GMOペパボ

How to take over OSS project

and How hand over OSS project

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2017.08.05 builderscon tokyo 2017

GMOペパボ



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https://www.hsbt.org



https://pepabo.com

self.introduce

=>
{
  name: “SHIBATA Hiroshi”,
  nickname: “hsbt”,
  organizations: [“pepabo”, “ruby_core_team”, “asakusarb”],
  commit_bits: [“ruby”, “rake”, “rubygems”, “rdoc”, “psych”, “syck”, “ruby-build”, “railsgirls”, “railsgirls-jp”, …],
  sites: [“hsbt.org”, “ruby-lang.org”, “rubyci.org”, “railsgirls.com”, “railsgirls.jp”],
}



asakusarb

foo category:bar/baz comment:foobar

README

Imports 426

meetup 389

hanami 1

misc 1

000_Log 2

(no category) 5

README.md

Edit



大事なことなので日本語で

- スライドは英語です。発表は日本語です。
- 一緒にサービス開発する仲間を大募集中!!! 声かけてください。
- Builderscon のためにステッカー作って来ました!!1 (Twitter で反応してもらえると嬉しい)



1.

Introduction

A History of Ruby(Short Ver.)

- Ruby 1.8.7 bundled a lot of library named standard library a.k.a stdlib.

2008

- Ruby 1.9.x bundled rubygems that is ruby library packaging and distributing.

2009

- Many of libraries was born after that. Example for rspec, nokogiri, rake and thor. It's start time for Ruby language and library ecosystems.

2013

- First Authors of famous library is burnout.
- Some of useful gems are changed maintainers of second generation.

2017

- Ruby 2.4, 2.5



How continue to maintain OSS

- Contribute
- Fork
- Re-Implementation
- Take over



What I talk?

- Case study of gem for take over.
- They has commonly knowledge of OSS.



Pattern of take over OSS

1. If you triage or comments to Issue, an send a pull request to repository. Current maintainer add commit bit to you.
2. Request to take over via E-Mail/DM/slack…Etc
3. Request to take over via face to face communication.



2.

Case 1: ruby/rake

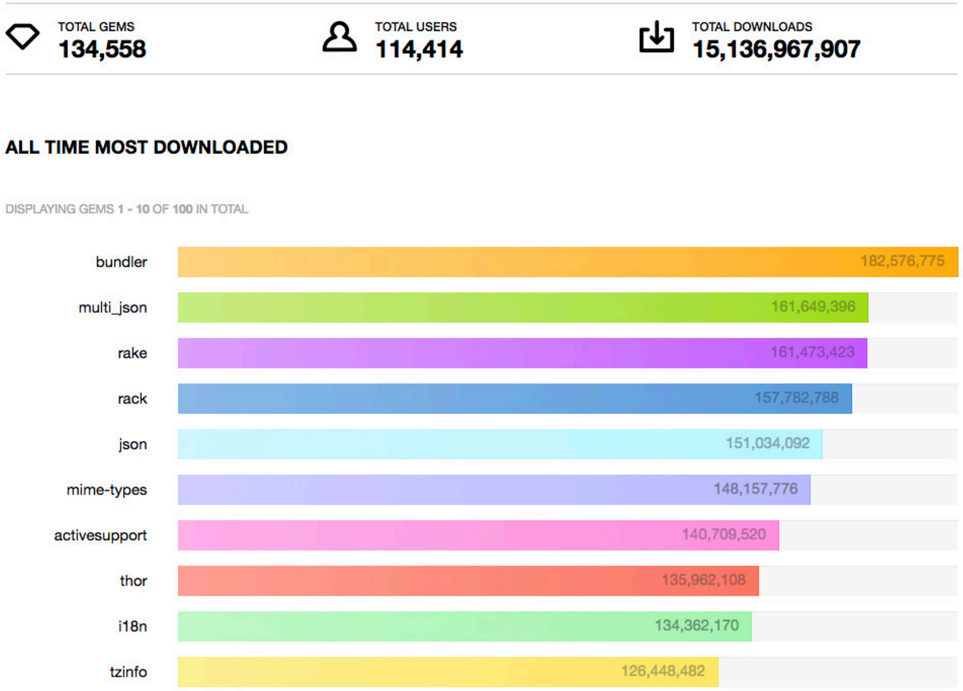
Make in Ruby

Rake is a Make-like program implemented in Ruby. Tasks and dependencies are specified in standard Ruby syntax.

```
task :awesome do
  puts :bar
end

task beat: [:awesome] do
  puts :buzz
end

task default: :beat
```



ruby/rake

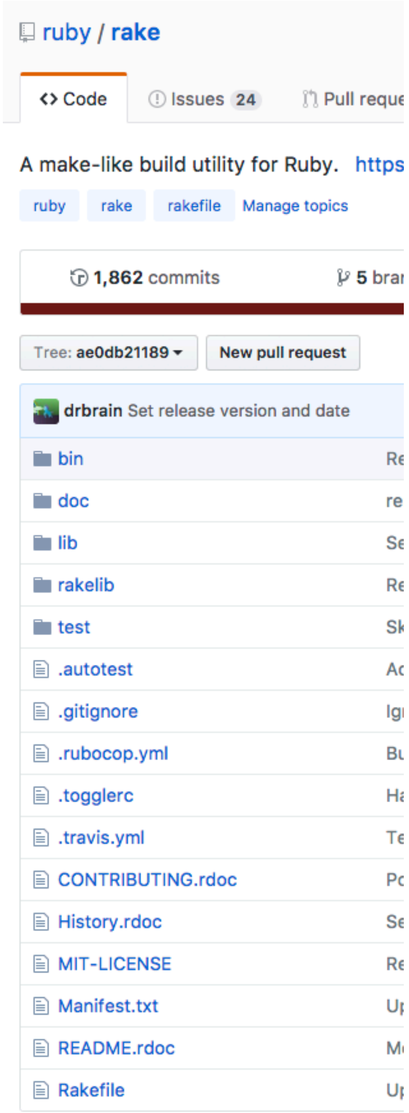
- Rake was originally created by Jim Weirich, who unfortunately passed away in February 2014.
- This repository was originally hosted at github.com/jimweirich/rake, It has been moved to github.com/ruby/rake by @drbrain
- Rake adopted SemVer policy. (v0.9.x to v10.x.y)
- @drbrain and @hsbt maintain ruby/rake now.

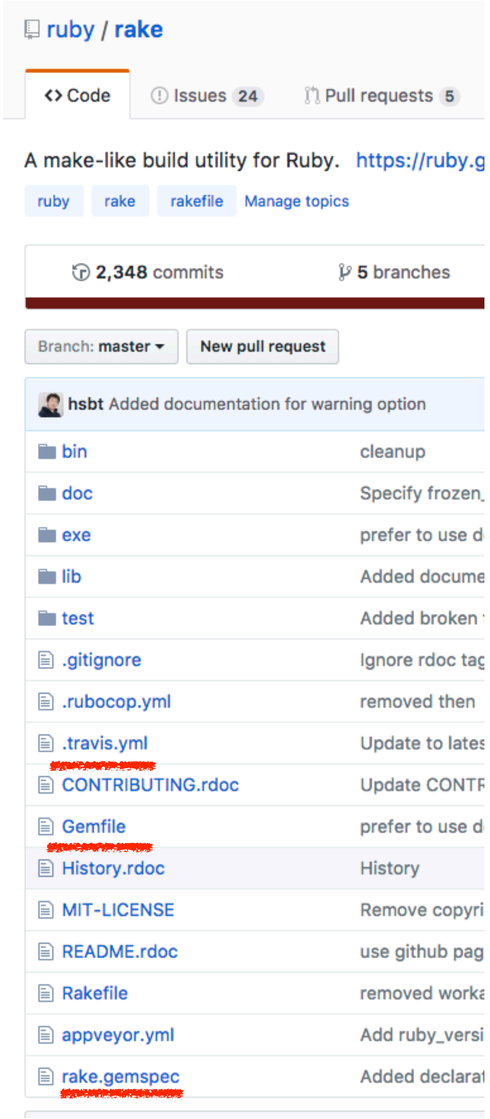


Rewrite hoe to bundler

- You may invoke to `bundle` when to see Gemfile
- Without bundler, you need to install hoe and their plugins.

“boilerplate” is important for continuously development.





My mistake - TaskManager#last_comment

- I removed obsoleted attr_accessor named `@last_comment` with deprecated code.
- I found a my commit is “breaking changes” when it happens.
- It was referenced yard, rspec and rubocop. When users updated Rake 11, It breaks rake task with these gems.

We should prepare “Transition Path” for breaking changes.



3.

Case 2: ruby/psych

Whats psych?

A libyaml wrapper for Ruby

- It supports bundled libyaml-* sources. You can build psych without libyaml-devel(dev) packages.

```
# Load YAML in to a Ruby object
Psych.load('--- foo') # => 'foo'

# Emit YAML from a Ruby object
Psych.dump("foo")     # => "--- foo\n...\n"
```



History of Psych

- Original author is Aaron Patterson a.k.a @tenderlove
  - https://github.com/tenderlove/psych

- I've been backport/forwardport between tenderlove/psych and ruby/ruby.
- After that, I was promoted gem maintainer. I released psych to rubygems.org



Problem for psych case

- I’m not project Owner. Because I could not change configuration of CI or project settings.
- Sometimes I got build fail of JRuby version.

I hope to prepare to test with JRuby on Travis CI.



Solutions

- I picked up tenderlove on RedDotRubyConf and transferred personal repository of Github to organization account named “ruby”
- Now, canonical repository of psych is https://github.com/ruby/psych
- I can update CI configuration and team of contributors.

Face to Face is a best practice for OSS development.



Security release

We hard to fix and release these security issue. so all of release maintainer are volunteer work.

If you have a plan for OSS take over, you should concern security handling.

- Do you have a connection of security community?
- Do you have a friends of security specialist?
- etc…



4.

Case 3: ruby/rdoc

Whats rdoc?

RDoc produces HTML and online documentation for Ruby projects.

```
#   puts listings.product + "\n" + listings.price
#
# _Generates_
#
#   Chicken Fried Steak
#   A well messages pattie, breaded and fried.
#
#   Chicken Fried Steak -- 9.95
#   A well messages pattie, breaded and fried.
#
def initialize(str, safe_level=nil, trim_mode=nil, eoutvar='_erbout')
  @safe_level = safe_level
  compiler = make_compiler(trim_mode)
  set_eoutvar(compiler, eoutvar)
  @src, @encoding, @frozen_string = *compiler.compile(str)
  @filename = nil
```



Public Class Methods

new(str, safe_level=nil, trim_mode=nil, eoutvar='_erbout')

Constructs a new ERB object with the template specified in *str*.

An ERB object works by building a chunk of Ruby code that will output the completed template when run. If *safe_level* is

If *trim_mode* is passed a String containing one or more of the following modifiers, ERB will adjust its code generation as

```
%  enables Ruby code processing for lines beginning with %
<> omit newline for lines starting with <% and ending in %>
>  omit newline for lines ending in %>
-  omit blank lines ending in -%>
```

eoutvar can be used to set the name of the variable ERB will build up its output in. This is useful when you need to run m
variable to be used inside a String.

Example

```
require "erb"

# build data class
class Listings
  PRODUCT = { :name => "Chicken Fried Steak",
```

History of RDoc

- Canonical repository of RDoc was rdoc/rdoc.
- It maintained rdoc team (not ruby core, seattle.rb)
- I only backport to ruby core from rdoc upstream.



Problem of JSON dependency.

- Ruby 2.4 changed Integer Unification. Therefore json-2.x breaks Ruby 2.4.x or later.
- You could not install rails with Ruby 2.4 at it time.
- `gem i rails` was stopped caused by json dependency via rdoc/sdoc.

See details: https://www.hsbt.org/diary/20160829.html
And my talk of RubyKaigi 2017



Solutions

- I was promoted RDoc maintainer.
- I fixed json dependency from RDoc.

- After that. I released new versions of RDoc and triage issues and pull requests on rdoc/rdoc.



“Release” is important

I think “Take over the OSS project” is that take over release management.

Sometimes, previous maintainer only add commit bit when take over the OSS. If you faced it, you should request to release grant from previous maintainer.



Current status of rdoc

- I handle a project of rdoc and management releases(not product management)
- I have no idea for improving documentation tool about rdoc

If you are interested in rdoc or documentation tools of Ruby, Please discuss to me. (It's a take over chance)



5.

Case 4: rubygems/rubygems

Whats rubygems

RubyGems is a package management framework for Ruby.

- **rubygems/rubygems.org:**
  - **The Ruby community's gem host.**
- **rubygems/rubygems:**
  - **Command line tool of rubygems**



Problem

- Rubygems have difference from ruby core repository. I created a patch for rubygems/rubygems from ruby core.
- But I felt that rubygems has no project/product manager. In the past, @drbrain released new version of rubygems. But it decreased a number of releases in 2015.
- In Q4 of 2015, RubyTogether taken over the rubygems projects.



What happened?

Bundler team funded RubyTogether take over rubygems/rubygems. (I didn’t understand that at it times.)

- **Some maintainers removed from rubygems/rubygems.**
- **I requested to remain maintainer of rubygems.**



Current problem of rubygems

bundler,rubygems team are not interested in ruby core collaboration. (It's my point of view.)

In the past, We easily discuss maintenance plan and policy about ruby and rubygems to @tenderlove and @drbrain.

I hard to backport a patch to rubygems from ruby core. Because these patch only need ruby trunk. It is needless stable versions.



My mistake

- I should have declared take over at an early stage.
- I can fork rubygems/rubygems to ruby/rubygems. But it's worse to ruby world.

We should discuss and communicate bundler/rubygems team continously.



6.

Gemification for Ruby 2.5.0

Gemification for stdlib

https://bugs.ruby-lang.org/issues/5481

- We extract old or un-maintain status stdlibs like net-telnet, xmlrpc, tk to bundled gems.
  - These are extracted under the https://github.com/ruby/ . And shipped on rubygems.org
  - Other gems are also extracted at the future.



Status of OpenSSL binding

- OpenSSL is already extracted default gems. You can update it separated ruby core releases same as rubygems, rdoc, bigdecimal.
- https://github.com/ruby/openssl
  - It's maintained by @rhenium
  - Upstream was changed github repository from svn.ruby-lang.org
  - He aggressively maintains new feature of openssl



fiddle

fiddle is standard library for wrapper of libffi. But fiddle was already reserved another implementation rubygems.org

https://github.com/bsm/fiddle

I did coordinate to transfer above namespace and override CRuby implementation now.

https://github.com/ruby/fiddle



Conclusion

まとめ(大事なことなので日本語で)

- 標準の boilerplate に揃えてコードベースを書き換えることはメンテナンスを続けていく上で重要
- OSS を引き継ぐ時はリリース権限ももらおう
- OSS も人と人とのコミュニケーション、builderscon のようなカンファレンスに行って喋ろう
- OSS を引き継いで開発するのも楽しい



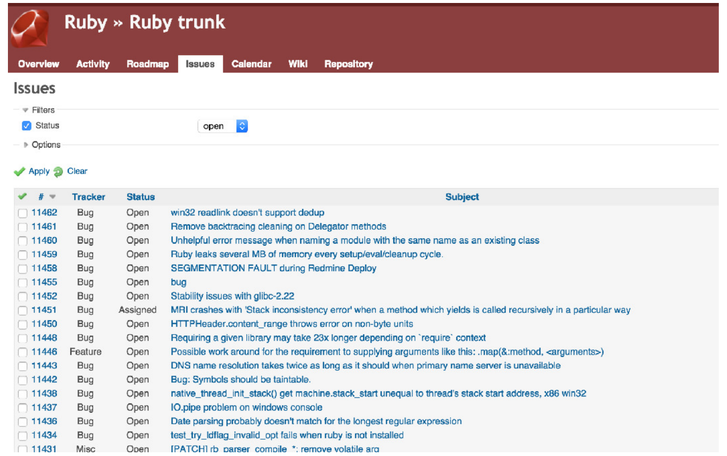

Let’s Happy Hacking!

Appendix

Issue tracker

Our official tracker is “bugs.ruby-lang.org”

https://github.com/ruby/ruby is acceptable space for ruby core team.



[CAUTION] If you hope to ask new feature to Matz, You need to submit bugs.ruby-lang.org . Matz is only available on redmine.



How confirm active libraries on GitHub

- Is it canonical repository?
- Does it have original commits on commit history? If you found a only merge commit, It’s non-active project maybe.
- Does it triage issue and pull requests?
- How long cycle of releases? Half-year or one-year are seriously status.



What pattan of hand over OSS

1. You should add commit bit to patch author
2. You should add commit bit to contributor of issue triage
3. Create wanted entry to issues of GitHub.
4. Add wanted entry to README of GitHub.



My mistake - TestTask#deps

I added deps option for `Rake::TestTask`

```
task :setup do
end
Rake::TestTask.new do |t|
  t.deps = :setup
end
```

But It's same behavior this.

```
task :setup do
end

Rake::TestTask.new(:test) => [:setup] do
end
```



Overview/History of rubygems

Rubygems are created by Seattle.rb that involves @tenderlove, @drbrain, @zenspider, etc…

rubygems.org is maintain by infrastructure team of rubygems. It is different team from rubygems cli team.

In Ruby 1.9, ruby core merged rubygems to stdlib of ruby. @tenderlove and @drbrain maintain it.

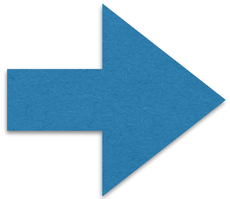


What number of these libraries - 2.4.0 to 2.5.0

In Ruby 2.4
Standard Libraries
- Pure ruby: 69
- Extensions: 23

Default gems
- Pure ruby: 1
- Extensions: 5

Bundled Gems
- Pure ruby: 7
- Extensions: 0



In Ruby 2.5
Standard Libraries
- Pure ruby: 64 (-5)
- Extensions: 14 (-9)

Default gems
- Pure ruby: 6 (+5)
- Extensions: 14 (+9)

Bundled Gems
- Pure ruby: 7
- Extensions: 0



Pros/Cons of Gemification

Pros:

- Maintainers can release gem for bugfix, new feature independent with Ruby core.
- Easily back port stable version from develop version. Ruby users can use new feature on stable version.
- If upstream is available on GitHub, Ruby users easily send patch via Pull request.

Cons:

- Abandoned and complex dependency on rubygems and bundler
- Maintainers need to maintain ruby core and GitHub repositories both.



gdbm 1.3.1

This library provides a gdbm library compatible with the MRI standard library, but using Ruby-FFI rather than a C extension. This allows gdbm to easily be used from alternative Ruby implementations, such as JRuby. It can also be used with MRI, if there is some kind of need for that.

VERSIONS:

1.3.1 - April 29, 2016 (9 KB)
1.3.0 - December 14, 2014 (9 KB)
1.2 - May 3, 2010 (12 KB)
1.1 - December 1, 2009 (12 KB)
1.0 - October 10, 2009 (12 KB)

Show all versions (6 total) →

AUTHORS:

Justin Collins

OWNERS:

SHA 256 CHECKSUM:

fad4bed21852e402fc37dbd6770c40cd12ccc2bd9cd8fbde07a9603b4925a72f

Star

TOTAL DOWNLOADS
21,259

FOR THIS VERSION
2,052

GEMFILE:

```
gem 'gdbm', '~> 1.3
```

INSTALL:

```
gem install gdbm
```

LICENSES:

N/A

REQUIRED RUBY VERSION:

>= 0

LINKS:

Homepage

Source Code

Documentation

What we will do?

I must offer to transfer ownership of these gems to rubygems.org. But some of gems are masked status. As first, I need to un-mask it.

My plan for reserved gems:

- Transfer request to owners of reserved gems.
- Removed gemification gems from blacklist on rubygems.
- Override reserved gems by standard libraries.



Conclusion

- It’s important to rewrite code base with modern boilerplate.
- You should get ownership of library for distributing.
- You must go tech conference!!1(here)
- You should do what you can do now.
- To take over the OSS is also valuable.



What differences these libraries?

Standard Libraries

- Upstream: Only Ruby core repository(svn.ruby-lang.org)
- Release cycle: 1 year

Default Gems

- Upstream: Ruby core repository and GitHub
- Release cycle: 1year or maintainers matter

Bundled Gems

- Upstream: Only GitHub
- Release cycle: Maintainers matter

