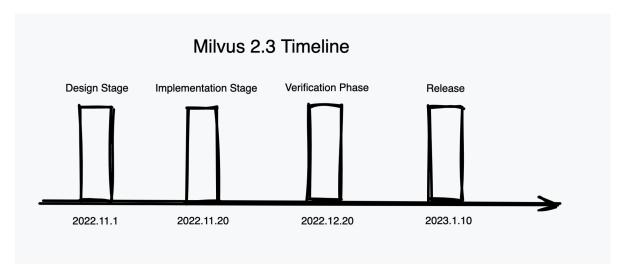
# Feature plans for Milvus 2.3 and timeline



## **Stability improvement**

Implement Mini Milvus Cluster and add more e2e test in the repo.

Clean all the chaos test issue and ensure all failure can be recovered in less than 3 Minutes.

Improve the availability with multiple replicas

Better memory usage control mechanism

#### **Performance**

2C8G 1M 128 dim Vector, serial search latency < 5ms

2C8G 1M 128 dim Vector, 50 thread concurrent search latency < 50ms(QPS > 1000)

Release vector search benchmark and tool

Support large cluster with tens of billion vectors and scale linearly

Improve the hybrid search/retrieve performance

## **Major functionalities**

#### Partition refine

- 1. Support dynamically load/release one partition
- 2. Manage the memory when many partitions are created.
- 3. Improve partition search performance

#### Data backup

#### **Resource Group**

- 1. physical isolation between resource groups
- 2. resource group can be also combined with a namespace.

#### Range Search

Rolling Upgrade/Graceful shutdown

**Change Data capture** 

**GPU Index support (Optional)** 

## **SDK**

Go SDK fully tested

Restful API Documentation

Refine python, java, go, node SDK and sync up all APIs

## **Enhancement**

- 1. Refactoring Data storage format to support new scalar execution engine and better compression
- Refactoring data coordinator and index coordinator, combine to single process and make it easy to understand and deploy
  Implement QueryNode V2 to simplify search path and improve search performance

# **Ecosystem**

- Support Huggingface , PaddlePaddle and OpenAI as the inference engine
  Support Data Migration from Milvus 1.0, Faiss, Hnswlib to Milvus 2.0
- 3. Support to deploy Milvus on GCP easily
- 4. Feder support Vector data visualization
- 5. More trouble solving tools such as tracing, birdwatcher and dynamic config support

## **Documents**

- 1. Update all user document
- 2. First version of milvus technical guide