

Wisplet S2W Quick Start Guide

Add a Wisplet device to your Wi-Fi network

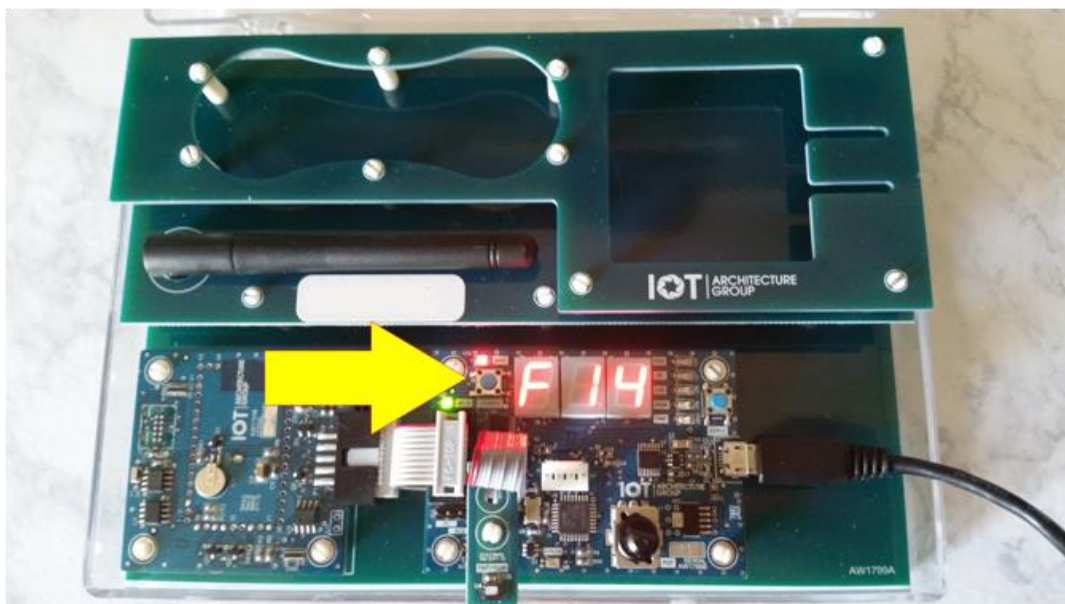
The first step in beginning to use your Wisplet Evaluation kit is to attach it to your local Wi-Fi network. To do this you must temporarily put the Wisplet in Access Point mode. In this mode, the Wisplet becomes a Wi-Fi network access point, which can then connect with your computer or smartphone.

After connecting the Wisplet to your Wi-Fi access point, you will choose the Wi-Fi network for the Wisplet itself by loading the web page served by the Wisplet, and reaching the MQTT broker and Wisplet server.

Step 1 – Discover the access point

Power the Wisplet System by connecting the micro-USB to the microcontroller and the plugging into any AC power supply.

Once the Wisplet system has been powered up for at least 5-10 seconds, press and hold the CONFIG button for at least 5 seconds, then release. The Wisplet should restart as an Access Point called **IOTAG-Config** (which uses WPA2 AES PSK security) with a passphrase **sileng3550**. The Wisplet will automatically select a channel with the least interference.



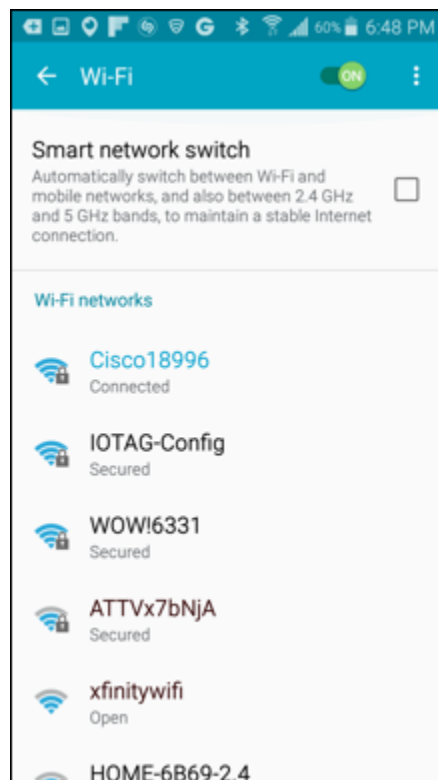
You can connect to the Wisplet when it is in this mode by using any device with Wi-Fi and a web browser. So you can use your laptop, smartphone, or tablet. The examples on this page show how to do this using an Android smartphone.

STEP 2 – Connect to the IOT AG access point

1. Open the **Settings** app on your device and choose **Wi-Fi settings**. You will see the Android device scan for Wi-Fi networks (access points).

Wait until the access point named IOTAG-Config is detected.

2. Choose access point **IOTAG-Config** and enter password **sileng3550**



Your smartphone/tablet/computer should then be connected to the Wisplet as your Wi-Fi access point. At this point, any Wi-Fi traffic generated from your smartphone will attempt to route to the internet through the Wisplet. Your smartphone thinks that the Wisplet is its route to the internet. This is not really the case though—the Wisplet has only begun operating in this mode in order for you to connect only to it, for the purpose of attaching the Wisplet to a real Wi-Fi access point that is running at your location.

STEP 2 – Connect the Wisplet to your Wi-Fi network

1. Now open your smartphone's web browser and load the **URL <http://192.168.0.1>**

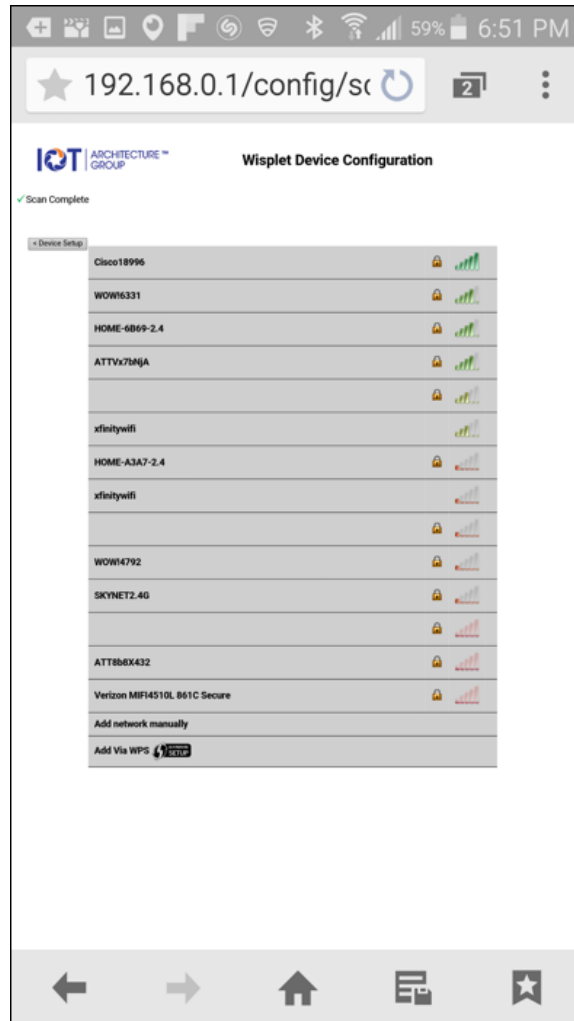
Note: Currently this does not seem to work with iOS Safari. If you are attempting to configure the Wisplet using an iPhone or iPad, please use a browser other than Safari.

You will see a web page that looks like this:



The screenshot shows a mobile web browser interface. At the top is a status bar with various icons and a 60% battery level at 6:50 PM. Below the status bar is the IOT Architecture Group logo and the title 'Wisplet Device Configuration'. The main content area is titled 'Application Settings' and contains four input fields: 'MQTT Broker Username', 'MQTT Broker Password', 'MQTT Broker Port' (with the value '1883' pre-filled), and 'MQTT Keep Alive Interval (sec)' (with the value '60' pre-filled). There are two buttons at the bottom right: 'Save settings' and 'Wi-Fi Setup >'.

2. At present, it is not necessary to supply the MQTT broker credentials, so simply press the **Wi-Fi Setup** button.



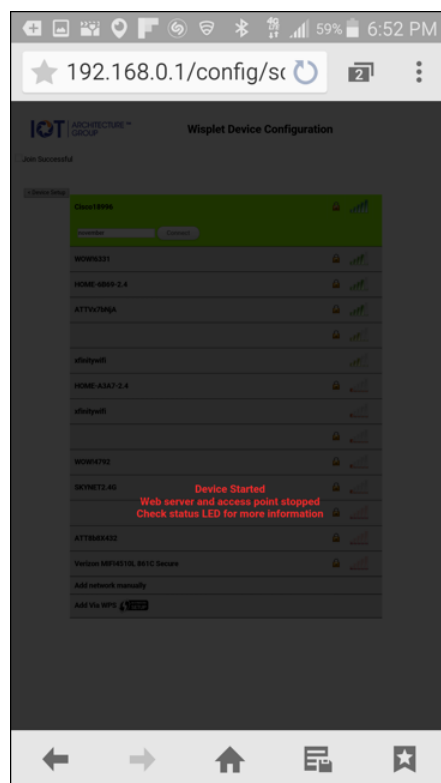
You will see a web page like the one shown above.

This web page shows you the actual Wi-Fi networks that the Wisplet has detected in its vicinity, indicates whether they are password-protected, and shows the signal strength of each Wi-Fi network.

3. Tap on the **Wi-Fi network** to which you want the Wisplet to attach itself. For example, the Wi-Fi network called Cisco18996.

If that Wi-Fi network is password protected, you will be prompted for that network's password.

The Wisplet will then stop operating as a Wi-Fi access point and will attempt to connect to the Wi-Fi network you specified.



Once the Wisplet Wi-Fi access point has disappeared, the smartphone, tablet, or computer you used to configure the Wisplet should connect to the Wi-Fi access point you chose for it, and should be connected to the MQTT broker and the Wisplet server.

If you have created an account on the Wisplet server and created the Wisplet device under that account, you should be able to log into that account via the Wisplet server web interface at <http://wisplet.net> (or via the iOS or Android app), and you should see that Wisplet's connection status as GREEN.



Troubleshooting

Creating an account and device on the Wisplet server is covered elsewhere, but if you do not see the connection status become GREEN after a minute or so, the possible causes could be:

- The Wi-Fi network password you entered was incorrect.
- The MAC address you entered when defining the Wisplet in your account on the Wisplet server is incorrect.

If you suspect that you may have entered the Wi-Fi network password incorrectly, simply hold down the **CONFIG** button on the Wisplet device to put it into Access Point again, and repeat the steps above.

You should also ensure that the Wi-Fi network to which you attached the Wisplet is connected to the general internet, so the Wisplet can route to the MQTT broker and Wisplet server.

Access to the Wisplet Server

Visit <http://wisplet.net> for access to the Wisplet server, as well as for links from which you can download the Wisplet iOS and Android apps.

More information

Visit iotarchitecturegroup.com for more information about the Wisplet.