Feature plans of Milvus 2.2 and timeline

Kickstart	Design Stage	Code Freeze	RC1	GA
2022.7.1	2022.7.15	2022.8.30	2022.9.15	2022.9.30
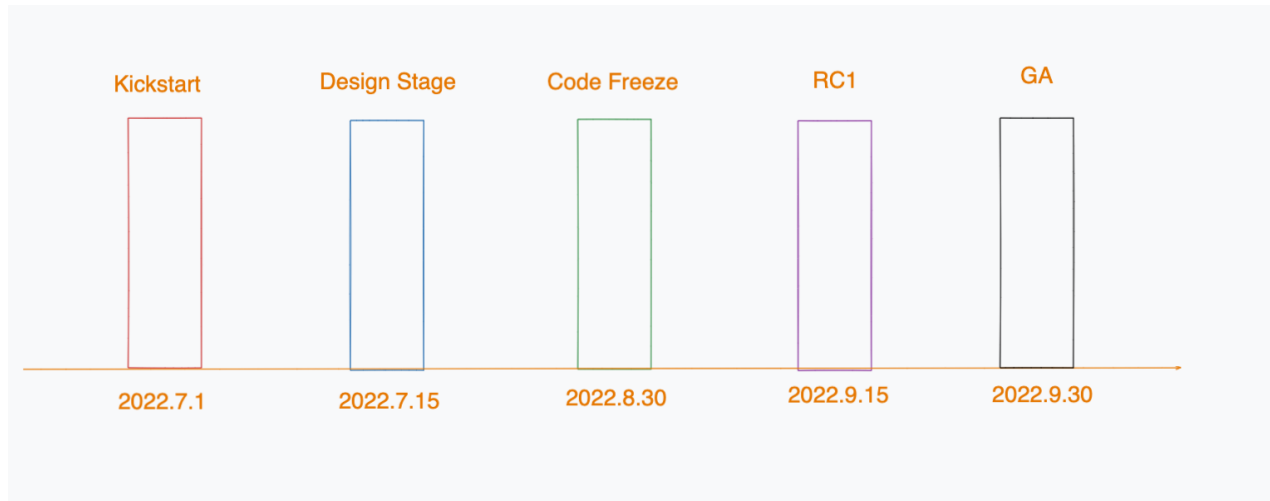
Note: the v2.2 is delayed to 2022.10.30

Stability improvement

Stabilitiy is the first priority of milvus for now.

The community decide to improve stability to a new step in the next major release, including:

1. Refactor Rootcoord to support idempotent retry of all DDL actions
2. Refactor Querycoord to solve the issues of loading collection error and failure recovery
3. Refactor IndexCoord and refine index build process
4. Support coordinator active/standby switch
5. Increase the UT coverage for all coordinator and Knowhere execution engine to 90%
6. Figure out some major memory issues.
7. Add fully e2e test for Java and Golang SDKs.
8. Support Quota to avoid overload the cluster

Major functionalities

Search by ID

    Given a entity ID, search for the closest TOP N of this entity

Vector Range Search (search by distance)

    Find all matched entity where distance > xxx or distance < xxx

Query Result pagination

    If query result is large, pagination is required to avoid large memory consumption on proxy and SDK side.

Coordinator Primary/Backup

    Failover fast when coordinator crash

GPU INDEX

    Support Faiss GPU index building and search.

Disk INDEX

    Support DiskANN as on disk index

RBAC Support

    Role based access control, See design of MEP29

Data backup

    Support data backup and restore, help you to keep your data safe

Enhancement

Refactor collection Alias

  Support atomic switch of collection alias.

Refactor meta storage and meta storage format

  Support mysql meta storage for some of the large metas, change meta storage format.

Performance optimization

  Performance boost on scalar filtering and vector comparison

Others

Observability

  Refine Log and Monitoring

  Support open tracing in Milvus