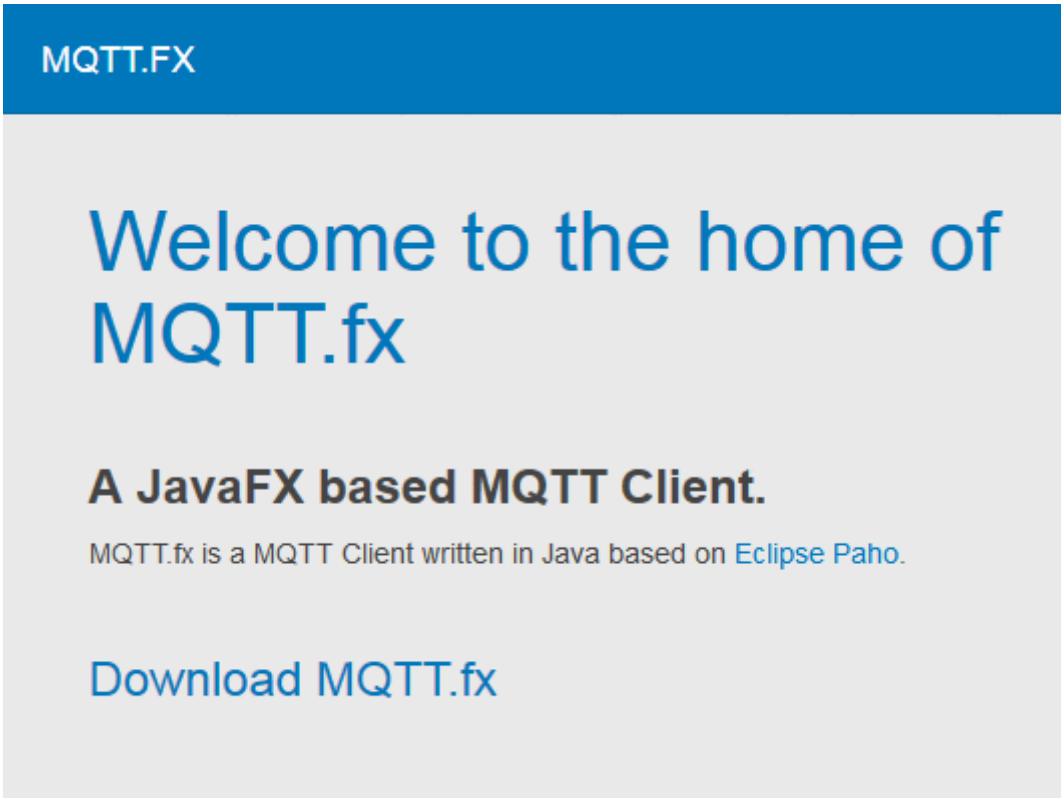
Desktop MQTT Client for Adafruit.io

Created by lady ada



https://learn.adafruit.com/desktop-mqtt-client-for-adafruit-io

Last updated on 2023-08-29 02:58:48 PM EDT

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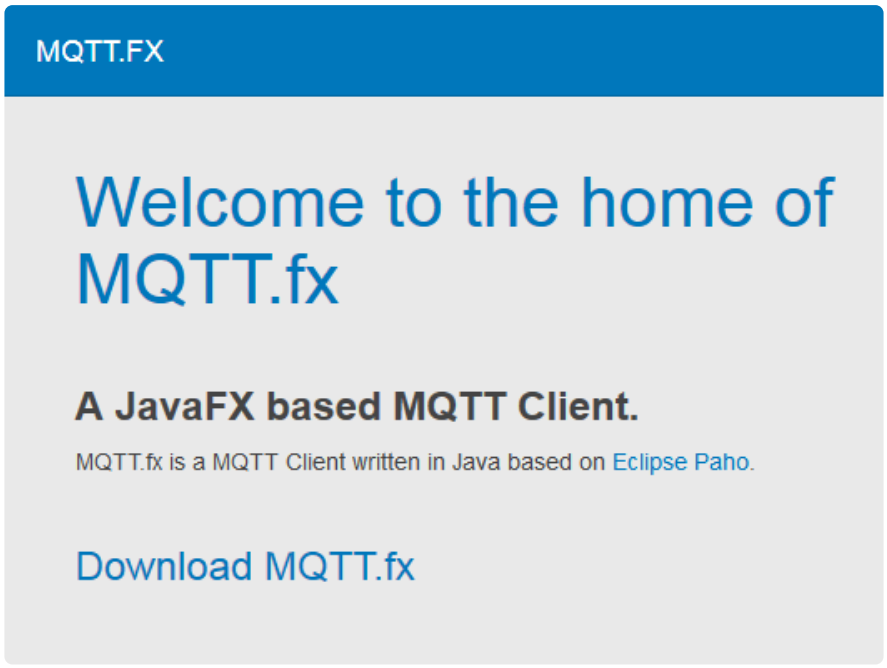
Overview



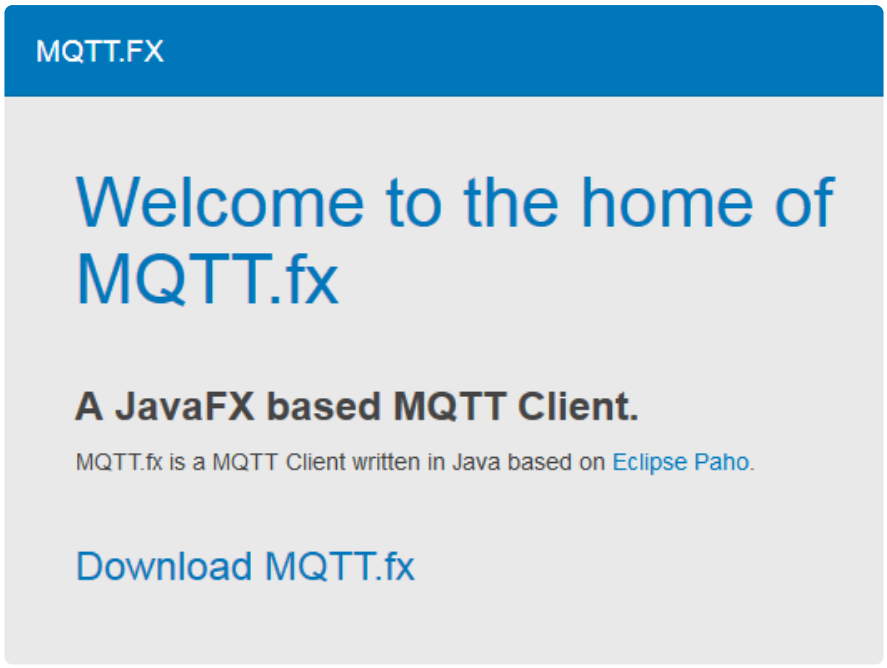
Even though adafruit.io () is designed to be used with portable and wireless devices, it can also be used with desktop software! This makes it easy to control remote devices and debug your setup.

This tutorial will document how we installed some desktop software and used it to interact with our dashboard & feeds.

Installing Software

We tried out and really like MQTT.fx which is Open source under the Apache 2.0 license and has packages available for Windows, Mac and Linux (64bit deb)

Start by visiting http://mqttfx.org/ ()



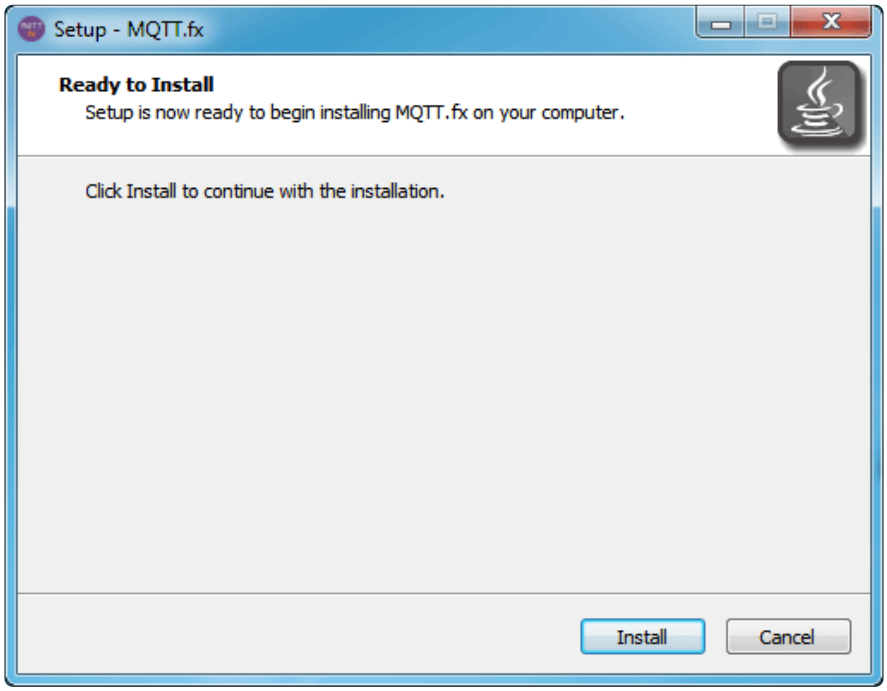
and download the latest version, as of this writing, 0.0.16 is the latest

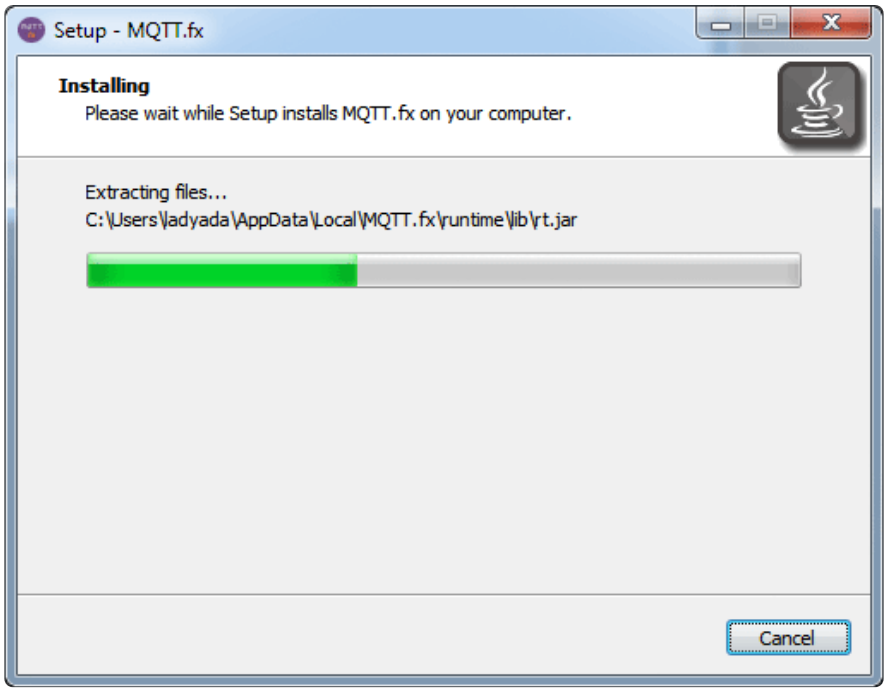
You might have to mouseover to see the links, we grabbed the .exe file for windows. The .dpkg file is for Macs, the .deb file is for Debian Linux.

Index of /apps/mqttfx/0.0.16

Name	Last modified	Size	Description
Parent Directory		-	
MQTT.fx-0.0.16-64bit..>	29-Jun-2015 23:53	51M	
MQTT.fx-0.0.16-64bit..>	29-Jun-2015 23:54	69M	
MQTT.fx-0.0.16.dmg	29-Jun-2015 22:46	76M	
MQTT.fx-0.0.16.pkg	29-Jun-2015 22:46	69M	
mqtt.fx-0.0.16-64bit..>	01-Jul-2015 21:12	55M	

Go thru the installation process



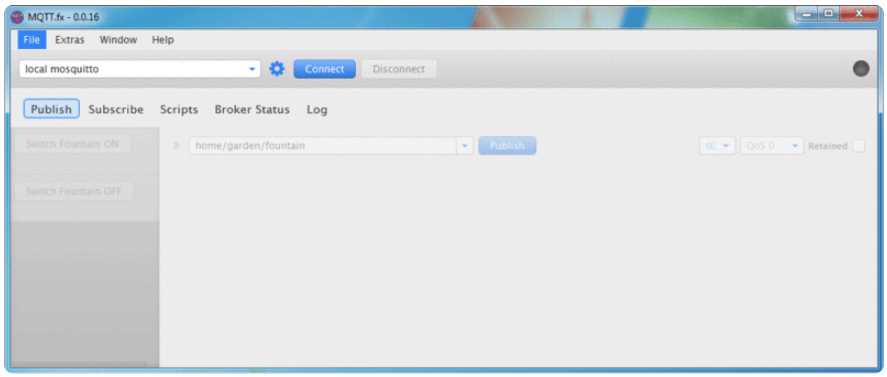


OK now run it and go to the next step!

Configuring

Once the software is installed, you'll need to configure it for adafruit.io

Start it up, this is the main window:

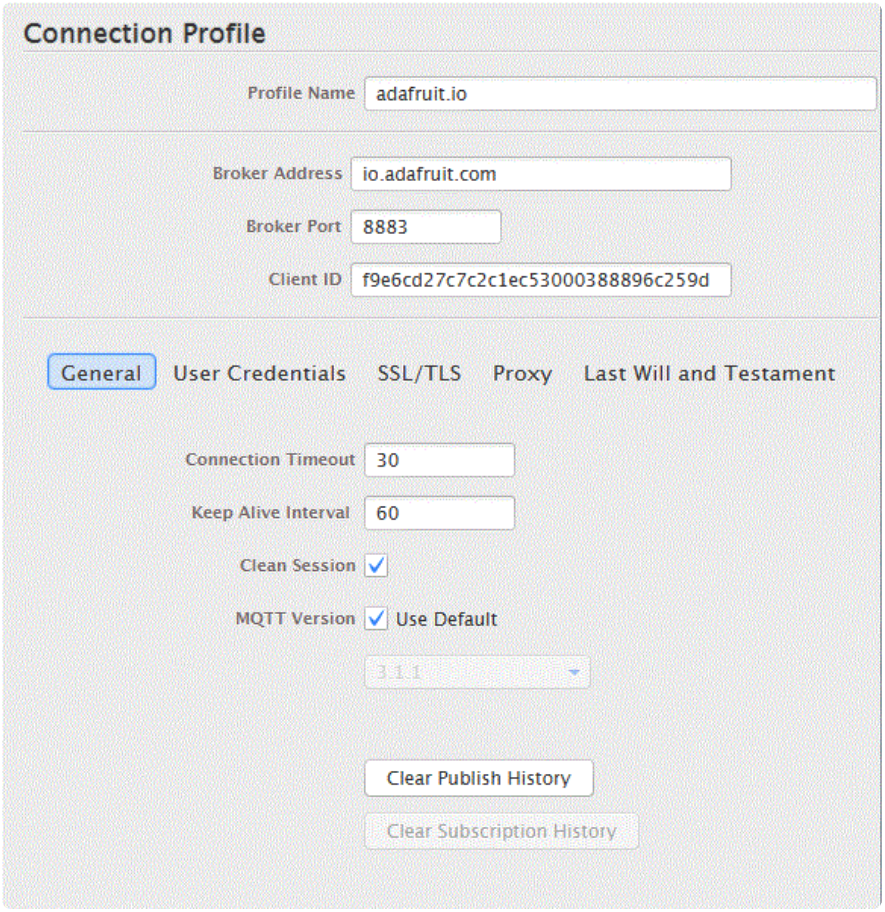


Click on the gear logo in the top middle area. It will take you to the config page.

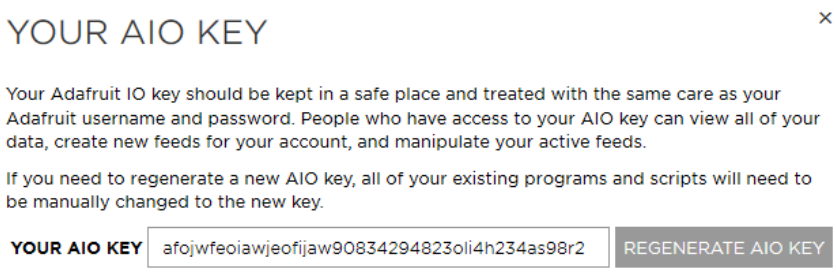
1. The Profile Name is just the name we'll call this connection set by. I used adafruit.io but use whatever you like
2. The Broker Address must be io.adafruit.com - we don't recommend using an IP addres in case the server moves
3. For the Broker Port use 1883 if you are not using SSL. For SSL connections, go with 8883 instead!

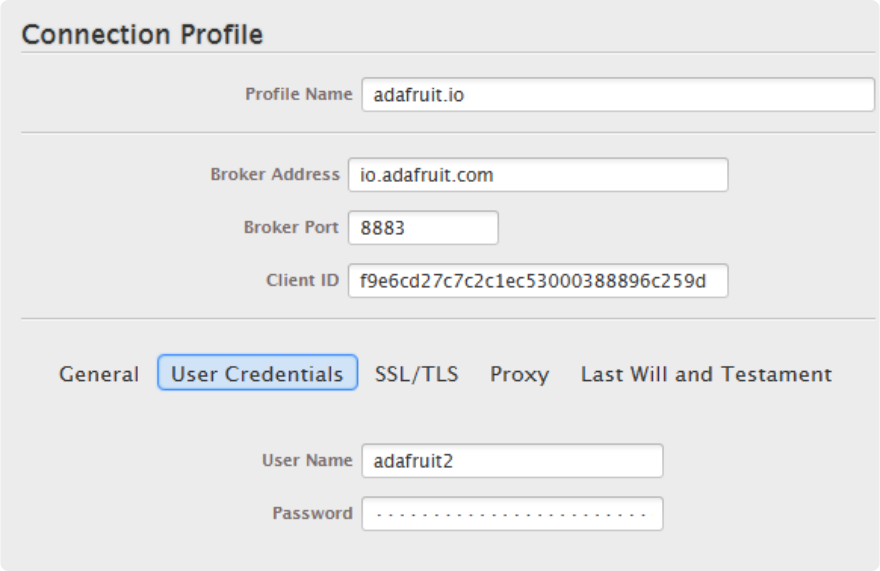
4. Client ID needs to be a unique value - you can use your AIO key or go to http://www.danstools.com/md5-hash-generator/ () and type in a bunch of text to generate a unique MD5 hash

Then there's a set of sub-tabs. For the General Tab. You can set whatever timeout/keep alive you want. We recommend keeping Clean Session and Default MQTT version selected.



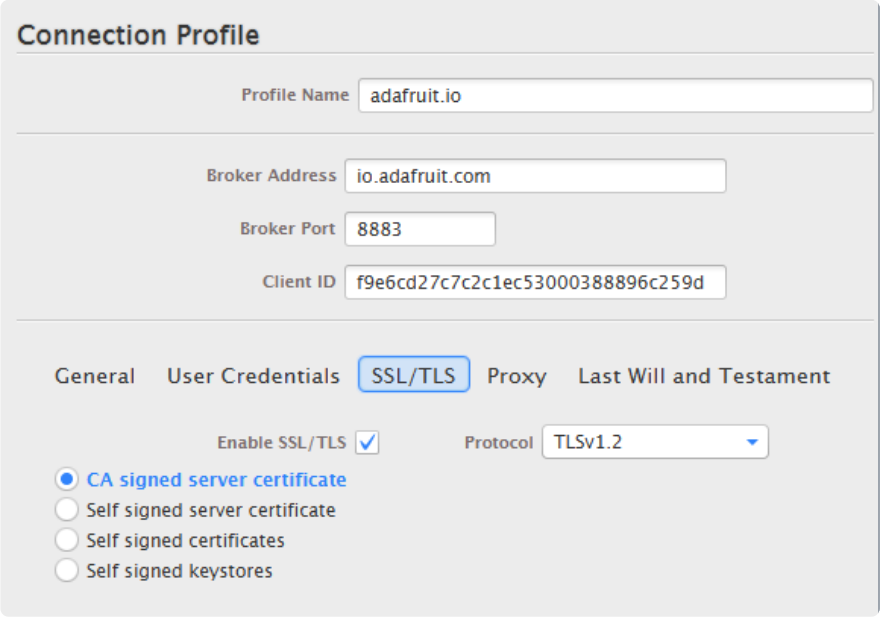
In the next tab you actually put in your credentials. Use your adafruit.com account user name for User Name and then your Password is the long alphanumeric key in your AIO settings





SSL Connections

If you want to use SSL (and you should!) the next tab will let you set that up.



Select CA signed server certificate and for Protocol, try TLSv1.2

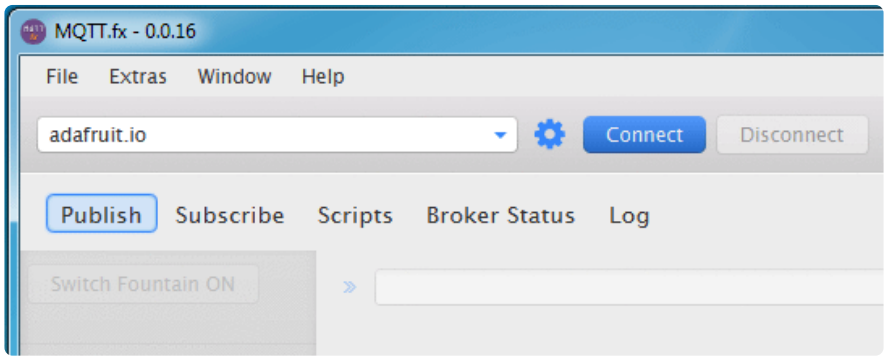
You'll also need to make sure the Broker Port above is 8883!

Connecting & Use

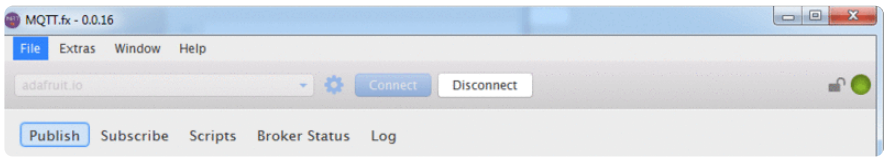
Connecting

Once done with the profile, click OK or Apply and Cancel to get back to the main screen.

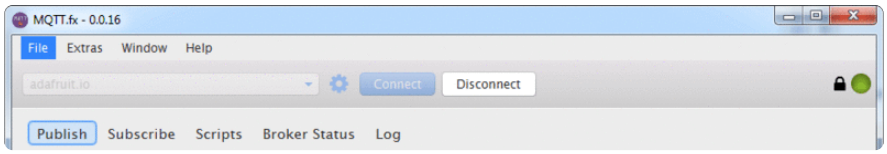
Select the new profile by name and click Connect



The Connect button will gray out and the Disconnect button will be clickable. On the very right hand side you'll see a green dot to tell you the connection is OK



If you are using SSL, you'll see a closed-lock as well

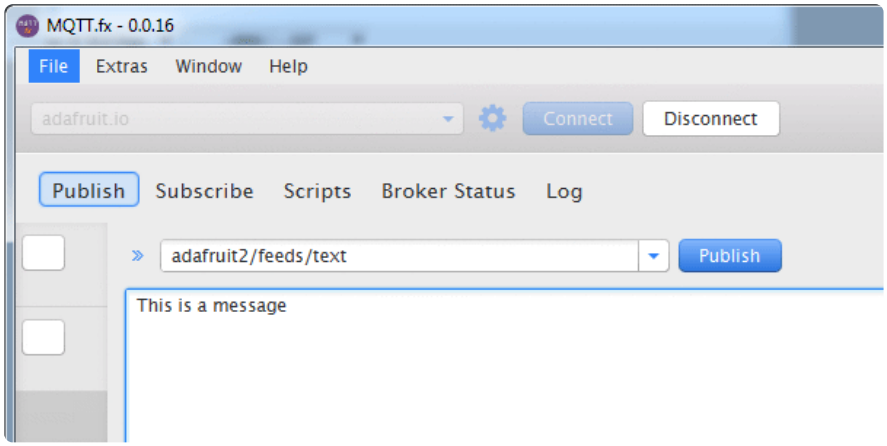


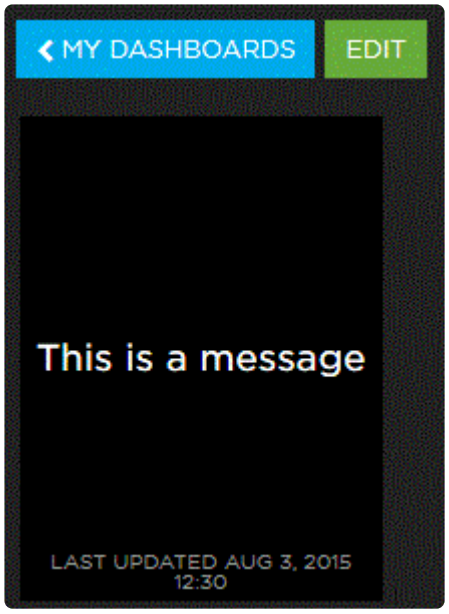
Publishing

You can publish to a feed by clicking on the Publish button in the 'tab menu'

Next to the >> there's a text field. Enter your feed name there, it will be in the format `username/feeds/feedname` where username is your adafruit account name, and feed name is the actual feed name you have in your feedlist

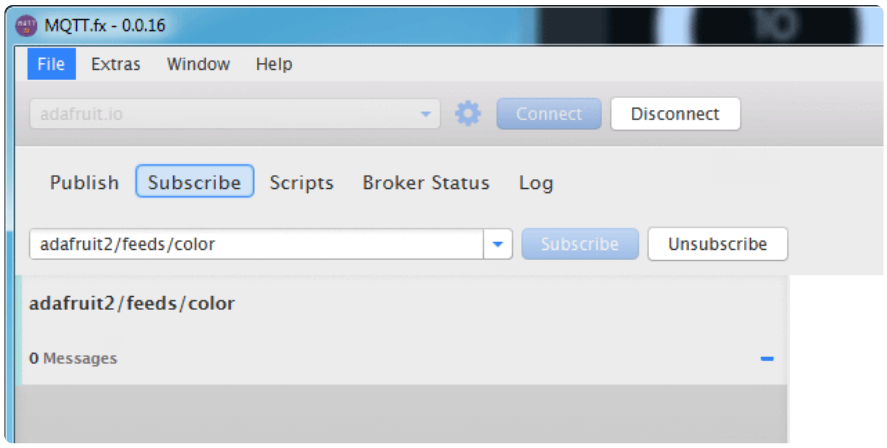
Type some text or data or numbers or whatever into the big box below and then click the Publish button to the right of the feed name entry box

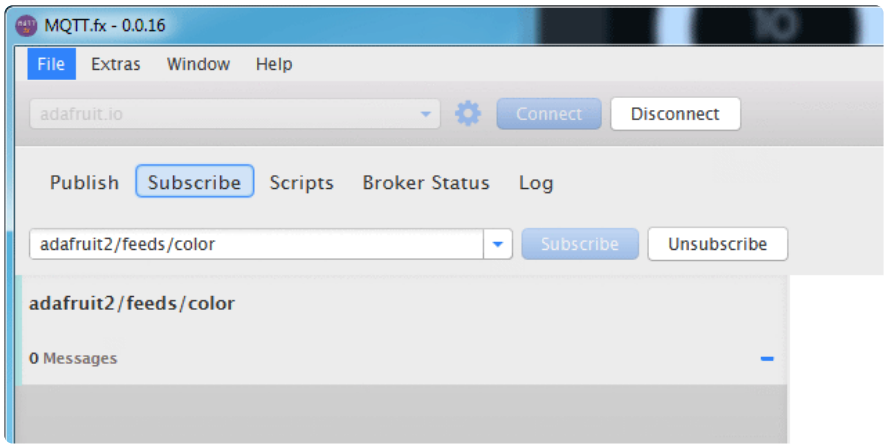




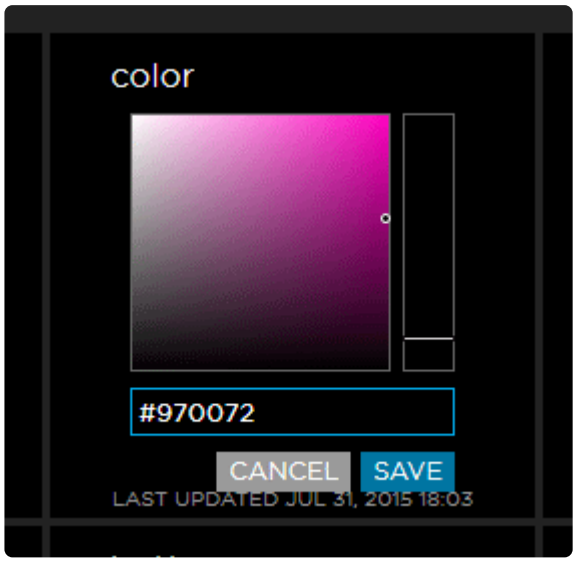
Subscribing

Subscribing to data feeds is pretty much the same, in the Subscribe tab, enter in the feed name in the `username/feeds/feedname` format and click Subscribe to the right of the feed entry box

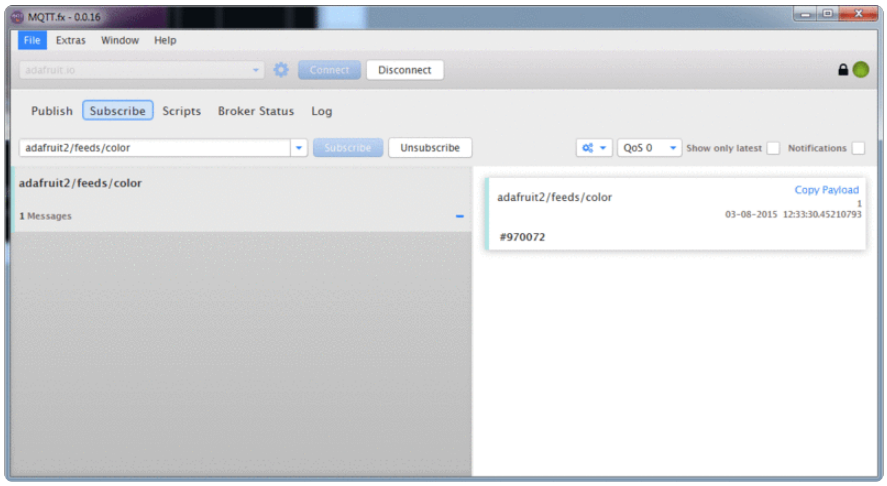




Then on your dashboard you can make a change



And it will be received in the desktop


MQTT.fx - 0.0.16
File
Extras
Window
Help
adafruit.io
Connect
Disconnect
Publish
Subscribe
Scripts
Broker Status
Log
adafruit2/feeds/color
Subscribe
Unsubscribe
QoS 0
Show only latest
Notifications
adafruit2/feeds/color
1 Messages
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