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# JavaOne<sup>SM</sup>

## Java<sup>TM</sup> Cloud Computing with GridGain



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GridGain Systems

[www.gridgain.com](http://www.gridgain.com)

# Agenda

- > What is Grid/Cloud Computing
- > GridGainIn a Glance
- > Demo

# What is Grid/Cloud Computing

- > Grid Computing = Compute Grids + Data Grids
  - Compute Grids: parallelize execution
  - Data Grids: parallelize data storage
- > Cloud Computing = Grid Computing + Data Center Automation
- > Clouds are the new way to deploy and run grid applications

# Why Grid Computing?

- > Ask Google, Yahoo, eBay, Amazon
  - Amazon: 100ms latency cost 1% of sales
  - Google: 500ms latency drops traffic 20%
  - Financial: \$4M/ms lose if 5ms behind
- > Solves problems often unsolvable otherwise
  - Google has ~1,000,000 nodes in its grid
- > Uniformed programming paradigm
  - Scales from garage and up

# Why Cloud Computing?

- > Ask Google, Yahoo, eBay, Amazon ☺
  - In-house, specialized, enterprise clouds
- > Potential cost reduction of 10x and 100x
  - If you don't run 24/7
- > Final piece in a long HPC ➡ Grid Computing ➡ [...]  
saga

# GridGain In a Glance

- > **Open Source Java-Based Open Cloud Platform**
- > Open Cloud Platform
  - Innovative Compute/Data Grid
  - Native Cloud Applications
- > Java
  - Built in Java and for Java
- > Open Source
  - LGPL and Apache 2.0

## GridGain Statistics

- > Over 50,000 downloads
- > Starts every 60 seconds around the globe
- > One of the largest Java-based Amazon EC2 clouds – 512 nodes
- > Over 2000 different individuals, projects and organizations
- > Fastest Growing Java-Based Cloud Computing Platform

# Demo

- > Grid application in **10 minutes**
  - GridGain 2.1
  - Eclipse 3.0
  - Windows Vista





# JavaOne<sup>SM</sup>

# Thank You

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Subhead: 28pt

- > All text is **Arial**
- > Level One bullet point: 28pt
  - Level Two bullet: 26pt
    - Level Three: 22pt
      - Level Four and subsequent: 18pt
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