

About establishing a Stata kernel on JupyterHub

Step 1: Activating Stata in your terminal

Open the terminal on Jupyter and then type the command:

```
nano ~/.bashrc
```

You will be guided to an interface like this:

```
GNU nano 6.2 /home/jupyter-user/.bashrc
# ~/.bashrc: executed by bash(1) for non-login shells.
# see /usr/share/doc/bash/examples/startup-files (in the package bash-doc)
# for examples

# If not running interactively, don't do anything
case $- in
  *i*) ;;
  *) return;;
esac

# don't put duplicate lines or lines starting with space in the history.
# See bash(1) for more options
HISTCONTROL=ignoreboth

# append to the history file, don't overwrite it
shopt -s histappend

# for setting history length see HISTSIZE and HISTFILESIZE in bash(1)
HISTSIZE=1000
HISTFILESIZE=2000

# check the window size after each command and, if necessary,
# update the values of LINES and COLUMNS.
shopt -s checkwinsize

# If set, the pattern "**" used in a pathname expansion context will
# match all files and zero or more directories and subdirectories.
#shopt -s globstar

# make less more friendly for non-text input files, see lesspipe(1)
[ -x /usr/bin/lesspipe ] && eval "$(SHELL=/bin/sh lesspipe)"

# set variable identifying the chroot you work in (used in the prompt below)
if [ -z "${debian_chroot:-}" ] && [ -r /etc/debian_chroot ]; then
    debian_chroot=$(cat /etc/debian_chroot)
fi

# set a fancy prompt (non-color, unless we know we "want" color)
case "$TERM" in
  xterm-color|*-256color) color_prompt=yes;;
esac

# uncomment for a colored prompt, if the terminal has the capability; turned
[ Read 117 lines ]
[ Help ] [ Write Out ] [ Where Is ] [ Cut ] [ Execute ] [ Location ] [ Undo ] [ Set Mark ] [ To Bracket ] [ Previous ] [ Back ]
[ Exit ] [ Read File ] [ Replace ] [ Paste ] [ Justify ] [ Go To Line ] [ Redo ] [ Copy ] [ Where Was ] [ Next ] [ Forward ]
```

At the end of the file, add the following argument:

```
export PATH="/usr/local/stata-18:$PATH"
```

Please make sure that you haven't made other changes except adding the command to the end of the file. Then you can save the file by `ctrl+s` and exit by `ctrl+x`.

Please run the following command to apply the change:

```
source ~/.bashrc
```

Then you will be able to run Stata programs simply by typing `stata` in the terminal:

```
(base) jupyter-qiansiqihu@user:/mnt/disk1/qiansiqihu-dot$ stata

StataNow 18.5
BE-Basic Edition

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Stata license: 5-user network, expiring 28 Jun 2025
Serial number: 501809388172
Licensed to: Department of Decisions, Operations and Technology, CUHK Business School
            Hong Kong

Notes:
    1. Unicode is supported; see help unicode_advice.

. sysuse auto
(1978 automobile data)

. summarize
```

Variable	Obs	Mean	Std. dev.	Min	Max
make	74	6165.257	2949.496	3291	15906
price	74	21.2973	5.785503	12	41
mpg	69	3.405797	.9899323	1	5
rep78	74	2.993243	.8459948	1.5	5
headroom	74	13.75676	4.277404	5	23
trunk	74	3019.459	777.1936	1760	4840
weight	74	187.9324	22.26634	142	233
length	74	39.64865	4.399354	31	51
turn	74	197.2973	91.83722	79	425
displacement	74	3.014865	.4562871	2.19	3.89
gear_ratio	74	.2972973	.4601885	0	1
foreign	74				

```
. exit
(base) jupyter-qiansiqihu@user:/mnt/disk1/qiansiqihu-dot$
```

Step 2: Establishing Stata kernels in Jupyter

We can utilize the library `nbstata` to build notebook files for Stata programs. First, open the terminal on Jupyter and install the library:

```
pip install nbstata
```

Then run the following command to install the Stata kernel:

```
python -m nbstata.install --conf-file
```

You can access the configuration file with

```
nano ~/.config/nbstata/nbstata.conf
```

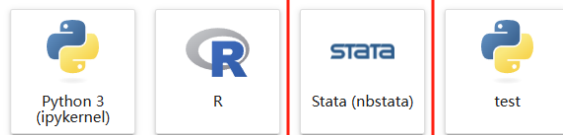
Please check whether the content is consistent with the screenshot below.

```
GNU nano 6.2 /home/jupyter-qiansiqihu/.config/nbstata/nbstata.conf
[nbstata]
stata_dir = /usr/local/stata18
edition = mp
splash = False
graph_format = png
graph_width = 5.5in
graph_height = 4in
echo = None
missing = .
```

IMPORTANT: Due to the fact that the existing network license only supports 5 users, only the first five people who have expressed their need for Stata in the Google Form can have access to `/usr/local/stata18`. They will also receive email notifications about the access to Stata. For users who wish to use Stata but have not filled out the form, please declare your need through [this link](#). When the demand reaches a certain number, we will try to upgrade the license.

After properly setting up the configuration file, the Stata kernel will become available.

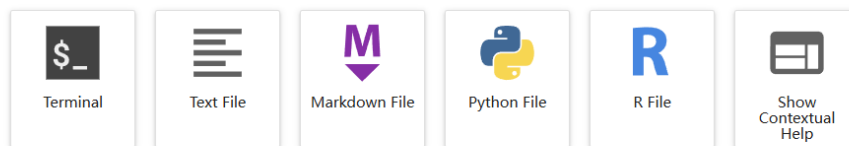
Notebook



Console



Other



Now you can run Stata programs in notebook files:

```
[1]: sysuse auto
(1978 automobile data)
```

```
[2]: summarize
```

Variable	Obs	Mean	Std. dev.	Min	Max
make	0				
price	74	6165.257	2949.496	3291	15906
mpg	74	21.2973	5.785583	12	41
rep78	69	3.480797	.9895323	1	5
headroom	74	2.953243	.8459948	1.5	5
trunk	74	13.75676	4.277484	5	23
weight	74	3019.459	777.1936	1760	4840
length	74	187.9324	22.28634	142	233
turn	74	39.44865	4.399354	31	51
displacement	74	197.2973	91.83722	79	425
gear_ratio	74	3.814865	.4562871	2.19	3.89
foreign	74	.2972973	.4601885	0	1

Please be aware that if you do not have access to `/usr/local/stata18`, the output will look like as follows:

```
[ ]: sysuse auto
```

Specified stata_dir, "/usr/local/stata18", is not Stata's installation path