dyntext — Process Stata dynamic tags in text file

DescriptionQuick startSyntaxOptionsRemarks and examplesReferencesAlso see

Description

dyntext converts a dynamic text file—a file containing both plain text and Stata commands—to an output file in text format. Stata processes the Stata dynamic tags (see [RPT] **Dynamic tags**) in the dynamic text file and creates the output text file.

If you want to convert a dynamic text file to an HTML or Word (.docx) document, see [RPT] dyndoc. If you want to convert a Markdown document to an HTML or Word document, see [RPT] markdown.

Quick start

Convert text file myfile.txt with Stata dynamic tags to a text file output.txt with Stata output dyntext myfile.txt, saving(output.txt)

Same as above, and overwrite the existing output.txt

dyntext myfile.txt, saving(output.txt) replace

Syntax

dyntext srcfile [arguments], <u>sav</u>ing(targetfile) [options]

srcfile is a plain text file containing Stata dynamic tags. *srcfile* and *targetfile* may be any text format (.txt, .html, .do).

arguments are stored in the local macros '1', '2', and so on for use in *srcfile*; see [U] 16.4.1 Argument passing.

You may enclose *srcfile* and *targetfile* in double quotes and must do so if they contain blanks or other special characters.

options	Description
* <u>sav</u> ing(<i>targetfile</i>)	specify the target file to be saved
replace	replaces the target file if it already exists
noremove	do not process «dd_remove» and «/dd_remove» dynamic tags
nostop	do not stop when an error occurs

*saving(targetfile) is required.

Options

saving(*targetfile*) specifies the target file to be saved. saving() is required.

replace specifies that the target file be replaced if it already exists.

noremove specifies that «dd_remove» and «/dd_remove» tags not be processed.

nostop allows the document to continue being processed even if an error occurs. By default, dyntext stops processing the document if an error occurs. The error can be caused either by a malformed dynamic tag or by executing Stata code within the tag.

Remarks and examples

A dynamic document contains both static narrative and dynamic tags. Dynamic tags are instructions for dyntext to perform a certain action, such as run a block of Stata code, insert the result of a Stata expression in text, export a Stata graph to an image file, or include a link to the image file. Any changes in the data or in Stata will change the output as the document is created. The main advantages of using dynamic documents are

- results in the document come from executing commands instead of being copied from Stata and pasted into the document;
- no need to maintain parallel do-files; and
- any changes in data or in Stata are reflected in the final document when it is created.

Example 1

Let's consider an example. Suppose that we have dyntext_ex.txt with the following text that includes Stata dynamic tags. Because we are writing in plain text, we use - to indicate Stata command names, variable names, etc.

```
begin dyntext_ex.txt -
<<dd version: 2>>
Using Stata dynamic tags in a text file with the -dyntext- command
_____
Let us consider an example where we study the -mpg- and -weight- variables in
-auto.dta-. In our examples below, we will first write the commands so that
they will be displayed in our output text file. Then, we will write the
commands so that Stata will process the Stata dynamic tags, displaying the
results of the Stata commands in the output text file.
We first use the -sysuse- command to load the dataset and then describe
the data using the -describe- command.
<<dd_ignore>>
<<dd_do>>
sysuse auto, clear
describe
<</dd_do>>
<</dd_ignore>>
This produces the following Stata results:
<<dd do>>
sysuse auto, clear
describe
<</dd do>>
Now, we want to check if -mpg- is always greater than 0 and less than 100.
```

We use the -assert- command to perform the check. In this case, we do not want to include any output in the output text file, so we use the -quietlyattribute to modify the behavior of the -dd_do- Stata dynamic tag. <<dd_ignore>> <<dd_do:quietly>> assert mpg > 0 & mpg < 100 <</dd do>> <</dd ignore>> <<dd do:quietly>> assert mpg > 0 & mpg < 100 <</dd do>> If the data do not satisfy the conditions, -dyntext- will fail with an error message, which will occur if we run the same -assert- command in a do-file. Next, we want to summarize the -weight- variable: <<dd ignore>> <<dd do>> summarize weight <</dd_do>> <</dd_ignore>> This produces the following in the output text file: <<dd do>> summarize weight <</dd_do>> We want to use the minimum and maximum values of -weight- in a sentence. Instead of copying and pasting the numbers from the -summarize- output, we can use the -dd display- Stata dynamic tag with the -r(min)- and -r(max)stored results <<dd ignore>> The variable weight has minimum value <<dd display: %4.2f 'r(min)'>> and has maximum value <<dd display: %4.2f 'r(max)'>>. <</dd ignore>> which produces the following in the output text file: > The variable weight has minimum value <<dd display: %4.2f 'r(min)'>> and has maximum value <<dd display: %4.2f 'r(max)'>>. The -dd_display- dynamic tag uses Stata's -display- command to evaluate expressions. It can be used as a calculator. For example, if we want to include the range = max - min in a sentence, instead of calculating the number and then copying and pasting it, we can use <<dd ignore>> The variable weight has range <<dd_display: %4.2f 'r(max)'-'r(min)'>>. <</dd_ignore>> which produces the following in the output text file: > The variable weight has range <<dd_display: %4.2f 'r(max)'-'r(min)'>>.

end dyntext_ex.txt -

We can copy this file to our working directory by typing

. copy https://www.stata-press.com/data/r19/reporting/dyntext_ex.txt .

To generate the output file in Stata, we then type

. dyntext dyntext_ex.txt, saving(dyntext_res.txt)

which produces the following:

```
— begin dyntext_res.txt ——
Using Stata dynamic tags in a text file with the -dyntext- command
_____
Let us consider an example where we study the -mpg- and -weight- variables in
-auto.dta-. In our examples below, we will first write the commands so that
they will be displayed in our output text file. Then, we will write the
commands so that Stata will process the Stata dynamic tags, displaying the
results of the Stata commands in the output text file.
We first use the -sysuse- command to load the dataset and then describe
the data using the -describe- command.
<<dd do>>
sysuse auto, clear
describe
<</dd do>>
This produces the following Stata results:
. sysuse auto, clear
(1978 automobile data)
. describe
Contains data from C:\Program Files\Stata19\ado\base/a/auto.dta
Observations:
                     74
                                     1978 automobile data
                                     13 Apr 2024 17:45
   Variables:
                     12
                                      (_dta has notes)
_____
                                                   _____
        Storage Display
Variable
                            Value
           Storage Display Value
type format label
                                      Variable label
  name
_____
               -----
                                                  _____
           str18 %-18s
                                     Make and model
make
price
            int %8.0gc
                                     Price
                                     Mileage (mpg)
mpg
            int
                  %8.0g
rep78
                  %8.0g
            int
                                     Repair record 1978
           float %6.1f
                                     Headroom (in.)
headroom
trunk
            int
                   %8.0g
                                      Trunk space (cu. ft.)
            int
weight
                   %8.0gc
                                      Weight (lbs.)
                                     Length (in.)
            int
length
                   %8.0g
                                     Turn circle (ft.)
turn
            int
                   %8.0g
displacement int
                   %8.0g
                                     Displacement (cu. in.)
          float %6.2f
                                     Gear ratio
gear_ratio
           byte %8.0g
foreign
                           origin
                                     Car origin
_____
                                    _____
                                                 Sorted by: foreign
```

Now, we want to check if -mpg- is always greater than 0 and less than 100. We use the -assert- command to perform the check. In this case, we do not want to include any output in the output text file, so we use the -quietlyattribute to modify the behavior of the -dd_do- Stata dynamic tag. <<dd_do:quietly>>

assert mpg > 0 & mpg < 100 <</dd_do>>

If the data do not satisfy the conditions, -dyntext- will fail with an error message, which will occur if we run the same -assert- command in a do-file.

Next, we want to summarize the -weight- variable:

<<dd_do>> summarize weight <</dd do>> This produces the following in the output text file:

. summarize weight

Variable	Obs	Mean	Std. dev.	Min	Max
+ weight	 74	3019.459	777.1936	 1760	4840

We want to use the minimum and maximum values of -weight- in a sentence. Instead of copying and pasting the numbers from the -summarize- output, we can use the -dd_display- Stata dynamic tag with the -r(min)- and -r(max)stored results The variable weight has minimum value <<dd_display: %4.2f 'r(min)'>> and has maximum value <<dd_display: %4.2f 'r(max)'>>. which produces the following in the output text file: > The variable weight has minimum value 1760.00 and has maximum value 4840.00. The -dd_display- dynamic tag uses Stata's -display- command to evaluate expressions. It can be used as a calculator. For example, if we want to include the range = max - min in a sentence, instead of calculating the number and then copying and pasting it, we can use The variable weight has range <<dd display: %4.2f 'r(max)'-'r(min)'>>. which produces the following in the output text file: > The variable weight has range 3080.00.

- end dyntext_res.txt -

4

□ Technical note

Because quietly and capture suppress the results of the command from being produced, you should not use these prefix commands with Stata code to be converted by dyntext.

References

Gillman, M. S. 2018. Some commands to help produce Rich Text Files from Stata. *Stata Journal* 18: 197–205. Jann, B. 2016. Creating LATEX documents from within Stata using texdoc. *Stata Journal* 16: 245–263.

Also see

[RPT] Dynamic documents intro — Introduction to dynamic documents

[RPT] Dynamic tags — Dynamic tags for text files

[RPT] dyndoc — Convert dynamic Markdown document to HTML or Word (.docx) document

[RPT] markdown — Convert Markdown document to HTML file or Word (.docx) document

Stata, Stata Press, Mata, NetCourse, and NetCourseNow are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow is a trademark of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2025 StataCorp LLC, College Station, TX, USA. All rights reserved.



For suggested citations, see the FAQ on citing Stata documentation.