FLIP-219: Revised Format API

Status

Discussion thread	
Vote thread	
JIRA	
Release	

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

Motivation

Any data that accessible through an external system is encoded in some kind of format (Avro, JSON, CSV, ...). Flink provides interfaces that parse and produce the well-formed serializations of data according to the chosen format. However, the current state of Flink is that there is a wide-range of interfaces and factories that are not connected. Any user that wants to read from CSV and includes the dependency will find >10 public Flink classes that start with CSV. Each of these implementations have a very specific purpose that may not be as obvious to users as it's for the developers. The implementations also offer different ways of configuration.

This FLIP aims to provide a first-class citizen Format interface t

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/apacho/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?

Test Plan

Describe in few sentences how the FLIP will be tested. We are mostly interested in system tests (since unit-tests are specific to implementation details). How will we know that the implementation works as expected? How will we know nothing broke?

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.