# Basic ESP8266 REST API

This is a library designed to parse inputs URIs and call a corresponding function with parameters linked to the rest request.

The library provides functions to get Json arguments for post and put body interpretation.

This library uses ArduinoJson to parse the Json:

<https://github.com/bblanchon/ArduinoJson>

Terms:

**Resource Identifier**: numeric value that identifies the resource you are trying to access.

e.g. the “1” in /door/1/open identifies the first door

**Generic uri**: Uri in which the resource identifier is replaced by /num/ and the last block is replaced by /action. These two generic terms are used to parse the uri with different arguments

Json:

The json has a strict format you have to respect to get it to parse.

You can use either a json generator or a json validator to ensure you have the correct format:

Generator <http://www.objgen.com/json>

Validator <http://jsonlint.com/>

I recommend using both. Since the generator can sometimes omit a whitespace.

Testing:

For precise testing of the rapi library you can use [Postman](https://chrome.google.com/webstore/detail/postman/fhbjgbiflinjbdggehcddcbncdddomop?utm_source=chrome-app-launcher-info-dialog) extension on google Chrome or [httprequester](https://addons.mozilla.org/en-US/firefox/addon/httprequester/) for firefox. Those tools allow you to send requests with set headers and body (for post and put) and visualize the response.

The default use case for the Rapi library was to open a door.

Helper functions:

extractResourceId()

Used to extract the resource id from an input uri according to another generic uri

listMethods()

returns every uri function and the corresponding actions in Json

getJsonArg() – getIntJsonArg()