Getting Involved in Open Source

Responsible Users and Effective Contributors
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- Project Lead: Artificer
- Committer and Core Dev: Hibernate ORM
- Contributor: Apache Camel, Ininispan, and several JBoss projects
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- Owner/Consultant, 3River Development LLC
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Talk Rules

- There are none
- Open discussion
- Interrupt me

(Ok, maybe there are a couple of rules...)
Open Source Overview
Proprietary Software

- Not much to discuss...
- Black box
- Closed-off development process
- Exclusive control
- Car with its hood welded shut
Proprietary Software == No Rights

- Users must complain when something's broke
- Cannot fix on your own
- Cannot modify on your own
- Restricted usage
- Frequently, don't even own it
- Company ceases? You're screwed
Example: John Deere (Wired)
Open Source

- No black box
- Source code is publicly viewable
- Does not explicitly grant:
  - Ownership
  - Modification rights
  - Redistribution rights
- Not implicitly free of cost
- Not implicitly "open" development processes
Open Development

- Transparency
- Open processes
- Open discussions (mailing list, forums, etc.)
- *Not* implicitly open source
"Free" Software

- Open source, plus...
- Free as in speech (freedom), not as in beer
- *Still not* implicitly free of cost
- Freedoms:
  - *Run* for any purpose
  - *Study* the code
  - *Redistribute* copies
  - *Improve* the code
- Freedoms tweaked by license differences (whole other talk)
- Typically (*hopefully*) includes "open development"...
- ...but not always (at least not always done *well*)
FLOSS Software

- Good: FOSS ("Free Open Source Software")
- Best: FLOSS ("Free/Libre Open Source Software")
- FLOSS emphasizes "freedom" over misleading "free"
- Talk assumes FLOSS over OS...
FLOSS Religion
FLOSS Religion

- Not Free == Not Ethical
- Appreciate the mentality, but...
- IMO
  - FLOSS == superior engineering
  - Proprietary != The Devil
  - No Ownership == The Devil
FLOSS Superiority

- Control & ownership
- Superior engineering
  - More eyes == less bugs
  - More eyes == stability
  - More eyes == security
  - Community == new features
  - Breadth of features (ex: Apache Camel)
- Speed (ie, not waiting for a fix)
"The Open Source Way"

- Not limited to software
- Openness, collaboration, transparent communication
- Meritocracy (best ideas win)
- Community service
- opensource.com
Open Source Your Projects

- Obvious: beneficial to the software community
- Rarely detrimental to your competitive edge
- Again: superior engineering
- Again: potential new features
Why should I get involved?

• Necessity
• Community
• Increased opportunities (both individually and for the company)
• Better understanding of the specific tool
• Professional network
• Resume & personal brand
FLOSS Users
Proprietary Software Users

- Purely a customer/consumer
- No control
- Request and wait on fixes/features
"Bad" FLOSS Users

- Continue to act like proprietary users
- "WHY HASN'T THIS BEEN FIXED YET?!"
- "YOU need to fix this!"
- Threaten to use a different project
- Talker, not "doer"
- Encounter bug -> abandon or workaround
"Bad" FLOSS Users: Bug Reports

- "It doesn't work."
- "I don't have time to create a test case."
- "Here's my entire application, zipped up."
- "I know this was rejected before, but opening again."
- "Bump."
- "I know this branch is 10 years old and not maintained, but fix this and release?"
Effective FLOSS Users

- Entirely different mentality
- Customer/Consumer
- Contributor, not user
- Vital part of the development process
- Everyone has different priorities...
- ...and yours may not be mine
- Willing to discuss and be open
- Simple issues -> immediately fix and contribute
- Lighten up
- Finish what you start
- Appreciate it? Tell us! Goes a long way.
Effective FLOSS Users: Bug Reports

- Encounter bug -> don't ignore it (responsibility)
- Search before opening
- Verbose, but precise
- Logs, stacks, thread dumps
- Clearly separate facts vs. speculations
- Study the code
- [https://hibernate.atlassian.net/browse/HHH-8765](https://hibernate.atlassian.net/browse/HHH-8765)
Effective FLOSS Users: Bug Reports

- Test cases are king!!!
- Minimum: *Enough* code fragments and config details
- Better: Small, standalone reproducer
- Best: Pull request, adding test case to existing testsuite
How to Contribute
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<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
<th>Votes</th>
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<tbody>
<tr>
<td>Code</td>
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<td>49</td>
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<tr>
<td>Documentation</td>
<td>6%</td>
<td>7</td>
</tr>
<tr>
<td>Marketing / Promotion</td>
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<td>39</td>
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<td>13</td>
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<td>Translation</td>
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<td>7</td>
</tr>
<tr>
<td>Support</td>
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<td>12</td>
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</table>

NOT A CODER
CAN STILL CONTRIBUTE
Ways to Contribute

- Code (of course)
- Weigh in on discussions
- Documentation
  - VERY HELPFUL
  - Often over-looked
  - Again: Simple issues -> immediately fix and contribute
- Translation
  - Most large-scale projects have internationalization support...
  - ...but very few languages
Ways to Contribute

- Marketing
  - Social media
  - Blogs
  - Website and branding (frequently open source as well)
  - Presentations
  - Vital, but also over-looked
  - Many teams simply don't have adequate time available
Ways to Contribute

- Testing
  - For large projects, single most helpful thing you can do
  - Attempt to reproduce/analyze bug reports
  - Can't emphasize that enough
  - Seriously
  - Guys, seriously...
  - Hibernate has 2000+ open issues
  - (Please send help...)
  - Test alpha/beta releases (and provide good bug reports)
Ways to Contribute

- Support
  - User forums
  - Mailing lists
  - Chat
  - Stack Overflow
  - Again: Limited time available
Ways to Contribute

- Most importantly: Be a good and responsible user!
- FLOSS does *not* work without it
Discover Projects to Help
Discover Projects to Help

- Most important: You use it (@ work, on-the-side)
- Scratches an itch
- Need a capability
  - Could do it from scratch...
  - ...but Project X is close (missing a few things)
  - Add to it!
Discover Projects to Help

- Not unlike startups: requires passion to be effective
- Community driven: What would be the most enabling?
- Humanitarian Free and Open Source Software (HFOSS)
  - Lots of momentum
  - Large number of efforts
  - Whole new level of *passion*
“That’s all Folks!”