
AWS
re:Invent
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DAT305-R

Build ultra-fast microservices apps with Amazon MemoryDB for Redis

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Agenda

What is Amazon MemoryDB for Redis

Use case 1: Microservices messaging bus for healthcare

Demo

Use case 2

Q&A

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Amazon MemoryDB for Redis

Redis-compatible, durable, in-memory database service

Access data with ultra-fast performance and process more than 160 million requests per second

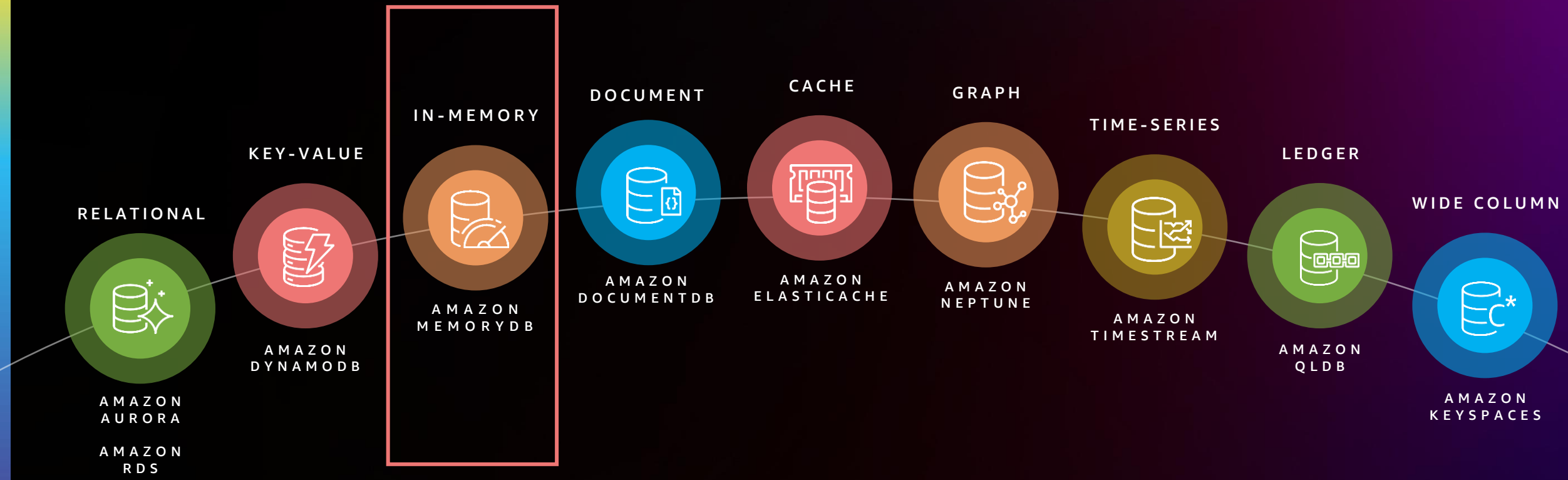
Store data durably with in-memory storage that uses a Multi-AZ transactional log



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Broadest portfolio of purpose-built databases



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In-memory performance, Multi-AZ durability

Performance and durability

- Microsecond reads, single-digit millisecond writes
- Multi-AZ data durability

Designed for scale

- Scale horizontally and vertically
- Online scaling
- High availability with read replicas

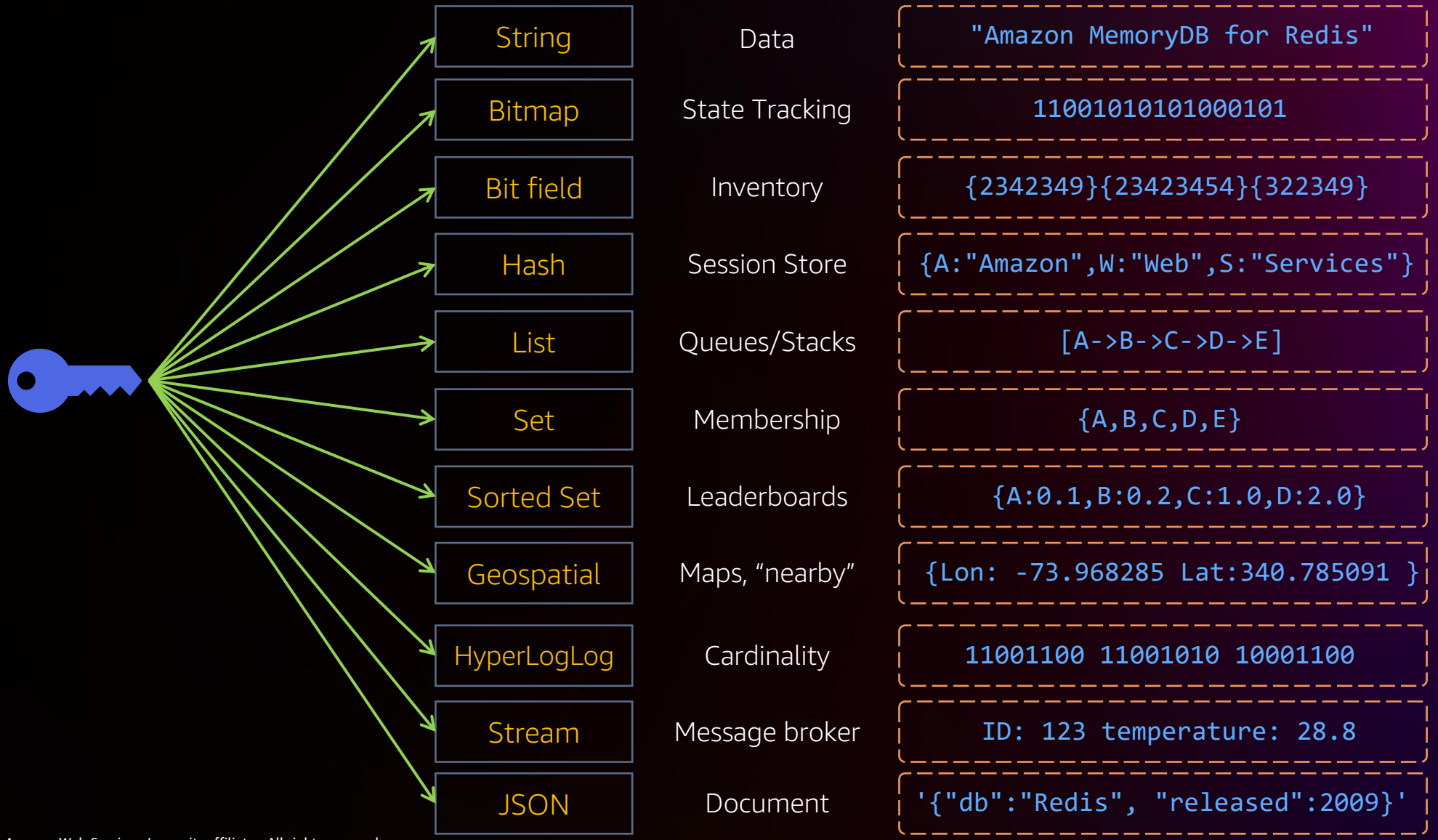
Features

- Expand storage with data tiering
- HIPAA eligible, PCI DSS, and others
- Automatic failovers



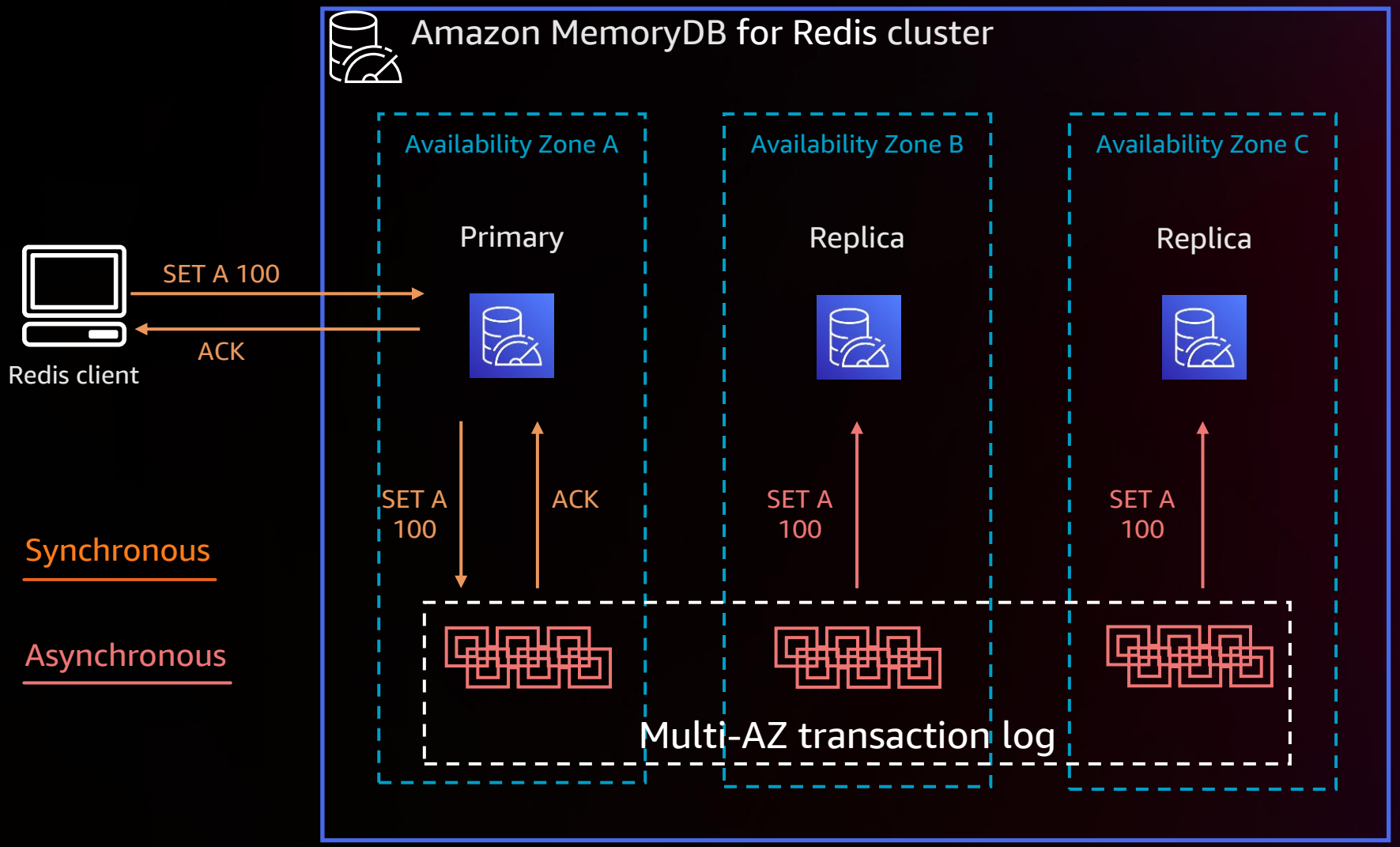
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Amazon MemoryDB is Redis Compatible



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Multi-AZ durability



Automatic Multi-AZ durability

No data loss, even in case of node or AZ failure

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Microservices messaging bus – health services

Use case

- Health monitoring devices generate health data
- Health professionals view health data on demand



Requirements

- HIPAA eligible
- High performance
- Data durability

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Which use case next?

1

Durable session store

- Store longer-term user sessions
- Retail, gaming
- Build with a cache and database or MemoryDB

2

Tokenized data storage

- Store tokenized data like financial instruments
- Banking, fintech
- Cache and database or MemoryDB

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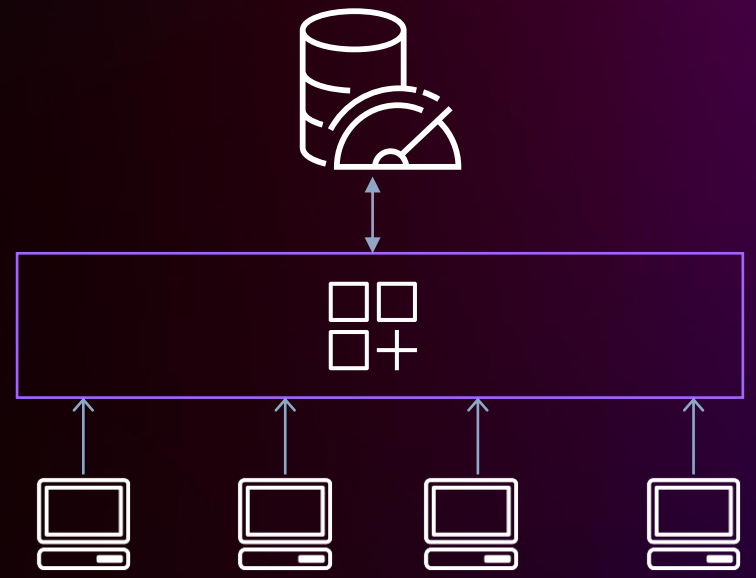
User session data

Use case

- Long-lived session data

Requirements

- Ultra-fast performance
- No data loss
- JSON support
- Data tiering



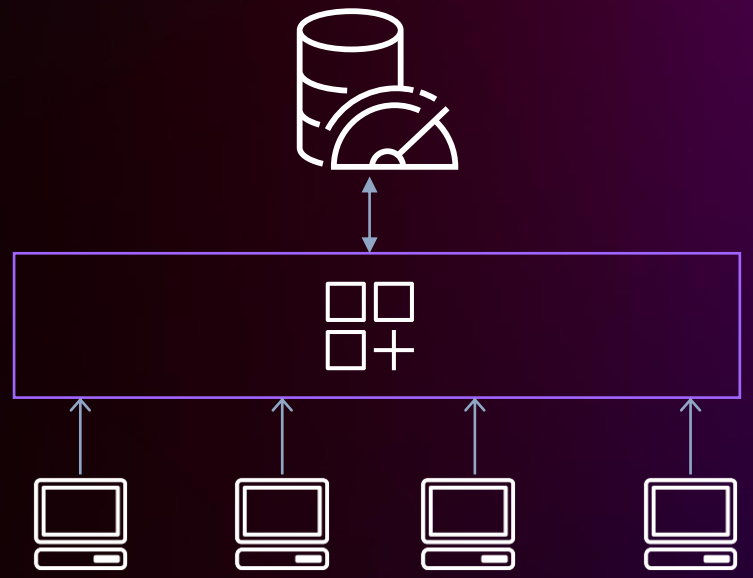
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Tokenized financial data

Use case

- Store and retrieve tokenized data
- Financial instruments tokenization



Requirements

- Ultra-fast performance
- No data loss
- Data tiering

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Additional resources



Get started with a 2-month free trial of MemoryDB



MemoryDB service documentation



Contact the MemoryDB team for more questions or help

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Thank you!

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