#### **NAME**

fetchheaders - Download and display email header information.

## **SYNOPSIS**

fetchheaders [options]

## **DESCRIPTION**

fetchheaders is a Python application that (simultaneously, using multiple threads) accesses multiple imap email accounts (over SSL) and displays header information (date, from, and subject fields) wihout downloading entire emails. It is motivated by fetchmail and created to overcome the unavailability of email software that only download and display header information.

#### **GENERAL OPERATION**

The behaviour of fetchheaders is controlled by a configuration file (located by default at **\$HOME/.fetchheaders/fetchheaders.conf**) which contains account information and default values for the appearance and behaviour of the program. (For details read the **CONFIGFILE OPTIONS** section of this manpage.)

The configuration file options can be over-ridden by passing command line arguments to the program. These are contained in this man page and can also be viewed by using the **-h** switch.

#### **OPTIONS**

A discussion of the command-line arguments that can be passed to the *fetchheaders* application. These arguments override the settings in the configuration file.

## -c CONFIGFILE, --config CONFIGFILE

CONFIGFILE is the name and path of the configuration file to be used. If not specified the program will use the default configuration file at \$HOME/.fetchheaders/fetchheaders.conf

Note: The (configuration) specification file \$HOME/.fetchheaders/fetchheaders.conf.spec should not be altered casually. The program will **only** look for it in \$HOME/.fetchheaders/

# -a ACCOUNTS, --accounts ACCOUNTS

Show header information from **only** the accounts listed in the comma-separated list *ACCOUNTS*. Only account names specified in the configuration file *fetchheaders.conf* are allowed.

## -A, --showall

Show all messages in the specified folder, NOT just unseen ones (the default behaviour).

# -a, --numsOnly

Only download and display the total number of messages and the number of unseen messages in the specified folder of each account. This is analogous to 'fetchmail -c' (but faster).

# -h, --help

Display help message for command-line arguments.

Display help message for command-line arguments.

## -n, --numsOnly

Download and display only the total **number** of messages and the **number** of unseen messages in the specified folder (INBOX by default) for each folder. This is analogous to **fetchmail -c**.

#### --oldestFirst

Display oldest email first, that is in chronological order. (The default behaviour is reverse chronological order).

#### --noColor

Turn off colored output.

The application implements colored output using xterm's color escape codes. Use this flag if your shell does not support colored text (escape codes) or if you need to pipe the output of the application to some other application.

#### -t THREADS, --threads THREADS

Specify the maximum number (*THREADS*) of parallel threads the application will use to simultaneously access IMAP servers.

The default value is 5. Set to 1 for serial (non-parallel) behaviour.

## --showFlags

Show mutt-style message flags (e.g. N for new/unseen message) in square brackets. Only active when ALL emails are being displayed, for instance when the -A swtich has been used.

#### **CONFIGFILE OPTIONS**

A discussion of the allowed options in the configuration file (default location \$HOME/.fetchheaders/fetchheaders.conf . Command-line arguments override any options set in the configuration file.

The configuration file is parsed by Python's ConfigObj module (intended for .ini files). Options are specified as option-value pairs separated by an = sign. Strings are NOT enclosed in quotes. Whitespace is NOT significant. Comments are declared using the # symbol. *True* and *False* correspond to boolean entries (where boolean entries are expected by the application).

The configuration file consists of two sections: *accounts* and *global*, with the former containing serveral subsections. Top-level sections are enclosed in single square brackets. Strings are NOT enclosed in quotes.

## [accounts]

Contains the configuration options for each specific imap account to be accessed. Sub-sections are enclosed in double square brackets.

The **[[DEFAULT]]** subsection contains options that need to be applied to each account. The default options given here can be overridden by supplying said option in a specific account's subsection.

Options:

**host** Hostname of IMAP server e.g. *imap.gmail.com*.

username Username/Login of account on the host.

**password** Password of account on the host.

**folder** Folder to be accessed on the server. Default: *INBOX*.

**showUnseen** Flag (boolean). Set to True if you only want to download headers for unseen messages. Default: *True*.

**showNums** Flag (boolean). Set to True if you want to display total and unseen number of messages before displaying header information. Default: *True*.

**showOnlyNums** Flag (boolean). Set to True if you only wnat to display total and unseen **number** of messages. No header information is downloaded. Equivalent to the **-n** switch. Default: *False*.

## [global]

Contains the global settings that control the behaviour and appearance of the application.

**maxThreads** The maximum number of parallel threads that the application will open to simultaneously access IMAP servers. Set to 1 for serial (non-parallel) behaviour. Default: 5.

**showFlags** Flag (boolean). Set to True if you want to display mutt-style flags (e.g. **N** for new/unseen messages contained in square brackets) when displaying **ALL** messages. Default: *False*.

**color** Flag (boolean). Set to True if you want colored output. Colored text is implemented using xterm escape codes. Set to False if your shell doesn't support colored text or you will be piping the output to another application. Default: *True*.

The allowed color values for the color options that follow are: black, red, green, yellow, blue, magenta, cyan and, white.

**colorTitle** Color of the account *title* in the output. Default: *blue*.

**colorFlag** Color of the message flags, if displayed. Default: red.

colorDate Color of the date field. Default: yellow.

**colorFrom** Color of the *from* field. Default: cyan.

**colorSubjectSeen** Color of the *subject* field for **seen** messages. Default: *yellow*.

**colorSubjectUnseen** Color of the *subject* field for **unseen/new** messages. Default: *green*.

#### RESOURCES

fetchheaders.conf

version 1.0 Sep. 25, 2012 3

User editted configuration file. Contains login and password information for each IMAP account that needs to be accessed. In addition each account can be associated with account specific options that modify behaviour or appearance of the program as well as global options for the same.

Read the **CONFIGFILE OPTIONS** section of this man page for more information.

## fetchheaders.conf.spec

Specification file used to validate the configuration file as well as implementing the application defaults for various options.

This file should not be editted casually. It contains the fall-back default values set by the programmer in case the corresponding options are completely deleted from the configuration file.

The application looks for this file in **ONLY** one location: \$HOME/.fetchheaders/fetchheaders.conf.spec

Note: The application will probably mis-behave if this file is tampered with.

# fetchheaders.py

Main file of the Python application. Execution begins here. Contains the primary implementation of the program including threading, agrument parsing and validation, configuration parsing and validation and the interface with each IMAP account using the pollAccount() function.

People looking to modify the application would be well advised to begin by grokking and editing this file.

# imapServer.py

Implements a wrapper class around Python's imaplib module improving (in my opinion) the interface to the IMAP server.

## miscClasses.py

Contains the implementation of a number of custom classes used by various bits of the code.

#### **COPYRIGHT**

Copyright (c) 2012 Abid Hasan Mujtaba

See the file LICENSE for copying permission.

# **BUGS**

## **Reporting Bugs**

Email bug reports to the author at abid.naqvi83@gmail.com.

## **AUTHOR**

Abid Hasan Mujtaba

Email: abid.naqvi83@gmail.com