



CHAPTER

10

Data Set Options

Data Set Options Under UNIX 187

Summary of SAS Data Set Options 189

Data Set Options Under UNIX

This chapter describes SAS data set options that have behavior or syntax that is specific to UNIX environments. Each data set option description includes a brief “UNIX specifics” section that tells which aspect of the data set option is specific to UNIX. Each data set option is described in both this documentation and in *SAS Language Reference: Dictionary*.

Specify data set options following the data set name in SAS statements as follows:

...data-set-name(option-1=value-1 option-2=value-2...)

A few data set options are also SAS system options (for example, BUFSIZE=). If the same option is specified both as a system option and as a data set option, the SAS System uses the value given after the data set name. See “Customizing Your SAS Session” on page 14 and Chapter 17, “SAS System Options,” on page 253 for more information on SAS system options.

See “Summary of SAS Data Set Options” on page 189 for a table of all of the data set options available under UNIX.

BUFNO=

Specifies the number of buffers for processing a SAS data set

Valid as: data set option, SAS system option

Engines: BASE, V8, V7, V6, TAPE, V6TAPE, V7TAPE, V8TAPE

Default: 1

UNIX specifics: default value

Syntax

BUFNO=number-of-buffers

Details

The BUFNO= data set option specifies the number of buffers to be allocated for processing a SAS data set. The buffer number is not a permanent attribute of the data set and is valid only for the current SAS session or job.

See Also

- “BUFSIZE=” on page 188
- “BUFNO” on page 257

BUFSIZE=

Specifies the size of the internal I/O buffer to be used for output data sets

Valid as: data set option, SAS system option

Engines: BASE, V6, V7, V8, TAPE, V6TAPE, V7TAPE, V8TAPE

Default: 0

UNIX specifics: valid range

Syntax

BUFSIZE=*n* | *nK* | *nM* | *nG*

Details

The BUFSIZE= data set option specifies the buffer size for data sets you are creating. This option is valid only for output data sets.

The buffer size can range from 1K to 2G-1. The value can be specified in bytes (*n*), kilobytes (*nK*), megabytes (*nM*), or gigabytes (*nG*).

If you use the default value (0) when you create a SAS data set, the V7 engine calculates a buffer size to optimize CPU and I/O use. This size is the smallest multiple of 8K that can hold 80 observations but is not larger than 64K.

If you specify a nonzero value when you create a SAS data set, the V7 engine uses that value. If that value cannot hold at least one observation or is not a valid buffer size, the engine rounds the value up to a multiple of 1K.

See Also

- “BUFSIZE” on page 258

FILECLOSE=

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

Valid as: data set option

Engines: TAPE
 Default: REREAD
 UNIX specifics: list of valid values

Syntax

FILECLOSE=*disposition*

Details

Disposition can be one of the following values:

- FREE**
 rewinds and dismounts the tape. If the device cannot dismount the tape, it will only be rewound.
- LEAVE**
 performs no tape positioning when you close a file.
- REREAD**
 rewinds to the beginning of this file when it is closed. This is the default.
- REWIND**
 rewinds to the beginning of the tape after closing this file.

Summary of SAS Data Set Options

SAS data set options are listed in Table 10.1 on page 189. The table gives the name of each option; a brief description; whether the option can be used for a data set opened for input, output, or update; and a list of engines with which the option is valid. All options are described in *SAS Language Reference: Dictionary*.

Table 10.1 Summary of SAS Data Set Options

Option Name	Description	When Used	Engines
ALTER=	assigns an alter password to a SAS file.	output update	V8, V7, V6 TAPE, V7TAPE
BLKSIZE=	specifies the default block size for SAS data libraries	inputoutputupdate	V8, V7, TAPE, V8TAPE, V7TAPE
BUFNO=	specifies the number of buffers for processing a SAS data set.	input output update	V8, V7, V6 TAPE, V6TAPE, V7TAPE
BUFSIZE=	specifies the buffer size for output SAS data sets.	output	V8, V7, V6 TAPE, V7TAPE, V6TAPE

Option Name	Description	When Used	Engines
CNTLLEV=	specifies the level of shared access allowed to the SAS data set.	input	V8, V7
COMPRESS=	compresses observations in an output SAS data set.	output	V8, V7, V6
DLDMGACTION=	specifies which action to take when a SAS catalog in a SAS data library is detected as damaged.	input output update	V8, V7
DROP=	excludes variables from processing or from output SAS data sets.	input output update	all
ENCRYPT=	encrypts SAS data files	output	V8, V7, V6
FILECLOSE=	specifies how a tape volume is to be positioned when a SAS file on that volume is closed.	input output	TAPE, V7TAPE
FIRSTOBS=	causes processing to begin at a specified observation.	input	all
GENMAX=	requests generations for a data set and specifies the maximum number of versions	output update	V8, V7
GENNUM=	references a specific generation of a data set	input output update	V8, V7
IDXNAME=	directs SAS to use a specific index to satisfy the conditions of a WHERE expression	input	V8, V7
IDXWHERE=	overrides SAS System decision whether to use an index to satisfy the conditions of a WHERE expression	input	V8, V7
IN=	creates a variable that indicates whether the data set contributed data to the current observation.	input update	all
INDEX=	defines indexes when creating a data set.	output	V8, V7, V6
KEEP=	specifies variables for processing or writing to output SAS data sets.	input output update	all
LABEL=	specifies a label for the data set.	input output update	all
OBS=	specifies the last observation of the data set to process.	input	all
OUTREP=	specifies an operating environment's requirements vector for an output file	output	V8, V7
POINTOBS=	controls whether a compressed data set may be processed with random access (by observation number) rather than sequential access only	output	V8
PW=	assigns a read, write, and alter password to a SAS file.	output update	V8, V7, V6 TAPE, V7TAPE

Option Name	Description	When Used	Engines
PWREQ=	controls the pop up of a requestor window for a data set password	input output update	V6
READ=	assigns a read password to a SAS file.	output update	V8, V7, V6 TAPE, V7TAPE
RENAME=	changes the name of a variable.	input output update	all
REPEMPTY=	controls replacement of like-named temporary or permanent SAS data sets when the new one is empty.	output	V8
REPLACE=	controls replacement of like-named temporary or permanent SAS data sets.	output	all
REUSE=	specifies reuse of space when observations are added to a compressed data set.	output	V8, V7, V6
SORTEDBY=	specifies how the data set is currently sorted.	input output update	V8, V7, V6 TAPE, V7TAPE
TOBSNO= ¹	specifies the number of observations to be transmitted in each multi-observation exchange with a SAS server	input output update	V8, V7
TRANTAB=	specifies a translation table for character conversions.	input output update	V8, V7
TYPE=	specifies the data set type for input, update, and output data.	input output update	all
WHERE=	selects observations that meet the specified condition.	input	all
WHEREUP=	specifies whether to evaluate added observations and modified observations against a WHERE clause.	input output update	V8, V7
WRITE=	assigns a write password to a SAS file.	output update	V8, V7 TAPE, V7TAPE

¹ The TOBSNO= option is valid only for data sets that are accessed through a SAS server via the REMOTE engine.

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