Title

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ssc — Install and uninstall packages from SSC

Description

`ssc` works with packages (and files) from the Statistical Software Components (SSC) archive, which is often called the Boston College Archive and is provided by http://repec.org.

The SSC has become the premier Stata download site for user-written software on the web. `ssc` provides a convenient interface to the resources available there. For example, on Statalist (see http://www.statalist.org/), users will often write

> The program can be found by typing `ssc install newprogramname`.

Typing that would load everything associated with `newprogramname`, including the help files.

If you are searching for what is available, type `ssc new` and `ssc hot`, and see [R] **search**. `search` searches the SSC and other places, too. `search` provides a GUI interface from which programs can be installed, including the programs at the SSC archive.

You can uninstall particular packages by using `ssc uninstall`. For the packages that you keep, see [R] **adoupdate** for an automated way of keeping those packages up to date.

Command overview

`ssc new` summarizes the packages made available or updated recently. Output is presented in the Stata Viewer, and from there you may click to find out more about individual packages or to install them.

`ssc hot` lists the most popular packages—popular based on a moving average of the number of downloads in the past three months. By default, 10 packages are listed.

`ssc describe` *pkgname* describes, but does not install, the specified package. Use `search` to find packages; see [R] **search**. If you know the package name but do not know the exact spelling, type `ssc describe` followed by one letter, `a`–`z` or _ (underscore), to list all the packages starting with that letter.

`ssc install` *pkgname* installs the specified package. You do not have to describe a package before installing it. (You may also install a package by using `net install`; see [R] **net**.)

`ssc uninstall` *pkgname* removes the previously installed package from your computer. It does not matter how the package was installed. (`ssc uninstall` is a synonym for `ado uninstall`, so either may be used to installed any package.)

`ssc type` *filename* types a specific file stored at SSC. `ssc cat` is a synonym for `ssc type`, which may appeal to those familiar with Unix.

`ssc copy` *filename* copies a specific file stored at SSC to your computer. By default, the file is copied to the current directory, but you can use options to change this. `ssc copy` is a rarely used alternative to `ssc install ..., all`. `ssc cp` is a synonym for `ssc copy`.

Quick start

Describe mycommand at SSC

```
ssc describe mycommand
```

Install mycommand from SSC

```
ssc install mycommand
```

As above, but replace previously installed version of mycommand

```
ssc install mycommand, replace
```

See a summary of all new and recently updated packages on SSC

```
ssc new
```

See a summary of the 10 most popular SSC packages

```
ssc hot
```

As above, but see the top 25 packages

```
ssc hot, n(25)
```

Syntax

Summary of packages most recently added or updated at SSC

```
ssc new [ , saving(filename[ , replace]) type]
```

Summary of most popular packages at SSC

```
ssc hot [ , n(#) author(name) ]
```

Describe a specified package at SSC

```
ssc describe { pkgname | letter } [ , saving(filename[ , replace]) ]
```

Install a specified package from SSC

```
ssc install pkgname [ , all replace]
```

Uninstall from your computer a previously installed package from SSC

```
ssc uninstall pkgname
```

Type a specific file stored at SSC

```
ssc type filename [ , asis]
```

Copy a specific file from SSC to your computer

```
ssc copy filename [ , plus personal replace public binary]
```

where *letter* in `ssc describe` is `a`–`z` or `_`.

Options

Options are presented under the following headings:

Options for use with ssc new

`saving(`*filename*`[ , replace])` specifies that the "what's new" summary be saved in *filename*. If *filename* is specified without a suffix, *filename*`.smcl` is assumed. If `saving()` is not specified, `saving(ssc_results.smcl)` is assumed.

`type` specifies that the "what's new" results be displayed in the Results window rather than in the Viewer.

Options for use with ssc hot

`n(#)` specifies the number of packages to list; `n(10)` is the default. Specify `n(.)` to list all packages in order of popularity.

`author(`*name*`)` lists the 10 most popular packages by the specified author. If `n(#)` is also specified, the top # packages are listed.

Option for use with ssc describe

`saving(`*filename*[`, replace`]`)` specifies that, in addition to the description's being displayed on your screen, it be saved in the specified file.

If *filename* is specified without an extension, `.smcl` will be assumed, and the file will be saved as a SMCL file.

If *filename* is specified with an extension, no default extension is added. If the extension is `.log`, the file will be stored as a text file.

If `replace` is specified, *filename* is replaced if it already exists.

Options for use with ssc install

`all` specifies that any ancillary files associated with the package be downloaded to your current directory, in addition to the program and help files being installed. Ancillary files are files that do not end in `.ado` or `.sthlp` and typically contain datasets or examples of the use of the new command.

You can find out which files are associated with the package by typing `ssc describe` *pkgname* before or after installing. If you install without using the `all` option and then want the ancillary files, you can `ssc install` again.

`replace` specifies that any files being downloaded that already exist on your computer be replaced by the downloaded files. If `replace` is not specified and any files already exist, none of the files from the package is downloaded or installed.

It is better not to specify the `replace` option and wait to see if there is a problem. If there is a problem, it is usually better to uninstall the old package by using `ssc uninstall` or `ado uninstall` (which are, in fact, the same command).

Option for use with ssc type

`asis` affects how files with the suffixes `.smcl` and `.sthlp` are displayed. The default is to interpret SMCL directives the file might contain. `asis` specifies that the file be displayed in raw, uninterpreted form.

Options for use with ssc copy

`plus` specifies that the file be copied to the `PLUS` directory, the directory where user-written additions are installed. Typing `sysdir` will display the identity of the `PLUS` directory on your computer; see [P] **sysdir**.

`personal` specifies that the file be copied to your `PERSONAL` directory as reported by `sysdir`; see [P] **sysdir**.

If neither `plus` nor `personal` is specified, the default is to copy the file to the current directory.

`replace` specifies that, if the file already exists on your computer, the new file replace it.

`public` specifies that the new file be made readable by everyone; otherwise, the file will be created according to the default permission you have set with your operating system.

`binary` specifies that the file being copied is a binary file and that it is to be copied as is. The default is to assume that the file is a text file and change the end-of-line characters to those appropriate for your computer/operating system.

Remarks and examples

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Users can add new features to Stata, and some users choose to make new features that they have written available to others via the web. The files that comprise a new feature are called a package, and a package usually consists of one or more ado-files and help files. The `net` command (see [R] **net**) makes it reasonably easy to install and uninstall packages regardless of where they are on the web. One site, the SSC, has become particularly popular as a repository for additions to Stata. Command `ssc` is an easier to use version of `net` designed especially for the SSC.

Many packages are available at the SSC. Packages have names, such as `oaxaca`, `estout`, or `egenmore`. At SSC, capitalization is not significant, so `Oaxaca`, `ESTOUT`, and `EGENmore` are ways of writing the same package names.

When you type

```
. ssc install oaxaca
```

the files associated with the package are downloaded and installed on your computer. Package names usually correspond to the names of the command being added to Stata, so one would expect that installing the package `oaxaca` will add command `oaxaca` to Stata on your computer, and expect that typing `help oaxaca` will provide the documentation. That is the situation here, but that is not always so. Before or after installing a package, type `ssc describe` *pkgname* to obtain the details.

▷ Example 1

`ssc new` summarizes the packages most recently made available or updated. Output is presented in the Viewer, from which you may click on a package name to find out more or install it. For example,

```
. ssc new
(contacting http://repec.org)
  (output omitted)
GEOCODE3
 module to retrieve coordinates or addresses from Google Geocoding API Version3
 Authors: Stefan Bernhard       Req: Stata version 12, insheetjson and libjson
> from SSC (q.v.)
 Created: 2013-05-19
GGTAX
 module to identify the most suitable GG family model
 Authors: Andres L Gonzalez Rangel       Req: Stata version 11
 Created: 2013-05-19
ASL_NORM
 module  computing bootstrap Gaussianity tests
 Authors: Maarten L. Buis       Req: Stata version 11
 Created: 2013-05-16
  (output omitted)
------------------------------------------------------------------------------
 End of recent additions and updates
```

`ssc hot` provides a list of the most popular packages at SSC.

```
. ssc hot
```

Top 10 packages at SSC

Rank	Nov 2014 # hits	Package	Author(s)
1	22300.3	qcount	Alfonso Miranda
2	16380.4	estout	Ben Jann
3	15947.4	outreg2	Roy Wada
4	4697.0	ivreg2	Christopher F Baum, Steven Stillman, Mark E Schaffer
5	4009.3	winsor	Nicholas J. Cox
6	3907.1	psmatch2	Barbara Sianesi, Edwin Leuven
7	3212.3	csipolate	Nicholas J. Cox
8	3173.7	use13	Sergiy Radyakin
9	3135.3	ranktest	Mark E Schaffer, Frank Kleibergen
10	2860.9	tabout	Ian Watson

(Click on package name for description)

Use the `n(#)` option to change the number of packages listed:

```
. ssc hot, n(20)
```

Top 20 packages at SSC

Rank	Nov 2014 # hits	Package	Author(s)
1	22300.3	qcount	Alfonso Miranda
2	16380.4	estout	Ben Jann
3	15947.4	outreg2	Roy Wada
4	4697.0	ivreg2	Christopher F Baum, Steven Stillman, Mark E Schaffer
5	4009.3	winsor	Nicholas J. Cox
6	3907.1	psmatch2	Barbara Sianesi, Edwin Leuven
7	3212.3	csipolate	Nicholas J. Cox
8	3173.7	use13	Sergiy Radyakin
9	3135.3	ranktest	Mark E Schaffer, Frank Kleibergen
10	2860.9	tabout	Ian Watson
11	2772.3	outreg	John Luke Gallup
12	2494.7	fre	Ben Jann
13	2375.3	egenmore	Nicholas J. Cox
14	2278.3	regsave	Julian Reif
15	2221.1	spmap	Maurizio Pisati
16	2089.7	shp2dta	Kevin Crow
17	2024.3	carryforward	David Kantor
18	2020.0	bcuse	Christopher F Baum
19	1887.0	distinct	Gary Longton, Nicholas J. Cox
20	1781.4	xtabond2	David Roodman

(Click on package name for description)

The author(*name*) option allows you to list the most popular packages by a specific person:

```
. ssc hot, author(baum)
```

Top 10 packages at SSC by author Baum

Rank	Nov 2014 # hits	Package	Author(s)
4	4697.0	ivreg2	Christopher F Baum, Steven Stillman, Mark E Schaffer
18	2020.0	bcuse	Christopher F Baum
21	1613.0	xttest3	Christopher F Baum
24	1383.2	tscollap	Christopher F Baum
41	800.0	xttest2	Christopher F Baum
46	734.0	overid	Steven Stillman, Christopher F Baum, Vince Wiggins, Mark E Schaffer
50	711.5	hprescott	Christopher F Baum
51	709.0	whitetst	Christopher F Baum, Nicholas J. Cox
74	435.0	outtable	Christopher F Baum, Joao Pedro Azevedo
77	429.3	ivendog	Steven Stillman, Mark E Schaffer, Christopher F Baum

(Click on package name for description)

ssc describe *pkgname* describes, but does not install, the specified package. You must already know the name of the package. See [R] **search** for assistance in searching for packages. Sometimes you know the package name, but you do not know the exact spelling. Then you can type ssc describe followed by one letter, a–z or _, to list all the packages starting with that letter; even so, using search is better.

```
. ssc describe bidensity
```

package **bidensity** from http://fmwww.bc.edu/repec/bocode/b

TITLE

'BIDENSITY': module to produce and graph bivariate density estimates

DESCRIPTION/AUTHOR(S)

bidensity produces bivariate kernel density estimates and graphs the result using a twoway contourline plot, optionally overlaying a scatterplot. The default kernel is Epanechnikov; all the kernels provided by -kdensity- are also available. Compared to Baum's -kdens2- (SSC), which was recently enhanced to produce contourline plots, -bidensity- computes the bivariate kernel densities much more efficiently through use of Mata, and provides a choice of kernel estimators. The estimated densities can be saved in a Stata dataset or accessed as Mata matrices.
KW: density estimation
KW: bivariate density
KW: contourline plots
Requires: Stata version 12.1 and moremata from SSC (q.v.)
Distribution-Date: 20130119
Author: John Luke Gallup, Portland State University
Support: email jlgallup@pdx.edu
Author: Christopher F Baum, Boston College
Support: email baum@bc.edu

INSTALLATION FILES (type **net install bidensity**)

bidensity.ado
bidensity.sthlp

(type **ssc install bidensity** to install)

The default setting for the `saving()` option is for the output to be saved with the `.smcl` extension. You could also save the file with a `log` extension, and in this case, the file would be stored as a text file.

```
. ssc describe b, saving(b.index)
  (output omitted)
. ssc describe bidensity, saving(bidensity.log)
  (output omitted)
```

`ssc install` *pkgname* installs the specified package. You do not have to describe a package before installing it. There are ways of installing packages other than `ssc install`, such as `net`; see [R] **net**. It does not matter how a package is installed. For instance, a package can be installed using `net` and still be uninstalled using `ssc`.

```
. ssc install bidensity
checking bidensity consistency and verifying not already installed...
installing into C:\ado\plus\...
installation complete.
```

`ssc uninstall` *pkgname* removes the specified, previously installed package from your computer. You can uninstall immediately after installation or at any time in the future. (Technical note: `ssc uninstall` is a synonym for `ado uninstall`, so it can uninstall any installed package, not just packages obtained from the SSC.)

```
. ssc uninstall bidensity
package bidensity from http://fmwww.bc.edu/repec/bocode/b
      'BIDENSITY': module to produce and graph bivariate density estimates
(package uninstalled)
```

`ssc type` *filename* types a specific file stored at the SSC. Although not shown in the syntax diagram, `ssc cat` is a synonym for `ssc type`, which may appeal to those familiar with Unix. To view only the `bidensity` help file for the `bidensity` package, you would type

```
. ssc type bidensity.sthlp
-------------------------------------------------------------------------------
help for bidensity
-------------------------------------------------------------------------------

Bivariate kernel density estimation
        bidensity varnameY varnameX [if exp] [in range] [, n(#)
                  kernel(kernelname) xwidth(#) ywidth(#) saving( name) replace
                  nograph scatter[(scatter_options)] contourline_options
                  mname(name)
  (output omitted)
```

`ssc copy` *filename* copies a specific file stored at the SSC to your computer. By default, the file is copied to the current directory, but you can use options to change this. `ssc copy` is a rarely used alternative to `ssc install ..., all`. `ssc cp` is a synonym for `ssc copy`.

```
. ssc copy bidensity.ado
(file bidensity.ado copied to current directory)
```

◁

For more details on the SSC archive and for information on how to submit your own programs to the SSC, see http://repec.org/bocode/s/sscsubmit.html.

Acknowledgments

`ssc` is based on `archutil` by Nicholas J. Cox of the Department of Geography at Durham University, UK, and coeditor of the *Stata Journal* and author of *Speaking Stata Graphics* and by Christopher F. Baum of the Department of Economics at Boston College and author of the Stata Press books *An Introduction to Modern Econometrics Using Stata* and *An Introduction to Stata Programming*. The reworking of the original was done with their blessing and their participation.

Baum maintains the Stata-related files stored at the SSC archive. We thank him for this contribution to the Stata community.

References

Baum, C. F., and N. J. Cox. 1999. ip29: Metadata for user-written contributions to the Stata programming language. *Stata Technical Bulletin* 52: 10–12. Reprinted in *Stata Technical Bulletin Reprints*, vol. 9, pp. 121–124. College Station, TX: Stata Press.

Cox, N. J., and C. F. Baum. 2000. ip29.1: Metadata for user-written contributions to the Stata programming language. *Stata Technical Bulletin* 54: 21–22. Reprinted in *Stata Technical Bulletin Reprints*, vol. 9, pp. 124–126. College Station, TX: Stata Press.

Also see

[R] **adoupdate** — Update user-written ado-files

[R] **net** — Install and manage user-written additions from the Internet

[R] **search** — Search Stata documentation and other resources

[R] **sj** — Stata Journal and STB installation instructions

[P] **sysdir** — Query and set system directories