Traefik

- `helm` chart
- Kubernetes + Traefik Ingress/Service Annotations
- Two services are created by this chart. One, `fluentd-ext` is the publicly exposed LB (`80/tcp` , `443/tcp`). The other, `fluentd-int` is for the Wazuh server's `filebeat` output to talk to `fluentd` .

Prerequisites

High-Availability with Consul

- Because of issues with storing TLS certs with `ACME` , their rate-limiting rules on non-staging certificates, and the fact that Traefik would need 1 read-only volume per pod would, we run `consul` to be a shared k/v store for these certificates and config, enabling *HA* for **Traefik**.
- This repo includes a forked version of this `helm` incubator project, with `ClusterIP` commented out of the `service` object, so that **Traefik** can reach the cluster over the network.

Create a Basic Auth Secret for the Consul UI

```
for i in consul-basic-auth; do htpasswd -c ./k8s/$i.txt chipper && kubectl -n client
```

Install / Upgrade / Delete

Install

```
helm --debug install \
  --name consul --namespace client \
    --values './k8s/helm/consul/values.yaml' \
    stable/consul --version 3.5.2
```

Upgrade

```
helm --debug upgrade \
  --namespace client consul \
  --values './k8s/helm/consul/values.yaml' \
    stable/consul --version 3.5.2
```

Delete (DANGER)

```
helm del --purge consul
```

Install

```
 env CF_API_EMAIL='PUT_EMAIL_HERE' env CF_API_KEY='PUT_KEY_HERE' \
 helm --debug install \
    --namespace client --name traefik \
    --values './k8s/helm/traefik/values.yaml' \
    --set=acme.dnsProvider.name='cloudflare' \
    --set=acme.dnsProvider.cloudflare.CF_API_EMAIL='$CF_API_EMAIL' \
    --set=acme.dnsProvider.cloudflare.CF_API_KEY='$CF_API_KEY' \
    stable/traefik --version 1.59.2
```

Run this to get `EXTERNAL-IP` for the `LoadBalancer` that `traefik` creates:

```
kubectl get svc -n client --field-selector metadata.name=traefik
```

Adjust public DNS records accordingly.

Upgrade

```
 env CF_API_EMAIL='PUT_EMAIL_HERE' env CF_API_KEY='PUT_KEY_HERE' \
 helm --debug upgrade --namespace client \
    traefik --values './k8s/helm/traefik/values.yaml' \
    --set=acme.dnsProvider.name='cloudflare' \
    --set=acme.dnsProvider.cloudflare.CF_API_EMAIL='$CF_API_EMAIL' \
    --set=acme.dnsProvider.cloudflare.CF_API_KEY='$CF_API_KEY' \
    stable/traefik --version 1.59.2
```

Delete (DANGER)

```
helm del --purge traefik
```