Swagger UI with Tek NS US:

1. Enter the following command from Linux machine to get JWT token. Make sure the Linux machine has necessary curl packages installed.

**Linux Command:**

**The username and password fields highlighted below should be your login username and password used to login to the Tektelic Network Server https://lorawan-ns-na.tektelic.com.**

*curl -X POST --header 'Content-Type: application/json' --header 'Accept: application/json' -d '{"username":"your_username ", "password":"your_password"}' 'https://lorawan-ns-na.tektelic.com/api/auth/login' | grep -o '"token":"[^"]*' | grep -o '[^"]*$'*

After entering the above curl command, it would give you the token like this.

eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbGljLmNvbSIsInNjb3BlcyI6WyJDVVNUT01FUl9BRE1JTiJdLCJ1c2VySWQiOiI1NzU3MTdmMC0zYjJmLTExZWMtYWMxYy0zMzg5NGFiYjQxYWIiLCJmaXJzdE5hbWUiOiJEaGFFudXNoaWSiLCJsYXN0TmFtZSI6Ik1hY2hhcmxhIiwiZW5hYmxlZCI6dHJ1ZSwicHJvdmlkZXJJZCI6IjYxNjNiYzEwLThjYTgtMTFlYy1iYjJjLThkZDIzNDg2MTQzMSIsImN1c3RvbWVySWQiOiI4NjU0MzY2MC00NGViLTExZTktODBhMC1hMzZlM2ZiZWM0NzciLCJpc3MiOiJ0ZWt0ZWxpYy5jb20iLCJpYXQiOjE2NTY5NzA2NzcsImV4cCI6MTY1Njk3Nzg3N30.ENIXMJjeMSetkZ2tBUbs3y73pfYLALZOUgCtMU_cQqF6I-kujRnQ5ZpAzB0x9sH1lR-PRsU1jVNhGXzDzobJ1w

**Windows Command:**

*C:\curl>curl -X POST --header "Content-Type: application/json" --header "Accept: application/json" -d "{\"username\":\" your_username\",\"password\":\"your_password\"}" "https:// lorawan-ns-na.tektelic.com/api/auth/login"*

In this example I used US Instance. For EU instance please use 'https:// lorawan-ns-eu.tektelic.com/api/auth/login'

User name and Password – Login credentials to NS.

After entering the above curl command, it would give you the token like this.

{"token":"eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbGljLmNvbSIsInNjb3BlcyI6WyJDVVNUT01FUl9BRE1JTiJdLCJ1c2VySWQiOiI1NzU3MTdmMC0zYjJmLTExZWMtYWMxYy0zMzg5NGFiYjQxYWIiLCJmaXJzdE5hbWUiOiJEaGFEdXNoaWSiLCJsYXN0TmFtZSI6Ik1hY2hhcmxhIiwiZW5hYmxlZCI6dHJ1ZSwicHJvdmlkZXJJZCI6IjYxNjNiYzEwLThjYTgtMTFlYy1iYjJjLThkZDIzNDg2MTQzMSIsImN1c3RvbWVySWQiOiI4NjU0MzY2MC00NGViLTExZTktODBhMC1hMzZlM2ZiZWM0NzciLCJpc3MiOiJ0ZWt0ZWxpYy5jb20iLCJpYXQiOjE2NTY5NzI5OTcsImV4cCI6MTY1Njk4MDE5N30.Gj10K6-NYIqLEJWSJszRKn8YiZagAMxTLG_yP651upIsWNYj0eayAT9FmlFSOsvtRV0ylkOr5tHVFK67HjpaOQ","refreshToken":"eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbGljLmNvbSIsInNjb3BlcyI6WyJSRUZSRVNIX1RPS0VOIl0sInVzZXJJZCI6IjU3NTcxN2YwLTNiMmYtMTFlYy1hYzFjLTMzODk0YWJiNDFhYiIsImlzcyI6InRla3RlbGljLmNvbSIsImp0aSI6IjM1M2ZiNThhLWFkOTUtNGQ5Yy1hNDdjLWRlNWYxZDAyNzY5ZiIsImlhdCI6MTY1Njk3Mjk5NywiZXhwIjoxNjU3MDU5Mzk3fQ.EYWRi5EPM84TtDmyxExHI-8R0GNWch0645D0FFwExwzg0XYYHBCJI5coIJjKpgS-YZQMHqAJXBQ_mT0CJJROnQ"}
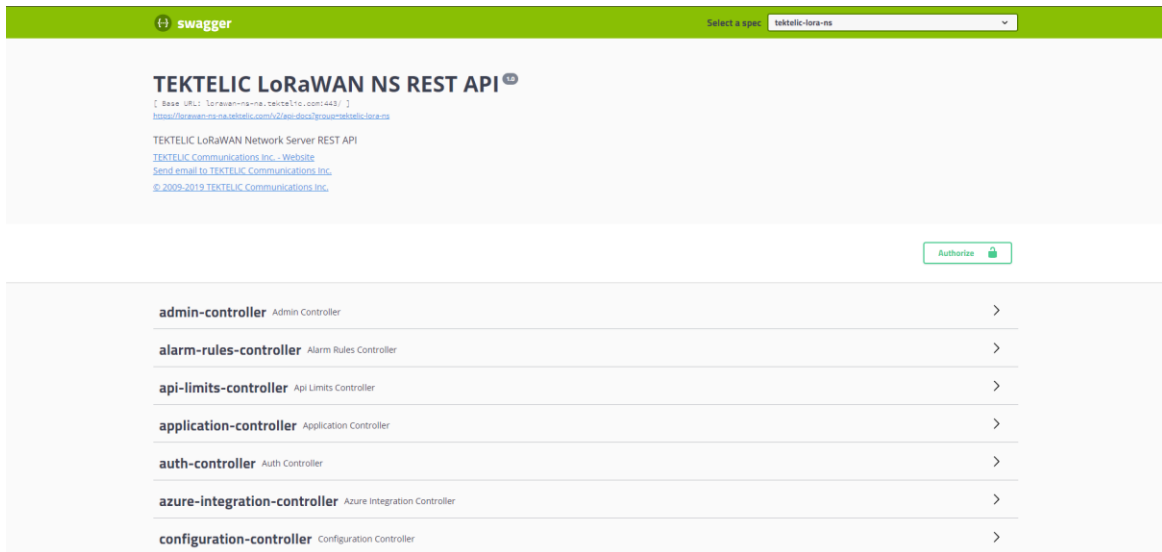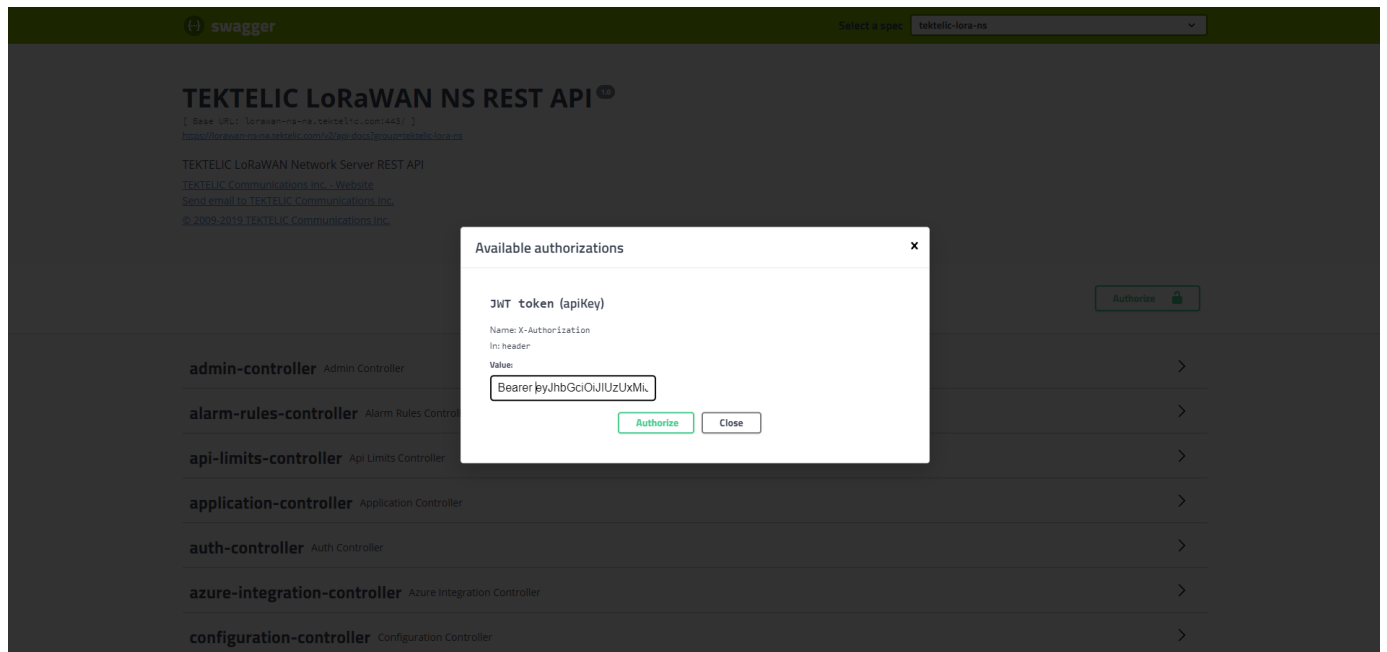
Then copy the first part of the token (as highlighted above), which is **JWT token**.

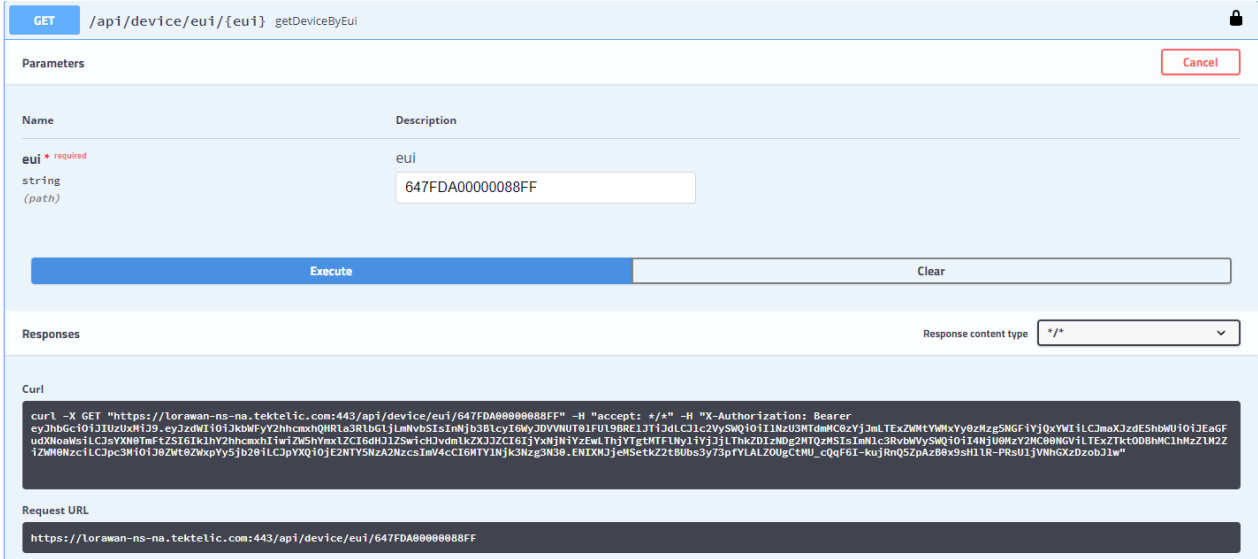2. Go to swagger page for the Network Server: (In this example I used US Instance)
   https://lorawan-ns-na.tektelic.com/swagger-ui.html#/



Then click Authorize button. And type **Bearer then give a space and paste the JWT token** that you copied before. And then select Authorize button. You are logged in now.

Then select the API that you want to get information from NS. In this example I selected Device-controller then selected **"GET /api/device/eui/{eui}"**. Then I entered the EUI for my device in the "value" field. Then select "Try it out!" button.

| GET | /api/device/eui/{eui} getDeviceByEui | 🔒 |

**Parameters**                                           Cancel

**Name**                    **Description**

eui * required             eui
string
(path)                     647FDA00000088FF

|                Execute                |                Clear                |

**Responses**                         Response content type   */*   ▼

**Curl**

curl -X GET "https://lorawan-ns-na.tektelic.com:443/api/device/eui/647FDA00000088FF" -H "accept: */*" -H "X-Authorization: Bearer eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbGljLmNvbSIsInNjb3BlcyI6WyJDVVNUT01FUl9BRE1JTiJdLCJlc2VySWQiOiI1NzU3MTdmMC0zYjJmLTExZWMtYWMxYy0zMzg5NGFiYjQxYWIiLCJmaXJzdE5hbWUiOiJEaGFudXNoMosWsiLCJsYXN0TmFtZSI6IklhY2hhcmxhIiwiZW5hYmxlZCI6dHJlZSwicHJvdmlkZXJJZCI6IjYxNjNiYzEwLThjYTgtMTFlNy1iYjJjLThkZDIzNDg2MTQzMTQzNSIsImN1c3RvbWVySWQiOiI4NjU0MzY2MC00NGViLTExZTktODBhMC1hMzZlM2Z iZWM0NzciLCJpc3MiOiJ0ZWt0ZWxpcYy5jb20iLCJpYXQiOjE2NTY5NzA2NzcsImV4cCI6MTY1Njk3Nzg3N30.ENIXMJjeMSetkZ2tBUbs3y73pfYLALZOUgCtMU_cQqF6I-kujRnQ5ZpAzB0x9sHllR-PRsU1jVNhGXzDzobJlw"

**Request URL**

https://lorawan-ns-na.tektelic.com:443/api/device/eui/647FDA00000088FF

You will get the response containing the information of the Device as shown below.

**Request URL**

https://lorawan-ns-na.tektelic.com:443/api/device/eui/647FDA00000088FF

**Server response**

**Code**        **Details**

200             **Response body**

```
{
  "id": {
    "entityType": "DEVICE",
    "id": "3c7b9740-f401-11ec-aa28-f354b6ac8832"
  },
  "createdTime": 1656104668852,
  "additionalInfo": null,
  "name": "dsaf",
  "deviceEUI": "647FDA00000088FF",
  "appEUI": "647FDA8010000100",
  "providerId": {
    "entityType": "PROVIDER",
    "id": "6163bc10-8ca8-11e7-bb2c-8dd234861431"
  },
  "customerId": {
    "entityType": "CUSTOMER",
    "id": "86543660-44eb-11e9-80a0-a36e3fbec477"
  },
  "deviceModelId": {
    "entityType": "DEVICE_MODEL",
    "id": "11442020-a16c-11ec-8ec4-d5a6fdc4d50c"
  },
  "applicationId": {
    "entityType": "APPLICATION",
    "id": "a338f4a0-d868-11ec-9a5d-17d0f39d804d"
  },
```
                                                              Download

**Response headers**

```
cache-control: no-cache, no-store, max-age=0, must-revalidate
content-type: application/json
date: Mon, 04 Jul 2022 21:48:17 GMT
expires: 0
pragma: no-cache
transfer-encoding: chunked
vary: Origin, Access-Control-Request-Method, Access-Control-Request-Headers
x-content-type-options: nosniff
x-xss-protection: 1; mode=block
```

**Responses**

**Code**                    **Description**

200                         *OK*

**Troubleshooting Tips:**

**Windows Machine:**

The empty space in the JWT token will cause an issue.

In windows command prompt, when the JWT token gets displayed in multiple lines, ensure that you remove the empty space when copying to Authorize field on Swagger UI. Then, select "Authorize" button.

For ex: (Here is the key from my windows command prompt)

```
C:\Users\dmarcharla>curl -X POST --header "Content-Type: application/json" --header "Accept: application/json" -d "{\"username\":\"dmarcharla@tektelic.com\",\"password\":\"Koushik@95\"}" "https://lorawan-ns-na.te
ktelic.com/api/auth/login" | findstr -o "token"
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  1025  100   963  100    62    963     62  0:00:01 --:--:--  0:00:01  1930
0:{"token":"eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbGljLmNvbSIsInNjb3BlcyI6WyJDVVNUT01FUl9BRE1JTiJdLCJ1c2VySWQiOiI1NzU3MTdmMC0zYjJmLTExZWMtYWMxYy0zMzg5NGFiYjQxYWIiLCJmaXJzdE5hbWUiOiJEaGFudXNoIC
JsYXN0TmFtZSI6Ik1hY2hhcmxhIiwiZW5hYmxlZCI6dHJ1ZSwicHJvdmlkZXJJZCI6IjYxNjNiYzEwLThjYTgtMTFlNy1iYjJjLThkZDIzNDg2MTQzMSIsImN1c3RvbWVySWQiOiI4NjU0MzY2MC00NGViLTExZTktODBhMC1hMzZlM2ZiZWM0NzciLCJpc3MiOiJ0ZWt0ZWxpYy5jb
20iLCJpYXQiOjE2NTY5NzI1MzIsImV4cCI6MTY1Njk3OTczMn0.2MdKY8EDjwtOLTciMnceDN-eLjIaRlXsFWf7jjxnOlIHIj4Coj2x4tiF0R7doKFABihd9BrPOhuikAc1ZYizYw","refreshToken":"eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbG
jLmNvbSIsInNjb3BlcyI6WyJSRUZSRVNIX1RPS0VOIl0sInVzZXJJZCI6IjU3NTcxN2YwLTNiMmYtMTFlYy1hYzFjLTMzODk0YWJiNDFhYiIsImlzcyI6InRla3RlbGljLmNvbSIsImp0aSI6IjVjOGRkNmI2LWVjYmUtNDVkMi04MWViLWVjYmRhNTMxYjc4NiIsImlhdCI6MTY1Nj
k3MjUzMiwiZXhwIjoxNjU3MDU4OTMyfQ.RtBELPV-MEBkctFjn_70GR_NdJHQg0yRa8kSyNHeFOHZve5-Z1T80upw5AKTlNWTMvT_B2HLa19T_zVhIK069Q"}

C:\Users\dmarcharla>
```

{"token":"eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbGljLmNvbSIsInN jb3BlcyI6WyJDVVNUT01FUl9BRE1JTiJdLCJ1c2VySWQiOiI1NzU3MTdmMC0zYjJmLTExZW MtYWMxYy0zMzg5NGFiYjQxYWIiLCJmaXJzdE5hbWUiOiJEaGFudXNoaWwiLCJsYXN0TmFt ZSI6Ik1hY2hhcmxhIiwiZW5hYmxlZCI6dHJ1ZSwicHJvdmlkZXJJZCI6IjYxNjNiYzEwLThjYTgtM TFlNy1iYjJjLThkZDIzNDg2MTQzMSIsImN1c3RvbWVySWQiOiI4NjU0MzY2MC00NGViLTExZ TktODBhMC1hMzZlM2ZiZWM0NzciLCJpc3MiOiJ0ZWt0ZWxpYy5jb20iLCJpYXQiOjE2NTY5 NzI1MzIsImV4cCI6MTY1Njk3OTczMn0.2MdKY8EDjwtOLTciMnceDN-eLjIaRlXsFWf7jjxnOlIHIj4Coj2x4tiF0R7doKFABihd9BrPOhuikAc1ZYizYw","refreshToken":"

eyJhbGciOiJIUzUxMiJ9.eyJzdWIiOiJkbWFyY2hhcmxhQHRla3RlbGljLmNvbSIsInNjb3BlcyI6 WyJSRUZSRVNIX1RPS0VOIl0sInVzZXJJZCI6IjU3NTcxN2YwLTNiMmYtMTFlYy1hYzFjLTMzO Dk0YWJiNDFhYiIsImlzcyI6InRla3RlbGljLmNvbSIsImp0aSI6IjVjOGRkNmI2LWVjYmUtNDVk Mi04MWViLWVjYmRhNTMxYjc4NiIsImlhdCI6MTY1Njk3MjUzMiwiZXhwIjoxNjU3MDU4O TMyfQ.RtBELPV-MEBkctFjn_70GR_NdJHQg0yRa8kSyNHeFOHZve5-Z1T80upw5AKTlNWTMvT_B2HLa19T_zVhIK069Q"}

So, when adding the JWT token on Swagger UI, ensure that there is no space between multiple lines. Then select "Authorize" button.

Now you should be to make API call successfully. It should return with a 200 response code.