How to “Hack” the DSpace Community

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Hacking any OS Community

• How do things get done?

• Who are the “do-ers”?

• What is their motivation? Why do they care?

• What is your own motivation? What do you want to achieve?
How things get done

• Releases just happen!
• One person / organization decides it all!

• Ummmm... no.
The Primary “Do-ers”

- Committers Team
- DSpace Community Advisory Team (DCAT)
- “The Community” (i.e. YOU)
Committers

• Meritocracy and democracy
• 24 volunteers from around the globe
• Roles:
  – Reviewers / approvers of code
  – Writers of (some, but not all) code
  – Fixers of bugs / maintainers of software
  – Release planners
  – Technology support

http://tinyurl.com/dspace-committers
DCAT

• Open membership
• 22 volunteers from around the globe
• Roles:
  – Voice of the repository manager/admin
  – Champions of feature requests/bug fixes
  – Surveyors of community / Networkers
  – Gatherers of use cases
  – Repository Admin support

http://tinyurl.com/dspace-dcat
The Community / Contributors

• Everyone, literally (includes YOU)
• Roles:
  – Answerers of questions (on mailing lists)
  – Providers of feedback
  – Requesters of features
  – Reporters of bugs / issues
  – Contributors of features / bug fixes
  – Contributors to documentation
What about this new Governance model?

Standing Working Groups

- Product Planning Group
- Technology Advisory Group
- DSpace Community Advisory Team (DCAT)

Technology Team

- DSpace Committers

Governance Roles

**Steering Group**
Set strategic direction; oversee project operations

**Leadership Group**
Approve priorities and strategic direction; elect steering group

**Project Members**
Submit requests, requirements, recommendations, feedback, use cases; may be elected to steering group
Goals of Governance Model

• Really about increasing efficiency and organization of our resources

• Help us to better prioritize what gets done

• Helps try to locate more resources / funding (add more “do-ers”)

You can have more opportunities & influence. Become a DuraSpace Member! Support DSpace!
Who writes the code?

- Committers (and developers at their institutions)
- The Community
  - submit code for review (via GitHub)
- Recent Major Releases:
  - 4.0: 59 contributors (19 Committers)
  - 3.0: 43 contributors (14 Committers)
  - 1.8: 44 contributors (14 Committers)
Code Commits to DSpace

1.8.0 Commits* (342 total)

- Committers (non-DuraSpace): 20%
- DuraSpace: 80%

* - Moved to GitHub post-1.8.0

3.0 Commits (416 total)

- Committers (non-DuraSpace): 12%
- DuraSpace: 79%
- Community Members: 9%

4.0 Commits (798 total)

- Committers (non-DuraSpace): 31%
- DuraSpace: 67%
- Community Members: 2%

(Note: Not all “Committer” code is actually written by Committers)

Data based on commits between release dates, from: https://github.com/DSpace/DSpace/graphs/contributors
So, why should I contribute (code)?
Motivations to contribute

• “Greater Good” motivations, e.g.
  – Betterment of product for all
  – Help your colleagues, earn “merit”

• “Local” motivations, e.g.
  – This tiny fix needs to be maintained!
  – Upgrade difficulty increases as you make more locally-specific changes
  – Are you *CERTAIN* your local change is really only interesting to you? Ask.
OK, I have (code) to contribute!
How do I contribute code?

1. Open a ticket in JIRA (anyone can)
   – Attach or link to code change

2. Code change is reviewed by Committers
   – Majority vote wins. But, veto power.

3. Response is either:
   – Accepted -> it’s in!
   – Changes requested -> it needs fixes
   – Rejected -> it’s out?
Why may delay a ticket?

• Committers are volunteers!
• Sometimes...
  – we overlook things / forget
  – we have questions / concerns
  – we don’t have enough background info / details
  – we cannot find a volunteer developer

http://tinyurl.com/dspace-code
How can I help speed it up?

- Be responsive, please
- Remind us
  (seriously, we don’t mind)
- Use JIRA & GitHub
- Share your code early
  – Esp. large changes

http://tinyurl.com/dspace-code
Oh, I need this feature!
How do I request a feature?

1. Open up a ticket to describe feature and sample use cases
2. Ticket & idea are reviewed
   - By both Committers and DCAT
   - DCAT may add use cases / promote
3. Volunteer developer(s) sought
4. Feature built/developed
5. Feature code reviewed / approved

http://tinyurl.com/dspace-contribute
How can I help speed it up?

• Be responsive, please
• Help gather info / use cases
• Help locate developer
  – Hire service provider?
• ‘Vote’ or comment on features of interest in JIRA

http://tinyurl.com/dspace-contribute
I think I just found a bug!
How do I get it fixed?

1. Open a ticket (if one doesn’t exist)
2. Ticket is reviewed (by Committers)
   – We attempt to verify the bug
3. Volunteer developer(s) sought
4. The fix is determined/developed
5. Bug fix code is reviewed / approved
How can I help speed it up?

• Be responsive, please
• Provide as much info as you can about reproducing the bug
• Help locate a developer and/or fix
• You can also help us verify bugs!
  – In JIRA, add a verification comment
Look, I already knew all of this...
Get (more) involved!

• Help answer questions on lists
• Help improve documentation on wiki
• Join DCAT
• Help verify bugs or send in fixes
• Opportunities abound, get in touch
Questions / Comments?

Contact Info & Slides
• Email: tdonohue@duraspace.org
• Slides: http://www.slideshare.net/tdonohue/

Image Credits
• Hacker: https://flic.kr/p/bEy1pi
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• Speed of Light: https://flic.kr/p/2ojA8h
• Penny: https://flic.kr/p/7XvhFR
• Bug: https://flic.kr/p/2Bow
• Learn, Teach, Help, Enjoy: https://flic.kr/p/bk7tHV