



# Zing is the Best Foundation for Java in the Cloud

Java applications can take advantage of Cloud flexibility using advanced technology from Azul Systems

## Moving to the Cloud

Java-based applications are critical for many enterprises. However, as companies move applications into the Cloud for cost savings, flexibility and scalability, these critical apps are being left behind. The cause is conventional Java Virtual Machines (JVMs) which were never designed for use with hypervisors or in environments that demand resource flexibility. They are limited in the amount of heap memory they can use without long garbage collection (GC) pauses and can't grow and shrink elastically to handle unpredictable loads. As a result, conventional JVMs can prevent you from deploying mission critical Java applications effectively in both internal and external Clouds.

## The Cloud Requires Infrastructure Elasticity

The benefits of Cloud deployments and services include the ability to grow and shrink resources available to an application based on demand and to launch standardized virtual machines for rapid scale-out. Conventional JVMs rigidly limit resource usage and can suffer 'out of memory' errors if load increases too quickly. They were also never designed for use

with hypervisors that control memory and CPU availability. Services and deployments in the Cloud need a Java infrastructure that can grow and shrink the resources available to an application instance elastically hand-in-hand with the hypervisor, provide ease of deployment for new virtual machine instances and increased server utilization.

## Introducing Zing®

Azul Systems, the leader in Java performance innovation, has taken its proven technology and made it available as a software-only solution – Zing. Zing is the only commercial JVM that provides the resource elasticity and high utilization efficiency needed in Cloud deployments. It is a highly innovative Java infrastructure that provides guaranteed predictability, even under unpredictable load.

## Zing removes barriers to offering Cloud services

and to Cloud deployment for Java applications. Zing resource elasticity and instance management tools allow Java applications to leverage the benefits of the Cloud and enable new business strategies.



## BENEFITS OF ZING FOR CLOUD DEPLOYMENTS

- Flexible resource allocation takes advantage of Cloud elasticity
- Eliminate GC pauses even while using large heaps
- Deliver stable and consistent response times under load without constant tuning
- Flexible deployment move logical servers between physical machines
- Ease of management simplified instance deployment
- Speed time to market with minimal tuning needs and a hypervisor-friendly JVM
- Utilize cost-effective x86 hardware for your enterprise Cloud with no porting
- Proven scalability and performance proven success in Cloud deployments



### Benefits

With Zing, Cloud deployments and services enjoy resource elasticity and consistently fast response times, even under unpredictable loads. Zing complies with the Java SE specification, is easy to deploy and requires no code changes to your application.

Zing is more than just another JVM. It also includes Zing Vision, a zero-overhead production monitoring platform. The Zing Vision tool reduces production issue resolution time by utilizing the existing instrumentation built into Zing and used during normal operation.

### Zing: The Best JVM for the Cloud

The Zing allows your Java apps to take advantage of Cloud flexibility and efficiencies. Your applications will run better – with more consistent performance, improved scalability and increased reliability. With Zing, you can deploy in the Cloud and offer Cloud-based services with confidence. Each Java instance can grow and shrink resource usage on demand, “borrowing” and returning memory as needed.

### Get Started Today

Resource flexibility and ease of management allow Java applications to be deployed effectively in the Cloud. With a robust, scalable Java infrastructure based on Zing, you’ll be able to support new business models and Cloud strategies other JVMs just can’t handle.

## CUSTOMER SUCCESS

### Tier 1 Telco

#### Problem:

Current JVM was not able to support the requirements of new Cloud-based services.

#### Solution:

- Azul Zing.
- Flexible resource allocation
- Each server can handle more load due to higher throughput
- Ease of instance administration
- Elimination of long garbage collection pauses that impacted SLA conformance
- Ability to bill internal and external customers by CPU usage via Zing’s monitoring tools
- Improved overall performance

To get started, contact us:

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