

User Guide

Weather Monitoring System

Server

Setting up

Edit the **server.conf** file with the required settings.

@server_com	Port for socket communication
	Default: 6666
@rmi_port	Port for the RMI Registry
	Default: 1099

Running the Server

1. Start **rmiregistry**
2. Start the server using the **Server.jar** executable jar file.

Managing users

Add New User

Command format: @add <username> <password>

Example: @add user123 pass123

Remove Existing User

Command format: @remove <username>

Example: @remove user123

Note:

1. AES Encryption is used to secure your usernames and passwords. User details are stored in **users.conf** file.
2. Server needs to be restarted once a change is made to its configurations
3. If a user is removed while he is connected, automatically his session gets destroyed.

Shutting down the Server

1. Type 'exit' and press Enter.

```
Loading configurations...
Socket communication port: 9999
RMI port: 1099
Server started...
Listening on port 9999 for sensors
Type 'exit' to shutdown server
exit
Shutting down server...
```

Figure 1: A healthy run

Sensor

Setting up

Edit the **sensor.conf** file with the required settings.

@sensor_com	Port for socket communication
	Default: 6666
@server	Server's IP address
	Default: localhost

Running the Sensor

1. Start the sensor application using the **Sensor.jar** executable jar file.

Shutting down the Sensor

2. Type 'exit' and press Enter.

```
Loading configurations...
Server: localhost:6666
Enter location: Kandy
Available Sensor Types:
1.      Air Pressure
2.      Humidity
3.      Rainfall
4.      Temperature

Select type of sensor: 3
Connected to server
Type 'exit' to stop the sensor
exit
Sensor shutting down...
```

Figure 2: A healthy run

Monitoring Station Dashboard

Setting up

Edit the **station.conf** file with the required settings.

@rmi_host	Host address for RMI
	Default: localhost
@rmi_port	Port for RMI
	Default: 1099

Running the Station

1. Start the station application using the **Station.jar** executable jar file.
2. Login to the system

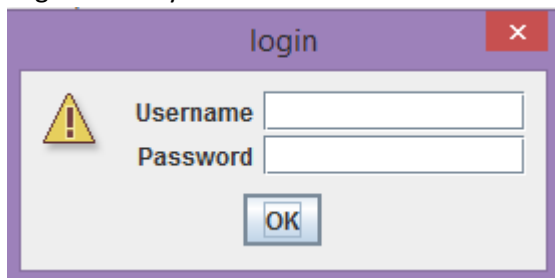


Figure 3: Login Popup

Default: Username: user
 Password: pass

3. Tool tips are available on the dashboard. Move your cursor on to elements to see what they do.

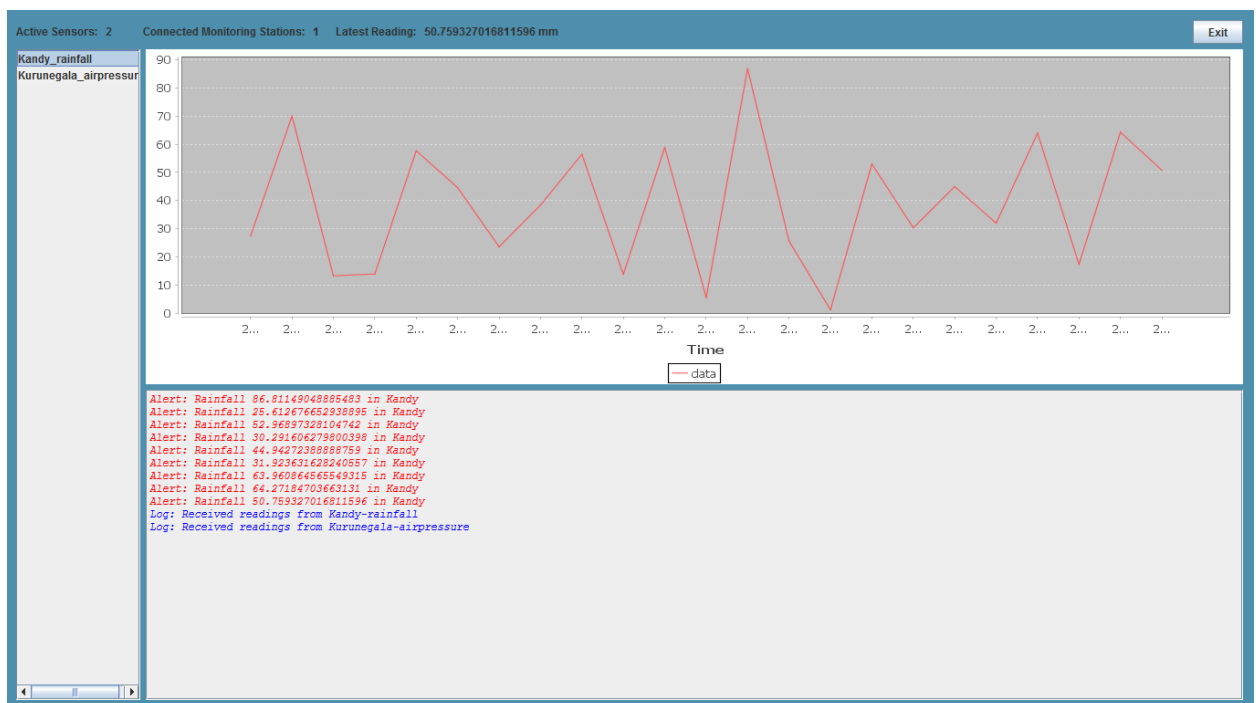


Figure 4: Dashboard

Shutting down the Station

1. Click on the 'Exit' button on the right top corner and confirm.