How to use the IoT (internet of things) System

(www.IoT.fm)

1. Login into system

Anyone can use the default uid=demo and password=demo to login into the IoT system.

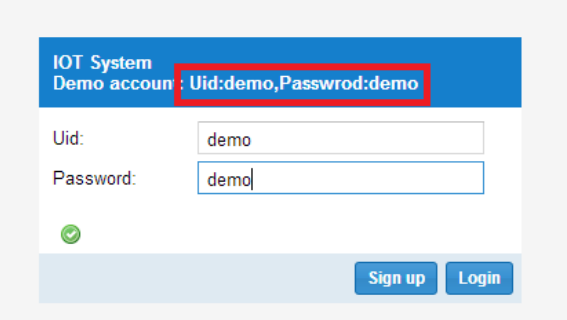

Fig. 1 Login into IoT system.

2. User Guide

In this user guide, you can read many methods about the communication between Arduino and the remote server. That is, HTTP protocol and TCP protocol.

3. Get API Key

Since in the Arduino code, we may use uid and password to set up a sensor node, and the Arduino code need the uid and password. To encrypt the password, in this part, the password has been encrypted for the safety. As shown in Fig. 2, the uid=demo, password=demo, and the key is c514c91e4ed341f263e458d44b3bb0a7.

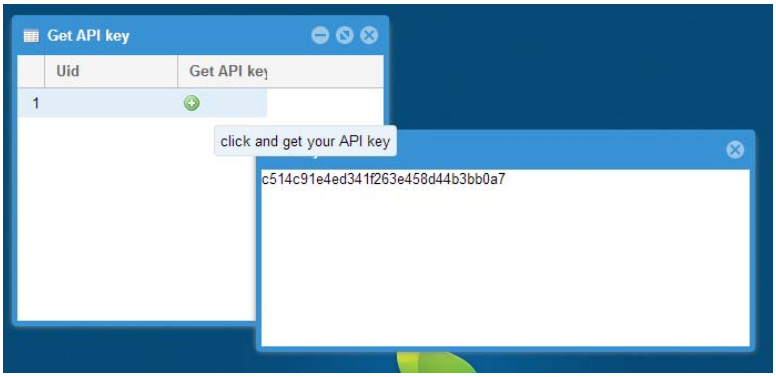

Fig. 2 Generate the key

4. Device Control

In the Device Control, we can add the sensor node. For example, in the first experiment, we set up a arduino node to receive the temperature from LM35 based on the Arduino board.

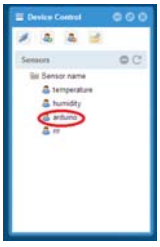

Fig. 3 Add a temperature sensor node “arduino”

Certainly, in this part, anyone can add or delete a sensor node. In addition, we can send a control command to control the sensor node. For example, we can send a “on” command to let a led light, and “off” to let a let dark.

5. Data Display

In this part, you can read the sensed data from the Arduino board. For example, if you want to show the arduino sensor node data, you just let mouse move to arduino pie. At this time, you can read the arduino sensor data. The left below subfigure shows the history sensed data.

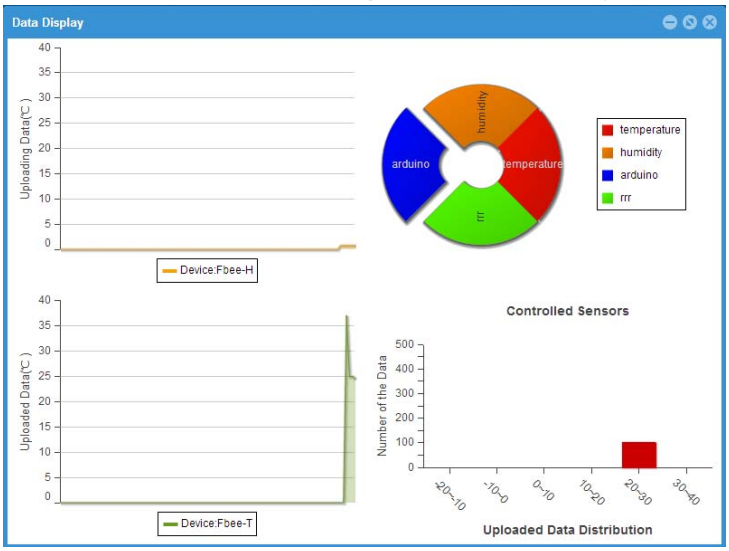

Fig. 4 Data disply

6. Data List

Data List is used to check whether the sensed node upload the data succefully. Fig. 5 shows the sensed data from the LM35 on the Arduino board in the next experiment. So, we can know that LM35 has successfully upload the temperature to the remote server.

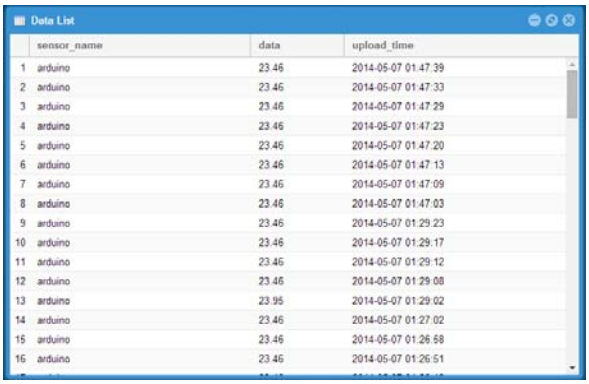

Fig. 4 Data exhibition at the remote server.

More stronger function are found in the near future. Please focus on it continually.