



1 Overview

The CUWB Manager API is a REST API that is automatically runs as a systemd unit following the installation of the CUWB Manager package. This API configures all of the resource units required to facilitate the creation, configuration, and deletion of CUWB Configurations within the CUWB RTLS platform. This is the vessel through which the CUWB Manager’s web-based frontend requests adjustments through HTTP to the CUWB Configuration’s .cuwb saved state files.

Users have the option of creating their own control mechanisms utilizing this API by issuing the following requests over any of the host machine’s network interfaces on port 5000. The expected response formats are also provided for success, failure, and error scenarios.

Unless otherwise listed in the tables: the parameters, data body schemes, and responses are all required when using the API call.

1.1 JSON Format

This information can also be queried through the API itself via `GET /api.json`

Files produced:

- `application/json`
- `text/html`

1.2 Swagger API Access

Additionally, the API is available on the Host PC where the CUWB Manager Package is installed. This can be accessed by either going to `localhost:5000/api` or `{hostpc_ipaddress}:5000/api` . The swagger API access also has the ability to run api call examples in the interface.



2 CDP Streams

This section outlines the available API commands to create, modify, or delete CDP streams in a particular CUWB Configuration.

The API allows for the use of either `cdp-streams` or `cdp_streams` within the API call

2.1 Data Body Schemes

2.1.1 CDP Stream Body

Name	Schema
destination_ip	string
destination_port	integer
interface	string
interface_port	integer
name	string
time_to_live	integer

2.2 POST

The following API call creates a new CDP stream for a particular CUWB Configuration.

POST /cuwbnets/{cuwb_name}/cdp-streams

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
cdp_stream_body	Body	<code>cdp_stream_body</code>	The request body

Responses

HTTP Code	Name	Schema	Description
201	cdp_stream	string	CDP Stream
400	message	string	Invalid Request
409	message	string	Conflict
500	message	string	Internal Error

2.3 GET

The GET API command can be used for individual CPD streams or for a list of all the CDP streams in a particular CUWB Configuration.

2.3.1 GET Individual Stream

The following API call queries if an individual CPD stream exists in a particular CUWB Configuration.

```
GET /cuwbnets/{cuwb_name}/cdp-streams/{id}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
id	Path	integer	The id of the CDP stream to use

Responses

HTTP Code	Name	Schema	Description
200	cdp-stream	string	CDP Stream
404	message	string	Not found

2.3.2 GET List of All Streams

The following API call gets a list of all the CDP streams in a particular CUWB Configuration.

```
GET /cuwbnets/{cuwb_name}/cdp-streams
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use

Responses

HTTP Code	Name	Schema	Description
200	cdp-streams	< object > array	CDP Stream List

2.4 PATCH

The following API call can adjust a single existing CDP stream in a CUWB Configuration.

```
PATCH /cuwbnets/{cuwb_name}/cdp-streams/{id}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
id	Path	integer	The id of the CDP stream to use
cdp_stream_body	Body	cdp_stream_body	The request body

Responses

HTTP Code	Name	Schema	Description
200	cdp-stream	string	CDP Stream
400	message	string	Invalid request
404	message	string	Not found
409	message	string	Conflict
500	message	string	Internal error

2.5 DELETE

The following API command removes an existing CDP Stream from a particular CUWB Configuration.

```
DELETE /cuwbnets/{cuwb_name}/cdp-streams/{id}
```

Config, Anchor, and User CDP Streams cannot be removed.

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
id	Path	integer	The id of the CDP stream to use

Responses

HTTP Code	Name	Schema	Description
200	message	string	Item Deleted
400	message	string	Invalid request
404	message	string	Not found
409	message	string	Conflict

3 CUWB Configurations

This section outlines the available API commands to create, modify, or delete CUWB Configurations/CUWB Nets.

3.1 Data Body Schemes

3.1.1 CUWB Network Body

Name	Schema
instance	string
name	string

3.1.2 Action Body

Name	Schema
action	enum (copy, delete, start, stop)
name	string

3.2 POST

The POST API command can create a new CUWB Configuration, upload an existing CUWB Configuration, or send an action to a CUWB Configuration.

3.2.1 POST Create New

Create a new CUWB Configuration.

POST /cuwbnets

Parameters

Name	Type	Schema	Description
cuwb_network_body	Body	cuwb_network_body	The request body

Responses

HTTP Code	Name	Schema	Description
201	cuwbnets	string	CUWB Configuration
400	message	string	Invalid request
409	message	string	Conflict

3.2.2 POST Upload Existing

Upload an existing CUWB Configuration to the CUWB Manager.

```
POST /cuwbnets/upload
```

Parameters

Name	Type	Schema	Description
cuwb_file	FormData	file	A CUWB Configuration file to upload

Responses

HTTP Code	Name	Schema	Description
201	cuwbnets	string	CUWB Configuration
400	message	string	Invalid request
409	message	string	CUWB Configuration already exists

Consumes

- `multipart/form-data`

3.2.3 POST an Action

POST an action to a CUWB Configuration, like copy, delete, start, or stop.

```
POST /cuwbnets/{cuwb_name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of a CUWB Configuration
action_body	Body	<code>action_body</code>	The request body

Responses

HTTP Code	Name	Schema	Description
200	status	string	Action succeeded
400	message	string	Invalid request
404	message	string	Not found

3.3 GET

The GET API command can be used to query if an individual CUWB Configuration exists, get a list of all CUWB Configurations on a single Host PC, or download an existing CUWB Configuration to a local PC.

3.3.1 GET Individual CUWB Configuration

The following API command queries if an individual CUWB Configuration exists on a particular Host PC.

```
GET /cuwbnets/{cuwb_name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of a CUWB Configuration

Responses

HTTP Code	Name	Schema	Description
200	cuwbnets	string	CUWB Configuration
404	message	string	Not found

3.3.2 GET List of All CUWB Configurations

The following API call gets a list of all the CUWB Configurations available on a particular Host PC.

```
GET /cuwbnets
```

Responses

HTTP Code	Name	Schema	Description
200	cuwbnets	< object > array	CUWB Configuration List

3.3.3 GET Download existing CUWB Configuration

The following API calls downloads a copy of the specified CUWB Configuration.

```
GET /cuwbnet/{cuwb_name}/download
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of a CUWB Configuration

Responses

HTTP Code	Name	Schema	Description
200	file	string	CUWB Configuration File
404	message	string	Not found

3.4 PATCH

The following API command can be used to update a CUWB Configuration.

```
PATCH /cuwbnet/{cuwb_name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of a CUWB Configuration
cuwb_network_body	Body	cuwb_network_body	The request body

Responses

HTTP Code	Name	Schema	Description
200	cuwbnet	string	CUWB Configuration
400	message	string	Invalid request
404	message	string	Not found

3.5 DELETE

Delete a CUWB Configuration

```
DELETE /cuwbnets/{cuwb_name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of a CUWB Configuration

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item deleted

4 Calculate Maximum Tags

This section outlines API commands that can generate maximum tag calculations. These can be run regardless if a CUWB Configuration is active.

4.1 Data Body Schemes

4.1.1 Calculate Maximum Tags Parameterized Body

Name	Schema
number_of_seeders	integer
seeder_period	integer
tag_period	integer
maximum_tag_period	integer
accelerometer_period <i>optional</i>	integer
gyroscope_period <i>optional</i>	integer
magnetometer_period <i>optional</i>	integer
quaternion_period <i>optional</i>	integer
pressure_period <i>optional</i>	integer
temperature_period <i>optional</i>	integer
payload_overhead_size <i>optional</i>	integer
user_data_period <i>optional</i>	integer
user_data_size <i>optional</i>	integer
settings <i>optional</i>	string

4.1.2 Calculate Maximum Tags Body

Name	Schema
role_id	integer

4.2 Calculate Maximum Tags via Parameters

This API command allows users to calculate the maximum number of tags allowed based on given parameters.

```
POST /calculate_maximum_tags
```

Parameters

Name	Type	Schema	Description
calculate_maximum_tags_parameterized_body	Body	calculate_maximum_tags_parameterized_body	The request body

Responses

HTTP Code	Name	Schema	Description
200	maximum_tags_calculation	string	Calculate maximum tags
400	message	string	Invalid request
404	message	string	Not found
409	message	string	Conflict
500	maximum_tags_calculation	string	Internal error

4.3 Calculate Maximum Tags via Configured Role

This API command allows users to calculate the maximum number of tags allowed based on a given role in a CUWB Configuration.

```
POST /cuwbnet/{cuwb_name}/calculate_maximum_tags
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
calculate_maximum_tags_body	Body	calculate_maximum_tags_body	The request body

Responses

HTTP Code	Name	Schema	Description
200	maximum_tags_calculation	string	Calculate maximum tags
400	message	string	Invalid request
404	message	string	Not found
409	message	string	Conflict
500	maximum_tags_calculation	string	Internal error

5 Commands

5.1 Data Body Schemas

5.1.1 Command Body

Name	Schema
action	string

5.1.2 Device Command Body

Name	Schema
action	string

5.2 POST

5.2.1 Post a CUWB Engine Action

This API call posts an action to the CUWB Engine.

```
POST /cuwbnet/{cuwb_name}/action
```

Parameters (#command-post-netapp-params)

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
command_body	Body	command_body	The request body

Responses

HTTP Code	Name	Schema	Description
200	status	string	Command
400	message	string	Invalid request
404	message	string	Not found

5.2.2 Post a Device Action

This API call posts an action to a device.

```
POST /cuwbnets/{cuwb_name}/devices/{device_key}/action
```

Parameters (#command-post-device-params)

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
device_command_body	Body	device_command_body	The request body

Responses

HTTP Code	Name	Schema	Description
200	status	string	Device Command
400	message	string	Invalid request
404	message	string	Not found

6 Devices

6.1 Data Body Schemes

6.1.1 Device Body

Name	Schema
serial_number	string
interfaces	string
disabled	boolean
name <i>optional</i>	string
id <i>optional</i>	string

6.1.2 Multiple Device Patch Body

Name	Schema
serial_number	string
interfaces	string
disabled	boolean
name <i>optional</i>	string

6.1.3 Multiple Device Delete Body

Name	Schema
delete	string

6.2 POST

The POST method for adding a new device.

```
POST /cuwbnets/{cuwb_name}/devices
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_body	Body	device_body	The request body

Responses

HTTP Code	Name	Schema	Description
201	device	string	Device
400	message	string	Invalid request
409	message	string	Conflict
500	message	string	Internal error

6.3 GET

6.3.1 GET Individual Device

```
GET /cuwbnets/{cuwb_name}/devices/{device_key}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID

Responses

HTTP Code	Name	Schema	Description
200	device	string	Device
404	message	string	Not found

6.3.2 GET List of All Devices

The GET method for a list of all devices.

```
GET /cuwbnets/{cuwb_name}/devices
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use

Responses

HTTP Code	Name	Schema	Description
200	devices	string	Device List

6.3.3 GET Unconfigured Devices by CUWBNet

```
GET /cuwbnets/{cuwb_name}/unconfigured_devices
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use

Responses

HTTP Code	Name	Schema	Description
200	devices	string	Unconfigured Device List

6.3.4 GET All Unconfigured Devices

```
GET /unconfigured_devices
```

Responses

HTTP Code	Name	Schema	Description
200	devices	string	Unconfigured Device List

6.4 PATCH

6.4.1 Patch Individual Device

The PATCH method for a single device.

```
PATCH /cuwbnets/{cuwb_name}/devices/{device_key}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
device_body	Body	device_body	The request body

Responses

HTTP Code	Name	Schema	Description
200	device	string	Device
400	message	string	Invalid request
409	message	string	Conflict
500	message	string	Internal error

6.4.2 PATCH Multiple Devices

The PATCH method for multiple devices.

```
PATCH /cuwbnets/{cuwb_name}/devices
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_body	Body	device_body , object	The request body

Responses

HTTP Code	Name	Schema	Description
200	device	object	Device Patch Statuses
400	message	object	Invalid request
404	message	object	Not found
500	message	object	Internal error

6.5 DELETE

6.5.1 DELETE Single Device

The DELETE method for a single device.

```
DELETE /cuwbnets/{cuwb_name}/devices/{device_key}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item deleted

6.5.2 DELETE Multiple Devices

The DELETE method for multiple devices.

```
DELETE /cuwbnets/{cuwb_name}/devices
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
multiple_device_delete_body	Body	multiple_device_delete_body	The request body

Responses

HTTP Code	Name	Schema	Description
204	message	string	Devices deleted

7 Group Images

7.1 Data Body Schemes

7.1.1 Group Image Patch Body

Name	Schema
path	string

7.2 GET

The GET method for group images.

```
GET /cuwbnet/{cuwb_name}/group_image
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use

Responses

HTTP Code	Name	Schema	Description
200	group_images	string	Group Images
404	message	string	Not found

7.3 PATCH

The PATCH method for group images.

```
PATCH /cuwbnets/{cuwb_name}/group_image
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
group_image_patch_body	Body	group_image_patch_body	The PATCH body - must include at least one field

Responses

HTTP Code	Name	Schema	Description
200	group_images	string	Group Images
404	message	string	Not found
500	message	string	Internal error

8 Interface Roles

The API allows the use of either `{device_key}-{interface_identifier}` or `{device_key}/interfaces/{interface_identifier}` within the API call.

8.1 GET

8.1.1 GET All Interface Roles for a Device

GET /cuwbnet/{cuwb_name}/devices/{device_key}-{interface_identifier}/roles

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
interface_identifier	Path	integer	An identifier for interfaces

Responses

HTTP Code	Name	Schema	Description
200	roles	string	Device Roles
404	message	string	Not found

8.1.2 GET Individual Interface Role by Role ID

```
GET /cuwbnets/{cuwb_name}/devices/{device_key}-{interface_identifier}/roles/{role_id}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
interface_identifier	Path	integer	An identifier for interfaces
role_id	Path	integer	An id for roles

Responses

HTTP Code	Name	Schema	Description
200	roles	string	Device Roles
404	message	string	Not found

8.2 DELETE

This API call deletes a single role from a device.

```
DELETE /cuwbnets/{cuwb_name}/devices/{device_key}-{interface_identifier}/roles/{role_id}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
interface_identifier	Path	integer	An identifier for interfaces
role_id	Path	integer	An id for roles

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item deleted

9 Interfaces

The API allows the use of either `{device_key}-{interface_identifier}` or `{device_key}/interfaces/{interface_identifier}` within the API call.

9.1 GET

9.1.1 GET Individual Interface

The GET method for a single interface.

```
GET /cuwbnets/{cuwb_name}/devices/{device_key}-{interface_identifier}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
interface_identifier	Path	integer	An identifier for interfaces

Responses

HTTP Code	Name	Schema	Description
200	interface	string	Device interface
404	message	string	Not found

9.1.2 GET All Interfaces

The GET method for a list of all interfaces.

```
GET /cuwbnets/{cuwb_name}/devices/{device_key}/interfaces
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID

Responses

HTTP Code	Name	Schema	Description
200	interface	string	Device interface
404	message	string	Not found

9.2 DELETE

The DELETE method for a single interface.

```
DELETE /cuwbnets/{cuwb_name}/devices/{device_key}-{interface_identifier}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
interface_identifier	Path	integer	An identifier for interfaces

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item deleted

10 Log Messages

10.1 GET

The GET method for a list of all log messages.

```
GET /cuwbnets/{cuwb_name}/log_messages
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use

Responses

HTTP Code	Name	Schema	Description
200	log_messages	< string > array	Log Message List

11 Magnetometer Calibration

11.1 Data Body Schemes

11.1.1 Magnetometer Calibration Body

Name	Schema
x_offset	integer
y_offset	integer
z_offset	integer

11.2 POST

Create a new magnetometer calibration.

```
POST /cuwbnetns/{cuwb_name}/devices/{device_key}/set_magnetometer_calibration
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
device_key	Path	string	Either a Ciholas serial number or an integer ID
magnetometer_calibration_body	Body	magnetometer_calibration_body	The request body

Responses

HTTP Code	Name	Schema	Description
201	magnetometer_calibration	string	Magnetometer Calibration
400	message	string	Invalid request
404	message	string	Not found
409	message	string	Conflict
500	message	string	Internal error

12 Notifications

12.1 GET

The GET method for notifications.

```
GET /cuwbnets/{cuwb_name}/notification
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use

Responses

HTTP Code	Name	Schema	Description
200	notification	string	Notification

13 Operating Modes

13.1 Data Body Schemes

13.1.1 Operating Mode Patch Body

Name	Schema
network_mode	string

13.2 PATCH

The PATCH method for the operational mode.

```
PATCH /cuwbnets/{cuwb_name}/network_mode
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
operating_mode_patch_body	Body	operating_mode_patch_body	The PATCH body - must include at least one field

Responses

HTTP Code	Name	Schema	Description
200	network_mode	string	Operating Mode
404	message	string	Not found
409	message	string	Conflict
500	message	string	Internal error

13.3 GET

The GET method for a list of all operational modes.

```
GET /network_modes
```

Responses

HTTP Code	Name	Schema	Description
200	network_modes	string	Operating Mode List

14 Packages

14.1 GET

The GET method for PPA packages.

```
GET /packages
```

Responses

HTTP Code	Name	Schema	Description
200	ppa_status	string	Packages
404	ppa_status	string	Not found

15 Paired Interfaces

15.1 PUT

The PUT method for adding a new paired interface.

```
PUT /cuwbnets/{cuwb_name}/devices/{device_key}/{interface_identifier}/{_type}_interfaces
```

Parameters

Name	Type	Schema	Description
_type	Path	string	A type for paired interfaces
cuwb_name	Path	string	The name of the cuwbnet to use
device_key	Path	string	A Ciholas serial number
interface_identifier	Path	integer	An identifier for interfaces

Responses

HTTP Code	Name	Schema	Description
201	paired_interface	string	Paired Interface
400	message	string	Invalid request
409	message	string	Conflict
500	message	string	Internal error

15.2 DELETE

The DELETE method for a single paired_interface.

```
DELETE /cuwbnets/{cuwb_name}/devices/{device_key}/{interface_identifier}/{_type}_interfaces/{interface}
```

Parameters

Name	Type	Schema	Description
_type	Path	string	A type for paired interfaces
cuwb_name	Path	string	The name of the cuwbnet to use
device_key	Path	string	A Ciholas serial number
interface_identifier	Path	integer	An identifier for interfaces
interface	Path	string	The paired interface to interact with

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item Deleted
409	message	string	Conflict

16 Position Limits

16.1 Data Body Schemes

16.1.1 Position Limits Post Body

Name	Schema
max_x	integer
max_y	integer
max_z	integer
min_x	integer
min_y	integer
min_z	integer
name	string

16.1.2 Position Limits Patch Body

Name	Schema
max_x	integer
max_y	integer
max_z	integer
min_x	integer
min_y	integer
min_z	integer

16.2 POST

Create a new Position Limit object

```
POST /cuwbnet/{cuwb_name}/position_limits
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
position_limits_post_body	Body	position_limits_post_body	The POST body

Responses

HTTP Code	Name	Schema	Description
200	position_limits	string	Position Limit
400	message	string	Invalid request
409	message	string	Conflict

16.3 GET

16.3.1 GET Individual Position Limit

The GET method for a single position limit.

```
GET /cuwbnet/{cuwb_name}/position_limits/{name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
name	Path	string	The name of the position limit to use

Responses

HTTP Code	Name	Schema	Description
200	position_limits	string	Position Limit
404	message	string	Not Found

16.3.2 GET List of All Limits

The GET method for a list of all position limits.

```
GET /cuwbnets/{cuwb_name}/position_limits
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use

Responses

HTTP Code	Name	Schema	Description
200	position_limits	string	Position Limit List

16.4 PATCH

The PATCH method for a single position limit.

```
PATCH /cuwbnets/{cuwb_name}/position_limits/{name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
name	Path	string	The name of the position limit to use
position_limits_patch_body	Body	position_limits_patch_body	The PATCH body - must include at least one field

Responses

HTTP Code	Name	Schema	Description
200	position_limits	string	Position Limit List
404	message	string	Not found
500	message	string	Internal error

16.5 DELETE

The DELETE method for a single position limit.

```
DELETE /cuwbnets/{cuwb_name}/position_limits/{name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
name	Path	string	The name of the position limit to use

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item Deleted

17 RF Settings

17.1 Data Body Schemes

17.1.1 RF Settings Post Body

Name	Schema
bit_rate	integer
channel	integer
name	string
preamble_code	integer
preamble_length	integer
prf	integer

17.1.2 RF Settings Patch Body

Name	Schema
bit_rate	integer
channel	integer
preamble_code	integer
preamble_length	integer
prf	integer

17.2 POST

Create a new RF Settings object.

```
POST /cuwbnet/{cuwb_name}/rf_settings
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the CUWB Configuration to use
rf_settings_post_body	Body	rf_settings_post_body	The POST body

Responses

HTTP Code	Name	Schema	Description
200	rf_settings	string	RF Setting
400	message	string	Invalid request
409	message	string	Conflict

17.3 PATCH

The PATCH method for a single RF Settings.

```
PATCH /cuwbnet/{cuwb_name}/rf_settings/{name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
name	Path	string	The name of the RF Settings to use
rf_settings_patch_body	Body	rf_settings_patch_body	The PATCH body - must include at least one field

Responses

HTTP Code	Name	Schema	Description
200	rf_settings	string	RF Setting
404	message	string	Not Found
500	message	string	Internal Error

17.4 GET

17.4.1 GET Single RF Setting

The GET method for a single RF Setting.

```
GET /cuwbnets/{cuwb_name}/rf_settings/{name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
name	Path	string	The name of the RF Settings to use

Responses

HTTP Code	Name	Schema	Description
200	rf_settings	string	RF Setting
404	message	string	Not Found

17.4.2 GET List of all RF Settings

The GET method for a list of all RF Settings.

```
GET /cuwbnets/{cuwb_name}/rf_settings
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use

Responses

HTTP Code	Name	Schema	Description
200	rf_settings	string	RF Setting

17.5 DELETE

The DELETE method for a single RF Setting.

```
DELETE /cuwbnet/{cuwb_name}/rf_settings/{name}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
name	Path	string	The name of the RF Settings to use

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item Deleted

18 Roles

18.1 Data Body Schemes

18.1.1 Role Post Body

Name	Schema
name	string
network_period	integer
window_duration <i>optional</i>	integer
device_count <i>optional</i>	integer
accelerometer_period <i>optional</i>	integer
gyroscope_period <i>optional</i>	integer
quaternion_period <i>optional</i>	integer
magnetometer_period <i>optional</i>	integer
pressure_period <i>optional</i>	integer
temperature_period <i>optional</i>	integer
led_brightness <i>optional</i>	string

18.1.2 Role Patch Body

Name	Schema
name	string
network_period	integer
window_duration	integer
device_count	integer
accelerometer_period	integer
gyroscope_period	integer
quaternion_period	integer
magnetometer_period	integer
pressure_period	integer
temperature_period	integer
led_brightness	string

18.2 POST

The POST method for adding a new role.

```
POST /cuwbnet/{cuwb_name}/roles
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
role_body	Body	role_body	The request body

Responses

HTTP Code	Name	Schema	Description
201	role	string	Device Role
400	message	string	Invalid request
409	message	string	Conflict
500	message	string	Internal error

18.3 GET

18.3.1 GET Individual Role

The GET method for a single role

```
GET /cuwbnet/{cuwb_name}/roles/{role_id}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
role_id	Path	integer	An id for roles

Responses

HTTP Code	Name	Schema	Description
200	role	string	Device Role
404	message	string	Not found

18.3.2 GET a List of All Roles

The GET method for a list of all roles.

```
GET /cuwbnets/{cuwb_name}/roles
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use

Responses

HTTP Code	Name	Schema	Description
200	role	string	Device Role
404	message	string	Not found

18.4 PATCH

The PATCH method for a single role.

```
PATCH /cuwbnets/{cuwb_name}/roles/{role_id}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
role_id	Path	integer	An id for roles
role_body	Body	role_body	The request body - must use at least one body field

Responses

HTTP Code	Name	Schema	Description
200	role	string	Role
400	message	string	Invalid request
404	message	string	Not found
500	message	string	Internal error

18.5 DELETE

The DELETE method for a single role.

```
DELETE /cuwbnets/{cuwb_name}/roles/{role_id}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
role_id	Path	integer	An id for roles

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item Deleted
409	message	string	Conflict

19 System Settings Keys

These API calls are under the Special Settings in the Swagger UI.

The API allows the use of either `/settings` or `/settings/{setting_class}/{setting_id}` within the API call.

19.1 Data Body Schemes

19.1.1 Settings Body

Name	Schema
setting_key	string

19.2 POST

The POST method to create a new setting.

POST `/cuwbnets/{cuwb_name}/settings`

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
setting_class <i>optional</i>	Path	string	The setting class of the setting to use
setting_id <i>optional</i>	Path	integer	The setting id of the setting to use
settings_body	Body	<code>settings_body</code> , object	The request body

Responses

HTTP Code	Name	Schema	Description
200	setting	string	Setting
409	message	string	Conflict
500	message	string	Internal error

19.3 GET

19.3.1 GET Individual Setting

The GET method for a single setting.

```
GET /cuwbnets/{cuwb_name}/settings/{key}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
key	Path	string	The key of the setting to use
setting_class <i>optional</i>	Path	string	The setting class of the setting to use
setting_id <i>optional</i>	Path	integer	The setting id of the setting to use

Responses

HTTP Code	Name	Schema	Description
200	setting	string	Setting
404	message	string	Not found
409	message	string	Conflict

19.3.2 GET a List of All Settings

The GET method for a list of all settings.

```
GET /cuwbnets/{cuwb_name}/settings
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
setting_class <i>optional</i>	Path	string	The setting class of the setting to use
setting_id <i>optional</i>	Path	integer	The setting id of the setting to use

Responses

HTTP Code	Name	Schema	Description
200	setting	string	Setting List
409	message	string	Conflict

19.4 PUT

The PUT method for a single setting.

```
PUT /cuwbnet/{cuwb_name}/settings
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
setting_class <i>optional</i>	Path	string	The setting class of the setting to use
setting_id <i>optional</i>	Path	integer	The setting id of the setting to use
settings_body	Body	settings_body , object	The request body

Responses

HTTP Code	Name	Schema	Description
200	setting	string	Setting List
500	message	string	Internal error

19.5 PATCH

The PATCH method for a single setting.

```
PATCH /cuwbnet/{cuwb_name}/settings
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
setting_class <i>optional</i>	Path	string	The setting class of the setting to use
setting_id <i>optional</i>	Path	integer	The setting id of the setting to use
settings_body	Body	settings_body , object	The request body

Responses

HTTP Code	Name	Schema	Description
200	setting	string	Setting List
404	message	string	Not Found
500	message	string	Internal error

19.6 DELETE

The DELETE method for a single setting.

```
DELETE /cuwbnet/{cuwb_name}/settings/{key}
```

Parameters

Name	Type	Schema	Description
cuwb_name	Path	string	The name of the cuwbnet to use
key	Path	string	The key of the setting to use
setting_class <i>optional</i>	Path	string	The setting class of the setting to use
setting_id <i>optional</i>	Path	integer	The setting id of the setting to use

Responses

HTTP Code	Name	Schema	Description
204	message	string	Item Deleted
409	message	string	Conflict

20 System Settings Keys Defaults

These API commands retrieve the available system setting keys that a CUWB Configuration could use and their default values. These are not the system setting keys that have been applied to a CUWB Configuration.

The API allows for the use of either `default-settings` or `default_settings` within the API call.

20.1 GET

20.1.1 GET Individual setting

This API call provides the default value for a single system setting key.

GET /default-settings/{key}

Parameters

Name	Type	Schema	Description
key	Path	string	The key of the setting to use

Responses

HTTP Code	Name	Schema	Description
200	default_setting	string	Setting
404	message	string	Not found

20.1.2 GET List of all settings

This API call provides a list of the available system settings keys that could be applied to a CUWB Configuration and their default values.

GET /default-settings

Responses

HTTP Code	Name	Schema	Description
200	default_setting	string	Setting List

21 Revision

Version	Date	Change Description
v5.0.1	2025-11-11	Removing Device Settings, Reformatting tables, Adding callouts for optional parameters
v5.0.0	2025-10-31	Initial Release, Compatible with 300 series devices