

Release Plan 0.11.0.0

Release Dates

- KIP Freeze: May 10, 2017 (a KIP must be accepted by this date in order to be considered for this release)
- Feature Freeze: May 17, 2017 (major features merged & working on stabilization, minor features have PR, release branch cut; anything not in this state will be automatically moved to the next release in JIRA)
- Code Freeze: May 31, 2017 (first RC created now)
- Release: June 14, 2017

Release Manager

These dates are goals and subject to change, but we expect to stay on the [Time Based Release Plan](#) unless unexpected critical issues come up. While the target release date is fixed at ~2w after code freeze, RCs will roll out as needed until the release vote passes.

The release manager is [Ismael Juma](#).

Release Features

This is a list of key features/improvements/bugfixes that we can include with release notes (WIP):

- Exactly-once delivery and transactional messaging
- Streams exactly-once semantics
- AdminClient
- Record headers
- Request rate quotas
- Improved resiliency: replication protocol improvement and single-threaded controller

How to Contribute

Before code freeze:

- Participate in votes and discussions to land or postpone the open KIPs
- **Review patches.** We anticipate that this release will be bottlenecked mostly on reviews. The more reviewers, the more content we can fit in.
- **Write system tests.** We want to preserve the tradition of high-quality releases in Apache Kafka.

After code freeze:

- Test the release candidates
- Open bugs on important issues found
- Fix bugs
- Review bug fixes
- Vote on RCs. Even though only PMC votes are binding, community votes are super important as we evaluate the readiness of the release

Open Issues




Key	Summary	T	Created	Updated	Due	Assignee	Reporter	P	Status	Resolution
KAFKA-3663	Proposal for a kafka broker command - kafka-brokers.sh		May 05, 2016	Nov 01, 2017		Unassigned	Jayesh Thakrar		PATCH AVAILABLE	Unresolved
KAFKA-4790	Kafka cannot recover after a disk full		Feb 23, 2017	Dec 12, 2018		Unassigned	Pengwei		REOPENED	Unresolved














[2 issues](#)

Planned KIP Content

Note: The planned content is not binding - final content will be based the features committed by branch-cutting date.





	KIP	JIRA	Component	Committer
1	KIP-54: Sticky Partition Assignment Strategy	KAFKA-2273 - KIP-54: Add rebalance with a minimal number of reassignments to server-defined strategy list RESOLVED	Consumer	Jason Gustafson




2	KIP-66: Single Message Transforms for Kafka Connect (items not included in 0.10.2.0)	 KAFKA-4714 - Implement remaining KIP-66 SMTs RESOLVED	Connect	Ewen Cheslack-Postava
3	KIP-82 - Add Record Headers	 KAFKA-4208 - Add Record Headers RESOLVED	Multiple	Jason Gustafson
4	KIP-98 - Exactly Once Delivery and Transactional Messaging	 KAFKA-4815 - Idempotent/transactional Producer (KIP-98) RESOLVED  KAFKA-4816 - Message format changes for idempotent /transactional producer RESOLVED  KAFKA-4817 - Implement idempotent producer RESOLVED  KAFKA-4818 - Implement transactional clients RESOLVED	Multiple	Guozhang Wang, Jason Gustafson, Jun Rao, Ismael Juma
5	KIP-101 - Alter Replication Protocol to use Leader Epoch rather than High Watermark for Truncation	 KAFKA-1211 - Hold the produce request with ack > 1 in purgatory until replicas' HW has larger than the produce offset (KIP-101) RESOLVED  KAFKA-5036 - Followups from KIP-101 RESOLVED	Replication	Jun Rao
6	KIP-106 - Change Default unclean.leader.election.enabled from True to False	 KAFKA-5257 - Change Default unclean.leader.election.enabled from True to False RESOLVED	Controller	Ismael Juma
7	KIP-107: Add purgeDataBefore() API in AdminClient	 KAFKA-4586 - Add purgeDataBefore() API in AdminClient RESOLVED	Multiple	Jiangjie Qin
8	KIP-109: Old Consumer Deprecation	 KAFKA-3264 - Mark the old Scala consumer and related classes as deprecated RESOLVED	Consumer	Ismael Juma
9	KIP-114: KTable state stores and improved semantics	 KAFKA-5045 - KTable materialization and improved semantics RESOLVED	Streams	Guozhang Wang
10	KIP-115: Enforce offsets.topic.replication.factor upon __consumer_offsets auto topic creation	 KAFKA-3959 - KIP-115: __consumer_offsets wrong number of replicas at startup RESOLVED	Request handling	Ewen Cheslack-Postava
11	KIP-117: Add a public AdminClient API for Kafka admin operations	 KAFKA-3265 - Create Java Admin Client RESOLVED	Admin Client	Ismael Juma
12	KIP-119: Drop Support for Scala 2.10 in Kafka 0.11	 KAFKA-4422 - Drop support for Scala 2.10 (KIP-119) RESOLVED	Build	Ewen Cheslack-Postava
13	KIP-121: Add KStream peek method	 KAFKA-4720 - Add KStream.peek(ForeachAction<K,V>) RESOLVED	Streams	Guozhang Wang
14	KIP-122: Add Reset Consumer Group Offsets tooling	 KAFKA-4743 - Add a tool to Reset Consumer Group Offsets RESOLVED	Tools	Jason Gustafson
15	KIP-123: Allow per stream/table timestamp extractor	 KAFKA-4144 - Allow per stream/table timestamp extractor RESOLVED	Streams	Guozhang Wang
16	KIP-124 - Request rate quotas	 KAFKA-4195 - support throttling on request rate RESOLVED	Broker	Jun Rao
17	KIP-126 - Allow KafkaProducer to split and resend oversized batches.	 KAFKA-3995 - Split the ProducerBatch and resend when received RecordTooLargeException RESOLVED	Clients	Joel jkoshy
18	KIP-128: Add ByteArrayConverter for Kafka Connect	 KAFKA-4783 - KIP-128: Blackbox or pass through converter or ByteArrayConverter for connect RESOLVED	Connect	Ewen Cheslack-Postava

19	KIP-129: Streams Exactly-Once Semantics	<p> KAFKA-4923 - Add Exactly-Once Semantics to Streams RESOLVED</p> <p> KAFKA-4986 - Add producer per task support RESOLVED</p>	Streams	Guozhang Wang
20	KIP-133: Describe and Alter Configs Admin APIs	<p> KAFKA-3267 - Describe/Alter Configs protocol, server and client (KIP-133) RESOLVED</p>	AdminClient	Jun Rao
21	KIP-134: Delay initial consumer group rebalance	<p> KAFKA-4925 - Add a configurable delay to the initial consumer group rebalance RESOLVED</p>	Group Coordinator	Guozhang Wang
22	KIP-136: Add Listener name to SelectorMetrics tags	<p> KAFKA-4982 - Add listener tag to socket-server-metrics. connection-... metrics (KIP-136) RESOLVED</p>	Metrics	Ismael Juma
23	KIP-137: Enhance TopicCommand --describe to show topics marked for deletion	<p> KAFKA-4291 - TopicCommand --describe shows topics marked for deletion as under-replicated and unavailable (KIP-137) RESOLVED</p>	Tools	Ismael Juma
24	KIP-140: Add administrative RPCs for adding, deleting, and listing ACLs	<p> KAFKA-3266 - Implement KIP-140 RPCs and APIs for creating, altering, and listing ACLs RESOLVED</p>	AdminClient	Ismael Juma
25	KIP-143: Controller Health Metrics	<p> KAFKA-5135 - Controller Health Metrics (KIP-143) RESOLVED</p>	Controller	Jun Rao
26	KIP-144: Exponential backoff for broker reconnect attempts	<p> KAFKA-3878 - Exponential backoff for broker reconnect attempts (KIP-144) RESOLVED</p>	Clients	Ismael Juma
27	KIP-146 - Classloading Isolation in Connect	<p> KAFKA-3487 - KIP-146: Support per-connector/per-task classloaders in Connect RESOLVED</p>	Connect	Ewen Cheslack-Postava
28	KIP-151 Expose Connector type in REST API	<p> KAFKA-4343 - KIP-151: Connect REST API should expose whether each connector is a source or sink RESOLVED</p>	Connect	Ewen Cheslack-Postava
29	KIP-153: Include only client traffic in BytesOutPerSec metric	<p> KAFKA-5194 - KIP-153: Include only client traffic in BytesOutPerSec metric RESOLVED</p>	Metrics	Ismael Juma
30	KIP-154 Add Kafka Connect configuration properties for creating internal topics	<p> KAFKA-4667 - KIP-154: Connect should create internal topics RESOLVED</p>	Connect	Ewen Cheslack-Postava
31	KIP 155 - Add range scan for windowed state stores	<p> KAFKA-5192 - Range Scan for Windowed State Stores RESOLVED</p>	Streams	Guozhang Wang
32	KIP 156 Add option "dry run" to Streams application reset tool	<p> KAFKA-5166 - Add option "dry run" to Streams application reset tool RESOLVED</p>	Streams	Guozhang Wang

See [Kafka Improvement Proposals](#) for the full list of KIPs.

KIPs Bumped to Next Release

	KIP	JIRA	Component	Committer	Notes
1	KIP-48 Delegation token support for Kafka	<p> KAFKA-1696 - Kafka should be able to generate Hadoop delegation tokens OPEN</p>	Security		PR not available
2	KIP-72: Allow putting a bound on memory consumed by Incoming request	<p> KAFKA-4602 - KIP-72 Allow putting a bound on memory consumed by Incoming requests RESOLVED</p>	Network	Jun Rao	It was deemed safer to merge this to trunk early in the release cycle for the next release.
3	KIP-81: Bound Fetch memory usage in the consumer	<p> KAFKA-4133 - Provide a configuration to control consumer max in-flight fetches OPEN</p>	Consumer		Has a dependency on KIP-72 (which is still in progress) and there is no PR available, seems prudent to postpone it to the subsequent release.
4	KIP-112: Handle disk failure for JBOD	<p> KAFKA-4763 - Handle disk failure for JBOD (KIP-112) RESOLVED</p>	Broker		Needs more review time and makes sense to be part of the same release as KIP-113.

5	KIP-118: Drop Support for Java 7	 KAFKA-4423 - Drop support for Java 7 RESOLVED	Build		Postponed for a variety of reasons
6	KIP-120: Cleanup Kafka Streams builder API	 KAFKA-3856 - Cleanup Kafka Streams builder API RESOLVED	Streams	Guozhang Wang	Unable to review it in time for the feature freeze
7	KIP-138: Change punctuate semantics	 KAFKA-5233 - Changes to punctuate semantics (KIP-138) RESOLVED	Streams	Guozhang Wang	High impact change that needs more time to review