

Meeting the Challenge

The Real Time Business Imperative



Table of Contents

Introduction	2
1. The Real Time Business	3
2. Java Limitations	6
3. A Better Java	8
4. Zing: Java for the Real Time Business	10
5. Java for the Real Time Business	15

CHAPTER ONE

The Real Time Business

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The Real Time Business Imperative [Is Everywhere]

The emerging Real Time Business Imperative means your business must now leverage new technologies and high volumes of data to deliver insight, capability and value faster than ever, with near zero tolerance for inconsistent delivery and uneven performance.

Key market shifts:

Nonstop Need to Innovate:

Demand shifts fast, and competitors don't stand still

Migration to Mobile:

Rich mobile apps need robust supporting apps

The War for Talent:

Attracting and keeping the best developers is more difficult than ever

The Incredible Shrinking Budget:

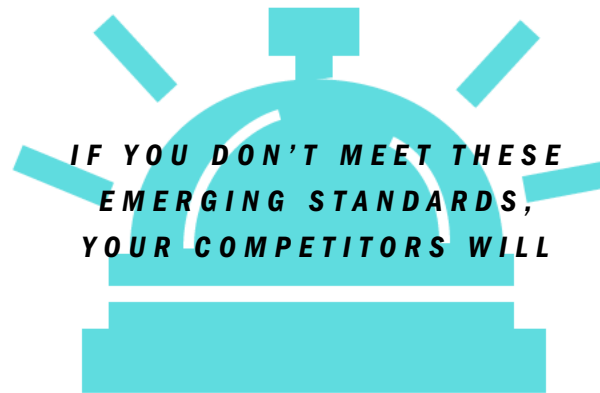
Budgets are constrained and can disappear overnight

Big (and Ever Bigger) Data:

That must be analyzed and acted on in near real time



Your Business is Now Real Time



- ▶▶ **Human Scale Timeframes:** Users get antsy in just a few seconds. An extra second can be a fatal delay.
- ▶▶ **Machine Scale Timeframes:** Automated data feeds have service levels in the microseconds.
- ▶▶ **Expectations and Imperatives Don't Change:** You can't just be fast, you have to be consistently fast – the worst case outlier is as important as the average.



If a trading company can save a millisecond...it could be worth as much as \$100 million to them.

– Mike Saunders, Hibernia Atlantic

CHAPTER TWO

Java Limitations

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Java is Great!

It's the default language for the enterprise. Ubiquitous, powerful and productive.

But Java has limitations for a real time business:

Performance Under Load: Long waits for users, SLA violations and even crashes

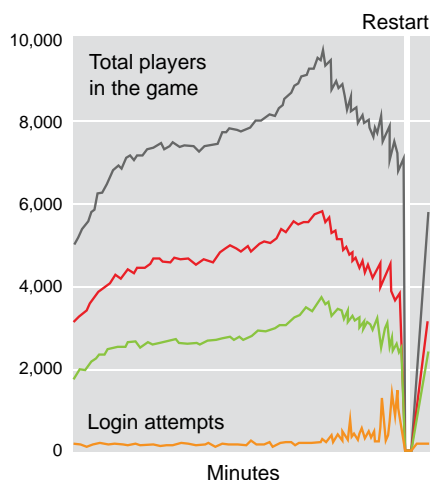
Tuning, Re-tuning and More Re-Tuning: Every time the app or load changes

Scale Out vs. Up: Create lots of small applications instances to avoid performance issues

Blocking Innovation: Tying up resources to fix production issues that should be used for new business initiatives



Java for the Real Time Business



Java applications don't scale. They don't. It's a fact, and it's not even up for debate, although many in the Java community are unwilling to admit it.

– Cameron McKenzie, TheServerSide.com









CHAPTER THREE

A Better Java

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What if there was a better Java?

-  **One that met all industry standards**
-  **One that eliminated jitter – out of the box**
-  **One that helped drive new revenues**
-  **One that gets your apps live ahead of rivals'**
-  **One that delivers better utilization of your human capital and existing hardware**
-  **One that helps you face your real time imperatives**

There is. We call it
Zing[®]

Zing: Java for The Real Time Business



4

Zing is the New Java Performance Standard



- ▶ **Great Performance, All the Time:** Java's optimizing compilers generate great code. That speed is now free of operational glitches, even when demand spikes.
- ▶ **Rival C/C++:** Use Java for application types that were formerly the exclusive domain of C and C++.
- ▶ **Without App Changes:** Improve performance of existing apps without re-coding or re-architecting.
- ▶ **Innovate:** Gain new competitive advantage from aggressive in-memory computing initiatives.

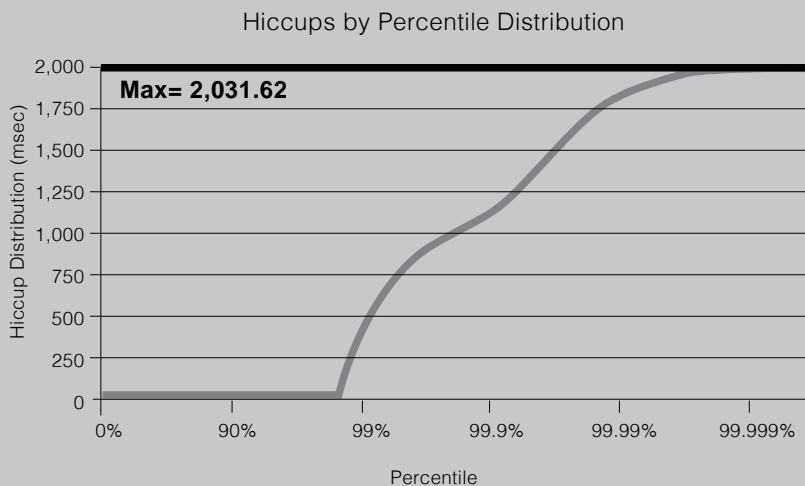
Java for the Real Time Business



*With Zing our reporting engine shows its best side.
It's not hobbled by the JVM anymore.*
– Daniel Taylor, VP Operations, Vocalabs

Zing: Java That Never Stalls Business

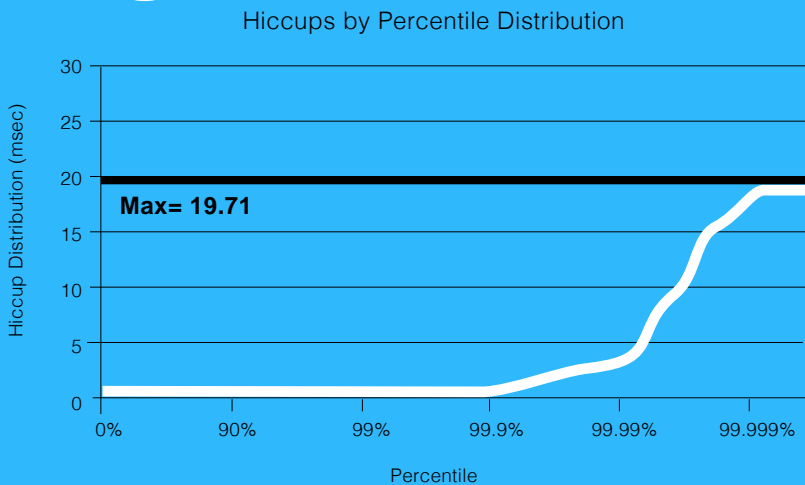
Traditional JVM



From this:

- Typical response time is fine
- Worst case is far too high

Zing



To this:

- Great performance – all the time
- No latency spikes

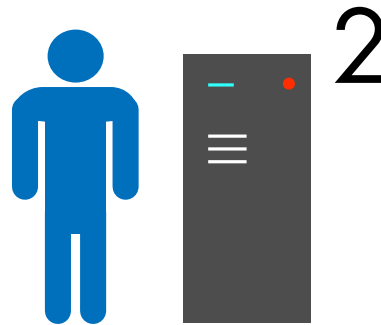
Unlocks Innovation



- 🔑 Deliver competitive advantage in real time
- 🔑 Create more functionality, faster
- 🔑 Pursue new business models that just don't work with traditional Java
- 🔑 Free up development and hardware resources for new innovation
- 🔑 Implement “actionable” Big Data and memory-based computing
- 🔑 Using all the advantages of Java – developer productivity, rich array of tools and libraries

Zing Drives Competitive Advantage

Capital Efficiency



Human Capital

Free up developers from time wasted tuning glitchy systems

Engage them in building new functionality and new offerings

“Developers are the new kingmakers”
– Stephen O’Grady,
Red Monk

Servers

Make effective use of all available memory and CPUs

Handle more users and transactions on existing hardware (2-3X more sustainable operational throughput)

*Zing allows **Smart Bomb Interactive** to support 2.5X the number of users on the same hardware – without crashing*

CHAPTER FIVE

Java for The Real Time Business



5

Azul Zing



Fast, consistent performance



Unmatched predictability



Unlocks innovation



Drives operational and capital efficiency



Standards based



Designed for the needs of your real time business



Proven

Evaluate Zing Today



Take a snapshot of your Java runtime configuration with the [free Azul Inspector tool](#)



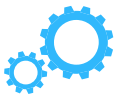
Confirm your business and technical goals and success criteria



Register for a [free trial](#) of Zing (Most trials are complete within 2 weeks)



Install Zing (takes about 5 minutes)



During the trial, work with your assigned Azul Engineer to achieve the best results



Review your Zing Trial results against your technical goals and ROI targets



Final Step: Purchase Zing subscriptions and deploy Java for your Real Time Business