



Adopt OpenJDK

(Full Presentation)



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On behalf of the LJC and the global JUG program

Slides provided by *Martijn Verburg* (@karianna) – thanks!

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What is the Adopt OpenJDK program?

- ▽ A JUG lead initiative to improve participation in OpenJDK
 - Individuals and groups work on aspects of OpenJDK
 - Wide range of activities from starter to advanced levels
- ▽ Acts as an incubator for projects that improve OpenJDK
 - From Build and Test infrastructure to Lambda Tutorials to bug fixes
- ▽ Lots of Open Source projects to work on as well as Java itself
 - There's plenty of low hanging fruit to tackle!
- ▽ See <http://adoptopenjdk.java.net>





A Sample of what we do

- ▽ [Hack on OpenJDK](#) - Build Java itself!
- ▽ [Test Fests](#) - Write tests and improve the quality of Java!
- ▽ [Testing Java 8](#) - Help get 100's of projects get ready for Java 8
- ▽ [Lambda Tutorials](#) - Learn all about Lambdas in Java 8!
- ▽ [Betterrev](#) - Improve the patch submission, build and test of Java
- ▽ [Javacountdown](#) - Ensure the world is using the safest Java!
- ▽ [JitWatch](#) - Show the inner workings of JIT in JavaFX





Why should you get involved? - 1

- ▽ To move the language and the platform forward
 - To become part of the solution as opposed to complaining
 - Help define the future

- ▽ To give something back to the platform that sustains us all
 - Not to mention large chunks of our civilisation!

- ▽ To be at the forefront of the latest Java technology

- ▽ To make sure useful libraries and APIs get built
 - Ones that are developer friendly

- ▽ To boost your careers





Why should you get involved? - 2

- ▽ To demystify OpenJDK
 - Get day to day developers knowledgeable about the process
- ▽ To acquire new knowledge
 - Gain valuable technical skills
 - Learn a brand new part of the Java ecosystem
- ▽ Gets developers people excited again
 - Brings people back to the days of hacking with friends
- ▽ It's fun!





How does it help OpenJDK?

- ▽ OpenJDK gets earlier feedback
 - Leading to more developer friendly APIs
 - Get 'end user/developer' expert input
- ▽ OpenJDK gets developed more quickly
 - Extra resource can free up key committers
- ▽ OpenJDK technical debt can be reduced
 - OpenJDK is a very old project, there's plenty to do
 - Bugathons a key event





How does it help OpenJDK?

- ▽ OpenJDK gets a wave of new talent
 - Developers that were previously unknown to the OpenJDK
 - More academics providing empirical research
 - The next Brian, Mark, Mandy etc....
- ▽ You can also help with management of OpenJDK
 - Managing mailing lists
 - Triaging issues
 - Testing
 - Evangelism
 - + more!





Who is involved already?

- ▽ See <http://adoptopenjdk.java.net/>
 - The London Java Community (UK)
 - SouJava (Brazil)
 - JavaBahia (Brazil)
 - Greenville JUG (USA)

- ▽ + Several individuals & teams outside of JUGs





What difference have they really made?

- ▽ Helped make sure 'JSR-310' (Date and Time) got into Java 8
 - Focussed on building the Technology Compatibility Kit (TCK)
 - Massive API poll with day to day developers
- ▽ Helped with 'JSR-335' (Lambdas)
 - Ran several hackdays which lead to API design changes
 - Focussed on developer usability (usage patterns)
 - Bugs found and fixed, warnings improved, wrote tutorials
- ▽ Some Build and Test infrastructure improvements
 - After direct feedback regarding build and test of OpenJDK
- ▽ 100's of minor compiler warnings fixed
 - Results of initial bugathon pilots





How do I join?

- ▽ Go to <http://adoptopenjdk.java.net/>
 - Join the mailing list
 - Join the IRC channel

- ▽ AND/OR
 - Contact your local JUG leader





An Important Note - Co-ordination I

- ▽ Your enthusiasm and skill sets is what OpenJDK needs!

- ▽ But your efforts should have the correct focus
 - Sometimes well meaning enthusiasm can be counter productive
 - i.e. We're not all language designers!
 - However, there is always a truly productive way to help OpenJDK

- ▽ Remember it's easy to overwhelm the committers on OpenJDK
 - We don't want to do that!





An Important Note - Co-ordination II

- ▽ Don't forget, co-ordinate and communicate your efforts
 - With an OpenJDK project sponsor
 - With other Adopt OpenJDK folks

- ▽ If you're an individual we recommend joining a local team / JUG
 - Otherwise sign up to the mailing list & IRC channel
 - There are lots of people there to help you





Steps to take after joining

- ▽ Find what there is to work on
 - Projects at <http://adoptopenjdk.java.net/> (will point you at GitHub)
 - Check with the mailing list and IRC channel
- ▽ We encourage people/groups to work with some guidance
 - The OpenJDK has complex requirements
 - Simply ask on the mailing list what needs done!
- ▽ Working on the same areas is OK!
 - But we need to co-ordinate
- ▽ Don't forget to have fun!





Starter Levels to get involved at - 1

- ▽ Test the early Reference Implementation (RI) builds
 - Use them to find pain points (“It’s just too laborious to construct X”)
 - Report bugs (“Arggh NPE!!”)
 - Suggest feature enhancements (“A convertX method would help”)

- ▽ Help triage issues
 - Reproduce issues
 - Erase/merge duplicates
 - Set priorities/categories etc

- ▽ Give feedback on design
 - Discuss issues with your team and deliver feedback
 - How would you use a feature day to day?





Starter Levels to get involved at - 2

- ▽ Help moderate the mailing lists
 - Help the community self police towards helpful conversations
 - Pour water on flame wars etc

- ▽ Help evangelise OpenJDK
 - Social media (Twitter, Facebook et al)
 - Blogging (write a post about OpenJDK)
 - Lightning talks (give a talk at your user group or online!)

- ▽ Bugathons
 - Work as a group on low hanging fruit in OpenJDK
 - Apply Project Coin
 - Fix Compiler warnings
 - Apply enhanced for loops
 - And More!





Intermediate Levels to get involved at

- ▽ Jigsaw and its interaction with OSGi

- ▽ Test Framework
 - Standardise testing framework to use industry standard tooling
 - e.g. Replace shell scripts
 - e.g. Migrate to TestNG?

- ▽ Other JEPs
 - See Appropriate OpenJDK mailing list





Advanced Levels to get involved at

- ▽ Javadoc overhaul
 - Bring output into the modern web age
 - Improve compiler

- ▽ Lambdas
 - Get involved in empirical end user studies
 - Try to break lambdas

- ▽ Build and CI
 - Help with the future of OpenJDK build infrastructure

- ▽ Co-routines and beyond
 - blue skies academic/empirical research for Java 9+





Lets change the Java ecosystem!

- ▽ We really hope you'll consider joining us
 - Duke would love your help!

- ▽ <http://adoptopenjdk.java.net/>

- Join the Mailing list
 - adopt-openjdk@googlegroups.com
- Join the IRC channel
 - [adoptopenjdk](http://irc.freenode.net) on irc.freenode.net
- On Twitter
 - [@adoptopenjdk](https://twitter.com/adoptopenjdk)
- Newspaper
 - <http://paper.li/adoptopenjdk/1370465075>



- ▽ Thanks for reading!

- Mani Sarkar (@theNeomatrix369)
- Thanks to *Martijn Verburg* (@karianna) for the slides!

