

[help limits](#); [help query](#); [help set](#)

Before you begin learning Stata's data management capabilities, you must first understand the limitations of your Stata and how you can change some key system parameters to suit your personal needs.

help limits This help file provides a list of maximum size limits, per Stata flavour.

These limits are system constants and are defined by the flavour of Stata, *e.g.* Stata Small can take only up to 99 variables and 1,000 observations, Stata/IC up to 2,047 variables and 2,147,483,647 observations and Stata/SE and Stata/MP up to 32,767 and 2,147,483,647 observations. There are plenty of other constants and you should spend some time to review the limits of your Stata.

help query This help file provides a list of system parameters.

These parameters are values of Stata that can be changed and personalised accordingly (but within limits) using the command `set`. We will next review most of these system parameters and use `set` to change them.

[help memory](#); [help clear](#)

Stata is fast because it keeps the entire data within RAM (Random Access Memory). Hence, the wider or lengthier the dataset the more RAM is required. However, be very careful not to oversupply Stata with RAM because you may end up slowing down the entire operating system and Stata. The default memory for Stata/MP and Stata/SE is 10MB, for Stata/IC is 1MB and for Stata Small is 300KB (this is a non-changeable option for Stata Small). In order to change the allocation of memory, you must first:

clear To `clear` the memory from data.

The command `clear` removes all data from memory, *i.e.* all variables and any value labels that may be assigned to variables. This is sufficient for changing the allocation of memory. If you wish, however, to remove all stored attributes from memory that may have been created within a session (such as saved results, programs and macros, ado-files, matrices, scalars, globals, constraints and other stored elements), then you must type:

clear all To `clear all` elements from the memory.

To allocate, for example, 20 MB RAM to Stata type `set memory 20m`. Following, load the desired dataset and if you get the error message '*no room to add...*' then allocate a bit more memory. Try 30MB, 40MB and so on. For this session we suspect that 20MB will be enough:

memory Obtain a report on Stata's memory allocation.

set memory 20m For now, allocate 20MB of RAM to Stata.

query memory See the current memory allocation to Stata.

Notice that there are two other system parameters that relate to the allocation of memory.

Lastly, to find out how to estimate the expected size for your dataset in terms of required MB, see <http://www.stata.com/support/faqs/data/howbig.html>.

