**Lesson 9 Demo 2**

**Understanding Kubernetes Cluster Logging Architecture**

**Objective:** Understanding the logging architecture of the Kubernetes cluster

**Tools required:** Kubernetes platform with a master and two worker nodes

**Prerequisites:** Kubernetes cluster must be set up with kubeadm, kubectl, and kubelet installed and tested. Some Pods, Containers, Services, etc. should be created so that the existing cluster and its contents can be logged.

# Steps to be followed:

1. Getting help with logging
2. Experimenting with BusyBox
3. Logging Pod information
4. Logging options and switching information

**Step 1: Getting Help with Logging**

1. Execute the following command to invoke the help menu:

**kubectl logs --help**

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**Step 2: Experimenting with BusyBox**

1. Create a Pod called BusyBox using the following command:

**vi busybox.yaml**

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1. Include the following code in the file:

**apiVersion**: v1

**kind**: Pod

**metadata**:

**name**: counter

**spec**:

**containers**:

- **name**: count

**image**: busybox:1.28

**args**: [/bin/sh, -c,

'i=0; while true; do echo "$i: $(date)"; i=$((i+1)); sleep 1; done']

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1. Deploy the YAML file and check its logs using the below commands:

**kubectl apply -f busybox.yaml**

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**kubectl logs counter**

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**Step 3: Logging Pods**

1. Execute the following command to get the last five lines of the log:

**kubectl logs counter --tail=5**

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**Step 4: Logging Options and Switch Information**

1. Execute the following command to obtain the logs of all the containers in a namespace:

**kubectl logs counter --all-containers**

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1. Execute the following command to obtain time-specific information using the below command:

**kubectl logs counter --since=<timespan>**

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