

Nuki Bridge API

V1.13.2

17.06.2022

Nuki Home Solutions GmbH
Münzgrabenstrasse 92/4, 8010 Graz

1. Introduction	4
1.1 Abbreviations used	4
2. Calling URL	4
2.1 Example	4
3. Bridge discovery & API activation	5
3.1 Example	5
3.1.1 Alternative via Nuki App	5
3.2 Token	5
3.2.1 Parameters	6
3.2.2 Example calls	7
4 States and Actions	8
4.1 Device Types	8
4.2 Modes	8
4.3 Lock States	9
4.4 Lock Actions	10
4.5 Simple Lock Actions	10
4.6 Doorsensor States	11
5. Endpoints	12
/auth	12
/configAuth	13
/list	14
/lockState	16
/lockAction	18
/lock	19
/unlock	21
/unpair	22
/info	23
/callback	26
/callback/add	26
/callback/list	27
/callback/remove	28
6. Maintenance endpoints	30
/log	30
/clearlog	31
/fwupdate	31
/reboot	32

/factoryReset	33
7. Error codes/handling	34
8. Frequently Asked Questions	35
Why are the batteries of my Smart Lock draining so fast when I use the Bridge API?	35
Why do i repeatedly get an Error 503 when calling the Bridge API	35
Why do API commands sometimes take very long or time out?	35
9. Changelog	36
Changelog v 1.13.2	36
Changelog v 1.13.1	36
Changelog v 1.13.0	36
Changelog v 1.12.3	36
Changelog v 1.12.2	37
Changelog v 1.12.1	37
Changelog v 1.12	37
Changelog v 1.11	37
Changelog v 1.10	38
Changelog v 1.9	38
Changelog v 1.8	38
Changelog v 1.7	38
Changelog v 1.6	39

1. Introduction

The REST API on the Nuki Bridge offers simple endpoints to list all available Nuki Smart Locks and Nuki Openers, retrieve their current lock state and perform lock operations.

Check for the latest version of this document at our [Developer Plattform](#).

1.1 Abbreviations used

Abbr.	Long form	Description
cm	Continuous Mode	Nuki Opener Mode with Ring to Open continuously activated
Ing	Lock 'n' Go	Unlock and lock again automatically
rto	Ring to Open	Nuki Opener State in which ringing the bell activates the electric strike actuation

2. Calling URL

This is the address used to call the available services of the internal webserver.

The IP address is shown in the bridge settings within the Nuki App or can be retrieved from the bridge discovery URL.

The server is listening for incoming requests either on default port 8080 or the configured one if it has been modified within the Nuki App.

2.1 Example

The following base url will be used in upcoming examples:

<http://192.168.1.50:8080/>

3. Bridge discovery & API activation

Calling the URL <https://api.nuki.io/discover/bridges> returns a JSON array with all bridges which have been connected to the Nuki Servers through the same IP address than the one calling the URL within the last 30 days. The array contains the local IP address, port, the ID of each bridge and the date of the last change of the entry in the JSON array.

3.1 Example

```
{
  "bridges": [
    {
      "bridgeId":2117604523,"ip":"192.168.1.50","port":8080,"dateUpdated":"2017-06-14
T06:53:44Z"
    }
  ],
  "errorCode":0
}
```

Once a bridge has been discovered on the LAN the API can be activated and the [API token](#) retrieved by calling the [/auth](#) command. The user has to confirm this request by pressing the button on the bridge. For more details see the description of the [/auth](#) command. Alternatively you can activate the API and set the token by managing the Bridge in the Nuki App.

If discovery is disabled via [/configAuth](#) or through the Nuki App, the IP is 0.0.0.0 and the port 0. In this case the [/auth](#) command fails with HTTP error 403.

3.1.1 Alternative via Nuki App

As an alternative you can activate and manage the Bridge API via the Nuki App by opening *Burger menu* > *Manage my devices* > *Bridge* and follow the described steps:

3.2 Token

We offer two ways of verifying calls to endpoints with a token:

Method	Usage
Plain token	You can use the plain token for testing and in private, secured WIFIs or VLANs.

Hashed token deprecated	Use if you do not want to send the plain token within your API-calls.
Encrypted token	Use if you do not want to send any plain text information within your API-calls. Note: Only available for the hardware bridge running firmware version: <u>Bridge 1.0:</u> ≥1.22.1 <u>Bridge 2.0:</u> ≥2.14.0

3.2.1 Parameters

Name	Parameter	Values	Example
Plain token	token	uint8[20]	123456
Timestamp	ts	YYY-MM-DDTHH:MM:SSZ	2019-03-05T01:06:53Z
Random number	rn	uint16	4711
Hash	hash	sha256("ts,mr,token")	f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6
Encrypted token	nonce	24 byte random nonce	119c38fb6d7d707b8a45f14e688b74b8c4c1acf33643c71a
Encrypted token	ctoken	xsalsa20poly1305(timestamp, random number, secret key (=SHA256 of token), nonce)	a7f6b4df6758b92445bd5470b755b43ba41cf50af8b3f6e19368348ddfb1686291555dfd90b31f9333

sha256("2019-03-05T01:06:53Z,4711,123456") =
f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6

3.2.2 Example calls

Plain token:

`http://192.168.1.50:8080/info?token=123456`

Hashed token (deprecated):

`http://192.168.1.50:8080/info?ts=2019-03-05T01:06:53Z&rnr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6`

A hashed token will only be valid with a sufficiently current timestamp and can not be reused, to prevent replay attacks. So making two calls with the exact same timestamp will only work with different random numbers.

To debug problems with non synchronous times you can check the current time on the bridge via [bridge discovery](#)

Crypted token:

<http://192.168.1.50:8080/info?ctoken=a7f6b4df6758b92445bd5470b755b43ba41cf50af8b3f6e19368348ddfb1686291555dfd90b31f9333&nonce=119c38fb6d7d707b8a45f14e688b74b8c4c1acf33643c71a>

A crypted token will only be valid within a 60 seconds timeframe based on the timestamp used for the calculation, to prevent replay attacks. So making two calls with the exact same timestamp will only work with different random numbers or by using a different nonce.

4 States and Actions

4.1 Device Types

Nuki device connected to the bridge.

- 0 ... smartlock - Nuki Smart Lock 1.0/2.0
- 2 ... opener - Nuki Opener
- 3 ... smartdoor - Nuki Smart Door
- 4 ... smartlock3 - Nuki Smart Lock 3.0 (Pro)

4.2 Modes

mode	smartlock	opener	Description
2	door mode	door mode	Operation mode after complete setup
3	-	continuous mode	Ring to Open permanently active

Note: Only modes 2 and 3 can appear in JSON elements, as the HTTP API is not available in the other modes.

4.3 Lock States

Possible lock states (used in [Endpoints](#) below).

ID	smartlock	opener
0	uncalibrated	untrained
1	locked	online
2	unlocking	-
3	unlocked	rto active
4	locking	-
5	unlatched	open
6	unlocked (lock 'n' go)	-
7	unlatching	opening
253	-	boot run
254	motor blocked	-
255	undefined	undefined

4.4 Lock Actions

Possible lock actions (used in [Endpoints](#) below):

ID	smartlock	opener
1	unlock	activate rto
2	lock	deactivate rto
3	unlatch	electric strike actuation
4	lock 'n' go	activate continuous mode
5	lock 'n' go with unlatch	deactivate continuous mode

4.5 Simple Lock Actions

Possible outcome of a simple lock action (mapping handled in the firmware of the device):

action	smartlock / knob	smartlock / handle	opener
/lock	lock	lock	deactivate rto and cm
/unlock	unlatch	unlock	open

To use this features your Nuki devices need the following firmware version:

Nuki device	Firmware version
Bridge	1.14.0/2.5.0 (or higher)
Smart Lock 1.0	1.8.0 (or higher)
Smart Lock 2.0	2.4.3 (or higher)
Opener	1.3.0 (or higher)

4.6 Doorsensor States

Possible door sensor states (used in [Endpoints](#) below).

ID	name
1	deactivated
2	door closed
3	door opened
4	door state unknown
5	calibrating
16	uncalibrated
240	removed
255	unknown

5. Endpoints

/auth

URL	http://192.168.1.50:8080/auth	
Usage	<p>Enables the api (if not yet enabled) and returns the api token.</p> <p>If no api token has yet been set, a new (random) one is generated.</p> <p>When issuing this API-call the bridge turns on its LED for 30 seconds.</p> <p>The button of the bridge has to be pressed within this timeframe. Otherwise the bridge returns a negative success and no token.</p>	
Response	JSON list containing the success of the authorization	
	token	The api token
	success	Flag indicating the success of the authorization
Errors	HTTP 403	Returned if the authentication is disabled
Example-Call	http://192.168.1.50:8080/auth	
Example-Response	<pre>{ "token": "token123", "success": true }</pre>	

/configAuth

URL	http://192.168.1.50:8080/configAuth	
Usage	Enables or disables the authorization via /auth and the publication of the local IP and port to the discovery URL (https://api.nuki.io/discover/bridges).	
URL-Parameters	enable	Flag (0 or 1) indicating whether or not the authorization should be enabled
	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the success of the operation	
	success	Flag indicating the success of the authorization
Errors	HTTP 400	Returned if the given value for enable is invalid (neither 0 nor 1)
	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/configAuth?enable=0&token=123456 http://192.168.1.50:8080/configAuth?enable=0&ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "success": true }</pre>	

/list

URL	http://192.168.1.50:8080/list		
Usage	Returns a list of all paired Nuki devices		
URL-Parameters	token	The api token configured via the Nuki app when enabling the API	
Response	JSON array. One item of the following per Nuki device		
	nukild	ID of the Nuki device	
	deviceType	Nuki device type <ul style="list-style-type: none"> • 0 => smartlock (<i>Nuki Smart Lock 1.0/2.0</i>) • 2 => opener (<i>Nuki Opener</i>) • 3 => smartdoor (<i>Nuki Smart Door</i>) • 4 => opener (<i>Nuki Smart Lock 3.0 (Pro)</i>) 	
	name	Name of the Nuki device	
	lastKnownState	JSON list containing the last known lock state of the Nuki device	
		mode	ID of the lock mode (see Modes)
		state	ID of the lock state (see Lock States)
		stateName	Name of the lock state (see Lock States)
		batteryCritical	Flag indicating if the batteries of the Nuki device are at critical level
batteryChargeState		Value representing the current charge status in %	
keypadBatteryCri		Flag indicating if the	

		critical	batteries of the paired Nuki Keypad are at critical level
		keypadBatteryCritical	Flag indicating if the batteries of the paired Nuki Keypad are at critical level
		doorsensorState	ID of the door sensor state
		doorsensorState Name	Name of the door sensor state
		ringactionTimestamp	timestamp of the last ring-action
		ringactionState	Flag indicating if a ring-action is currently occurring or not (reset after 30 seconds)
		timestamp	Timestamp of the retrieval of this lock state
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.	
Example-Calls	http://192.168.1.50:8080/list?token=123456 http://192.168.1.50:8080/list?ts=2019-03-05T01:06:53Z&rnr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6		
Example-Response	<pre>[{ "nukiId": 1, "deviceType": 0, "name": "Home", "lastKnownState": { "mode": 2, "state": 1, "stateName": "unlocked", "batteryCritical": false, "batteryCharging": false,</pre>		

	<pre> "batteryChargeState": 85, "keypadBatteryCritical": false, "doorsensorState": 2, "doorsensorStateName": "door closed", "timestamp": "2018-10-03T06:49:00+00:00" } },{ "nukiId": 2, "deviceType": 2, "name": "Community door", "lastKnownState": { "mode": 3, "state": 3, "stateName": "rto active", "batteryCritical": false, "ringactionTimestamp": 2020-04-27T16:13:00+00:00", "ringactionState": false, "timestamp": "2018-10-03T06:49:00+00:00" } } }]] </pre>
--	---

/lockState

Warning: /lockstate gets the current state directly from the device and so should not be used for constant polling to avoid draining the batteries too fast. /list can be used to get regular updates on the state, as is it cached on the bridge.

URL	http://192.168.1.50:8080/lockState	
Usage	Retrieves and returns the current lock state of a given Nuki device	
URL-Parameters	nukild	The ID of the Nuki device from which the lock state should be retrieved
	deviceType	Nuki device type (see Device Types ; defaults to 0)

	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the retrieved lock state	
	mode	ID of the lock mode (see Modes)
	state	ID of the lock state (see Lock States)
	stateName	Name of the lock state (see Lock States)
	batteryCritical	Flag indicating if the batteries of the Nuki device are at critical level
	batteryCharging	Flag indicating if the batteries of the Nuki device are charging at the moment
	batteryChargeState	Value representing the current charge status in %
	keypadBatteryCritical	Flag indicating if the batteries of the paired Nuki Keypad are at critical level
	doorsensorState	ID of the door sensor state
	doorsensorStateName	Name of the door sensor state
	ringactionTimestamp	timestamp of the last ring-action
	ringactionState	Flag indicating if a ring-action is currently occurring or not (reset after 30 seconds)
	success	Flag indicating if the lock state retrieval has been successful
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
	HTTP 404	Returned if the given Nuki device is unknown

	HTTP 503	Returned if the given Nuki device is offline
Example-Calls	http://192.168.1.50:8080/lockState?nukild=1&deviceType=0&token=123456 http://192.168.1.50:8080/lockState?nukild=1&deviceType=&ts=2019-03-05T01:06:53Z&rnr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "mode": 2, "state": 1, "stateName": "locked", "batteryCritical": false, "batteryCharging": false, "batteryChargeState": 85, "keypadBatteryCritical": false, "ringactionTimestamp": 2020-04-27T16:13:00+00:00", "ringactionState": false, "doorsensorState": 2, "doorsensorStateName": "door closed", "success": true }</pre>	

/lockAction

URL	http://192.168.1.50:8080/lockAction	
Usage	Performs a lock action on the given Nuki device	
URL-Parameters	nukild	The ID of the Nuki device which should execute the lock action
	deviceType	Nuki device type (see Device Types ; defaults to 0)
	action	The desired lock action (see Lock Actions)

	nowait	Flag (0 or 1) indicating whether or not to wait for the lock action to complete and return its result (<i>optional; defaults to 0</i>)
	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the result of the lock action	
	batteryCritical	Flag indicating if the batteries of the Nuki device are at critical level
	success	Flag indicating if the lock action has been executed successfully
Errors	HTTP 400	Returned if the given action is invalid
	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
	HTTP 404	Returned if the given SNuki device is unknown
	HTTP 503	Returned if the given Nuki device is offline
Example-Calls	http://192.168.1.50:8080/lockAction?nukild=1&deviceType=0&action=1&token=123456 http://192.168.1.50:8080/lockAction?nukild=1&deviceType=0&action=1&ts=2019-03-05T01:06:53Z&mrnr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "success": true, "batteryCritical": false }</pre>	

/lock

URL	http://192.168.1.50:8080/lock
------------	---

Usage	Send the simple lock action "lock" to a given Nuki device	
URL-Parameters	nukild	The ID of the Nuki device which should execute the lock action
	deviceType	Nuki device type (see Device Types ; defaults to 0)
	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the result of the lock action	
	batteryCritical	Flag indicating if the batteries of the Nuki device are at critical level
	success	Flag indicating if the lock action has been executed successfully
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
	HTTP 404	Returned if the given Nuki device is unknown
	HTTP 503	Returned if the given Nuki device is offline
Example-Calls	http://192.168.1.50:8080/lock?nukild=1&deviceType=0&token=123456 http://192.168.1.50:8080/lock?nukild=11&deviceType=0&ts=2019-03-05T01:06:53Z&nrr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "success": true, "batteryCritical": false }</pre>	

/unlock

URL	http://192.168.1.50:8080/unlock	
Usage	Send the simple lock action "unlock" to a given Nuki device	
URL-Parameters	nukild	The ID of the Nuki device which should execute the lock action
	deviceType	Nuki device type (see Device Types ; defaults to 0)
	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the result of the unlock action	
	batteryCritical	Flag indicating if the batteries of the Nuki device are at critical level
	success	Flag indicating if the unlock action has been executed successfully
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
	HTTP 404	Returned if the given Nuki device is unknown
	HTTP 503	Returned if the given Nuki device is offline
Example-Calls	http://192.168.1.50:8080/unlock?nukild=1&deviceType=0&token=123456 http://192.168.1.50:8080/unlock?nukild=11&deviceType=0&ts=2019-03-05T01:06:53Z&rnr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "success": true, "batteryCritical": false</pre>	

	}
--	---

/unpair

not available on software bridge

URL	http://192.168.1.50:8080/unpair	
Usage	Removes the pairing with a given Nuki device	
URL-Parameters	nukild	The ID of the Nuki device which should be unpaired
	deviceType	Nuki device type (see Device Types ; defaults to 0)
	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the result of the operation	
	success	Flag indicating if the lock action has been executed successfully
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
	HTTP 404	Returned if the given Nuki device is unknown
Example-Calls	http://192.168.1.50:8080/unpair?nukild=1&token=123456 http://192.168.1.50:8080/unpair?nukild=1&ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "success": true }</pre>	

/info

URL	http://192.168.1.50:8080/info		
Usage	Returns all Nuki devices in range and some device information of the bridge itself		
URL-Parameters	token	The api token configured via the Nuki app when enabling the API	
Response	JSON list with the result		
	bridgeType	<ul style="list-style-type: none">• 1 => Hardware bridge• 2 => Software bridge	
	ids	JSON list containing the ids of the bridge	
		hardwareId	Hardware ID (<i>hardware bridge only</i>)
		serverId	Server ID
	versions	JSON list containing the versions of bridge	
		firmwareVersion	Version of the bridges firmware (<i>hardware bridge only</i>)
		wifiFirmwareVersion	Version of the WiFi modules firmwarehardware bridge only
		appVersion	Version of the bridge appsoftware bridge only
	uptime	Uptime of the bridge in seconds	
currentTime	Current timestamp		

	serverConnected	Flag indicating whether or not the bridge is connected to the Nuki server	
	scanResults	JSON Array. One item of the following per Nuki device	
		nukild	Nuki device ID
		deviceType	Nuki device type (see Device Types)
		name	BLE-Name of the Nuki device
		rsi	RSSI value
		paired	Flag indicating whether or not a pairing with this Nuki device has already been established
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.	
Example-Calls	http://192.168.1.50:8080/info?token=123456 http://192.168.1.50:8080/info?ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6		
Example-Response	<pre>{ "bridgeType": 1, "ids": {"hardwareId": 12345678, "serverId": 12345678}, "versions": { "firmwareVersion": "0.1.0", "wifiFirmwareVersion": "0.2.0" }, "uptime": 120, "currentTime": "2018-04-01T12:10:11Z", "serverConnected": true, "scanResults": [{ "nukiId": 10, "type": 0,</pre>		

	<pre>"name": "Nuki_00000010", "rssi": -87, "paired": true }, { "nukiId": 11, "deviceType": 2, "name": "Nuki_00000011", "rssi": -93, "paired": false }] }</pre>
--	---

/callback

The following endpoints provide methods to register up to 3 http (no https) url callbacks, which will be triggered once the lock state of one of the known Nuki devices changes.

The new lock state will be sent to the callback url by executing a POST request and posting a JSON list in the following format:

```
{"nukiId": 11, "deviceType": 0, "mode": 2, "state": 1, "stateName": "locked", "batteryCritical": false, "batteryCharging": false, "batteryChargeState": 85, "keypadBatteryCritical": false}
```

Nuki device with door sensor capabilities:

```
{"nukiId": 11, "deviceType": 0, "mode": 2, "state": 1, "stateName": "locked", "batteryCritical": false, "batteryCharging": false, "batteryChargeState": 85, "doorsensorState": 2, "doorsensorStateName": "door closed"}
```

Opener (with ring action capabilities):

```
{"nukiId": 11, "deviceType": 2, "mode": 3, "state": 3, "stateName": "rto active", "batteryCritical": false, "ringactionTimestamp": "2020-04-27T16:13:00+00:00", "ringactionState": false}
```

/callback/add

URL	http://192.168.1.50:8080/callback/add	
Usage	Registers a new callback url	
URL-Parameters	url	The callback url to be added (no https, url encoded, max. 254 chars)
	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the result	
	success	Flag indicating if the url has been added successfully

	message	Contains the reason for the failure if success is false
Errors	HTTP 400	Returned if the given URL is invalid or too long
	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/callback/add?url=http%3A%2F%2F192.168.0.20%3A8000%2Fnuki&token=123456 http://192.168.1.50:8080/callback/add?url=http%3A%2F%2F192.168.0.20%3A8000%2Fnuki&ts=2019-03-05T01:06:53Z&rnr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "success": true }</pre>	

/callback/list

URL	http://192.168.1.50:8080/callback/list			
Usage	Returns all registered url callbacks			
URL-Parameters	token	The api token configured via the Nuki app when enabling the API		
Response	JSON list with the result			
	callbacks	JSON array. One item of the following per callback		
		id	ID of the callback	
		url	URL of the callback	
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.		
Example-Calls	http://192.168.1.50:8080/callback/list?token=123456			

	http://192.168.1.50:8080/callback/list?ts=2019-03-05T01:06:53Z&rnr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6
Example-Response	<pre>{ "callbacks": [{ "id": 0, "url": "http://192.168.0.20:8000/nuki" },{ "id": 1, "url": "http://192.168.0.21/test" }] }</pre>

/callback/remove

URL	http://192.168.1.50:8080/callback/remove	
Usage	Removes a previously added callback	
URL-Parameters	id	The id of the callback to be removed
	token	The api token configured via the Nuki app when enabling the API
Response	JSON list containing the result	
	success	Flag indicating if the url has been added successfully
	message	Contains the reason for the failure if success is false
Errors	HTTP 400	Returned if the given url is invalid or too long
	HTTP 401	Returned if the given token is invalid or a

		hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/callback/remove?id=0&token=123456 http://192.168.1.50:8080/callback/remove?id=0&ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	<pre>{ "success": true }</pre>	

6. Maintenance endpoints

The following endpoints are available for maintenance purposes of the hardware bridge. Therefore they are not available on the software bridge.

/log

URL	http://192.168.1.50:8080/log	
Usage	Retrieves the log of the bridge	
URL-Parameters	offset	Offset position where to start retrieving log entries (<i>optional; defaults to 0</i>)
	count	How many log entries to retrieve (<i>optional; defaults to 100</i>)
	token	The api token configured via the Nuki app when enabling the API
Response	JSON array. One item of the following per log entry	
	timestamp	Timestamp of the log entry
	type	Type of the log entry
	some more optional parameters	
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/log?token=123456 http://192.168.1.50:8080/log?ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	[{"timestamp": "2018-10-06T16:46:05+00:00", "deviceType": "..."},]	

	<pre>{ "timestamp": "2018-10-06T16:46:05+00:00", "deviceType": "...", ... }</pre>
--	---

/clearlog

URL	http://192.168.1.50:8080/clearlog	
Usage	Clears the log of the bridge	
URL-Parameters	token	The api token configured via the Nuki app when enabling the API
Response	No response	
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/clearlog?token=123456 http://192.168.1.50:8080/clearlog?ts=2019-03-05T01:06:53Z&rn=r=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	None	

/fwupdate

URL	http://192.168.1.50:8080/fwupdate	
Usage	Immediately checks for a new firmware update and installs it	
URL-Parameters	scope (optional)	Flag indicating which devices shall be updated to the latest firmware version (if available and applicable). <u>Allowed values:</u> 0 ... all devices (Bridge and all connected)

		devices) 1 ... Bridge only 2 ... connected devices only (defaults to 0)
	nukild (optional)	The ID of the Nuki device which should be updated to the latest firmware version (if available and applicable).
	deviceType (optional)	Nuki device type (see Device Types ; defaults to 0)
	token	The api token configured via the Nuki app when enabling the API
Response	No response	
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/fwupdate?token=123456 http://192.168.1.50:8080/fwupdate?ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	None	

/reboot

URL	http://192.168.1.50:8080/reboot	
Usage	Reboots the bridge	
URL-Parameters	token	The api token configured via the Nuki app when enabling the API
Response	No response	
Errors	HTTP 401	Returned if the given token is invalid or a

		hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/reboot?token=123456 http://192.168.1.50:8080/reboot?ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	None	

/factoryReset

URL	http://192.168.1.50:8080/factoryReset	
Usage	Performs a factory reset	
URL-Parameters	token	The api token configured via the Nuki app when enabling the API
Response	No response	
Errors	HTTP 401	Returned if the given token is invalid or a hashed token parameter is missing.
Example-Calls	http://192.168.1.50:8080/factoryReset?token=123456 http://192.168.1.50:8080/factoryReset?ts=2019-03-05T01:06:53Z&nr=4711&hash=f52eb5ce382e356c4239f8fb4d0a87402bb95b7b3124f0762b806ad7d0d01cb6	
Example-Response	None	

7. Error codes/handling

Specific errors for endpoints are documented in the respective section. This is an overview of general and specific errors that may occur when using the Bridge API:

Error code	Type	Description	Solution
400	Bad Request	Wrong/missing parameter	Check endpoint documentation for details on expected parameters and format.
401	Unauthorized	Invalid token or missing hashed token parameter	Recheck if the token is correct or parameters are correctly set.
403	Forbidden	Authentication is disabled	Activate the Bridge API (see 3. Bridge discovery & API activation).
404	Not Found	Unknown Nuki device ID	Recheck the connected device IDs on the Bridge and the device ID used in the request.
503	Service Unavailable	Another request already running on the device	Increase intervals between API calls sent to the Bridge as it can only handle one request at a time.
Failed to connect	Connection refused	Bridge not available at given URL	Check if the Bridge is powered and connected to the Wifi and if IP and Port are correctly set in your request.

8. Frequently Asked Questions

Why are the batteries of my Smart Lock draining so fast when I use the Bridge API?

Most likely you are repeatedly calling [/lockAction](#) to get the current state directly from the device, but this should not be used for constant polling to avoid draining the batteries too fast. [/list](#) can be used instead to get regular updates on the state, as is it cached on the bridge.

Why do i repeatedly get an Error 503 when calling the Bridge API

The Bridge can only handle one incoming request at a time and you therefore have to serialize repeated requests to the Bridge API. See also: [7. Error codes/handling](#)

Why do API commands sometimes take very long or time out?

The Bridge can only handle one outgoing command at a time and may also have to wait for the response of a Nuki actuator. So using several clients (Bridge API, Nuki Apps, Nuki Web) at the same time may lead to delays or timeouts.

9. Changelog

Changelog v 1.13.2

17.06.2022

- Extended /fwupdate by automatic update capabilities for connected Nuki devices
- Added description for new crypted API token

Changelog v 1.13.1

14.12.2021

- Added new Doorsensor states introduced with the new external door sensor

Changelog v 1.13.0

30.11.2021

- Added Smart Door and Smart Lock 3.0 (Pro) to [Device Types](#).

Changelog v 1.12.3

22.06.2021

- Added [error code overview and handling section](#)
- Added a [Frequently Asked Questions](#) section.

Changelog v 1.12.2

11.06.2021

- Fixed missing values for battery state.

Changelog v 1.12.1

07.05.2021

- Added information on how to [activate the API alternatively via Nuki App](#).

Changelog v 1.12

02.09.2020

- Updated **/lockState** to include the keypadBatteryCritical flag, ringactionState and ringactionTimestamp.
- Updated **/list** to include the keypadBatteryCritical flag, ringactionState and ringactionTimestamp.
- Expanded POST request example for a **/callback** with the keypadBattery flag, ringactionState and ringactionTimestamp.

Changelog v 1.11

08.07.2020

- Introduced **Dorsensor States** for all supported devices.
- Updated **/lockState** to include doorsensorState and doorsensorStateName in the response.
- Updated **/list** to include doorsensorState and doorsensorStateName in the response.
- Added a POST request example for a device with door sensor capabilities to **/callback**.

Changelog v 1.10

07.01.2020

- Introduced **Simple lock actions** for all usecases where the logic should be handled by the device itself.
- Made wording for Nuki devices more general.

Changelog v 1.9

06.05.2019

- Introduced **Device Types** and **Modes** to be able to distinguish between Smart Locks and Nuki Openers and their operating modes.
- Updated **Lock States** to reflect matching and new states for the Nuki Opener.
- Updated **Lock Actions** to reflect matching and new actions for the Nuki Opener and add deviceType parameter.
- Added Opener support to **/list** and **/info** endpoints.
- Expanded **Callbacks** to Nuki Openers and added **deviceType** and **mode**.
- Expanded **Callbacks** to Nuki Openers and added **deviceType** and **mode**.
- Added deviceType parameter to **/unpair**.

Changelog v 1.8

07.03.2019

- Introducing the hashed **token** as a more secure alternative to sending the plain token

Changelog v 1.7

30.03.2018

- Small changes in bridge discovery information

Changelog v 1.6

21.06.2017

- Added bridge discovery