

# KIP-14 - Tools Standardization

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## Status

**Current state:** *Under Discussion*

**Discussion thread:** [here](#)

**JIRA:**

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

## Motivation

Currently tools in Kafka have three flavor of command line arguments:

1. command line arguments using dot, e.g. `--consumer.config`
2. command line arguments using dash `--broker-list`
3. command line arguments using position

#2 and #3 conforms to Unix standards while #1 does not.

Also, some tools always require config files for producer and consumer even when most people might just use default settings (ex. MirrorMaker).

And finally, some tools use a unique command line argument name for a command argument (ex. `VerifyConsumerRebalance` uses `-zk` to specify ZooKeeper URL while other tools use `--zookeeper`).

## Proposed Changes

- Change all tools using argument style #2 (arguments containing dots) to argument style #3 (following Unix standard, arguments containing dashes) (details listed below).
- (Suggested by Gwen) Since mirror maker is more like a service instead of a tool. It makes sense to pass in a mirror maker config file.
- Change unique/one-off command line argument names to match standard argument name (details listed below).

Command	Old Argument Name	New Argument Name	Reason For Change
kafka-console-consumer.sh	consumer.config	consumer-config	Not Unix Standard
kafka-consumer-offset-checker.sh	socket.timeout.ms	socket-timeout-ms	Not Unix Standard
kafka-consumer-offset-checker.sh	retry.backoff.ms	retry-backoff-ms	Not Unix Standard
ExportZkOffsets.scala	zkconnect	zookeeper	One-off Name
ImportZkOffsets.scala	zkconnect	zookeeper	One-off Name
KafkaMigrationTool.java	consumer.config	consumer-config	Not Unix Standard
KafkaMigrationTool.java	producer.config	producer-config	Not Unix Standard
KafkaMigrationTool.java	num.producers	num-producers	Not Unix Standard
KafkaMigrationTool.java	num.streams	num-streams	Not Unix Standard
KafkaMigrationTool.java	queue.size	queue-size	Not Unix Standard
kafka-mirror-maker.sh	consumer.config	consumer-config	Not Unix Standard
kafka-mirror-maker.sh	producer.config	producer-config	Not Unix Standard
kafka-mirror-maker.sh	num.streams	num-streams	Not Unix Standard
kafka-producer-perf-test.sh	request-num-acks	request-required-acks	One-off Name
kafka-replay-log-producer.sh	inputtopic	input-topic	One-off Name
kafka-replay-log-producer.sh	outputtopic	output-topic	One-off Name

kafka-replica-verification.sh	topic-white-list	whitelist	One-off Name
kafka-replica-verification.sh	report-interval-ms	reporting-interval	One-off Name
kafka-simple-consumer-shell.sh	fetchsize	fetch-size	One-off Name
TestLogCleaning.scala	zk	zookeeper	One-off Name
VerifyConsumerRebalance.scala	zookeeper.connect	zookeeper	One-off Name
TestLinearWriteSpeed.scala	compression	compression-codec	One-off Name
TestOffsetManager.scala	thread-count	threads	One-off Name
TestOffsetManager.scala	reporting-interval-ms	reporting-interval	One-off Name

Note that the following additional command line argument standardizations will be tracked via [KAFA-2111](#) but are not part of this KIP since they are less invasive:

- Add 'help' command line argument to any top-level tool scripts that were missing it.
- Properly format argument descriptions (into sentences) and add any missing "REQUIRED" notes.

## Compatibility, Deprecation, and Migration Plan

- *What impact (if any) will there be on existing users? - Previously used command line arguments will no longer function so end-users will need to adapt their calls when upgrading Kafka.*
- *If we are changing behavior how will we phase out the older behavior? - There will be no deprecation of old command line arguments, only a change-over.*
- *If we need special migration tools, describe them here. - No migration tools needed but the Kafka Documentation & Wiki pages will need to be updated to educate end-users on these changes.*
- *When will we remove the existing behavior? Existing behavior will change as soon as patch is committed and included in release build.*

## Rejected Alternatives

None