

Communication (Arduino ⇔ Server)

All the “Requests” and “Responses” here:

- refer to the body of the HTTP messages;
- are written in JSON.

Registration

URL = www.mkafeina.eesc.usp.br/api/registration

RegistrationRequest (Arduino → Server)

```
{
  mac : <<string>>,
  registrationMessage : <<int>>,
  uniqueName : <<string>>,
  coffeeEmptyOffset : <<int>>,
  coffeeFullOffset : <<int>>,
  waterEmptyOffset : <<int>>,
  waterFullOffset : <<int>>,
  milkEmptyOffset : <<int>>,
  milkFullOffset : <<int>>,
  sugarEmptyOffset : <<int>>,
  sugarFullOffset : <<int>>
}
```

registrationMessage	Meaning
0	Undefined
100	Registration Attempt
101	Registration Acceptance
200	Offsets
300	Unregister

offsets	Meaning
< 0	Ingredient not available
>= 0	Sensor offset

RegistrationResponse (Server → Arduino)

```
{
  responseCode : <<int>>,
  trueUniqueName : <<string>>
}
```

responseCode	Meaning
-1	Null response
200	Ok
400	Cancel

Report

URL = www.mkafeina.eesc.usp.br/api/report

ReportRequest (Arduino → Server)

```
{
  mac : <<string>>,
  reportMessage : <<string>>,
  isEnabled : <<bool>>,
  coffeeLevel : <<int>>,
  waterLevel : <<int>>,
  milkLevel : <<int>>,
  sugarLevel : <<int>>
}
```

reportMessage	Meaning
0	Undefined
100	Levels
900	Disabling

Levels	Meaning
< 0	<u>Ingredient</u> not available
>= 0	Sensor signal

ReportResponse (Server → Arduino)

```
{
  responseCode : <<int>>,
  command : <<int>>
}
```

responseCode	Meaning
-1	Null response
200	Ok
400	Cancel

command	Meaning
0	Undefined
1	Do nothing
100	Get coffee order
200	Disable
201	Disabling Confirmed

Order

URL = www.mkafeina.eesc.usp.br/api/order

OrderRequest (Arduino → Server)

```
{  
  mac : <<string>>,  
  orderMessage : <<int>>,  
  orderReference : <<int>>  
}
```

orderMessage	Meaning
0	Undefined
100	Give me an order
200	Processing will start
300	Order ready
400	Problem occurred during processing

OrderResponse (Server → Arduino)

```
{  
  responseCode : <<int>>,  
  orderReference : <<int>>,  
  recipe : <<string>>  
}
```

responseCode	Meaning
-1	Null response
200	Ok
400	Cancel

Recipe notation:

[[ingredient1]=[value1],[ingredient2]=value2,[...]].

Ingredients : <<char>>.

Values : <<int>>.

Ex1: (c=2,w=200).

Ex2: (c=1,w=200,m=100,s=2).

List of ingredients:

Char	Ingredient
c	Coffee
w	Water
m	Milk
s	Sugar