github v. 2.0.0 package vignette

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Contents

v. 2.0.0

1 github

github is a program for searching, installing, and managing Stata packages as well as their dependencies from GitHub website

1.1 Syntax

github [*subcommand*] [*keyword* | *username/repository*] [, *options*]

where the subcommands can be:

subcommand	*Description*
install	followed by the *username/repository*, installs the specified repository
query	followed by *username/repository*, returns all released versions of that package
check	followed by *username/repository*, evaluates whether the repository is installable
uninstall	followed by *package name*, uninstalls a package
search	followed by *keywords*, it searches the GitHub API for relevant packages or repositories
findfile	followed by a *keyword*, it searches Stata packages for files that include the keyword
list	lists the packages installed from GitHub and checkes if they have an update

1.2 Description

github simplifies searching and installing Stata packages from GitHub website. The package also allows installing older releaes of the package using the **version()** option, if the author has made different release versions on GitHub. In addition, the command allows the authors to specify package dependencies - that must be installed prior to using the package - to be installed automatically.

If the dependencies are also hosted on GitHub, the author can specify a particular version of the dependencies to ensure the software works with the tested version of the dependencies. The information about the package dependencies also appear in the **github search** command, allowing the user to view the dependencies and their particular version that will be installed automatically.

1.3 Options

The **github** command also takes several options for installing a package or searching for a keyword. The table shows the options accordingly:

1.3.1 github install options:

option	*Description*
package(*str*)	the package name. only needed if the repository name is not identical to the package name
stable	installs the latest stable release. otherwise the main branch is installed
verson(*str*)	specifies a particular stable version (release tags) for the installation

1.3.2 github search options:

option	*Description*
language(*str*)	specifies the programming language of the repository. the default is **Stata**
in(*str*)	specifies the domain of the search which can be **name**, **description**, **readme**, or **all**
all	shows repositories that lack the **pkg** and **stata.toc** files in the search results

1.4 Installing package dependencies

Packages installed by **github** command can also automatically install the package dependencies. The **github install** command will look for a file named **dependency.do** in the repository and executes this file if it exists.

The **dependency.do** file will not be copied to the PLUS directory and is simply executed by Stata after installing the package. It can include a command for installing dependency packages using **ssc**, **net install**, or **github install** commands. The latter is preferable because it also allows you to specify a particular version for the dependency packages.

Note that the **dependency.do** file will only be executed by **github install** command and other installation commands such as **net install** will not install the dependencies.

1.5 Examples

1.5.1 examples of installing and uninstalling packages

install the latest development version of MarkDoc package

```
. github install haghish/markdoc
```

install the latest stable version of MarkDoc package

```
. github haghish/markdoc, stable
```

install MarkDoc version 3.8.1 from GitHub (older version)

```
. github haghish/markdoc, version("3.8.1")
```

Uninstall MarkDoc repository

```
. github uninstall markdoc
```

list all of the available versions of the MarkDoc package

```
. github query haghish/markdoc
```

1.5.2 examples of searching for a package

search for MarkDoc package on GitHub

```
. github search markdoc
```

search for a Stata package named

```
. github search weaver, language(stata)
```

search for Stata packages that mention the keyword

```
. github search likelihood, language(stata) in(all)
```

search for a script files with the name *dy*

```
. github findfile dy
```

1.5.3 examples of searching the popular packages

build the complete list of Stata packages on GiutHub

```
. github list stata, language(all) in(all) all save(archive) append
```

1.6 Author

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2 gitget

gitget installs or updates a package from GitHub using the *packagename* only. this is an exploratory alternative to **github** command.

2.1 Syntax

gitget *packagename* [, stable version(*str*)]

options

option	*Description*
stable	installs the latest stable release. otherwise the main branch is installed
verson(*str*)	specifies a particular stable version (release tags) for the installation

2.2 Description

github is a wrapper for github install command. it uses the **gitget.dta** data set, which is installed with **github** package to obtain the *username/reponame* of the package. if multiple packages with identical name are found, the command describes them in a table without installing any module.

by default, the command installs the development version of a repository. if you wish to install a stable release rather than the developmnt version, add the **stable** option or specify the version within the **version** option.

2.3 Example

installing markdoc package and its dependencies

```
. gitget markdoc
```

installing the latest stable version of markdoc package and its dependencies

```
. gitget markdoc, stable
```

2.4 Author

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3 make

builds package installation files

3.1 Syntax

make *pakagename* [, *options*]

3.1.1 options

option	*Description*
replace	replace existing files
toc	generates **stata.toc** file
pkg	generates **packagename.pkg** file
readme	generates **README.md** file
title(*str*)	title of the package
version(*str*)	Version of the package

option	*Description*
description(*str*)	description of the package
license(*str*)	license of the package
author(*str*)	author of the package
affiliation(*str*)	author's affiliation
url(*str*)	package or relevant url address
email(*str*)	package maintainer's email address
install(*str*)	installation files, seperated by
ancillary(*str*)	ancillary files, seperated by

3.2 Description

make generates the required files to make a Stata program installable. the command is particularly handy for packages hosted on private websites or GitHub

3.3 Example

building the installation files for program

```
. make mypackage, replace toc pkg readme          ///
       title(title) version(1.0.0) license("MIT") ///
       description(describe the package)          ///
       author(author name)                        ///
       affiliation(author's affiliation)          ///
       email(package maintained email)            ///
       url(relevant URL)                          ///
       install("a.ado;a.sthlp;b.ado;b.sthlp")     ///
       ancillary("x.dta;y.dta")
```

3.4 Author

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3.5 License

MIT License

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4 pkgzip

creates and downloads a Zip file from SSC and names it based on the package release date

4.1 Syntax

pkgzip *packagename*

4.2 Description

pkgzip downloads a package from SSC. t will also analyze the last release date of the package and creates a Zip file with the release date, to imply the version of the package. packages hosted on SSC do not have a version specified within the package description and instead, the release date is used to show package versions.

4.3 Examples

download adoedit package from SSC, along with its version

```
. pkgzip adoedit
```

4.4 Author

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5 githublistpack

mines the GitHub API for Stata repositories

5.1 Syntax

githublistpack [*keyword*] [, *options*]

5.1.1 Options

option	*Description*
language(*str*)	specifies the programming language of the repository. the default is **Stata**
in(*str*)	specifies the domain of the search which can be **name**, **description**, **readme**, or **all**
all	shows repositories that lack the **pkg** and **stata.toc** files in the search results
duration(*num*)	search time frame in number of days. the default is **1**
delay	number of miliseconds to let the API rest after each search. the default is 10000 ms

option	*Description*
save	saves the search results in a data set
replace	replaces existing data set
append	appends results to an existing data set
created(*str*)	initial date for beginning of the search
pushed(*str*)	initial pushing date of the repository, which is useful for updating the archive
reference(*str*)	initial date. if missing, it is set to
perpage(*num*)	maximum number of returned results (check GitHub API limits)
quite	avoids output log
debug	detailed output log

5.2 Description

githublistpack searches for repositories on GitHub within a limited time frame (i.e. *duration*). It can save and update the results in a data set. It also provides options for narrowing down or expanding the search.

5.3 Examples

5.3.1 examples of mining Stata packages on packages

list all GitHub repositories in Stata language

```
. githublistpack , language(Stata) append replace   ///
  save("repolist") duration(1) all in(all)          ///
                                perpage(100)
```

search for repositories created from 2019 on

```
. githublistpack , language(Stata) append replace   ///
  save("update") duration(1) all in(all)            ///
  reference("2019-01-01") perpage(100)
```

5.4 Author

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6 sscminer

mines and archives SSC packages based on their updates

6.1 Syntax

sscminer , *save(str)* [*download*]

6.1.1 options

option	*Description*
save(*str*)	specifies the name of the data set to include packages information
download	downloads and archives SSC packages in zip files

6.2 Description

sscminer mines packages on SSC server and summarizes them in a data set. it also list the files that are installable within each packages and categorizes them based on the Stata programming language they are using (ado, mata, dlg, etc.)

originally, the archive was developed for education purpose.

6.3 Examples

mine Stata packages on SSC without downloading any package

```
. sscminer, save("archive.dta")
```

mine stata packages and download the files

```
. sscminer, save("archive.dta") download
```

6.4 Author

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version: 1.1.0

7 abspath

a Stata program that returns the absolute path of any given *filename*

7.1 Syntax

abspath *filename*

7.2 Example

Return absolute path of a file with relative path in Stata

```
. abspath ../../myfile.smcl
. abspath "./my file.smcl"
```

7.3 Author

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8 findall

a program to search for Stata packages on GitHub, Stata Journal, SSC, and the web. ths program is executed by **github search** command, with the **net** option and is not called on its own.

8.1 Syntax

findall *keyword*

8.2 Description

findall is a general command for searching for Stata packages on variety of web hosts, including GitHub, Stata, SSC, etc. The command wraps the Stata's search command and adds the results of **github search** command from the github package.

In addition, the command shows the date of the last update of Stata modules on SSC as well as GitHub, allowing the users to get the most recent version of the package.

8.3 Example

search for markdoc package on SSC and GitHub and show the last update

```
. findall markdoc
```

8.4 Author

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