

Milestones for Beam 3.0.0

Date: 2025-04-05

Self-Link: <https://s.apache.org/beam3-milestones>

Objective

This document details the milestones for achieving Beam 3.0, including features, enhancements, and potential deprecations. These milestones are based on the Beam 3.0 vision outlined in [the discussion document](#).

Milestones

Break down the development cycle into manageable phases, each with specific deliverables and timelines. Note Beam has approximately **eight** releases per year. The latest release is Beam 2.64.0.

Milestone 1: No-Code and ML Focus (2025-04-01 - 2025-12-31 ; Beam reaches 2.70.0)

Themes: Core improvements, API refinements, and groundwork for key features.

Deliverables:

- Prism as the default local runner for all Python workflows ([#34549](#))
- Deprecate ZetaSQL ([#34423](#))
- Default option changes for IO connectors (e.g., BigQuery IO), Runners (e.g., SA vs SE) ([#34550](#))
- Enrich YAML supports for IOs, turnkey transforms ([#34551](#))
- Enrich Managed IO by onboarding more IOs and making Iceberg feature complete ([#34552](#))
- Enrich ML features such as RAG, Anomaly Detection, Model Metrics, Hyperparameter Tuning ([#34553](#))
- Consider reducing dependencies in core, moving more to separate/extra packages ([#34554](#))
- Scope streamlining Beam primitives (coders [#34637](#), type hints [#34671](#), schema [#34672](#), etc)

Milestone 2: Stabilization and Polish Focus: (2026-01-01 - 2026-03-31 ; Beam reaches 2.72.0)

Themes: Refinement, bug fixes, performance optimization, and documentation.

Deliverables:

- Finalize all features with thorough testing and stabilization
- Comprehensive documentation updates
- Performance benchmarking and optimization, especially for cross-language pipelines
- Addressing feedback from community testing and early adopters

Milestone 3: Release Candidate Focus (2026-04-01 - 2026-07-01 ; Beam reaches 2.75.0)

Themes: Final preparations for the official release.

Deliverables:

- Final bug fixes and documentation updates
- Release notes and migration guides prepared

Milestone 4: Beam 3.0 Release Focus (2026-07-01 - 2026-08-01 ; Beam releases 3.0.0)

Themes: Public announcement and availability of the Beam 3.0 release.

Deliverables:

- Release candidate build published for community review
- Official release artifacts published
- Announcement to the Beam community and broader ecosystem

Tracking and Communication

- **Issue Tracking:** Utilize [our github milestones](#) (see above 4 milestones) to track progress on individual tasks and issues
- **Regular Updates:** Provide consistent communication to the community through mailing lists, blog posts, Beam Summit, release notes ([#34555](#))
- **Feedback Mechanisms:** Gather feedback from users and contributors throughout the development process through mailing lists and GitHub issues ([#34555](#))