KIP-757: Topic metadata

This page is meant as a template for writing a KIP. To create a KIP choose Tools->Copy on this page and modify with your content and replace the heading with the next KIP number and a description of your issue. Replace anything in italics with your own description.

Status

Current state: *[One of "Under Discussion", "Accepted", "Rejected"]*

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

JIRA: *here [Change the link from KAFKA-1 to your own ticket]*

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

Motivation

Currently, to have metadata for Kafka topics we need to use external storage (e.g. a database) and we need to keep it in synch with Kafka.

- A topic is deleted, how to delete its metadata?
- How to deal with topics created by KafkaStream, KafkaConnect, or KafkaAdmin.

Making Kafka self-sufficient in this aspect sounds good.

Public Interfaces

Briefly list any new interfaces that will be introduced as part of this proposal or any existing interfaces that will be removed or changed. The purpose of this section is to concisely call out the public contract that will come along with this feature.

A public interface is any change to the following:

- *Binary log format*
- *The network protocol and api behavior*
- Any class in the public packages under clientsConfiguration, especially client configuration

    - org/apache/kafka/common/serialization
    - org/apache/kafka/common
    - org/apache/kafka/common/errors
    - org/apache/kafka/clients/producer
    - org/apache/kafka/clients/consumer (eventually, once stable)
- *Monitoring*
- *Command line tools and arguments*
- *Anything else that will likely break existing users in some way when they upgrade*

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

Use the topic name as a suite of concatenation of metadata a.b.c or key_val.key_val.

the Topic name is limited to 245 characters and less when replicated 245 - alias size