FAQ
Data management

Each morning I have to set my memory size to, say, 20m. The default, 1m, is not sufficient for my data. Is there a way of changing the default setting?

Title	Changing the default memory setting
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Date	March 2002

The following material is based on an exchange that started on Statalist.

More than one person replied to Statalist with "see **help profile**".

With the 01Feb2002 update of Stata 7, however, there is a second answer that cannot be found in the manual, which is, type

```
. set memory 20m, permanent
```

You can do that regardless of operating system; it works under Windows, Macintosh, and all the Unix systems. Typing the above does the same thing as

```
. set memory 20m
```

and it tells Stata to remember that, so that the next time Stata comes up, it is to come up with 20m of memory; see **help memory**.

This was part of the Stata/SE improvements we made, except that this improvement was not limited to Stata/SE. Before the update, the **set memory** command did not do all the syntax checking it should have. You could type

```
. set memory 20m, anything you want to type here
```

and it would set the memory to 20m rather than complaining about a syntax error. Thus, even if you do not have the update, typing **set memory 20m** will appear to work. The next time you invoke Stata, however, you will find it did not. Please note that in Stata for Windows and in Stata for Unix, the initial memory size may be specified on the command line to invoke Stata. For Windows, the command line to invoke Stata might look like

```
c:\stata\wstata.exe /m1
```

which tells Stata to start with 1 megabyte of memory. For Intercooled Stata for

Windows, this is the "factory-installed" default.

If the initial memory size is specified on the command line in this way, it overrides the **set memory, permanent** setting.

You can refer to Appendix A, section 6 in the Getting Started with Stata for Windows manual which will explain how to change the command line in Windows that invokes Stata. We suggest removing the **/m** option from the command line so that only the **set memory, permanent** setting will be used.

You can check if you have the latest update by typing

```
. query born
```

and verifying that your born is 01Feb2002 or later, or just type

```
. update query
```

to see whether Stata thinks your executable needs updating. If it does, **update query** will tell you what to do next.

We often release new features in the updates. Typing **help whatsnew** after installation of the update tells you about them.

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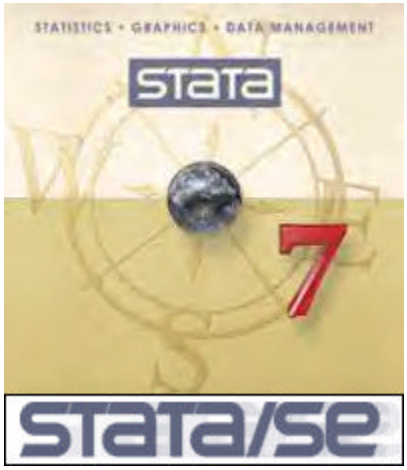

Order Upgrade

Order New Purchase

Stata/SE is ready and we think you are going to like it!

Stata/SE allows Stata users to analyze larger datasets. Specifically,

- Datasets may contain up to 32,766 variables.
- Datasets may contain string variables with longer strings – up to 244 characters.
- Matrices may be up to 11,000 x 11,000, subject to available memory, thus allowing users to estimate models with more independent variables and to estimate certain panel-data models with larger time-series within panel.

These limits are a substantial increase from those of Intercooled Stata with its 2,047 maximum variables, 80-character maximum string length, and an 800 x 800 maximum size of matrices.

Obtaining a copy of Stata/SE is easy. Intercooled Stata 7 users may upgrade on-line to obtain Stata/SE via a web update. If you do not currently own Stata, or if you own an earlier release of Stata, you may purchase Stata/SE on-line as well, and we will send the software to you on a CD along with a Documentation Set.

Frequently asked Questions

Is Stata/SE a new release of Stata?

No. It is Stata/SE 7.0. There are now three flavors of Stata: Small Stata (suitable for student use), Intercooled Stata (the "standard" version), and Stata/SE (the big version).

How large of a computer do I need to run Stata/SE?

A computer with 64 megabytes of memory is adequate, but the larger your computer, the bigger the problems that can be handled by Stata/SE.

Does Stata/SE provide support for 64-bit computers?

Yes.

Can I still run Intercooled Stata?

Yes. There is no reason, however, that you would want to do that except for the security of knowing that you can.

Has the dataset format changed for Stata/SE?

Yes, but there is no problem. Stata/SE will read Intercooled Stata datasets, and both Intercooled and Small Stata 7 have been updated to automatically read Stata/SE datasets, assuming the datasets are not too big.

For those who have Stat/Transfer 6.0, Circle Systems is making available a no-cost Stat/Transfer update that supports the Stata/SE dataset format. Users can use the automatic update feature on the "About" tab, or they can manually download the update from http://www.stattransfer.com.

If I want Stata/SE now, how fast can I get it?

You can have it installed today, if today is a workday; otherwise, you will have to wait until the next workday.

Stata/SE is available two ways: as a web update or shipped to you on a CD. The least expensive way to get it is as a web update.

Just order on-line.

How much does it cost if I already own Intercooled Stata 7.0?

For single-user licenses ordered as a web update, the cost is $140 for those at universities and $240 for non-academics.

I want to know more before buying. Where can I go for more information?

Fire up your copy of Stata and type **help SpecialEdition**. If you have updated your ado-files recently (hint: type **update ado**), you will see the on-line help file for new Stata/SE users.

You can see the same file by pointing your browser to www.stata.com/news/specialedition.html.

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Stata help for limits:

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help for limits (manual: [R] limits)

Maximum size limits

To learn about the larger limits available in Stata/SE, see help SpecialEdition.

	Small	Intercooled
max. # of observations	about 1,000	2,147,483,647 (1)
max. # of variables	99	2,047
width of a dataset	200	24,576
value of matsize	40	800
# characters in a command	3,500	67,800
# options for a command	50	50
# of elements in a numlist	1,600	1,600
# of unique time-series operators in a command	100	100
# seasonal suboperators per time-series operator	8	8
# of dyadic operators in an expression	66	200
# of numeric literals in an expression	50	150
# of string literals in an expression	256	512
length of string in string expression	80	80
# of sum functions in an expression	5	5
# of characters in a macro	3,400	67,784
# of nested do-files	32	32
# of lines in a program	1,000	3,500
# of characters in a program	37,296	135,600
length of a variable name	32	32
length of ado-command name	32	32
length of a global macro name	32	32
length of a local macro name	31	31
length of a string variable	80	80

number of conditions in an if statement	30	100
adjust		
# of variables in by() option	7	7
anova		
# of terms in anova model test statement	8	8
# of terms in the repeated() option	4	4
char		
max. length of a single characteristic	3,400	67,784
constraint		
# of constraints	1,000	1,000
cox		
# of variables in strata() option	5	5
encode and decode		
# of unique values	1000	65,536
estimates hold		
# of stored estimation results	10	10
graph		
length of title	69	69
# of xlab, ylab, rlab, tlab values	25	25
gap	10	10
set textsize	400	400
graph, bar		
# of variables	6	6
# of by-groups	50	50
# of bars (variables X by-groups)	150	150
graph, box		
# of variables	6	6
# of by-groups	50	50
# of boxes (variables X by-groups)	150	150
graph, histogram		
# of by-groups	400	400
# of bins	50	50
# of density() points	300	300
graph, matrix		
# of variables	30	30
graph, oneway		
# of variables	20	20
# of by-groups	52	52
# of plots (variables X by-groups)	60	60

graph, pie		
# of variables	16	16
# of pie charts in single image	64	64
graph, star		
# of variables	16	16
# of stars in single image	81	81
graph, twoway		
# of y variables	20	20
greigen		
# of eigenvalues plotted	13	13
grmeanby		
# of unique values in *varlist*	_N/2	_N/2
hist		
# of unique values in *varname*	50	50
impute		
# of variables in *varlist*	31	31
infile		
record length without dictionary	none	none
record length with a dictionary		
Stata for Windows and Macintosh	7,998	7,998
Stata for Unix	19,998	19,998
infix record length		
Stata for Windows	7,998	7,998
Stata for Unix	19,998	19,998
iqreg		
# of independent variables	336	336
label		
length of dataset label	80	80
length of variable label	80	80
length of value label string	80	80
length of name of value label	32	32
# of codings within a single value label	1,000	65,536
matrix		
dimension of single matrix	40 x 40	800 x 800
maximize options		
iterate() maximum	16,000	16,000
mlogit		

# of outcomes	20	50
notes		
length of a single note	1,000	67,784
# of notes attached to _dta	9,999	9,999
# of notes attached to each variable	9,999	9,999
numlist		
# of elements in the numeric list	1,600	1,600
ologit and oprobit		
# of outcomes	20	50
plot		
# of columns specified with column()	133	133
# of lines specified with lines()	83	83
reg3, sureg, and other system estimators		
# of equations	40	800
set adosize		
max. amount of memory ado-files may consume	500K	500K
set scrollbufsize		
memory for Result window buffer	500K	500K
sqreg		
# of independent variables (q=#quantiles)	336/q	336/q
stcox		
# of variables in strata() option	5	5
sts graph		
# of by variables (2)	5	5
table and tabdisp		
# of by variables	4	4
# of margins, i.e., sum of rows, columns, and supercolumns	3,000	3,000
e.g,, table could be	2,999 x 1	2,999 x 1
	2,998 x 2	2,998 x 2
	2,997 x 3	2,997 x 3
	...	...
	1 x 2,999	1 x 2,999
tabulate (3)		
# of rows in one-way table	500	3,000
# of rows and cols in two-way table	160 x 20	300 x 20

tabulate, summarize (see help tabsum)		
# of cells (rows X cols)	375	375
window		
# of dialog controls	85	85
xt estimation commands (e.g., xtgee, xtgls, xtpois, xtprobit, xtreg with mle option, and xtpcse when neither option hetonly nor option independent are specified)		
# of time periods within panel	40	800

Notes

(1) This is theoretical; memory availability will certainly impose a smaller maximum.

(2) May be restricted to fewer depending on other options specified.

(3) For Intercooled Stata for the Macintosh, limits are 2,000 for the number of rows for a one-way table and 180 for number of rows for a two-way table.

Matrix size

See help matsize.

Determining which flavor of Stata you are running

Type

```
. about
```

The response will be Stata/SE, Intercooled Stata, or Small Stata. Other information is also shown, including your serial number. See help about.

Also see

Manual: [R] limits
On-line: help for about, compress, datatypes, infile, matsize, memory, obs

Statistics/Data Analysis

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help for **memory** (manual: **[R] memory**)

Setting the size of memory

set memory #[**k**|**m**]

memory

set virtual { **on** | **off** }

where # is specified in terms of kilobytes or megabytes.

Description

Setting the size of memory is relevant only if you are using Intercooled Stata. For Small Stata, the amount of memory used is fixed.

The **set memory** command is relevant only if you are using Stata for Windows or Stata for Unix.

Stata for Macintosh users can set the memory at start-up time: see **[GSM] A.5 Specifying the amount of memory allocated**.

Stata for Windows and Stata for Unix users can set the memory at start-up time or use **set memory**. To set it at start-up time: see **[GSW] A.6 Specifying the amount of memory allocated**.

The **memory** command displays a report on Stata's memory usage. **memory** is available on all Intercooled Statas regardless of platform.

set virtual controls whether Stata should perform extra work to arrange its memory to keep objects close together. By default, **virtual** is set **off**. **set virtual** is available on all Intercooled Stata regardless of platform. Just because **virtual** is set **off** does not mean Stata cannot use virtual memory.

Resetting the amount of memory (Stata for Windows and Unix)

```
. set memory 4m
no; data in memory would be lost
r(4);

. drop _all
. set memory 4m
(4096k)

. set memory 32m
(32768k)

. set memory 1m
(1024k)

. set memory 256m
op sys refuses to provide memory
r(909);
```

Obtaining a memory report

```
. memory
```

Using virtual memory slightly more efficiently

```
. set virtual on

...

. set virtual off
```

Do not **set virtual on** unnecessarily; you will slow Stata down. Stata goes to extra work to arrange its memory to be more like a virtual memory system would like it to be.

Also see

Manual: **[U] 7 Setting the size of memory**,
[R] memory
On-line: help for compress, matsize, query