Dynamic tags — Dynamic tags for text files

Description Remarks Also see

Description

Dynamic tags are instructions used by Stata's dynamic documents commands, `dyndoc` and `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.

Remarks

Remarks are presented under the following headings:

Descriptions of dynamic tags
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Execute and include output from a block of Stata code
Include strings and values of scalar expressions in text
Include values of scalar expressions and formatted text in a .docx file
Export and include a Stata graph
Include a text file
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Skip contents based on condition
Remove contents

Descriptions of dynamic tags

Here is a list of available dynamic tags and a short description for each. The tag may be abbreviated; the minimum abbreviation is indicated by the underlined letters.

Dynamic tag	Description
«dd_version»	specify the minimum version required to convert the dynamic document
«dd_do»	execute a block of Stata code and optionally include its output
«/dd_do»	end «dd_do»
«dd_display»	include output of Stata expression as shown by Stata's display command
«dd_docx_display»	include output of Stata expression in a .docx file as shown by Stata's display command and format text within a block
«dd_graph»	export a Stata graph and include a link to the file
«dd_ignore»	disable processing of dynamic tags except «dd_remove»
«/dd_ignore»	end «dd_ignore»
«dd_include»	include the contents of a text file
«dd_remove»	remove the following text until «/dd_remove» is specified
«/dd_remove»	end «dd_remove»
«dd_if»	process text based on condition
«dd_else»	process text based on condition
«dd_endif»	end «dd_if» block
«dd_skip_if»	skip text based on condition
«dd_skip_else»	skip text based on condition
«dd_skip_end»	end «dd_skip_if» block

«dd_docx_display» is only for use with putdocx textblock commands in a do-file.

Some tags must start at the beginning of a line, and the text in the same line after the tag is simply ignored. Other tags can be written in the middle of a line. The following table lists the required position in text for all tags.

Dynamic tag	Description
«dd_version»	beginning of a line, recommended at the start of a file
«dd_do»	beginning of a line
«/dd_do»	beginning of a line
«dd_display»	within a line
«dd_docx_display»	within a line
«dd_graph»	within a line
«dd_ignore»	beginning of a line
«/dd_ignore»	beginning of a line
«dd_include»	beginning of a line
«dd_remove»	within a line
«/dd_remove»	within a line
«dd_if»	beginning of a line
«dd_else»	beginning of a line
«dd_endif»	beginning of a line
«dd_skip_if»	beginning of a line
«dd_skip_else»	beginning of a line
«dd_skip_end»	beginning of a line

Tags can have attributes. Attributes are modifiers of a tag's behavior. Attributes can be repeated, and the last one will take effect. For example, if you specify «dd_do: *commands nocommands*», the commands will not be displayed because the attribute nocommands supersedes the previously specified attribute commands. This is useful when you experiment with the behavior of attributes for the best output. Some attributes have values; for example, graphname() requires the name of the graph to be exported. If a tag has only one attribute and that attribute requires a value, then the attribute name is omitted and only the value is required; for example, the dd_version tag is used as «dd_version: *an integer number*».

Version control

<<dd_version: *version_number*>>

The «dd_version» tag specifies the minimum version required to convert the source file. The version number is independent of Stata's version command. The tag must be at the beginning of a new line. We recommend that the tag be placed at the beginning of the *srcfile*.

The current version, and the default, is 2, and it is introduced as of the release of Stata 16. The current version number is also stored in c(dyndoc_version).

Execute and include output from a block of Stata code

<<dd_do: *attribute*>>
block of Stata code ...
<</dd_do>>

The «dd_do» tag runs the block of Stata code, replacing the lines between «dd_do» and «/dd_do» with Stata output. Both the start tag, «dd_do», and the end tag, «/dd_do», must be at the beginning of new lines.

attribute	Description
quietly	suppress all output
nocommands	suppress printing of command
nooutput	suppress command output
noprompt	suppress the dot prompt

Include strings and values of scalar expressions in text

```
<<dd_display: display_directive>>
```

The «dd_display» tag executes Stata's display command and then replaces the tag with its output. The tag cannot contain a line break or ». Use > > (with a space in between) instead if you need to include » in the *display_directive*.

The «dd_display» tag can be used multiple times inside a line of text. For example, say that we want to display the circumference of a circle of radius 1 up to the two digits after the decimal. Instead of computing the number and then copying and pasting the result into the text, we can write

```
2*1*<<dd_display:%4.2f c(pi)>> = <<dd_display:%4.2f 2*1*c(pi)>>
```

which produces

```
2*1*3.14 = 6.28
```

Include values of scalar expressions and formatted text in a .docx file

```
<<dd_docx_display text_options: display_directive>>
```

This tag includes expressions and formatted text within a block of text in a .docx file. It can only be used with text enclosed in putdocx textblock commands, as follows:

```
putdocx textblock begin
... text <<dd_docx_display directive>> text ...
putdocx textblock end
```

The «dd_docx_display» tag executes Stata's display command and then replaces the tag with its output. The output is formatted according to the *text_options* available with putdocx text. The tag cannot contain a line break or ». If you need to include » in the *display_directive*, use the symbols with a space in between (> >).

The «dd_docx_display» tag can be used multiple times inside a line of text. For example, say that we want to display the circumference of a circle with radius 1 up to the two digits after the decimal. Instead of computing the number and then copying and pasting the result into a block of text, we can write

```
putdocx textblock begin
2*1*<<dd_docx_display bold:%4.2f c(pi)>> = <<dd_docx_display bold:%4.2f 2*1*c(pi)>>
putdocx textblock end
```

which formats the value of π and the product in bold and produces the following in the .docx file being created.

2*1*3.14 = 6.28

For another example demonstrating the use of this dynamic tag, see *Working with blocks of text* in [RPT] **putdocx paragraph**.

Export and include a Stata graph

```
<<dd_graph: attribute>>
```

The «dd_graph» tag exports a Stata graph and then includes a link to the exported image file in the target file.

attribute	Description
saving(*filename*)	export graph to *filename*
replace	replace the file if it already exists
graphname(*name*)	name of graph to be exported
svg	export graph as SVG
png	export graph as PNG
pdf	export graph as PDF
eps	export graph as EPS
ps	export graph as PS
html	output an HTML link
markdown	output a Markdown link; default is html
pathonly	output the path of the file; default is html
alt(*text*)	alternative text for the graph to be read by voice software; ignored if pathonly in effect
height(#)	height in pixels of the graph in HTML; ignored if markdown or pathonly in effect
width(#)	width in pixels of the graph in HTML; ignored if markdown or pathonly in effect
relative	use file path relative to the *targetfile* path specified in dyndoc or dyntext; this is the default
absolute	use absolute path in the link; default is relative
basepath(*path*)	use *path* as base directory where graph files will be exported; default is the current working directory if it is not specified
nourlencode	do not encode the path to a percent-encoded URL; ignored if html or markdown in effect

If graphname(*name*) is not specified, the topmost graph is used. You can use the default name "Graph" to export the graph without the name.

For paths specified in the saving() or basepath() attributes, a single backslash (\) is interpreted as an escape character rather than as the directory separator character. When working on Windows, we recommend using a forward slash (/) as the directory separator character (for example, C:/mypath/myfile); otherwise, you must use a double backslash (for example, C:\\mypath\\myfile).

If saving(*filename*) is not specified, a filename will be constructed based on the graph name.

If none of .svg, .png, or .pdf is specified, the saving(*filename*) is checked first; if the name specified in saving(*filename*) has the extension of .svg, .png, or .pdf, then the graph will be exported in the format corresponding to the extension. For example, the dynamic tag

```
<<dd_graph:saving(gr1.png) graphname(gr1)>>
```

produces

```
<img src="gr1.png">
```

Otherwise, the type .svg will be used as in

```
<<dd_graph:saving(gr1.pgg) graphname(gr1)>>
```

which produces

```
<img src="gr1.pgg.svg">
```

If markdown is specified, a Markdown link will be produced. For example, the dynamic tag

```
<<dd_graph:saving(gr1.svg) graphname(gr1) markdown>>
```

produces

```
![](gr1.svg)
```

You may use pathonly if you want an HTML link with more attributes than html or markdown can provide or if you want to use the path in a different target file type such as LaTeX.

By default, the path is outputted as a percent-encoded URL. For example, the dynamic tag

```
<<dd_graph:saving("gr 1.svg") graphname(gr1) pathonly>>
```

produces

```
gr%201.svg
```

You may use nourlencode to disable the encoding process as in

```
"<<dd_graph:saving("gr 1.svg") graphname(gr1) pathonly nourlencode>>"
```

which produces

```
"gr 1.svg"
```

The «dd_graph» tag can be used inside a line of text.

Include a text file

```
<<dd_include: filename>>
```

The «dd_include» tag replaces the tag with the contents of the specified text file. The text file is included as is. The tag must be at the beginning of a new line. The *filename* itself may contain Stata macros, but not the file contents.

Disable dynamic text processing

«dd_ignore» and «/dd_ignore»

The «dd_ignore» tag causes dyntext and dyndoc to ignore the dynamic tag processing, starting from the next line until the line right before a «/dd_ignore» tag. Both the beginning and ending tags must be at the beginning of a line. The only tag it does not affect is the «dd_remove» tag.

Process contents based on condition

```
<<dd_if: Stata expression>>
lines of text ...
<<dd_endif>>
```

or

```
<<dd_if: Stata expression>>
lines of text ...
<<dd_else>>
lines of text ...
<<dd_endif>>
```

«dd_if: *Stata expression*» evaluates the *Stata expression*; if it evaluates to true (anything but 0 or "0"), the lines before the next «dd_endif» are processed. If there is a «dd_else», the lines before «dd_else» are processed, and the lines between «dd_else» and «dd_endif» are skipped.

If the Stata expression evaluates to false (0 or "0"), the lines before the next «dd_endif» are skipped. If there is a «dd_else», the lines before «dd_else» are skipped, and the lines between «dd_else» and «dd_endif» are processed.

Skip contents based on condition

```
<<dd_skip_if: Stata expression>>
lines of text ...
<<dd_skip_end>>
```

or

```
<<dd_skip_if: Stata expression>>
lines of text ...
<<dd_skip_else>>
lines of text ...
<<dd_skip_end>>
```

«dd_skip_if: *Stata expression*» evaluates the *Stata expression*; if it evaluates to true (anything but 0), the lines before the next «dd_skip_end» are skipped. If there is a «dd_skip_else», the lines before «dd_skip_else» are skipped, and the lines between «dd_skip_else» and «dd_skip_end» are processed as usual.

If the Stata expression evaluates to false (0), the lines before the next «dd_skip_end» are not skipped. If there is a «dd_skip_else», the lines before «dd_skip_else» are not skipped, and the lines between «dd_skip_else» and «dd_skip_end» are skipped.

Remove contents

```
... <<dd_remove>>text to remove ...
lines of text to remove ...
text to remove ... <</dd_remove>> ...
```

The «dd_remove» and «/dd_remove» tags remove all the contents between the two tags from the resulting target file. The tags can be used inside a line of text.

«dd_remove» is a postprocessing tag, which means it is processed after all other tags.

Also see

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

[RPT] **dyntext** — Process Stata dynamic tags in text file

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

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