Using StackPath’s open-sourced Scouter Project to monitor StackPath’s edge compute

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About me

>>> from aaron_couch import ABOUT_ME
>>> for (key, value) in ABOUT_ME.items():
...    print(f"{key}: {value}"
...
name: Aaron Couch
title: Web Performance Engineer at StackPath
hobbies: ['Python', 'Automation', 'Video Games']
1. Please open:

2. Discuss core components of the workshop:
   - StackPath Edge Compute Platform
   - Scouter API
   - InfluxDB
   - Telegraf
   - Grafana

3. Demo Time!
   - Deploy the monitoring stack
   - Setup data collection via InfluxDB + Telegraf + Scouter
   - Visualize the data in Grafana

4. Q&A Time!
Core components

Let’s quickly discuss the core components that make up our monitoring stack before proceeding to the demo.
Summary

• StackPath’s edge compute is a cloud-computing platform with a global footprint that offers instant deployment of both containers and virtual machines at the edge.

Key Features:

• Anycast capabilities
• Easy-to-use network policies
• Built-in metrics
• Developer friendly management API
Scouter is a simple containerized API that allows you to perform various troubleshooting utilities remotely.

**Those utilities include:**

- Ping
- Traceroute
- HTTP request
- Emulated browser request
- DNS lookups
- DNS (UDP) traceroutes
InfluxDB is an open-sourced time series database developed by InfluxData.

**Key Features:**
- Accepts data via HTTP, TCP and UDP
- Fast and scales very well
- Offers SQL-like query language, InfluxQL
Telegraf is an open-source server agent for collecting, processing, aggregating, and writing metrics.

**Key Features**

- Offers a wide array of input and output plugins.
- Also developed by InfluxData, so works very well with InfluxDB.
Grafana is an open-source solution for running data analytics and monitoring.

**Key Features**

- Can connect with every possible datastore.
- Highly customizable dashboards.
- Built-in InfluxDB support and others.
Demo Time!

The following demo will be broken out into six parts and towards the end we should have a fully built, globally deployed, monitoring stack!
CREATE
1. The performance metric collection workload
2. The globally deployed Scouter API workload

INSTALL
3. InfluxDB on our VM
4. Telegraf on our VM
5. Grafana on our VM

EXPLORE
6. Exploring our performance data!
Creating the performance metric collection workload

Let's begin our journey by creating our first Edge Compute workload within the StackPath 2.0 portal.
Creating the globally deployed Scouter API workload

Let's continue by deploying the Scouter API globally so we can collect performance metrics from anywhere that edge compute is available.
Installing and configuring InfluxDB on our VM

Let’s get InfluxDB v1.7.1 downloaded, installed and configured on our VM.
Installing and configuring Telegraf on our VM

Let's get the Telegraf server agent installed so we can actually start pulling performance metric from the Scouter API.
Installing and configuring Grafana on our VM

It’s time to start visualizing some data!
Exploring our performance data!

Let’s quickly deep dive into our performance data.
Q&A