

# Cluster Administrator

<https://kubesphere.io/docs/v3.4/cluster-administration/>

## + KubeSphere Log Dashboard

As an open-source, application-centric container platform, KubeSphere v3.4.1 uses OpenSearch instead of Elasticsearch as the backend storage for logs, events, and auditing. By default, we can use the query tool provided in the lower-right corner on the KubeSphere console to retrieve logs, events, and auditing records.

## + Enable Log Dashboard Before KubeSphere Installation

### • Install on Linux

When installing KubeSphere with multiple nodes on Linux, you should create a configuration file that lists all KubeSphere components.

**1.** When you Install KubeSphere on Linux, create a file `config-sample.yaml` and change it by executing the following command:

**cmd: vi config-sample.yaml**

**2.** Before enabling the OpenSearch Dashboard, you need to enable components `logging`, `opensearch`, and `events` or `auditing` in the yaml file. In this example, enable `events` as follows:

```
opensearch:
  basicAuth:
    enabled: true
    password: admin
    username: admin
  dashboard:
    enabled: true      # Change "false" to "true".
  enabled: true        # Change "false" to "true".
  externalOpensearchHost: ""
  externalOpensearchPort: ""
  logMaxAge: 7
  opensearchPrefix: whizard
```

```
logging:
  enabled: true # Change "false" to "true".
  logsidecar:
    enabled: true
    replicas: 2
```

```
events:
  enabled: true # Change "false" to "true".
  ruler:
    enabled: true
    replicas: 2
```

3. Execute the following command to create the cluster using this configuration file:

**cmd:** `./kk create cluster -f config-sample.yaml`

- **Install on Kubernetes**

When you [Install KubeSphere on Kubernetes](#), you need to enable the relevant components in the [cluster-configuration.yaml](#) file.

1. Download the [cluster-configuration.yaml](#) file and edit the file using the following command:

**cmd:** `vi cluster-configuration.yaml`

2. Before enabling the OpenSearch Dashboard, you need to enable components `logging`, `opensearch`, and `events` or `auditing` in the yaml file. In this example, enable `events` as follows:

```
opensearch:
  basicAuth:
    enabled: true
    password: admin
    username: admin
  dashboard:
    enabled: true      # Change "false" to "true".
enabled: true        # Change "false" to "true".
externalOpensearchHost: ""
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logMaxAge: 7
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logging:
  enabled: true      # Change "false" to "true".
logsidecar:
  enabled: true
  replicas: 2
```

```
events:
  enabled: true      # Change "false" to "true".
ruler:
  enabled: true
  replicas: 2
```

3. Execute the following command to start KubeSphere installation:

```
cmd: kubectl apply -f https://github.com/kubesphere/ks-
installer/releases/download/v3.4.1/kubesphere-installer.yaml
      kubectl apply -f cluster-configuration.yaml
```

#### + Enable Log Dashboard After KubeSphere Installation

1. Log in to the console as the `admin` user, click **Platform** in the upper left corner, and select **Cluster Management**.
2. Click **CRDs**, enter `clusterconfiguration` in the search bar, and click the search result to view its detailed page.
3. Under **Custom Resources**, click the three dots on the right side of `ks-installer`, select **Edit YAML**.
4. In the YAML file, edit as follows, and then click **OK** to save the configuration.
5. Check the installation process in kubectl by executing the following command:

```
cmd: kubectl logs -n kubesphe-system $(kubectl get pod -n kubesphe-system -l 'app in (ks-install, ks-installer)' -o jsonpath='{.items[0].metadata.name}') -f
```

+ Access Log Dashboard

After logging in to the console, expose the 5601 port of the OpenSearch dashboard through NodePort or other forms such as Ingress to an accessible network as below:

Cluster

Overview

Nodes

System Components

Projects

Application Workloads

Workloads

Jobs

Pods

Services

Routes

Configuration

CRDs

Storage

Monitoring & Alerting

Cluster Settings

Services

Services provide an abstract way to expose applications running on a pod as network services. [Learn More](#)

kubesphe-logging-... X

Search

Create

<input type="checkbox"/>	Name	Project	Internal Access	External Access	Creation Time	
<input type="checkbox"/>	ks-events-ruler	kubesphe-logging-system	None Headless	-	2021-10-28 11:50:40	
<input type="checkbox"/>	kube-auditing-webhook-svc	kubesphe-logging-system	172.17.222.91 VirtualIP	-	2021-10-20 11:50:30	
<input type="checkbox"/>	ks-events-admission	kubesphe-logging-system	172.17.9.29 VirtualIP	-	2021-10-28 11:50:36	
<input type="checkbox"/>	logsidecar-injector-admission	kubesphe-logging-system	172.17.213.190 VirtualIP	-	2021-09-15 16:17:59	
<input type="checkbox"/>	elasticsearch-logging-discovery	kubesphe-logging-system	None Headless	-	2021-09-16 16:16:49	
<input type="checkbox"/>	elasticsearch-logging-data	kubesphe-logging-system	172.17.61.80 VirtualIP	-	2021-09-16 16:16:49	

Total: 6

+ Node Management