

IoT with EPOS

EPOS has been receiving several enhancements focused on IoT, particularly the SmartData API, which is documented in the section Sensing and Actuation Wireless Sensor Network of [EPOS User Guide](#). The use of SmartData with EPOSMoteIII is straightforward and the basic pointers are listed next.

1.1. EPOS @ EPOSMote III

EPOSMote III is at the heart of most projects at [LISHA's IoT Platform](#). It is also one of the main target platforms for EPOS 2.

- Refer to [EPOSMoteIII Quick-Start](#) page to learn how to download, compile, and run a simple application on EPOS at the EPOSMote III.
- For more information on how to upload the compiled image to EPOSMoteIII follow the guidelines in [EPOSMoteIII User Guide](#)
- Also, refer to [EPOS User Guide](#) for any question not covered here.

1.2. LISHA's IoT Platform

Refer to [IoT Platform](#) for a description of [LISHA's IoT Platform](#) and available APIs.

1.3. IoT Domain for Tests

IoT Platform offers the users a domain for development and testing named "tutorial". When using "tutorial" domain, users are not required to provide valid certificates to access the platform. The "tutorial" domain is periodically cleaned up. Data in this domain is temporary, and thus, it should be used only during tests.

1.3.1. Using "tutorial" domain

To use the IoT platform under the "tutorial" domain, make your requests according to the queries described into [IoT Platform](#) documentation and fulfill the credentials using "tutorial" as domain and username, and "tuto20182" as the password.

The creation of a SmartData series on the tutorial domain should use the very same API URL (<https://iot.lisha.ufsc.br/api/create.php>) with the following Body:

```
{
  "series" : Object
  {
    "version" : 1.1
    "unit" : unsigned long
    "x" : long
    "y" : long
    "z" : long
    "r" : unsigned long
    "t0" : unsigned long long
    "t1" : unsigned long long
    "workflow": unsigned long
  }
  "credentials" : Object
  {
    "domain" : "tutorial"
    "username" : "tutorial"
    "password" : "tuto2018"
```

```
}  
}
```

For more information or to perform other operations, refer to the [IoT Platform](#) documentation.

1.3.2. Data visualization on Grafana

Users not registered do not have permission to configure Grafana dashboards. If it is necessary to visualize data, contact Lisha.