

Milvus 2.X Roadmap and Time schedule

Milvus Project Roadmap and Time Schedule

	Time	Note
2.0.2	2022.3.10	
2.0.3	2022.3.24	
2.1-RC1	2022.5.6	
2.1	2022.5.17	
2.2-RC1	2022.8.12	
2.2	2022.8.24	

Milvus 2.0 time schedule

Next Few Big Releases:

Milvus 3.0: 2022.12

Roadmap features

DDL

Version	Feature	Owner	Status	Comment
2.1	Supports string data types	xi-ge16, dragondriver	in progress	https://wiki.lfaidata.foundation/display/MIL/MEP+11+-+Support+String+Data+Type?src=contextnavpagetreemode
2.1	Username/Password	awekjiang	in progress	MEP 27 -- Support Basic Authentication
2.2	Supports Scalar bitmap/inverted Index for string and numeric data types		pending	
2.2	Collection alias atomic switch		pending	
2.2	Supports alter collection		pending	
2.2	Support auto data partition		pending	
3.0	Support list,set,json data type		pending	

DML

Version	Feature	Owner	Status	Comment
2.1	support query/search result iteration		delayed to 2.2	
2.1	Support auto-expiration	Writic	in progress	Partly finished. TBD next step.
2.2	Supports search by id		pending	TBD
2.2	Vector range search		pending	TBD
2.2	Update support		pending	
2.2	Delete performance optimization		pending	
3.0	Support complicated scalar operation with vectorization(DuckDB, Data fusion, Gandiva)		pending	
Long term	Multi vector support		pending	
Long term	Supports upsert/primary key deduplication		pending	

Features

Version	Feature	Owner	Status	Comment
2.1	Multi tenant support and access control/Support ACL	Ke Jiang	in progress	MEP 29 -- Support Role-Based Access Control
2.1	Data compression	yah01	done	
2.2	query pagination		pending	
2.2	Segment LRU load		pending	
2.2	Change data capture		pending	
3.0	UDF support		pending	
3.0	User specified reranking and preprocessing in container		pending	
3.0	Adopts incremental backup		pending	
Long Term	Supports static data encryption		pending	

Performance/Cost

Version	Feature	Owner	Status	Comment
2.1	performance benchmark	wangting	done	
2.1	performance optimization and monitoring	czs007	in progress	
2.1	Multi memory replica	sunby	in progress	
2.1	Data bulkload	yhmo	done	MEP 24 -- Support bulk load
2.2	Supports GPU Index building and embedding retrieval		pending	
2.2	Load balance optimization	congqi xia	pending	
2.2	Supports ScaNN Index	walmart labs	in progress	
3.0	Adopts cost-based query optimization algorithm to improve hybrid search efficiency		pending	
Long Term	Supports on-disk vector indexing		pending	
Long Term	Automatic index optimization		pending	

Stability

Version	Feature	Owner	Status	Comment
2.1	Chaos test	zhuwenxing	done	basically works
2.x	Pressure test	yanliang567	pending	
2.1	Supports segment in memory replicas	sunby	in progress	
2.2	Coordinator Primary/Backup support		in progress	MEP30
2.2	Flow control && back pressure support	jaimie	pending	
3.0	Master/Slave cluster		pending	
3.0	Query node resource isolation		pending	

Ease Of Use

Version	Feature	Owner	Status	Comment
2.1	Embedded Milvus that runs on laptops	soothing-rain	in progress	
2.1	windows support	matrix ji	in progress	
2.1	arm support	yusheng ma	in progress	
2.2	Multi datacenter deployment and multi-cloud integration		pending	ON AWS
2.2	Cluster auto scaling	LoveEachDay	pending	
2.2	Milvus deploy with ansible	zwd1208	in progress	
Long Term	Offline vector computation		pending	

SDK

Version	Feature	Owner	Status	Comment
2.1	Supports Restful APIs	haorensa, Anosh	in progress	coding
2.1	Supports C++ SDK	yhmo,matrixji, ArkaprabhaChakraborty	in progress	almost done
3.0	Milvus Query Language(SQL like, with ANN,Range support)		pending	
Long Term	Support GraphQL		pending	
Long Term	Support Rust SDK		pending	

Integration

Version	Feature	Owner	Status	Comment
2.1	Integrates Kafka	Jaime	in progress	
2.2	Support meta storage interface (Meta in etcd, zookeeper and other user implemented logic)	Jaime	pending	
2.2	Refine milvus bootcamp with Towhee and Hugging face	hou jie	pending	
2.2	Data stored over local/distributed filesystems		pending	
Long Term	Integrates distributed KV stores such as HBase/TiKV/FoundationDB		pending	