

How To use undaw Watch Face

Doc. Release V1

Jun 2021



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It is free !

After confirming your registration, please check your mailbox (and spam folder).

Subscribe to  **UNDAWA**
Those informations are essentials to locate the neighborhoods around you

E-Mail (Login) *

Password *

Nickname *

Lastname

FirstName *

You have to confirm your registration by clicking in the Email undawa.com sent you.

2/ Setting you watch

By default, you watch synchronized the 'demo' settings.

To be able to change this, go on the configuration menu : click on the watch in the left menu :



this will open the configuration option menu.

3/ Activate your new watch

this is how it should be in your explorer :

Setup of your devices

Active Watch				External Data			
Your Watch is in DEMO mode, you have to create your own model to be able to modify it (Active Watch -> New Watch).				Here is how it looks on your watch GARMIN - Descent Mk1 (updated after synchronization of your watch)			
	Set your watch	undawa.com					
ATOM USD 11.47	Bitcoin Euro 29317.82	Ethereum Euro 1783.51	Jun Wed 30 Week 26				
GOLD 1769.6 1755.45	MATIC Euro 0.95	XRP USD 0.68	TSD 43d 04h 06m				
***** 01:53 ...	07:53 ...	Jun Wed 30 Week 26					
WALK!	NYC	Paris					

Garmin Connect settings for this watch :
E-Mail (i-Login undawa.com) : demo
Serial Key : demo

On the left, the configuration cubes. On the right, the renderer simulator.

When in 'demo' mode, you can't change anything.

You have a new menu, 'Active Watch' and 'External data'.

'Active watch' will let you create a new watch or access it.

In the future you'll be able to have multiple configuration watch, and you'll select the active one you want (eg financial watchFace, weather watchFace, Sport watch face, mix watchFace and so on...).

a) At this point, click on / move your mouse over 'Active Watch'. Then choose 'New watch'.

Select your watch

Model
Approach 562 (280x280)

Enter a label for this watch :
My watch

Warning: you will overwrite your current configuration!

Your api key (apiKey) will then be displayed, don't forget to enter it in the configuration/parameters of the watch (Garmin Connect) to start your configuration

Select your watch model, on family watch model, or a model with the same screen shape (eg 240x240, 280x280 etc).

Type in a name you want to give to this model.

Submit your request by clicking on « launch creation ».

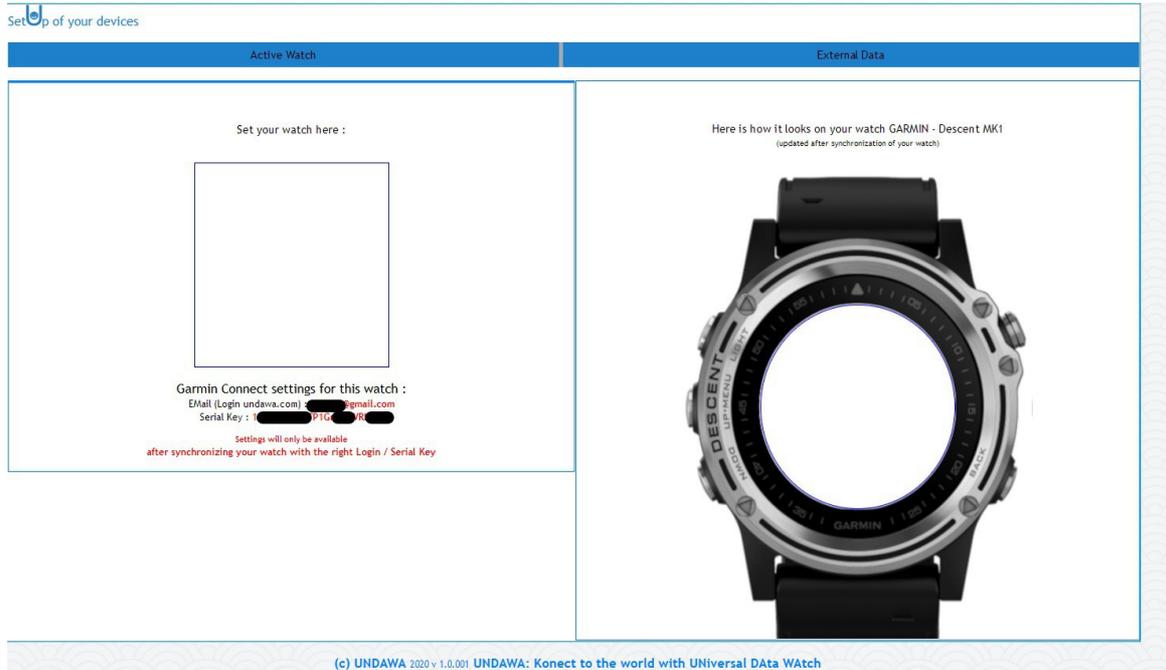
At this point please take care, if you already have a watch set, this will erase it and create a new one from scratch (base is demo watch).

b) Connect IQ setting

undawa.com new watch is (should be) ok.

What you now have to do :

take a deeper look at the screen now (you can come whenever you want on this screen by clicking on the watch - left main menu) :



Screen is blank, as is simulator screen.

Why ?

Undawa need to get an « uuid » (unique identifier) given by Garmin, to join your watch and your new watch face here.

Take a deeper look at this screen :

you have your login remembered, and a new serial key (remember, before it was « demo/ demo » !) :

Garmin Connect settings for this watch :

Email (Login undawa.com) [redacted]@gmail.com
Serial Key : 1625033 [redacted] 1Gn4WW [redacted]

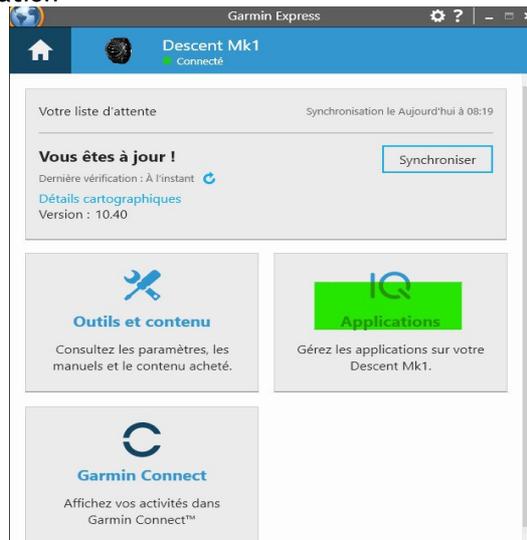
You have now to go in Connect IQ on your phone or Garmin Express, since it's easier to Copy/Paste data.

Connect you watch to your computer, open Garmin Express/ or go on your phone / undawa app settings.

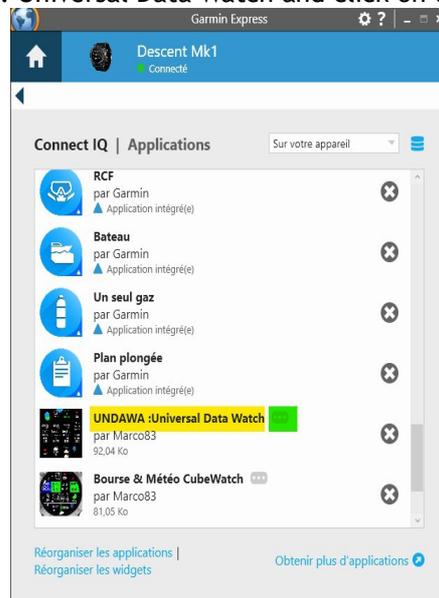
We absolutly need thoses steps, for both security and technical reasons.

So your watch is connected to your phone or, like here, at your computer.

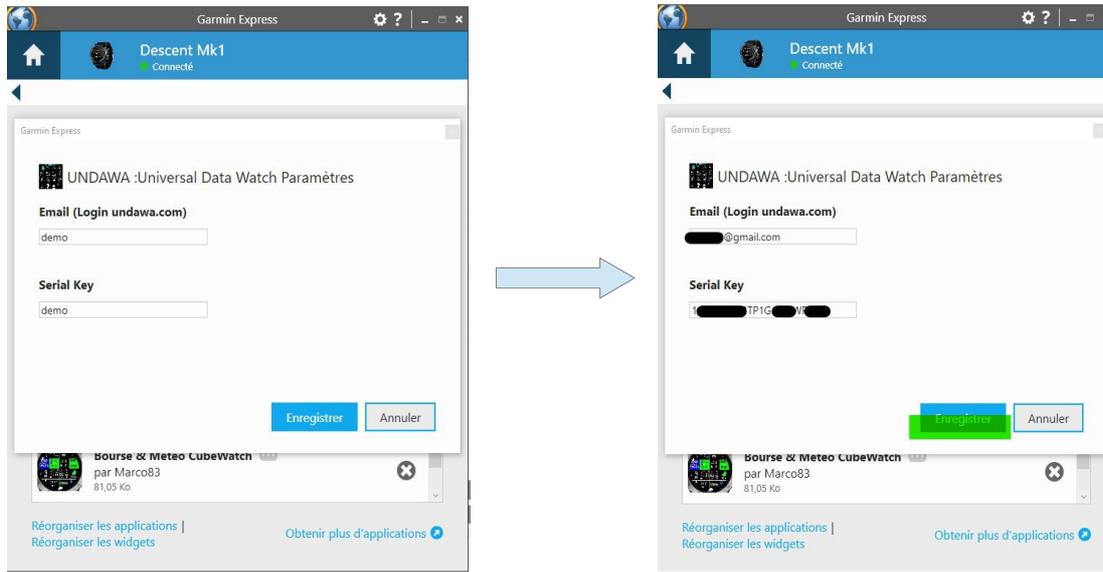
Now in Garmin Express choose IQ application



Once in « Application », search for UNDAWA : Universal Data Watch and click on the 3 points on the right :



You'll have the watchFace settings :



At this point, just copy / paste your undawa.com Login, and your Serial Key (from undawa.com to this screen).

You can do the same thing on your Connect IQ phone (maybe you'll have to type in informations, take care at this point to type the right informations!).

(Check if your Copy/Paste do not add some blank character at the end).

Then send your settings (here « Enregistrer » since my Express is in French).

That's it for the first part.

Now synchronized your watch for letting settings to be send to the watch, and the watch to synchronized wuth undawa.com.

This operation should take almost 5minutes (Garmin specification).

Please control your watch has connection with your phone, you should see a BlueTooth Icon in the last cube (bottom right). You may see a (very) little green sign on the left on the BT icon, it means UNDAWATCH have GPS informations. If needed (eg you want to have GPS located weather in some cube), you'll have to launch some GPS capable app in your watch (eg follow me, bike, map ...) and wait for your watch to get sync with GPS satellites. This is a Garmin WatchFace restriction : WatchFace can not directly have access to GPS hardware on your watch.

Note : you can use « demo / demo » whenever you want, just type in those codes in watch settings.

But to have your own configuration, you'll always need to have YOUR undawa.com watch configuration login/Serial Key settings back on your watch.

Once your watch synchronized with undawa.com (5mn), you'll be able to use the configurator !

Just click again on the watch (left menu) or « Active watch »-> « your_watch_name » to refresh the screen.

4/ Configuration

You should now have this screen :

the demo sample available to be updated to fit your own needs, your login/Serial key always displayed under it.

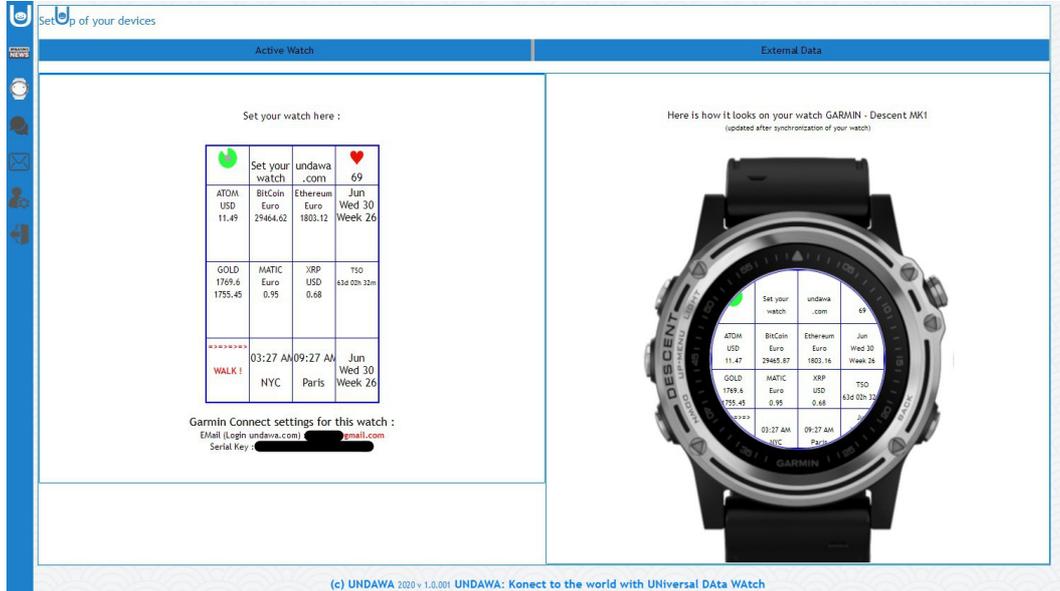
On the right, the rendering simulator, updated after each sync of your watch (you may have some 0 values while not synch).

It's now up to you to put all the data you want in your watch and fit the Cubes :

240x240 rounded watches models for instances will have 3 lines per cube available, while 280 or more could have 4 lines.

Looking at the configurator :

click on the cube of your choice (except 16th cube reserved to bluetoothicon).



Let's say the 2nd one, with « Set your watch » in.

You can, at this step, choose what you'll want to be displayed in his cube.

- Simple function like « date », « distance », « move bar » etc
- Countdown option, which will display a day/hour/min countdown to reach your target (TSO).
- Dual time with DST options (summer time)
- Free text Zone (4 lines proposed, check if it fits with your watch!)

You also have an External data option, we'll see it later.

We'll choose for instance the Dual Time, select your time zone, DST time if applicable.

For this option (Dual Time), you can use the first line of free text zone to add a line (do not select the « Free text Zone », just write in « Line 1 » area.

Choose the data for this cube:

Battery

Date

Heart Rate

Elevation

Barometer

Distance / Steps / % Goal

Move Bar

Floors climbed/descended/goal

Countdown: days -> 30 / 06 / 2021 Hour -> 12 : 00

Dual Time -> -1:00 Cape Verde, Greenland, Azore -> -1:00 (Daylight Saving Time)
(You can use the LINE 1 field (below and without validating the text field) to add a label to this Dual Time)

Free Text Zone

Porto Line 1

Line 2

Line 3

Line 4

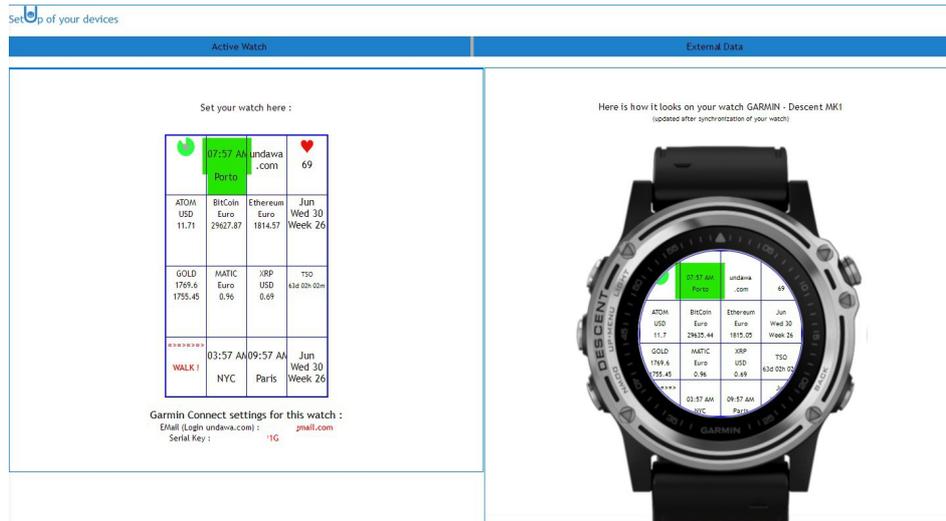
External data

Source : --> Choose your library <--

Submit this Cube

After submitting this cube, you'll have it on your watch setting.
 The simulator can render it since it is an internal function

Without doing anything else, your watch will get it at the next automatic synchronization (max 5mn).



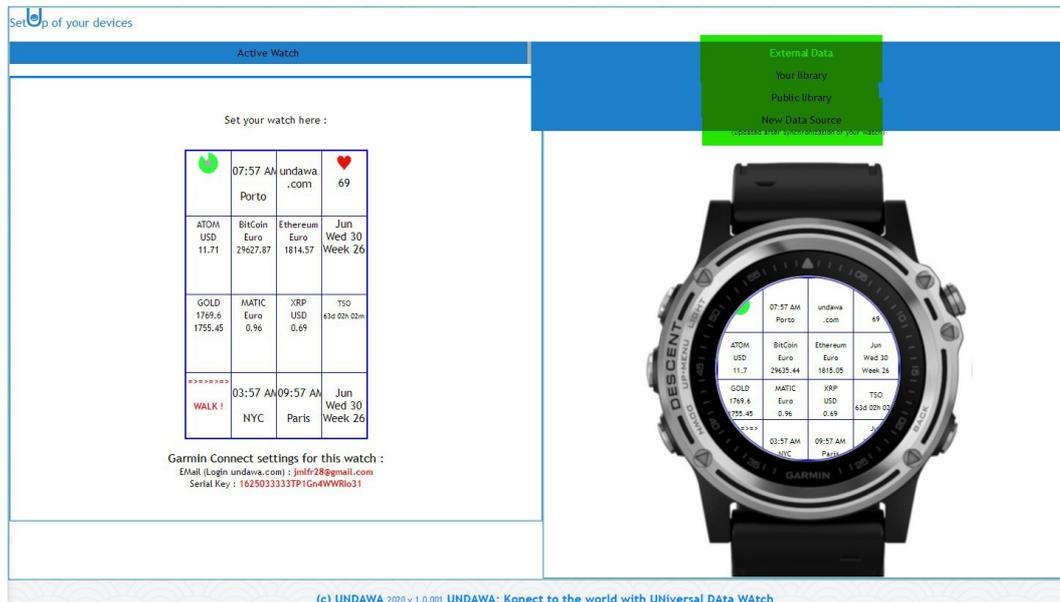
5/ External Data Configuration

Let's go to the heart of UNDAWA : external datas.

With this, you will be able to have any data available in the world wide web, and why not from your own network (Sales reporting, technical issues, etc. if you need OAUTH we could examine your request...)

Pass you mouse over « External Data » option, you'll have 3 options available :

- Your Library
- Public Library
- New Data Source



Let's begin by an overview of the Public library, in which you will probably share your own libraries !

Set up of your devices		Active Watch	External Data
<p>The Public Libraries :</p> <p>By clicking on the library, you'll be able to save it in your own library You can also read the reviews by clicking on the notes given</p>			
Author	Title	Abstract	Date Reviews
Bleeker	Weather	<p>Connexion chez OPEN WHEATHER MAP</p> <p>Prévision Météo</p> <p>Obtenez gratuitement votre clef API : (Free Weather API KEY) https://home.openweathermap.org/users/sign_up</p> <p>Pensez à activer le GPS sur votre montre (do not forget to activate GPS on your watch : just open some GPS app like Follow me)</p> <p>Get your ETHER account balance.</p> <p>Usage Parameter 1 : network Parameter 2 : account</p>	2021-06-20 20:40:53 2 0
Marcus	Ether Balance API TEST	<p>Networks values are : mainnet opstest inkeby kovan goerli</p> <p>NOTE : TEST API. ONLY AVAILABLE AT THIS TIME FOR KOVAN NETWORK</p>	2021-06-19 13:45:43 2 0
Marcus	CryptoCompare COSMOS	<p>Single Symbol Price</p> <p>Get the current price of any cryptocurrency in any other currency that you need. (You can change to any Crypto) If the crypto does not trade directly into the tosymbol requested, BTC will be used for conversion. If the opposite pair trades we invert it (eg.: BTC-XMR)</p>	2021-06-16 23:09:22 1 0
Marcus	Gold Price: London Fixing	<p>Gold Price: London Fixings, London Bullion Market Association (LBMA). Fixing levels are set per troy ounce. The London Gold Fixing Companies set the prices for gold that are globally considered as the international standard for pricing of gold. The Gold price in London is set twice a day by five LBMA Market Makers who comprise the London Gold Market Fixing Limited (LGMFL). The process starts with the announcement from the Chairman of the LGMFL to the other members of the LBMA Market Makers, then relayed to the dealing rooms where customers can express their interest as buyers or sellers and also the quantity they wish to trade. The gold fixing price is then set by collating bids and offers until the supply and demand are matched. At this point the price is announced as the 'Fixed' price for gold and all business is conducted on the basis of that price.</p>	2021-06-16 23:07:43 1 0
Marcus	NASA Close Near Earth Object	<p>This API provides access to current close-approach data for all asteroids and comets in JPL's SBDB (Small-Body DataBase). Defaults for query parameters are setup for a typical CNEOS web-site search: NEO Earth close-approaches less than 0.05 au (or dist-max) in the next 60 days sorted by date.</p> <p>For complete API documentation please visit the JPL SBDB Close-Approach Data API website.</p> <p>From https://api.nasa.gov/ Connexion chez OPEN WHEATHER MAP</p>	2021-06-16 23:07:17 1 0
Marcus	Weather FORECAST Ville	<p>Météo (Usage à + x heure par rapport à l'heure courante) Obtenez gratuitement votre clef API sur openweathermap.com</p>	2021-06-16 23:07:01 1 0

You have here a list of various external data configurations.
Here we can see weather library, various Crypto libraries, Nasa etc..
Let's take a look at the first one : Weather Library. Just click on the line.

if you click on the reviews, you are going to this library forum. You may have some more information here, or ask for some more help...

Set up of your devices

Active Watch External Data

Here is the information from this public data source:

- This source must return a JSON format only
- You can modify it here before transferring it to your private library

Source Name:

source abstract

Connexion chez OPEN WHEATHER MAP

Prévision Météo

Obtenez gratuitement votre clef API :
(Free Weather API KEY)

URL:

Parameter n° 1	appid	Value n° 1	<input type="text" value=""/>
Parameter n° 2	units	Value n° 2	metric
Parameter n° 3	lang	Value n° 3	fr
Parameter n° 4		Value n° 4	
Parameter n° 5		Value n° 5	
Parameter n° 6		Value n° 6	

Use information transmitted by your watch :

Parameter LATITUDE	lat	Value n° 7	45.6084
Parameter LONGITUDE	lon	Value n° 8	4.25858

Source present in your library, saving will just update (you can change the title to duplicate)

What you need to know :

Here is a public library.

You can test it 'as is', but oftently you'll have to get some Api Key (here « appid »), as describe in the abstract.

Indeed, you may have to - freely- register to have access to some data on the web.

Here is openweathermap.org, a freemium weather website. Enough for what we want to do !

Some others sources do not need any appid/SerialKey/ApiKey ...

We are working to make deals with some providers for that ;)

Let the source name or change it, the system will check in your own (private) libraries if you already have the same title lib.

Check the abstract or change it as you want.

Check URL of the external api.

We have now access to as much as 6 parameters, all customizable according to website (here openweather) recommendations.

Parameters are indeed given by your API provider (take a quick look at : [OpenWeatherMap API doc](#))

For instance you may want to change units to imperial value, lang to us value etc.

For weather informations, we may need latitude and longitude informations back from the watch.

Type them in the format the website API provider wants them (here « lat » and « lon »).

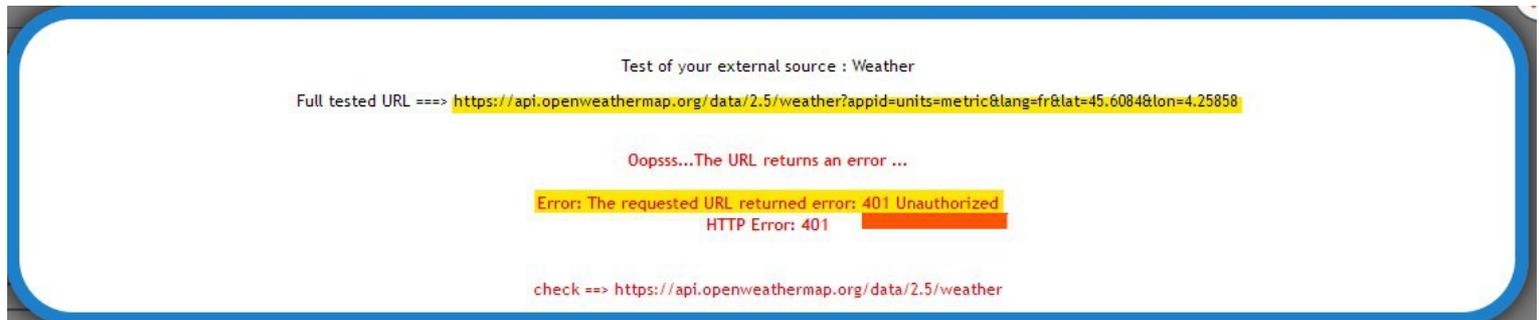
you can now either « test this source» with theses settings, and / or « Save this source to your library ».

Before saving it to our own,click on test.

You'll see the returned data (or error data, eg if you have no appid/apikey, parameter name mistape ...).

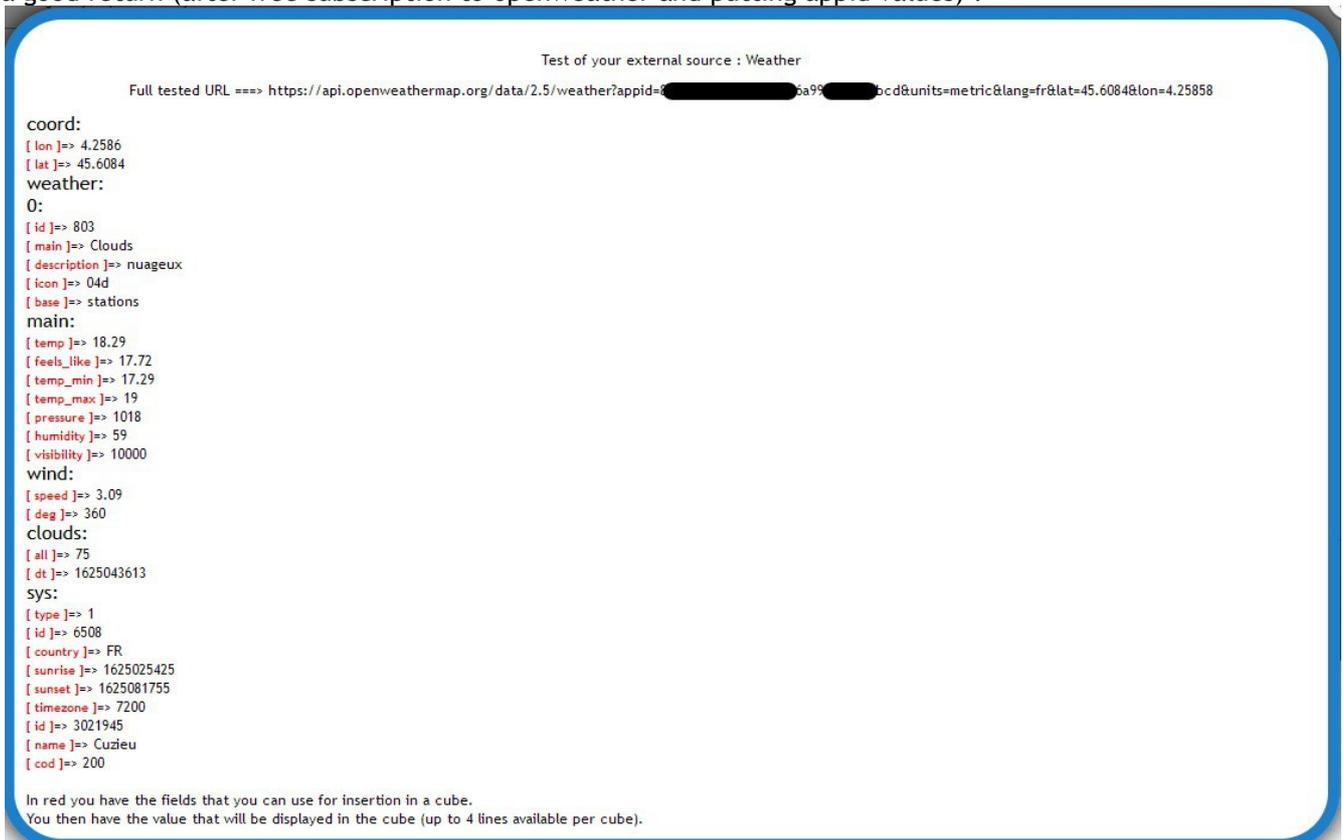
When using Lat / Long params, the system will automatically use some (sometimes from your Provider IP geoloc if available) lat long data to test your source. Don't care of the results, your watch will send correct Lat/Long data.

Here is an authorization error :



We can see the full tested URL (main URL associated with the params and values), and the contacted URL return message.

Here is a good return (after free subscription to openweather and putting appid values) :



You have the full return of this source.

In red (with brackets), the fields name usable for your watch. It's up to you to check if it will fit your watch. On the right, sample data which could appear on your watch just at this time.

So, now, back to the Public source library, save it to your library, with the same name (you can change it if you feel good with using all this).

Click on « External Data » → « Your libraries ».

You should now be able to see this library in your private list. You can either create a new one, this is the same process (name, abstract, URL and params) but from scratch...

In your private library list, select « Weather » we just added. You'll have this :

Setup of your devices

Active Watch External Data

Fill in the information for this data source :
(This source must return a JSON format only)

Source Name

source abstract

Connexion chez OPEN WHEATHER MAP

Météo

Obtenez gratuitement votre clef API

URL

Parameter n° 1	appid	Value n° 1	83d8
Parameter n° 2	units	Value n° 2	metric
Parameter n° 3	lang	Value n° 3	fr
Parameter n° 4		Value n° 4	
Parameter n° 5		Value n° 5	
Parameter n° 6		Value n° 6	

Use information transmitted by your watch :

Parameter LATITUDE	lat	Value n° 7	45.6084
Parameter LONGITUDE	lon	Value n° 8	4.25858

Test this source

Save this source to your library

Source present in your library, saving will just update (you can change the title to duplicate)

Remove this source from your library

Make this source public

You have new buttons option :

« Remove this source from your library » and « Make this source public ».

Just by changing the name you can save it again under a new name (some duplicate lib), in your private Lib...

How to use it :

« Test this source » will give the same results we saw before.

You can save it under a new name with different params, for instance with cryptos, Stocks or any others, you would just have to change the symbol of the crypto, of the stock, with the same others params.

Let's jump directly to the configuration cube now, as we have tested it with ok results !

6/ Using External data Source in Cube

Back to the configurator (remember ? «Active Watch» → « your_watch_name » OR watch icon on left menu)

Click then on demo cube « undawa.com » (3rd cube, right of our Dual Time on 'Porto' we set).

You can now select « External data » radio button, and select « weather » library.

It should give you (do not forgot registering to openweathermap!) some screen like this :

Choose the data for this cube:

- Battery
- Date
- Heart Rate
- Elevation
- Barometer
- Distance / Steps / % Goal
- Move Bar
- Floors climbed/descended/goal
- Countdown: days -> 30 / 06 / 2021 Hour -> 12 : 00
- Dual Time -> -12:00 Baker Island, Howland Island -1:00 (Daylight Saving Time)
(You can use the LINE 1 field (below and without validating the text field) to add a label to this Dual Time)
- Free Text Zone

Line 1
Line 2
Line 3
Line 4

External data
Source : Weather

Votre source externe : Weather

URL testée ==> https://api.openweathermap.org/data/2.5/weather?appid=...&units=metric&lang=fr&lat=45.6084&lon=4.25858

En rouge vous avez les champs que vous pourrez utiliser pour insertion dans un cube.
Vous avez ensuite la valeur qui sera affichée dans le cube (jusqu'à 4 lignes disponibles par cube)

Free Text Zone

coord:

[lon] => 4.2586 Arrondi sur 2 décimale(s)
[lat] => 45.6084 Arrondi sur 2 décimale(s)

weather:

0:

[id] => 800 Affichage de 3 chiffres
[main] => Clear Affichage de 5 lettres
[description] => ciel dégagé Affichage de 13 lettres
[icon] => 01d Affichage de 3 lettres (Associer cet icon à la météo type openweather ?=)
[base] => stations Affichage de 8 lettres

main:

[temp] => 17.9 Arrondi sur 2 décimale(s)
[feels_like] => 17.29 Arrondi sur 2 décimale(s)
[temp_min] => 16.52 Arrondi sur 2 décimale(s)
[temp_max] => 18.3 Arrondi sur 2 décimale(s)
[pressure] => 1018 Affichage de 4 chiffres
[humidity] => 59 Affichage de 2 chiffres
[visibility] => 10000 Affichage de 5 chiffres

wind:

[speed] => 2.57 Arrondi sur 2 décimale(s)
[deg] => 20 Affichage de 2 chiffres

clouds:

[all] => 0 Affichage de 1 chiffres
[dt] => 1625045434 (date possible : 30/06/2021, 11h) Arrondi sur 2 décimale(s)

SYS:

[type] => 1 Affichage de 1 chiffres
[id] => 6508 Affichage de 4 chiffres
[country] => FR Affichage de 2 lettres
[sunrise] => 1625025425 Atomic divid. 10 (eg wei to ether : divide by 18)
[sunset] => 1625081755 Atomic divid. 10 (eg wei to ether : divide by 18)
[timezone] => 7200 Affichage de 4 chiffres
[id] => 3021945 Atomic divid. 7 (eg wei to ether : divide by 18)
[name] => Cuzieu Affichage de 6 lettres
[cod] => 200 Affichage de 3 chiffres

Submit this Cube

We are at the very heart of the system.

First, we selected our external data source (« weather »).

Then appeared the results, in which we selected 3 lines (you can have 1 more if your watch is big enough).

- We want to have a weather icon on 1st line, with associated icon (checkbox on the right)
- we selected temp for the 2nd line
- humidity on 3rd line.

We could have chose any of the value offered here !

Set your watch here :

	09:44 AM Porto	 18.77 55	 69
ATOM USD 11.65	BitCoin Euro 29053.53	Ethereum Euro 1782.36	Jun Wed 30 Week 26
GOLD 1769.6 1755.45	MATIC Euro 0.94	XRP USD 0.67	TSO 63d 00h 15m
=====>>>>>>>> WALK !	05:45 AM NYC	11:45 AM Paris	Jun Wed 30 Week 26

What's powerfull is that you can slect weather source for more than one cube, that is to say, you can have 1 cube for tempreatures, another one for the wind, another for max...

You have for instance a weather Forecast in the public library.

We are using it like this :

- one cube for the next 3hours (we selected the next 3 hours based on current time at the moment of setting it)
- another cube for next 6hours (Forecast for 3hours in 6 hours)
- another one for next 24 hours.

Nothing to do on your watch, next sync will display your new configuration automatically!

So, now, it is up to you, do not hesitate to contact us, to use the forum and create or found new external sources !

Enjoy !