

# Memurai Enterprise for financial services

Lower risk, improved resilience, assure compliance and provide a superior customer experience with Memurai.



**MEMURAI**  
ULTRA-FAST DATA STORE



“A high performance database that delivers sub-milliseconds response time can be vital.”

The financial industry is undergoing massive changes. While consumer expectations have increased in the last few years, the market has become more and more competitive. On top of this, the global pandemic and low interest rates; financial institutions are facing the worst bank stock performance in history.

Financial institutions are responding by looking to improve profitability by making business decisions faster, for example by approving loans and credit applications more quickly. A high-performance database that delivers sub-milliseconds response time can be vital. Memurai Enterprise high availability and seamless integration with Windows make it the perfect tool to help financial institutions be more competitive.

Memurai is a fully-supported platform that meets enterprise customers' requirements in terms of support, scalability, and performance. Memurai offers outstanding feature parity as a Redis-compatible Windows alternative to tackle the most demanding enterprise needs. Multiple Fortune 500 companies, government agencies, universities, insurance, and fintech companies on 7 continents already use it for critical workloads

# How Memurai Enterprise empower financial services

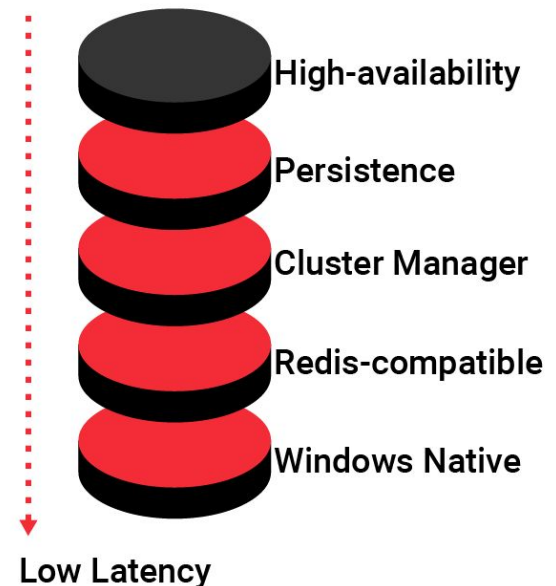
## Memurai Enterprise for fraud detection and mitigation

The complexity of storing and executing multiple risk models at the same time and the large volume of transactions undertaken by today's financial industry lead to systems built on traditional relational databases fall short when it comes to the streaming of market data and providing query answers in real time.

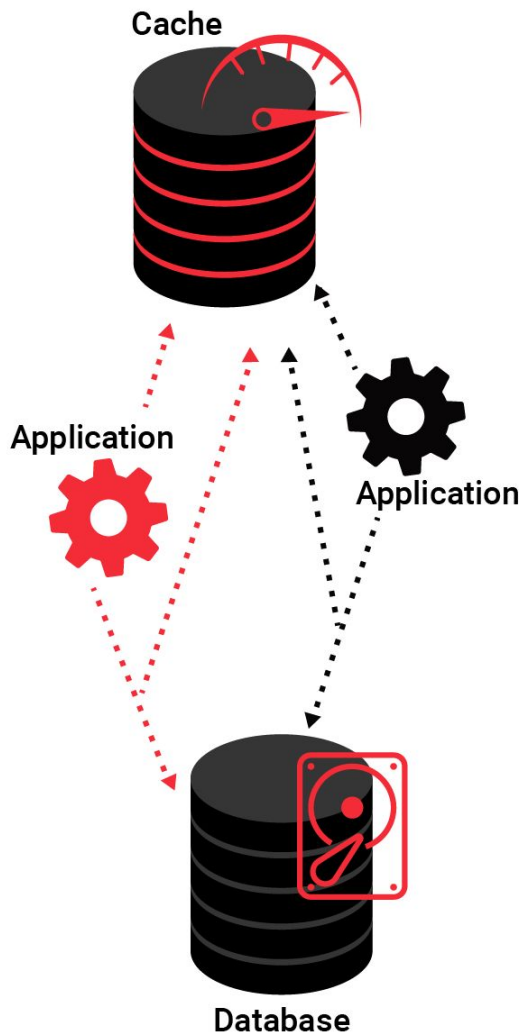
**In-memory distributed cache provides a fast and reliable solution that will end up in not only better performance, but lower costs.**

In place checks and validation to fast in-memory before transactions can help with fraud detection and prevention.

### Memurai Enterprise



# A happy client is a long term client, strengthen customer relationships



Today's customers have higher expectations from their financial institutions. Long gone are the times when you went to a physical office for everyone of your operations. These days most of the operations are made on-line and mostly by the bank app.

Customers expect their banking apps to be flawless. [Mobile banking apps are one of the most used mobile apps.](#) To meet customer expectations banks are changing from the old relational databases that weren't designed for millions of transactions and queries and customers constantly accessing their accounts.

Memurai is a responsible, low latency, scalable and highly available in-memory cache and datastore that will help your business reduce complexity and costs while meeting your customers' ever-increasing demands.

**LEARN MORE NOW**

# Compatibility between Redis and Memurai

Memurai is binary compatible with Redis. If you're already running Redis instances on Linux, you can replicate data between Memurai and Redis, or even use both Redis and Memurai within the same cluster.

If you have systems that are relying on the now archived MSOpenTech Redis on Windows that stopped evolving and got stuck at version 3.x - Memurai is a rock-solid alternative. The experience of transitioning from MSOpenTech Redis to Memurai has been smoothless for all customers.

## How is the performance of Memurai on Windows compared to Redis on Linux?

Performance is crucial for developers using in-memory caches. Memurai brings an enterprise-grade cache and data store to Windows and benefits from the considerable amount of time we've poured into improving its performance. The results above show Memurai easily matches Redis for the majority of the queries in the synthetic redis-benchmark workload, and for some queries performs over 50% better when pipelining is used, making Memurai a competitive alternative to Redis for Windows environments. You can read the full benchmark comparison article [here](#).

# Memurai vs. Redis Benchmark Comparison

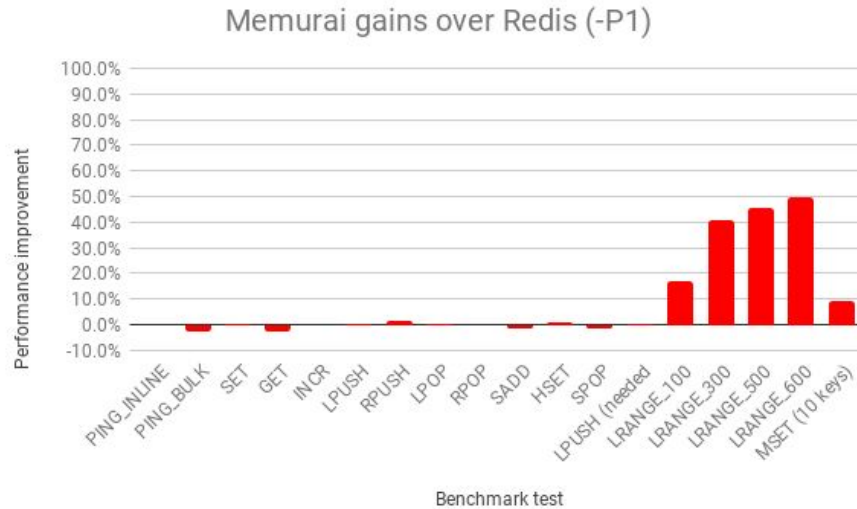


Fig 1.0 shows that performance of Redis and Memurai is comparable for most of the tests when using the -P1 option, with some marginal gains and losses that are within the noise. It's a different story, however, for the LRange\_\* and MSET benchmark tests, and you can see a blatantly obvious improvement over the Redis scores. And when increasing the pipelining value to 16, the difference is even starker.

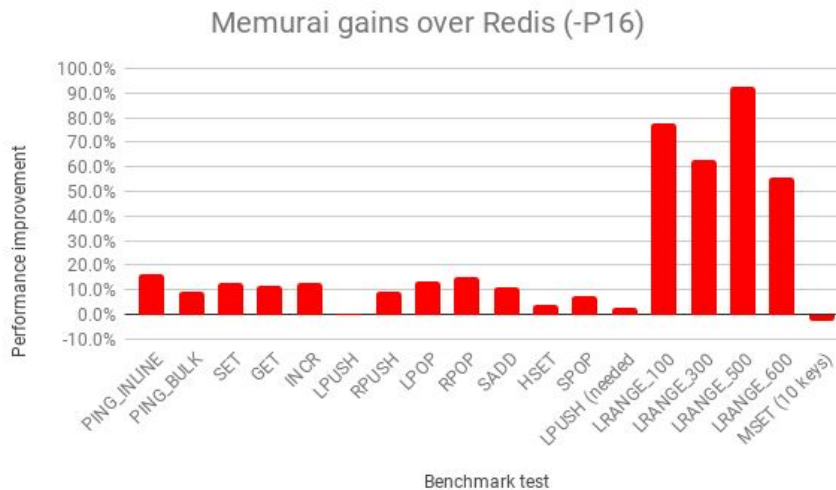


Fig 2.0 demonstrates how pipelining helps recognize significant gains over Redis. The majority of the tests in fig 2.0 show more than a 5% improvement over Redis on Linux. But again it's in the LRange\_\* results that Memurai shines. These benchmark results illustrate the dramatic improvement pipelining provides when working with Memurai, and each of the LRange\_\* tests shows over a 50% improvement when compared with Redis.

## **Are there known Redis Security vulnerabilities from version 3.x addressed in Memurai?**

Many customers, still using the archived MS Open Tech Redis on Windows build are exposed to a handful of publicly known security vulnerabilities. Those organizations are exposing themselves to unnecessary risks. Starting with Memurai 2.0.0 we already fixed and closed the known Redis 3.x, 4.x, and 5.x security vulnerabilities.

Currently, not only we are free from security vulnerabilities, but we are committed to fix them as soon as they become known.

## **How is Memurai different from other Redis for Windows alternatives?**

There is no official Redis support for Windows users. For testing and development purposes some developers recommend running Redis on Windows using Docker containers or running it under WSL (Windows Subsystem for Linux). Those alternatives are decent developer workarounds however those are not recommended for production workloads for performance, maintenance and security reasons.

# Thank You



**MEMURAI**  
ULTRA-FAST DATA STORE

Book a free consultation with one of our experts to learn what we can do for your business

[TALK TO AN EXPERT](#)

Download Memurai Developer Edition for free and start using Memurai today.

[DOWNLOAD FOR FREE](#)

## About Memurai Team

The Memurai team is a group of experienced developers and IT professionals with a long track record of delivering cutting edge solutions to software developers and enterprise customers.

We combine our expertise in open source technologies with deep understanding of the needs and challenges that enterprise customers are facing in the new fast-moving world of cloud-native app and service development.

Our journey with Memurai for Windows can be traced back to 2013, when we began leading the development of the Redis on Windows project by Microsoft Open Technologies (MSOpenTech).

