



## Garage Monitoring System Quick Start Guide

from



### 1 Modifications

Date	Modifications	Author	Version	Modified Sheets	Approved		
					By	Date	Signed
04/06/2024	First Release	GA	v1.9	All	JH	04/06/2024	JH
08/10/2024	Firewall Guidance	GA	v1.9.1	5	GA	08/10/2024	GA
17/12/2024	Version Change	GA	v1.10	NA	GA	17/12/2024	GA
07/07/2025	Version Change	GA	v1.11	NA	GA	07/07/2025	GA
17/02/2026	ASP .NET & .NET Desktop	GA	v1.13	2	GA	17/02/2026	GA

## 2 Overview

This quick start guide is to be used in association with 1SYSTEM® GMS DCS v1.13, GMS API v1.13, and GMS GUI (Sample) v1.2.3.

### GMS DCS

The Device Communication Service is how the sensor data is received by the host PC, using 2.4GHz frequency wireless communication.

### GMS API

The Application Programming Interface is how the sensor data is managed. It is output as a JSON format data stream that can work with either the supplied GMS GUI (Sample), or the customers own GMS GUI.

A GMS Server should be nominated within the team's garage network that will run the API. The API license by default will work with one DCS node, which can either be on the Server itself, or another PC on the network. Additional DCS nodes can be added to the license to expand the coverage.

For API and additional DCS node, please send a purchase order to [sales@bf1systems.com](mailto:sales@bf1systems.com)

### GMS GUI (Sample)

The Graphical User Interface (Sample) is how a user can view and configure sensors, with all changes saved within the API itself.


Should you wish to use your own GMS GUI, please email [1system@bf1systems.com](mailto:1system@bf1systems.com) explaining your intentions, so we can send you a guide how to work with GMS API.


## 3 Installation

Before installing **GMS DCS**, please ensure your PC has the latest version of the following installed.

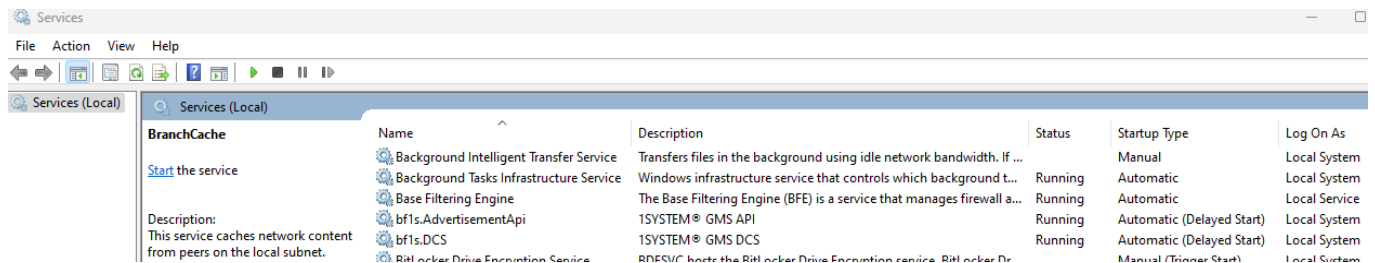
**ASP.NET Core Runtime 8.0.XX**  
**.NET Desktop Runtime 8.0.XX**

To download the **GMS DCS & API** software, please send an email to [1system@bf1systems.com](mailto:1system@bf1systems.com), so a link can be sent to you.

 1SYSTEMSetupAPI(x64)

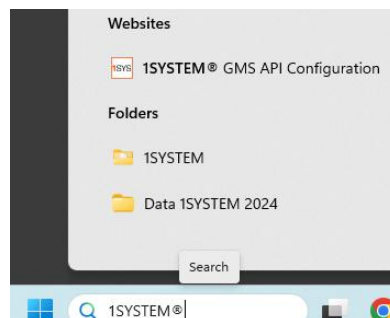
 1SYSTEMSetupDCS(x64)

After download and installation, both will be configured within Windows Services with 'Start Type - Automatic (Delayed Start)'.



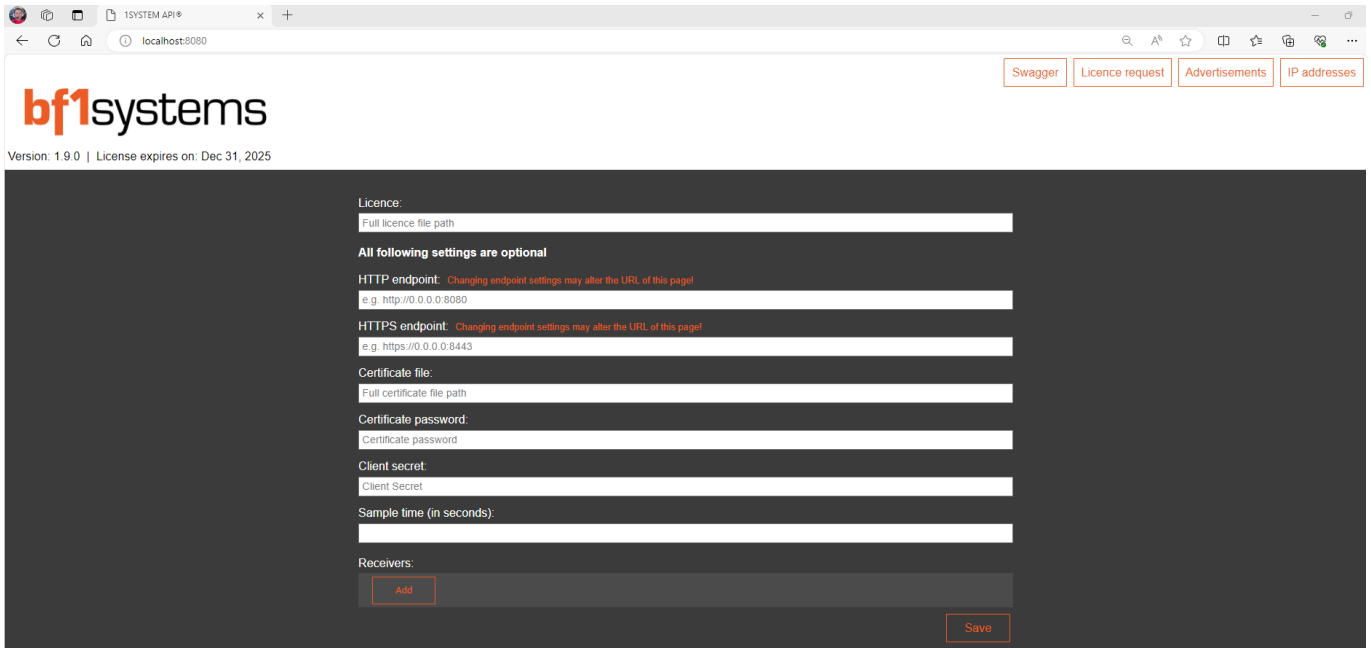
There is nothing more to do with **GMS DCS**.

To configure **GMS API**, there will now be website link added to your Windows Start Menu that you can click to open.



Alternatively, please enter the following address in your web browser:-

<http://localhost:8080/>



Licence:  
Full licence file path

All following settings are optional

HTTP endpoint: Changing endpoint settings may alter the URL of this page!  
e.g. http://0.0.0.0:8080

HTTPS endpoint: Changing endpoint settings may alter the URL of this page!  
e.g. https://0.0.0.0:8443

Certificate file:  
Full certificate file path

Certificate password:  
Certificate password

Client secret:  
Client Secret

Sample time (in seconds):

Receivers:  
Add

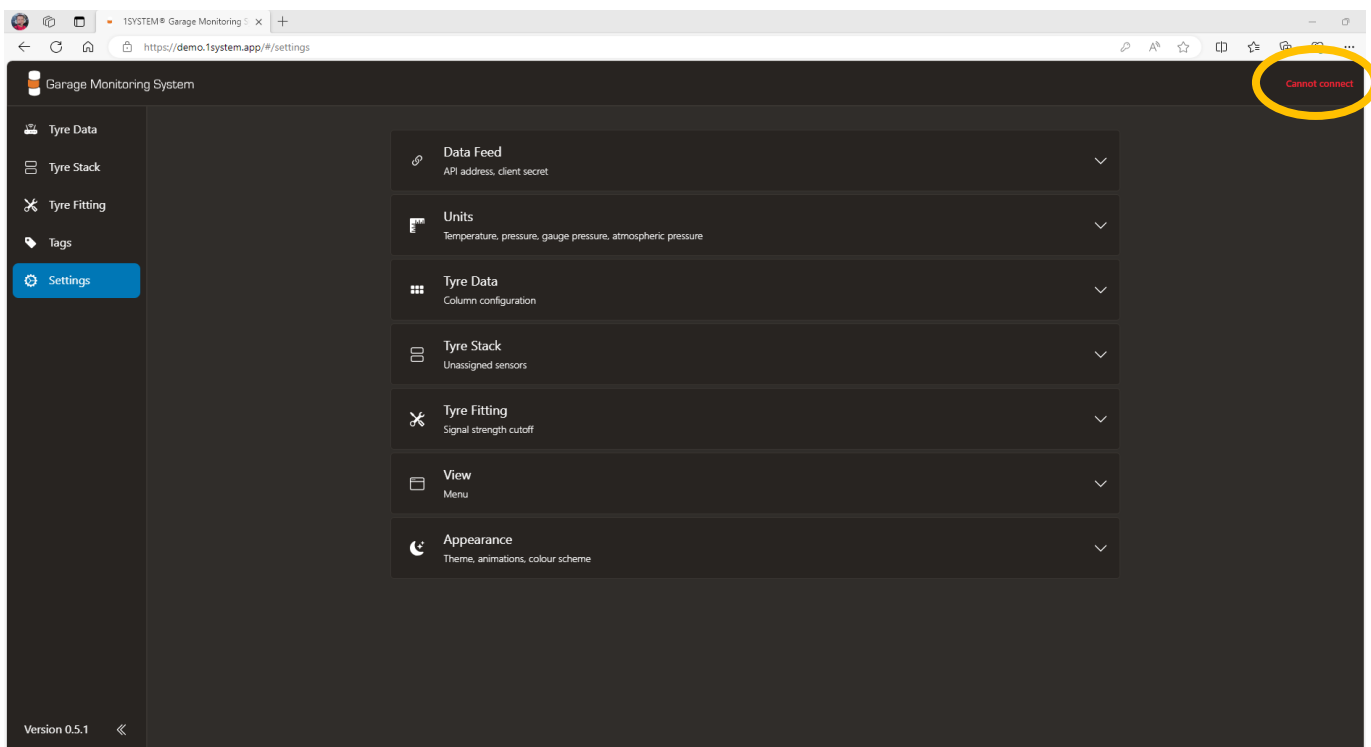
Save

Page to configure GMS API

There is a PC based software available for **GMS GUI (Sample)**, should accessing the web-based version be problematic. Please contact [1system@bf1systems.com](mailto:1system@bf1systems.com) if you require this option.

Please check you have no firewall restrictions accessing the following address:-

<https://demo.1system.app/#/settings>



Garage Monitoring System

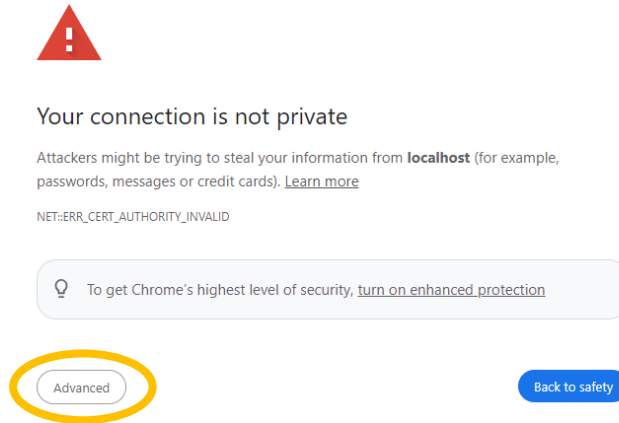
Cannot connect

Version 0.5.1

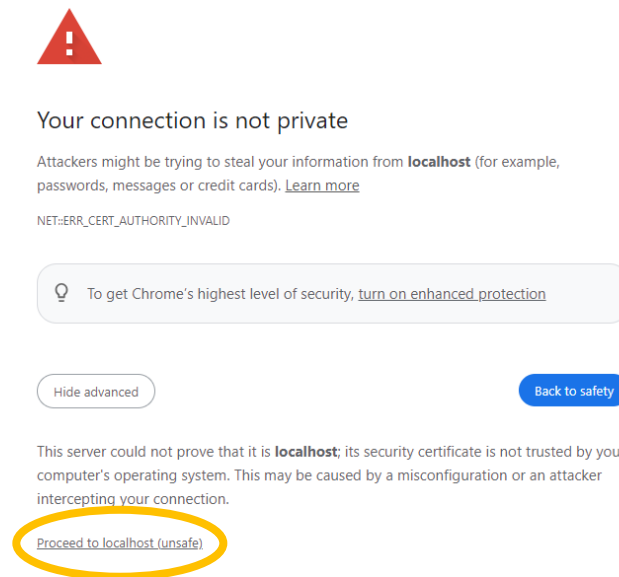
Page to configure GMS GUI (Sample)


At this point, please ignore **Cannot connect** notification until sensors are being received and **GMS API + GMS GUI (Sample)** have been configured, using the following steps.

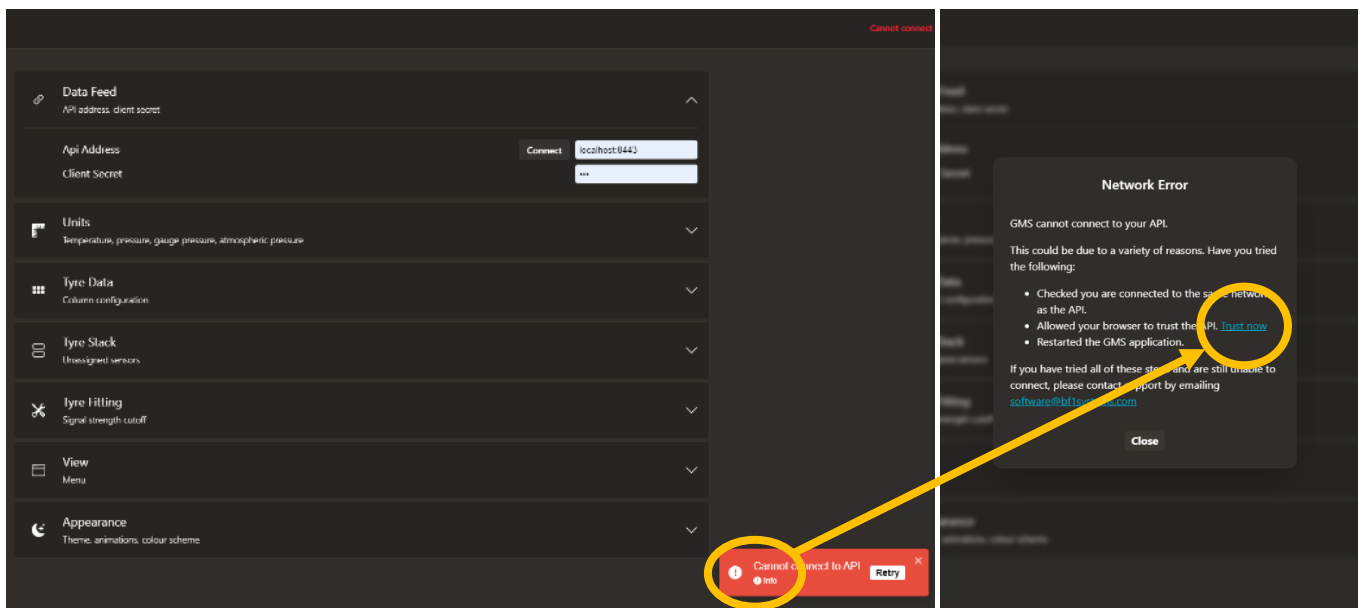
If at any stage your web browser prompts you with the following notification, please click 'Advanced'.



Then click 'Proceed to localhost (unsafe)'.

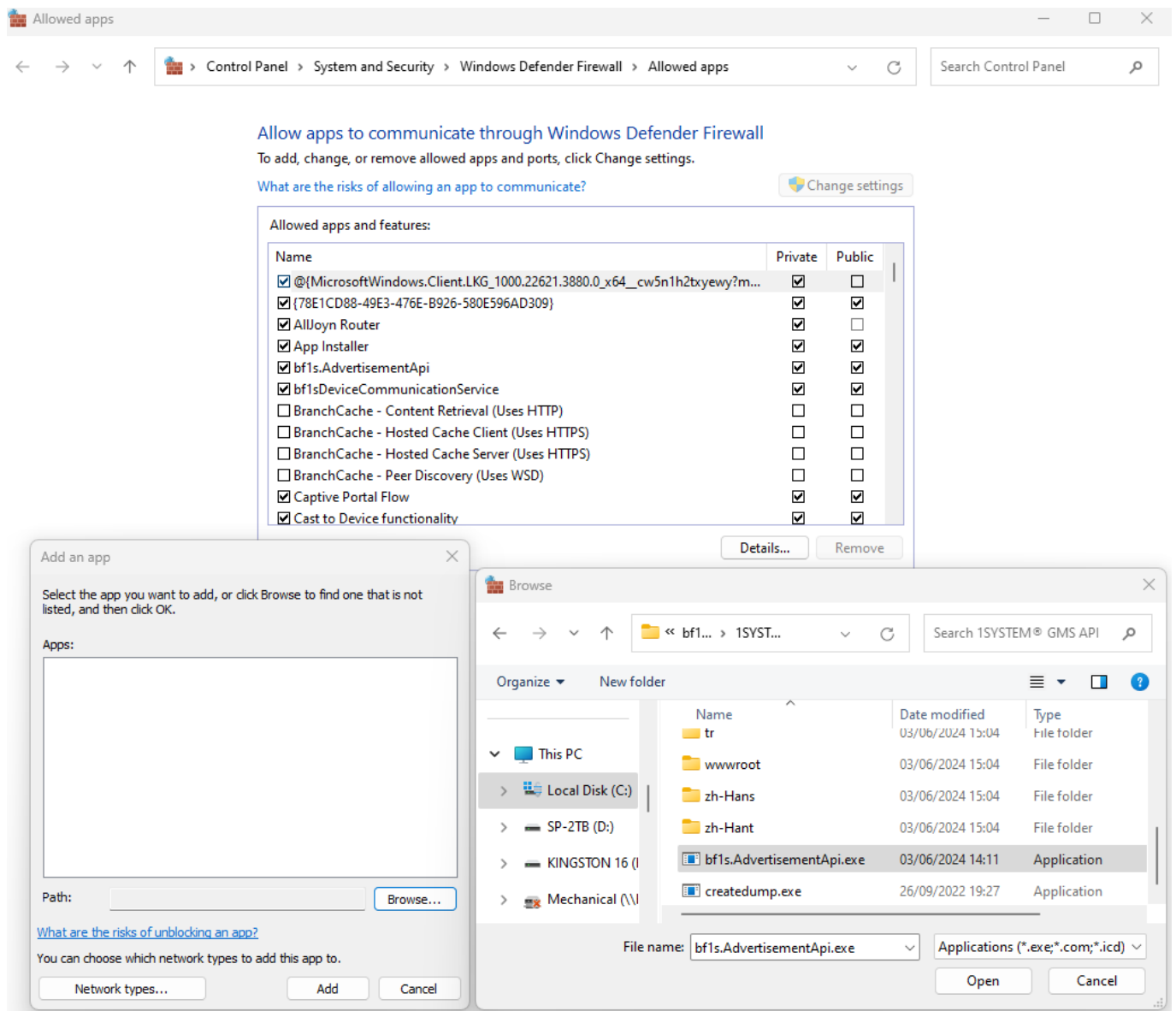


At some point you may need to click 'info'  in the red box, then **Trust now** in the pop-up window.



Pages to allow GMS GUI (Sample) permission

It is also advisable to allow the API to have permission to pass through the Firewall.



C:\Program Files\bf1Systems\1SYSTEM® GMS API\bf1s.AdvertisementApi.exe

## 4 Configuration

Once a GMS API license has been purchased, using the **GMS API** configuration page, please click 'License Request' and send this file to [1system@bf1systems.com](mailto:1system@bf1systems.com), with the bf1systems Sales Order number included for reference.

Please save your license activation file to a safe location on the PC, and copy / paste the location path to the license section of the **GMS API** configuration page. Then click 'Save'.

[Swagger](#)
[Licence request](#)
[Advertisements](#)
[IP addresses](#)


Version: 1.9.2 | License expires on: Dec 31, 2025

Licence:

**All following settings are optional**

HTTP endpoint: Changing endpoint settings may alter the URL of this page!

HTTPS endpoint: Changing endpoint settings may alter the URL of this page!

Certificate file:

Certificate password:

Client secret:

Sample time (in seconds):

Receivers:

**Scenario 1** – If you are running **GMS API**, plus the one and only **GMS DCS** on the same PC, then by clicking 'Advertisements', you can expect to see in another web browser tab, the (raw) data stream in JSON format. This requires you have one or more of your 1SYSTEM sensors pressurised and near your PC, otherwise no data stream will appear.

```
data:{"sensorAddress":5278882484049,"sensorName":"BF1W4F51","sensorType":"TPMS","timestamp":"2024-04-25T15:59:52.5185846+00:00","receivers":
[{"name":"Local","signalStrengthInDbm":-76}],sequence":49,"securityCode":"Generic - Factory -
Unsecured","errorFlags":0,"rbl":48.828125,"temperature":21.0,"pressure":975.0,"vehicleId":1,"wheelPosition":1,"tyreType":0,"tyreSet":0,"firmwareVersio
n":"4.6","moving":"No"}
data:{"sensorAddress":5278882484868,"sensorName":"BF1W5284","sensorType":"TPMS","timestamp":"2024-04-25T15:59:51.4896264+00:00","receivers":
[{"name":"Local","signalStrengthInDbm":-80}],sequence":18,"securityCode":"Generic - Factory -
Unsecured","errorFlags":0,"rbl":49.21875,"temperature":21.0,"pressure":975.0,"vehicleId":0,"wheelPosition":0,"tyreType":0,"tyreSet":0,"firmwareVersio
n":"4.6","moving":"No"}
data:{"sensorAddress":242504948288834,"sensorName":"BF1W8D42","sensorType":"TPMS","timestamp":"2024-04-25T15:59:54.609248+00:00","receivers":
[{"name":"Local","signalStrengthInDbm":-74}],sequence":45,"securityCode":"Generic - Factory -
Unsecured","errorFlags":0,"rbl":90.234375,"temperature":20.0,"pressure":980.0,"vehicleId":0,"wheelPosition":0,"tyreType":0,"tyreSet":0,"firmwareVersio
n":"4.6","moving":"No"}
data:{"sensorAddress":158561238799202,"sensorName":"BF1W5362","sensorType":"TPMS","timestamp":"2024-04-25T15:59:50.84235+00:00","receivers":
[{"name":"Local","signalStrengthInDbm":-80}],sequence":41,"securityCode":"Generic - Factory -
Unsecured","errorFlags":0,"rbl":49.21875,"temperature":20.0,"pressure":975.0,"vehicleId":1,"wheelPosition":0,"tyreType":0,"tyreSet":0,"firmwareVersio
```

**Scenario 2** – If you are using a different PC to run a 2<sup>nd</sup> GMS DCS node, then please add the Local **AND** Additional Receiver to this page.

[Swagger](#)[Licence request](#)[Advertisements](#)[IP addresses](#)

Version: 1.9.2 | License expires on: Dec 31, 2025

Licence:

**All following settings are optional**

HTTP endpoint: **Changing endpoint settings may alter the URL of this page!**

HTTPS endpoint: **Changing endpoint settings may alter the URL of this page!**

Certificate file:

Certificate password:

Client secret:

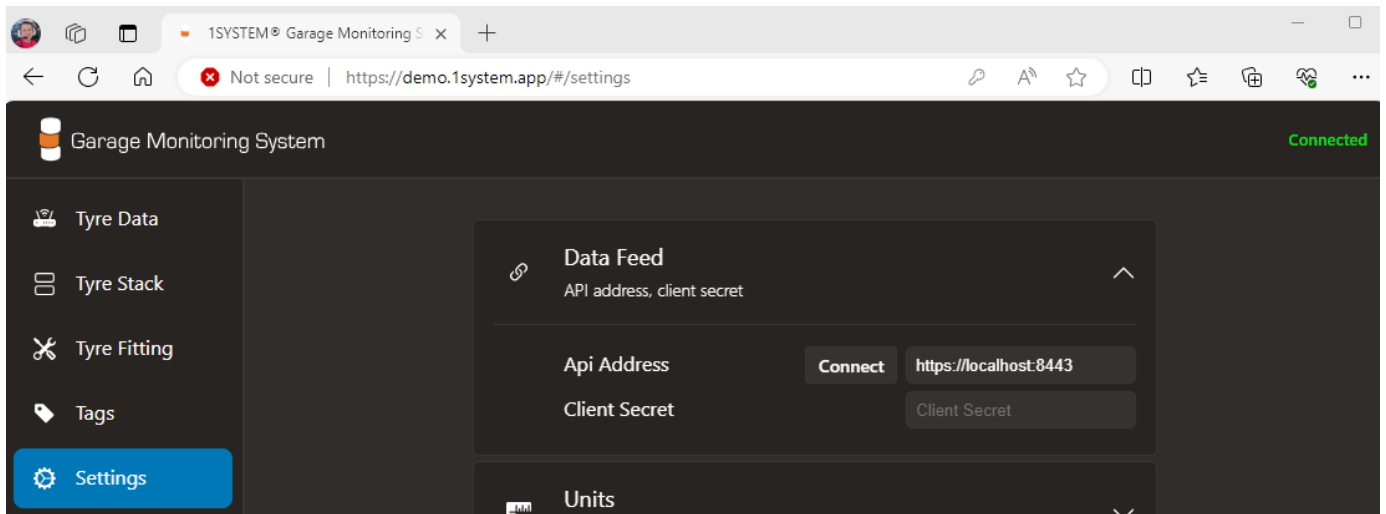
Sample time (in seconds):

Receivers:

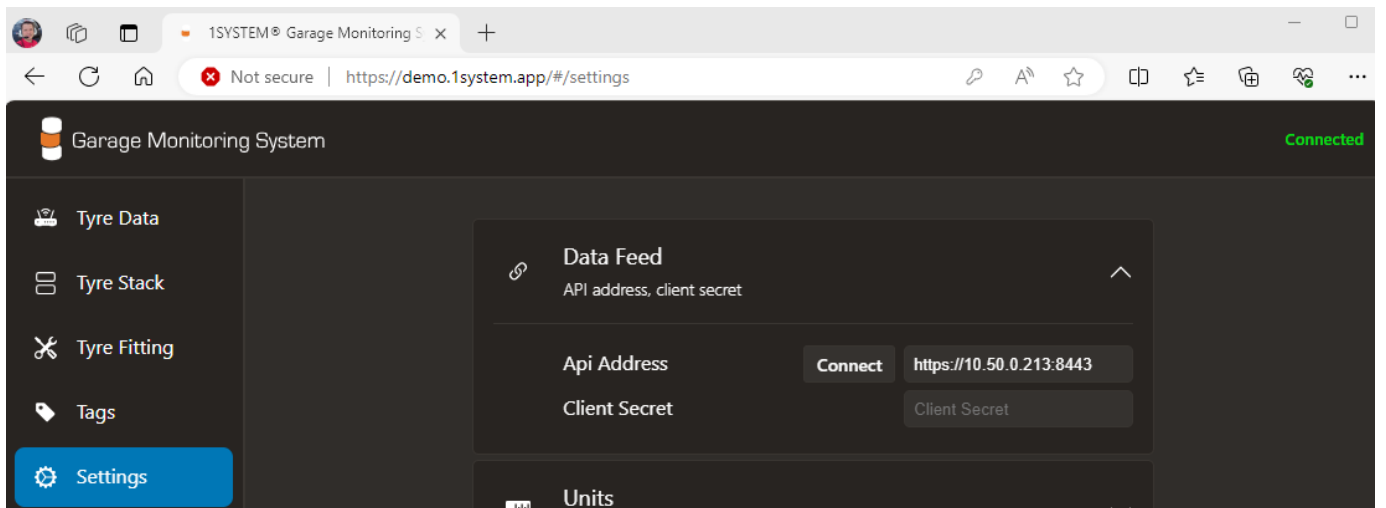
Local	localhost:10001	Delete Edit
Mini PC 1	12.168.3.150:10001	Delete Edit

Note - The IP address is unique to the PC that is running the GMS DCS, but the port should always be 10001.

If **GMS API** and **GMS GUI (Sample)** are running on the same PC, within the **GMS GUI (Sample)**>**Settings**>**Data feed**>**API Address**, please enter the following address – <https://localhost:8443>

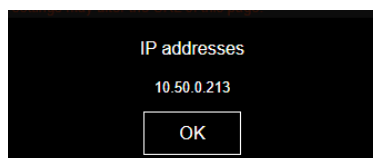
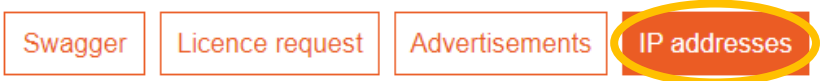


If **GMS API** and **GMS GUI (Sample)** are running on separate PCs (same network), within the **GMS GUI (Sample)**>**Settings**>**Data feed**>**API Address**, please enter the following address of the PC running **GMS API** – <https://xxx.xxx.xxx.xxx:8443>



The IP address is unique to the PC that is running the **GMS API**, but the port should always be 8443 (note, this should **not** be :8443/)

On the **GMS API** configuration main page, you can click 'IP Addresses' to easily see the address of the PC to use in **GMS GUI (Sample)**:-



Now you're connected and configured ! Please follow 'bf1systems 1SYSTEM GMS GUI (Sample) User Guide v.X.pdf' and 'bf1systems 1SYSTEM GMS API Developers Guide v.X.pdf' for more guidance.