

Installing PAN-PHP-FRAMEWORK

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1. Mac OS X

You need to run PHP 5.4 or later (untested with 5.4+ at the time of this writing). PHP 5.4 is available natively on Mac OS X 10.9.x.

The following command will help you to determine your PHP version : "php -v"

```
[~] swaschkut$ php -v
PHP 7.1.23 (cli) (built: Feb 22 2019 22:19:32) ( NTS )
Copyright (c) 1997-2018 The PHP Group
Zend Engine v3.1.0, Copyright (c) 1998-2018 Zend Technologies
```

1.1. Create a GitHub account

Using github's utilities to maintain a fresh copy of pan-configurator by looking for the latest sources for you.

If you don't have an account yet, go on their website and create an account

<https://github.com/join?source=header-home>

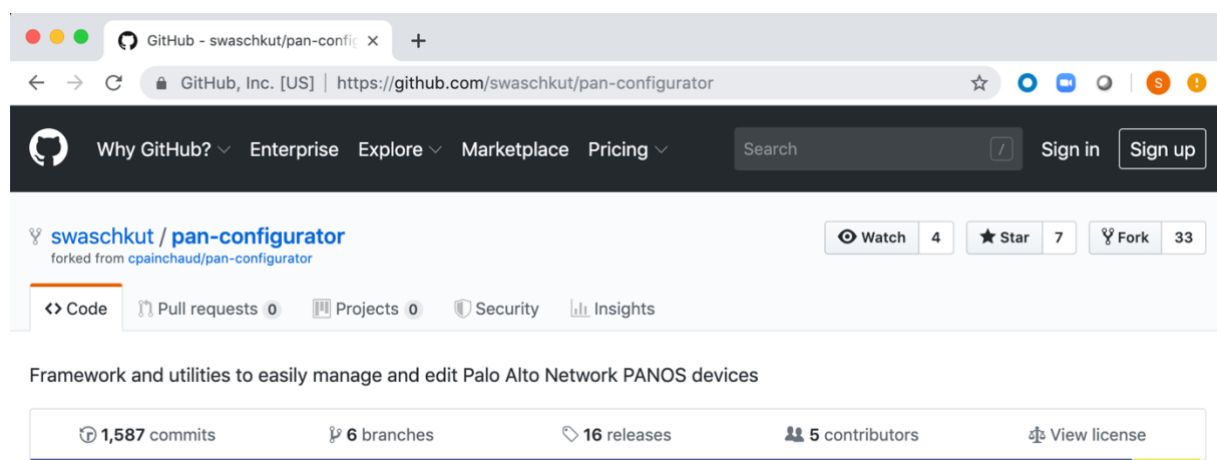
1.2. Install and setup GitHub Desktop for Mac

Download client from <https://desktop.github.com/> and install it. Start the client and it will first request for your Github login.

1.3. Bookmark/Star Pan-configurator project

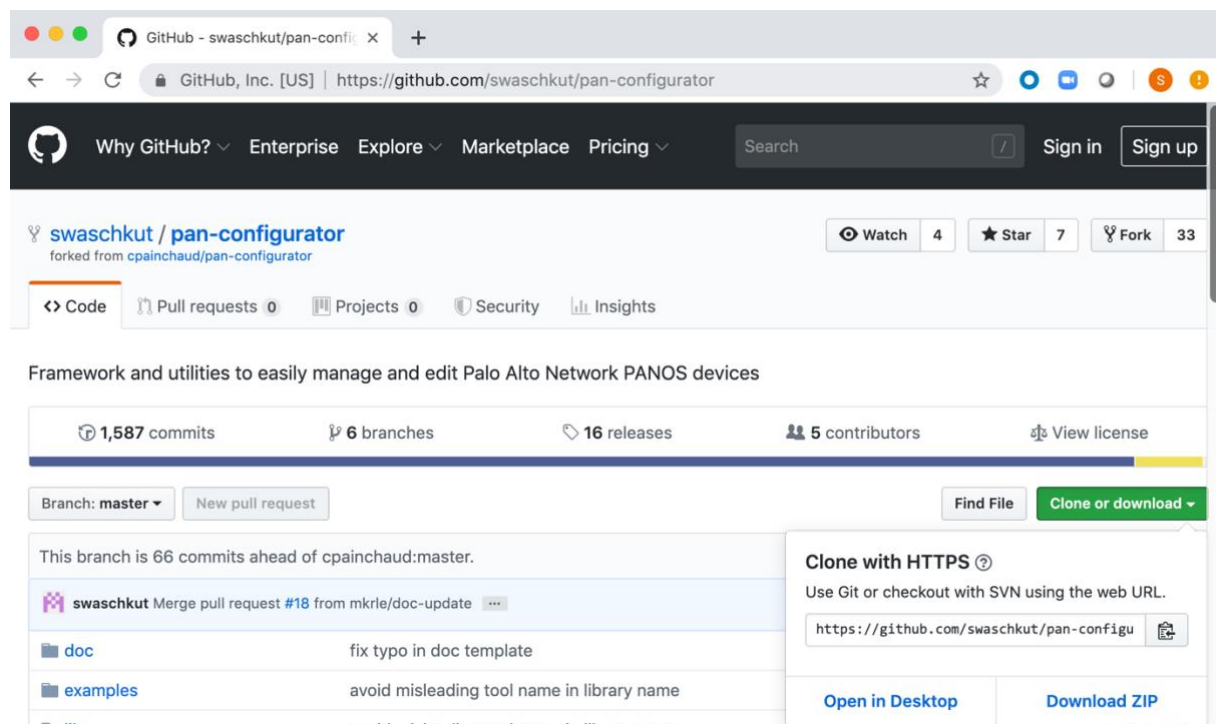
In order to know when a new version is out and also look for the project easier in GitHub client, it's a good idea to Star/bookmark the project and eventually.

For this, go to the project page (<https://github.com/swaschkut/pan-configurator>) and click on "Star" button (see screenshot) and optionally on "Watch" button to Watch it.

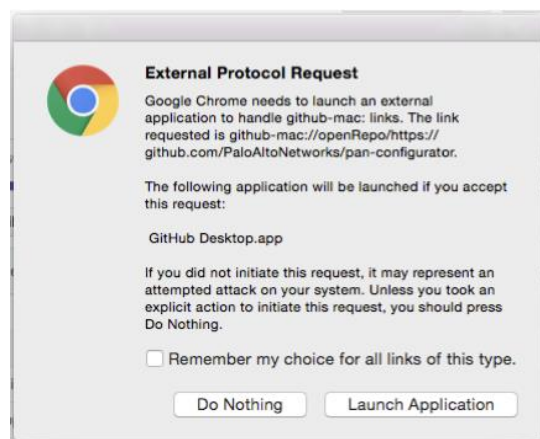


1.4. Clone Pan-Configurator repository

Still on PAN-Configurator homepage, click the Clone button like below :



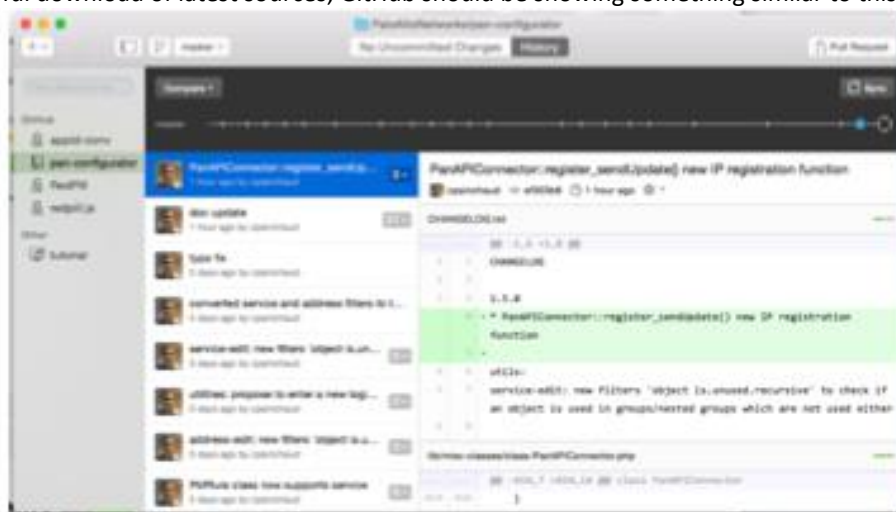
Chrome will warn you that it will open external program GitHub Desktop, click "Launch Application":



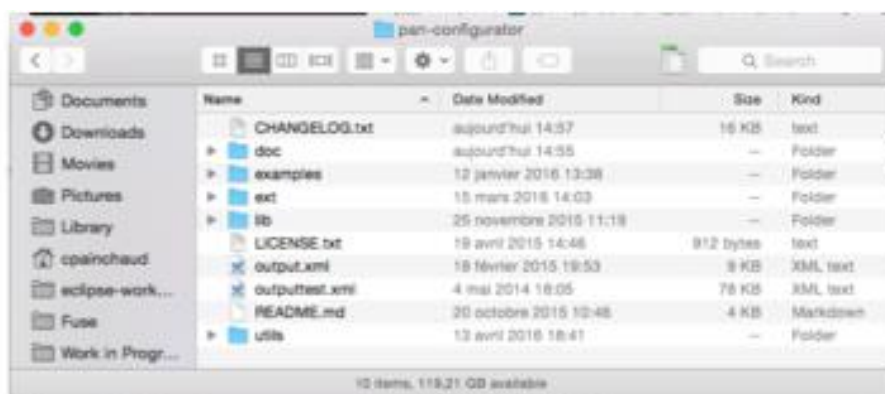
Github will then ask you in which location you want to install Pan-Configurator. Suggestion : install it in your



Upon successful download of latest sources, GitHub should be showing something similar to this screenshot:



If you browse to the folder where you install Pan-Configurator, you should see its file structure:



1.5. Add pan-configurator install directory to PHP include_dir

The next two steps; 1.5 and 1.6 are now automated.

Please execute the bash script:

```
sh mac_set_path_variable.sh
```

PHP stores its configurations in “/etc/php.ini”. If this file does not exist yet on your system, you need to copy the default template, you can do this from CLI. You can also use the following CLI to overwrite your existing PHP configuration:

```
sudo cp -f /etc/php.ini.default /etc/php.ini
sudo chmod u+w /etc/php.ini
echo "include_path = \".:/php/includes:/Users/$USER/Documents/pstools/pan-configurator\" | sudo tee -a /etc/php.ini
```

If you want to do this manually, edit /etc/php.ini with your favorite editor (be careful of the root privilege required) to edit property “include_path” to add the path to pan-configurator.

You can test that you installed everything properly by testing the following command line:

```
php -r "require('lib/pan_php_framework.php');print \"OK INSTALL SUCCESSFUL\\n\";"
OK INSTALL SUCCESSFUL
```

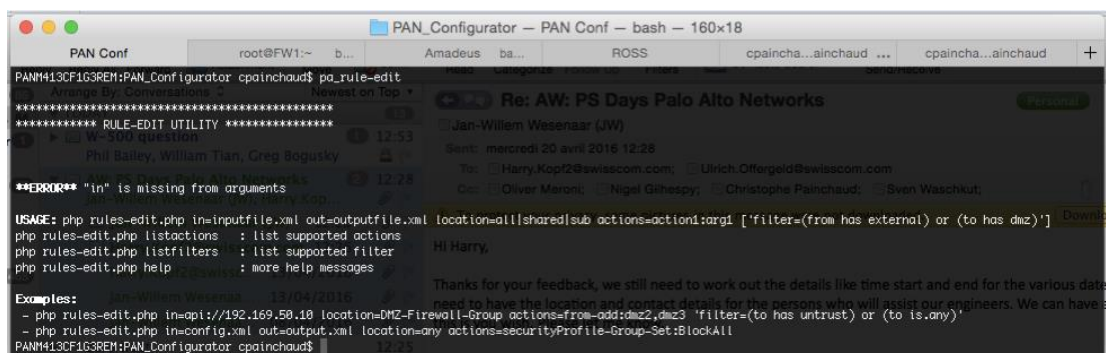
1.6. Load pan-configurator alias for your CLI

If you already executed the bash script of part 1.5, without any issue, skip this part.

It will be very convenient to load pan-c toolset from any location on your folder. For this you can load an alias file every time you start a new CLI console. Use the following command-line to add it in your ~/.profile :

```
echo "source \"/Users/$USER/Documents/pstools/pan-configurator/utils/alias.sh\" >> ~/.profile
```

Now open a new CLI console (to reload all your environment) and try to run command “pa_rule-edit”:



```
PANM13CF1G3REM:~$ pa_rule-edit
***** RULE-EDIT UTILITY *****
***** W-300 question *****
***** Phil Bailey, William Tian, Greg Bogusky *****
**ERROR** in is missing from arguments
USAGE: php rules-edit.php in=inputfile.xml out=outputfile.xml location=all|shared|sub actions=action1:arg1 ['filter=(from has external) or (to has dmz)']
php rules-edit.php listactions : list supported actions
php rules-edit.php listfilters : list supported filter
php rules-edit.php help : more help messages
Examples:
- php rules-edit.php in=api://192.169.50.10 location=DMZ-Firewall-Group actions=from-add:dmz2,dmz3 'filter=(to has distrust) or (to is.any)'
- php rules-edit.php in=config.xml out=output.xml location=any actions=securityProfile-Group-Set:BlockAll
PANM13CF1G3REM:~$
```

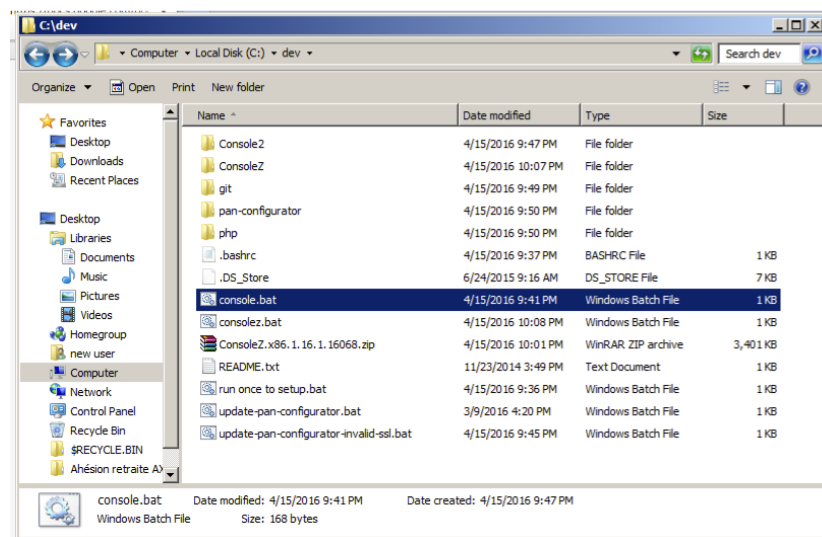
2. Windows

Windows users can go through same steps as Mac OS X users or use a pre-packaged all-in-one zip file for an easy and quick setup.

2.1. Download and unzip package

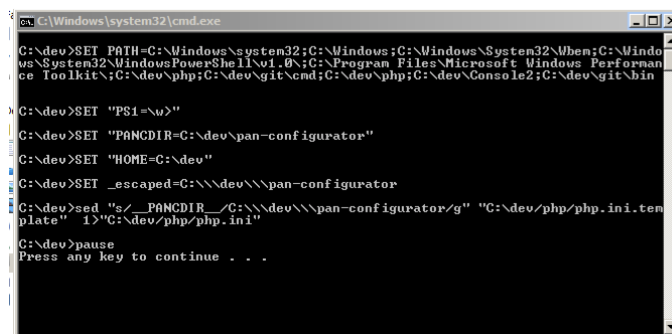
Download URL is <https://app.box.com/v/pan-configurator>.

After unzipping (location does not matter, use anything convenient do you), you will have a folder looking like this:



2.2. Execute setup script

Run script "run once to setup.bat".



2.3. Run pan-configurator source code update script

Run script "update-pan-configurator.bat"

```
C:\Windows\system32\cmd.exe
C:\dev\pan-configurator>git clean -f
C:\dev\pan-configurator>git pull origin master
remote: Counting objects: 35, done.
remote: Compressing objects: 100% (35/35), done.
remote: Total 35 (delta 25), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (35/35), done.
From https://github.com/PaloAltoNetworks-BD/pan-configurator
* branch                master       -> FETCH_HEAD
   249e240..ef303b6      master       -> origin/master
Updating 249e240..ef303b6
Fast-forward
 CHANGELOG.txt                | 2 +
 doc/class-Address.html       | 1 +
 doc/class-AddressCommon.html | 1 +
 doc/class-AddressGroup.html  | 1 +
 doc/class-AggregateEthernetIfStore.html | 1 +
 doc/class-AggregateEthernetInterface.html | 1 +
 doc/class-App.html           | 1 +
 doc/class-EthernetInterface.html | 1 +
 doc/class-IPsecTunnel.html   | 1 +
 doc/class-LoopbackInterface.html | 1 +
 doc/class-ManagedDevice.html | 1 +
 doc/class-PanAPIConnector.html | 66 ++++++
 doc/class-ReferencableObject.html | 38 ++++++
 10 files changed, 124 insertions(+), 0 deletions(-)
```

2.4. Test it

Windows zip package comes with a utility called Console2 which offers a good alternative to MS- DOS shell, plus it has all environment variables preset.

Run “console.bat” to start it:

```
Console2
File Edit View Help
*****
** PAN-Configurator environment is ready
*****
* Reminder of available alias for quick
* access from anywhere:
*
* pa_rule-edit, pa_address-edit, pa_service-edit
* pa_upload-config
*
->
```

Run the following command “pa_rule-edit” and check that it actually works:

```
Console2
File Edit View Help
*****
* access from anywhere:
*
* pa_rule-edit, pa_address-edit, pa_service-edit
* pa_upload-config
*
->pa_rule-edit
*****
***** RULE-EDIT UTILITY *****

**ERROR** "in" is missing from arguments

USAGE: php rules-edit.php in=inputfile.xml out=outputfile.xml location=all|shared|sub actions=action1:arg1 ['filter=(from has external) or (to has dmz)']
php rules-edit.php listactions      : list supported actions
php rules-edit.php listfilters     : list supported filter
php rules-edit.php help            : more help messages

Examples:
- php rules-edit.php in=api://192.169.50.10 location=DMZ-Firewall-Group actions=from-add:dmz2,dmz3 'filter=(to has untrust) or (to is.any)'
- php rules-edit.php in=config.xml out=output.xml location=any actions=securityProfile-Group-Set:BlockAll
->
```

3. More documentation

- PAN-Configurator GitHub homepage: <https://github.com/swaschkut/pan-configurator>
- PAN Live Community page for PAN-Configurator: <https://live.paloaltonetworks.com/t5/API-Articles/PAN-Configurator-scripting-library-and-utilities/ta-p/52163>
- PAN Live Community helper page for “rules-edit”: <https://live.paloaltonetworks.com/t5/API-Articles/rules-edit-php-to-manage-edit-export-rules-from-CLI/ta-p/53321>