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 community-contributed software on the web. ssc provides a convenient interface to the resources available there. For example, on Statalist (see https://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] **ado update** 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`

Same 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`

Same 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` [`, ` <u>`sav`</u>`ing(`*filename*[`, replace`]`) type`]

Summary of most popular packages at SSC

> `ssc hot` [`, n(#)` <u>`auth`</u>`or(`*name*`)`]

Describe a specified package at SSC

> `ssc` <u>`d`</u>`escribe` { *pkgname* | *letter* } [`, saving(`*filename*[`, replace`]`)`]

Install a specified package from SSC

> `ssc` <u>`inst`</u>`all` *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* [`, ` <u>`pl`</u>`us` <u>`person`</u>`al replace` <u>`pub`</u>`lic` <u>`bin`</u>`ary`]

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 community-contributed 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.

stata.com

Remarks and examples

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. Try it for yourself! Type ssc new in the Command window.

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

```
. ssc hot
```
Top 10 packages at SSC

Rank	Sep 2024 # hits	Package	Author(s)
1	51657.2	reghdfe	Sergio Correia
2	48498.0	estout	Ben Jann
3	47416.0	unique	Tony Brady
4	47030.3	outreg2	Roy Wada
5	35310.3	asdoc	Attaullah Shah
6	31918.0	winsor2	Yujun Lian
7	27743.6	ftools	Sergio Correia
8	25306.6	egenmore	Nicholas J. Cox
9	19392.0	distinct	Nicholas J. Cox, Gary Longton
10	17075.6	gtools	Mauricio Caceres Bravo

(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	Sep 2024 # hits	Package	Author(s)
1	51657.2	reghdfe	Sergio Correia
2	48498.0	estout	Ben Jann
3	47416.0	unique	Tony Brady
4	47030.3	outreg2	Roy Wada
5	35310.3	asdoc	Attaullah Shah
6	31918.0	winsor2	Yujun Lian
7	27743.6	ftools	Sergio Correia
8	25306.6	egenmore	Nicholas J. Cox
9	19392.0	distinct	Nicholas J. Cox, Gary Longton
10	17075.6	gtools	Mauricio Caceres Bravo
11	15899.0	coefplot	Ben Jann
12	14721.7	nearmrg	Eric Booth
13	13793.7	winsor	Nicholas J. Cox
14	13720.0	ivreg2	Christopher F Baum, Mark E Schaffer, Steven Stillman
15	13671.8	ivreg210	Mark E Schaffer, Christopher F Baum, Steven Stillman
16	13617.1	ivreg29	Mark E Schaffer, Christopher F Baum, Steven Stillman
17	13558.3	ivreg28	Mark E Schaffer, Steven Stillman, Christopher F Baum
18	12779.4	labutil	Nicholas J. Cox
19	12776.5	tscollap	Christopher F Baum
20	12663.7	tableplot	Nicholas J. Cox

(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	Sep 2024 # hits	Package	Author(s)
14	13720.0	ivreg2	Christopher F Baum, Mark E Schaffer, Steven Stillman
15	13671.8	ivreg210	Mark E Schaffer, Christopher F Baum, Steven Stillman
(*output omitted*)			

```
(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 i
```

```
http://fmwww.bc.edu/repec/bocode/i/
(no title)
```

PACKAGES you could -**net describe**-:
  (*output omitted*)

ivreg2	module for extended instrumental variables/2SLS and GMM estimation
ivreg210	module for extended instrumental variables/2SLS and GMM estimation (v10)
ivreg28	module for extended instrumental variables/2SLS and GMM estimation (v8)
ivreg29	module for extended instrumental variables/2SLS and GMM estimation (v9)
ivreg2h	module to perform instrumental variables estimation using heteroskedasticity-based instruments
ivreg2hdfe	module to estimate an Instrumental Variable Linear Regression Model with two High Dimensional Fixed Effects
ivreg2m	module to identify treatment-effects estimates with potentially misreported and endogenous program participation
ivreg_ss	module to compute confidence intervals, standard errors, and p-values in an IV regression in which the excluded instrumental variable has a shift-share structure
ivreghdfe	module for extended instrumental variable regressions with multiple levels of fixed effects
ivregress2	module to export first and second-stage results similar to ivregress
(*output omitted*)	

```
(type ssc describe pkgname for more information on pkgname)
```

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. For example, we could type

```
. ssc describe i, saving(i.index)
```

or the following:

```
. ssc describe ivreg2, saving(ivreg2.log)
```

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 ivreg2
checking ivreg2 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 ivreg2
package ivreg2 from http://fmwww.bc.edu/repec/bocode/i
        'IVREG2': module for extended instrumental variables/2SLS and GMM
                estimation
(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 ivreg2 help file from the ivreg2 package, you would type

```
. ssc type ivreg2.sthlp
```

help for **ivreg2**

Extended instrumental variables/2SLS, GMM and AC/HAC, LIML and k-class regression
        Full syntax
    (*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 ivreg2.ado
(file ivreg2.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

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.

Choodari-Oskooei, B., and T. P. Morris. 2016. Quantifying the uptake of user-written commands over time. *Stata Journal* 16: 88–95.

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.

Newson, R. B. 2022. Stata tip 147: Porting downloaded packages between machines. *Stata Journal* 22: 996–997.

Also see

[R] **ado update** — Update community-contributed packages

[R] **net** — Install and manage community-contributed additions from the Internet

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

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

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