JavaOne 2015
An Overview
The Conference Oct 24 - 29

• Located in downtown San Francisco
• Saturday and Sunday at the Moscone
  • JavaOne4Kids (Sat) – 10 to 18 years old
  • Sessions and Keynote (Sun)
• Monday – Thursday at Hilton Union Square and Parc 55
  • Community Keynote at Marriott Marquis
• Overlapped with Oracle OpenWorld
# Sessions and Tracks

<table>
<thead>
<tr>
<th>Track</th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Total</th>
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<tr>
<td>Core Java Platform</td>
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<td>34</td>
<td>42</td>
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<td>Java and Security</td>
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<td>Emerging Languages</td>
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<td>Java, DevOps, and the Cloud</td>
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<td>Java and the Internet of Things</td>
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<td>17</td>
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<td>Java Development Tools and Agile Techniques</td>
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<td>15</td>
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<tr>
<td><strong>Total</strong></td>
<td>47</td>
<td>202</td>
<td>211</td>
<td>172</td>
<td>98</td>
<td>730</td>
</tr>
</tbody>
</table>

But Wait! There are only 439 Total Sessions
## Sessions and Tracks – The reality

<table>
<thead>
<tr>
<th>Session</th>
<th>Sunday</th>
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<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<tr>
<td>JavaOne Keynote</td>
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<td>Java Community Keynote</td>
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<td>Sessions</td>
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<td>131</td>
<td>128</td>
<td>100</td>
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</table>

439 Total Unique Sessions including Keynotes  
7 Repeats on Thursday  
6 Repeats on Tuesday  
11 Repeats on Wednesday
Project Jigsaw

JEP 200: The Modular JDK
JEP 201: Modular Source Code
JEP 220: Modular Run-Time Images
JEP 260: Encapsulate Most Internal APIs
JEP 261 / JSR 376: Java Platform Module System

OpenJDK

http://openjdk.java.net/project
Docker Introduction

Arun Gupta
Vice President, Developer Advocacy
@arungupta, blog.arungupta.me
arun@cloudnative.com
Pirates of DevOps
On Continuous Delivery Tides

Bruno Souza
bruno@javamain.com.br
@brjavamain

Edson Yanaga
edson@javamain.com.br
@eyanaga

Slides and Bonus Materials:
http://javamain.com/career
Refactoring your Java EE applications using Microservices and Containers

Arun Gupta
Vice President, Developer Advocacy
@arungupta, blog.arungupta.me
arun@couchbase.com
Getting Started With Microservices

Design Patterns for Decomposing the Monolith
by Anur Gupta

Still re-deploying your entire application for one small update? Microservices deploy modular updates and increase the speed of application deployments.

https://dzone.com/refcardz/getting-started-with-microservices
Welcome to the Jungle!

Docker Orchestration
Culture is King

Mattias Karlsson, Agile Coach

@matkar
Deploying Elastic Java EE Microservices in the Cloud with Docker

Steve Millidge: Founder Payara
EQUIPPED TO CONQUER DEVOPS SPACE

PaaS
Flexible

IaaS
Container Based
How Netflix Thinks of DevOps

JavaOne 2015

Dianne Marsh
Director of Engineering
@dmarsh
Creating Amazing Visual Programming Environments With JavaFX

JavaOne
October 27, 2015

Michael Hoffer
STZ/G-CSC
NASA Space Mission Support Fueled by the Java Ecosystem
Sean M Phillips, a.i. solutions, Inc.

- Deep Space Trajectory Explorer (DSTE)
- Thousands of potential trajectories exist at any given position and energy
  - Data spaces to represent scenarios start in the 100Ks and go up
  - Interactive 2D and 3D data selection and constraint tools
- JavaFX 8 is the key enabling framework
  - High speed Canvas plots for visually interactive interface
  - Parallel Streams enable background search and filtering of data responsive in million point scenarios
  - Integrated Pure JavaFX 3D Trajectory Renderings
Arun Gupta
Roy van Rijn
Theresa Nguyen
Andy Nilson
G Venkat
Suyash Joshi

Andy Gumbrecht
Tamao Nakahara
Andrzej Grzesik
Dario Laverde
Siamak (Ash)
Bert Jan Schrijver

Tim Pettersen
Tori Wieldt
Daniel De Luca
Stephen Chin
Rustam Mehmandarov
Martijn Verburg
Pair Mob Programming

Mob Programming
A Whole Team Approach

mobprogramming.org  Twitter @WoodyFlull

www.infoq.com/interviews/zuill-mob-programming

benjweber.co.uk/blog/2014/11/30/the-true-mob-probablyfree.co.uk/papers/probablyfree-mob-programming.pdf
Continued Growth

- #1 Development Platform, Now in the Cloud
- 10 Million Java Developers Worldwide
- #1 Choice For Developers
- 13 Billion Devices Run Java
- 200 Million Medical Devices Run Java
- 1 Billion Automotive Devices Run Java
- 97% of Enterprise Desktops Run Java

Oracle Keynote Slide 4
Java SE Progress

**JDK 8**
- Lambda
- JSR 310: New Date and Time API
- Nashorn: JavaScript Interoperability
- JavaFX Enhancements

**8u40**
- Performance Improvements
- Density and Resource Management
- Multi-Language Support Improvements
- Accessibility Enhancements
- Continued Java SE Advanced Features

**2014**

**8u20**
- G1 Performance Improvement
- JVM Performance Improvements
- Java Mission Control 5.4
- Advanced Management Console 1.0
- MSI Enterprise JRE Installer

**8u60**
- Bug Fixes
- Continued Java SE Advanced Features

**2016**

- Oracle Keynote Slide 33
JDK 9

• 10 December 2015: Feature Complete
• 04 February 2016: All Tests Run
• 25 February 2016: Rampdown Start
• 21 April 2016: Zero Bug Bounce
• 16 June 2016: Rampdown Phase 2
• 21 July 2016: Final Release Candidate
• 22 September 2016: General Availability
JDK 9 Proposal

• 26 May 2016: Feature Complete
• 11 August 2016: All Tests Run
• 01 September 2016: Rampdown Start
• 20 October 2016: Zero Bug Bounce
• 01 December 2016: Rampdown Phase 2
• 26 January 2017: Final Release Candidate
• 23 March 2017: General Availability

• [http://openjdk.java.net/projects/jdk9/](http://openjdk.java.net/projects/jdk9/)
  • Project Jigsaw – the new modularity features of Java
Java EE Progress

Java EE 7
- HTML 5: WebSockets, JSON Processing, REST, Servlet NIO
- Productivity: More annotated POJOs, less boilerplate code, cohesive platform
- Meet Enterprise Demands: Batch, Concurrency

Java EE 8 JSR 366 Begins
- Approved unanimously
- HTML5 and web enhancements
- Ease of development and CDI alignment
- Modernized infrastructure cloud/on-premise
  GlassFish
  - GlassFish 4.1, Java EE 7 SDK, update 1

Java EE 8 GA
- Servlet 4.0, JAX-RS 2.1
- Model-View-Controller 1.0, JSF 2.3
- JSON Binding, JSON-P 1.1
- CDI 2.0, JMS 2.1
- Java EE Security 1.0, Java EE Management 2.0

2013

Java EE 8 Community Survey
- Three part survey
- Prioritized features
- 4500+ responses
- Shared results

GlassFish
- GlassFish 4.1.1
- Java EE 7 SDK, update 2
- GlassFish 5 Builds
- Java EE 8 builds

2016

2017

2018

• Oracle Keynote slide 58
Java ME Embedded Progress

- **Java ME Embedded 8.2**
  - Optimized app memory usage (MCUs) – Up to double
  - Security features (DTLS sockets, PSK, crypto H/W)
  - Enhanced pre-provisioning, software updates
  - Support for CMSIS architecture
  - Windows/Linux, Linux/ARM, Cortex-M3/M4

- **Java ME SDK 8.2**
  - Productivity enhancements, new heap analyzer tool
  - Desktop Linux support

- **Java ME Embedded 8.3 (CY16-H1)** *
  - Increased range of target platforms: STM F4/F7, Intel
  - Enhanced Oracle IoT CS support
  - New features, time-to-market savings for embedded, IoT
  - Footprint optimizations

- **Java ME SDK 8.3** *
  - Improved productivity for IoT development
  - New: Oracle Developer Cloud and web-based IDE support

- **Java ME Embedded 8 (H2 2016)** *
  - Increased alignment between Java ME and SE
  - Advanced IoT CS integration
  - Additional ports on commercial/IoT embedded platforms

- **Java ME SDK 9 (H2 2016)** *
  - Enhanced Developer Cloud support, tooling-driven software development
  - Productivity/usability improvements

*Subject to change
Fun Video

• *Scott McNealy* 2.5 min
  • Top 10
Useful Links

• 113 Sessions presented on YouTube
  https://www.reddit.com/r/java/comments/3requx/javaone_2015_sessions/

• JavaOne 2015: On Demand Video
  https://www.oracle.com/javaone/on-demand/index.html

• JavaOne Session Catalog
  https://events.rainfocus.com/oow15/catalog/oracle.jsp?event=javaone&search.event=javaoneEvent
Additional Information

• Oracle Academy: [https://academy.oracle.com](https://academy.oracle.com)
  - Oracle Academy advances computer science education globally to drive knowledge, innovation, skills development, and diversity in technology fields

  - **Java Magazine** is one of Oracle’s newest and most significant investments in the continuing health and growth of the Java technology ecosystem

• OpneJDK [http://openjdk.java.net/](http://openjdk.java.net/)
  - The place to collaborate on an open-source implementation of the [Java Platform, Standard Edition](http://openjdk.java.net/), and related projects
Managing Technical Debt in Space.
Thanks!

- Jesse Warden
- @jesterxnl
- jesse@jessewarden.com