Prometheus & Grafana Setup

git clone https://github.com/kubernetes/ingress-nginx

Create nginx ingress controller

```
kubectl apply -f
https://raw.githubusercontent.com/kubernetes/ingress-nginx/master/deploy/mandatory.yaml
```

Deploy prometheus configurations in Kubernetes

```
cd ingress-nginx/deploy/monitoring

kubectl apply -f configuration.yaml
```

Deploy prometheus in Kubernetes

```
kubectl apply -f prometheus.yaml
```

Open Prometheus dashboard in web browser

Get the internal ips of the nodes

```
kubectl get nodes --selector=kubernetes.io/role!=master -o
jsonpath={.items[*].status.addresses[?\(@.type==\"InternalIP\"\)].address}
```

In the browser, open the prometheus endpoint url

http://172.18.0.2:30843/graph

Setup Grafana

```
cd ingress-nginx/deploy/monitoring

kubectl apply -f grafana.yaml

Launch grafana endpoint url

http://172.18.0.2:30623/login
```

admin/admin is the default login/password credentials

Create prometheus datasource
http://172.18.0.2:30843/

Then import grafana dashboard for nginx controller

Setting up ELK Stack

git clone https://github.com/kubernetes/kubernetes.git
cd /home/jegan/kubernetes/cluster/addons/fluentd-elasticsearch

Install ElasticSearch

kubectl apply -f es-statefulset.yaml -f es-service.yaml

kubectl label nodes kube-node-1 beta.kubernetes.io/fluentd-ds-ready=true
kubectl label nodes kube-node-2 beta.kubernetes.io/fluentd-ds-ready=true

kubectl apply -f fluentd-es-configmap.yaml

kubectl apply -f fluentd-es-ds.yaml

Install Kibana and its service
kubectl apply -f kibana-deployment.yaml
kubectl apply -f kibana-service.yaml

```
kubectl cluster-info
```