

# SRQM: Programs

The folder contains some teaching utilities:

- the `packages_required` command to check for the existence of commands installed through additional packages
- the `proper_labels` commands to capitalize the first letters of variable labels
- the `srqm` utilities to set up a computer for the course by following the instructions in the [README](#) file of the SRQM folder
- the `tsst` command to export summary statistics tables as tab-separated values

All commands were written to assist [students](#) in completing their research projects.

## `packages_required`

Checks whether a given list of commands are currently installed in Stata, and [if not](#), tries to install the corresponding package at the [SSC archive](#).

## `proper_labels`

Sets the labels of a variable to their proper capitalization. The code for this command was kindly provided by William A. Huber as an answer to a [StackOverflow question](#).

## Syntax

```
packages_required fre spineplot tabout etc
```

The command is used in course do-files to send a legible one-line warning about package dependencies without slowing down execution with multiple `ssc install` commands.

## `srqm`

The `srqm` utilities rely on the architecture of the SRQM folder, a.k.a the '[Teaching Pack](#)', which contains the course material. All `srqm` commands should be run with this folder set as the working directory.

The `srqm` utilities require one command and optionally one subcommand to execute:

```
srqm command [subcommand] [, nolog]
```

The commands and subcommands form three blocks. The first of them, `setup`, is called from the `profile.do` file of the SRQM folder and is used to set up computers for the course:

```
srqm setup
srqm setup folder
srqm setup packages
```

To minimize trouble with working directory errors, the setup creates a mock symbolic link to the SRQM folder and performs a quick folder integrity check at startup. A few more similar checks are available:

```
srqm check
srqm check folder
```

```
srqm check packages
srqm check course
```

Finally, the mock symbolic link to the SRQM folder can be erased at the end of the semester, and a few more cleanup utilities can be used for testing purposes:

```
srqm clean
srqm clean folder
srqm clean packages
```

Unless the additional `nolog` option is specified, all commands send moderately verbose output to a log in order to help users report issues.

## `srqm setup`

Tries to permanently set up a few options like screen breaks and scrollbar buffer size in Stata, including memory on software versions older than Stata 12.

### *srqm setup folder*

Tries to tell Stata to automatically run from the SRQM folder by copying its path to the global macro `$srqm_wd`. The macro is saved into a `profile.do` file located in the Stata application folder.

The `profile.do` file saved to the Stata application folder acts as a symbolic link that also runs the `profile.do` file from the SRQM folder, to perform further integrity checks on the course setup.

This command occasionally fails on Windows Vista and Windows 7 due to an [issue with admin privileges](#) in which that case users have to set their working directory manually in each session.

If the SRQM folder has been renamed to SRQM-USB, the subcommand ignores the Stata application folder and sets instead packages to be installed to a temporary `Packages` folder in the SRQM folder.

### *srqm setup packages*

Installs the additional Stata packages and [graph schemes by Edwin Leuven](#) used in the course do-files. Requires Internet access to execute properly. Usually runs in less than five minutes.

The subcommand will try to run as quickly as possible by skipping packages that are [already installed](#). This behaviour can be overridden by passing the `forced` option.

## `srqm check`

Produces a report on the current setup, covering the basic system options obtained with `query` and the list of installed packages obtained with `ado dir`.

### *srqm check folder*

Checks the existence of the `Datasets` and `Replication` folders used in class. This subcommand is automatically run with the `nolog` option every time Stata loads with the SRQM working directory.

### *srqm check packages*

Checks whether the additional packages installed from the SSC server by the `srqm setup packages` subcommand are up to date.

### *srqm check course*

Runs the whole course (weekly sessions and draft assignments) as a single sequence to test the executability of the course code. Usually runs in less than ten minutes.

## srqm clean

Cleans up the SRQM folder by erasing temporary workfiles produced by the course do-files. The workfiles consist of logs and folders with the `-files` suffix.

*srqm clean folder*

Unlinks Stata from the SRQM folder by erasing the `profile.do` file that is installed in the application folder as part of the setup for the course. Used at the end of the semester.

*srqm clean packages*

Uninstalls course packages. Used for testing purposes.

## tsst

Produces a simple table of summary statistics as required for the course research project. The code draws on [a tutorial by Ben Jann](#).

The command is very barebones and means ‘tabbed summary statistics table’ because it produces tab-separated values in plain text format, for maximum compatibility with text and spreadsheet editors.

### Syntax

```
tsst using stats.txt [weight], su(v1 v2) fr(v3 v4) [f(1) replace verbose]
```

The `su` option is meant produces five-number summaries out of continuous variables. The `fr` option produces frequencies out of categorical variables. Both results are combined in a single table.

### Options

- The `tsst` command accepts analytical, frequency and probability weights `[aw, fw, pw]`. It does not, however, support the `svy` survey prefix command.
- The command uses a default precision of one decimal that can be changed by specifying a different number `n` with the `f(n)` option.
- The command will overwrite the file to which it exports its results if the `replace` option is specified. Note that there is no `append` option.
- For testing purposes, it is possible to view the plain text result of the command in the Stata Results window by specifying the `verbose` option.

Far more sophisticated output options appear in packages like `estout` or `tabout`. Tamás Bartus is also [developing](#) the `publish` command, which comes close to the spirit of the `tsst` command.

### Help

- Type `tsst` to view a quick syntax sheet.
- Type `tsst using options` for a list of options.
- Type `tsst using example` for a working example.

Students are referred to the documentation of their text or spreadsheet editor to learn how to import a tab-separated values document, or how to convert tab-delimited text into tabular output.