

# Breaking Down Barriers



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

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slides are at: <http://hdl.handle.net/10355/41264>

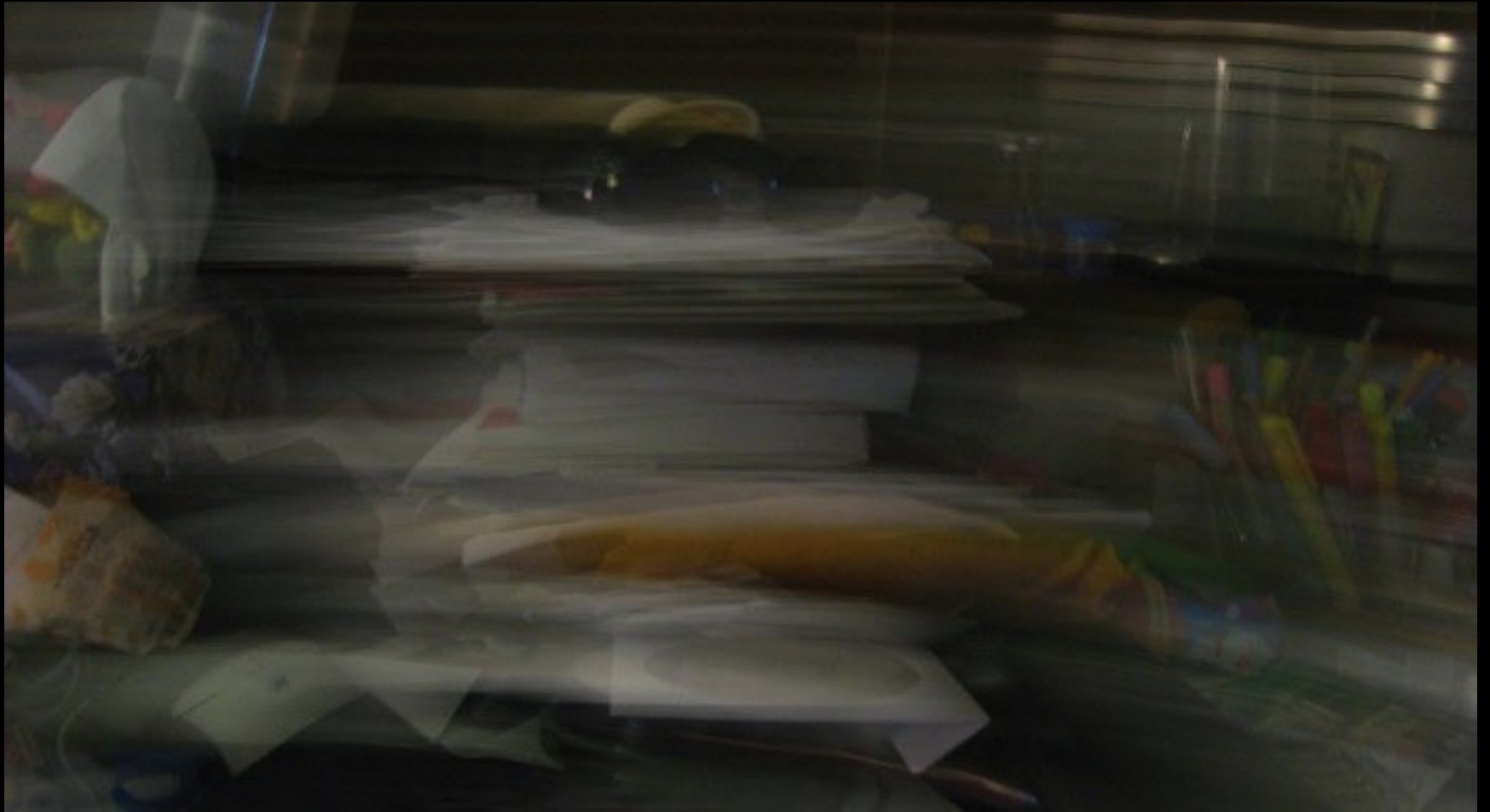


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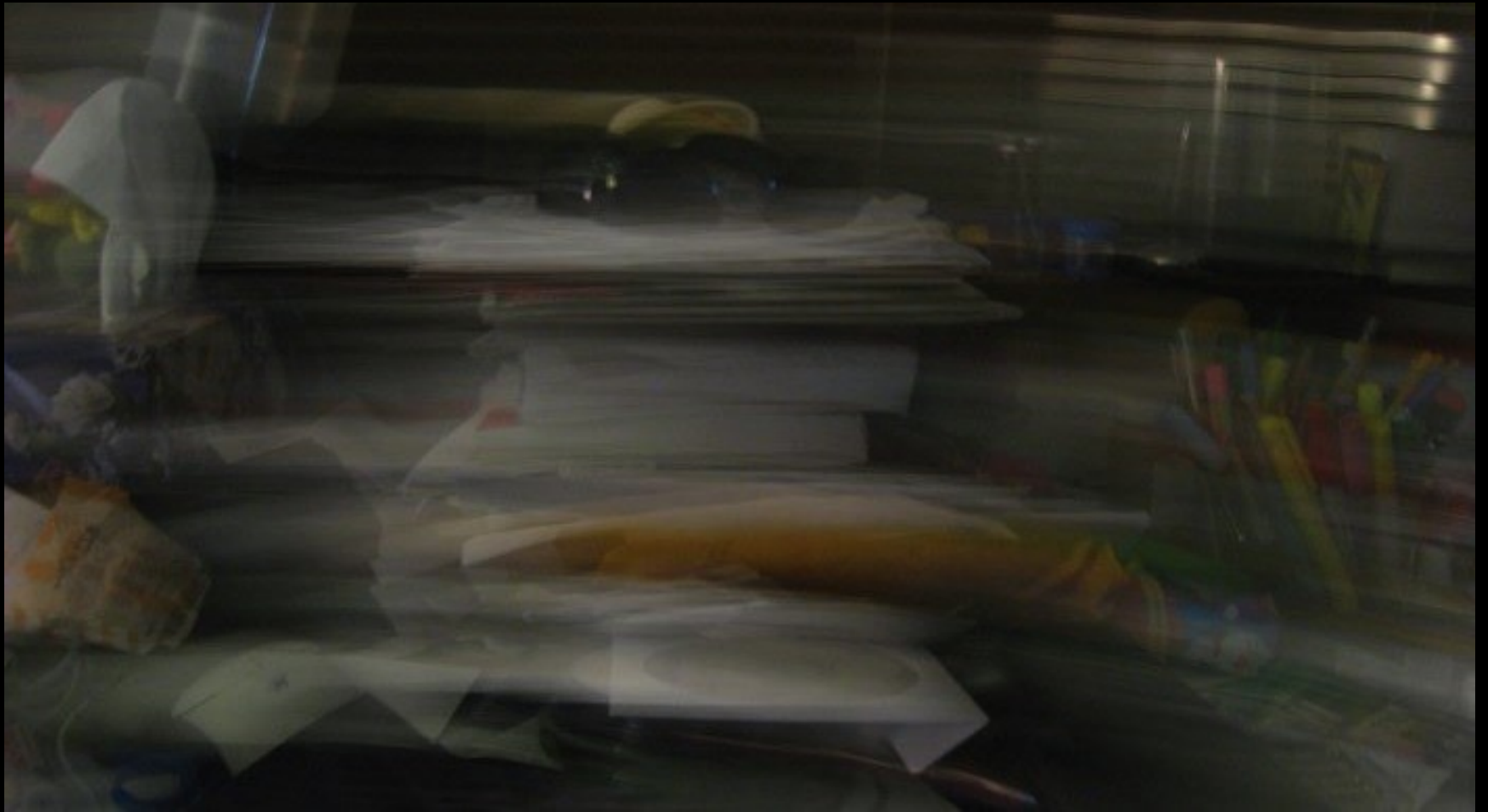
# Who is this guy, anyway?

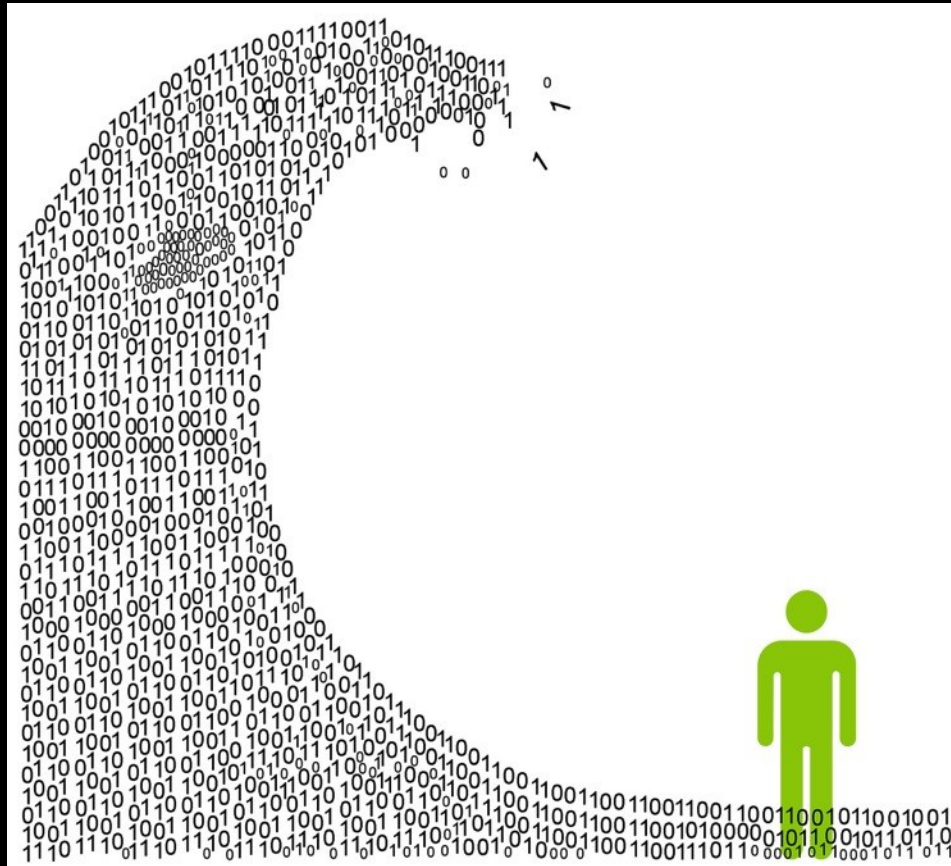
- I'm a repository developer, working here in Missouri
- I'm a DSpace Committer (since August 2011)
- I really like to collaborate, not just with other developers
- I complain, a lot

I have so much to do!



*We all* have so much to do!





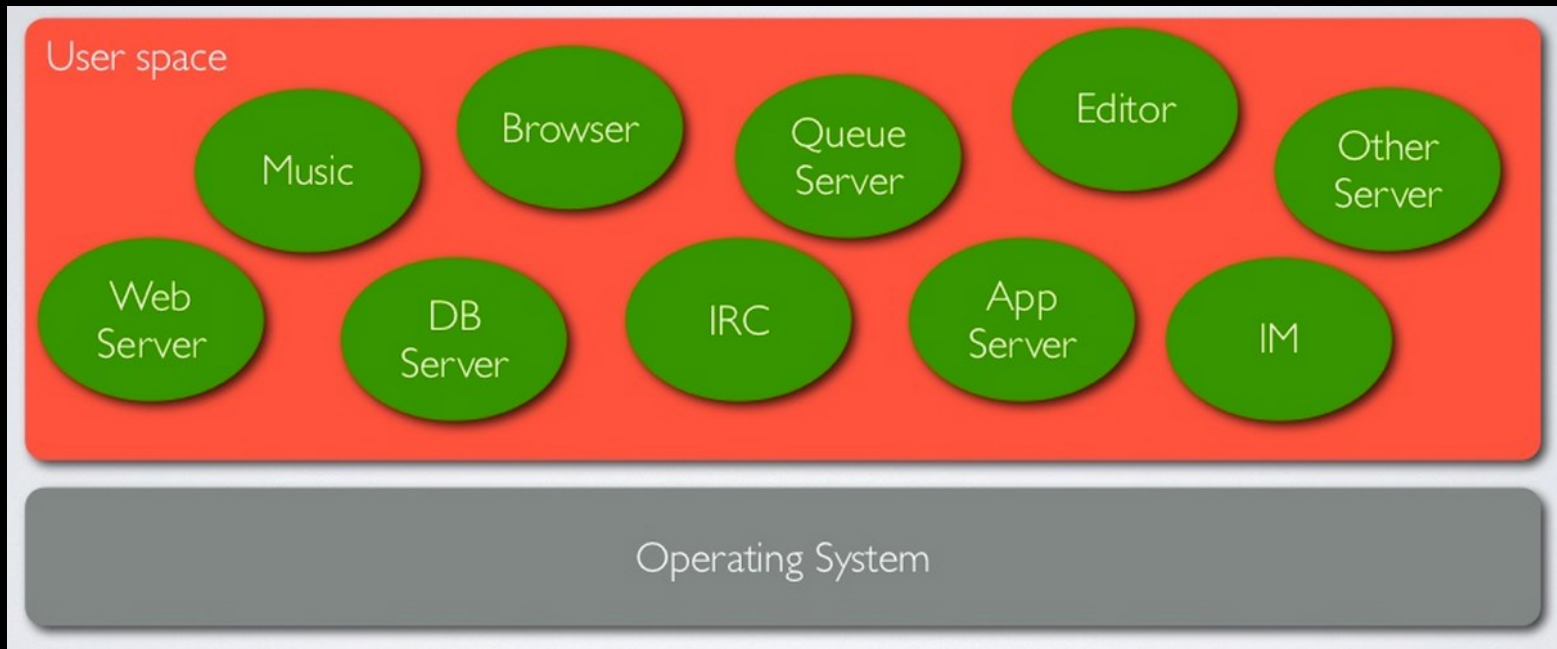
## Information Overload

It's exactly like this, isn't it?





**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>
- “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?

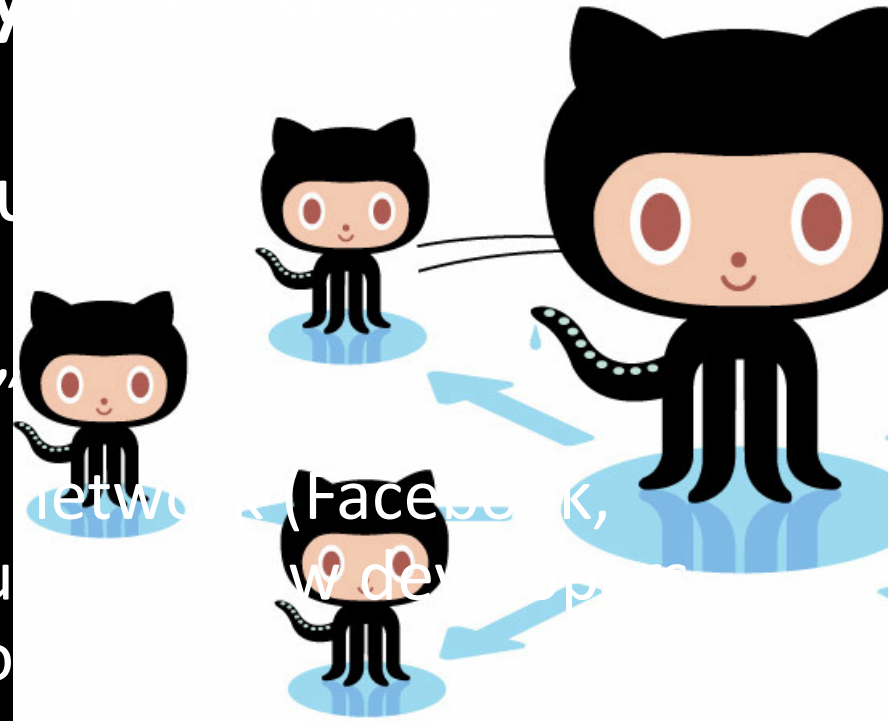


Who is this?



# What you may

- 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 share your code and projects they are working on
  - This isn’t just good for you, the community you help create can help you
  - And you’ll need the account



# 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



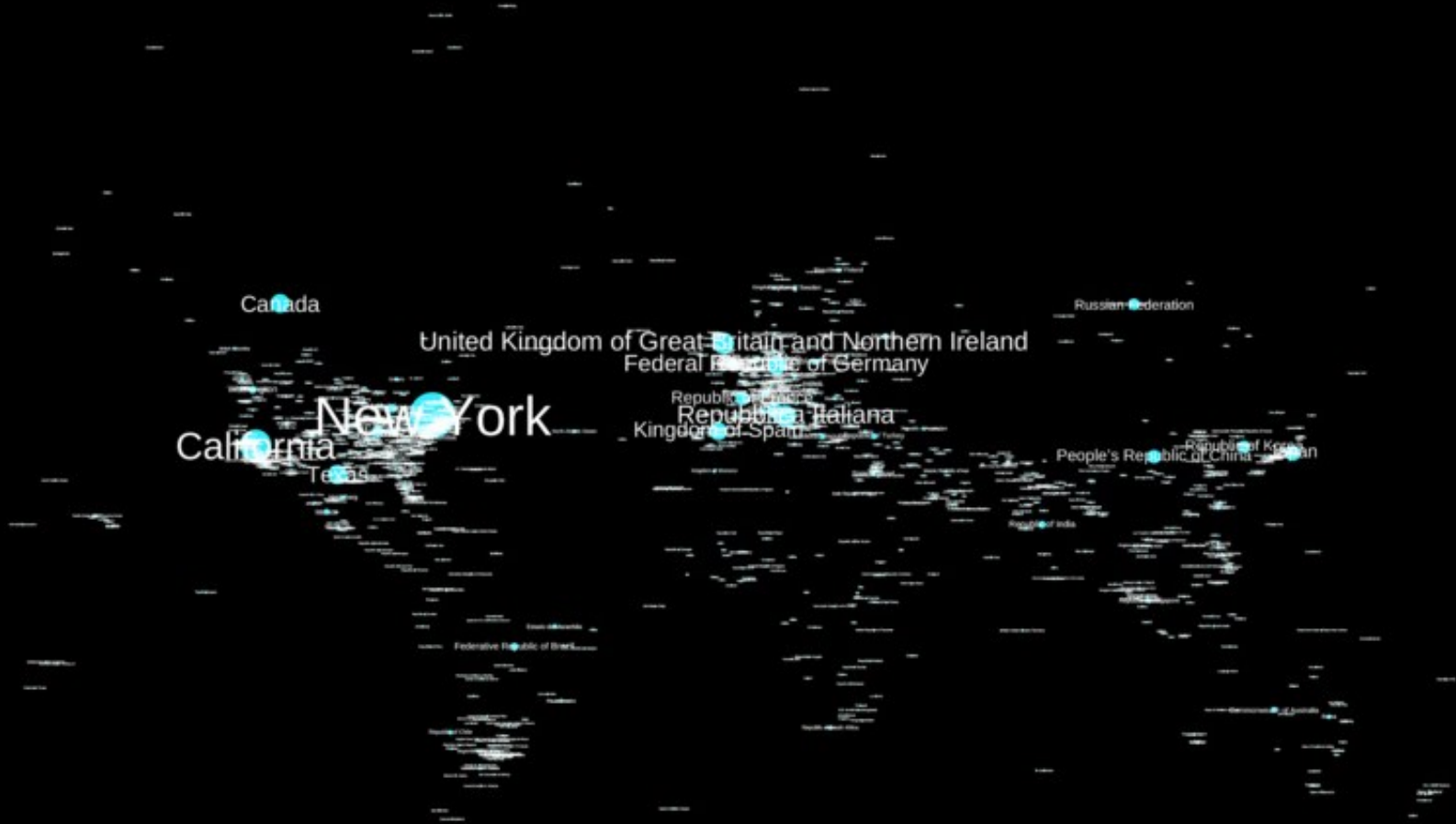
# New and interesting projects

- 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/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

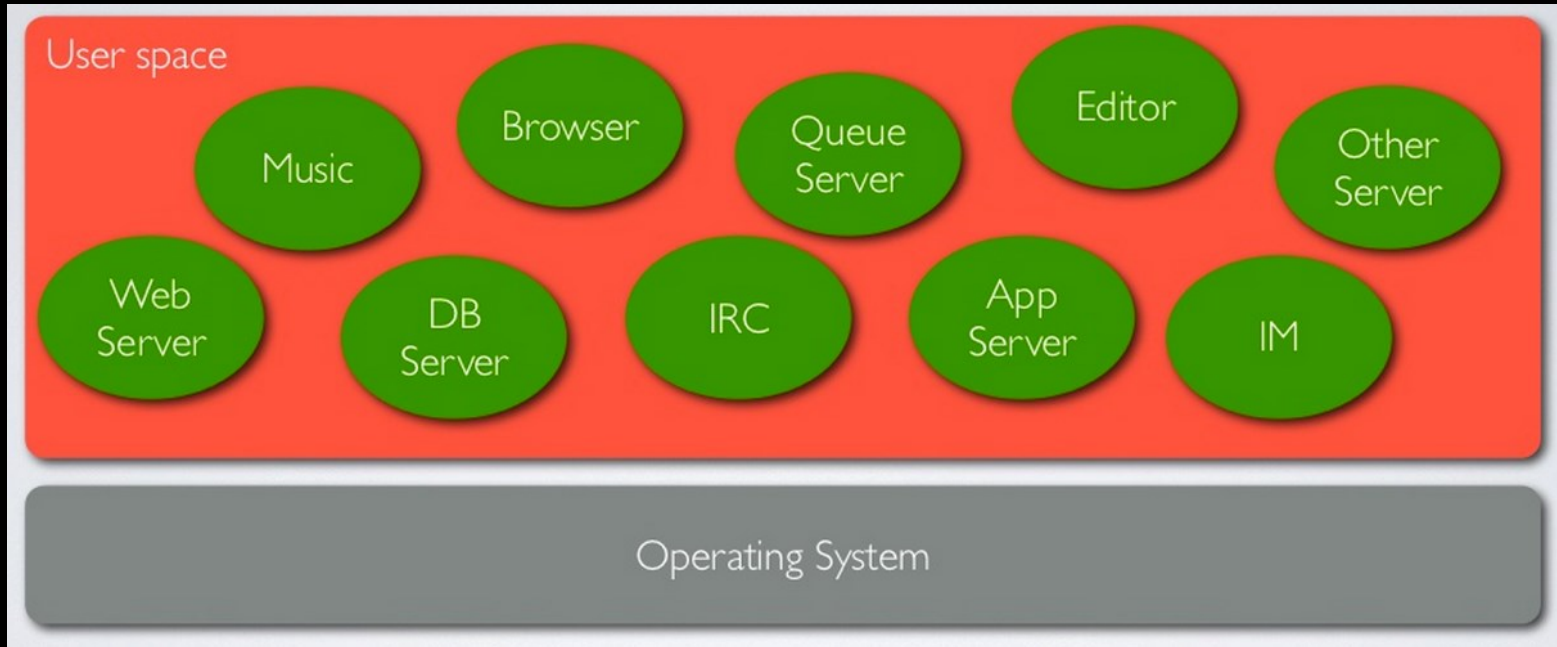
- You don't have to install anything, just go here:  
<http://webchat.freenode.net/?channels=dspace>
- Or here:  
<http://webchat.freenode.net/?channels=duraspace>
- Pick a nickname for yourself
  - `FirstnameLastname` works fine and is friendly
- Say hello, start a conversation (whatever is on your 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 #dspaceroom 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**



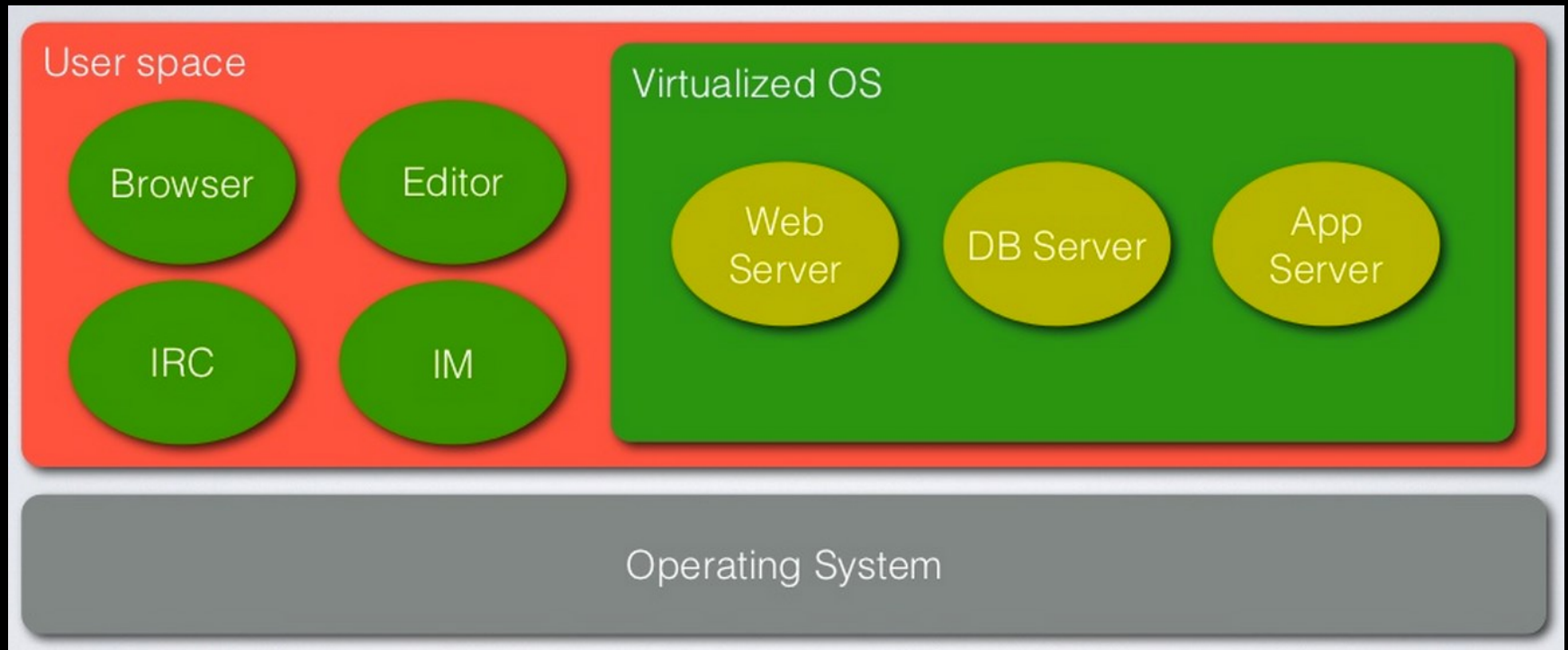
**We spent months, he did not get past this hurdle**



# 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

- *Push* by Rohan Gupta <http://thenounproject.com/term/push/11715/>
- *Messy Desk* by Yatoobin <http://www.flickr.com/photos/30661646@N00/243293760/>
- *Information Overload* by Intersection Consulting <http://www.flickr.com/photos/intersectionconsulting/7537238368/>
- *Information Overload is Painful* by Bandita [http://www.flickr.com/photos/cosmic\\_bandita/3004255043/](http://www.flickr.com/photos/cosmic_bandita/3004255043/)
- *Think* by Jack Mallon <http://www.flickr.com/photos/18924124@N00/8071905112/>
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