



# BBN API Documentation - Local & Cloud Control

BubblyNet Bluetooth Mesh, Gateway, Developer Account

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# Control API system – Local and Cloud

## Requirements:

BubblyNet Bluetooth mesh network + Gateway (or touchscreen) + Cloud Developer account.

## Executive Summary:

Use the BubblyNet Control APIs to control your network with existing infrastructure or create your own user interface.

## Explanation:

If you have a BubblyNet Gateway and a BubblyNet Cloud Services developer account - you can use our Control API sets to operate your network areas/groups. These provide a simple, well documented set of standard REST requests for BubblyNet customers.

With both Cloud Control API and Local Control API, you can create your own tools and workflows that support existing architectures and environments.

Both APIs allows you to easily control your network and integrate with systems that support hooks or making network requests. With our documentation, you'll be able to get started quickly and take full advantage of the capabilities of our API.

We're excited to see what you'll build with our Control API toolsets, and we're here to support you every step of the way. If you have any questions or feedback, don't hesitate to reach out to our support team.

## Sample Use Cases:

*“John has an alarm system that supports webhooks. When the alarm is activated at the end of the night, the group for the entire building is set to Off via the Power API.”*

*“Pet Biz wants to create their own app to run their business with a single control panel for lights, food delivery, and monitoring. Rather than have 3 separate apps - they use BubblyNet’s API set alongside their other vendors to create their own application.”*

*“Detroit Opera has a ballroom that uses Crestron V2 APIs for stage lights. They find they can integrate stage lights and house lights using the Local API set with their bluetooth mesh gateways.”*

## Cloud Control APIs:

Our Cloud Control System excels at remote operations and allows a developer to create applications into their own business management systems, web applications, or mobile devices. Our Cloud based control system supports area/group controls like Network, Group, and Scene searching, Scene recall, Power, and color controls.

**Our Cloud Control API system supports Network List, Group List, Scene List, Power, Scene recall, and Color controls.**

Cloud Control APIs are available from any computer or system and are hosted externally by BubblyNet Cloud Services.

## Local Control APIs:

Our Local Control API is similar to the Cloud, but does not require a connection to the external internet (though does require a network connection to operate). Our Local Control API is served entirely from the gateway and does not require Cloud Services. BubblyNet’s Local Control Panel uses the local API system for operation.

**Our Local Control API system supports Power, Scene recall, and Color controls.**

Local Control APIs are hosted internally using a BubblyNet Gateway. All requests are handled through the local gateway and only forwarded to Cloud Services if the gateway has access to the external internet.

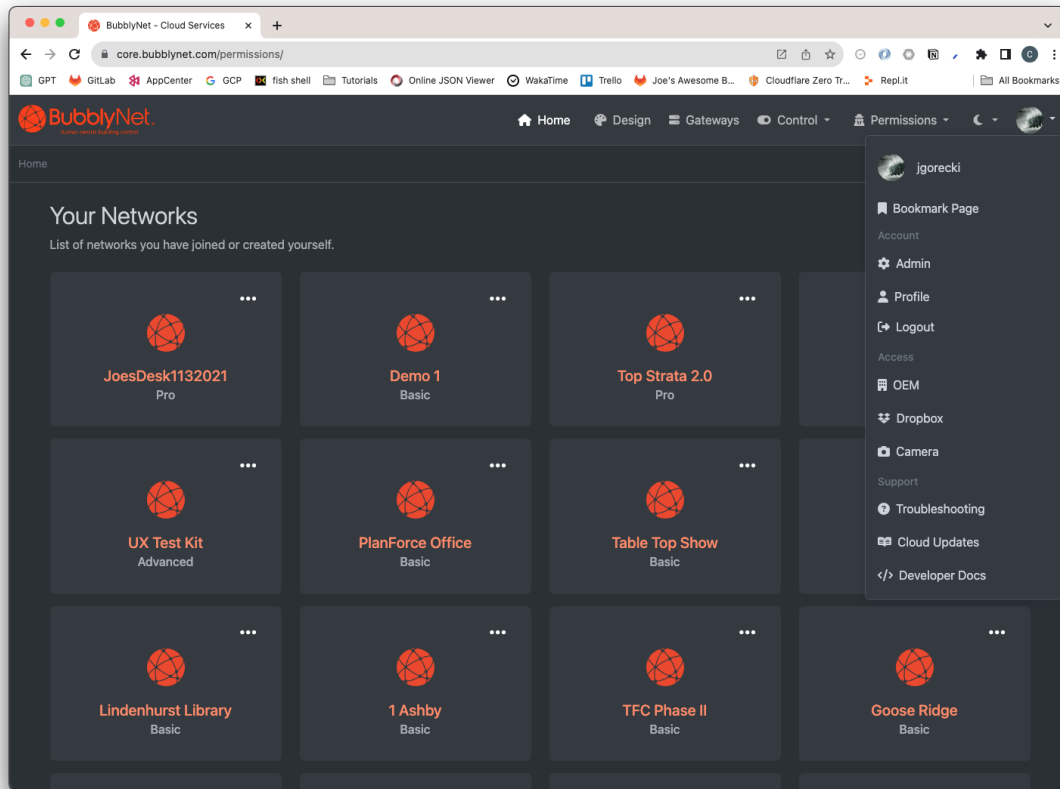
*Warning: Enabling Local API has additional technical requirements for setup from BubblyNet and network considerations from the installation network administration.*

## Developer Documentation:

An available tool for working with either API is the Cloud Services Developer section. With this tool a developer can view the required network documentation and developer account information needed.

A Developer account and credentials are located at Cloud Services:

Access BubblyNet Cloud Services (<https://core.bubblynet.com>) and click the profile link and access the developer section.



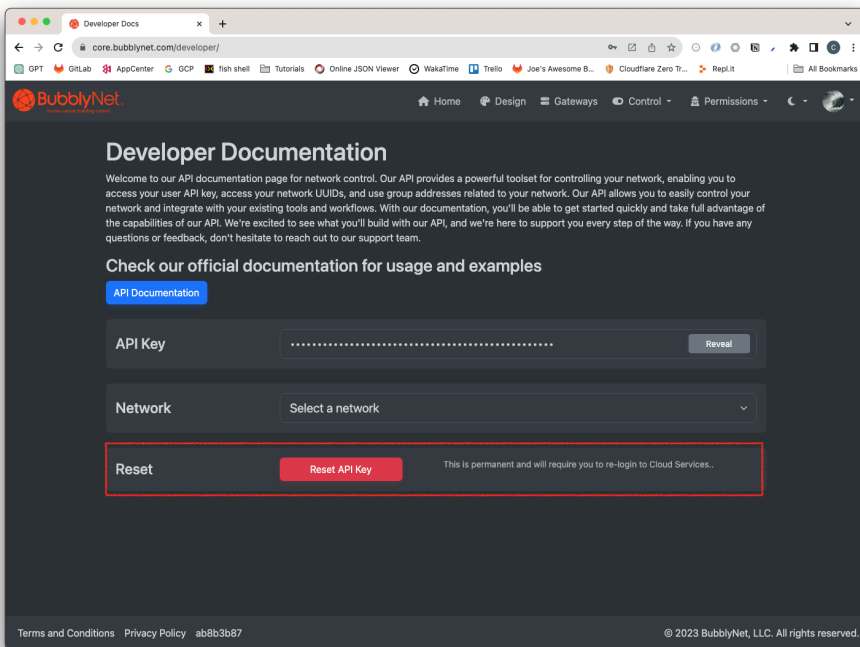
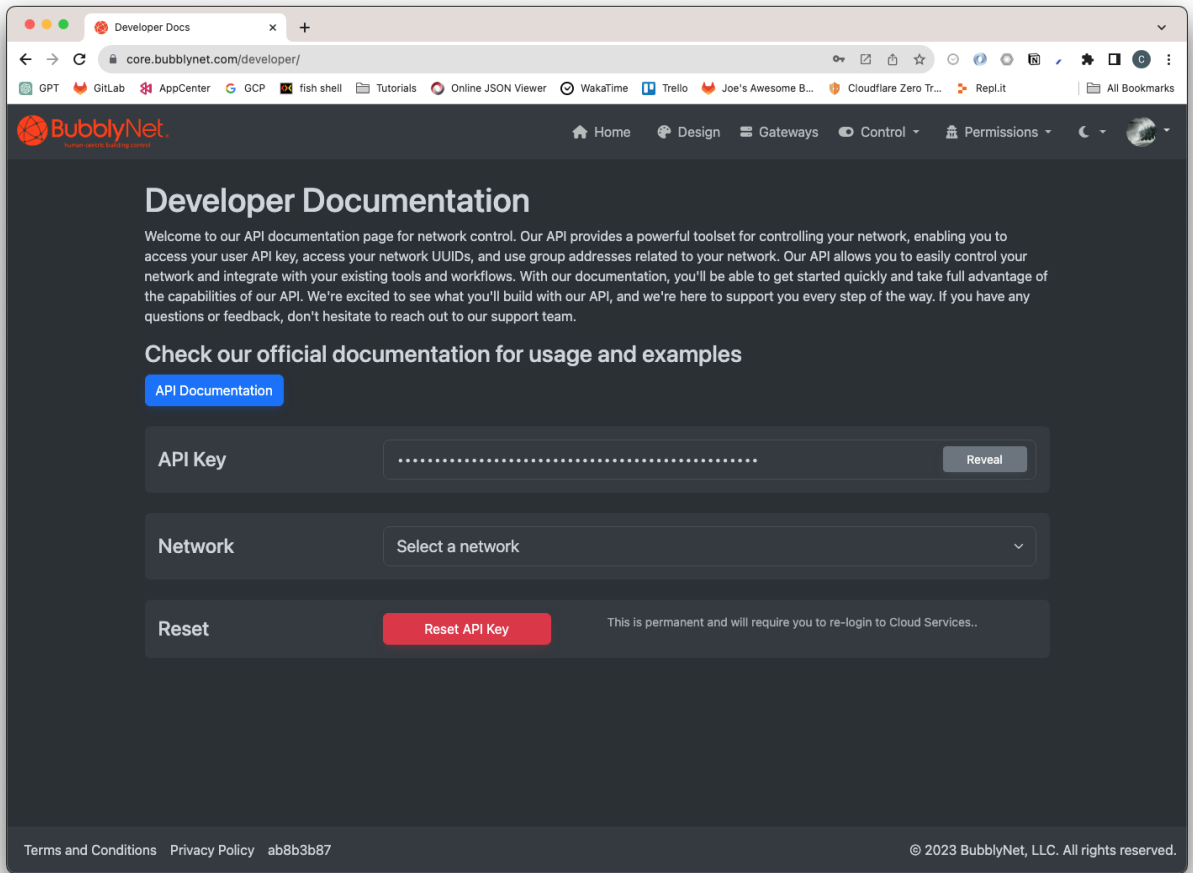
A Developer can access the public technical API documentation on the Postman API tool.

Our official documentation is available on Postman. Postman is an industry standard and includes documentation on the usage of the Cloud APIs and the Local APIs available from BubblyNet. This tool is the best place to monitor for changes, updates, and new API availability.

## Authorization

For Cloud based API systems, use the developer section to gather the required API key information for your user account. You can also reset the API key from this portal. Resetting the API key will prevent unauthorized access from this user account.

Please see our Postman library for examples on authentication and authorization parameters.

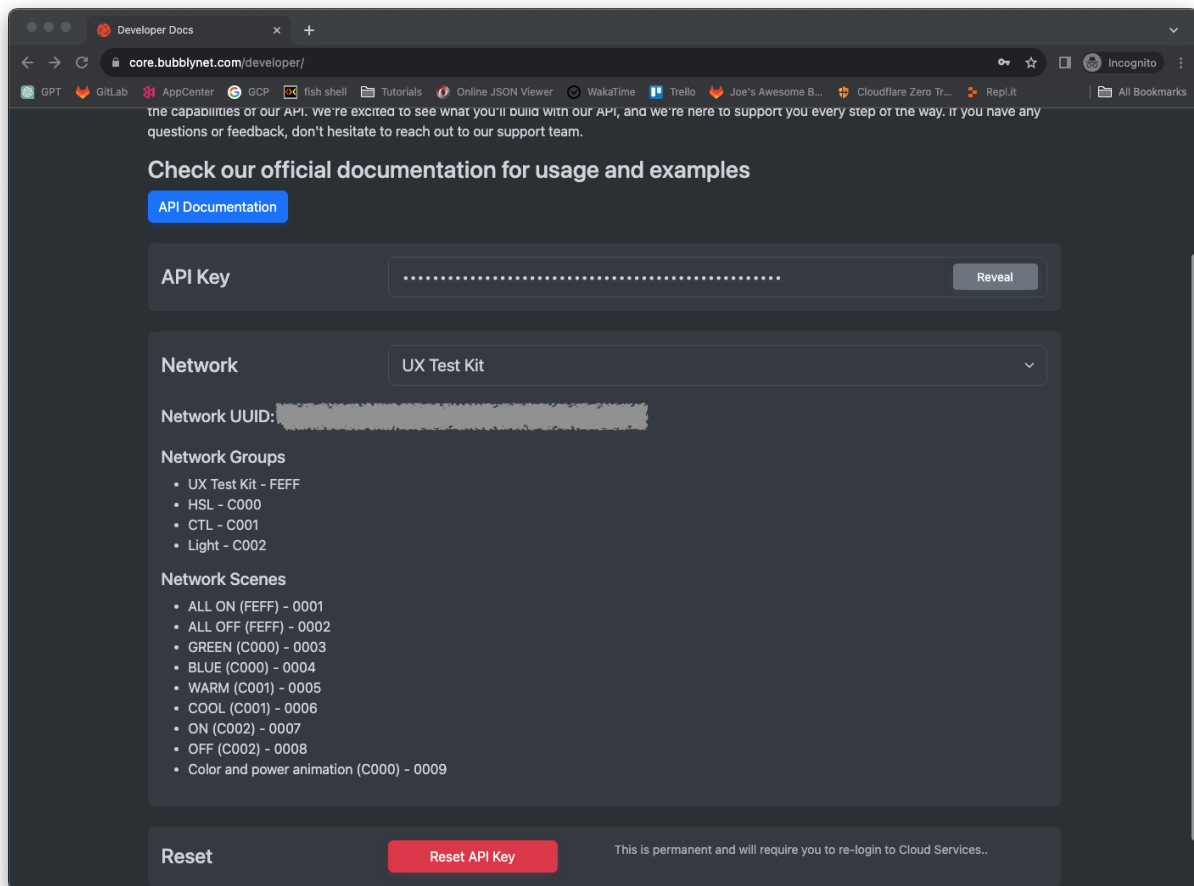


## Control

All APIs require network parameters from the mesh network to be sent via HTTP post requests with a dictionary of required parameters in the request body.

Developers can use the Cloud Services Developer portal to gather required configuration data.

All requests are based on RESTful design practices.



## Cloud Based Control APIs for Group Control

All requests will be JSON formatted with application/json as the type. Do not use html form encoded requests.

A successful response will always be a response 200.

An incorrect request with bad data will always be a response of 300+.

An bad request will always be a response of 400+.

**Parameters for POST Request body:**

Key	Sample	Type	Required
Network Label	API Test Kit	String	Yes
Network UUID	76939AB1-FA88-4321-911A-500000000005	UUID	Yes
Destination	0005, C001, FEFF	String	Yes
Action	control	String	No
Type	scene, power, level, kelvin	String	Yes

**Parameters for POST Response**


Key	Sample	Type	Required
Data	<i>Copy of posted request</i>	Dictionary	-
Group	81kG0R1, 77mF5V6	String	-
Type	group, scene	String	-
Action	control, list	String	-
Control	scene, power, level, kelvin	String	-

## Body raw (json)

json

```
{
  "network_label": "JoesDesk1132021",
  "network_udid": "76939AB7-FA88-4231-9D1A-11039B8DD7E5",
  "address": "FEFF",
  "action": "control",
  "type": "power",
  "value": "0n"
}
```

## Example

Power On 

### Request

cURL

```
curl --location 'https://cloud.bubblynet.com/api/v3/control/power/' \
--data '{
  "network_label": "JoesDesk1132021",
  "network_udid": "76939AB7-FA88-4231-9D1A-11039B8DD7E5",
  "address": "FEFF",
  "action": "control",
  "type": "power",
  "value": "0n"
}'
```

### Response

Body Headers (8)

200 OK

json

```
{
  "data": {
    "network_label": "JoesDesk1132021",
    "network_udid": "76939AB7-FA88-4231-9D1A-11039B8DD7E5",
    "address": "FEFF",
    "action": "control",
    "type": "power",
    "value": "0n"
  },
  "group": "81460B1"
```

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