

Temp_TH

By *MooPing* Group

6010545021 Kornphon Noiprasert

6010545692 Kunyaruk Katebunlu

Overview

This project is the visualize temperature project that can ...

- ✓ Show the average temperature, wind speed and UV index of each region in Thailand. (Result update every 10 minutes)
- ✓ Show the average temperature, wind speed and UV index of Thailand. (Result update every 10 minutes)
- ✓ Fill in the temperature value for each province in Thailand.

Data Sources

We're getting data from ...

1. **Form** in Node-RED (only temperature value)
2. **API** : <http://www.openweathermap.org/>



OpenWeather

We're calling API for
all 77 provinces!

Database

Database that we're using in this project is ...



➤ phpMyAdmin for MySQL

th_avg_region_data

region_name	text
date_iso	text
avg_temp	float
avg_wind_speed	float
avg_uv_index	float

th_data

date_iso	text
avg_temp	float
avg_wind_speed	float
avg_uv_index	float

th_province_from

province_name	text
date_iso	text
temp	float

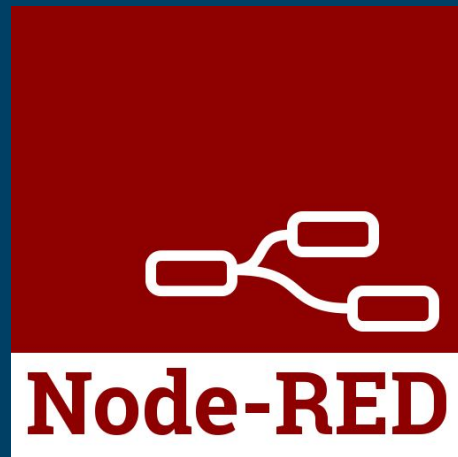
th_province_api

province_name	text
date_iso	text
temp	float
weather	float
wind_speed	float
uv_index	float

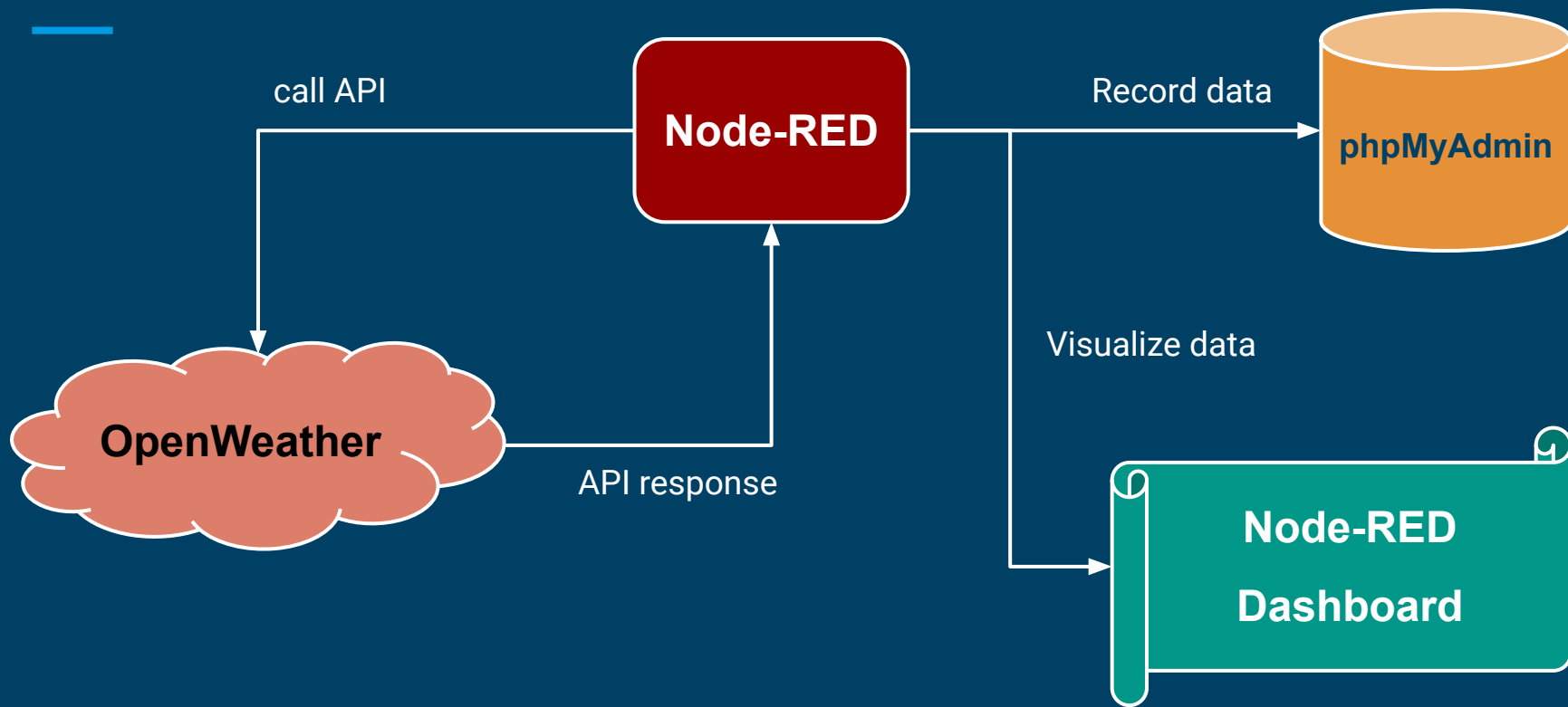
Data Visualization & Data Integration

Our project integrate and visualize data by using ...

- **Node-RED**
- **Node-RED Dashboard**



Architecture



Problems while doing?

- ★ **“Take a lot of time”** because we’ve created nodes (for call API, form, calculate, join data, and etc.) for ALL 77 provinces.
- ★ **“Screen lag”** while doing because we’ve about 600+ nodes in our flow!!
- ★ **“Node-RED failed to login”** but this problem happen just about 1 hour then it can login as it should.
 - Try to do **“Heat map”** but not success due to the less time for study new library and apply.

Demonstration

<https://158.108.34.31/red/b6010545692/ui/#!/7?socketid=gH3UstUqd3Lly9YDAAhD>