## Wazuh

- Wazuh
  - Server
    - About
      - References
      - Special Things the Chart Does
    - Useful Commands
      - List Cluster Members
      - Run Configuration File Test
      - Restart all OSSEC Processes
      - See status of all processes related to Wazuh
      - Test Security Alerts
    - Prerequisites
      - Set Basic Auth for Kibana Plugin -> Wazuh API Communication
    - Install / Upgrade / Delete
      - Install
      - Post-Installation
      - Upgrade
      - Delete (DANGER)
    - Troubleshooting

## Server

### **About**

 All of Wazuh on the server-side runs as a stateful set because node names need to be static for clustering.

#### References

- Wazuh on GitHub
- Wazuh on Docker Hub
- Wazuh Kibana Plugin
- Wazuh automatically generates SSL certs. I've also verified this when observing logs, and connecting to it through Kibana.
- Port List
- Clustering Info

Wazuh's tools

### **Special Things the Chart Does**

- Username/Password is used by Kibana to authenticate to the Wazuh API server is injected by the helm chart @ /var/ossec/api/configuration-template/auth/user.
   Couldn't inject on the path in the docs because it contained symlinks.
- 2. Overwrites filebeat.yml to point it to fluentd.

### **Useful Commands**

#### **List Cluster Members**

/var/ossec/bin/cluster\_control -1

### **Run Configuration File Test**

/var/ossec/bin/ossec-analysisd -d -t

#### **Restart all OSSEC Processes**

/var/ossec/bin/ossec-control restart

## See status of all processes related to Wazuh

This also seems to clean up processes, not just report status.

/var/ossec/bin/ossec-control status

## **Test Security Alerts**

https://documentation.wazuh.com/current/user-manual/ruleset/testing.html

/var/ossec/bin/ossec-logtest

```
Mar 8 22:39:13 ip-10-0-0-10 sshd[2742]: Accepted publickey for root from 73.189.13:
```

## **Prerequisites**

### Set Basic Auth for Kibana Plugin -> Wazuh API Communication

```
htpasswd -n -b chipper
```

These values go in ./server/k8s/helm/wazuh/files/auth.txt . The chart reads from this file and mounts it in the container.

## Install / Upgrade / Delete

#### Install

```
helm --debug install --namespace client --name wazuh './server/k8s/helm/wazuh'
```

#### Post-Installation

Kibana uses a plugin to interact with Wazuh's API. In the app, set these values:

```
username = chipper

password =

url = https://wazuh-cluster.client.svc.cluster.local

port = 55000
```

This configuration is saved in Elasticsearch, so even if Kibana is reset (including volumes), nothing should change in terms of config.

If you encounter an error about api.log doesn't exist, run:

```
touch /var/ossec/data/logs/api.log && chown ossec:ossec /var/ossec/data/logs/api.log
```

## Upgrade

helm --debug upgrade --namespace client wazuh './server/k8s/helm/wazuh'

## **Delete (DANGER)**

helm del --purge wazuh

# **Troubleshooting**

• Error Elasticsearch Template Missing. The Fix.