Bringing the Enterprise into the Open Source World

How we did it...

Daniel Ruggeri, Principal Engineer
Work:

• Principal Engineer  
  – Design and implement on/off-prem clouds  
  – Grew up in Internet space

• Open Source advocate  
  – Founding member of our OSS program  
  – We’ll talk all about this

Play:

• Apache Software Foundation  
  – VP Fundraising, member, httpd PMC

• Adjunct instructor  
  – Open Source Software Development (University of MO – St. Louis)  
  – Software Development (Washington University)
Some History
We’ve been around a while

- Founded by member banks as a cooperative
- Organic growth
- Public company on NYSE (MA) in 2006
## Related OSS history

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1978</td>
<td>OSS was being born in the 70’s</td>
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<tr>
<td>1983</td>
<td>X window and its business focus</td>
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<tr>
<td>1989</td>
<td>Foundations helped change the game</td>
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<tr>
<td>1994*</td>
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<td>1998</td>
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<tr>
<td>2000</td>
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*The year 1994 is marked with an asterisk to indicate a significant event in OSS history.*
"Real enterprises do not use open source software."

"We <3 Open Source!"
How We Did It
Become the Champion(s)

• Prepare for the long haul
  – You own responsibility
  – Do you <3 OSS enough?

• Know your stuff
  – Licenses, intellectual property, legal, copyright, etc
  – Company processes

• Identify barriers and define success
  – Get ready for the barriers
  – Be prepared to track progress

💡 Pro tip: There can be more than one champion
Form a Team of Stakeholders

• Establish the bootstrap team
  – You may need to educate team members

• “You have two ears and one mouth”
  – The team should be experts of their domain

• Our bootstrap team:
  – Development & Operations
  – Information Security
  – Legal
  – Intellectual Property

💡 Pro tip: Get an Executive sponsor
Articulate WHY

- You must be able to answer, “Why are we doing this?”
  - There IS a benefit to your company, so explain it
  - This is not everyone’s day job, so be patient

- Some starting points
  - “We don’t want to maintain patches and custom builds”
  - “Do well by doing good”
  - “Give our company a seat at the global table”
  - “This drives technologists to us and enhances our careers”
  - “It’s FREE!”

- The whole team should be able to do this

💡 Pro tip: Check your corporate objectives. I bet they can help!
Establish The Process™

• Figure out how to collaborate
  – How will the core team work?
  – This is OSS, so be transparent

• Define how people engage and work
  – Balance stakeholder and contributor needs
  – Be concerned about Internal ↔ External, too
  – Education and understanding is a top goal

• VERY IMPORTANT in most enterprises
  – There must be a process
  – Be thorough in putting this together

💡 Pro tip: Make the process as easy as possible
Pick a LICENSE.txt

• This saves big headaches
  – Suggest a license so people have a starting point
  – Choose a well-known license

• This is important
  – LICENSE establishes copyright and legal use of the code

• To CLA or not to CLA
  – CLA = Contributor License Agreement

• We chose Apache License v2

💡 Pro tip: Start with one of the top five
**Document and Socialize**

- **Documentation (everyone’s favorite part)**
  - Important for scale

- **Minimal docs:**
  - What is Open Source
  - Why are we doing this?
  - The Process™
  - Who to talk to for help

- **Good doco helps sell the program**
  - Accidental communities may form

💡 Pro tip: Take the show on the road and involve your exec. sponsor
Keep it Going

• Assumption:
  – You successfully bootstrapped the program

• Enter maintenance mode
  – Grow the program
  – Check in with stakeholders and exec. sponsor
  – Track and report

• Look at the core team again
  – We chose to add several evangelists at this point
  – Helps spread the load and shows the program is here to stay

💡 Pro tip: Find some evangelists
Potential Gotchas
The License Will Be Questioned

- Probably not a big deal
  - Experience: “Why X instead of Y?”

- Articulate your reasons for choosing the license
  - Be flexible since no license is a perfect fit all the time
  - Brace the team for this, too

- Do be worried about copyright
  - Side note: It’s hard to lose copyright

- Defense: Know your stuff

💡 Pro tip: Involve your team for their input
Errors Will Be Made

• Prepare an action plan for these scenarios:
  – Stuff that *probably* shouldn’t be public made it out there
  – We committed something *sensitive*
  – We committed something *private*

• When it happens, handle it promptly
  – You and the core team are accountable

• Defense: judicious use of delegation
  – You can only own so much
  – Expect common sense from your customers

💡 Pro tip: Remember that distributed version control has history!
“Who is THAT?”

- There may be non-company addresses in SCM history

- Community contributions
  - This is normal

- We permit personal accounts in our repos
  - This is unique
  - We keep an inside → outside the firewall translation
  - Self service

💡 Pro tip: Maintain an audit trail
Business vs Personal

• As the program grows/grew, were your assumptions right?

• Identity specifically
  – Inside the firewall vs outside

• Be concerned with protections
  – You as a company
  – Your people as users/contributors
  – The projects as consumers

💡 Pro tip: Remember the labor laws!
Wrap it Up
Handy links and notes

• People who do this for a living: https://todogroup.org

• License compatibility matrices: https://en.wikipedia.org/wiki/License_compatibility

• Some good notes about choosing a license: https://opensource.guide/legal/

• Trademarks and OSS? Yes, please! http://fossmarks.org/

• Apache Software Foundation resolved legal questions https://www.apache.org/legal/resolved.html

• Dept of Defense FAQ on OSS* https://dodcio.defense.gov/Open-Source-Software-FAQ/

• Teach a class on this stuff https://github.com/druggeri/OSSClass

• THIS presentation: https://people.apache.org/~druggeri/presentations/