Feature Plans of Milvus 2.1 && Milvus Community activities
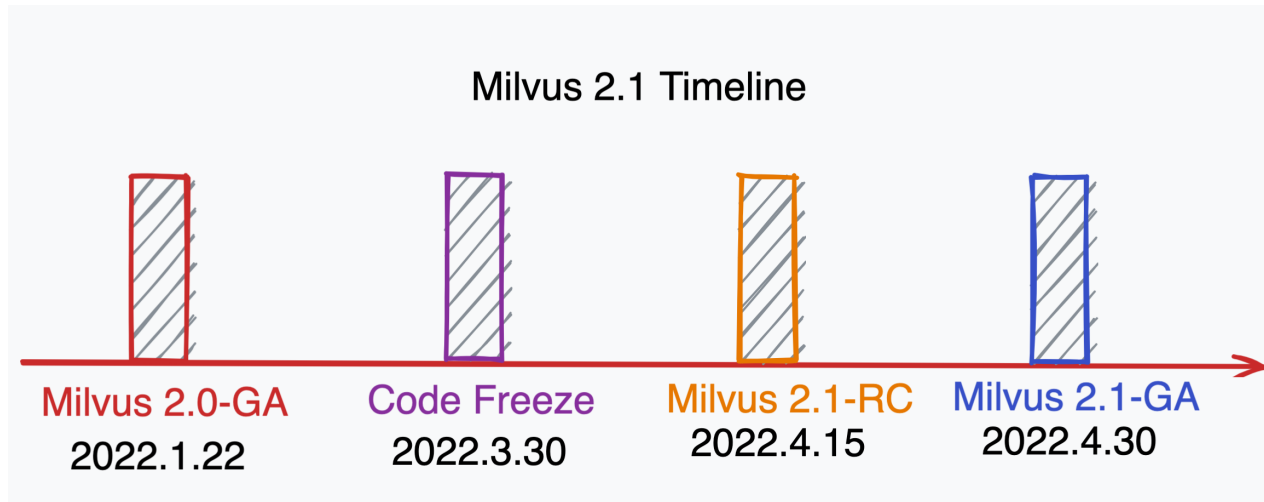
Milvus 2.1 Timeline

What's inside milvus 2.1?

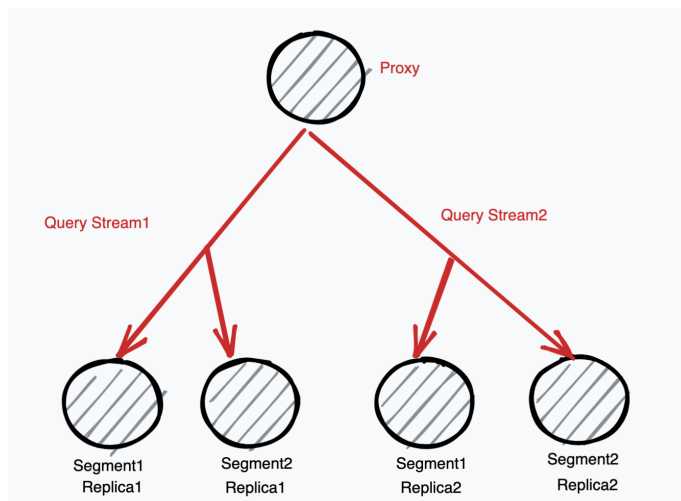**Functionality:**

String Support

MEP 11 -- Support String DataType
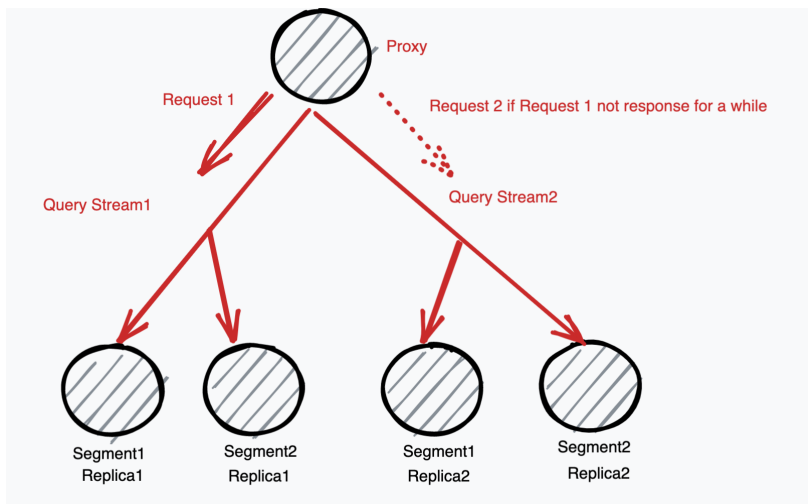
Data Time To Live(TTL)

Support automatically purge outdated data

Multi Memory Replica

Speculative execution

Speculative execution **is an optimization technique where a computer system performs some task that may not be needed**
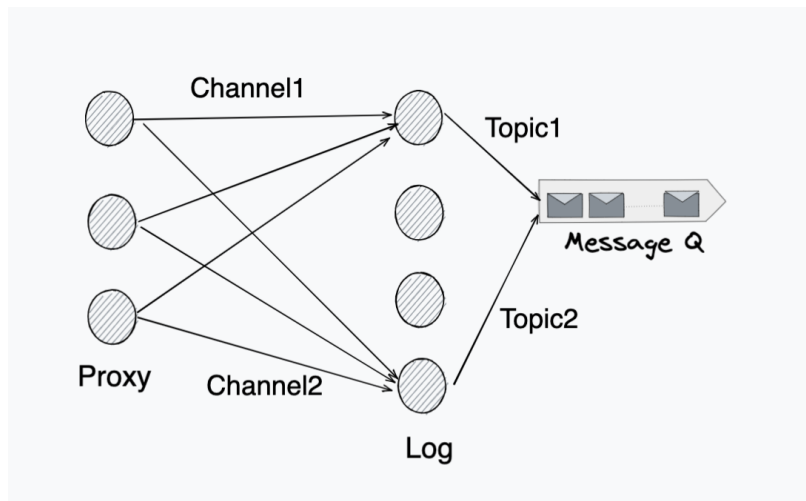
Account and password

Architecture Change:

    Plugin Message Storage

        More message storage options, such as Kafka, pulsar, rockmq....

    Add Log node as a new component

        each channel will be handled by one log node, all time tick will be sent by log node rather than root coord.

        log node can implement log indexes for PK Segment mapping

    Move knowhere out of Milvus as a independent oss project

Performance Boosting:. Goal 10ms e2e latency under small data size(Minimize the overhead), 10000 + QPS for 100m 768 dim vectors(Maximize Throughput)

    Full Performance benchmark

    Performance bottle neck removal

    In Memory RPC under standalone mode

        change grpc into a new implementation

    Request combination

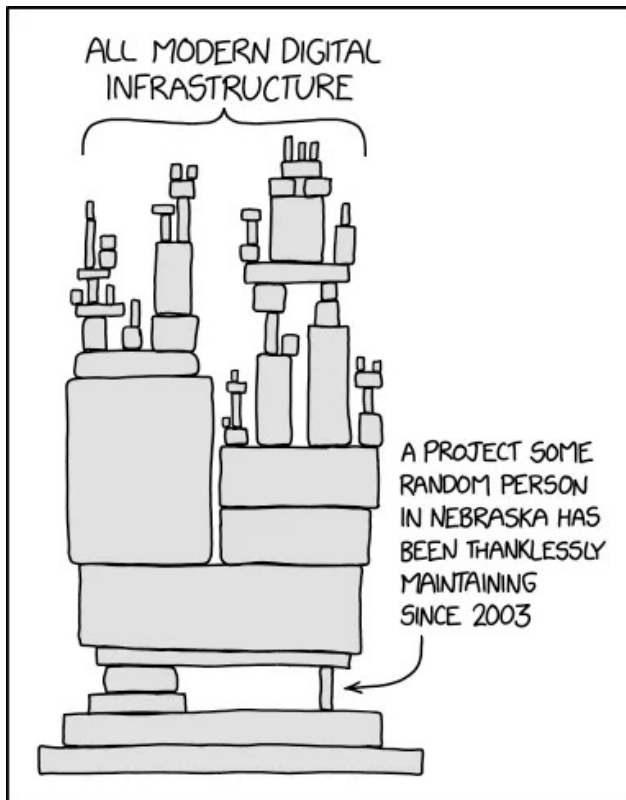   **Merge multiple small nq request into a large nq request to improve throughput**

Ease of use:

    Support Milvus Standalone as a single process

    Support Milvus as a python embedded library.

    Dev && run milvus on Mac and Arm server

    C++/Restful SDKs

Other community improvements

Membership

    Mentorship

    Looking for volunteers on refine technical documentation

    Refines logs with new standard.