Breaking Down Barriers

This is your community, here’s how to participate!

Hardy Pottinger
@hardypottinger
http://iso.umsystem.edu/~pottingerhj/

slides are at: http://hdl.handle.net/10355/41264
Who is this guy, anyway?

• I’m a repository developer, working here in Missouri
• I’m a DSpace Committer (since August 2011)
• I really like to collaborate, not just with other developers
• I complain, a lot
I have so much to do!
We *all* have so much to do!
Information Overload

It’s exactly like this, isn’t it?
Apologies to Adam Field and Peter Burnhill....

I really like this wordle from OR12, and the color scheme matched, I had to put them together!
The point: we cram a lot in there
Inside the typical developer’s workstation

Here’s what we try to cram in to our computers. This is important, I’ll get back to it in a minute.
Perspectives

• A manager sees an overwhelmed developer and thinks
  – Need more developers

• A repository manager sees long response times to change requests and thinks
  – Need more developers
  – These guys have no idea what they are doing
It’s all a little bit true.

I’ll explain why...
All admins (IT and Repository) agree

- We don’t have enough developers to get done, what we want done
- How do we get out of this mess?
Lower the barriers to participation!

• there are many ways to participate (some you know, some you may not)

• developing software does not need to be as hard as we have made it in the past

• collaboration is fun! the spirit of play and exploration is really important
But, we’re not developers!

- I don’t care!
- OK, seriously, it doesn’t matter, you can still participate
What you probably already know

• Subscribe and participate on the mail lists
  – dspace-general
  – dspace-tech
  – dspace-devel
  – dspace-release
  – https://lists.sourceforge.net/lists/listinfo/dspace-
    ...general, tech, devel, release
  – You should sign up for all of them, no matter your
    technical background, and if anyone complains, send
    them to me
But I already get too much e-mail!

• I don’t care!
• OK, seriously, I care, and I know exactly where you are coming from, but, here’s the thing:
• E-mail filters are awesome
  – Promise me you’ll sign up for all the DSpace mail lists, and I promise I will figure out how to use e-mail filters again, AND...
  – I will write a how-to
  – But, while you wait, you should check out http://inboxzero.com/
DSpace Community Advisory Team

- [http://tinyurl.com/dspace-dcat](http://tinyurl.com/dspace-dcat)
- “help review and facilitate community-wide discussions about new feature requests... and to provide support to the DSpace Committer group in producing software releases.”
- Monthly teleconference via Skype
- 2nd Tuesday of every month
Who is this?
Who is this?
What you may not know

• You NEED a GitHub account
  https://github.com/signup
  — GitHub is “Social Coding”
  — Just like any other social network (Facebook, Twitter, Google Plus) you can follow developers and projects they are working on
  — This isn’t just good for you, the social network map you help create can be used by the entire community
  — And you’ll need the account if you want to play
GitHub is Social Coding

https://help.github.com/articles/be-social

- Follow your own developers
  - they will notice, and will take it as a compliment
  - seriously, don’t worry about frightening them
  - besides, they deserve it!
- Follow all contributors to DSpace
- “Star” and “watch” interesting projects
- Configure your notifications (but don’t just turn them off)
GitHub is Social Coding

• Follow all the contributors to DSpace, not just the committers
  – https://github.com/DSpace/DSpace/graphs/contributors
  – Star and “watch” interesting projects
  – Keep an eye on the DSpace wiki for new and interesting projects
New and interesting projects

• Terry Brady at Georgetown University
   - https://github.com/terrywbrady
   - File-Analyzer
   - Batch-Tools
• Kim Shepherd (kshepherd)
   - http://tinyurl.com/dspace-streaming
• Hardy Pottinger (hardyoyo)
   - http://tinyurl.com/dspace-replace-auth
New and interesting (continued)

- Richard Rodgers’ MDS (Modern DSpace)
  - https://github.com/richardrodgers/mds
- Anja LeBlanc’s REST-API work (search, plus the new JORUM interface)
  - https://github.com/DSpace/DSpace/pull/434
- Almost anything that looks interesting in the list of DSpace “pull requests”
  - https://github.com/dspace/dspace/dspace/pulls
MIT: API for data mining OA fulltext items in DSpace

@sandsfish
Also worth watching

• Harvard’s MyDASH site code
  – https://github.com/oscharvard/mydash
  – It’s a Drupal interface to DSpace statistics
  – See it in action at
    • https://osc.hul.harvard.edu/dash/mydash
You don’t need to be a developer to participate in the conversation!

- “Just watching” is enough, the number of watchers on a project is useful data
- if you get a notification about something interesting to you, pass it on to your developers: be their “eyes and ears”
- if a developer asks for help in evaluating their work, you may be able to provide that feedback (don’t assume you are not able)
Let’s talk a little bit about IRC

• Internet Relay Chat, it’s the great grandfather of Instant Messaging
• You’ve heard of it, but it’s “scary”
• It even scares developers
• But, IRC remains the best way to regularly interact directly with the DSpace developer community, while we discuss building the software, day in, day out
IRC: it’s not that scary, really

• You don’t have to install anything, just go here: http://webchat.freenode.net/?channels=dspace
• Or here: http://webchat.freenode.net/?channels=duraspace
• Pick a nickname for yourself
  — FirstnameLastname works fine and is friendly
• Say hello, start a conversation (whatever is on your mind about DSpace works)
• Or listen to the ongoing conversation
• We are all very friendly and will treat you with courtesy, I promise
IRC: it’s not that scary, really

• You don’t have to hang out all day every day
  – Though, if you do, that’s cool
  – We won’t judge, but we might put you to work

• If you can spare the time, sit in on our weekly Developer’s Meeting (every Wednesday at 20:00 UTC in #duraspace)

• Watch for an announcement of a release date, the #dspace room can get pretty entertaining on release days
Developing software does not need to be as hard as we have made it

• I was overwhelmed
• My boss said, “We’ll get you some help.”
• We hired a student
• I did my best to show him the way
The old way
We spent months, he did not get past this hurdle
I complained, again

• Our sysadmin pointed me to Vagrant
  • http://www.vagrantup.com/
  • Go there now if you want, it’s cool with me.
  • “Development environments made easy.”
What is Vagrant?
No, really, what is Vagrant?

“Vagrant is a tool for building complete development environments.”

Set up a development environment

• Quickly
• Reproducibly
• In a way that is readily sharable with others

http://www.vagrantup.com/
Vagrant-DSpace is born

https://github.com/dspace/vagrant-dspace

• A collaboration between myself and Tim Donohue, with some help from Luigi Andrea Pascarelli (thanks, Tim & Andrea, we owe you)

• I knew Tim was working on Puppet modules for provisioning DSpace Direct, so I pestered him to share his modules with me

• Vagrant has Puppet embedded, Tim shared what he had, we got it all working with Vagrant
Open Source Software Development is a conversation

• “Hey, I hear you’re working on something awesome, can I play, too?”

• GitHub formalizes the process
  – Fork a project (“hey, this is cool, I want to play!”)
  – Provide Pull Requests (“here’s something cool I did with your thing, you might like it, let’s play!”)
  – Code comments (“I tested your cool thing, here’s what I found out, thanks for sharing, you are awesome!”)
This is fun! the spirit of play and exploration is really important

- try new things (especially try Vagrant-DSpace)
- talk about what you are learning
- if you find a solution to a problem you've asked someone to work on for you, tell them! They'll be really excited, and so will you!
- consider testing a Pull Request and providing feedback in GitHub (watch the DSpace-release mail list for suggestions on what needs testing)
Issue trackers are awesome

• there is lots of "low hanging fruit" in the DSpace JIRA issue tracker

• https://jira.duraspace.org/issues/?filter=12102

• The label “low hanging fruit” is a work in progress, we will tag more tickets as we review them

• Tell your developers, this is an easy way to get your feet wet, and be useful at the same time
If a developer is working on something you're interested in, let them know

- good: email or face to face
- better: try their code and give them feedback on it
  - what works,
  - what doesn’t
  - what surprised you
  - what delighted you
If no one is working on the feature you’d like to exist, let the community know

• Good: ask about it on the mail lists
• Better: work with DCAT, and advocate for the feature
• If you know of other institutions that might be working on the feature, or something similar, start a conversation with their developers, or have your developers do the same
“My code is not ready to share”

- If you start a collaboration conversation, you may hear this
- Ignore them (but don’t be rude about it)
- Keep asking anyway (just not every day)
- Talk about what they are working on with others (they may also ask them)
There are many ways to participate

• mail lists
• DCAT
• meetings like this one
• GitHub is “Social Coding”
• IRC is worth the time
• Development doesn’t have to be scary or hard
• Collaboration is fun!
Come play with us!

slides are at: http://hdl.handle.net/10355/41264
Questions?

slides are at: http://hdl.handle.net/10355/41264
Images Used

- *Messy Desk* by Yatoobin [http://www.flickr.com/photos/30661646@N00/243293760/](http://www.flickr.com/photos/30661646@N00/243293760/)
- *Think* by Jack Mallon [http://www.flickr.com/photos/18924124@N00/8071905112/](http://www.flickr.com/photos/18924124@N00/8071905112/)
- *OR12 Wordle* used by permission of Adam Field [http://www.adamfield.net/oldsite/or2012/wordle.png](http://www.adamfield.net/oldsite/or2012/wordle.png)
- Slides 18 & 23 from *San Francisco DevOps: Introducing Vagrant*, used by permission of Mitchell Hashimoto [http://www.slideshare.net/mitchellh/sf-devops-introducing-vagrant](http://www.slideshare.net/mitchellh/sf-devops-introducing-vagrant)

Slides are at: [http://hdl.handle.net/10355/41264](http://hdl.handle.net/10355/41264)