Release Plan 3.7.0

Release Dates

(all are in 2023)

- KIP Freeze: **22nd November** (Wednesday)
  - A KIP must be accepted by this date in order to be considered for this release. Note, any KIP that may not be implemented in a week, or that might destabilize the release, should be deferred.
- Feature Freeze: **6th December** (Wednesday)
  - *major features merged & working on stabilisation, minor features have PR, release branch cut; anything not in this state will be automatically moved to the next release in JIRA*
- Code Freeze: **20th December** (Wednesday)
- At least two weeks of stabilization will follow Code Freeze, meaning we expect to release **no earlier** than **January 3rd**. We will move as fast as we can, and aim completion the earliest we can in January.

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 earliest possible release date is 2w after code freeze, release candidates (RCs) will roll out as needed until the release vote passes.

The release manager is Stanislav Kozlovski

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, as it usually happens, **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 release candidates. Even though only PMC votes are binding, community votes are super important as we evaluate the readiness of the release.

Open Issues

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution

> ⚠ JQL and issue key arguments for this macro require at least one Jira application link to be configured

Also, feel free to refer to the 3.7.0 release page for more details of the included tickets (requires logging in to the Apache Kafka Jira project).

Planned KIP Content

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

See Kafka Improvement Proposals for the full list of KIPs.

If you do not see your KIP here and want to, please reply to the mailing list thread about the release!

KIP	JIRA	Component	Status

KIP-405: Kafka Tiered Storage	⚠ Unable to render Jira issues macro, execution error. ⚠ Unable to render Jira issues macro, execution error.	core	A major part went out with 3.6.0. A minor part of the KIP is to be completed in 3.7.0.
KIP-580: Exponential Backoff for Kafka Clients	⚠ Unable to render Jira issues macro, execution error.	clients	Done
KIP-714: Client metrics and observability	⚠ Unable to render Jira issues macro, execution error.	core	Done A few minor improvements in the next release.
KIP-848: The Next Generation of the Consumer Rebalance Protocol	⚠ Unable to render Jira issues macro, execution error.	core	KIP Accepted Targetting a **Preview** in 3.7
KIP-858: Handle JBOD broker disk failure in KRaft	⚠ Unable to render Jira issues macro, execution error.	core	KIP Accepted Implementation not yet completed
KIP-890: Transactions Server-Side Defense	⚠ Unable to render Jira issues macro, execution error.	core	Part 1 Completed
KIP-896: Remove old client protocol API versions in Kafka 4.0 - metrics /request log changes to identify deprecated apis	⚠ Unable to render Jira issues macro, execution error.	core	KIP has enough votes Nov 22, 72 hours not completed

KIP-919: Allow AdminClient to Talk Directly with the KRaft Controller Quorum and add Controller Registration	⚠ Unable to render Jira issues macro, execution error.	core	KIP accepted
KIP-925: Rack aware task assignment in Kafka Streams	⚠ Unable to render Jira issues macro, execution error.	streams	KIP Accepted
KIP-951 - Leader discovery optimizations for the client	⚠ Unable to render Jira issues macro, execution error.	clients	Done
KIP-954: expand default DSL store configuration to custom types	⚠ Unable to render Jira issues macro, execution error.	streams	Done
KIP-959: Add BooleanConverter to Kafka Connect	⚠ Unable to render Jira issues macro, execution error.	connect	Done
KIP-960: Single-key single-timestamp IQv2 for state stores	⚠ Unable to render Jira issues macro, execution error.	streams	Done
KIP-962: Relax non-null key requirement in Kafka Streams	⚠ Unable to render Jira issues macro, execution error. ⚠ Unable to render Jira issues macro, execution error.	streams	Done

[KIP-963: Additional metrics in Tiered Storage](#)	⚠ Unable to render Jira issues macro, execution error.	core	KIP passed vote on November 21. Targetting 3.7
[KIP-968: Support single-key_multi-timestamp Interactive Queries (IQv2) for Versioned State Stores](#)	⚠ Unable to render Jira issues macro, execution error.	streams	Done
[KIP-970: Deprecate and remove Connect's redundant task configurations endpoint](#)	⚠ Unable to render Jira issues macro, execution error.	connect	Done (deprecation in 3.7.0, removal in 4.0.0)
[KIP-975: Docker Image for Apache Kafka](#)	⚠ Unable to render Jira issues macro, execution error.		Done
[KIP-976: Cluster-wide dynamic log adjustment for Kafka Connect](#)	⚠ Unable to render Jira issues macro, execution error.	connect	Done
[KIP-978: Allow dynamic reloading of certificates with different DN / SANs](#)	⚠ Unable to render Jira issues macro, execution error.	core	Done
[KIP-979: Allow independently stop KRaft processes](#)	⚠ Unable to render Jira issues macro, execution error.	core	Done
[KIP-980: Allow creating connectors in a stopped state](#)	⚠ Unable to render Jira issues macro, execution error.	connect	Done

[KIP-985: Add reverseRange and reverseAll query over kv-store in IQv2](#)	⚠ Unable to render Jira issues macro, execution error.	streams	Done
[KIP-988: Streams Standby Update Listener](#)	⚠ Unable to render Jira issues macro, execution error.	streams	Done
[KIP-992: Proposal to introduce IQv2 Query Types: TimestampedKeyQuery and TimestampedRangeQuery](#)	⚠ Unable to render Jira issues macro, execution error.	streams	Done
[KIP-1000: List Client Metrics Configuration Resources](#)	⚠ Unable to render Jira issues macro, execution error.	core	Done
[KIP-1001: Add CurrentControllerId Metric](#)	⚠ Unable to render Jira issues macro, execution error.	core	Done

Postponed to subsequent release

KIP	JIRA	Component	Status
[KIP-759: Unneeded repartition canceling](#)		streams	KIP accepted
[KIP-892: Transactional Semantics for StateStores](#)		streams	KIP accepted
KIP-910: Update Source offsets for Source Connectors without producing records			Vote thread restarted on Nov 15 but no activity
KIP-912: Support decreasing send's block time without worrying about metadata's fetch			Vote thread started Nov 13 - no activity
KIP-913: add new method to provide possibility for accelerate first record's sending			Vote thread started Nov 13 - no activity
KIP-953: partition method to be overloaded to accept headers as well			Vote didn't pass

[KIP-956 Tiered Storage Quotas](#)	⚠ Unable to render Jira issues macro, execution error.	core	Discussion started Nov 22 (KIP Freeze Date)
KIP-967: Support custom SSL configuration for Kafka Connect RestServer			Vote didn't pass
[KIP-969: Support range interactive queries (IQv2) for versioned state stores](#)		streams	
[KIP-977: Partition-Level Throughput Metrics](#)			2/3 binding votes on Nov 22 - didn't make the KIP Freeze
KIP-982: Enhance Custom KafkaPrincipalBuilder to Access SslPrincipalMapper and KerberosShortNamer			Vote didn't pass. Just one binding vote
[KIP-997: update WindowRangeQuery and unify WindowKeyQuery and WindowRangeQuery](#)		streams	Vote thread started November 17. Didn't get any votes by Nov 22
[KIP-938: Add more metrics for measuring KRaft performance](#)	⚠ Unable to render Jira issues macro, execution error. ⚠ Unable to render Jira issues macro, execution error.	core	Accepted. Majority was completed in 3.6. The remaining minority was planned to be done in 3.7.0, but it slipped (no PR opened)
[KIP-998: Give ProducerConfig(props, doLog) constructor protected access](#)	⚠ Unable to render Jira issues macro, execution error.	clients	KIP Accepted No PR merged for 3.7. Slipped