## **1**SYSTEM<sup>®</sup>

### Garage Monitoring System Quick Start Guide

from

# bf1systems

#### **1** Modifications

Date	Modifications	Author	Version	Modified		Approved			
				Sheets	Ву	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	Verision Change	GA	V1.10	NA	GA	17/12/2024	GA		

1SYSTEM@bf1systems.com



#### 2 Overview

This quick start guide is to be used in association with 1SYSTEM® GMS DCS v1.10, GMS API v1.10, 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 <a href="mailto:sales@bf1systems.com">sales@bf1systems.com</a>

#### 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 <u>1system@bf1systems.com</u> explaining your intentions, so we can send you a guide how to work with GMS API.

#### 3 Installation

To download the **GMS DCS** & **API** software, please send an email to <u>1system@bf1systems.com</u>, so a link can be sent to you.

0	1SYSTEMSetupAPI(x64)
---	----------------------

1SYSTEMSetupDCS(x64)

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

🥋 Services						- 0
File Action View	Help					
⇐ ➡ 🗖 🖬 🤇	à 🗟   🛛 📷   🕨 🔳 II ID					
🔍 Services (Local)	Services (Local)	_				
	BranchCache	Name	Description	Status	Startup Type	Log On As
	Start the service	Background Intelligent Transfer Service	Transfers files in the background using idle network bandwidth. If	Pupping	Manual	Local System
		Base Filtering Engine	The Base Filtering Engine (BFE) is a service that manages firewall a	Running	Automatic	Local Service
	Description:	Sector AdvertisementApi	1SYSTEM® GMS API	Running	Automatic (Delayed Start)	Local System
This service caches network content		Sector Se	1SYSTEM® GMS DCS	Running	Automatic (Delayed Start)	Local System
	nom peers on the local subhet.	BitLocker Drive Encryption Service	BDESVC hosts the BitLocker Drive Encryption service. BitLocker Dr		Manual (Trigger Start)	Local System
		🆏 Block Level Backup Engine Service	The WBENGINE service is used by Windows Backup to perform ba		Manual	Local System

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:-

http://localhost:8080/



💿 © □ 1system api® × +		- 0
← C ⋒ (i) localhost:8080		Q A 🟠 🛈 🕼 🖓 …
		Swagger Licence request Advertisements IP addresses
DISYSLEMS		
Version: 1.9.0   License expires on: Dec 31, 2025		
	Licence.	
	All following settings are optional	
	HTTP endpoint: Changing endpoint settings may alter the URL of this page!	
	e.g. http://0.0.0.08080	
	HTTPS endpoint: Changing endpoint settings may alter the URL of this page	
	e.g. https://o.u.u.o.o.6443	
	Certificate file:	
	Certificate password	-
	Client cocrat	
	Client Secret	
	Sample time (in seconds):	
	Docniyore'	

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 <u>1system@bf1systems.com</u> if you require this option.

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

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

🥘 🕼 🗖 🔹 1SYSTE	EM® Garage Monitoring 5 × +					- 0
< C ⋒ ⊡ h	https://demo.1system.app/#/settings			PA	0 û	¢ @ ~
Garage Monitoring	) System					Cannot connect
🗳 Tyre Data						
- Tyre Stack		S	Data Feed  API address. client scoret			
X Tyre Fitting		3	Units Temperature pressure autop pressure atmospheric pressure			
Tags						
Settings			Tyre Data ~ Column configuration			
		00	Tyre Stack Vinassigned sensors			
		℅	Tyre Fitting ~			
		۵	View ~			
		E	Appearance   Theme, animations, colour scheme			
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'.



At some point you may need to click 'info' **O** 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.

					- 0
$\rightarrow$ $\checkmark$ $\uparrow$ $\uparrow$	Control Panel > System and Security >	Windows Defender Firewall > Allowed apps	~ (	3 Search Cont	rol Panel
	Allow apps to communica To add, change, or remove allowed What are the risks of allowing an a Allowed apps and features: Name	te through Windows Defender Firewall d apps and ports, click Change settings. app to communicate?	Change settin	gs	
	<ul> <li>✓ @{MicrosoftWindows.Client</li> <li>✓ {78E1CD88-49E3-476E-B926-</li> <li>✓ AllJoyn Router</li> </ul>	t.LKG_1000.22621.3880.0_x64_cw5n1h2txyewy?m -580E596AD309}	Y I Y Y		
	<ul> <li>✓ App Installer</li> <li>✓ bf1s.AdvertisementApi</li> <li>✓ bf1sDeviceCommunication!</li> </ul>	Service	y v y v y		
	☐ BranchCache - Content Retr ☐ BranchCache - Hosted Cach ☐ BranchCache - Hosted Cach ☐ BranchCache - Peer Discove ☑ Captive Portal Flow ☑ Cast to Device functionality	rieval (Uses HTTP) ne Client (Uses HTTPS) ne Server (Uses HTTPS) ery (Uses WSD)			
Add an app	×	Deta	ills Remove		
		Browse			
Select the app you want to a listed, and then click OK.	dd, or dick Browse to find one that is not	$\leftrightarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\frown$ w bf1 $\rightarrow$ 1SYS	T ∨ C	Search 1SYST	م EM® GMS API
Select the app you want to a listed, and then dick OK. Apps:	dd, or click Browse to find one that is not	$\leftrightarrow \rightarrow \lor \uparrow$ $\frown$ $\Leftrightarrow$ $ff > 1SYS$ Organize $\checkmark$ New folder	т ~ С	Search 1SYST	EM® GMS API , S
Select the app you want to a listed, and then dick OK. Apps:	dd, or click Browse to find one that is not	← → ∨ ↑ ■ « bf1 → 1SYS Organize ▼ New folder Name tr ▼ ■ This PC	I ~ C	Search 1SYST	EM® GMS API
Select the app you want to a listed, and then click OK. Apps:	idd, or click Browse to find one that is not	<ul> <li>← → ∨ ↑</li> <li>← bf1 &gt; 1SYS</li> <li>Organize ▼ New folder</li> <li>Mame</li> <li>↓ tr</li> <li>↓ This PC</li> <li>↓ wwwroot</li> <li>↓ Local Disk (C;)</li> </ul>	T ~ C	Search 1SYST Date modified 03/06/2024 15:04 03/06/2024 15:04	EM® GMS API
Select the app you want to a listed, and then click OK. Apps:	dd, or click Browse to find one that is not	<ul> <li>← → ∨ ↑</li> <li>Crganize ▼</li> <li>New folder</li> <li>Name</li> <li>tr</li> <li>This PC</li> <li>Wowworot</li> <li>zh-Hans</li> <li>zh-Hant</li> </ul>	T ~ C	Search 1SYST Date modified 03/06/2024 15:04 03/06/2024 15:04 03/06/2024 15:04 03/06/2024 15:04	EM® GMS API
Select the app you want to a listed, and then click OK. Apps:	idd, or click Browse to find one that is not	<ul> <li>← → ∨ ↑ ■ « bf1 &gt; 1SYS</li> <li>Organize ▼ New folder</li> <li>■ This PC</li> <li>■ Wwwroot</li> <li>&gt; ■ SP-2TB (D:)</li> <li>&gt; ■ KINGSTON 16 ()</li> </ul>	T ~ C	Search 1SYST Date modified 03/06/2024 15:04 03/06/2024 15:04 03/06/2024 15:04 03/06/2024 15:04 03/06/2024 14:11	EM® GMS API
Select the app you want to a listed, and then click OK. Apps: 	dd, or click Browse to find one that is not	<ul> <li>← → ∨ ↑</li> <li>Crganize ▼</li> <li>New folder</li> <li>Name</li> <li>tr</li> <li>www.root</li> <li>≥ Local Disk (C:)</li> <li>≥ h-Hans</li> <li>≥ createdum</li> <li>⇒ m KINGSTON 16 (I</li> <li>⇒ Mechanical (\)</li> </ul>	T ~ C ^ rtisementApi.exe np.exe	Search 1SYST	EM® GMS API
Select the app you want to a listed, and then click OK. Apps: Path: Vhat are the risks of unblocki	Ing an app?	<ul> <li>← → ∨ ↑ ■ ≪ bf1 → 1SYS</li> <li>Organize ▼ New folder</li> <li>▼ ■ This PC</li> <li>▶ Werken bisk (C;)</li> <li>⇒ = SP-2TB (D;)</li> <li>⇒ = KINGSTON 16 (I</li> <li>■ bf1s.Advestion</li> </ul>	T V C	Search 1SYST	EM® GMS API

#### $C: \label{eq:constraint} C: \label{eq:constr$



#### 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 <u>1system@bf1systems.com</u>, 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'.



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.





IP addresses

Advertisements

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

### bf1systems

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

Licence <sup>.</sup>		
C:/Program Files/bf1System	ns/1SYSTEM® GMS API/bf1s_license_gareth.andrews@	@bf1systems.com_API_(1249).lic
All following settings a	re optional	
HTTP endpoint: Changing	endpoint settings may alter the URL of this page!	
e.g. http://0.0.0.0:8080		
HTTPS endpoint: Changir	ng 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:		
Local	localhost:10001	
Mini PC 1	12.168.3.150:10001	

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 – <u>https://localhost:8443</u>

٩	Ô		•	1SYST	EM® Garag	e Mon	itoring	×	+												—	
$\leftarrow$	С	ଜ	C	😣 No	t secure	htt	ps://de	mo.1s	ysten	n.app/	/#/settings				P	A»	☆	CD	£≡	Ē	~	
	Garage Monitoring System																	Conne	cted			
7.51	, Tyr	e Data																				
	Tyr	e Stack								ତ	Data Feed API address, client so	ecret						^				
×	; Tyr	e Fittin	g								Api Address		Connect	https:/	localho/	st:844	3					
•	Тад	js									Client Secret											
Ø	Set	tings								-1111)	Units							$\checkmark$				

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 – <u>https://xxx.xxx.xxx.8443</u>

٩	Ô		•	1SYST	EM® Garag	e M	lonitori	ng S_ 🗙	+	-										_	
$\leftarrow$	C	ଜ		🙁 N	Not secure   https://demo.1system.app/#/settings 🖉 A 🏠												¢	€≣	Ē	~	
	Garage Monitoring System																	Conne	ected		
<u>\</u> ?/	, Tyr	re Data																			
	Tyr	re Stack	C							ତ	Data Feed API address, client se	cret					^				
×	; Tyr	re Fittin	g								Api Address		Connect	https://10	.50.0.21	3:8443					
•	Тас	gs									Client Secret										
Ø	Set	ttings									Units										

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.

RD096 110124

