Install the Kubernetes App and view the Dashboards

This page provides instructions for installing the Kubernetes App, as well as descriptions and examples for each of the dashboards.

**Install the App**

Now that you have set up collection for Kubernetes App, install the Sumo Logic App for Kubernetes to use the pre-configured Kubernetes dashboards that provide visibility into your Kubernetes environment.

**To install the app, do the following:**

1. Locate and install the app from the App Catalog. If you want to see a preview of the dashboards included with the app before installing, click **Preview Dashboards**.

2. From the App Catalog, search for **Kubernetes** and select the app.

3. To install the app, click **Add to Library**.

4. Complete the following fields:
   a. **App Name.** You can retain the existing name, or enter a name of your choice for the app.
   b. **Data Source.** For each the sources listed, enter a Custom Data Filter or Source Category, as follows:
      ◦ For **Falco Log Source** leave **Source Category** selected, and enter the following source category: *falco* or one that matches the source categories in your environment.
      ◦ For **Events Log Source** leave **Source Category** selected, and enter the following source category: *events* or one that matches the source categories in your environment.
   c. **Advanced.** Select the location in library (the default is the Personal folder in the library), or click **New Folder** to add a new folder.

5. Click **Add to Library**.

**Filter with template variables**

Template variables provide dynamic dashboards that can rescope data on the fly. As you apply variables to troubleshoot
through your dashboard, you view dynamic changes to the data for a quicker resolution to the root cause. For more information, see the Filter with template variables help page.
You can use template variables to drill down and examine the data on a granular level.

Kubernetes - Cluster Explorer Dashboard

The Kubernetes - Cluster Explorer dashboard provides a high-level view of the health of the cluster services, along with details on the utilized resources by service.

Use this dashboard to:

- Navigate the cluster topology
- Review the memory and CPU usage by cluster and service components.

Kubernetes - Cluster Overview Dashboard

The Kubernetes - Cluster Overview dashboard provides a high-level view of the cluster health, along with details on all the components and resources.

Use this dashboard to:

- Monitor overall cluster health
- Get insight into the state and resource usage of cluster components And use this information to fine-tune your
Kubernetes cluster.
Kubernetes - Nodes Dashboard

The **Kubernetes - Nodes** dashboard provides detailed information on the health and performance of nodes in a Kubernetes cluster.

**Use this dashboard to:**

- Monitor node health.
- Get insight into how resources are being used across nodes and fine-tune node configurations accordingly.
- Investigate potential issues with nodes.
Kubernetes - Namespace Overview Dashboard

The Kubernetes - Namespace Overview dashboard provides insights into the health and resource utilization across cluster namespaces.

Use this dashboard to:

- Monitor namespace health.
- Get insight into the components of a namespace and how resources are being used across namespaces and fine-tune configurations accordingly.
- Investigate potential issues.
Kubernetes - Pods Dashboard

The Kubernetes - Pods dashboard provides insights into the health of and resource utilization across Kubernetes pods.

Use this dashboard to:

- Monitor pod health.
- Get insight into the components of a pod and how resources are being used across namespaces and fine-tune configurations accordingly.
- Investigate potential issues.
Kubernetes - Containers Dashboard

The Kubernetes - Containers dashboard provides insights into the health and resource utilization across Kubernetes containers.

Use this dashboard to:

- Monitor container health.
- Get insight into container resource utilization and fine-tune configurations accordingly.
- Determine if containers are stuck in CrashLoopBackOff, Terminated or Waiting states and make necessary adjustments.
- Investigate containers that are over-utilizing resources.
Kubernetes - Daemonsets and StatefulSets Dashboard

The Kubernetes - Daemonsets and StatefulSets dashboard provides insights into the health of and resource utilization across Kubernetes daemonsets and StatefulSets.

Use this dashboard to:

- Monitor the health of Daemonsets and StatefulSets.
- Identify whether the required replica level is achieved or not.

Kubernetes - Deployment Overview Dashboard

The Kubernetes - Deployment Overview dashboard provides insights into the health and performance of your Kubernetes deployments.

Use this dashboard to:

- Monitor the health of deployments in your Kubernetes environment.
- Identify whether the required replica level has been achieved or not.
Kubernetes - Container Logs Dashboard

The Kubernetes - Container Logs dashboard provides a high-level view of the health of cluster containers, along with information on errors and warnings.

Use this dashboard to:

- Monitor the health of containers.
- Identify, investigate and remediate errors and warnings.
- Identify spikes in the number of errors over time.

Kubernetes - Security Overview Dashboard

This dashboard relies on Falco. If the Dashboard is not populated, enable Falco by setting the flag "falco:enabled" as "true" in values.yaml as described on this page.

The Kubernetes - Security Overview dashboard provides high level details around anomalous container, application, host, and network activity detected by Falco.

Use this dashboard to:

- Identify and investigate anomalous activity.
Kubernetes - Security Rules Triggered Dashboard

This dashboard relies on Falco. If the Dashboard is not populated, enable Falco by setting the flag "falco:enabled" as "true" in values.yaml as described on this page.

The Kubernetes - Security Rules Triggered dashboard provides detailed information around anomalous activity detected by Falco. It also shows information around the OOB Falco rules triggered by anomalous activity in your Kubernetes environments.

Use this dashboard to:

• Reviewed detailed information of anomalous activity.
• Review if the OB Falco security events are triggered and identify the root cause.
Kubernetes - Service Overview Dashboard

The **Kubernetes - Service Overview** dashboard provides a high-level view of the health of the cluster services, along with details on utilized resources by service.

**Use this dashboard to:**

- Reviewed detailed information of services.
- Identify components by Services.
- Determine any errors and warning by Services.
The Kubernetes - Health Check dashboard provides an at-a-glance view of the health of the Kubernetes cluster, including FluentD, Fluent-bit, and Prometheus monitoring, as well as related job status.
Use this dashboard to:

- Monitor FluentD, Fluent-bit, and Prometheus performance for your cluster.
- Monitor job status on the cluster.

Kubernetes - Hygiene Check Dashboard

The Kubernetes - Hygiene Check dashboard provides visibility into the configuration hygiene of your Kubernetes cluster. This dashboard displays color-coded performance checks for nodes, along with resource utilization, pod capacity, pod errors, and pod states.

Use this dashboard to:
• Assess bad configurations and determine the trouble areas for proactive adjustment.
• Monitor resource allocation across your cluster to maintain optimum performance.

Kubernetes - DPM

The Kubernetes - DPM dashboard provides insights into where Data Points Per Minute (DPMs) originate so you can determine ways to reduce them for optimum performance. Panel analytics show DPMs by collector, namespace, pod, container, and cluster.

Use this dashboard to:

• Determine the DPMs for a node, cluster, pod and container.
• Identify ways to reduce DPM's.
Kubernetes - DPM Timeseries

The Kubernetes - DPM Timeseries dashboard provides visibility into the number of DPM timeseries and their breakdowns. This, combined with DPM analytics, enables you to determine ways to reduce DPMs for optimum performance.

Use this dashboard to:

- Track the number of DPM timeseries in your environment.
- Assess the types of DPM timeseries, their importance, and impact.
- Utilize this information in combination with DPM analytics to strategize optimum performance.
**Kubernetes - CoreDNS**

CoreDNS is a [DNS](https://en.wikipedia.org/wiki/Domain_Name_System) server and can be used as a replacement for kube-dns in a kubernetes cluster.

The **Kubernetes - CoreDNS** dashboard provides visibility into the health and performance of CoreDNS.

**Use this dashboard to:**

- Track the total number of requests.
- Review Cache statistics.
- Monitor CoreDNs resource usage and spikes.