

19 Updating and extending Stata—Internet functionality

Internet functionality in Stata

Stata works well with the Internet. Stata can use datasets and view remote help files as though they were on your computer. Stata also can keep itself up to date (with your permission, of course). Finally, you can install *user-written commands*, which are commands that extend Stata's functionality. These are commands that have been presented in the *Stata Journal* (SJ) or the *Stata Technical Bulletin* (STB) or have simply been written and shared by the greater Stata community.

This chapter will show you how you can expand Stata's horizons.

Using files from the Internet

Stata understands URLs as though they were local file locations. If you know of a file on the web that you would like to use, be it a dataset, a graph, or a do-file, you can easily open it in Stata. Here is a small example.

There are many datasets at <http://www.stata-press.com/data/>. Suppose that you would like to use the `census12` dataset used in [U] 11 Language syntax and that you know that its location is `http://www.stata-press.com/data/r15/census12.dta`. Because you know that the command for opening a dataset is `use`, you could type the following:

```
. use http://www.stata-press.com/data/r15/census12.dta
(1980 Census data by state)
. describe
Contains data from http://www.stata-press.com/data/r15/census12.dta
  obs:                50                1980 Census data by state
  vars:                7                 6 Apr 2016 15:43
  size:               1,950
```

| variable name | storage type | display format | value label | variable label |
|----------------------------|--------------|----------------|-------------|--------------------------------------|
| <code>state</code> | str14 | %14s | | State |
| <code>state2</code> | str2 | %-2s | | Two-letter state abbreviation |
| <code>region</code> | str7 | %9s | | Census region |
| <code>pop</code> | long | %10.0g | | Population |
| <code>median_age</code> | float | %9.2f | | Median age |
| <code>marriage_rate</code> | float | %9.0g | | |
| <code>divorce_rate</code> | float | %9.0g | | |

```
Sorted by:
```

This functionality is everywhere in Stata. Any command that reads a file with a *filename* in its syntax can use a web address as easily as a file that is stored on your computer.

This example used the HTTP protocol for retrieving the file. Stata also understands the HTTPS and FTP protocols.

Official Stata updates

By official Stata, we mean the pieces of Stata that are provided and supported by StataCorp. The other and equally important pieces are the user-written additions published in the SJ, distributed over Statalist, or distributed in other ways.

Stata can fetch both official updates and user-written commands from the Internet. Let's start with the official updates. StataCorp often releases updates to official Stata. These updates add new features and, sometimes, fix bugs.

By default, Stata has automatic update checking turned on and set to check for updates every seven days. To change or check your settings, select **Edit > Preferences > General preferences...** and click on the **Internet** tab.

We recommend using automatic update checking because it is a simple, unobtrusive way to be sure that your copy of Stata is always up to date. If you keep this default, you will be prompted with a dialog when you start Stata if you have not recently checked for updates.

To manually check whether there are any official Stata updates, either click on **Help > Check for updates** or type `update query` in the Command window. Regardless of which choice you make, Stata goes to check for official updates. After it checks, it will show you your update status. If your copy of Stata is already up to date, you will be told. If your copy of Stata needs updating, you will be told, and a link, `Install available updates`, will show up in your Results window. You can click on this link or type `update all` and press *Enter*. In either case, Stata will download what is needed to bring your copy of Stata up to date. Stata will need to restart after being updated, so it gives you a chance to postpone the update in case there was something (such as saving the command history) you wanted to do in the current session.

Troubleshooting note: If you do not have write permission for `C:\Program Files\Stata15`, you cannot install official updates in this way. You may still download the official updates, but you will need to use the command-line version of `update`; see [U] 28 Using the Internet to keep up to date for instructions.

Automatic update checking

Stata can periodically check for updates for you. By default, Stata will check once every seven days for updates from the StataCorp website. The seven-day interval is from the last time an `update query` was performed, regardless of whether it was by Stata or by you. You can change the interval between checks.

Before Stata connects to the Internet to check for an update, it will ask you if you would like to check now, check the next time Stata is launched, or check after the next interval. You can disable the prompt and allow Stata to check without asking.

If an update is available, Stata will notify you. From there, you should follow the recommendations for updating Stata.

You can change the settings for automatic update checking by selecting **Edit > Preferences > General preferences...** and choosing **Internet**.

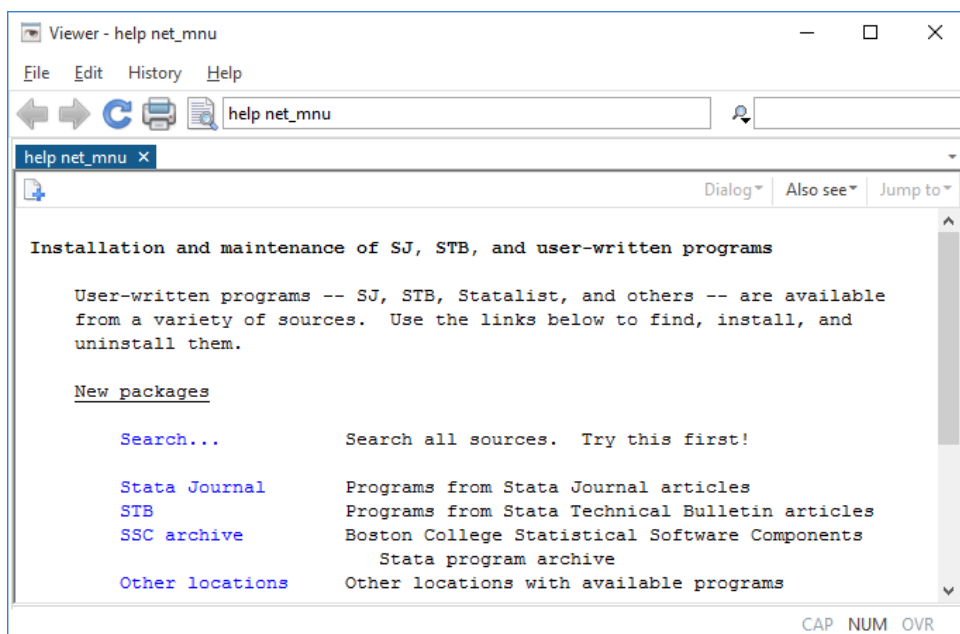
Finding user-written commands by keyword

Stata has a built-in utility created specifically to search the Internet for user-written Stata commands. You can access it by selecting **Help > Search...**, choosing *Search net resources*, and entering a keyword in the field. Choosing **Help > SJ and user-written commands** yields more specific choices for searching. The utility searches all user-written commands on the Internet, including the entire collection of SJ and STB commands. The results are displayed in the Viewer, and you can click to go to any of the matches found.

For the syntax on how to use the equivalent *search keywords*, *net* command, see [R] [search](#).

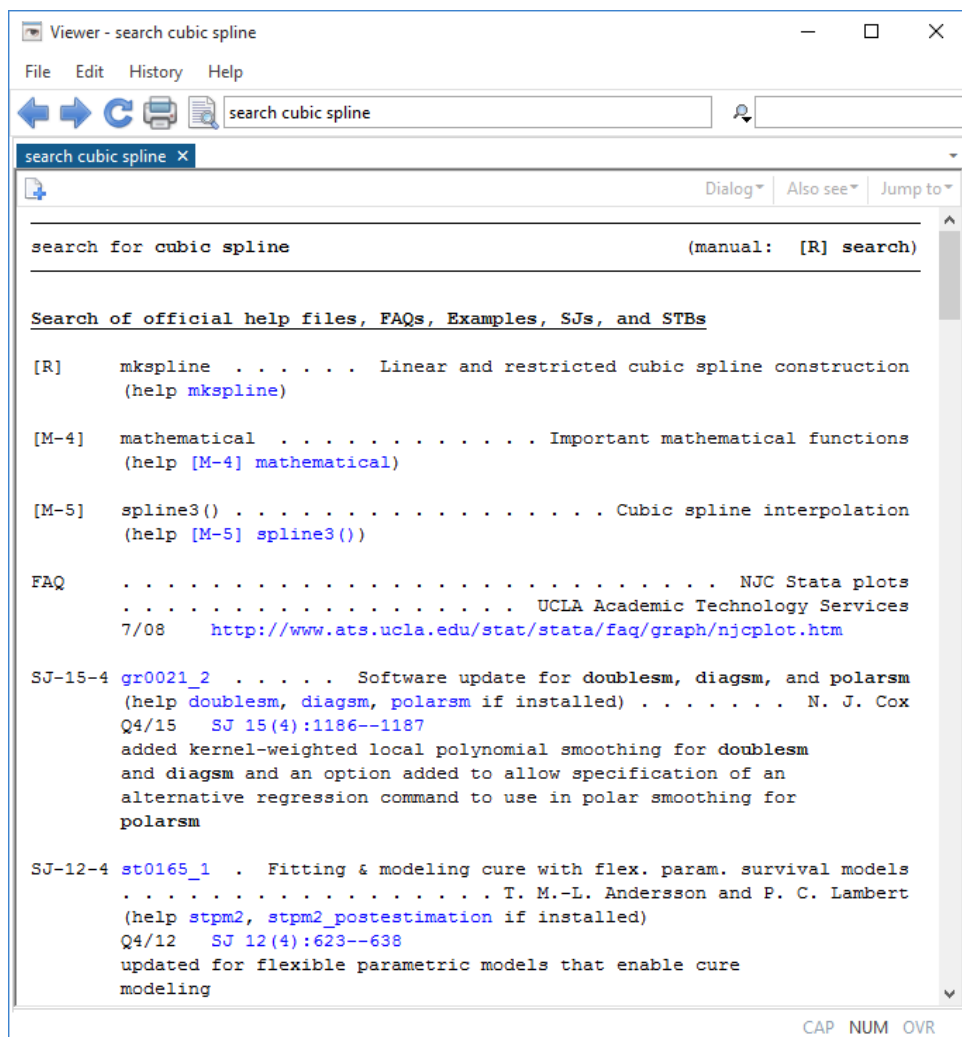
Downloading user-written commands

Downloading user-written commands is easy. Start by selecting **Help > SJ and user-written commands**:

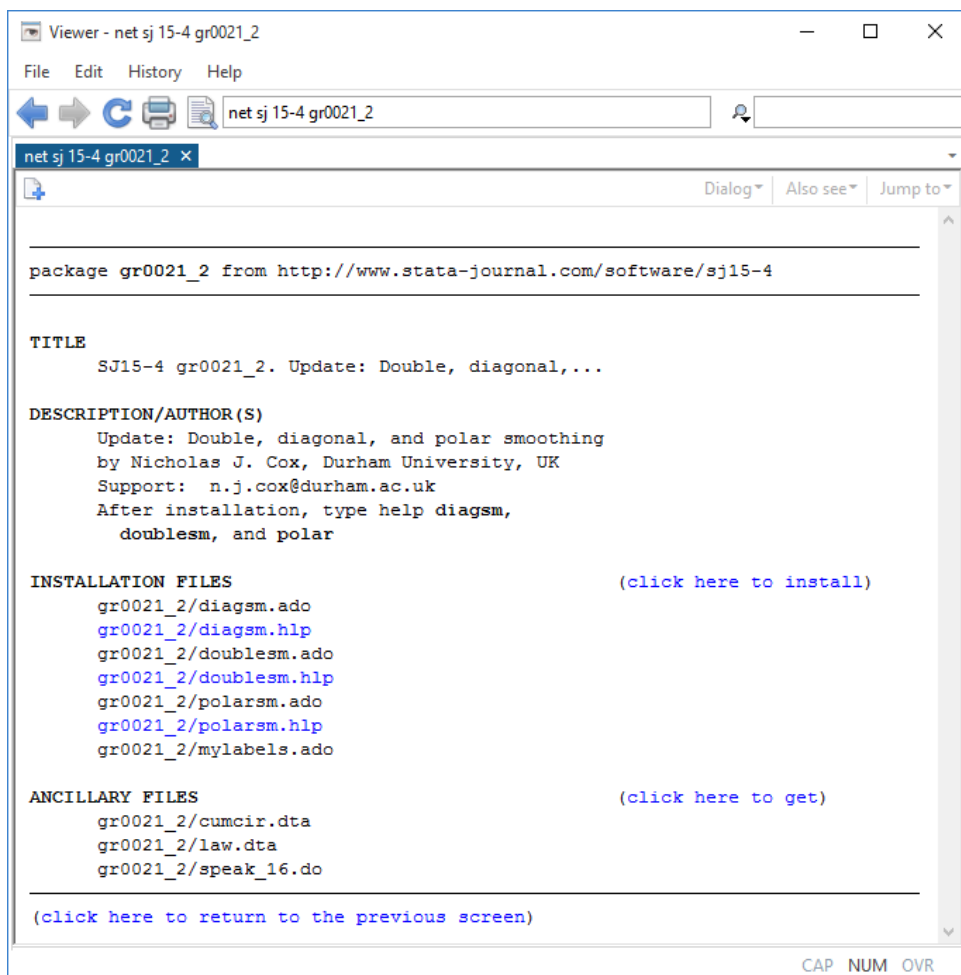


As the Viewer says, try *Search...* first.

Suppose that you were interested in finding more information or some user-written commands involving cubic splines. You select **Help > Search...**, select *Search all*, type *cubic spline* in the search box, and click on the **OK** button.

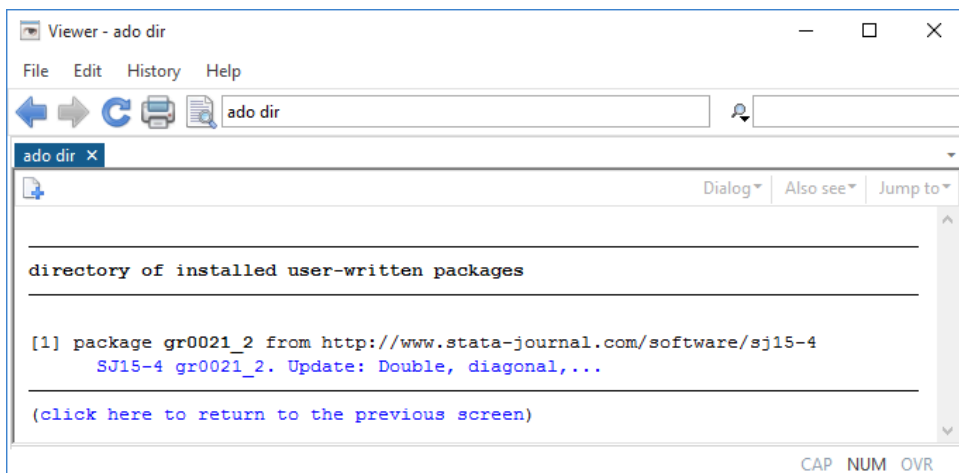


The first entry points to the built-in Stata command `mkspline`. You investigate this command and find it interesting. You see that the next two entries point to some built-in routines in Mata. You follow these links because Mata is not only intriguing but also fast. You see that the next link points to an FAQ on UCLA's website. The next two links point to articles in the SJ. Finally, you decide to check the first of these links. It points to an article in the SJ, volume 15, number 4 (fourth quarter, 2015). You should click on the `gr0021_2` link, because it will go to the commands associated with this article.

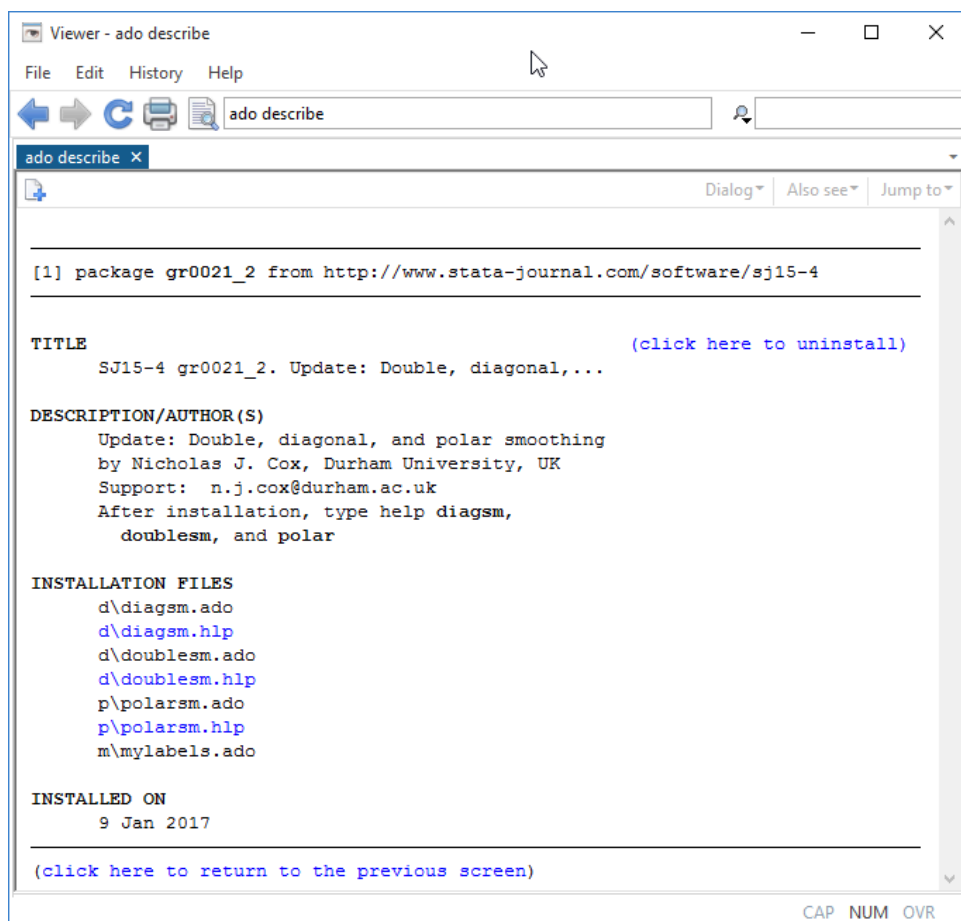


You will see that the package has three help files for three new commands. Click the `gr0021_2/polarsm.hlp` link to see if the `polarsm` command looks interesting. If you decide that you would like to install the command, click the **Back** button and click on the link [click here to install](#). If you decide that you would like to use some of the ancillary files—files that typically help explain the workings of the command, you could download those, too. You do not need to worry—doing so will not interfere in any way with your copy of Stata. We will show you how to safely uninstall these commands shortly.

You can keep the user-written commands you have installed up to date by using the `adoupdate` command. Typing `adoupdate` will check for updates, while typing `adoupdate, update` will check for updates and install any available updates. Now suppose that you decide that you would like to uninstall the package. Doing so is simple enough: select **Help > SJ and user-written commands**, and click on the `List` link. You should see the following:



If you click on the one-line description of the package, you will see the full description of what has been installed. Here is what you would see if you scroll to the bottom, with a different install date, of course:



You can uninstall materials by clicking on [click here to uninstall](#) when you are looking at the package description.

For information on downloading user-written commands by using the `net` command, see [R] [net](#).