# Welcome to StormAPP | StormPI | StormServer

#### Requirements

Storm can be deployed on any hardware device which supports the following software requirements.

- 1. Mac OSX
- 2. Windows 10
- **3.** Java 1.8
- **4.** Ubuntu 16.4

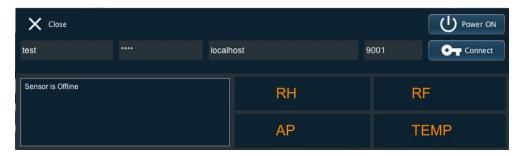
## Start the StormServer, StormSensor, StormAPP

- a. Run "RunServer.sh"
  - i. sh RunServer.sh
- **b.** Run "RunSensor.sh
  - i. sh RunSensor.sh
- c. Run "RunClient.sh"
  - i. sh RunClient.sh

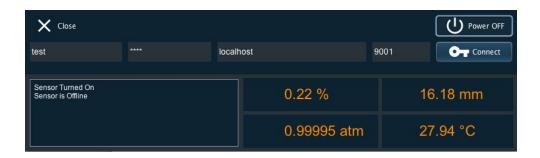
```
Dinushankas-MacBook-Pro: Archive3 Rama41222$ sh RunSensor.sh
StormPI sensor
R.G.D. Nayomal | IT15027948
Blog https://rama41222.blogspot.com
Starting up the StormServer
Dinushankas-MacBook-Pro:Archive3 Rama41222$ sh RunServer.sh
Storm Server
R.G.D. Nayomal | IT15027948
Blog https://rama41222.blogspot.com
Starting up the StormServer
Bye
Dinushankas-MacBook-Pro:Archive3 Rama41222$ sh RunClient.sh
Storm App
R.G.D. Nayomal | IT15027948
Blog https://rama41222.blogspot.com
Starting up the StormClient
Dinushankas-MacBook-Pro:Archive3 Rama41222$
```

#### PowerON the sensor

Before



After



Now that your sensor is running. Let's start the server. Click on the "Start Server" button of StormServer. Now the Storm Server is Running. Let's Connect the Sensor to the Server. To do this, Sensor should have a proper login. Example logins are given below.

#### Colombo sensor

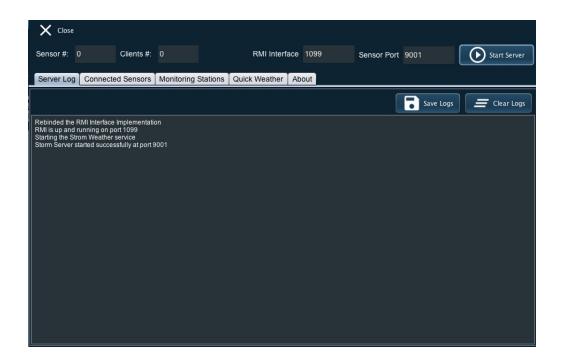
Username: test

Password:test

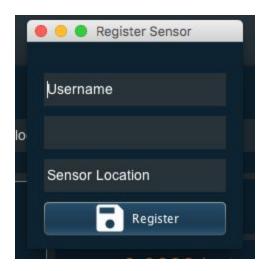
## Kandy sensor

Username: test1

Password:test1



But Let's Register a new Sensor. To do this let's clear the username and press connect in the



sensor. This will spawn a registration dialog as given below.

Let's fill out the fields and press register

Username : test12 Password : test12

Locaton: Monaragala



After pressing register, the registration details will be stored in the Storm Server and it will automatically logs you into the server. Now the sensor will start to broadcast the weather data to the StormServer. Check the given image below.



Now we have connected the Sensor to the Server through **Socket interface**.

Since there's no use of just sending the weather data to the StormServer Let's add some monitoring stations, so that the monitoring stations will be able to measure the weather data.

### **Client Logins**

Username: admin

Password: 123

This case, the server provides a common key, so that monitoring stations doenst have to be registered in the server. They can have the server key and subscribe to the weather service.

Using the credentials given above, press the connect button.

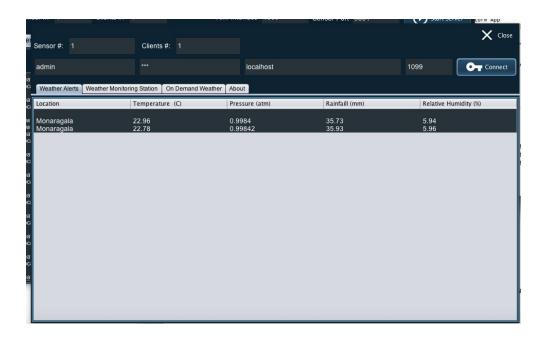
After Successfully connecting the client to the server, the server log will have the following entry.

```
Weather Update From 127.0.0.1
{"location":"Monaragala","temperature":"22.96","rainfall":"35.73","pressure":"0.9984","humidity":"5.94","isCritical":true}

New Monitoring Station Added
New Monitoring System Weather request Authenticated
Weather Update From 127.0.0.1
{"location":"Monaragala","temperature":"23.02","rainfall":"35.56","pressure":"0.99845","humidity":"5.95","isCritical":true}

Weather Update From 127.0.0.1
```

Now that the client is connected to the Server, the monitoring station will be able to observe weather. (Weather alerts and weather monitoring)



The client has ondemand weather updates. Where the client can select a weather location to receive weather updates. To get on demand weather, Navigate to the on demand weather tab and select a available location to get weather.

