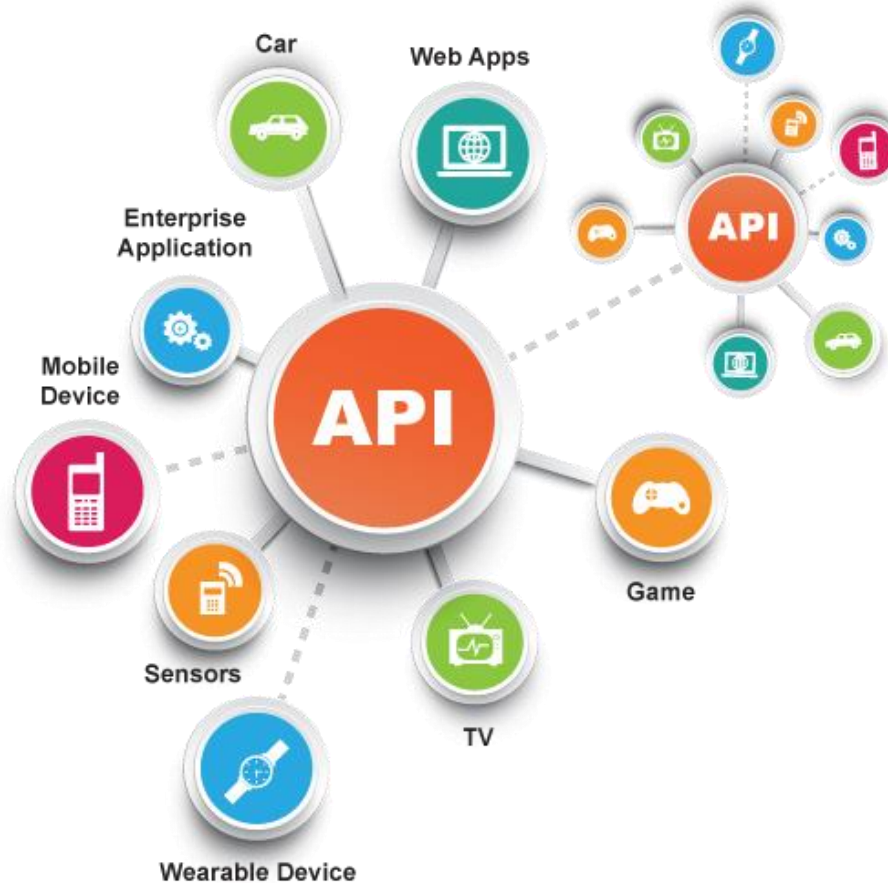


Application Programming Interface

■ Introdução ao estudo de API.



REST

POST

Create

GET

Read

PUT

Update

DELETE

Delete

Composição do Projeto

```
curl -X POST -H "Content-Type: application/json" -d '{"name": "Fabrica Principal"}'  
https://things.geniot.io/services/api/v1/datasources/?token=96dc46948e082abfa18935edf6685c91bad1226f
```

```
curl -X GET -H "Content-Type: application/json"  
https://things.geniot.io/services/api/v1/datasources/25961b15df4ba821b293f52001614a11/?token=96dc46948e082abfa18935edf6685c91bad1226f
```

```
curl -X DELETE -H "Content-Type: application/json"  
https://things.geniot.io/services/api/v1/datasources/f87392c11956e4124e4589cebd1dbc20/?token=96dc46948e082abfa18935edf6685c91bad1226f
```

```
curl -X PUT -H "Content-Type: application/json" -d '{"name": "Novo nome Datasource"}'  
https://things.geniot.io/services/api/v1/datasources/8834204dc034900e7e7d96f9bfa6fd6f/?token=96dc46948e082abfa18935edf6685c91bad1226f
```

Escrever na Variável

```
curl -X POST -H "Content-Type: application/json" -d '{"name": "Temperatura"}'  
https://things.geniot.io/services/api/v1/datasources/?token=96dc46948e082abfa189  
35edf6685c91bad1226f
```

```
{  
  "id": "b58302bc2cba36294557318c32182d1c",  
  "name": "Temperatura",  
  "icon": null,  
  "unit": "",  
  "datasource": "dc14c0e920702dee21a3e1eaa33ff218",  
  "url": "https://www.geniot.io/things/services/api/v1/variables/b58302bc2cba36294557318c32182d1c",  
  "description": null,  
  "properties": null,  
  "tags": null,  
  "value_url":  
"https://www.geniot.io/things/services/api/v1/variables/b58302bc2cba36294557318c32182d1c/values",  
  "created_at": "2017-10-25 13:49:21",  
  "last_value": "{\"timestamp\":1509107089,\"value\":123}",  
  "last_activity": "2017-10-27 12:24:49",  
  "type": "0",  
  "derived_expr": null,  
  "label": "S00"  
}
```

Composição do Projeto

JSON

```
{
  "person" : {
    "xmlns" : "urn:ns:person",
    "firstName" : {
      "$t" : "John"
    },
    "lastName" : {
      "$t" : "Smith"
    },
    "contactInfo" : {
      "default" : "true",
      "type" : "home",
      "xmlns" : "urn:ns:contactinfo",
      "phone" : [
        {
          "type" : "voice",
          "$t" : "203-555-1212"
        },
        {
          "type" : "fax",
          "$t" : "203-555-1213"
        }
      ],
      "email" : {
        "xmlns" : "",
        "$t" : "jsmith@example.com"
      }
    },
    "photo" : {
      "xmlns" : "",
      "$t" : "http://example.com/jsmith/profile.png"
    }
  }
}
```

XML

```
<person xmlns="urn:ns:person">
  <firstName>John</firstName>
  <lastName>Smith</lastName>
  <contactInfo
    xmlns="urn:ns:contactinfo" type="home"
    default="true" >
    <phone
      type="voice">203-555-1212</phone>
    <phone
      type="fax">203-555-1213</phone>
    <email
      xmlns="">jsmith@example.com</email>
    </contactInfo>
    <photo xmlns="">http://example.com
    /jsmith/profile.png</photo>
  </person>
```

Exemplo de API

<https://docs.api.ai/docs/contexts#get-contexts>

```
curl -i -X GET \  
  -H "Accept: application/json" \  
  -H "Content-Type: application/json" \  
  -H "Authorization: Bearer YOUR_ACCESS_TOKEN" \  
'https://api.api.ai/v1/contexts?sessionId=1234567890'
```

```
curl -i -X POST \  
  -H "Accept: application/json" \  
  -H "Content-Type: application/json" \  
  -H "Authorization: Bearer YOUR_ACCESS_TOKEN" \  
  -d \  
  '[  
    {  
      "name": "greetings",  
      "lifespan": 3,  
      "parameters": {  
        "name": "Sam"  
      }  
    }  
  ]' \  
'https://api.api.ai/v1/contexts?sessionId=1234567890'
```

ThingSpeak API

https://api.thingspeak.com/channels.json?api_key=1FDNU8PVGIMOSDWL&name=My New Channel

```
{
  "id": 218995,
  "name": "My New Channel",
  "description": null,
  "latitude": "0.0",
  "longitude": "0.0",
  "created_at": "2017-01-25T23:04:54Z",
  "elevation": null,
  "last_entry_id": null,
  "ranking": 30,
  "metadata": null,
  "tags": [

  ],
  "api_keys": [
    {
      "api_key": "0NRSKF827TZWLLFT",
      "write_flag": true
    },
    {
      "api_key": "0WVWL6FJ2J5LY8VA",
      "write_flag": false
    }
  ]
}
```

ThingSpeak API



Simple REST Client

Request

URL:

Method: ☐ GET ☒ POST ☐ PUT ☐ DELETE ☐ HEAD ☐ OPTIONS

Headers:

Data:

Clear

Send

Response

Status: 200 OK

Headers: X-Frame-Options: ALLOWALL
Access-Control-Allow-Methods: GET, POST, PUT, OPTIONS, DELETE, PATCH
Content-Type: application/json; charset=utf-8
Access-Control-Allow-Origin: *
Cache-Control: max-age=0, private, must-revalidate
Access-Control-Allow-Headers: origin, content-type, X-Requested-With"/>

Data:

ThingSpeak API



Simple REST Client

Request

URL:

Method: ☐ GET ☒ POST ☐ PUT ☐ DELETE ☐ HEAD ☐ OPTIONS

Headers:

Data:

Clear

Send

Response

Status: 200 OK

Headers:

```
Date: Wed, 25 Jan 2017 23:04:54 GMT
X-Powered-By: Phusion Passenger 4.0.57
Transfer-Encoding: chunked
Status: 200 OK
Access-Control-Max-Age: 1800
Connection: close
X-Request-Id: 4465ef6e-282b-41a7-b4ce-bbf0b468daef
X-Runtime: 0.287326
Server: nginx/1.9.3 + Phusion Passenger 4.0.57
ETag: "3db6be31df7f5b3d6a1a8255985cd8e4"
X-Frame-Options: ALLOWALL
Access-Control-Allow-Methods: GET, POST, PUT, OPTIONS, DELETE, PATCH
Content-Type: application/json; charset=utf-8
Access-Control-Allow-Origin: *
Cache-Control: max-age=0, private, must-revalidate
Access-Control-Allow-Headers: origin, content-type, X-Requested-With
```

Data:

```
{ "id": 218995, "name": "My New Channel", "description": null, "latitude": "0.0", "longitude": "0.0", "created_at": "2017-01-25T23:04:54Z", "elevation": null, "last_entry_id": null, "ra
```

Advanced Rest Client (terminal Rest Chrome)

The screenshot displays the Advanced Rest Client (ARC) interface. On the left is a sidebar with navigation options: ARC, HTTP request (highlighted), Socket, History, Saved, and Projects. The main panel shows a POST request to the URL `https://www.geniot.io/things/services/api/v1/collections/value/?token=7f33f3ce94f774494feb8f1843511509`. The request body is a JSON array: `[{"variable": "S00", "value": 1240}, {"variable": "S01", "value": 45.67, "timestamp": 1481929105}]`. The response status is 200 OK with a response time of 1446.88 ms. The response body is `[{"status_code": 201}, {"status_code": 201}]`. The bottom right corner indicates the selected environment is Default.

ARC

Method: POST Request URL: `https://www.geniot.io/things/services/api/v1/collections/value/?token=7f33f3ce94f774494feb8f1843511509` SEND

Parameters

Body content type: application/json Editor view: Text input

Body: `[{"variable": "S00", "value": 1240}, {"variable": "S01", "value": 45.67, "timestamp": 1481929105}]`

200 OK 1446.88 ms DETAILS

Response: `[{"status_code": 201}, {"status_code": 201}]`

Selected environment: Default