Platform Engineer Test

Scenario

At Gousto we use the open source event analytics platform Snowplow. Snowplow is made up of a number of different components, one of those being a collector. The collector receives data from Snowplow trackers and logs that data to S3 for storage and further processing.



We would like to introduce a Clojure based collector into our environments. The Clojure collector has been designed to run on Amazon's Elastic Beanstalk. However, we have invested heavily at Gousto in CloudFormation and Ansible based configuration management and so would like to deploy the collector in a similar manner. Your task is to create a CloudFormation template and any other associated supporting files that completely encapsulates the deployment of a Clojure based collector into an AWS environment.

The Clojure collector itself is available as a WAR file from http://d2io1hx8u877l0.cloudfront.net/2-collectors/clojure-collector/clojure-collector-1.1.0 -standalone.war

Requirements

- The WAR file should be deployed into Tomcat 8
- · Please feel free to choose an OS you feel most comfortable with
- All AWS components should be defined using a CloudFormation template or set of templates
- Configuration of the instances themselves should be done using a configuration management tool (We use Ansible but feel free to choose another)
- The Clojure collector should be deployed in a highly available manner
- The Clojure collector should adjust to increases in load
- In order to support the Clojure collector I would like to be alerted when CPU goes above 70% for more than 10 minutes

Not expected

- In order to be able to process the logs created by the Clojure collector they would normally be shipped to S3, we are not expecting log shipping for this task
- We are not expecting to see any other components of the snowplow architecture

Tips

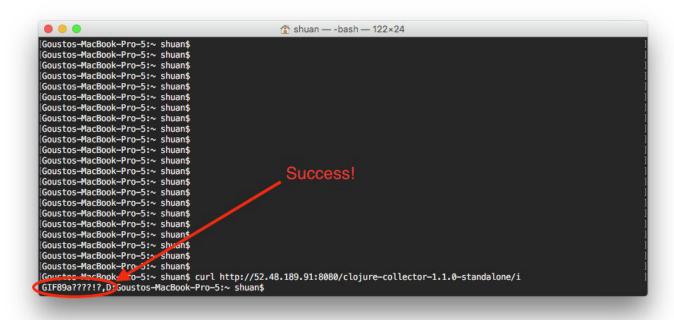
- Are all parts of your architecture highly available?
- What about the configuration management tool itself? (Assuming you need infrastructure to run your config management tool at all)

What does success look like?

The Clojure collector is simply used to drop a 1x1 tracking pixel onto the page. To test your collector has been deployed correctly please make the Curl Request as follows:

curl http://<endpoint>:8080/clojure-collector-1.1.0-standalone/i

You should see a response contain a GIF image:



What to send us

Please send back a zip file containing all of the assets required for us to stand up your CloudFormation template in our AWS account using our default VPC

Please also include a README explaining your solution along with any relevant instructions to get things set up.

Good luck!