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Monitoring Event Streams

- Use various tools to monitor Event Streams health
- Monitor your Event Streams deployment health
- Monitor your Kafka cluster health
- Use the Grafana service that is provided in IBM Cloud Private
- Use Kibana to view log data

Monitoring Event Streams health

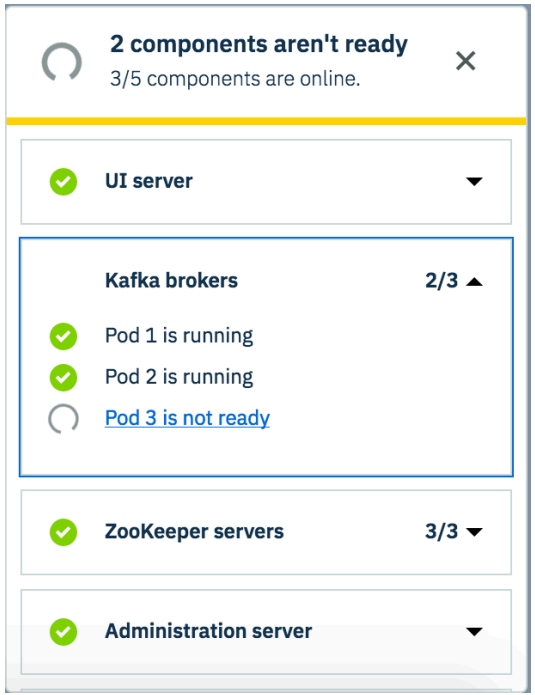
There are several tools available for monitoring the health of your Event Streams cluster and applications

The Event Streams console provides monitoring capabilities from a Kafka perspective

IBM Cloud Private includes the ELK (Elasticsearch, Logstash, and Kibana) stack, which provides an extensive monitoring and logging framework

You can also use external monitoring tools to read Kafka metrics

Monitoring your deployment in the UI



In the Event Streams console, in the bottom right corner, you can tell at a glance whether components are running

If any of the IBM Event Streams resources experience problems, the message states **component isn't ready**

Click the message to expand it, and then click the **Pod is not ready** link to open more details about the problem

The link opens the IBM Cloud Private console

Monitoring your deployment with the CLI

Make sure you installed `kubectl` and configured access to your cluster

- To check the status and readiness of the pods, run the following command, where `<namespace>` is the space used for your IBM Event Streams installation:

  ```
  kubectl -n <namespace> get pods
  ```

- To retrieve further details about the pods, including events affecting them, use the following command:

  ```
  kubectl -n <namespace> describe pod
  <pod-name>
  ```

- To retrieve detailed log data for a pod to help analyze problems, use the following command:

  ```
  kubectl -n <namespace> logs <pod-
  name> -c <container_name>
  ```

Monitoring cluster health

Event Streams collects metrics from all of the Kafka brokers and exports them to a Prometheus-based monitoring platform

You can view a selection of metrics in the Event Streams console on the **Monitor** tab

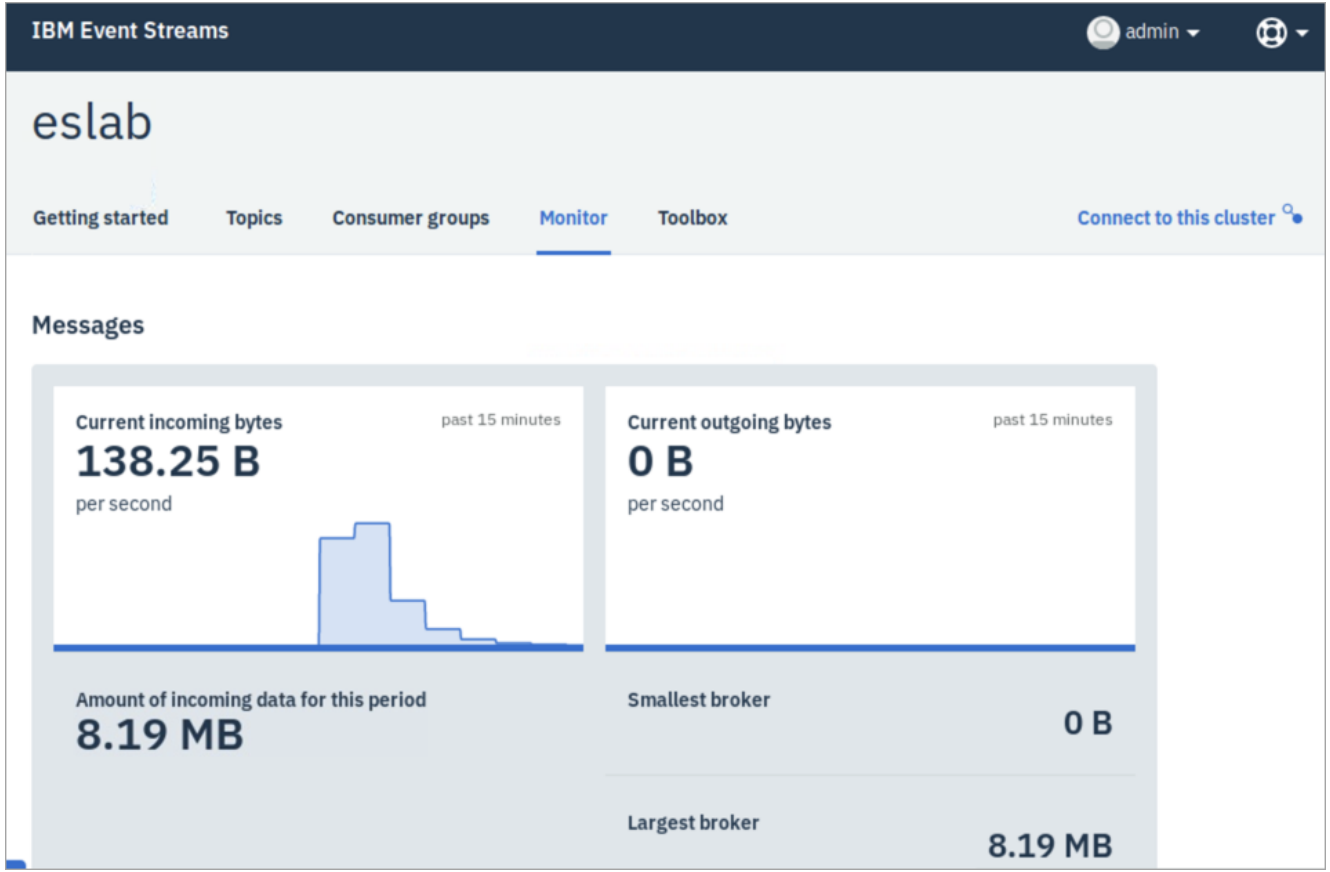
Or, you can use the Grafana service that is provided in IBM Cloud Private

Event Streams Monitor tab

Displays overview charts for messages, partitions, and replicas

Click a chart to drill down into more detail

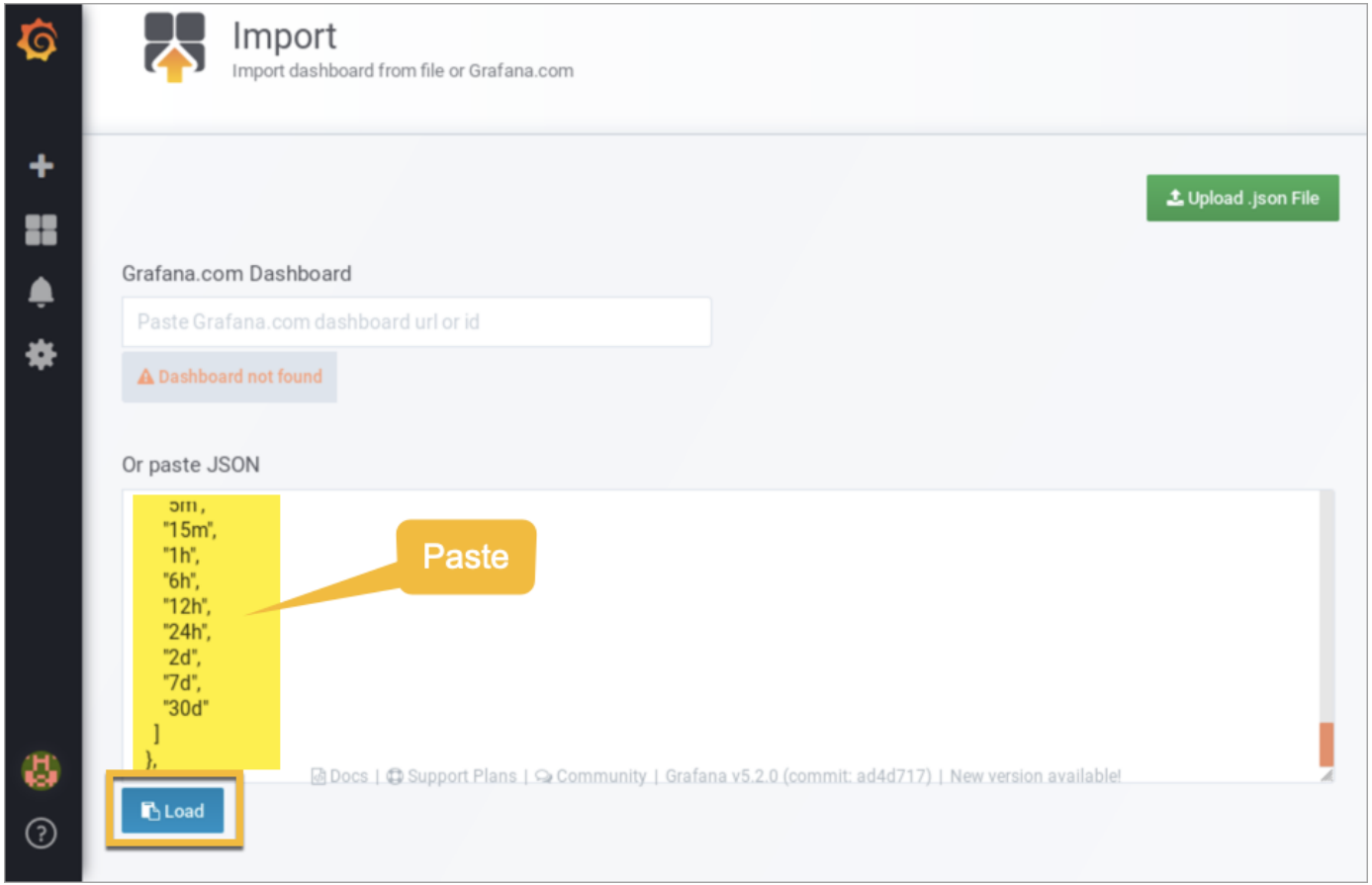
Click **1 hour**, **1 day**, **1 week**, or **1 month** to view data for different time periods



Using Grafana

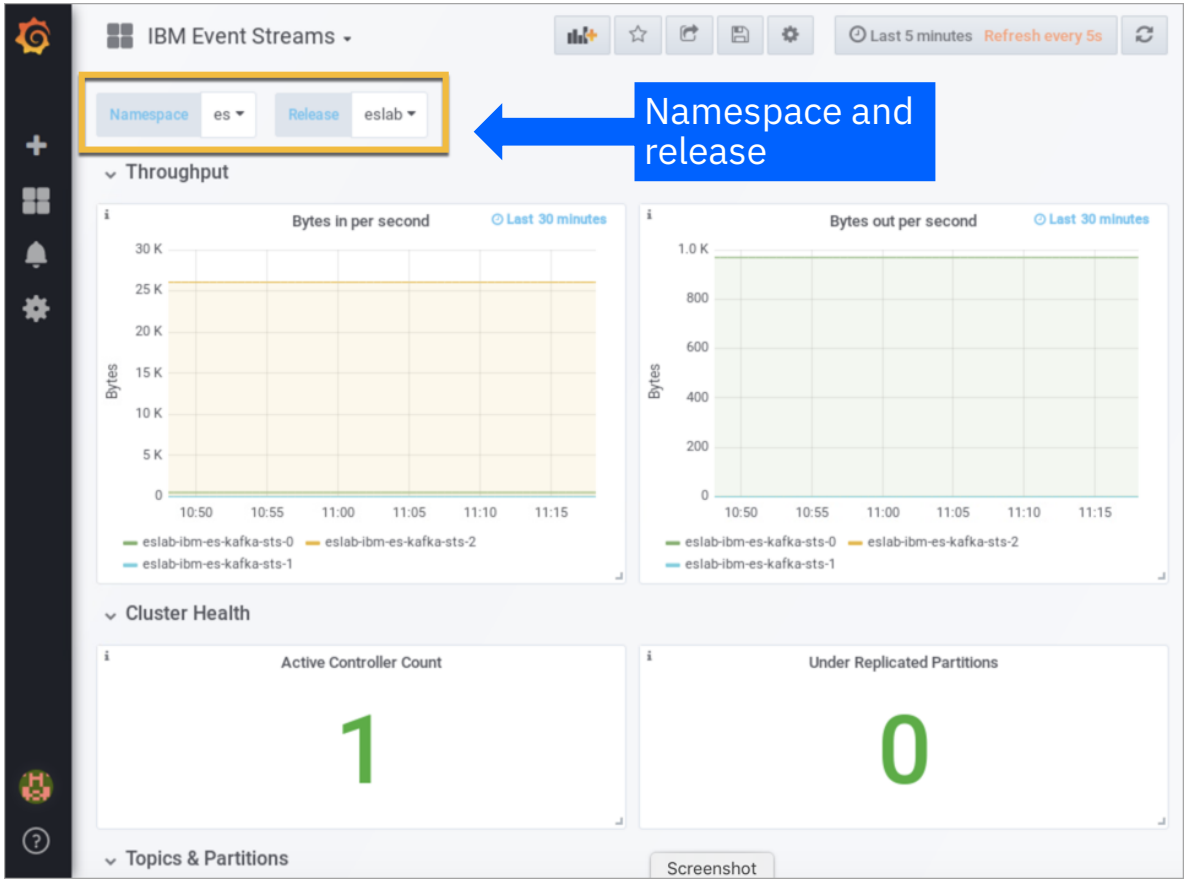
You can create a dashboard for Event Streams in the Grafana service

An example Grafana dashboard for Event Streams is included in the Event Streams helm chart



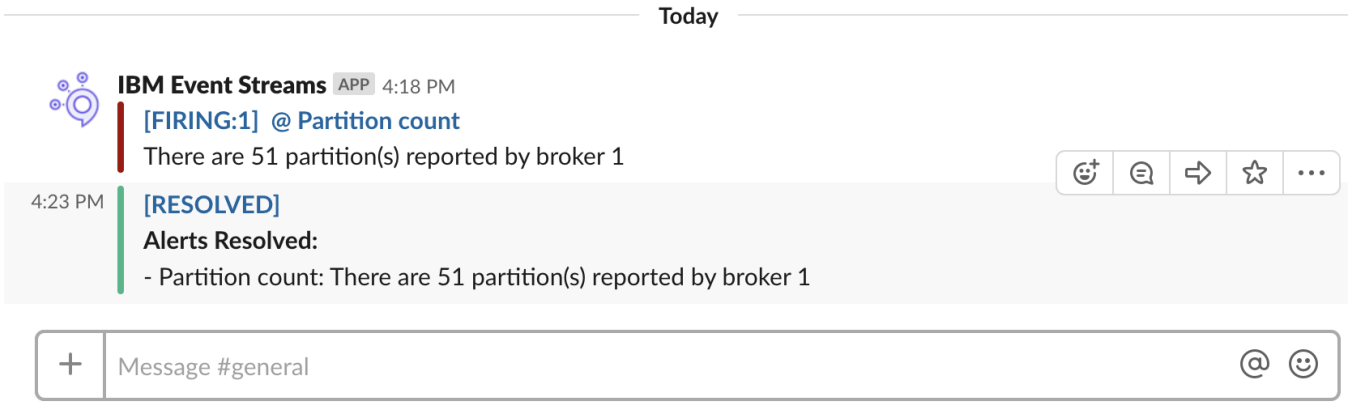
Event Streams dashboard

You can customize the information that you see in this dashboard



Setting up alerts

Metrics that meet predefined criteria can be used to send notifications to emails, Slack, PagerDuty, and so on

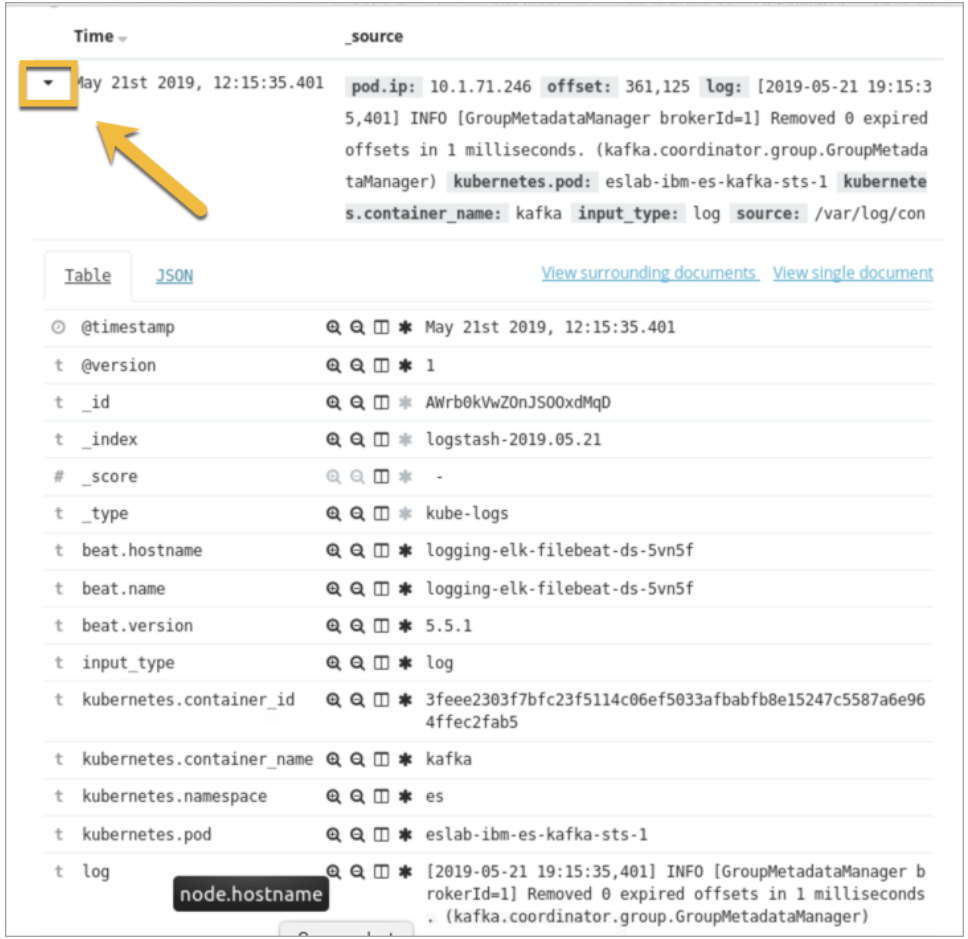


Viewing logs in Kibana

Kibana is an open source data visualization plugin for Elasticsearch, and is included in IBM Cloud Private

You can use it to view log data in various graphical forms

You can filter log output, and customize your own queries



Monitoring topic health

To access the Producers dashboard:

In the Event Streams console, click **Topics** > topic name > **Producers**