


Visualization (Grafana)

# Grafana



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# Grafana

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## Download Grafana

Nightly Builds

Version:

8.0.3

Edition:

Open Source

License:


AGPLv3

Release Date:

June 18, 2021

Release Info:


[What's New In Grafana 8.0.3](#)  
[Release Notes](#)


 **Grafana Cloud**


Get Grafana without the overhead involved with installing, maintaining and scaling your observability data.


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The Enterprise Edition includes all the features of the Open Source Edition. All open source functionality can be used free with the option to upgrade to the full paid Enterprise feature set, including support for Enterprise plugins.

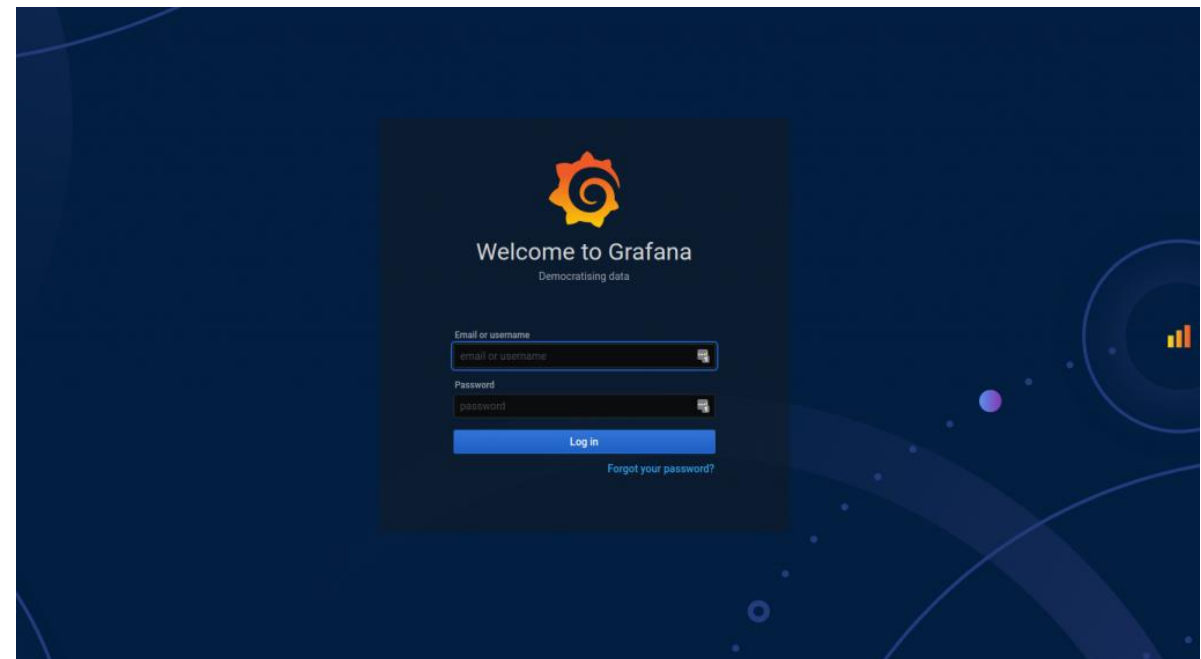
 Linux

 Windows

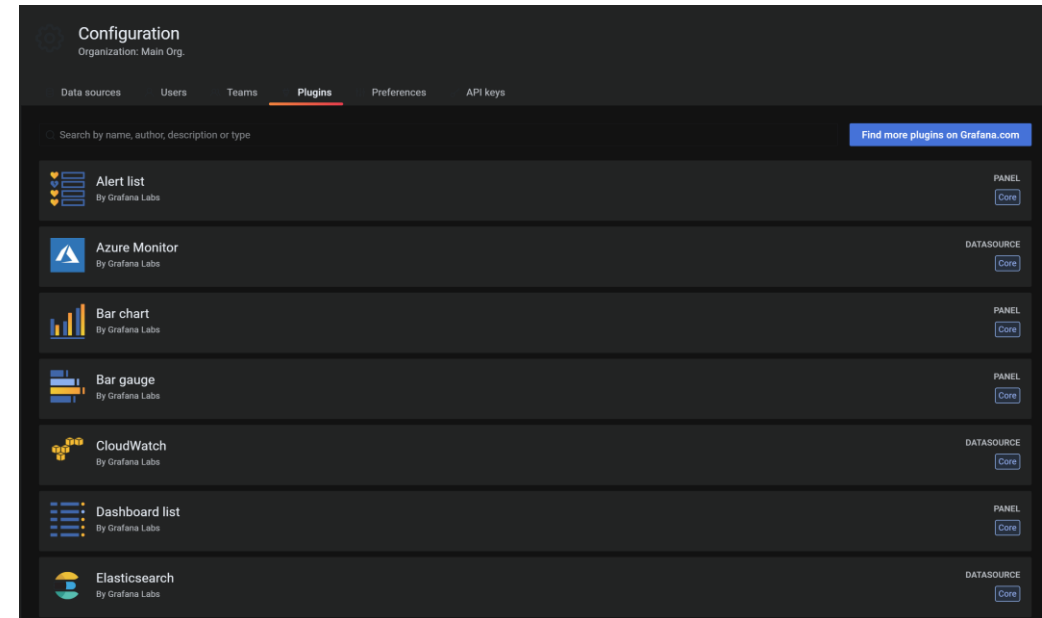
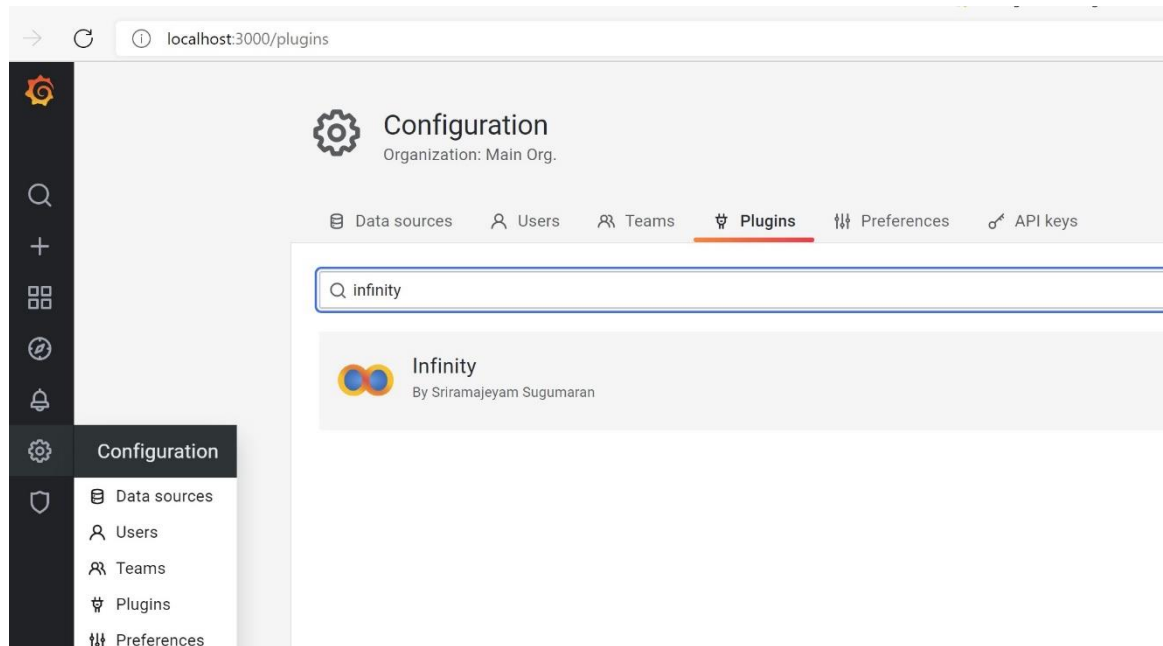
 Mac

 Docker

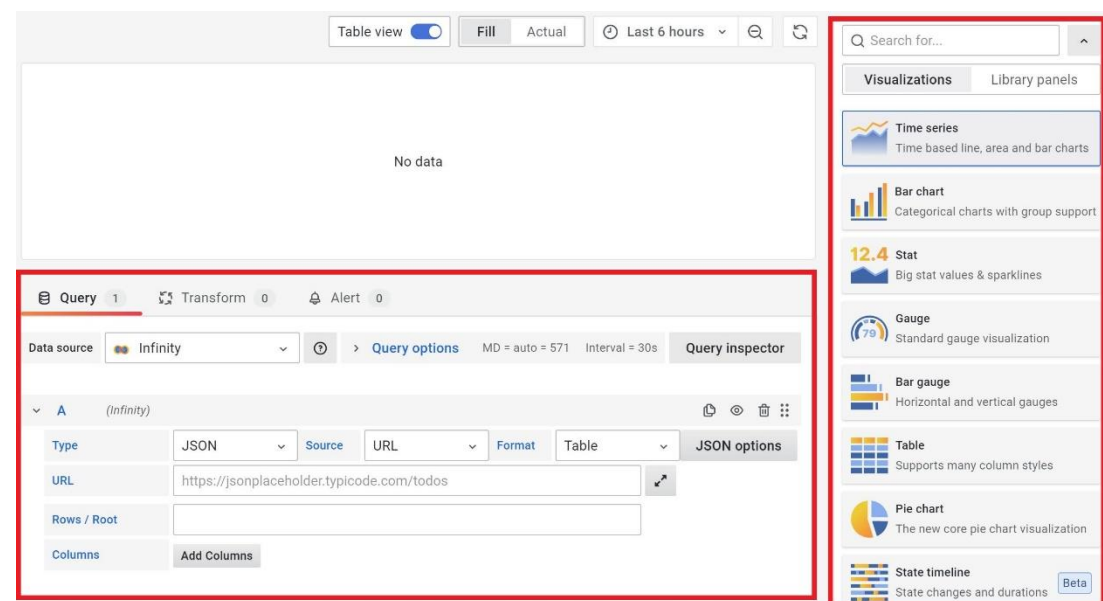
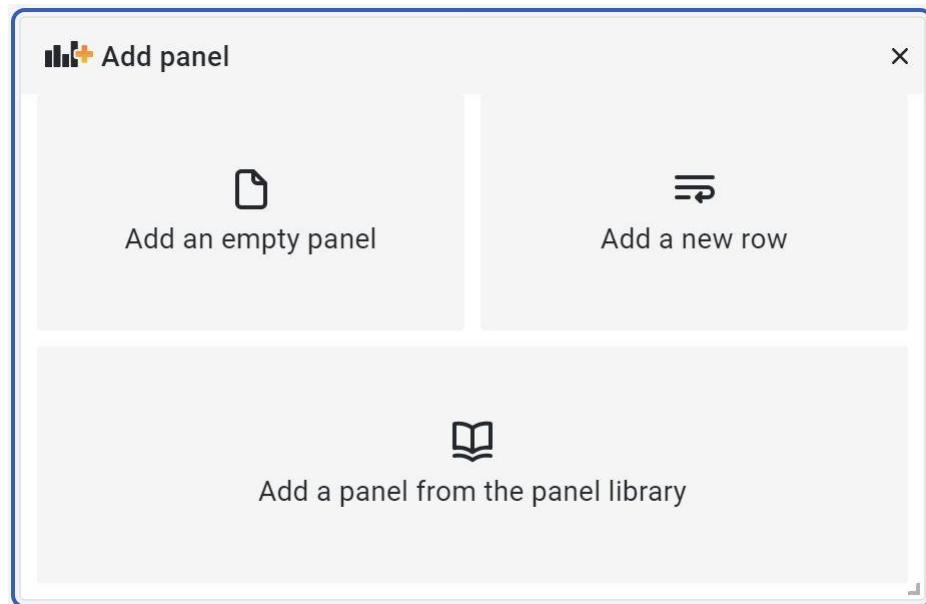
 ARM



# Configuration



# เพิ่ม Dashboard



# ข้อมูล

 <https://esp32micropython-c827d.firebaseio.com/>

**esp32micropython-c827d**



**-MdgJfrQdpUSWbGJ-JPt**

**humidity:** 75  
**temperature:** 30  
**time:** "2021-07-02T19:16:00"

# Query ข้อมูล

Query 1 Transform 0 Alert 0

Data source: Infinity MD = auto = 528 Interval = 30s Query inspector

Type: JSON Source: URL Format: Table JSON options

URL: <https://esp32micropython-c827d.firebaseio.com/.json>

Rows / Root: \$.\*

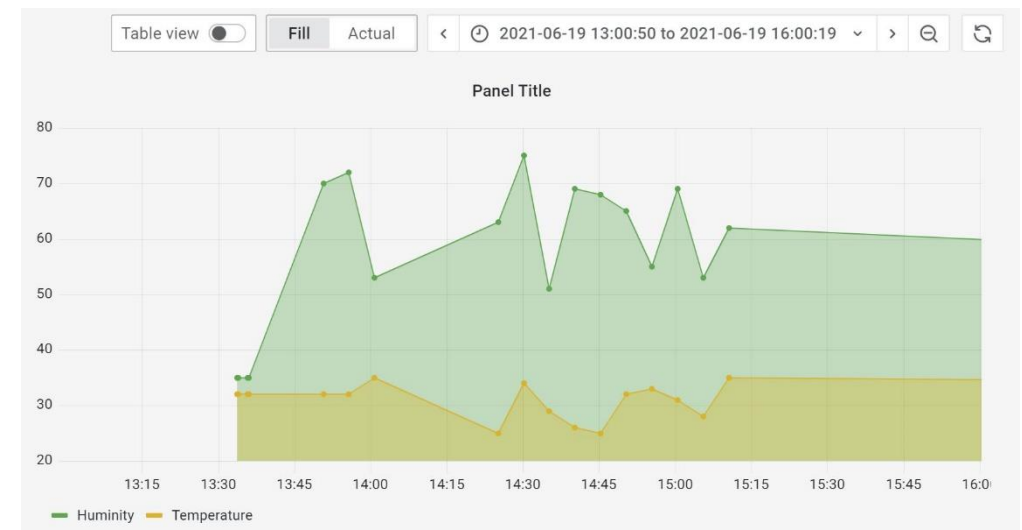
Column	Selector	as	Column	Timestamp
Column 1	time	as	Time	Timestamp
Column 2	humidity	as	Humidity	Number
Column 3	temperature	as	Temperature	Number

Results Filter

<https://esp32micropython-c827d.firebaseio.com/.json>

Table view ☒ Fill Actual < 2021-06-19 13:00:50 to 2021-06-19 16:00:19 > 🔍 ↺

Time	Humidity	Temperature
2021-06-19 13:33:45	35	32
2021-06-19 13:33:53	35	32
2021-06-19 13:34:00	35	32
2021-06-19 13:35:47	35	32
2021-06-19 13:35:54	35	32
2021-06-19 13:36:02	35	32
2021-06-19 13:50:43	70	32
2021-06-19 13:55:45	72	32
2021-06-19 14:00:48	53	35
2021-06-19 14:25:09	63	25

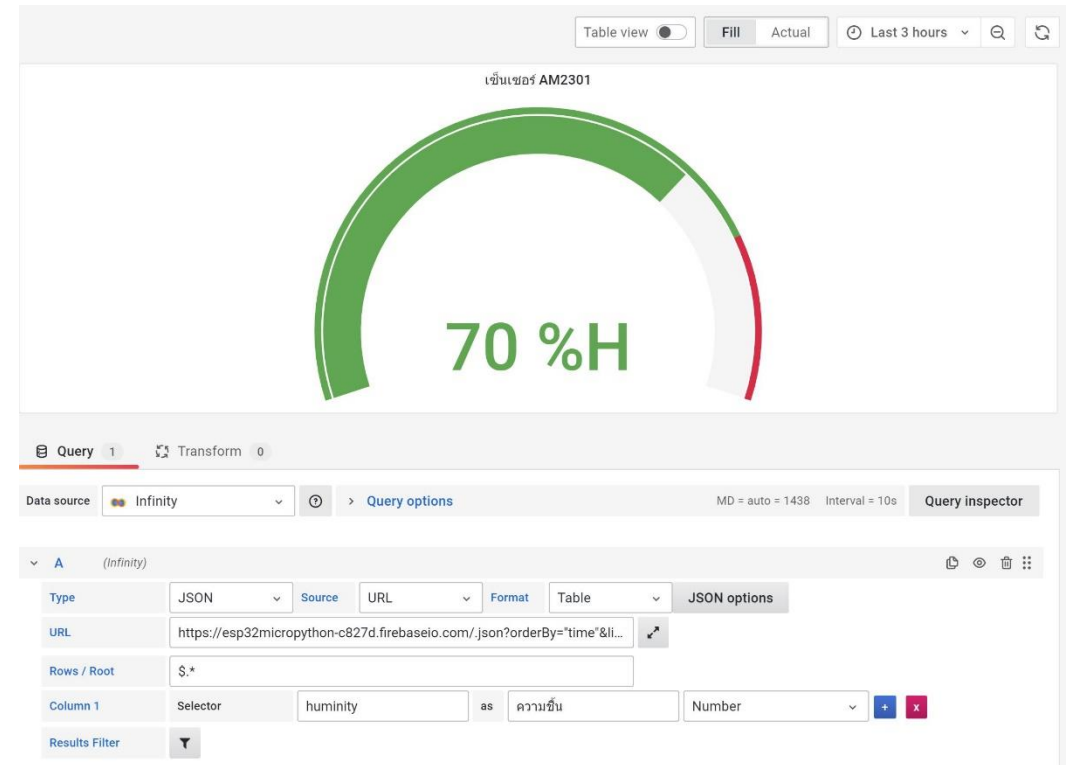


# การแสดงผลข้อมูลล่าสุดจาก

- ทำ index ให้ข้อมูล

```
1 {
2   "rules": {
3     ".read": "true", // 2020-12-20
4     ".write": "true", // 2020-12-2
5     ".indexOn": ["time"]
6   }
7 }
8
9
```

ตัวอย่างคำสั่งของ ไฟร์เบส ได้แก่ startAt endAt limitToFirst limitToLast และ equalTo



[https://esp32micropython-c827d.firebaseio.com/.json?orderBy="time"&limitToLast=1](https://esp32micropython-c827d.firebaseio.com/.json?orderBy=)



# แบบฝึกหัด

- เขียนโปรแกรม อ่านค่าอุณหภูมิ ความชื้น จากเซ็นเซอร์ เพื่อจัดเก็บยัง Firebase ดังนี้

 <https://esp32micropython-c827d.firebaseio.com/>

**esp32micropython-c827d**

 **-MdgJfrQdpUSWbGJ-JPt**

**humidity: 75**

**temperature: 30**

**time: "2021-07-02T19:16:00"**