

Desktop MQTT Client for Adafruit.io

Created by lady ada

MQTT.FX

Welcome to the home of MQTT.fx

A JavaFX based MQTT Client.

MQTT.fx is a MQTT Client written in Java based on Eclipse Paho.

Download MQTT.fx

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Overview

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Even though <u>adafruit.io</u> (http://adafru.it/jcY) 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/ (http://adafru.it/xDY)

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

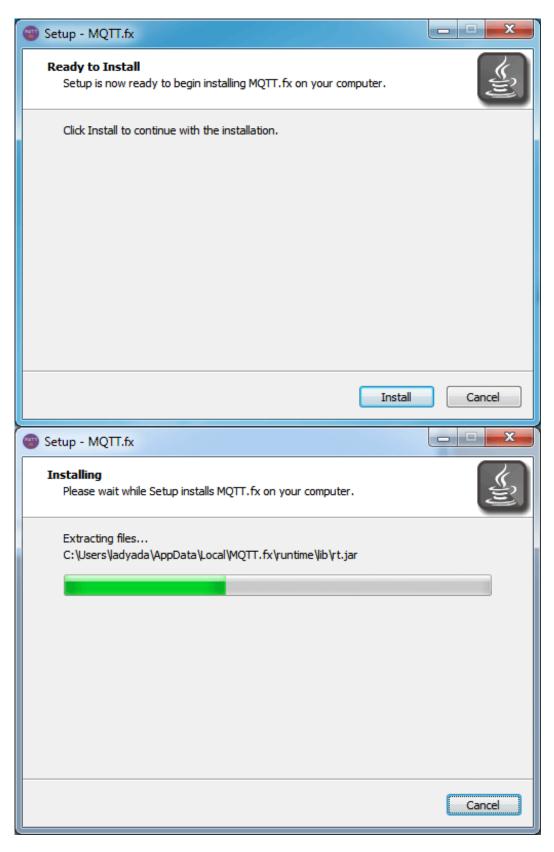


You might have to mouseover to see the links, we grabbed the .exe file for windows. The .dpkg file is for Macs, the .deb file is for Debian Linux.

Index of /apps/mqttfx/0.0.16

	<u>Name</u>	Last modifie	ed	Size	Description
>	Parent Directory			-	
10 01 10	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



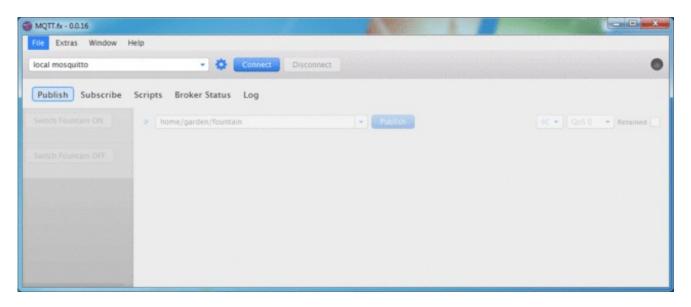
OK now run it and go to the next step!



Configuring

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

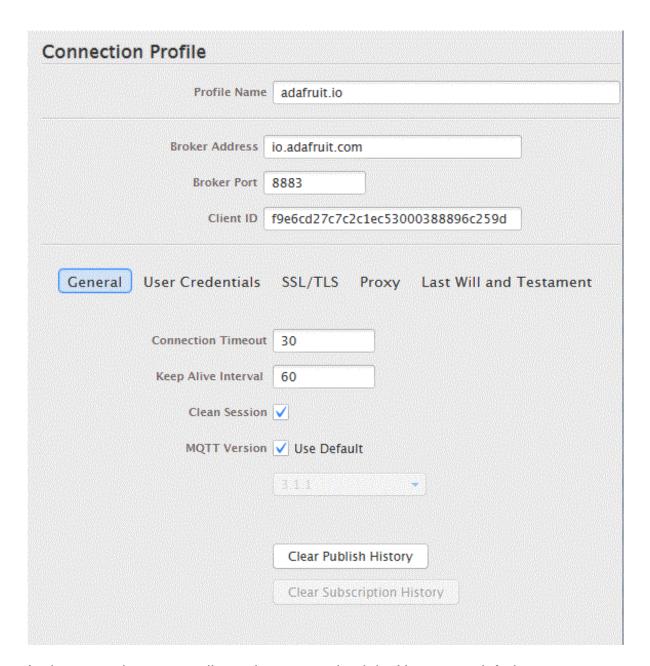
Start it up, this is the main window:



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/ (http://adafru.it/fJt) 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

YOUR AIO KEY

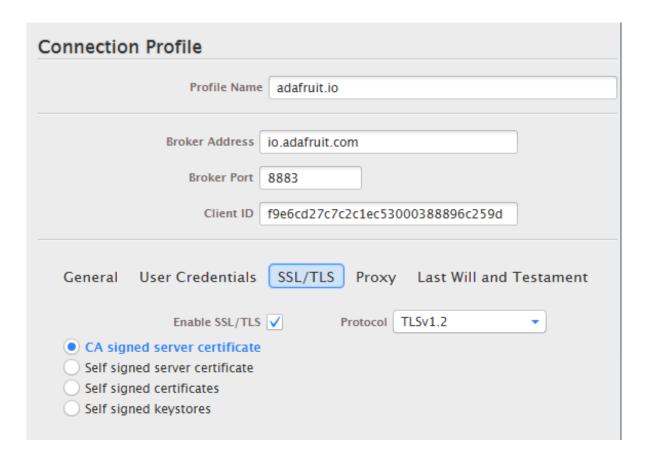
Your Adafruit IO key should be kept in a safe place and treated with the same care as your Adafruit username and password. People who have access to your AIO key can view all of your data, create new feeds for your account, and manipulate your active feeds.

If you need to regenerate a new AIO key, all of your existing programs and scripts will need to be manually changed to the new key.

YOUR AIO KEY afojwfeoiawjeofijaw90834294823oli4h234as98r2				REGENERATE AIG	KEY	
	D 511-					
Connection I	Profile					
	Profile Name	adafruit.io				
	Broker Address	io.adafruit.co	om			
	Broker Port	8883				
	Client ID	f9e6cd27c7c	2c1ec5300	0388896c259	d	
General U	ser Credentials	SSL/TLS	Proxy	Last Will an	d Testament	
	User Name	adafruit2				
	Password					

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!

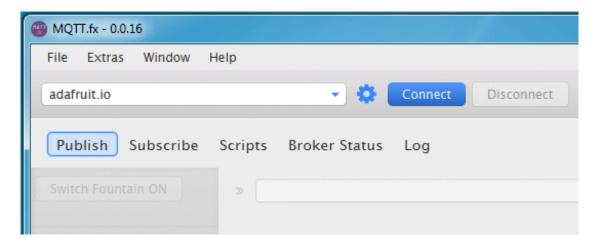


Connecting & Use

Connecting

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

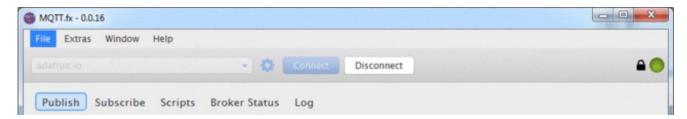
Select the new profile by name and click Connect



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

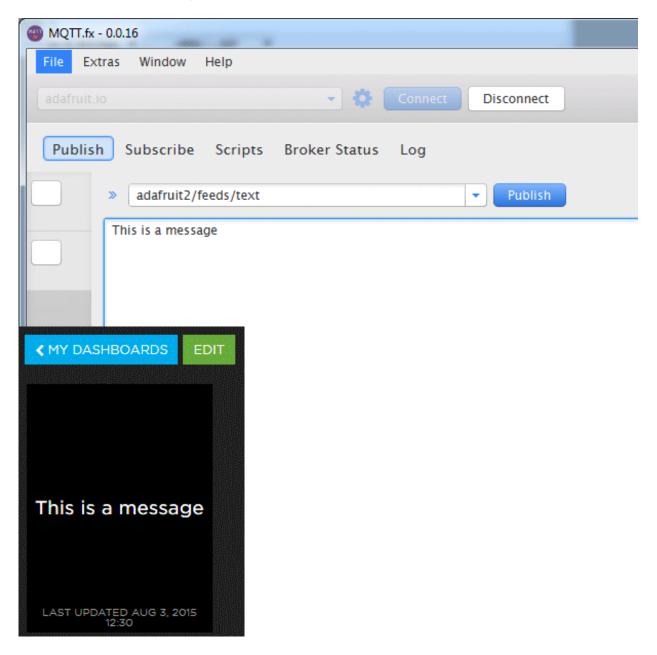


Publishing

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 feedname is the actual feed name you have in your feedlist

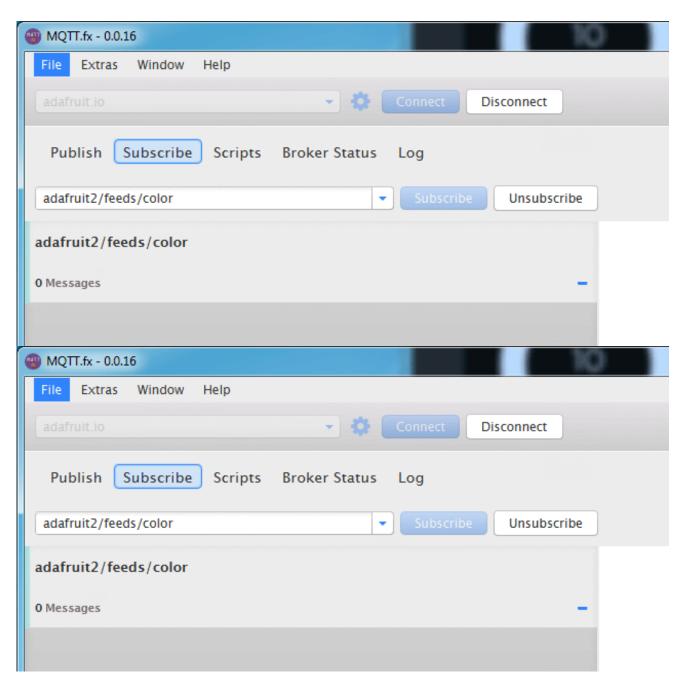
Type some text or data or numbers or whatever into the big box below and then click the **Publish** button to the right of the feed name entry box



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

