Streams Messaging Manager – Curing the Kafka blindness

Streams Messaging Manager (SMM) is an operations monitoring and management tool that provides end-to-end visibility in an enterprise Apache Kafka environment. With SMM, you can gain clear insights about your Kafka clusters, understand the end-to-end flow of message streams from producers to topics to consumers and analyse the stream dynamics between producers and consumers using various filters. SMM also helps you troubleshoot your Kafka environment to identify bottlenecks, throughputs, consumer patterns, and traffic flow.

Monitoring Kafka Clusters

Describes how to use Streams Messaging Manager to monitor Apache Kafka clusters, producers, topics, brokers, and consumers.

Managing Alert Policies

Describes how to use Streams Messaging Manager to create, modify, and monitor alert policies and alerts.

Managing Topics

Describes how to create, modify, and delete Kafka topics.

Monitoring End to End Latency

Describes how you can use Streams Messaging Manager to monitor end-to-end latency in topics. Use the latency feature to verify whether consumers are consuming the messages produced in a topic within the time SLA, identify the slow consuming applications that might occur due to an external or process bottleneck, and verify whether the consumers are consuming all the messages.

Securing Streams Messaging Manager

Describes how to secure Streams Messaging Manager.

Simplifies Troubleshooting Kafka Environments

SMM provides intelligence-based filtering that allows a user to select a producer, broker, topic or consumer and see only related entities based on the selection. SMM is smart enough to show only those producers that are sending data to the selected topics and show only those consumer groups that are consuming from those topics. The filtering works on the selection of any of the four entities.

This enables users to quickly hone in on the root cause when troubleshooting and debugging Kafka issues.

Visualizes end-to-end Kafka stream flows

Another powerful feature of SMM is its ability to visualize all the data streams/flows across all your Kafka clusters. You can select any entity and visualize how data flows with respect to the entity selected.

Extends monitoring and management capabilities with REST API

SMM offers REST endpoints for all of its capabilities. This enables developers to integrate SMM with their other enterprise tools such as APM or case or ticketing systems.

SMM Platform Operations benefits

A Platform Operations user is less concerned about the individual performance for a given consumer and/or producer application but rather more focused on the Kafka cluster holistically and the infrastructure that it runs on. Some specific needs, requirements, and questions from a Platform Operator may include the following:

- I would like a single platform to monitor all the Kafka clusters within my organization. I want to be able to quickly switch from one Kafka cluster to another.
- I would like to get quick current snapshot of my cluster: number of producers, number of brokers, number of topics, number of consumers.
- Across the entire cluster, which producers are generating the most data right now?
- Across the entire cluster, which of my consumer groups and consumer instances are falling behind with respect to reading from a topic or partition?
- I would like to see a snapshot view of all the Kafka brokers in my cluster with information including the hosts on which the broker is running, throughput in, messages in, number of partitions, and number of replicas.
- Are any of my brokers running hot? Which broker has the highest throughput in and out rates?
- Which topic partitions are on a given Kafka broker?
- Are there any skewed partitions for a broker? What is the throughput in and out for a given partition on that broker?
- For a given broker, topic, or partition, which producers are sending data to it, and which consumer groups are consuming from it.
- View detailed level metrics of a broker across time to see trends and patterns.
- What's are host metrics on the host where my broker is running? What are the other services running on my broker host?