

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/r13/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/r13/census12.dta
(1980 Census data by state)
. describe
Contains data from http://www.stata-press.com/data/r13/census12.dta
  obs:                50                1980 Census data by state
  vars:                7                 6 Apr 2013 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 programs 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.

For you to install updates, you need to be running as superuser. You should exit all instances of Stata, and then restart Stata by typing `sudo xstata-mp`, `sudo xstata-se`, `sudo xstata`, or `sudo xstata-sm`, depending on the flavor of Stata you use.

To 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 `/usr/local/stata13`, 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.

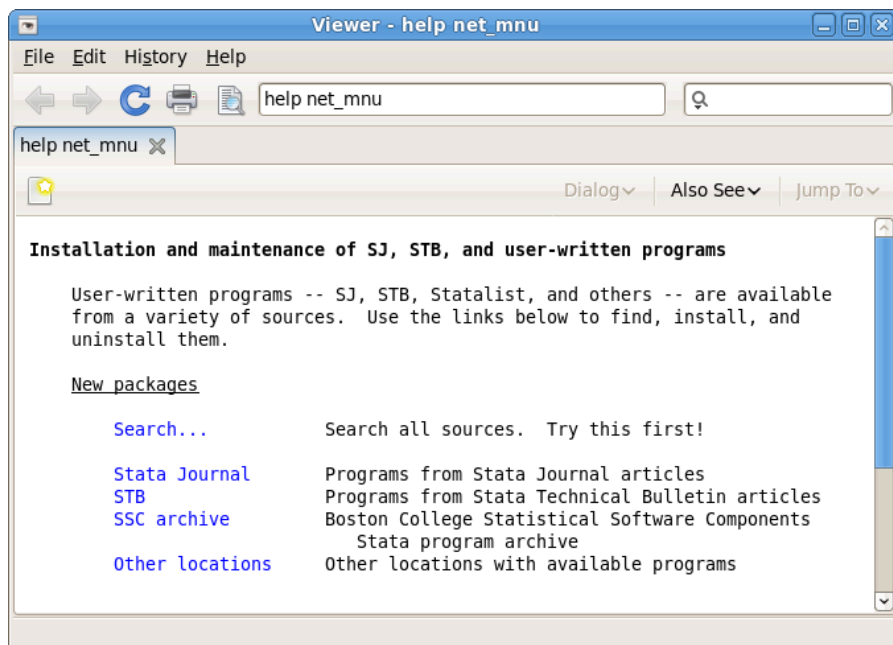
Finding user-written programs by keyword

Stata has a built-in utility created specifically to search the Internet for user-written Stata programs. 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 Programs** yields more specific choices for searching. The utility searches all user-written programs on the Internet, including the entire collection of SJ and STB programs. 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**.

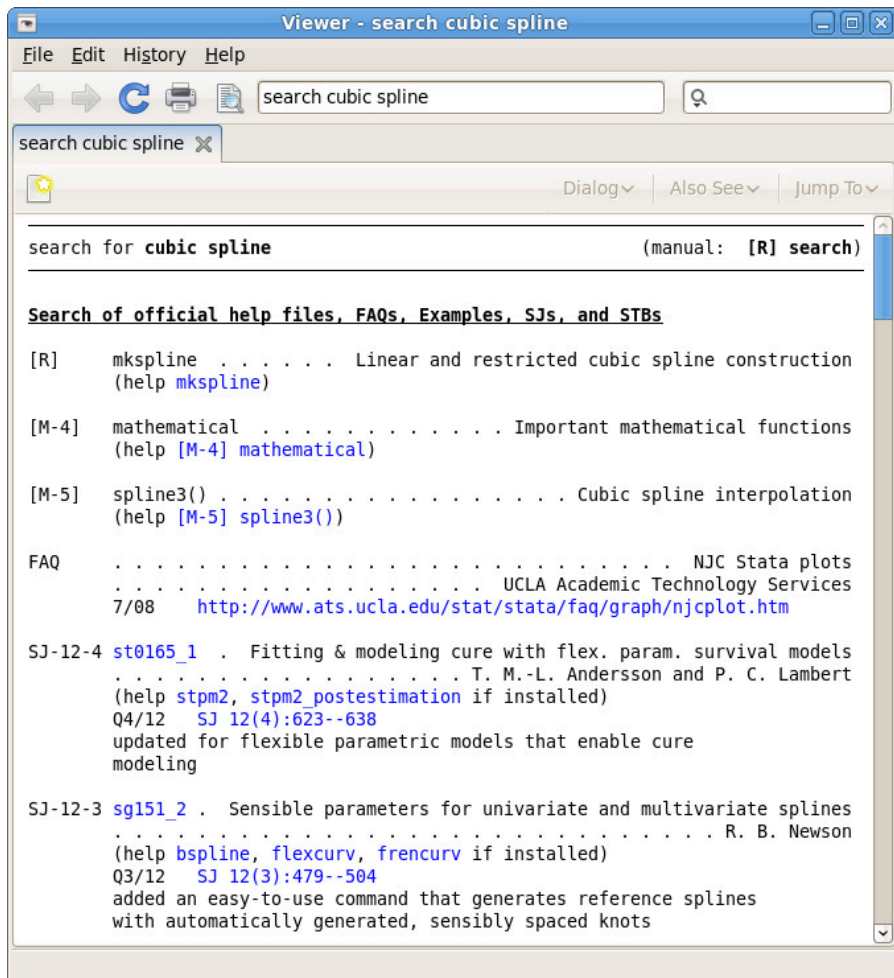
Downloading user-written programs

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

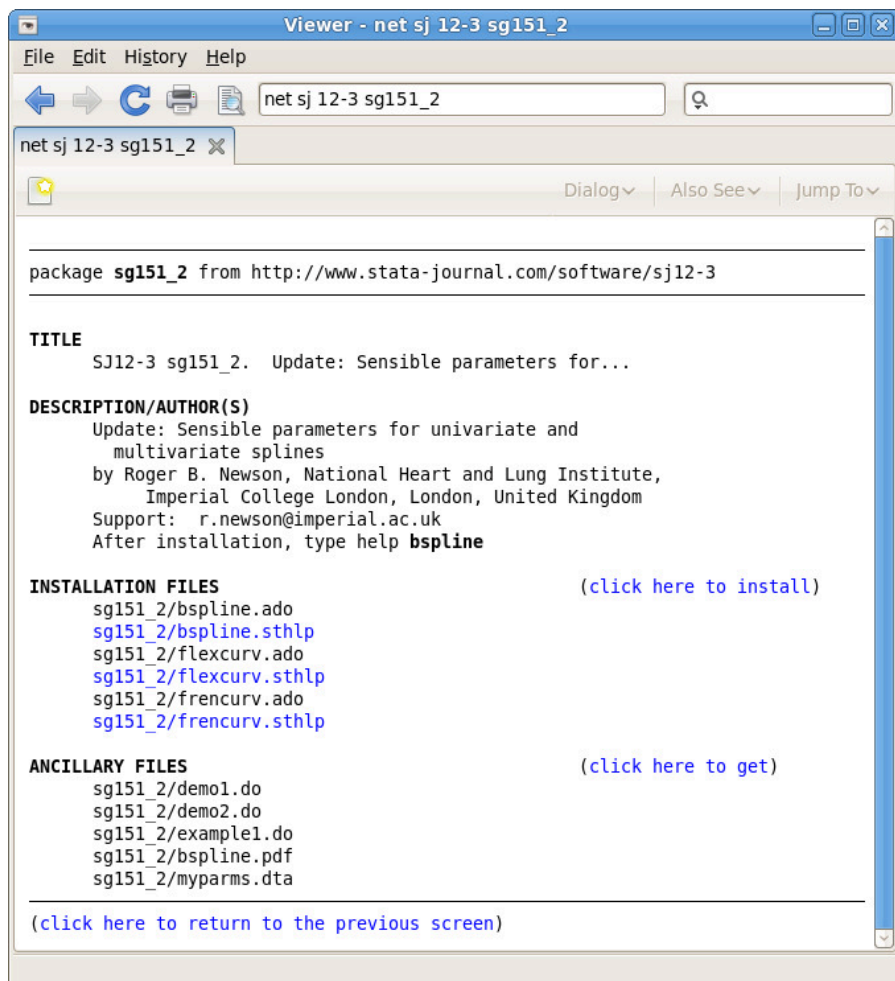


As the Viewer says, try **Search...** first.

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

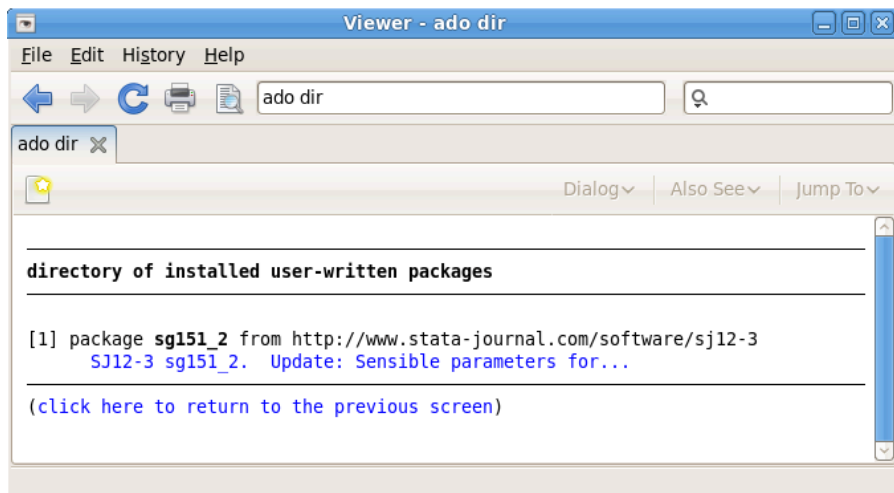


The first entry points to the built-in Stata command `mkspline`. You investigate this command and find it interesting. You see that the next two entries point to some built-in routines in Mata. You follow these links because Mata is not only intriguing but also fast. You see that the next link points to an FAQ on UCLA's website. The next two links point to articles in the SJ. Finally, you decide to check the second of these links. It points to an article in the SJ, volume 12, number 3 (third quarter, 2012). You should click on the `sg151_2` link, because it will go to the programs associated with this article.

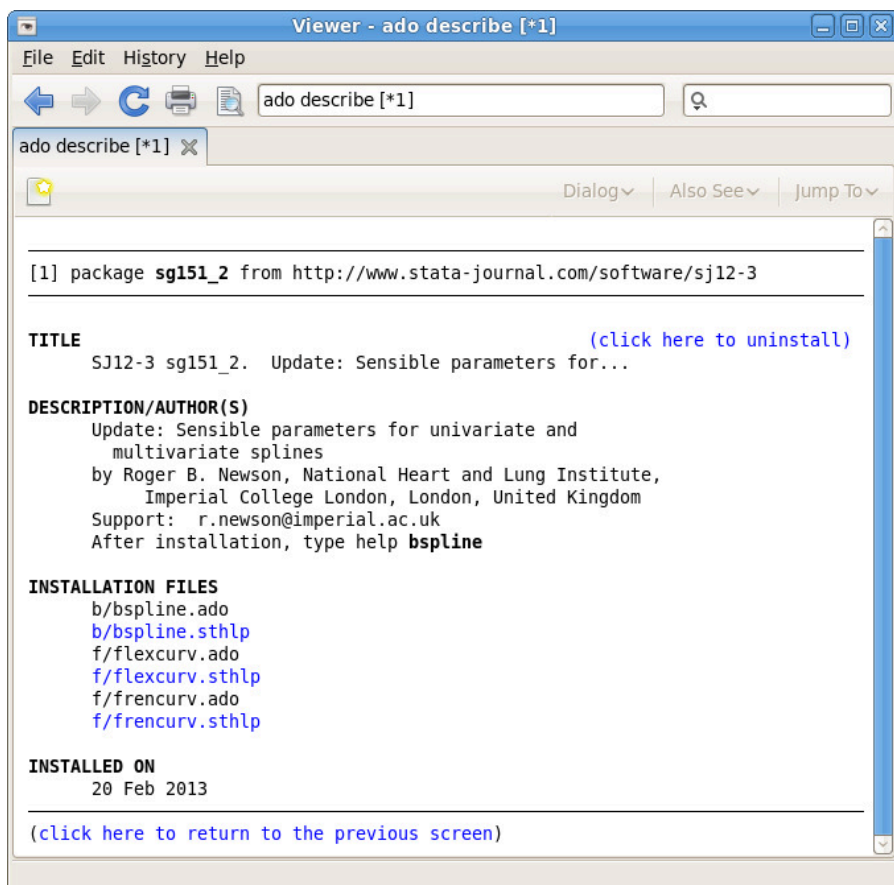


You will see that the package has three help files for three new commands. Click the `sg151_2/bspline.sthlp` link to see if the `bspline` command looks interesting. If you decide that you would like to install the command, click the **Back** button and click on the link [click here to install](#). If 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 programs shortly. That is all there is to installing a user-written package.

Now suppose that you decide that you would like to uninstall the package. Doing so is simple enough: select **Help > SJ and User-written Programs**, and click on the **List** link. You should see the following:



If you click on the one-line description of the program, 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. Try it.

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