TIG Stack Reference Architecture James Gregg / EdgeX DevOps WG 1/24/2019

Simple TIG Stack

Launch Instance Connect Actions					
Q search : TIG 🛛 Add filter					
Name -	Instance ID -	Instance Type 👻	Availability Zone 👻	Instance State	Status Checks
rrs-tig	i-0617f792b469aecb2	t2.medium	us-west-2a	running	2/2 checks passed
Bastion	i-0e8d9ca7722b426d8	t2.nano	us-west-2a	running	2/2 checks passed

amzn-ami-nvm-zu	18.03.0.20180412-x86_64-gp2 (ami-608cef13)
Description	Amazon Linux AMI 2018.03.0.20180412 x86_64 HVM GP2
Status	available
Platform	Amazon Linux
Image Size	8GB
Visibility	Public

n; hum 2010 02 0 20190412 x96 64 mp2 (am; 6h9aaf12)

100 gb

Persistent storage local to the server

Docker-ce

Docker-compose

SSL certificate on FE public facing interface

Patch management automated

Network endpoints exposed only to the EdgeX Sandbox appliances which are spun up when sandbox test is created.

Long lived for collection of sandbox telemetry data

Grafana

If long lived data persistence is required, may need IaC to set backend database to another server (DBaaS)

TIG Stack Solution Architecture

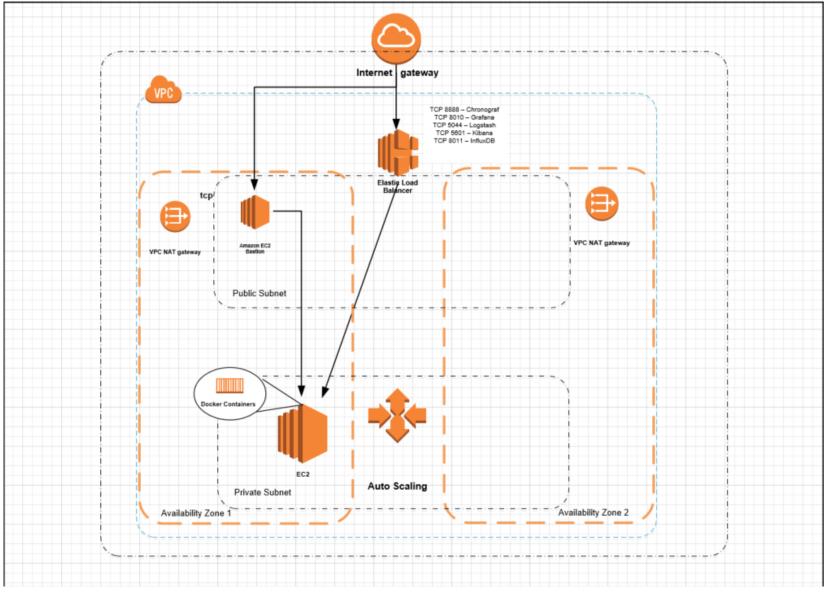


Runs on Appliance

• Telegraf container

Runs on Long Lived Server

- InfluxDB container
- Grafana container with Exposed web UI for dashboard



TIG / ELK combination

_ (/ Amazon Linux AMI \						
https://aws.amazon.com/amazon-linux-ami/2018.03-release-notes/						
security, out of 3 available						
o apply all updates.						
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS						
NAMES						
e82e2f03ca0a sebp/elk "/usr/local/bin/star" 2 weeks ago Up 2 weeks 0.0.0.0:5044->5	5044/tcp, 0.0.0.0:5601->5601/tcp, 0					
.0.0.0:9200->9200/tcp, 0.0.0.0:9300->9300/tcp elk_elk_1						
e0dde7813d2a grafana/grafana "/run.sh" 2 months ago Up 2 weeks 0.0.0.0:8010->3	3000/tcp					
telemetry-dashboard_grafana_1						
53d5821c2d71 chronograf "/entrypoint.sh chro" 2 months ago Up 2 weeks 0.0.0.0:8888->8	8888/tcp					
telemetry-dashboard_chronograf_1						
13ca1507da76 influxdb "/entrypoint.sh infl" 2 months ago Up 2 weeks 0.0.0.0:8011->8	8086/tcp					
telemetry-dashboard_influx_1						

Sandbox Appliance

List of appliance components

• Telegraf