confirm — Argument verification	

Description Syntax Option Remarks and examples Also see

Description

confirm verifies that the arguments following confirm ... are of the claimed type and issues the appropriate error message and nonzero return code if they are not.

confirm is useful in do-files and programs when you do not want to bother issuing your own error message. confirm can also be combined with capture to detect and handle error conditions before they arise; see [P] capture.

Syntax

confirm existence string confirm [new] file filename confirm [numeric | string | date] format string confirm [new] frame name confirm names names confirm names names confirm [integer] number string confirm matrix string confirm scalar string confirm [new|numeric | string | str# | alias | type] variable varlist [, exact] where type is {byte | int | long | float | double | str# | strL }

Option

exact specifies that a match be declared only if the names specified in *varlist* match. By default, names that are abbreviations of variables are considered to be a match.

Remarks and examples

Remarks are presented under the following headings:

confirm existence confirm file confirm format confirm frame confirm names confirm number confirm matrix confirm scalar confirm scalar

confirm existence

confirm existence displays the message " " found where something expected" and produces a return code of 6 if *string* does not exist.

confirm file

confirm file verifies that *filename* exists and is readable and issues the appropriate error message and return code if not.

confirm new file verifies that *filename* does not exist and that *filename* could be opened for writing, and issues the appropriate error message and return code if not.

The possible error messages and return codes are

Message	Return code
found where filename expected	7
file not found	601
file already exists	602
file could not be opened	603

Return codes of 7 and 603 are possible for both confirm file and confirm new file. For confirm new file, a return code of 603 indicates that the filename is invalid, the specified directory does not exist, or the directory permissions do not allow you to create a new file. For instance, even if *filename* does not exist, confirm new file *newdir\newfile* will generate an error if *newdir* does not exist and if you do not have permissions to create a file in *newdir*. confirm new file *filename* will fail if you do not have adequate permissions to create a new file in the current working directory.

confirm format

confirm format verifies that string is a valid variable display format. It produces the message

'string' found where format expected

with a return code of 7 if the format is not valid. It produces the message

" found where format expected

with a return code of 7 if the format is empty.

confirm numeric format specifies that the argument must be a valid numeric format. Valid numeric formats are general, fixed, and exponential. If not, it produces a return code of 7 and the message

'string' found where numeric format expected

or

" found where numeric format expected

if *string* is empty.

confirm string format specifies that the argument must be a valid string format. If not, it produces a return code of 7 and the message

'string' found where string format expected

or

" found where string format expected

if string is empty.

confirm date format specifies that the argument must be a valid date format. If not, it produces a return code of 7 and the message

'string' found where date format expected

or

" found where date format expected

if string is empty.

confirm frame

confirm frame verifies that *name* is a frame (see [D] frames). It produces the message

frame *name* not found

with a return code of 111 if a frame named name does not exist.

confirm new frame verifies that *name* is valid to be used as the name of a frame and that a frame with that name does not already exist. The possible messages and return codes are the following:

Message	Return code
found where frame name expected	7
frame already defined	110
invalid name	198

confirm names

confirm names verifies that the argument or arguments are valid names according to Stata's naming conventions. It produces the message

{name | nothing} invalid name

with a return code of 7 if the names are not valid.

confirm number

confirm number verifies that the argument can be interpreted as a number, such as 1, 5.2, -5.2, or 2.5e+10. It produces the message

{string | nothing} found where number expected

with a return code of 7 if not.

confirm integer number specifies that the argument must be an integer, such as 1 or 2.5e+10, but not 5.2 or -5.2. If not, it produces a return code of 7 and a slight variation on the message above:

{string | nothing} found where integer expected

confirm matrix

confirm matrix verifies that string is a matrix. It produces the message

matrix *string* not found

with a return code of 111 if string is not a matrix.

confirm scalar

confirm scalar verifies that string is a scalar. It produces the message

scalar string not found

with a return code of 111 if string is not a scalar.

confirm variable

confirm variable verifies that *varlist* can be interpreted as an existing varlist of any types of variables. If not, the appropriate error message and nonzero return code are returned:

Message	Return code
found where numeric variable expected	7
found where string variable expected	7
<pre> found where str# variable expected</pre>	7
found where strL variable expected	7
found where alias variable expected	7
no variables defined	111
variable not found	111
invalid name	198

confirm numeric variable specifies that all the variables are numeric. If the variable exists but is not numeric, Stata displays the message

'varname' found where numeric variable expected

or

" found where numeric variable expected

with a return code of 7 if varlist is not specified.

confirm string variable specifies that all the variables are strings, meaning str# or strL. If the variable exists but is not a string variable, Stata displays the message

'varname' found where string variable expected

or

" found where string variable expected

with a return code of 7 if varlist is not specified.

confirm str# variable specifies that all the variables are str#, such as str10 or str42, but are not strLs.

confirm alias variable specifies that all the variables were created by fralias add. If the variable exists but was not created by fralias add, Stata displays the message

'varname' found where alias variable expected

confirm *type* variable specifies that all variables are of the indicated storage type. For example, confirm int variable myvar, confirm float variable myvar thatvar, or confirm strL variable blobvar. As with confirm string variable, the appropriate message and return code of 7 are possible. When there is an alias variable in *varlist*, the linked variable's storage type is checked.

confirm new variable verifies that varlist can be interpreted as a new varlist. The possible messages and return codes are

Message	Return code
found where varname expected	7
already defined	110
invalid name	198

Example 1

confirm is a cheap way to include minimal syntax checking in your programs. For instance, you have written a program that is supposed to take a one-integer argument. Although you do not have to include any syntax checking at all—the program will probably fail with some error if the argument is incorrect—it is safer to add one line at the top of the program:

confirm integer number '1'

Now if the first argument is not an integer, you will get a reasonable error message, and the program will stop automatically.

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Example 2

More sophisticated programs often combine the confirm and capture commands. For instance, ttest has a complex syntax: if the user types ttest var=5, it tests that the mean of var is 5 using one set of formulas, and if the user types ttest var=var2, it tests equality of means by using another set of formulas. Whether there is a number or a variable to the right of the equal sign determines which set of formulas ttest uses. This choice was done by

```
capture confirm number 'exp'
if _rc==0 {
        (code for test against a constant)
        exit
}
(code for test of two variables)
```

Also see

- [P] capture Capture return code
- [D] fralias Alias variables from linked frames

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