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# Stata tip 30: May the source be with you

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Stata 9 introduced a command, `viewsource`, that does two things: it finds a text file along your ado-path and then opens the Viewer on that text file. See [P] **viewsource** and [U] **17.5 Where does Stata look for ado-files?** for the basic explanations. Naturally, if the text file does not exist as named, say, because you mistyped the name or because it really does not exist, you will get an error message.

Although intended primarily for Stata programmers, `viewsource` can be useful for examining (but not for editing) any text file you are working with. That can include program files, help files, text data files, do-files, log files, and other text documents. Binary or proprietary-format files are not banned, but the command is unlikely to be useful with them. The Viewer is, in particular, not a substitute for any word processor.

Here are some examples. A good way to learn about any Stata command defined by an ado-file is to look at the source code. You might be puzzled by some output, suspect a bug, or simply be curious. Even if you are not (yet) a Stata programmer, you can learn a lot by looking at the code. After all, it is just more Stata. Many, but not all, commands, generically *cmdname*, are defined by *cmdname*`.ado`—an ado-file with the same name as the command. The exceptions are part of the executable and not visible to you by using `viewsource` or indeed any other command. You might as well start reflexively:

```
. viewsource viewsource.ado
```

from which you will see that `viewsource`'s main actions are to (try to) find the file you specified using `findfile` and then to open the file using `view`. You will see other details too, and puzzling out what they do is a good exercise in program appreciation.

A second example is opening a help file. This action may seem redundant given the existence of the `help` command, but there is a noteworthy exception. `viewsource` fires up `view` with its `asis` option, so that interpreting the SMCL commands in any help file is disabled. This approach is useful for examining the SMCL producing the special markup effects that are evident when you use `help`. Suppose that you see code you want to emulate in your own help files. Then `viewsource` *cmdname*`.hlp` will show you how that was done, and you do not need to know exactly where the help file is on your machine, except that it must be on your ado-path. A useful template for producing help files is official Stata's `examplehelpfile.hlp`. Again, you do not need to know where it is, or to search for it, as `viewsource` will find it.

You do not need to be a Stata programmer, or even be interested in the innards of Stata programs or help files, to find `viewsource` useful. Other text files along your ado-

 

path, which includes your current directory or folder, may be opened, too. However, do-files and log files are most likely to be in the current directory or folder, so just using `view` is more direct. Say that you want to repeat a successful but complicated `graph` command, which you carefully stored in a log file or do-file. Use `view` or `viewsource` and then search inside the Viewer using keywords to locate the command before copying it.

Note the emphasis on viewing. The Viewer is not an editor, so making changes to the file is not possible. Use the Viewer when you are clear that neither you nor others should be changing file content, even if the person in question has the requisite file permissions. That situation certainly applies to StataCorp-produced files. With colleagues and students who could do no end of damage if unchecked, this feature is invaluable. It is a limitation if you really do want to edit the file, but then you should already be thinking how to clone `viewsource` so that it fires up your favorite text editor (or Stata's own Do-file Editor). Variants on this idea already exist in Stataland, but writing your own editing command is a good early exercise for any budding Stata programmer.