Open Source Project Communities

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FOSS B04

Open Source Innovation

1. Legal innovation
2. **Process innovation**
3. Software tool innovation
4. Business model innovation

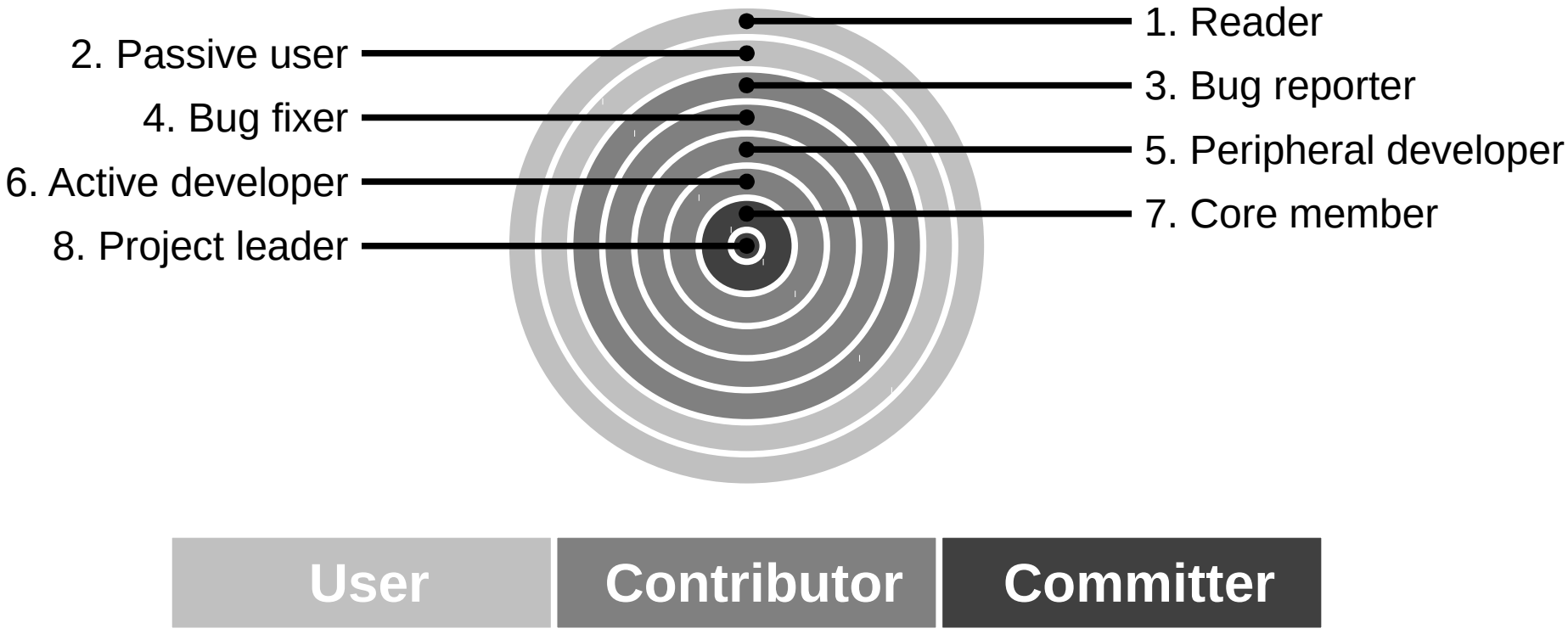
Open Source Process Innovation

- **Project communities**
- **Engineering processes**

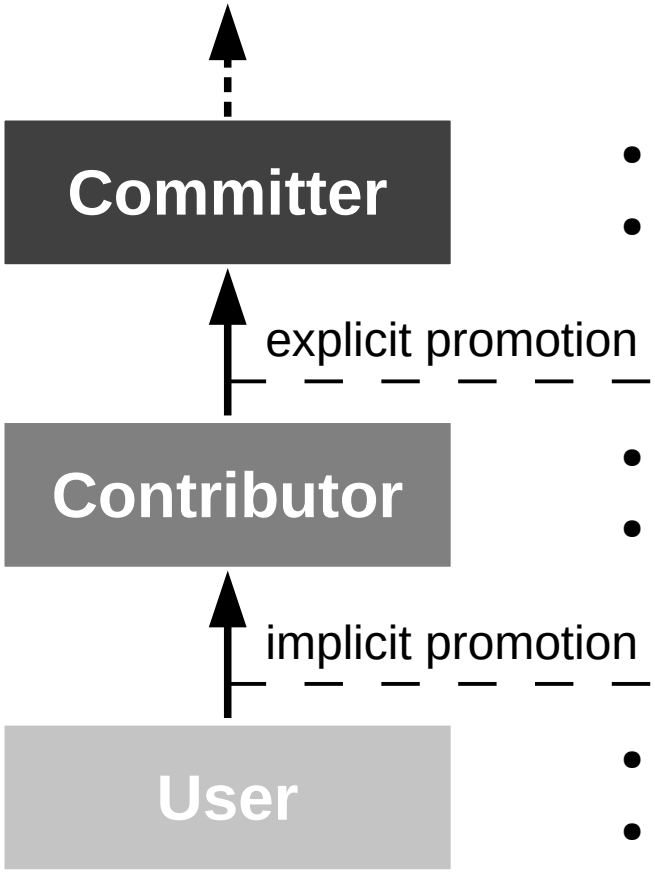
Community Open Source Project

- Project is owned and managed by community
  - The project typically has only one license
  - The governing body has no direct commercial interests
  - No single vendor has undue / dominant influence

The Onion Model [CH11]



The Basic Career Path [R15a]

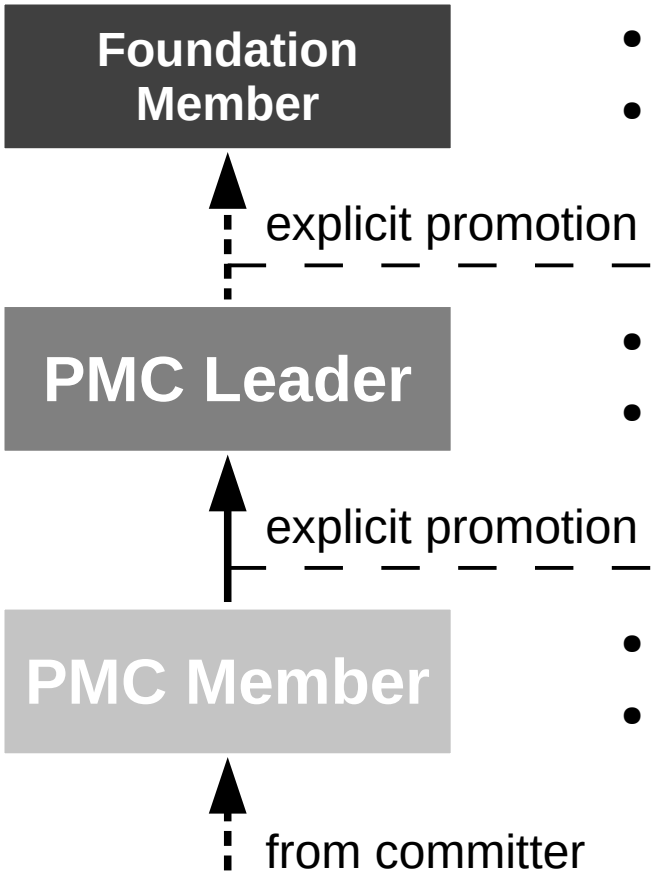


- Has commit (write) rights
- Performs bulk of the work, patch review

- Provides small features, bug fixes
- Submits patches (no commit right)

- Knows and uses software
- If so, helps with comments, feedback

The Extended Career Path (Foundations)

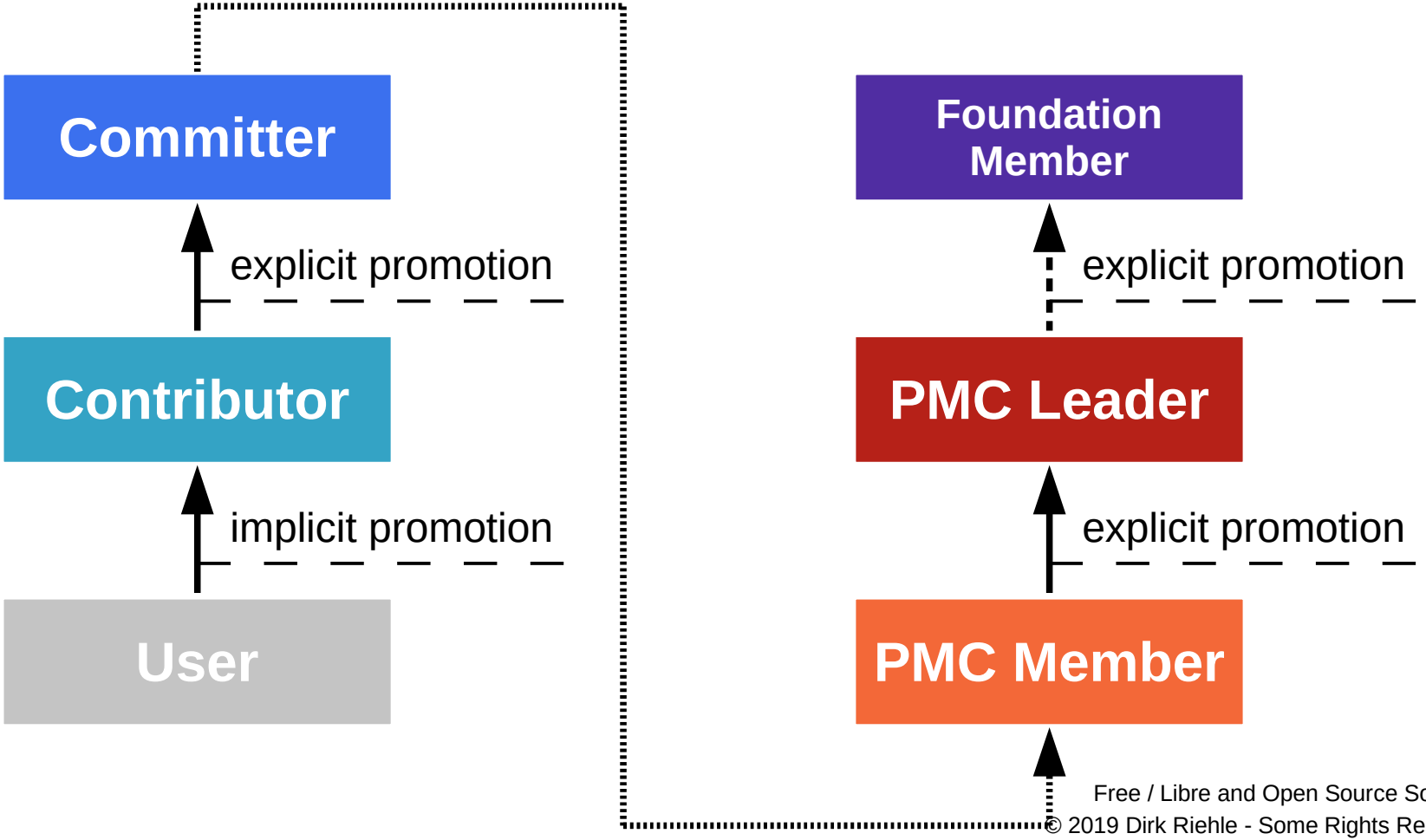


- Has interest of foundation at heart
- Acts as coach, markets, represents

- Leads project management committee
- Steers industry platform

- Contributes to project management
- Helps steer industry platform

The Full Open Source Career Path



The Apache Way 1 / 2 [A10b] (Official)

- Collaborative software development
- Commercial-friendly standard license
- Consistently high quality software
- Respectful, honest, technical-based interaction
- Faithful implementation of standards
- Security as a mandatory feature

The Apache Way 2 / 2 [C17] (Curcuru)

- Charity
  - Apache’s mission is providing software for the public good
- Community
  - Many of us are more effective than all of us
- Consensus
  - Getting good enough consensus is often better than voting
- Merit
  - Those that have proven they can do, get to do more
- Open
  - Technical decisions are discussed, decided, and archived publicly
- Pragmatic
  - Apache projects use the broadly permissive Apache license

The 3-4-5 Model of Project Communities

1. **Three principles** open collaboration
2. **Four practices** of open communication
3. **Five stages** of project volunteering

The Three Principles of Open Collaboration

1. **Egalitarian** participation
2. **Meritocratic** decision-making
3. **Self-organizing** processes

Principles in Comparison [R+09]

- **Traditional Work**
  - **Hierarchical project assignment**
    - Closed and hidden silos
    - Assigned to project
  - **Status-oriented decision making**
    - Public + private discussions
    - Hierarchical status decides
  - **Predefined processes**
    - Prescribed process
    - Prescribed jobs
- **Open Collaboration**
  - **Egalitarian participation**
    - Open for contribution
    - Everyone can contribute
  - **Meritocratic decision-making**
    - Public discussion process
    - Decisions based on merit
  - **Self-organizing processes**
    - People find their process
    - People find their project

The Four Practices of Open Communication

1. Public
2. Written
3. Complete
4. Archived

Public Communication 1 / 4

- Public communication
  - Is visible to everyone
  - Creates trust and credibility
  - Does not a priori exclude anyone
- Almost all communication should be public
  - Tools: mailing lists, forums, wikis, etc.
  - Avoid private emails, phone conversations
  - Summarize private discussions using email

Written Communication 2 / 4

- Written communication
  - Increases the reach of communication
  - Reduces barriers to participation (time and location)
  - Supports archiving of discussions
- (Almost) all communication should be in written form
  - Creates transparency, traceability, history
  - Reduces barriers to communication
  - Makes it easier to gain volunteers
- “If it wasn't written down, it might as well not exist.” [F05]

Complete Communication 3 / 4

- Complete communication
  - Increases effectiveness of communication
  - Supports the on-boarding process
  - Creates more trust, credibility

Archived Communication 4 / 4

- Archived communication
  - Simplifies documentation
  - Supports on-boarding process
  - Creates yet more trust, credibility

Project Immigration [B11]

- User
  1. Needs to get a job done
  2. Searches web for software
  3. Finds a matching project
  4. Checks out the project
  5. Gives it a try; is happy
  6. Finds a bug; reports it
  7. **Helps replicate bug; triage**
  8. Engages in conversation
  9. **Helps other users**
  10. **Contributes to docs**
  11. Leads project

- Developer
  1. Needs to solve a problem
  2. Searches web for software
  3. Finds a matching project
  4. Checks out the project
  5. Gives it a try; is happy
  6. Finds a bug; reports it
  7. **Fixes bug; submits patch**
  8. Engages in conversation
  9. **Keeps finding + fixing bugs**
  10. **Receives commit rights**
  11. Leads project

The Five Stages of Volunteering [R15b]

#	Volunteer View	Project View
1	Find project	Market project
2	Understand project	Explain project
3	Engage with project	Engage with volunteer
4	Work within project	Work with contributor
5	Lead project	Enable career

Definition of Best Practice

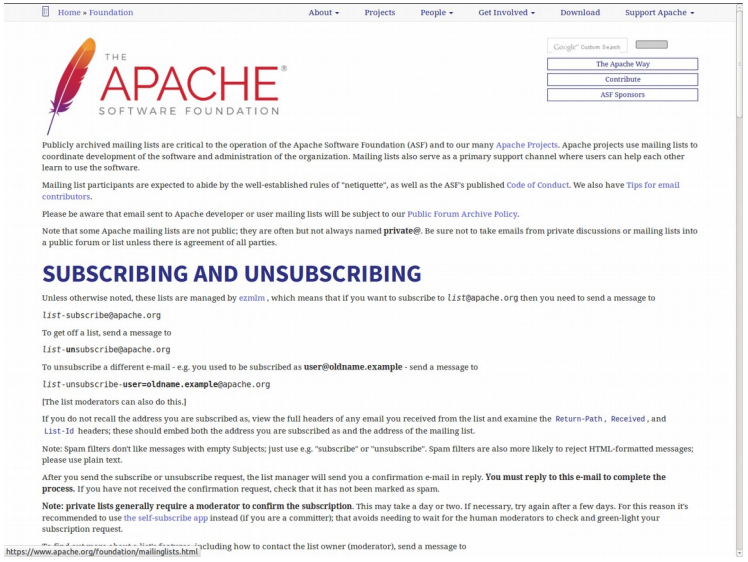
- A best practice is a broadly-accepted, often informally-defined method for achieving a specific goal. (Cf. State-of-the-art.) [DR]
- Best practices in this presentation are marked as a reference if they were derived from related work. My interpretation typically evolved the original practice, though.

#1 Volunteer: Find Project

- Stumble (and find)
  - Stumble upon project
  - **Listen to word-of-mouth**
- Search (to find)
  - Use general search engine
  - **Search on open source portal**

#1 Project: Market Project 1 / 2

- Active outreach [F05]
  - Choose a good project name
  - Define all relevant channels
  - Use channels consistently
  - Announce visibly
  - Be matter of fact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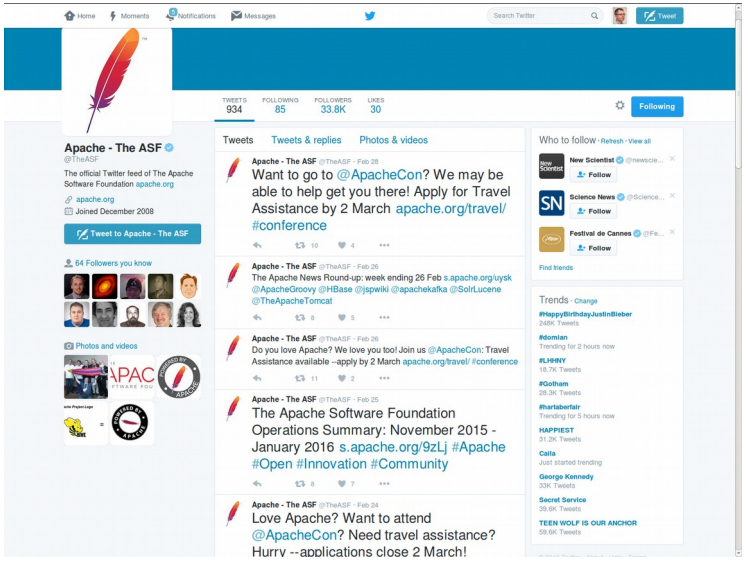
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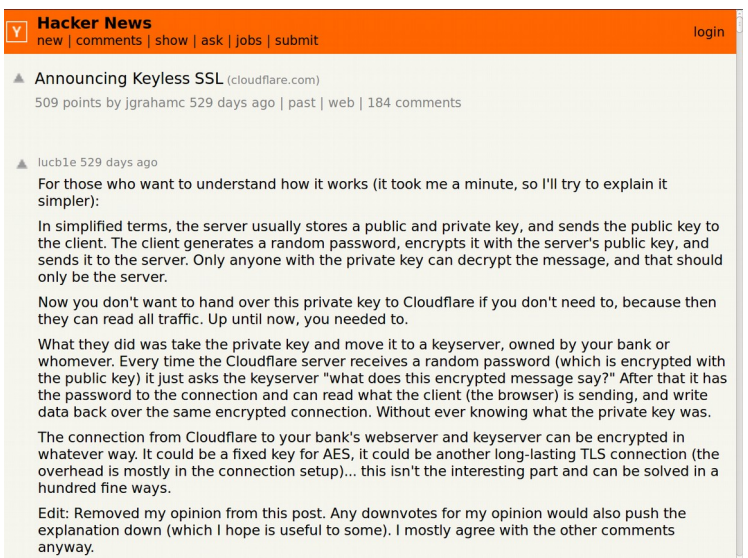
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Announcing Keyless SSL (cloudflare.com)
509 points by jgrahamc 529 days ago | past | web | 184 comments
lucb1e 529 days ago
For those who want to understand how it works (it took me a minute, so I'll try to explain it simpler):
In simplified terms, the server usually stores a public and private key, and sends the public key to the client. The client generates a random password, encrypts it with the server's public key, and sends it to the server. Only anyone with the private key can decrypt the message, and that should only be the server.
Now you don't want to hand over this private key to Cloudflare if you don't need to, because then they can read all traffic. Up until now, you needed to.
What they did was take the private key and move it to a keyserver, owned by your bank or whomever. Every time the Cloudflare server receives a random password (which is encrypted with the public key) it just asks the keyserver "what does this encrypted message say?" After that it has the password to the connection and can read what the client (the browser) is sending, and write data back over the same encrypted connection. Without ever knowing what the private key was.
The connection from Cloudflare to your bank's webserver and keyserver can be encrypted in whatever way. It could be a fixed key for AES, it could be another long-lasting TLS connection (the overhead is mostly in the connection setup)... this isn't the interesting part and can be solved in a hundred fine ways.
Edit: Removed my opinion from this post. Any downvotes for my opinion would also push the explanation down (which I hope is useful to some). I mostly agree with the other comments anyway.


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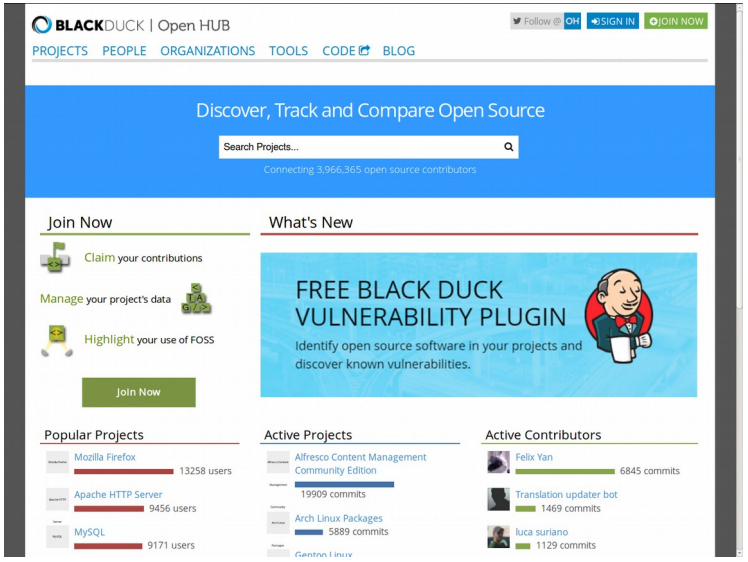
#1 Project: Market Project 2 / 2

- Passive inflow
  - Register on all relevant places
  - Support search engines
  - Support lucky chance
  - Use open source portal features
  - Provide findable summaries
  - Work to support portal metrics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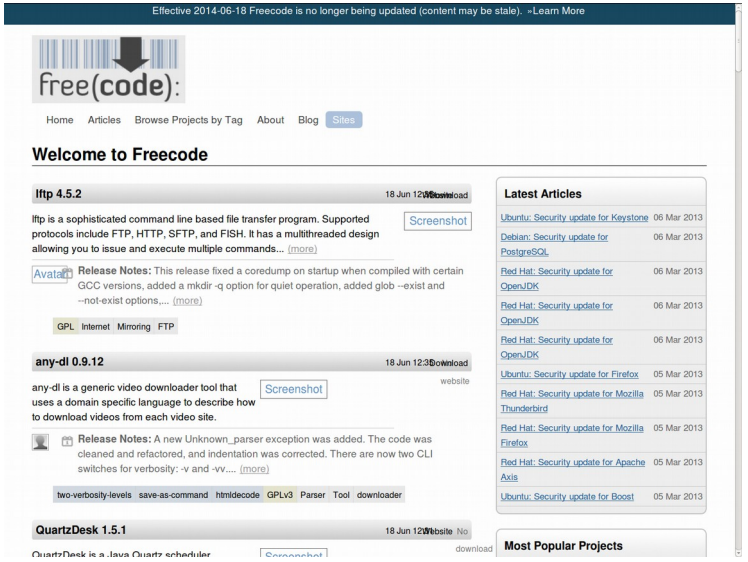
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any-dl 0.9.12
any-dl is a generic video downloader tool that uses a domain specific language to describe how to download videos from each video site.
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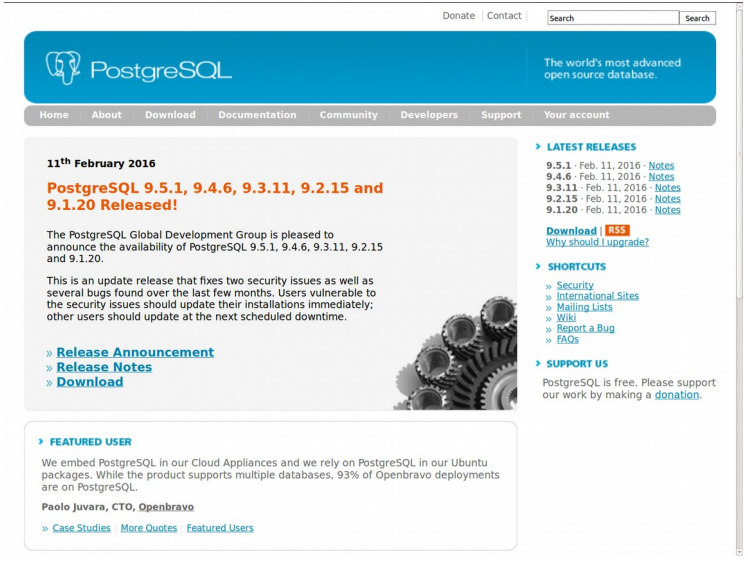
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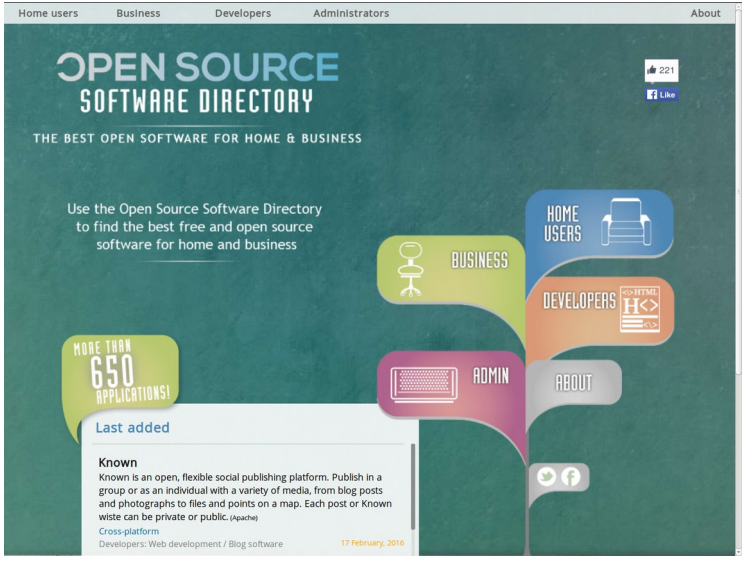
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17 February, 2016

#2 Volunteer: Understand Project

- Read up on project

#2 Project: Explain Project [F05]

- Have clear mission statement
- Provide examples and screenshots
- State license and terms
- Provide simple downloads
- Show current and future features
- Show development status
- Provide user documentation
- State whether volunteers are welcome
- State rules of engagement

#3 Volunteer: Engage with Project 1 / 2 [B11]

- (Volunteer) **users**
  - Do your homework first
    - Search archives
    - Read documentation
  - Communicate prudently
    - Be matter of fact
    - Don't jump to conclusions

#3 Volunteer: Engage with Project 2 / 2 [B11]

- (Volunteer) **developers**
  - Respect project practices
  - Respect project culture
  - Accept guidance

[Geoserver-users] Unable to add MrSID as a layer

From: Ralph Dell <RDell@Ca...> - 2011-07-07 17:38

Attachments: Message as HTML

This is my first post to this list.

I am running geoserver 2.0.3, jetty, as a windows service. I have installed GDAL 1.7.3. GDAL_DATA is set up, and the gdal native libraries are in GEOSERVER_HOME/wrapper/lib. I have copied a MrSID to GEOSERVER_DATA/data/MrSID folder which I created.

When adding a new store MrSID is one of my Raster Data Sources, I set the connection parameter to file:data/MrSID/Catawba_West.sid and are able to add the store. I assume the next step is adding the mrsid as a layer, and here is the problem no layer shows up for that store, I'm confused. The coveragestore.xml looks like this

How to Ask a Question 1 / 2

- The “simple” way [L11]
  - **I would like to do X (but it doesn’t work)**
  - **I have tried Y to achieve X**
  - **Then Z happened**
- Additional information
  - configuration
  - version information
- Preferably no attachments
- Short email (30 lines)

How to Ask a Question 2 / 2

- The “smart” way [RM14]
  - Choose your forum carefully
  - Stack Overflow
  - Web and IRC forums
  - As a second step, use project mailing lists
  - Use meaningful, specific subject headers
  - Make it easy to reply
  - Write in clear, grammatical, correctly-spelled language
  - Send questions in accessible, standard formats
  - Be precise and informative about your problem
  - Volume is not precision
  - Don't rush to claim that you have found a bug
  - Groveling is not a substitute for doing your homework
  - Describe the problem's symptoms, not your guesses
  - Describe your problem's symptoms in chronological order
  - Describe the goal, not the step
  - Don't ask people to reply by private e-mail
  - Be explicit about your question
  - When asking about code
  - Don't post homework questions
  - Prune pointless queries
  - Don't flag your question as “Urgent”, even if it is for you
  - Courtesy never hurts, and sometimes helps
  - Follow up with a brief note on the solution

Basics of Email Communication

- OpenStack mailing list etiquette [O15]
  - Subjects
  - Formatting
  - Netiquette

Effective Written Communication

- Every (email) contribution should have **one** purpose
  - Open a new issue that needs discussion
  - Support or argue against the issue at hand
  - Conclude discussion and summarize for archiving
- Follow patterns of effective writing
  - 72 characters, use subject line, use real sentences
  - Assume good faith, make no assumptions, use neutral tone
  - Terseness is acceptable, rudeness is not
  - Use URLs for reference, shortening
- Use the correct tool for the purpose
  - For example, no discussions in the bug tracker

Archive as Public Documentation

- Reasons for public documentation of project
  - Public documentation creates transparency, credibility, trust
  - Credibility and trust helps get volunteer contribution
  - Good public documentation reduces work, supports scaling up
- Public documentation needs to be backed into process
  - Mailing lists should have publicly readable archive
  - Wiki should be crosslinked with mailing list, bug tracker, code repository
  - Documentation work should be publicly recognized as valuable
- What to document? Anything of value to the project

Social Aspects of Communication [CF08]

- Be consistent in your communication
  - Adopt a real/serious name
  - Use that name consistently
  - Don't self-aggrandize
  - Use proper language
- Show no tolerance against rudeness
  - Rudeness destroys communities
  - Separate rudeness from content
- Companies have training programs

"On the Internet, nobody knows you're a dog."

Advice on Email Communication

- Sue Gardner on Wiki[p/m]edia communications [G16]
  - “You are going to be doing a lot of writing. Do it well.”
  - “In all your communications, be conscious of your group’s diversity.”
  - “Be cautious about creating an insider culture.”
  - “Publish early, publish often.”
  - “Be aware that volunteer time is different from paid time.”
  - “Write (and publish) a greater volume of stuff than you think you should.”
  - “Assume good faith.”
  - “Bias towards transparency. Way, way, way more than you think you should.”
  - “When you change your mind, say it publicly, and explain why.”
  - “Pay attention to people you disagree with.”

#3 Project: Engage with Volunteer 1 / 2 [F05]

- (Engage) with everyone
  - Show how to reach you
  - Welcome people to community
  - Stop any rudeness
  - Avoid private discussions
  - Accept initial redundancy
  - Provide simple tasks

#3 Project: Engage with Volunteer 2 / 2 [F05]

- (Engage) with developers
  - Provide tool access
  - Show requirements list
  - Provide developer guidelines
  - Provide developer docs

What Motivates Volunteers?

- Technical Motivation
  - To solve their technical problem
- Economic Motivation
  - To signal their capabilities to the labor market
  - To achieve status of economic value
- Social Motivation
  - To feel validated by other people
  - To enjoy a community
  - To do good

Getting to the First Contribution

- Make first contribution easy
- Make contributions incremental
- Remove arbitrary tool obstacles
- Call out lurkers from shadows

#4 Volunteer: Work within Project

- Be responsive
- Be reliable
- Contribute

#4 Project: Work with Contributor 1 / 3 [F05]

- General practices
  - Be component-oriented
  - Work from features
  - No discussions in bug tracker

#4 Project: Work with Contributor 2 / 3 [F05]

- **Working with a new contributor**
  - React speedily, don't sit on patches
  - Turn contributions into conversations
  - Practice conspicuous code review
  - Track contributions, provide credit
  - Praise plentiful, criticize specifically
  - Prevent territoriality

#4 Project: Work with Contributor 3 / 3 [F05]

- **Working with a regular contributor**
  - Track volunteer interests, assign accordingly
  - Distinguish inquiry from assignment
  - Share technical as well as managerial tasks
  - Follow-up to delegated assignment
  - Document practices and traditions
  - Archive practice descriptions

Meritocratic Decision Making Process

- Process for decision making depends on the project
  - Compare Linux Kernel vs. PostgreSQL vs. Tiki Wiki CMS
  - All involve some form of mailing list discussion
  - Sometimes, private side discussions are OK
- Most consensus-based projects avoid votes
  - Having to vote indicates a failure of the process
  - But if you have to ...
    - Idiosyncratic -1, ±0, +1 voting process [A10]
    - Votes are called on project roles, design decisions, resource allocations
    - Important example: Committer elections (determine social set-up)
- Decisions are summarized and archived

Illustration of How Numbers Play Out

Committers	1
Contributors	100
Users	10000

Recruiting is an Investment

Time is your scarcest resource

Recruiting takes time

Therefore:

View recruiting as investment

Align time spent with return received

Recruit for the long-term [F05]

Committer Announcements

Joe Conway <mail@joeconway.com> 11:22 PM (10 hours ago)

to Andres, Tom, pgsql-hackers

On 06/01/2018 05:14 PM, Andres Freund wrote:
> On 2018-06-01 17:05:11 -0400, Tom Lane wrote:
>> The core team is pleased to announce the appointment of seven
>> new Postgres committers:
>>
>> Etsuro Fujita
>> Peter Geoghegan
>> Amit Kapila
>> Alexander Korotkov
>> Thomas Munro
>> Michael Paquier
>> Tomas Vondra
>>
>> Congratulations to all!
>
> +1!

+7!

#5 Volunteer: Lead Project 1 / 2

- Lead project
  - Take responsibility
  - Praise other contributors
  - Acknowledge contributions
  - Support towards their manager
  - Provide tokens of appreciation

#5 Volunteer: Lead Project 2 / 2

- Enable community career
  - Define community career
  - Define roles and positions
  - Decide promotion privately
  - Announce promotion clearly

Dealing with Difficult People 1 / 4 [CF08]

- Understand the problem
  - Difficult (“poisonous”) people
    - May waste your time
    - May split the project
    - May ruin the project

Dealing with Difficult People 2 / 4

- Prepare for the problem
  - Build a healthy community
  - Document all decisions

Dealing with Difficult People 3 / 4

- Detect the problem
  - Difficult people typically
    - Don't show respect
    - Behave clueless
    - Are overly emotional
    - Make sweeping claims

Dealing with Difficult People 4 / 4

- Handle the problem
  - Don't engage with difficult people
    - Cf. “Don’t feed the troll”
  - Ignore them if possible
  - Boot them, if necessary

The Volunteering Process (Recap)

#	Volunteer View	Project View
1	Find project	Market project
2	Understand project	Explain project
3	Engage with project	Engage with volunteer
4	Work within project	Work with contributor
5	Lead project	Enable career

Review / Summary of Session

- Open source projects
- Project roles and careers
- The 3-4-5 model of open communities
  - The three principles of open collaboration
  - The four practices of open communication
  - The five stages of open source volunteering

Thank you! Questions?

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Credits and License

- Original version
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- Contributions
  - Christoph Lindenmüller by email of 2011-09-01
  - ...