

Release Plan 2.1.0 (Nov 2018)

Release Dates

- KIP Freeze: Sep 24, 2018 (a KIP must be accepted by this date in order to be considered for this release)
- Feature Freeze: Oct 1, 2018 (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: Oct 15, 2018
- Release: Nov 20, 2018

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 [Dong Lin](#).

Release Features

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

- Java 11 support
- Support for Zstandard, which achieves compression comparable to gzip with higher compression and especially decompression speeds (KIP-110)
- Avoid expiring committed offsets for active consumer group (KIP-211)
- Provide Intuitive User Timeouts in The Producer (KIP-91)
- Kafka's replication protocol now supports improved fencing of zombies. Previously, under certain rare conditions, if a broker became partitioned from Zookeeper but not the rest of the cluster, then the logs of replicated partitions could diverge and cause data loss in the worst case (KIP-320).
- Streams API improvements (KIP-319, KIP-321, KIP-330, KIP-353, KIP-356)
- Admin script and admin client API improvements to simplify admin operation (KIP-231, KIP-308, KIP-322, KIP-324, KIP-338, KIP-340)
- DNS handling improvements (KIP-235, KIP-302)

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 unit/integration/system tests. We want to preserve the tradition of high-quality releases in Apache Kafka.

After code freeze:

- Write more unit/integration/system tests. We want to preserve the tradition of high-quality releases in Apache Kafka.
- Improve documentation
- Test the release candidates
- Open blocker JIRAs on critical issues found. Open non-blocker JIRAs on any other issues found.
- Fix critical 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

No issues found

Also feel free to refer to this release [page](#) for more details of the included tickets.

Planned KIP Content

Note: The planned content is not binding - final content will be based the features committed by branch-cutting date. See [Kafka Improvement Proposals](#) for the full list of KIPs.

KIP	JIRA	Component	Committer (reviewer)	Comment
KIP-91 Provide Intuitive User Timeouts in The Producer	 KAFKA-5886 - Introduce delivery.timeout.ms producer config (KIP-91) RESOLVED	Clients	Jason Gustafson	

KIP-110: Add Codec for ZStandard Compression	 KAFKA-4514 - Add Codec for ZStandard Compression RESOLVED	Broker, Clients	Jason Gustafson	
KIP-206: Add support for UUID serialization and deserialization	 KAFKA-4932 - Add UUID Serde RESOLVED	Clients	Ewen Cheslack-Postava	
KIP-211: Revise Expiration Semantics of Consumer Group Offsets	 KAFKA-4682 - Committed offsets should not be deleted if a consumer is still active (KIP-211) RESOLVED	Broker, Clients	Jason Gustafson	
KIP-231: Improve the Required ACL of ListGroups API	 KAFKA-5638 - Inconsistency in consumer group related ACLs RESOLVED	Security	Jason Gustafson	
KIP-235: Add DNS alias support for secured connection	 KAFKA-6195 - DNS alias support for secured connections RESOLVED	Clients	Rajini Sivaram	
KIP-302 - Enable Kafka clients to use all DNS resolved IP addresses	 KAFKA-6863 - Kafka clients should try to use multiple DNS resolved IP addresses if the first one fails RESOLVED	Clients	Rajini Sivaram	
KIP-306: Configuration for Delaying Response to Failed Client Authentication	 KAFKA-6950 - Add mechanism to delay response to failed client authentication RESOLVED	Client	Rajini Sivaram	
KIP-308: Support dynamic update of max.connections.per.ip/max.connections.per.ip.overrides configs	 KAFKA-6751 - Make max.connections.per.ip.overrides a dynamic config RESOLVED	Broker	Jason Gustafson	
KIP-312: Add Overloaded StreamsBuilder Build Method to Accept java.util.Properties	 KAFKA-7027 - Overloaded StreamsBuilder Build Method to Accept java.util.Properties RESOLVED	Streams	Guozhang Wang	
KIP-319: Replace segments with segmentInterval in WindowBytesStoreSupplier	 KAFKA-7080 - WindowStoreBuilder incorrectly initializes CachingWindowStore RESOLVED	Streams	Guozhang Wang	
KIP-321: Update TopologyDescription to better represent Source and Sink Nodes	 KAFKA-6966 - Extend `TopologyDescription.Sink` to return `TopicNameExtractor` RESOLVED	Streams	Matthias J. Sax	
KIP-322: Return new error code for DeleteTopics API when topic deletion disabled	 KAFKA-4690 - IllegalStateException using DeleteTopicsRequest when delete.topic.enable=false RESOLVED	Tools	Jason Gustafson	
KIP-324: Add method to get metrics() in AdminClient	 KAFKA-6986 - Export Admin Client metrics through Stream Threads RESOLVED	AdminClient	Guozhang Wang	
KIP-328: Ability to suppress updates for KTables	 KAFKA-6556 - allow to attach callbacks in kafka streams, to be triggered when a window is expired OPEN	Streams	Matthias J. Sax	partially implemented in v2.1
KIP-330: Add retentionPeriod in SessionBytesStoreSupplier	 KAFKA-7101 - Session Window store should set topic policy `compact,cleanup` RESOLVED	Streams	Matthias J. Sax	
KIP-332: Update AclCommand to use AdminClient API	 KAFKA-7117 - Allow AclCommand to use AdminClient API RESOLVED	Tools	Jun Rao	
KIP-336: Consolidate ExtendedSerializer/Serializer and ExtendedDeserializer/Deserializer	 KAFKA-6923 - Consolidate ExtendedSerializer/Serializer and ExtendedDeserializer/Deserializer RESOLVED	Clients	Jason Gustafson	
KIP-338 Support to exclude the internal topics in kafka-topics.sh command	 KAFKA-7139 - Support to exclude the internal topics in kafka-topics.sh command RESOLVED	Tools	Jason Gustafson	
KIP-340: Allow kafka-reassign-partitions.sh and kafka-log-dirs.sh to take admin client property file	 KAFKA-7147 - Allow kafka-reassign-partitions.sh and kafka-log-dirs.sh to take admin client property file RESOLVED	Tools	Dong Lin	
KIP-342: Add support for Custom SASL extensions in OAuth2 authentication	 KAFKA-7169 - Add support for Custom SASL extensions in OAuth2 authentication RESOLVED	Security	Rajini Sivaram	
KIP-353: Improve Kafka Streams Timestamp Synchronization	 KAFKA-3514 - Stream timestamp computation needs some further thoughts RESOLVED	Streams	Guozhang Wang	

KIP-356: Add withCachingDisabled() to StoreBuilder	 KAFKA-6998 - Remove caching wrapper stores if cache-size is configured to zero bytes RESOLVED	Streams	Matthias J. Sax	
KIP-357: Add support to list ACLs per principal	 KAFKA-5698 - kafka-acls command should be able to list per principal RESOLVED	Tools	Dong Lin	
KIP-358: Migrate Streams API to Duration instead of long ms times	 KAFKA-7277 - Migrate Streams API to Duration instead of longMs times RESOLVED  KAFKA-7477 - Improve Streams close timeout semantics RESOLVED	Streams	Matthias J. Sax	
KIP-365: Materialized, Serialized, Joined, Consumed and Produced with implicit Serde	 KAFKA-7396 - KIP-365: Materialized, Serialized, Joined, Consumed and Produced with implicit Serde RESOLVED	Streams	Guozhang Wang	
KIP-366: Make FunctionConversions deprecated	 KAFKA-7399 - FunctionConversions in Streams-Scala should be private RESOLVED	Streams	Guozhang Wang	
KIP-372: Naming Repartition Topics for Joins and Grouping	 KAFKA-7406 - Naming Join and Grouping Repartition Topics RESOLVED	Streams	Matthias J. Sax	

Postponed to subsequent release

KIP	JIRA	Component	Committer	Comment
KIP-81: Bound Fetch memory usage in the consumer	 KAFKA-4133 - Provide a configuration to control consumer max in-flight fetches OPEN	Clients	Jason Gustafson	
KIP-149: Enabling key access in ValueTransformer, ValueMapper, and ValueJoiner	 KAFKA-4218 - Enable access to key in ValueTransformer RESOLVED	Streams		partially implemented in v1.1
KIP-150 - Kafka-Streams Cogroup	 KAFKA-6049 - Kafka Streams: Add Cogroup in the DSL RESOLVED	Streams		
KIP-289: Improve the default group id behavior in KafkaConsumer	 KAFKA-6774 - Improve default groupId behavior in consumer RESOLVED	Clients		
KIP-313: Add KStream.flatTransform and KStream.flatTransformValues	 KAFKA-4217 - KStream.transform equivalent of flatMap RESOLVED	Streams	Matthias J. Sax	
KIP-320: Allow fetchers to detect and handle log truncation	 KAFKA-6880 - Zombie replicas must be fenced RESOLVED	Broker,Clients	Dong Lin	
KIP-328: Ability to suppress updates for KTables	 KAFKA-6556 - allow to attach callbacks in kafka streams, to be triggered when a window is expired OPEN	Streams	Matthias J. Sax	partially implemented in v2.1
KIP-331 Add default implementation to close() and configure() for Serializer, Deserializer and Serde	 KAFKA-6161 - Add default implementation to close() and configure() for Serializer, Deserializer and Serde RESOLVED	Core, Streams		
KIP-339: Create a new IncrementalAlterConfigs API	 KAFKA-7466 - Implement KIP-339: Create a new IncrementalAlterConfigs API RESOLVED	AminClient	Colin McCabe	
KIP-341: Update Sticky Assignor's User Data Protocol	 KAFKA-7026 - Sticky assignor could assign a partition to multiple consumers (KIP-341) RESOLVED	Clients	Jason Gustafson	
KIP-359: Verify leader epoch in produce requests	 KAFKA-7383 - Verify leader epoch in produce requests (KIP-359) OPEN	Broker,Clients		
KIP-361: Add Consumer Configuration to Disable Auto Topic Creation	 KAFKA-7320 - Provide ability to disable auto topic creation in KafkaConsumer RESOLVED	Clients		

KIP-367 Introduce close(Duration) to Producer and AdminClient instead of close(long, TimeUnit)	 KAFKA-7391 - Introduce close(Duration) to Producer and AdminClient instead of close(long, TimeUnit) RESOLVED	Clients, AdminClient		
KIP-368: Allow SASL Connections to Periodically Re-Authenticate	 KAFKA-7352 - KIP-368: Allow SASL Connections to Periodically Re-Authenticate RESOLVED	Broker,Clients	Rajini Sivaram	