

# BigMemory for Financial Services

The in-memory solution for real-time big data



BigMemory stores hundreds of terabytes of data in memory for ultra-fast access to transaction, customer and risk data. It snaps into applications easily to deliver unmatched performance at any scale.

## Banking on Big Data

Boost performance and profits with BigMemory.

### Benefits

- Improve the performance of high-speed, high-volume applications
- Manage risk and allocate capital more effectively
- Profit from smarter, faster fraud detection
- Cultivate more valuable customer relationships
- Outpace competitors with real-time big data intelligence

### Why BigMemory

One out of three Fortune 500 banks, as well as the world's largest credit card and online payment processors, rely on BigMemory to power their applications and analytics. Why? Financial services firms live big data. They also need speed. And nothing goes as big or as fast as BigMemory. By taking advantage of real-time access to huge amounts of data for operations as varied as fraud detection, risk analytics and trade order management, BigMemory customers have added millions to their bottom line.

## BigMemory's Impact

### Real-time fraud detection

A Fortune 500 online payments processor dramatically improved the speed and accuracy of fraud detection, savings tens of millions of dollars annually.

### Trade order management

The largest security services firm doubled its order processing capacity—without adding servers—to handle growing trade volumes.

### Risk management

A Fortune 20 financial firm slashed risk reporting time from 45 minutes to 45 seconds for faster, more responsive decision-making.

### Credit card processing

A global financial group has saved millions by flagging blacklisted credit cards instantly, meeting its service level agreement with merchants 99.995 percent of the time.

**DOWNLOAD TRIAL**  
[terraccotta.org/financial](http://terraccotta.org/financial)

### Why in-memory?

- Speed data access by 100x or more
- Boost throughput by 10x or more
- Turn big data into fast data
- Gain instant business insights
- Take action in real-time
- Slash costs with cheap RAM

### Why BigMemory?

- Low latency at terabyte scale
- Easy, cost-efficient scaling
- Ultra-high availability
- Data consistency guarantees
- Persistence and fast restart
- Easy snap-in integration

### Financial services firms count on Terracotta to:

- Accelerate payment processing
- Thwart fraudsters in real-time
- Scale trade order management
- Achieve a trading edge
- Quickly gauge risk exposure
- Improve online banking

## Your Data in Real-Time

- Transaction data
- Risk and fraud rules
- Quotes and trades
- Credit data
- Financial assets
- Historical data
- Pricing and valuation data client and counterparty data
- Customer accounts
- Demographic and behavior data
- Tick data
- Social media data
- Reference data
- Clickstream data
- News/vendor feeds
- Geolocation data

## Our Proven Track Record with BigMemory

**4TB**

Fraud rules  
in-memory

**30x**

More transactions  
per second

**99.999%**

SLA compliance

**\$10 MILLION**

Saved annually

## Why BigMemory is a Big Deal

### Game-Changing Innovation for Financial Services

Turbocharge your most time-sensitive, data-intensive applications to increase transaction throughput, better manage risk, deepen customer engagement and gain real-time enterprise intelligence. BigMemory makes a big impact across the financial services sector, including market leaders in: capital markets, retail banking and payment services.



#### Trading

Trade order management—Manage orders in-memory to increase processing throughput and scale seamlessly with transient trading peaks and long-term growth.

Trade reconciliation—Boost the speed and stability of trade reconciliation applications to improve efficiency and limit operational risk.



#### Risk and Asset Management

Risk and compliance reporting—Use in-memory data to speed analytics and reporting for faster, more informed decisions on how to best deploy capital and mitigate risk.

Collateral management—Reduce risk exposure and support a higher volume of collateralized loans with real-time access to the data required to re-price and recall assets.



#### Payment Processing

Payment Authorizations—Accelerate the processing of online and mobile payments and boost profits by instantly identifying and rejecting blacklisted accounts.

Real-Time Fraud Detection—Prevent millions in losses with in-process fraud detection based on complex algorithms with thousands of rules.



#### Customer Engagement

Customer portals—Build customer loyalty by improving the convenience of online and mobile banking with reliable, ultra-fast access to account and other self-service information.

Personalization—Deepen customer relationships and increase profits with targeted cross-sell offers, displayed instantly through Web or mobile channels.



#### Real-Time Intelligence

Real-time big data analytics—Unlock the value in transaction, portfolio, market, customer, and other data. Improve performance and profits with real-time intelligence that can enhance investment decisions, risk management, customer targeting, and much more.

Integration—Pair BigMemory with Hadoop®, exchanging data through an in-memory hub to speed big data analysis and leverage the resulting insights more quickly.

Event Stream Processing (ESP)—Power event-driven applications, such as trading or risk management systems. Achieve low, predictable latencies and handle high-volume, high-velocity data streams in order to respond to market events in real-time.



Find out how to power up your Digital Enterprise at [www.SoftwareAG.com](http://www.SoftwareAG.com)

#### ABOUT SOFTWARE AG

Software AG helps organizations achieve their business objectives faster. The company's big data, integration and business process technologies enable customers to drive operational efficiency, modernize their systems and optimize processes for smarter decisions and better service. Building on over 40 years of customer-centric innovation, the company is ranked as a "leader" in 15 market categories, fueled by core product families Adabas-Natural, Alfabet, Apama, ARIS, Terracotta and webMethods. Learn more at [www.SoftwareAG.com](http://www.SoftwareAG.com).

© 2014 Software AG. All rights reserved. Software AG and all Software AG products are either trademarks or registered trademarks of Software AG. Other product and company names mentioned herein may be the trademarks of their respective owners.

SAG\_BigMemory\_for\_Financial\_Services\_SB\_Jan14