

**LET'S MAKE A GEM**

**WHAT IS A GEM?**

# LET'S MAKE A GEM

## 1. Creating a Gem with Bundler

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2. Testing it with rspec

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5. Publishing to a private gem server

# 1. Creating a Gem



**RVM**  
**BUNDLER**  
**RUBYGEMS**

# INITIALIZING OUR GEM

```
$ rvm use 2.1.0  
$ gem install bundler  
$ bundle gem eleventh  
$ cd eleventh  
$ rvm --rvmrc --create 2.1.0@eleventh  
$ cd ..; cd -
```

# GENERATED STRUCTURE

```
$ ls
eleventh
| --- README.md
| --- eleventh.gemspec
| --- Rakefile
| --- Gemfile
| --- lib
|       | --- eleventh.rb
|       | --- eleventh
|       |       | --- version.rb
```

# EXPLORING THE GENERATED STRUCTURE

```
$ vim eleventh.gemspec  
$ vim Gemfile  
$ vim lib/eleventh.rb  
$ vim lib/eleventh/version.rb  
$ rake -T
```

# MAKE IT DO SOMETHING

```
$ vim lib/eleventh/array_access.rb  
$ vim lib/eleventh.rb  
$ git add .  
$ git commit -m "Version 1"
```

# MAKE IT DO SOMETHING

```
# ./lib/eleventh/array_access.rb
class Array
  def eleventh
    self[10]
  end
end
```

```
# ./lib/eleventh.rb
require "eleventh/version"
require "eleventh/array_access"

module Eleventh
end
```

## 2. Testing our gem with rspec

# TESTING OUR GEM

```
$ mkdir spec
```

```
$ vim spec/spec_helper.rb
```

```
$ vim spec/array_access_spec.rb
```

```
$ rspec spec/array_access.rb
```



# TESTING OUR GEM

```
# ./spec/spec_helper.rb  
require 'rubygems'  
require 'bundler/setup'
```

```
Bundler.setup
```

```
require 'eleventh'
```

```
RSpec.configure do |config|  
end
```

# TESTING OUR GEM

```
# ./spec/array_access.rb
require 'spec_helper'

describe Array do
  describe '#eleventh' do
    it 'should return the eleventh element' do
      arr = (1..15).to_a

      arr.eleventh.should eq(11)
    end

    it 'should return nil if the eleventh element not exist' do
      arr = (1..9).to_a

      arr.eleventh.should eq(nil)
    end
  end
end
```

# TESTING OUR GEM

```
$ rspec spec/array_access.rb
```

```
..
```

```
Finished in 0.00135 seconds
```

```
2 examples, 0 failures
```

# TESTING OUR GEM

```
$ vim Rakefile
```

```
# ./Rakefile
```

```
require "bundler/gem_tasks"
```

```
require 'rspec/core/rake_task'
```

```
RSpec::Core::RakeTask.new('spec')
```

```
task :default => :spec
```

# TESTING OUR GEM

```
$ rake
/Users/bmorris/.rvm/rubies/ruby-2.1.0-p247/bin/ruby -S rspec ./spec/array_access_spec.rb
..

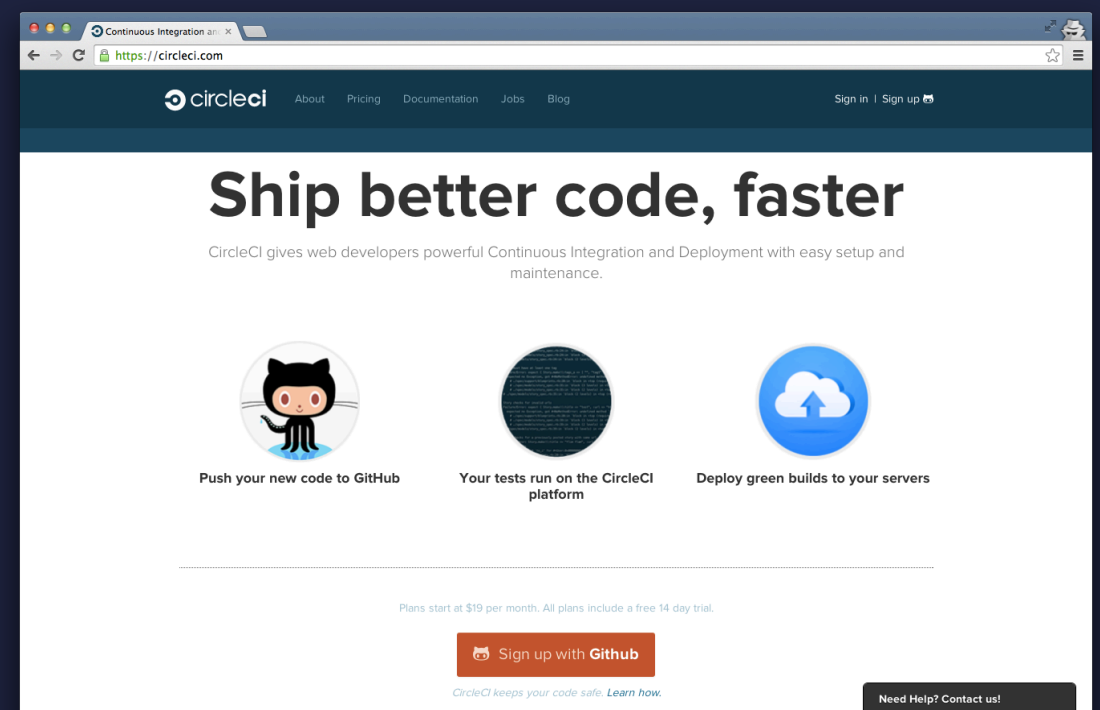
Finished in 0.00066 seconds
2 examples, 0 failures
```

# 3. Setting up continuous integration



# JENKINS

# CIRCLE CI





Travis CI - Free Hosted CI

https://travis-ci.org

travis

HomeBlogStatusHelp

Travis CI for Private Repositories

Sign in with GitHub

Search all repositories

Recent

pyca/cryptography

3293

1 min 19 sec

Finished: -

jhawthorn/spre

39

12 sec

Finished: -

Betahackers/quito-backend

76

6 sec

Finished: -

h0ru5/angulargw

68

1 sec

Finished: -

stevensloan/slack-notifier

26

2 sec

Finished: -

getsentry/raven-php

271

21 sec

Finished: -

pyca/cryptography

build: passing

cryptography is a package designed to expose cryptographic primitives and recipes to Python developers.

Current

Build History

Pull Requests

Branch Summary

Build

State

Finished

Duration

Message

Commit

Pull Request

Author

Committer

3293

Started

-

1 min 19 sec

remove some commented out code

43cf3aa (master)

#915 update travis config to be more concise

Paul Kehrer

Paul Kehrer

Build Matrix

Job	Duration	Finished	OS	Compiler	ENV
3293.1	-	-	linux	clang	TOX_ENV=py26
3293.2	-	-	linux	clang	TOX_ENV=py27
3293.3	-	-	linux	clang	TOX_ENV=py32
3293.4	-	-	linux	clang	TOX_ENV=py33
3293.5	-	-	linux	clang	TOX_ENV=py34
3293.6	-	-	linux	clang	TOX_ENV=pypy
3293.7	-	-	linux	clang	TOX_ENV=py26 OPENSSL=0.9.8
3293.8	-	-	linux	clang	TOX_ENV=py27 OPENSSL=0.9.8
3293.9	-	-	linux	clang	TOX_ENV=py32 OPENSSL=0.9.8
3293.10	-	-	linux	clang	TOX_ENV=py33 OPENSSL=0.9.8

TRAVIS CI

# SETTING UP CONTINUOUS INTEGRATION

```
$ vim travis.yml  
$ vim eleventh.gemspec  
$ vim README.md  
$ vim git commit -m "Setting up Travis CI"  
$ git push
```

# SETTING UP CONTINUOUS INTEGRATION

```
# ./travis.yml
```

```
language: ruby
```

```
rvm:
```

```
- 2.1.0
```

## 4. Publishing to Rubygems

# PUBLISHING TO RUBYGEMS

```
$ rake -T
```

```
$ rake release
```

```
$ gem build eleventh.gemspec
```

```
$ gem push eleventh-0.0.1.gem
```

```
$ open rubygems.org
```

**T.A.-D.A.!**

# REMOVING THE GEM

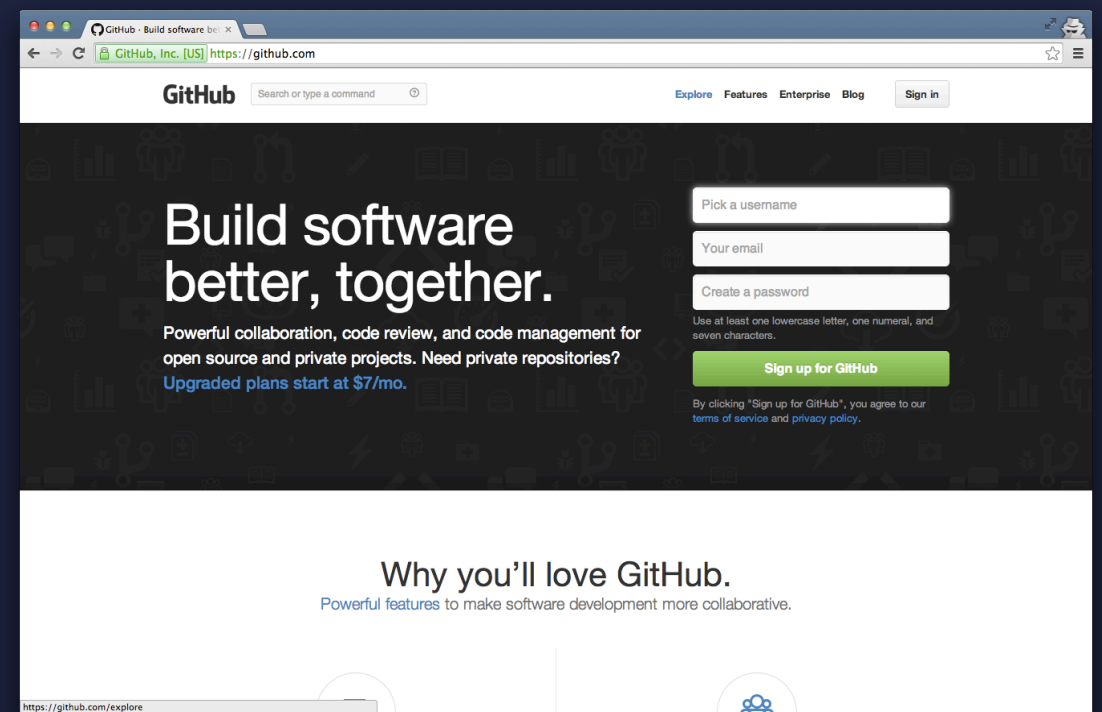
```
$ gem yank eleventh -v 0.0.1
```

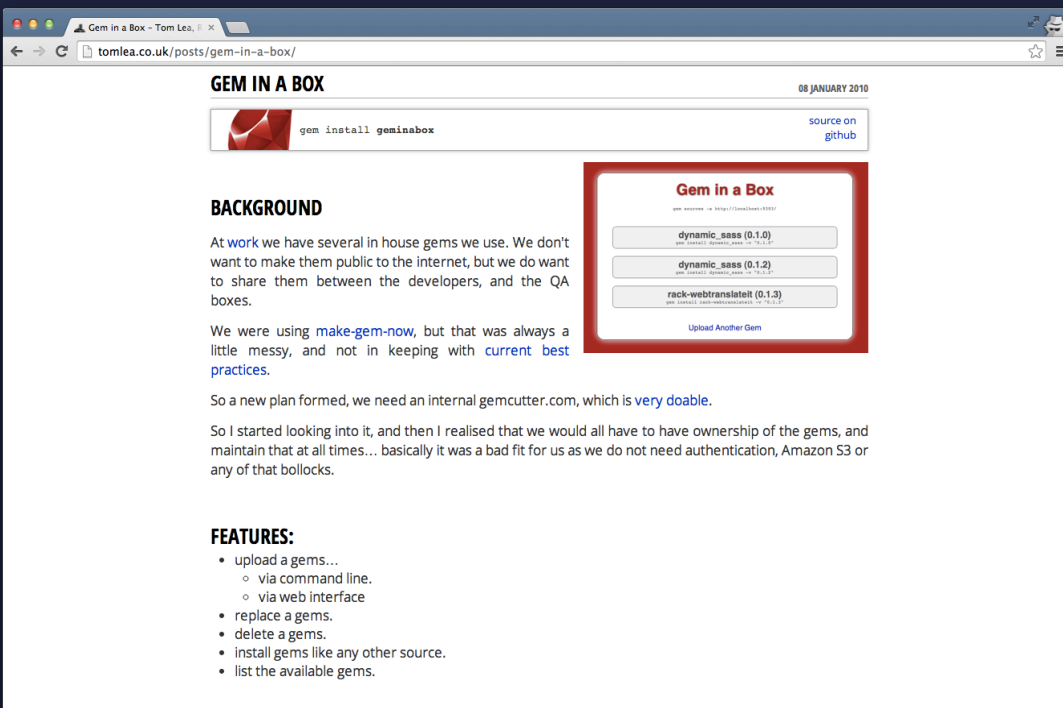
## 5. Publishing to a private gem server



**WHY PRIVATE?**

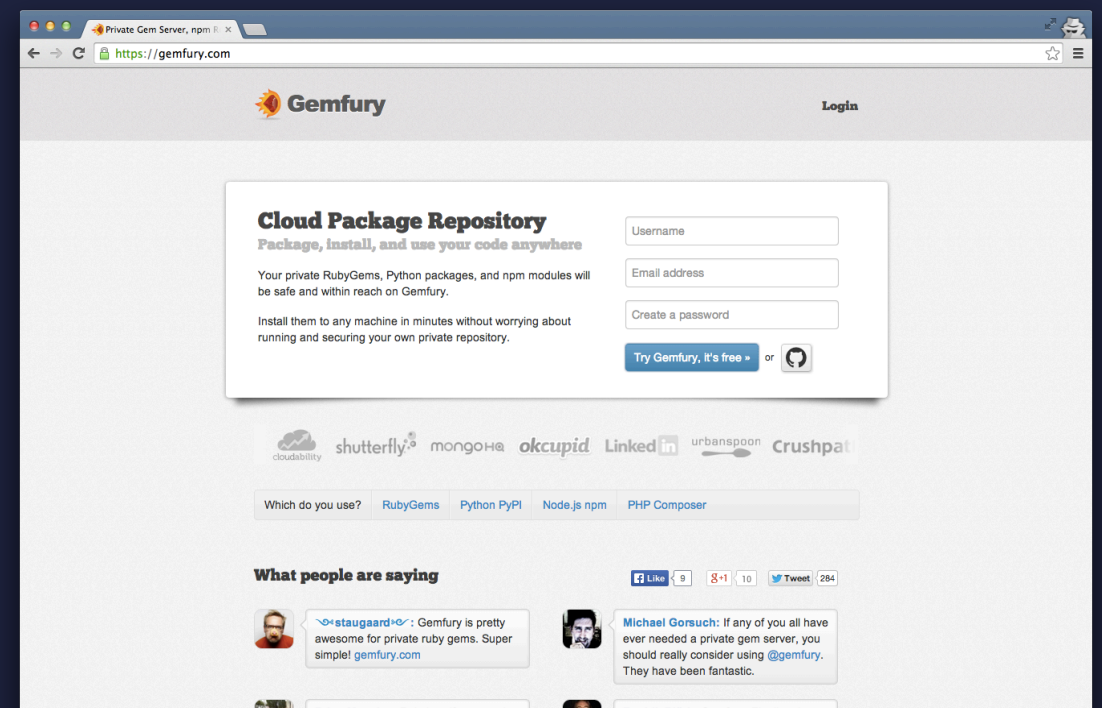
# GITHUB





GEMINABO  
X

# GEMFURY



# PUBLISHING TO GEMFURY

```
$ gem install gemfury  
$ gem build eleventh.gemspec  
$ fury push eleventh-0.0.1.gem
```

```
$ git remote add fury https://bnmrrs@git.fury.io/bnmrrs/eleventh.git  
$ git push fury master
```

# PUBLISHING TO GEMFURY

```
$ cd ../other-project
```

```
$ vim Gemfile
```

```
# ../other-project/Gemfile
```

```
source 'https://TOKEN@gem.fury.io/bnmrrs/'
```

```
$ bundle install
```

# PUBLISHING A NEW VERSION

```
$ vim lib/eleventh/version.rb  
$ gem build eleventh.gemspec  
$ git add .  
$ git commit -m "Version 2"  
$ fury push eleventh-0.0.2.gem  
$ fury list
```

# QUESTIONS?

@bnmrrs

[www.boltmade.com](http://www.boltmade.com)

<https://github.com/bnmrrs/talks>