KIP-256: Add RocksDB statistics via Streams metrics

- Status
- Motivation
- Public Interfaces
- Proposed Changes
- Compatibility, Deprecation, and Migration Plan
- Rejected Alternatives

Status

Current state: Under Discussion

Discussion thread: here [Change the link from the KIP proposal email archive to your own email thread]

JIRA: here

Please keep the discussion on the mailing list rather than commenting on the wiki (wiki discussions get unwieldy fast).

Motivation

RocksDB's own stats can be programmatically exposed and the JNI `Statistics` has indeed implemented many useful settings already. However these stats are not exposed directly via Streams today but have to manually interact with the underlying RockDB directly for any user wants to get access to.

Public Interfaces

RockDB JNI's Statistics contains multiple metrics and moving forward it may add more. To maintain compatibility, we have to do two changes.

1.Allow user selects metrics specifically.

Expanding KafkaStreams#metrics to allow to select specific metrics.

public Map<MetricName, ? extends Metric> metrics(final Set<MetricName> metricNames)

2.Allow user manually add RockDB's metrics in a custom way.

Proposed Changes

Describe the new thing you want to do in appropriate detail. This may be fairly extensive and have large subsections of its own. Or it may be a few sentences. Use judgement based on the scope of the change.

Compatibility, Deprecation, and Migration Plan

- What impact (if any) will there be on existing users?
- If we are changing behavior how will we phase out the older behavior?
- If we need special migration tools, describe them here.
- · When will we remove the existing behavior?

Rejected Alternatives

If there are alternative ways of accomplishing the same thing, what were they? The purpose of this section is to motivate why the design is the way it is and not some other way.