# **Kafka Monitoring Tools**

[Kafka](https://dzone.com/articles/kafka-technical-overview) itself comes with command line tools that can perform all necessary administrative tasks. But, those tools aren’t very convenient because they are not integrated into one tool, and you need to run a different tool for different tasks. Moreover, it is getting difficult to work with them when your clusters grow large, or when you have several clusters.With the increased demand for monitoring there are various monitoring tools for Kafka that has come up in the marker both open source and commercial

The following are some of the notable ones for monitoring :

1. Kafka Manager
2. Confluent Control Centre
3. Lenses
4. Datadog Kafka Dashboard
5. Cloudera Manager
6. Yahoo Kafka Manager
7. KafDrop
8. LinkedIn Burrow
9. Kafka Tool

**Kafka Manager**

[Kafka Manager](https://github.com/yahoo/kafka-manager) is a web-based management system for Kafka developed at Yahoo. It is capable of [administrating multiple clusters](https://dzone.com/articles/monitor-manager-for-apache-kafka-clusters); it can show statistics on individual brokers or topics, such as messages per second, lag, and etc. But, it's more of an administrative tool. Unfortunately, you can't use it to browse messages.

It also requires access to ZooKeeper nodes, so you might not be able to use it in some production environments, where ZooKeeper nodes are typically firewalled.

**Confluent Control Centre**

The commercial license of Confluent Platform comes with [Confluent Control Centre](https://www.confluent.io/confluent-control-center/) which is a management system for Apache Kafka that enables cluster monitoring and management from a User Interface. Confluent Control Center delivers understanding and insight about the inner workings of the Apache Kafka clusters and the data that flows through them. Control Center gives the administrator monitoring and management capabilities through curated dashboards, so that they can deliver optimal performance and meet SLAs for their Apache Kafka clusters.

**Lenses**

[Lenses](https://lenses.io/lenses-features/) (ex Landoop) is a company that offers [enterprise features and monitoring tools](https://lenses.io/lenses-features/) for Kafka Clusters. More precisely, it enhances Kafka with User Interface, streaming SQL engine and Cluster monitoring. It also enables faster monitoring of Kafka data pipelines by providing SQL and Connector visibility into your data flows. Lenses works with any Kafka distribution, delivers high quality enterprise features and monitoring, SQL for ALL and self-serviced real-time data access and flows on Kubernetes.

**Datadog Kafka Dashboard**

[Kafka Dashboard](https://www.datadoghq.com/dashboards/kafka-dashboard/) by Datadog is a comprehensive Kafka Dashboard that displays key metrics for Kafka Brokers, Producers, Consumers and Apache Zookeeper. Kafka deployments often rely on external software which is not part of the Kafka, like Apache Zookeeper. Datadog enables a comprehensive monitoring on all the layers of your deployment, including software components in your data pipeline which are not part of Kafka as such.

**Cloudera Manager**

[Kafka in Cloudera Manager](https://www.cloudera.com/documentation/enterprise/latest/topics/kafka_tour.html) is clearly a less rich monitoring tool compared to Confluent, Lenses and Datadog. However, it is very convenient for companies that are already customers of Cloudera and need their monitoring mechanisms under the same platform.

**Yahoo Kafka Manager**

[Yahoo Kafka Manager](https://github.com/yahoo/kafka-manager) is an open-source managing tool for Apache Kafka clusters. With Kafka Manager, you can:

* Manage multiple clusters
* Easy inspection of cluster state (topics, consumers, offsets, brokers, replica distribution, partition distribution)
* Run preferred replica election
* Generate partition assignments with option to select brokers to use
* Run reassignment of partition (based on generated assignments)
* Create a topic with optional topic configs
* Delete topics
* Batch generate partition assignments for multiple topics with option to select brokers to use
* Batch run reassignment of partition for multiple topics
* Add partitions to existing topic
* Update config for existing topic
* Optionally enable JMX polling for broker level and topic level metrics.
* Optionally filter out consumers that do not have ids/ owners/ & offsets/ directories in zookeeper.

[**KafDrop 3**](https://github.com/obsidiandynamics/kafdrop)

Kafdrop 3 is a UI for navigating and monitoring Apache Kafka brokers. The tool displays information such as brokers, topics, partitions, consumers and lets you view messages.

This project is a reboot of [Kafdrop 2.x](https://github.com/HomeAdvisor/Kafdrop), dragged kicking and screaming into the world of JDK 11+, Kafka 2.x and Kubernetes.

**LinkedIn Burrow**

[LinkedIn Burrow](https://github.com/linkedin/Burrow) is an open-source monitoring companion for Apache Kafka that provides consumer lag checking as a service without the need for specifying thresholds. It monitors committed offsets for all consumers and calculates the status of those consumers on demand. An HTTP endpoint is provided to request status on demand, as well as provide other Kafka cluster information. There are also configurable notifiers that can send status out via email or HTTP calls to another service. Burrow is written in Go, so before you get started, you should [install and set up Go](https://golang.org/doc/install).

**Kafka Tool**

[Kafka Tool](http://www.kafkatool.com/) is a GUI application for managing and using **Apache Kafka** clusters. It provides an intuitive UI that allows one to quickly view objects within a Kafka cluster as well as the messages stored in the topics of the cluster. It is a Windows program that can connect to a Kafka cluster and do all basic tasks. It can list brokers, topics, or consumers and their properties. It allows you to create new topics or update existing ones, and you can even look at the messages in a topic or partition.

Although it is very useful, its UI seems somewhat old, and it lacks some monitoring features, such as topic lag. Also, it is **not free for commercial use**. So, you can't really use it at work unless you pay for it.

It contains features geared towards both developers and administrators. Using Kafka Tool, you can:

* View metrics on cluster, broker, topic and consumer level
* View contents of messages in your partitions and add new messages
* **View offsets** of the Kafka consumers, including Apache Storm Kafka spout consumers
* Show **JSON and XML** messages in a pretty-printed format
* **Add and drop topics** plus other management features
* **Save individual messages** from your Kafka partitions to local hard drive
* Write your own [plugins](http://www.kafkatool.com/plugins.html) that allow you to view custom data formats

The tool runs on **Windows, Linux and Mac OS.**

## Bottomline

The alternative to commercial licenses are Yahoo Kafka Manager, LinkedIn Burrow, KafDrop and Kafka Tool.

If the enterprise running relatively big Kafka Clusters, then it is worth paying for a commercial license. Confluent and Lenses offer more rich functionality compared to the other monitoring tools we’ve seen and are highly recommended by experts.

Source Taken from :-

<https://blog.usejournal.com/overview-of-ui-monitoring-tools-for-apache-kafka-clusters-9ca516c165bd>

<https://dzone.com/articles/kafka-administration-and-monitoring-ui-tools>