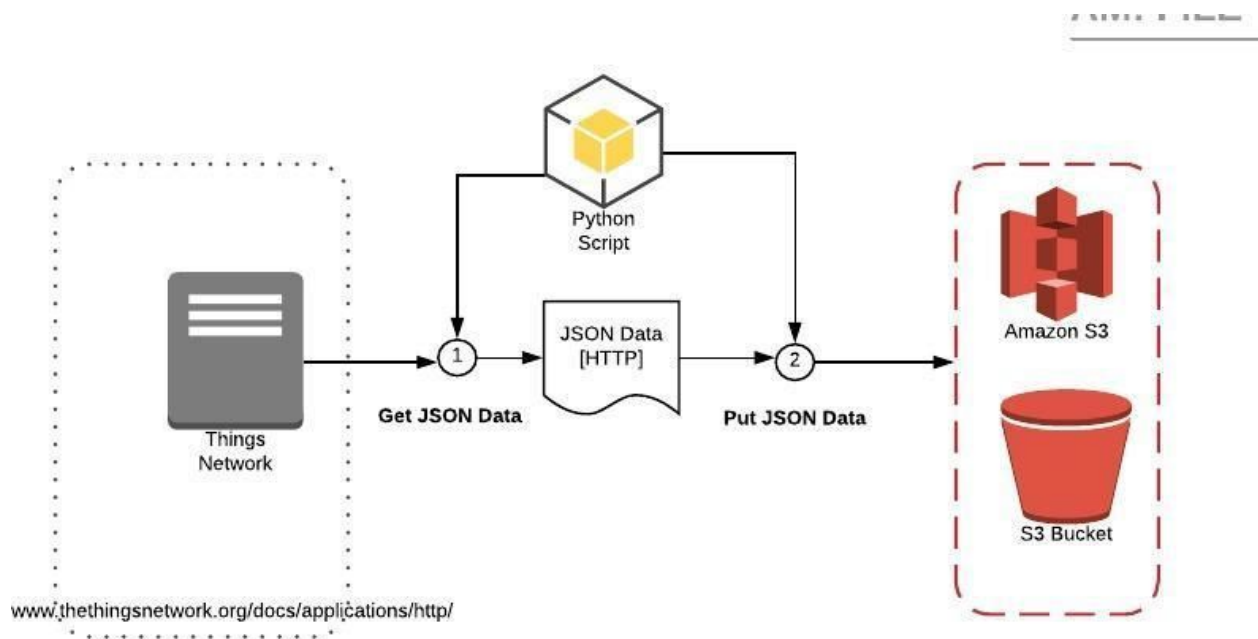


Project Overview

We want to develop a python script that must automatically pull JSON data from the things network API and store in an AWS S3 bucket as an object. We already have an AWS infrastructure running to accept the data although are now seeking help to develop a python script that can automate the storage of the JSON data.

The purpose of this project is to develop a python script to:

- Automate the storage of JSON data as an object from the things network to AWS S3 Storage Bucket.
- Contact the things network channel to retrieve the JSON data on a regular interval.
- Be deployable on any web server or local development environment.
- Contain parameters that can be easily updated after work is delivered.



JSON Out Sample

```
{
  "app_id": "ag1",
  "dev_id": "agsen1",
  "hardware_serial": "0077467B17B29969",
```

```

"port": 1,
"counter": 1,
"payload_raw": "AQg0FAEAmAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA==",
"payload_fields": {
  "Bus_Voltage": 0,
  "Float": 0,
  "Humidity": 51.21,
  "Identity": 1,
  "Load": 389.12,
  "Load_Current": 0,
  "Load_Voltage": 0,
  "RFID": "-48-48-48-48-48-48-48-48-48-48-48-48-48-48-48",
  "Shunt_Voltage": 0,
  "Temperature": 21
}
}

```

JSON Output Schema

| Object | |
|-----------------|---------|
| app_id | string |
| dev_id | string |
| hardware_serial | string |
| port | integer |
| counter | integer |
| payload_raw | string |

| Payload_Field | |
|---------------|---------|
| Bus_Voltage | integer |
| Float | integer |
| Humidity | number |
| Identity | integer |
| Load | number |
| Load_Current | integer |
| Load_Voltage | integer |
| RFID | string |
| Shunt_Voltage | integer |
| Temperature | integer |

Technical Details

Source Data

- We are currently using the things network
<https://www.thethingsnetwork.org/docs/applications/http/>

Infrastructure

- We are currently using an AWS EC2 with S3 bucket setup.

Testing

The python script must:

- Be deployable on any development environment type for testing purposes.

Budget

We'd like to spend \$X AUD but are willing to go to \$Y AUD for the right proposal.

Project Timeline

We expect the project to be delivered within 5-10 days of sign-off on contract.