**Workshop Handson Guide**

**Prerequisites:**

1. **Linux machine/virtual machine is up and running. In case, this is not available, setup one using oracle virtual box through below links**

* **Ubuntu virtual box setup :** 
  + [**https://docs.google.com/presentation/d/1ye0CZ88YaCU1OJycSjtQ1j4LaRxayIic/edit?usp=share\_link**](https://docs.google.com/presentation/d/1ye0CZ88YaCU1OJycSjtQ1j4LaRxayIic/edit?usp=share_link&ouid=111524236112322273900&rtpof=true&sd=true)

**- Virtual machine creation:**

* + **https://drive.google.com/file/d/1CfJ4XrtSFmZFgflBKn6cCdvEWhwxVKrF/view?usp=share\_link**

1. **Kubernetes cluster ready. If not available, setup one using kind**

* **https://kind.sigs.k8s.io/docs/user/quick-start/**

**Useful commands**

**Kubectl Installation:**

*curl -LO "https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl"*

*chmod +x kubectl*

*sudo mv kubectl /usr/local/bin*

**Helm installation:**

*curl https://baltocdn.com/helm/signing.asc | gpg --dearmor | sudo tee /usr/share/keyrings/helm.gpg > /dev/null*

*sudo apt-get install apt-transport-https --yes*

*echo "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/helm.gpg] https://baltocdn.com/helm/stable/debian/ all main" | sudo tee /etc/apt/sources.list.d/helm-stable-debian.list*

*sudo apt-get update*

*sudo apt-get install helm*

**Wordpress deployment:**

*helm repo add bitnami https://charts.bitnami.com/bitnami*

*helm repo add bitnami https://charts.bitnami.com/bitnami*

*helm repo update*

*helm install wordpress bitnami/wordpress*

**Logging: Checking application level loggings**

*kubectl logs wordpress-mariadb-0*

*kubectl logs wordpress-mariadb-0 -f*

*kubectl logs wordpress-mariadb-0 --tail=2*

*kubectl logs <pod name> -c <container name>*

**Logging: Checking logs from nodes**

*kubectl get pods -o wide*

*docker ps -a | grep kind-worker2*

*docker exec -ti <Container Id>/bin/sh*

*cd /var/log/containers*

*cat <container-log.log>*

**Prometheus Deployment:**

*helm repo add prometheus-community https://prometheus-community.github.io/helm-charts*

*helm repo update*

*helm install workshop prometheus-community/prometheus*

**Grafana Deployment:**

*helm repo add grafana https://grafana.github.io/helm-charts*

*helm install grafana-workshop grafana/grafana*