



網管資料視覺化系統建置分享

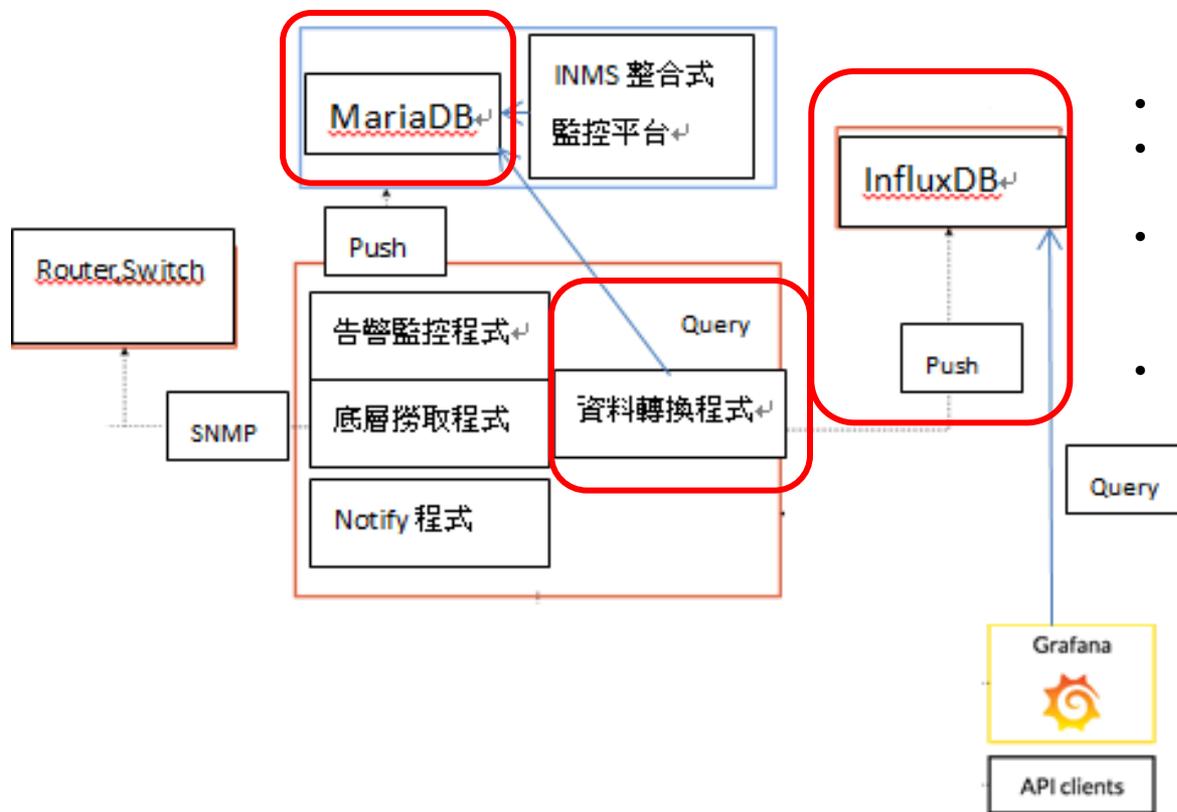
國家高速網路與計算中心 林孟璋

109年10月29日

綱要

- 網管資料轉換
- Grafana介紹
- 視覺化呈現

• 網管資料轉換

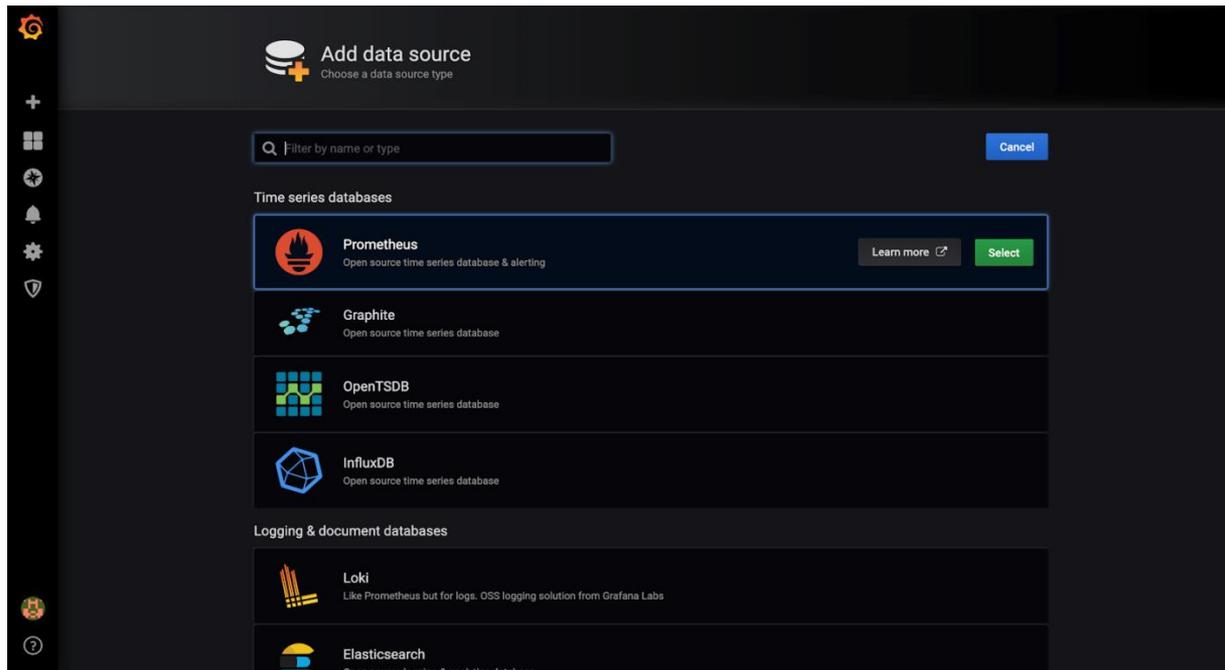


- MariaDB (特定資料表/欄位)
- InfluxDB (僅寫入Field,不寫 Tag)
- 以流量為例,Query 出時間 /InTraffic/OutTraffic,寫入 InfluxDB
- 處理歷史資料,每五分鐘資料

• Grafana介紹

• 特色

1. 支援多種資料來源(Data Sources)
2. 友好的查詢介面與視覺化設定
3. 豐富的Plug-ins 支援
4. 多元化的通知頻道(Notification channels)



• Grafana介紹

• 優點

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Features Contribute Dashboards **Plugins** Download

Plugins

Official & community built plugins

Product updates
Sign up to receive occasional product news and updates:

Name / Description

Plugin Type:

- All
- Panel
- Data Source
- App

Enterprise Plugins:

APPLICATION



Zabbix
by Alexander Zobnin
Zabbix plugin for Grafana

PANEL



Worldmap Panel
by Grafana Labs
World Map panel for Grafana. Displays time series data or geohash data from Elasticsearch...

APPLICATION

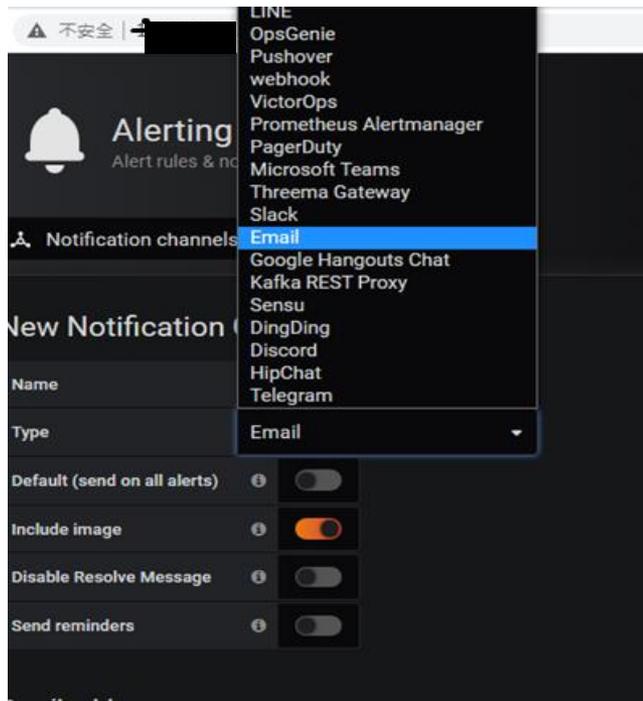


NS1 for Grafana
by NS1
NS1 for Grafana allows for the collection and graphing of NS1 data over time.

• Grafana介紹

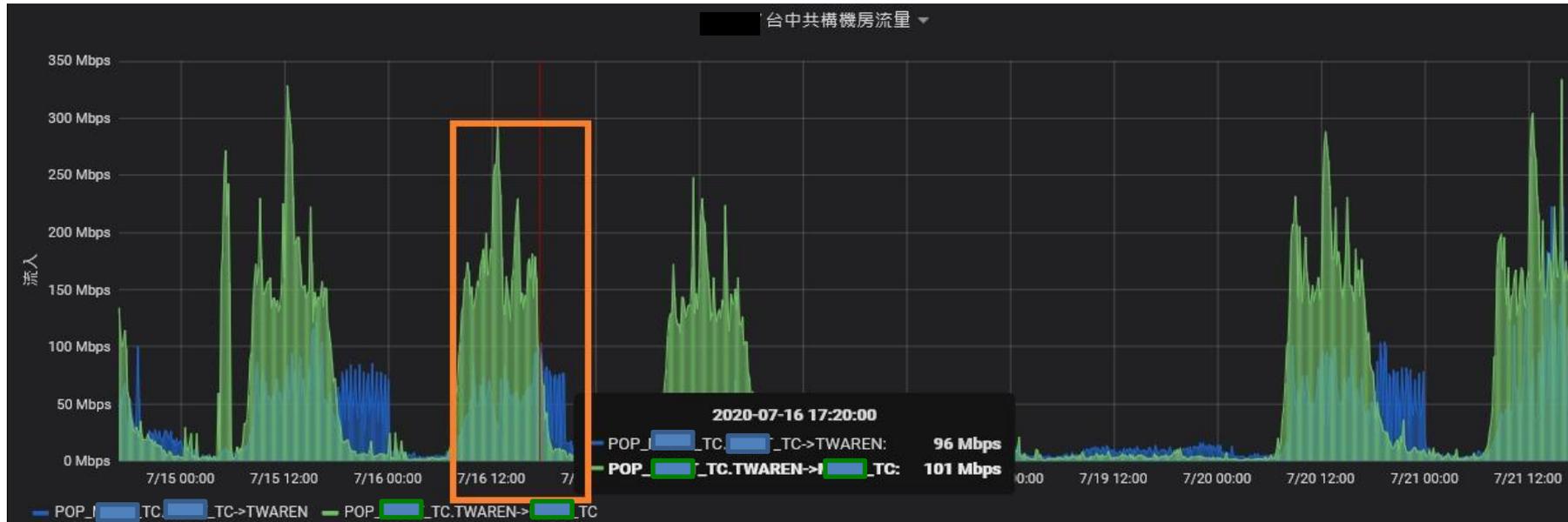
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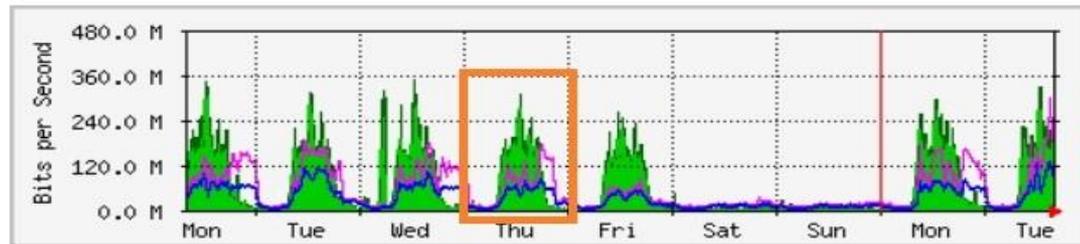
• Grafana介紹

• 與MRTG的差別



'Weekly' Graph (30 Minute Average)

MRTG 圖



上圖為Grafana所繪製,可看出7/16當時的流量,尖峰時段流進TWAREN為96 Mbps,但下圖MRTG無法看出,因為MRTG已經被aggregate

	Max	Average	Current
TWAREN->TC	448.2 Mb/s (44.8%)	62.0 Mb/s (6.2%)	224.7 Mb/s (22.5%)
TC->TWAREN	293.3 Mb/s (29.3%)	31.6 Mb/s (3.2%)	129.3 Mb/s (12.9%)

- 視覺化呈現-設定Data Sources

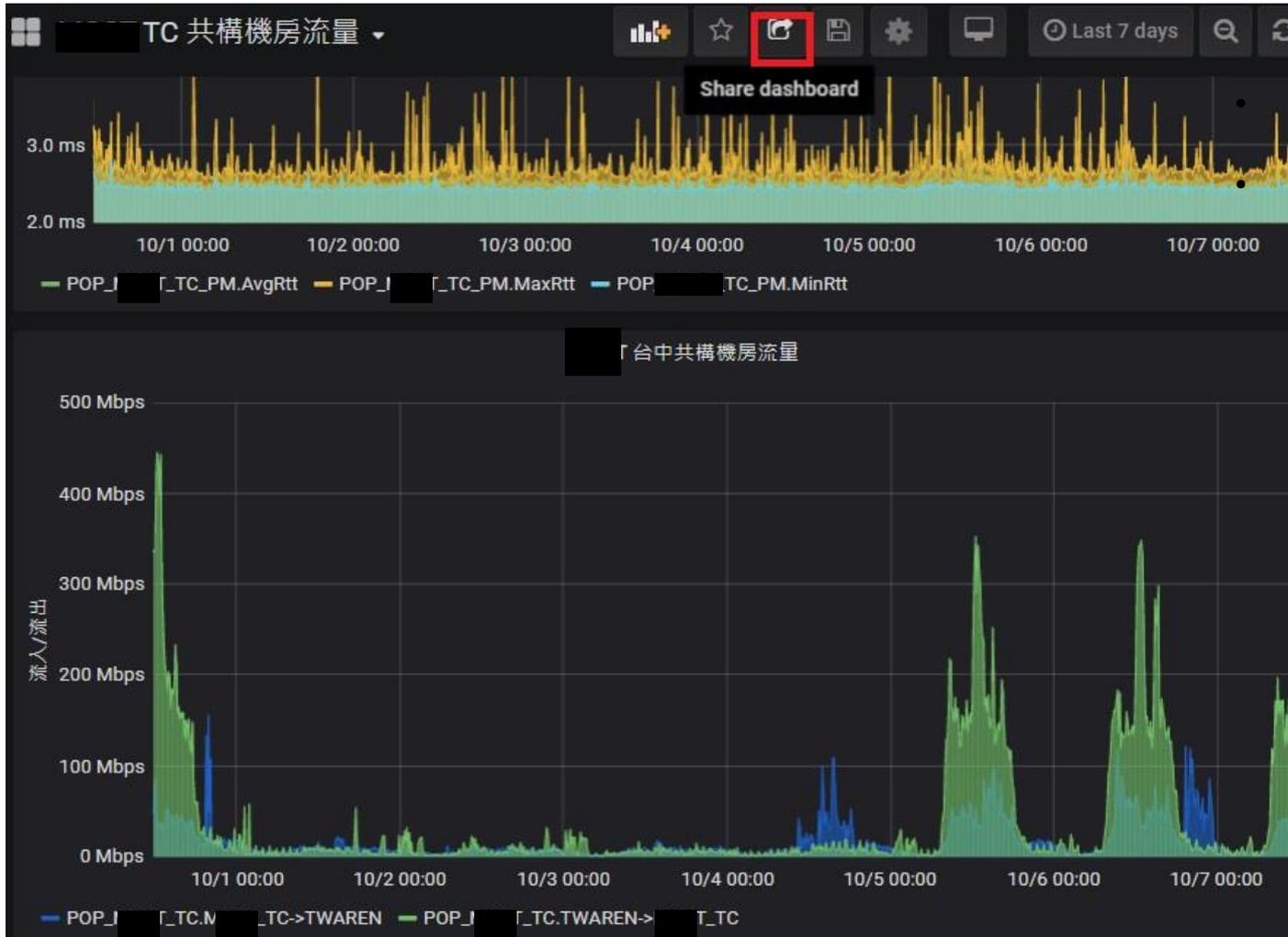
The screenshot displays the configuration page for an InfluxDB data source. The interface is dark-themed and includes the following sections:

- Header:** Shows the InfluxDB logo and the title "Data Sources / InfluxDB" with a sub-label "Type: InfluxDB".
- Settings:** A tab labeled "Settings" is active.
- Name:** The name of the data source is "InfluxDB", which is highlighted with a red box. A "Default" toggle switch is present to its right.
- HTTP:** This section contains:
 - URL:** The URL is "http://localhost:8086", highlighted with a red box.
 - Access:** A dropdown menu is set to "Server (Default)", with a "Help" link to its right.
 - Whitelisted Cookies:** A field labeled "Add Name" with an information icon.
- Auth:** This section contains several authentication options, each with a checkbox and an information icon:
 - Basic Auth: With Credentials:
 - TLS Client Auth: With CA Cert:
 - Skip TLS Verify:
 - Forward OAuth Identity:
- InfluxDB Details:** This section contains:
 - Database:** A text input field, highlighted with a red box.
 - User:** A text input field.
 - Password:** Two text input fields, both labeled "Password".
 - HTTP Method:** A dropdown menu set to "GET" with an information icon.

- 視覺化呈現- 新增Dashboard 與Panel



- 視覺化呈現- 完成Dashboard並設定共享



可新增另一 RTT Panel於 同一個Dashboard

敬請指導

