the load library.

Details

You must also specify the SERIES= system option in order for SAS to be used from DCSS. Specify both of them in the SASV8SYS CONFIG file when SAS is installed.

STIMEFMT=

Specifies the format to use for displaying the time on STIMER output

Default: M

Valid in: configuration file, SAS invocation, OPTIONS statement

CMS specifics: all

Syntax

STIMEFMT=S | M | H | SECONDS | MINUTES | HOURS

S, SECONDS
 specifies that SAS software display the STIMER output as seconds.

M, MINUTES
 specifies that SAS software display the STIMER output as minutes:seconds.

H, HOURS
 specifies that SAS software display the STIMER output as hours:minutes:seconds.

STIMER

Writes a subset of system performance statistics to the SAS log

Default: NOSTIMER

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

STIMER | NOSTIMER

STIMER
 specifies that SAS collect and display the timing statistics TCPU and VCPU and to
 display a list of computer resources used for each step.

NOSTIMER
 specifies that SAS software collect no timing statistics.

Details

The STIMER system option specifies whether CPU timing statistics of your SAS session
are collected. The STATS option must also be in effect for the statistics to be printed in
the log.

 Note: Use of the STIMER option might degrade performance of SAS. △

Certain procedures require the use of STIMER if they are to use or display the time consumed.

See Also

- □ "FULLSTIMER" on page 272
- □ *SAS Language Reference: Dictionary*

SYSIN=

Specifies a file containing a SAS program when running in batch or noninteractive mode

Default: none
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

SYSIN=*file-specification* | *('file-specification–1' 'file-specification–2' ... 'file-specification-n')*

file-specification
   identifies the file in one of the following forms. Refer to "Identifying an External File" on page 60 for additional details.

'*filename <filetype <filemode | SFS-directory | *>>*'
   specifies the filename, filetype, and filemode or SFS directory, respectively. This type of file specification is required for concatenated lists of the form *('file-specification–1' 'file-specification–2' ... 'file-specification-n')*. If specifying a single file, the filetype may be omitted; SAS responds by assuming a filetype of SAS.

fileref
   specifies a logical name to be associated with an external file. This one- to eight-character name is not enclosed in quotes. The fileref must have been assigned with a CMS FILEDEF command. If your CMS installation supports the access of OS/390 data sets from CMS (shared DASD), a member of an OS/390 partitioned data set can also be read with the *fileref* specification, assuming that the fileref was previously associated with a specific PDS member using the CMS FILEDEF command.

SYSLEAVE=

Specifies the amount of memory to leave reserved for normal SAS software termination

Default: 8096
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

SYSLEAVE=MIN | MAX | *n* | *n*K | *n*M | *n*G | *hex*X

MIN
   specifies the minimum number of bytes (0).

MAX
   specifies the maximum number of bytes (2,147,483,647).

n
   specifies an integer number of bytes.

*n*K
   specifies a number of kilobytes (1 kilobyte = 1,024 bytes).

*n*M
   specifies a number of megabytes (1 megabyte = 1,048,576 bytes).

*n*G
   specifies a number of gigabytes (1 gigabyte = 1,073,741,824 bytes).

*hex*X
   specifies a number of bytes in hexadecimal notation.

Details

If SAS software encounters an out-of-memory condition, the SYSLEAVE= option
ensures that there is enough memory for the task to close data sets and perform other
necessary cleanup during task termination.

See Also

   □ *SAS Language Reference: Dictionary*

TAPECLOSE=

Specifies the default CLOSE disposition for a SAS data library on tape

Default: REREAD
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

TAPECLOSE=LEAVE | REREAD | REWIND | DISP

LEAVE
   performs no tape positioning when you close a member.

REREAD
rewinds to the beginning of this file when it is closed.

REWIND
rewinds to the beginning of the tape after closing each member.

Details

The TAPECLOSE= system option specifies tape positioning when a SAS data library on tape is closed. The operands REWIND and REREAD are synonymous. No processing occurs under CMS for the operands FREE or DISP.

See Also

□   *SAS Language Reference: Dictionary*

TXTLIB

Determines whether SAS software is to search text libraries that are made global before invocation

Default: TXTLIB
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

TXTLIB | NOTXTLIB

TXTLIB
specifies that any text library that was included in a CMS GLOBAL TXTLIB specification before SAS software was invoked are to be added to the end of the list of libraries to be searched during the SAS session.

NOTXTLIB
specifies not to search any TXTLIBs made that were global before SAS software was invoked.

Details

The TXTLIB system option determines whether text libraries that were included in a CMS GLOBAL TXTLIB specification before SAS is invoked are searched during a SAS session. Note that the global chain is saved and restored by SAS.

USER=

Specifies the name of the default library for all one-level SAS data set names

Default: WORK

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: *library-specification*

Syntax

USER='*library-specification*' | ('*library-specification–1*' ...'*library-specification-n*')

'*library-specification*'
  specifies a physical name (enclosed in quotation marks), in the following form:

  '*<ft> fm*' | '*SFS-directory*'

  where *ft* specifies the optional SAS library, and *fm* is the disk on which the USER library resides.

('*library-specification-1*' ...'*library-specification-n*')
  specifies a concatenated list of user libraries.

Details

The USER library can be specified as a single library or as a concatenated list of libraries. For concatenated libraries, SAS saves new members into the first library in the list. SAS searches for members through all libraries, following the order of the libraries in the concatenated list.

  Concatenated library specifications require an explicit filetype. Without a filetype, SAS is not able to locate individual members within the specified library.

  For example, USER=SASXYZ causes all temporary data sets to be created as SASXYZ.*name*.

  The following example causes new library members to be saved with filetype MYLIB (which can also be used as a fileref). Existing members can be retrieved from either library without specifying a libref.

```
USER=('MYLIB A' 'DEPTLIB DEPT.SAS.LDB')
```

See Also

  □ *SAS Language Reference: Dictionary*

VERBOSE

Controls whether SAS writes the settings of SAS software to either the terminal or the batch log

Default: NOVERBOSE
Valid in: configuration file, SAS invocation
CMS specifics: all

Syntax

VERBOSE | NOVERBOSE

VERBOSE
> writes configuration options.

NOVERBOSE
> does not write configuration options.

VSAMLOAD

Enables or disables the loading of records into an empty VSAM data set

Default: NOVSAMLOAD
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

VSAMLOAD | NOVSAMLOAD

VSAMLOAD
> enables load access to VSAM data sets.

NOVSAMLOAD
> disables load access to VSAM data sets.

VSAMREAD

Enables or disables the reading of VSAM data sets in a SAS DATA step

Default: VSAMREAD
Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window
CMS specifics: all

Syntax

VSAMREAD | NOVSAMREAD

VSAMREAD
> enables read access to VSAM data sets.

NOVSAMREAD
> disables read access to VSAM data sets.

VSAMUPDATE

Enables or disables the updating of VSAM data sets by modifying or erasing existing records or by adding new records

Default: NOVSAMUPDATE

Valid in: configuration file, SAS invocation, OPTIONS statement, OPTIONS window

CMS specifics: all

Syntax

VSAMUPDATE | NOVSAMUPDATE

VSAMUPDATE
  enables the updating of VSAM data sets.

NOVSAMUPDATE
  disables the updating of VSAM data sets.

Details

VSAMUPDATE implies the specifications of VSAMREAD.

WORK=

Specifies the name of the SAS WORK library

Default: WORK

Valid in: configuration file, SAS command

CMS specifics: *library-specification*

Syntax

WORK=*library-specification*

library-specification
  is either a logical name or a physical name. If it is a logical name (no quotes), SAS
  looks for a FILEDEF for that name and uses the logical name as the WORK library
  name and the disk mode specified in the FILEDEF as the disk on which the WORK
  library resides. If it is a physical name (enclosed in quotation marks), then SAS
  expects it to be in the following form:

  '*<filetype> filemode* | *SFS-directory*'

  where *ft* is an optional specification of the name of the WORK library, and *fm* is the
  disk on which the WORK library resides.

Details

The WORK= option specifies a library name for the SAS data library in which
temporary files are stored. The files in the WORK data library are deleted when you
end the current SAS session.

See Also

- □ "USER=" on page 304
- □ "Handling Space in the WORK Library" on page 21
- □ *SAS Language Reference: Dictionary*

XCMD

Specifies whether the X Command is valid in this SAS session

Default: XCMD

Valid in: configuration file, SAS invocation

CMS specifics: all

Syntax

XCMD | NOXCMD

XCMD
  specifies that the X Command is valid in this SAS session.

NOXCMD
  specifies that the X Command is not valid in this SAS session.

Details

This option is used to prevent an X command or an X statement from being used. The X command and statement allow native operating environment commands to be issued from within a SAS session.

NOXCMD is useful for prohibiting X commands from being issued on a server or remote session.

Summary Table of SAS System Options

The following table lists all the SAS system options available to SAS users under the CMS operating environment. The table provides you with the following information about each SAS system option:

- □ the option name
- □ the default if you do not specify the option and the option does not appear in the configuration file, your site's default options table, or in the restricted options table
- □ where you can specify the option
- □ where to learn more about the option.

A few options have different default values depending on the mode in which the SAS System is running. For these options, the following abbreviations are used to distinguish the default values:

(b)   the default value in batch or noninteractive mode

(i)	the default value in interactive line mode
(w)	the default value in windowing environment mode.

The Specified In column indicates where you can set or change the option's value. The following abbreviations represent these circumstances:

SI	SAS invocation
CF	Configuration file
OS	OPTIONS statement
OW	OPTIONS window
all	All of the above.

Here is a key to abbreviations in the See column:

CAM	*Communications Access Methods for SAS/CONNECT and SAS/ SHARE Software*
COMP	the description of the system option earlier in this section of the *SAS Companion for the CMS Environment.*
CON	*SAS/CONNECT Software: Usage and Reference*
INST	the option documented in the SAS installation instructions for the CMS environment.
LR	*SAS Language Reference: Dictionary*
SHR	*SAS/SHARE User's Guide*

For example, look up the BATCH system option. You see that the default is NOBATCH. Read across to the Specified In column. You see that you can set this option upon SAS invocation or in a SAS configuration file. Now read across to the column labeled See. The text LR COMP means that more information about this option is available in *SAS Companion for the CMS Environment*, as well as in *SAS Language Reference: Dictionary.*

Where two references are listed in the See column, the first reference is the primary source of information and should be consulted first.

Table 19.1 Summary of All SAS System Options Available under CMS

Option Name	Default	Specified In	See
ALTLOG		SI CF	LR, COMP
ALTPRINT		SI CF	LR, COMP
APPLETLOC		all	LR
ASYNCHIO	NOASYNCHIO	SI CF	LR
AUTHENCR	OPTIONAL	all	CAM
AUTOEXEC		SI CF	LR, COMP
BATCH	NOBATCH	SI CF	LR
BINDING	DEFAULT	all	LR
BLKSIZE	16384	all	COMP
BOTTOMMARGIN		all	LR

Option Name	Default	Specified In	See
BUFNO	1	all	LR, COMP
BUFSIZE	0	all	LR, COMP
BYERR	BYERR	all	LR
BYLINE	BYLINE	all	LR
CAPS	NOCAPS	all	LR
CAPSOUT	NOCAPSOUT	all	COMP
CARDIMAGE	NOCARDIMAGE	all	LR
CATCACHE	0	SI CF	LR, COMP
CBUFNO	0	all	LR, COMP
CENTER	CENTER	all	LR
CHARCODE	NOCHARCODE	all	LR
CHARTYPE	0 (IBM), 1 (other terminals)	SI CF	COMP
CLEANUP	CLEANUP	all	LR, COMP
CMDMAC	NOCMDMAC	all	LR
CMPOPT	CMPOPT	all	LR
COLLATE	NOCOLLATE	all	LR
COLORPRINTING	COLORPRINTING	all	LR
COMAMID	IUCV	all	CON, CAM
COMAUX1		SI CF	CAM
COMAUX2		SI CF	CAM
COMPRESS	NO	all	LR
CONFIG	SASV8 CONFIG*	SI	COMP
CONNECTREMOTE		all	LR
CONNECTSTATUS	CONNECTSTATUS	all	LR
CONNECTWAIT	CONNECTWAIT	all	LR
CONSOLELOG		SI CF	LR
COPIES	1	all	LR, COMP
CPSP	NOCPSP	SI CF	COMP
CPUID	CPUID	SI CF	LR
DATASTMTCHK	COREKEYWORDS	all	LR
DATE	DATE	all	LR
DB2CMTRLSE	DB2CMTRLSE	SI CF	COMP
DBCS	NODBCS	SI CF	COMP
DBCSLANG		SI CF	COMP
DBCSTYPE	IBM	SI CF	COMP
DEFWORKUNIT	NODEFWORKUNIT	SI CF	COMP
DETAILS	NODETAILS	all	LR

Option Name	Default	Specified In	See
DEVICE		all	LR, COMP
DFLANG	ENGLISH	all	LR
DKRICOND	ERROR	all	LR
DKROCOND	WARN	all	LR
DLDMGACTION	REPAIR	all	LR
DMR	NODMR	SI CF	CON
DMS	DMS	SI CF	LR
DMSEXP	NODMSEXP	SI CF	LR
DOCLOC		SI CF	LR
DSNFERR	DSNFERR	all	LR
DUPLEX	NODUPLEX	all	LR
ECHO		SI CF	COMP
ECHOAUTO	NOECHOAUTO	SI CF	LR
EMAILSYS	SASMAIL	all	COMP
ENGINE	V8	SI CF	LR, COMP
ERRORABEND	NOERRORABEND	all	LR
ERRORCHECK	NORMAL	all	LR
ERRORS	20	all	LR
EXPLORER	NOEXPLORER	SI CF	LR
FILCLR	NOFILCLR	all	COMP
FILSZ	NOFILSZ	all	COMP
FIRSTOBS	1	all	LR
FMTERR	FMTERR	all	LR
FMTSEARCH	(WORK LIBRARY)	all	LR
FORMCHAR	|—-|+|—+=|-/\\\<>*	all	LR
FORMDLIM		all	LR
FORMS	DEFAULT	all	LR
FORTG		SI CF	COMP
FSBCOLOR	NOFSBCOLOR	SI CF	COMP
FSBORDER	BEST	SI CF	COMP
FSDEVICE		SI CF	COMP
FSMODE	IBM	SI CF	COMP
FULLSTIMER	NOFULLSTIMER	all	COMP
GHFONT		SI CF	COMP
GISMAPS		all	LR
GWINDOW	GWINDOW	all	LR
HELPLOC	HELPDOC	SI CF	COMP, LR

Option Name	Default	Specified In	See
IMPLMAC	NOIMPLMAC	all	LR
INITCMD		SI CF	LR
INITSTMT		SI CFSS SW	LR
INVALIDDATA	.	all	LR
LABEL	LABEL	all	LR
LAST	_NULL_	all	LR
LEAVE	0	all	COMP
LEFTMARGIN		all	LR
LINESIZE	terminal width or 132 in batch mode	all	LR, COMP
LOG	TERMINAL (i), SASLOG (b), LOG (w)	SI CF	COMP
MACRO	MACRO	SI CF	LR
MAPS	MAPS	all	LR, COMP
MAUTOSOURCE	MAUTOSOURCE	all	LR
MEMSIZE	0	all	COMP
MERGENOBY	NOWARN	all	LR
MERROR	MERROR	all	LR
MFILE	NOMFILE	all	LR
MISSING	.	all	LR
MLOGIC	NOMLOGIC	all	LR
MPRINT	NOMPRINT	all	LR
MRECALL	NOMRECALL	all	LR
MSG		SI CF	COMP
MSGCASE	NOMSGCASE	SI CF	LR, COMP
MSGLEVEL	N	all	LR
MSTORED	NOMSTORED	all	LR
MSYMTABMAX	524288	all	LR
MULTENVAPPL	NOMULTENVAPPL	all	LR
MVARSIZE	8192	all	LR
NETENCRYPT	NONETENCRYPT	all	CON, SHR
NETENCRYPTALGORITHM		all	CON, SHR
NETENCRYPTKEYLEN	0	all	CON, SHR
NETMAC	NETMAC	all	CON, SHR
NEWS		SI CF	LR, COMP
NOTES	NOTES	all	LR
NULLEOF	NONULLEOF	SI CF	COMP
NUMBER	NUMBER	all	LR

Option Name	Default	Specified In	See
OBJECTSERVER	NOOBJECTSERVER	SI CF	LR
OBS	2147483647	all	LR
OPLIST	NOOPLIST	SI CF	COMP
ORIENTATION	PORTRAIT	all	LR
OVP	NOOVP	all	LR
PAGENO	1	all	LR
PAGESIZE	terminal page size or 60 in batch	all	LR, COMP
PAPERDEST		all	LR
PAPERSIZE	LETTER	all	LR
PAPERSOURCE		all	LR
PAPERTYPE	PLAIN	all	LR
PARM		all	LR
PARMCARDS	FT15F001	all	LR
PFKEY	PRIMARY	SI CF	COMP
PLIO		SI CF	COMP
PRINT	TERMINAL (i), CMS file *program-name* LISTING (b), OUTPUT (w)	SI CF	COMP
PRINTERPATH		all	LR
PRINTINIT	NOPRINTINIT	SI CF	LR
PRINTMSGLIST	PRINTMSGLIST	all	LR
PROBSIG	0	all	LR
PROCLEAVE	8096	all	COMP
REPLACE	REPLACE	all	LR
REUSE	NO	all	LR
RIGHTMARGIN		all	LR
RSASUSER	NORSASUSER	SI CF	LR
RTRACE	NONE	SI CF	COMP
RTRACELOC		all	COMP
S	0	all	LR
SASAUTOS	SASAUTOS	all	LR, COMP
SASCMD		all	LR
SASFRSCR		all	CON, INST
SASHELP	SASHELP *	SI CF	LR, COMP
SASLIB		SI CF	COMP
SASLOAD		SI CF	COMP
SASMSTORE		all	LR

Option Name	Default	Specified In	See
SASSCRIPT	('SASCONNE MACLIB)	all	CON, INST
SASUSER	SASUSER *first-R/W-disk*	SI CF	LR, COMP
SEQ	8	all	LR
SEQENGINE	V7SEQ	all	COMP
SERIES	1	SI CF	INST, COMP
SERROR	SERROR	all	LR
SET		all	COMP
SETINIT	NOSETINIT	SI CF	LR
SIODISK		SI CF	COMP
SKIP	0	all	LR
SOLUTIONS	SOLUTIONS	SI CF	LR
SORTCUT	2500	all	COMP
SORTCUTP	0	all	COMP
SORTDUP	PHYSICAL	all	LR
SORTEQOP	SORTEQOP	all	COMP
SORTLIB		SI CF	COMP
SORTLIST	NOSORTLIST	all	COMP
SORTMSG	NOSORTMSG	all	COMP
SORTNAME		all	COMP
SORTPARM		all	COMP
SORTPGM	BEST	all	COMP
SORTSEQ		all	LR
SORTSIZE	MAX	all	COMP, LR
SORTSUMF	NOSORTSUMF	all	COMP
SORT31PL	NOSORT31PL	all	COMP
SOURCE	depends on run mode	all	LR
SOURCE2	NOSOURCE2	all	LR
SPOOL	NOSPOOL	all	LR
SSEG	NOSSEG	SI CF	COMP
STARTLIB	NOSTARTLIB	SI CF	LR
STIMEFMT	M	all	COMP
STIMER	NOSTIMER	all	COMP
SUMSIZE	8388608	all	LR
SYMBOLGEN	NOSYMBOLGEN	all	LR
SYNCHIO	SYNCHIO	SI CF	LR
SYSIN		SI CF	COMP

Option Name	Default	Specified In	See
SYSLEAVE	8096	all	COMP
SYSPARM		all	LR
S2	0	all	LR
TAPECLOSE	REREAD	all	LR, COMP
TBUFSIZE	0	all	CON
TCPPORTFIRST	0	all	CAM
TCPPORTLAST	0	all	CAM
TERMINAL	TERMINAL	SI CF	LR
TOPMARGIN		all	LR
TRAINLOC		SI CF	LR
TRANTAB		all	CON, LR
TXTLIB	TXTLIB	SI CF	COMP
USER		all	LR, COMP
VALIDVARNAME	V8	all	LR
VERBOSE	NOVERBOSE	SI CF	COMP
VNFERR	VNFERR	all	LR
VSAMLOAD	NOVSAMLOAD	all	COMP
VSAMREAD	VSAMREAD	all	COMP
VSAMUPDATE	NOVSAMUPDATE	all	COMP
WORK	WORK	SI CF	LR, COMP
WORKINIT	WORKINIT	SI C F	LR
WORKTERM	WORKTERM	all	LR
XCMD	XCMD	SI CF	COMP
YEARCUTOFF	1920	all	LR