

# Cloud Platform – Gateways

This guide describes how gateways can be controlled using the Wiliot Platform.

*Note: Only users with admin permissions can manage gateways. See [this guide](#) for information about user management*

## GW Module

*The Gateways section of the Wiliot Platform allows viewing and managing gateways. It lists Works with Wiliot gateways as well as mobile apps functioning as gateways. If there are no gateways listed in this view, follow the instructions under "[Adding a Gateway to the Wiliot Platform](#)" to add a gateway.*

### Gateway List

Each gateway is represented by one entry in the list

- ID - each gateway has a unique ID. For Works with Wiliot gateways the last few characters of this ID are printed on a sticker affixed on the gateway.
- For mobile apps, this ID is auto-generated by the mobile device's OS every time the app is installed or re-installed.
- Name - By default same as the ID. Can be changed to a more user-friendly name
- Type - For Works with Wiliot gateways this will be WIFI. For mobile apps, this will be MOBILE
- Status - Online means that the gateway is connected to the cloud and sending periodic updates. It does not indicate whether the gateway is receiving packets from tags

### Gateway details Page

Click on the GW line in the table to see more details about a gateway.

### Edit a Gateway

Click on the Edit button from the line entry menu or from the Gateway details page click on the Menu icon on the top right side of the screen and select Edit GW

In the Edit Gateway screen update the following settings:

Under the settings tab:

- Gateway ID is not editable
- Change a gateway's name by clicking on the current name and changing it
- Other Gateway parameters control how the gateway behaves. Changing these values need to be done by advanced users who are familiar with the GW configuration parameters. Consult [this article](#) for more information about the different configuration options

Under the location tab:

- Gateway location - A gateway can report a static location that is set by moving the cursor on the map to the desired location or by editing the longitude and latitude fields in the map. Alternatively, a gateway can derive its own location (controlled by configuration options)

*Note: Gateways awaiting a configuration change will have a green icon next to the ID of the gateway entry. additionally, the same icon will appear next to the parameter that is pending update*

### Upgrading a GW Firmware

- The Platform constantly check if the GW has the latest published FW
- if the GW is not up to date with the latest FW version a notification shall appear that a FW version update is available.
- to update the GW, Click on the link to update the GW and the GW will be updated to the latest released version

### Adding a Gateway to the Wiliot Platform

Before a gateway can be managed, it must be added to an owner's account in the Wiliot platform. A gateway can only be added under one owner.

### Registering a Gateway

Registering a GW can be done in two ways

- Via Mobile App
- Via the cloud platform

#### Registering a Gateway via Wiliot Mobile App

1. Login to the Wiliot app
2. For users with multiple accounts, select the account you want to register the GW
3. Go to the Edge module and select Gateway Settings
4. Follow the instructions to set the GW Wi-Fi Settings
5. At the end of the process the GW will automatically associate to the Owner's account

Note: if the GW is associates to another account the registration process will fail and the GW will have to be manually removed from its current account in order to change ownership again

#### Registering a Gateway via Cloud Platform

1. Power up the gateway
2. Make sure the gateway is connected to the Internet
3. Make sure there are pixels that are associated with your account nearby the gateway
4. Click on the "Scan Gateway" button near the search box. Wait for the new gateway to appear under "Registered Gateways"
5. Hover over the new gateway and click on the "Approve gateway" button. The gateway will then as "Approved". After a few minutes, the GW will appear as "online" and will also allow to view/edit the gateway configuration as mentioned above

## Advanced

Gateways can also be managed using Wiliot's [Edge API](#). Python programmers can use [PyWiliot](#) to manage bridges

### Monitor bridge connectivity

To monitor the gateway's recent connectivity status, click on the "Customize columns" icon and select the 3 connectivity-related columns to be presented. When choosing one of them, all three are presented. the columns are:

1. *Up time* - The percentage of time in which the gateway was online in the last 72 hours.
2. *Number of disconnections* - Last 72 hours
3. *Average disconnection time* - In HH:MM format. Last 72 hours.

To view the above information in more granular timeframes, press the Bridge entry on the Bridges list and go to the "Monitor" tab that appears at the top of the page:

- Home
- Assets
- Categories
- Locations
- DATA MANAGEMENT
- Connections
- EDGE MANAGEMENT
- Gateways

Gateways

Offline

Gateway Info Monitor

Gateway Type	wifi
Last Activated	Nov 20, 2022, 5:04 PM
Activated by	yotam.givati@willot.com
Firmware Version	1.6.1

On this page, the *Up time*, *Number of disconnections*, and *Average disconnection time* are also presented for both 8 hours and 24 hours (1 day). At the bottom of the page is a chart showing the history of connections and disconnections for the selected time frame, with the ability to zoom in and deep dive into certain connectivity events to your wish.

- Home
- Assets
- Categories
- Locations
- DATA MANAGEMENT
- Connections
- EDGE MANAGEMENT
- Gateways
- Bridges
- Pixels

Gateways

Offline

Gateway Info Monitor

Connectivity

Nov 20, 2022, 4:09 PM - Nov 21, 2022, 4:09 PM

8 Hours 1 Day 3 Days

27.6% Up Time	2 Number of Disconnections	08:21 Average Disconnection Time (HH:MM)
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Chart instructions

The chart shows a single gateway's connectivity status over a 24-hour period. The y-axis is labeled 'Online' and 'Offline'. The x-axis shows time from 4:10 PM to 3:16 PM. The gateway is 'Online' from 4:10 PM to approximately 11:52 PM, then drops to 'Offline' until 11:52 PM, and remains 'Offline' until 3:16 PM.

**Monitoring compare mode**

To compare the connectivity status history of your different devices in a single view, select multiple Gateways from the Gateways list and press "Mointor" on the top bar. A view with the connectivity charts of all the selected Gateways will appear, so it is possible to see the connectivity events of different devices all at once.