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The Power of Java Delivered at the Speed of C++, Unleashed for Capital Markets

Azul Platform Prime is the unmatched JVM that provides certainty of execution, guaranteed throughput and predictable behavior, and in many cases infrastructure savings.

Unmatched Java Performance for Capital Markets

Global capital markets are home to the world's most advanced real-time trading systems, a proving ground for advanced technologies since the emergence of electronic markets. Today, firms demand trading systems capable of handling massive volumes of pricing data with microsecond-level response times, serviced by complex algorithms executing trading strategies across multiple asset classes 24x7. These requirements also apply to downstream post-trade systems used for regulatory compliance and risk management, also upstream real-time "back-testing" and "walk-forward" systems,. As a result, advanced technology delivering ultra-low latency high performance, predictability, flexibility, scalability and reliability is a core competitive requirement.

Where Java is used, cheaper and with agility benefits versus C++, conventional one-size-fits-all JVMs are unable to meet the strict performance requirements of competitive global capital markets. The combination of unpredictable, inflexible and inadequate memory management in such JVMs introduces unacceptable risks into mission-critical systems that are fundamental to the success of underlying business models. The results is costly, constant tuning requiring developer time and scaling when it shouldn't be necessary to scale.

Benefits of Azul Platform Prime for Capital Markets and Financial Services

- **Provide certainty of behavior** Eliminate application pauses and latency spikes

- **Achieve Ultra-low latency when needed** Increase throughput at far lower average latencies

- **Unlock innovation** Enable new, real-time business capabilities that weren't possible before

- **Enhance Big Data in-memory applications** Provide data in less time

- **Improve time to market** Eliminate the need for most application tuning

- **Get more leverage from existing resources** Free developers to add capabilities and handle more transactions on existing hardware and software

- **Plug-and-play** Java SE compliant, requiring no code re-compilation or special configuration

- **Allocate resources in real-time** Grow and shrink memory usage above configuration limits, avoid out of memory crashes

- **Unmatched performance and scalability** Proven high performance JVM for capital markets

Introducing Azul Platform Prime The Azul Platform Prime JVM establishes performance standards unmatched in the industry. Azul Platform Prime meets or exceeds requirements for both real-time and big data applications. Azul Platform Prime improves service delivery, removing technical limitations that cause missed business opportunities, and facilitates optimal use of hardware, reducing infrastructure costs.

Designed for cost- and performance-driven data centers running Intel x86-64 commodity hardware on Linux, Azul Platform Prime unlocks the power of Java and takes it to a new level by leveraging Azul's innovative C4 no-pause garbage collection algorithm. The result is the industry's most advanced JVM that

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unlocks innovation, eliminating the traditional risks of applications written in Java. Azul Platform Prime also reduces tuning to a single parameter, freeing product development to focus on supporting business innovation and agility rather than on costly and time-consuming attempts to overcome fundamental constraints that inevitably fail to meet expectations.

Azul Platform Prime is the Best JVM for Capital Markets

Azul Platform Prime is widely deployed throughout the capital markets sector, used by the top ten trading organizations, leading hedge funds and exchanges Azul Platform Prime financial industry use cases range beyond low-latency Java -- Azul also powers Java-based infrastructure based upon Cassandra, Kafka, Hadoop, Spark, Ignite, Zookeeper and Elastic.

Azul Platform Prime solves the technical limitations associated with standard JVMs. With Azul Platform Prime, your development teams can focus on innovation and time-to-market instead of troubleshooting production issues.

Azul Platform Prime's certainty of execution, guaranteed throughput and predictable behavior allow firms to deploy applications with confidence. Azul Platform Prime meets the Java SE standard and is a full-featured JVM that requires no code re-compilation or special configuration. Implicit support for next generation products running on JVM-based languages such as Scala or Clojure and on technologies such as Spark, Hadoop, Cassandra, Kafka, Ignite and Hazelcast guarantees investment protection beyond current applications. Azul Platform Prime also includes a monitoring and management platform that provides complete real-time visibility into the health and performance of mission critical systems running Java.

Selected Azul Systems Capital Markets Quotes

"Improved response times tenfold. Azul allowed us to greatly reduce runtime in the most latency sensitive code. Keeping the code warm with ReadyNow! Technology improved response times over tenfold in infrequently run but very critical parts of our systems."

Marius Skoczen, CTO, DLT Capital

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"Reach C++ latencies with Java.""Azul Platform Prime is a powerful replacement of the standard Oracle Hotspot JVM. Azul Platform Prime addresses both the GC pause and JIT compilation issues… In our application, GCs are about 180 times smaller with Azul Platform Prime than with the standard Oracle Hotspot JVM."

Jad Sarno, Head of Technology, Dsquare Trading

DISQUARE

Customer Success: LMAX Exchange

Problem: LMAX needed a way to continue to provide low latency trade execution, high throughput and reliable service while experiencing rapid growth.
Solution: Azul Platform Prime

"LMAX Exchange is already one of the fastest execution venues for FX and our deep technological collaboration with Azul will help to ensure we continue to deliver even faster and more consistent execution for our clients in the future."
Edward McDaid, CIO at LMAX Exchange

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