A New Flame:
Experiences Starting an Open Source Operating System

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What is an illumos?

- An Open Source operating system
- Based on Solaris (POSIX/UNIX)
- By the community
- For the community
- Core of several commercial projects
Roots

- BSD begat SunOS
- SunOS & SVR4 begat Solaris
- Solaris begat OpenSolaris
- OpenSolaris begat illumos (Aug 3, 2010)
Why illumos?
Why illumos?
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Why illumos?

- FOSS Continuity for OpenSolaris
- Ability to fork(2)
- Home for Collaboration
Attitude Counts

• Tap turns off
  • bad? no!
  • freedom to innovate!

• Optimism and energy critical
• Demonstrate pace
• Avoid the FUD
Code First!

Make sure you have something to show when you announce!
Events

- Community events drive momentum
- User group meetings
- SCALE 9X, SCALE 10X!
- Open Storage Summit
- Hackathons
- FOSDEM, etc.
Think Global!

- Not just MPK17
- Not just SFBAY
- Euro. Russia. India.
- Local user groups
- Local events
- Localized software and documentation
- Next: Mars?
GSoC

- Students are the future
- Great way to appeal outside your core community
- Identification of good projects key
- Good mentors are critical
Governance

- Less is more
- Separate admin & tech
- Ends to a mean
Press Relations

• Press releases = buzz
• Early “announce”
• Trade press
• Slashdot
Commercialization

- Critical to success
- Don’t yield control
- OS development
- Marketing
Partnerships

• ISV relationships = commercial sponsors
• IHV relationships = broad H/W support
• FOSS relationships = community collaboration
Hardware Partners

- IHV adoption critical
- Biggest? Intel! Others too!
- How to get them involved?
- Through vendors!
- Show me the $$
Hardware Partners
OS Vendors/Derivatives

- Diversity drives strength
- Commercial distros make for great contributors
- Free alternatives for wide adoption
- Some abortive or problematic efforts
OS Vendors/Derivatives

- openindiana
- RELIANT
- nexenta
- Joyent
- StormOS
- Delphix
- napp-it
FOSS Interactions

- Code sharing
- Cross fertilization
- Lots of good ideas
- FreeBSD/NetBSD
ZFS Working Group

• Challenge: cabal
• Challenge: privacy
• Challenge: S:N ratio
• Result: awesome innovations
• Result: awesome collaboration
Cool Innovations

- KVM on illumos
- ZFS enhancements
- DTrace enhancements
- Protocol enhancements
Stay on Target!

- Know your goals/values
- Quality vs. pace vs. breadth
- Different audiences
- It’s okay to disagree
Licensing: Religion

Distributed ownership

GPL = anathema to commercialization

Copyright assignment problematic
Meritocracy

- 10% do 90%
- Identify the 10%
- Grow the 10%
- Not just code
- But sometimes just the code
Toxic People

- Slime exists, accept it
- Don’t feed the troll
- Delegate enforcement
- Sometimes best to just ignore
Lawyers

• SFLC

• What’s up with NetApp?

• Like any tool, can be useful

• But can also hurt you if misused
Delegation

• Make yourself redundant
• BDFL should be “symbolic”
• Good devs usually rotten admins
• And vice versa
• Extends to other areas
Futures

- More innovations
- Replace remaining closed bits
- Compiler liberation!
- Foundation
- World domination!