

Upgrading Rails?!



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GitHub
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<https://github.com/megantiu/>

[upgrade-rails-workshop](#)

<https://gist.github.com/megantiu/>

[bd0e02003d8d6d8e87116c456a307203](#)



Today we'll cover:

- Toolset
- Prerequisites
- Upgrade process
- Larger systems



Why upgrade?



Why upgrade?

- Ensure **stability**
- Easier **security** patches
- Improved **maintainability**
- Better **understanding** of your app



When to use this method

We can typically follow the same general process for minor or major upgrades

Major upgrades will just take longer/have more repetition of the steps



Tool belt



Tool belt

- Ruby
- Ruby on Rails
- Bundler
- rubygems.org
- Google, GitHub, etc.



Tool belt

More information available at
[toolset link here].



Prerequisites



Prerequisites

- Robust test suite
- Separate branch(es) for upgrade work
- Optional: peruse the upgrade guide/change summaries
- Enter with the right frame of mind



Mindset

- Expect the unexpected
- Upgrade as little as possible
- Document your work
- Always read the changelogs



Upgrade process



<https://github.com/megantiu/>

[upgrade-rails-workshop](#)

<https://gist.github.com/megantiu/>

[bd0e02003d8d6d8e87116c456a307203](#)



```
# Gemfile
```

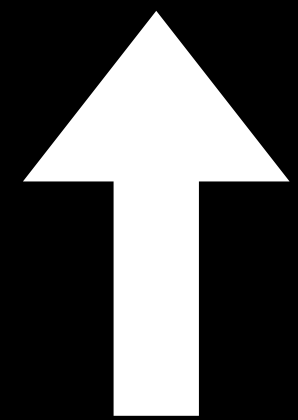
```
- gem 'rails', '~> 5.2.3'
```

```
+ gem 'rails', '~> 6.0.0.rc2'
```



```
# Gemfile
```

```
gem 'rails', '~> 6.0.0.rc2'
```



Necessary to pick up
pre-release version




```
$ bundle update rails
```



```
activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
  formtastic (~> 3.1) was resolved to 3.1.5, which depends on
    actionpack (>= 3.2.13)

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
  inherited_resources (>= 1.9.0) was resolved to 1.11.0, which depends on
    has_scope (~> 0.6) was resolved to 0.7.2, which depends on
      actionpack (>= 4.1)

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
  inherited_resources (>= 1.9.0) was resolved to 1.11.0, which depends on
    actionpack (< 6.1, >= 5.0)

rails (~> 6.0.0.rc2) was resolved to 6.0.0.rc2, which depends on
  actionpack (= 6.0.0.rc2)

devise was resolved to 4.6.2, which depends on
  responders was resolved to 3.0.0, which depends on
    actionpack (>= 5.0)

rspec-rails was resolved to 3.10.0, which depends on
  actionpack (>= 3.0)

Bundler could not find compatible versions for gem "activemodel":
In Gemfile:
  rails (~> 6.0.0.rc2) was resolved to 6.0.0.rc2, which depends on
    activemodel (= 6.0.0.rc2)

  web-console (>= 3.3.0) was resolved to 3.3.0, which depends on
    activemodel (>= 5.0)

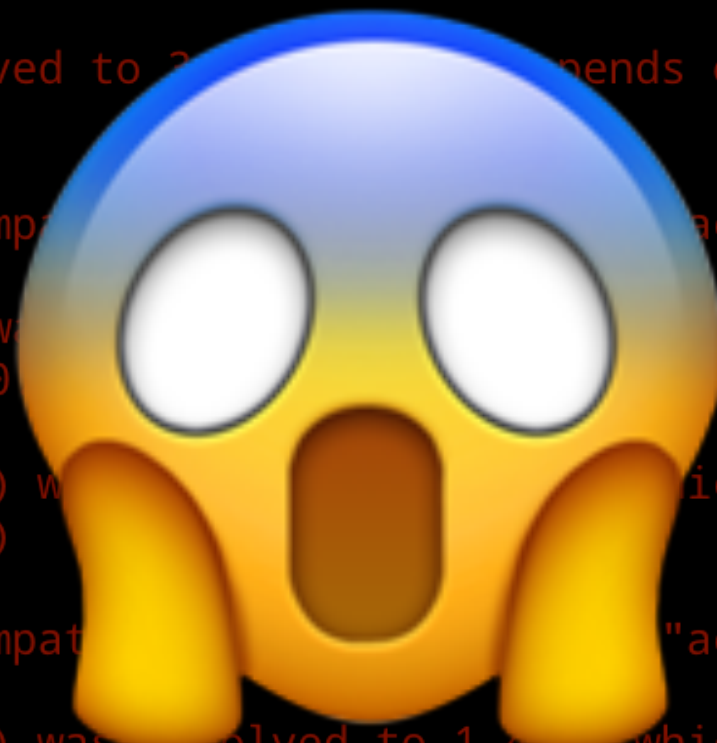
Bundler could not find compatible versions for gem "activerecord":
In Gemfile:
  activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
    kaminari (>= 0.15) was resolved to 1.1.1, which depends on
      kaminari-activerecord (= 1.1.1) was resolved to 1.1.1, which depends on
        activerecord

  rails (~> 6.0.0.rc2) was resolved to 6.0.0.rc2, which depends on
    activerecord (= 6.0.0.rc2)

  activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
    ransack (>= 1.8.7) was resolved to 2.1.1, which depends on
      activerecord (>= 5.0)

Bundler could not find compatible versions for gem "activesupport":
In Gemfile:
  activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
    arbre (>= 1.1.1) was resolved to 1.2.1, which depends on
      activesupport (>= 3.0.0)

  activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
    inherited_resources (>= 1.9.0) was resolved to 1.11.0, which depends on
      has_scope (~> 0.6) was resolved to 0.7.2, which depends on
        activesupport (>= 4.1)
```





Find the conflict!



Bundler could not find compatible versions for gem "railties":

In Gemfile:

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
railties (< 5.3, >= 4.2)

coffee-rails (~> 4.2) was resolved to 4.2.2, which depends on
railties (>= 4.0.0)

devise was resolved to 4.6.2, which depends on
railties (< 6.0, >= 4.1.0)

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
inherited_resources (>= 1.9.0) was resolved to 1.11.0, which depends on
railties (< 6.1, >= 5.0)

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
jquery-rails (>= 4.2.0) was resolved to 4.3.5, which depends on
railties (>= 4.2.0)

rails (~> 6.0.0.rc2) was resolved to 6.0.0.rc2, which depends on
railties (= 6.0.0.rc2)

rspec-rails was resolved to 3.8.2, which depends on
railties (>= 3.0)

sass-rails (~> 5.0) was resolved to 5.0.7, which depends on
railties (< 6, >= 4.0.0)

web-console (>= 3.3.0) was resolved to 3.7.0, which depends on
railties (>= 5.0)



Bundler could not find compatible versions for gem "railties":

In Gemfile:

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
railties (< **5.3**, >= 4.2)

coffee-rails (~> 4.2) was resolved to 4.2.2, which depends on
railties (>= 4.0.0)

devise was resolved to 4.6.2, which depends on
railties (< 6.0, >= 4.1.0)

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
inherited_resources (>= 1.9.0) was resolved to 1.11.0, which depends on
railties (< 6.1, >= 5.0)

activeadmin (~> 1.4.3) was resolved to 1.4.3, which depends on
jquery-rails (>= 4.2.0) was resolved to 4.3.5, which depends on
railties (>= 4.2.0)

rails (~> 6.0.0.rc2) was resolved to 6.0.0.rc2, which depends on
railties (= 6.0.0.rc2)

rspec-rails was resolved to 3.8.2, which depends on
railties (>= 3.0)

sass-rails (~> 5.0) was resolved to 5.0.7, which depends on
railties (< 6, >= 4.0.0)

web-console (>= 3.3.0) was resolved to 3.7.0, which depends on
railties (>= 5.0)

*One of these things
is not like the other...*



activeadmin *2.2.0*

The administration framework for Ruby on Rails.

VERSIONS:

2.2.0 - July 15, 2019 (424 KB)
2.1.0 - June 10, 2019 (422 KB)
2.0.0 - April 25, 2019 (423 KB)
2.0.0.rc2 - April 13, 2019 (422 KB)
2.0.0.rc1 - March 23, 2019 (422 KB)

Show all versions (46 total) →

RUNTIME DEPENDENCIES (11):

arbre ~> 1.2, >= 1.2.1
formtastic ~> 3.1
formtastic_i18n ~> 0.4
inherited_resources ~> 1.7
jquery-rails ~> 4.2
kaminari ~> 1.0, >= 1.0.1
railties >= 5.0, < 6.1
ransack ~> 2.1, >= 2.1.1
sassc-rails ~> 2.1
sprockets >= 3.0, < 4.1
sprockets-es6 ~> 0.9, >= 0.9.2



2.2.0 ≡

Enhancements

Minor

- The `status_tag` component now supports different labels for `false` and `nil` boolean cases through the locale. Both default to display "No" for backwards compatibility. [#5794](#) by [@javierjulio](#)
- Add Macedonian locale. [#5710](#) by [@violeta-p](#)

Bug Fixes

- Fix pundit policy retrieving for static pages when the pundit namespace is `:active_admin`. [#5777](#) by [@kwent](#)
- Fix show page title not being properly escaped if title's content included HTML. [#5802](#) by [@deivid-rodriguez](#)
- Revert [21b6138f](#) from [#5740](#) since it actually caused the performance in development to regress. [#5801](#) by [@deivid-rodriguez](#)

2.1.0 ≡

Bug Fixes

- Ensure application gets reloaded only once. [#5740](#) by [@jscheid](#)
- Crash when rendering comments from a custom controller block. [#5758](#) by [@deivid-rodriguez](#)
- Switch `sass` dependency to `sassc-rails`, since `sass` is no longer supported and since it restores support for directly importing `css` files. [#5504](#) by [@deivid-rodriguez](#)



```
# Gemfile
```

```
- gem 'activeadmin', '~> 1.4.3'
```

```
+ gem 'activeadmin'
```




```
$ bundle update rails activeadmin
```



Bundle
updated!



```
$ bundle exec rake
```



Failures:

- 1) PostsController GET #index returns a success response
Failure/Error: get :index, params: {}, session: valid_session

ActionView::Template::Error:
 wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:47:in `block (3 levels) in <top (required)>'

--- Caused by: ---
ArgumentError:
wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:47:in `block (3 levels) in <top (required)>'
- 2) PostsController GET #show returns a success response
Failure/Error: get :show, params: {id: post.to_param}, session: valid_session

ActionView::Template::Error:
 wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:57:in `block (3 levels) in <top (required)>'

--- Caused by: ---
ArgumentError:
wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:57:in `block (3 levels) in <top (required)>'
- 3) PostsController GET #new returns a success response
Failure/Error: get :new, params: {}, session: valid_session

ActionView::Template::Error:
 wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:62:in `block (3 levels) in <top (required)>'

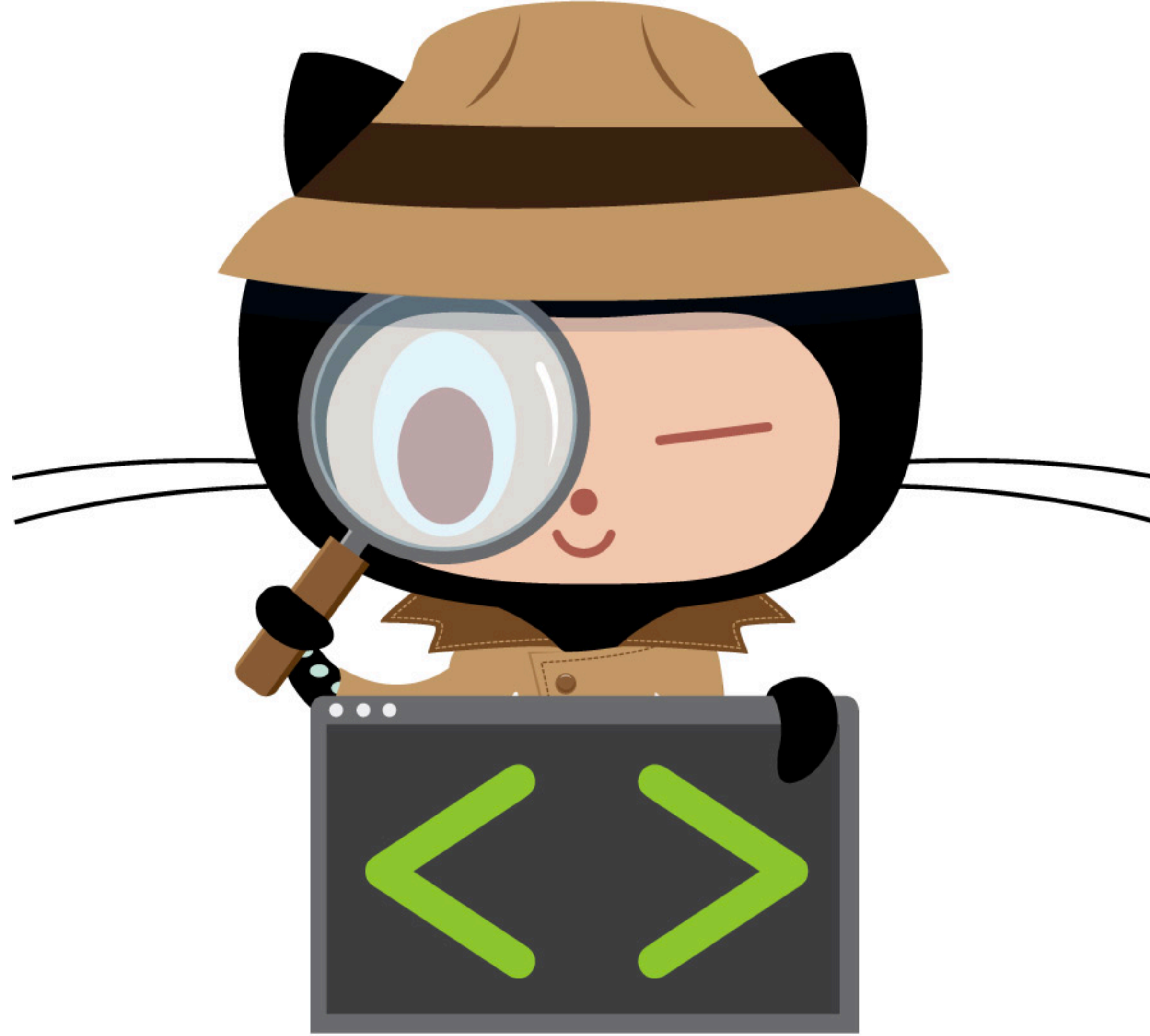
--- Caused by: ---
ArgumentError:
wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:62:in `block (3 levels) in <top (required)>'
- 4) PostsController GET #edit returns a success response
Failure/Error: get :edit, params: {id: post.to_param}, session: valid_session

ActionView::Template::Error:
 wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:70:in `block (3 levels) in <top (required)>'

--- Caused by: ---
ArgumentError:
wrong number of arguments (given 2, expected 1)
./spec/controllers/posts_controller_spec.rb:70:in `block (3 levels) in <top (required)>'

Finished in 0.86319 seconds (files took 2.32 seconds to load)
25 examples, 4 failures





1) PostsController GET #index returns a success response

Failure/Error: get :index, params: {}, session: valid_session

ActionView::Template::Error:

wrong number of arguments (given 2, expected 1)

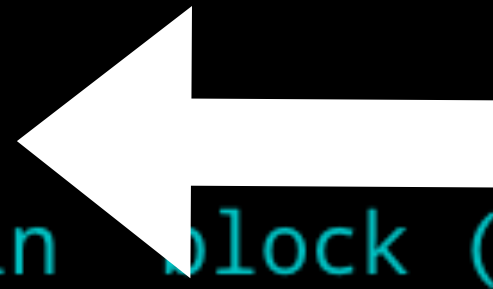
./spec/controllers/posts_controller_spec.rb:47:in `block (3 levels) in <top (required)>'

--- Caused by: ---

ArgumentError:

wrong number of arguments (given 2, expected 1)

./spec/controllers/posts_controller_spec.rb:47:in `block (3 levels) in <top (required)>'



Where is the error coming from?

```
describe "GET #index" do
  it "returns a success response" do
    Post.create! valid_attributes
    → get :index, params: {}, session: valid_session
    expect(response).to be_successful
  end
end
```





**RSpec controller ActionView
wrong number of arguments (given 2, expected 1)**



Controller spec failed with 6.0.0.beta2 · Issue #35417 · rails/rails · GitHub

<https://github.com/rails/rails/issues/35417> ▼

Feb 26, 2019 - ArgumentError: # **wrong number of arguments (given 2, expected 1)** # /Users/okaluzny/.rvm/gems/ruby-2.6.1@app/gems/actionview-6.0.0.beta2/lib/ ... This may be an issue with **rspec-rails: rspec/rspec-rails#2086** which ...



Okay, that's what we're seeing too!

We got this error :

```
ArgumentError:
```

```
#   wrong number of arguments (given 2, expected 1)
```

```
#   /Users/okaluzny/.rvm/gems/ruby-2.6.1@app/gems/actionview-6.0.0.beta2/lib/action_view/tem
```



It's not our code!



jamesjefferies commented on Feb 27



This may be an issue with rspec-rails: [rspec/rspec-rails#2086](#) which references this commit [28f88e0](#) [#diff-562906215bf781788ec5aaf37e958cb8](#)





jasnow commented on Mar 22



Here is the workaround to build Rails 6.0.0.beta3 until rspec-rails gets upgraded.
Replace:

```
gem 'rspec-rails'
```

with

```
gem 'rspec-rails', git: 'https://github.com/rspec/rspec-rails', branch: '4-0-dev'  
gem 'rspec-core', git: 'https://github.com/rspec/rspec-core'  
gem 'rspec-mocks', git: 'https://github.com/rspec/rspec-mocks'  
gem 'rspec-support', git: 'https://github.com/rspec/rspec-support'  
gem 'rspec-expectations', git: 'https://github.com/rspec/rspec-expectations'
```



Thanks, AI!



```
# Gemfile
```

```
- gem 'rspec-rails'
```

```
+ gem 'rspec-rails', github: 'rspec/rspec-rails', branch: '4-0-dev'
```

```
+ gem 'rspec-core', github: 'rspec/rspec-core'
```

```
+ gem 'rspec-mocks', github: 'rspec/rspec-mocks'
```

```
+ gem 'rspec-support', github: 'rspec/rspec-support'
```

```
+ gem 'rspec-expectations', github: 'rspec/rspec-expectations'
```



```
$ bundle install
```



25 examples, 0 failures



[illegible]

DEPRECATION WARNING: Single arity template handlers are deprecated.
Template handlers must
now accept two parameters, the view object and the source for the view
object.

Change:

```
>> Coffee::Rails::TemplateHandler.call(template)
```

To:

```
>> Coffee::Rails::TemplateHandler.call(template, source)
```

(called from <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/
github-workshop/Rakefile:6)

```
/Users/Megan/.rvm/rubies/ruby-2.5.1/bin/ruby -I/Users/Megan/.rvm/gems/  
ruby-2.5.1/gems/rspec-core-3.8.2/lib:/Users/Megan/.rvm/gems/ruby-2.5.1/  
gems/rspec-support-3.8.2/lib /Users/Megan/.rvm/gems/ruby-2.5.1/gems/rspec-  
core-3.8.2/exe/rspec --pattern spec/\*/*\{,/\/\*\/\*/*\}/\*_spec.rb
```



DEPRECATION WARNING: Single arity template handlers are deprecated.
Template handlers must
now accept two parameters, the view object and the source for the view
object.

Change:

```
>> Coffee::Rails::TemplateHandler.call(template)
```

To:

```
>> Coffee::Rails::TemplateHandler.call(template, source)
```

(called from <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/
github-workshop/Rakefile:6)

```
/Users/Megan/.rvm/rubies/ruby-2.5.1/bin/ruby -I/Users/Megan/.rvm/gems/  
ruby-2.5.1/gems/rspec-core-3.8.2/lib:/Users/Megan/.rvm/gems/ruby-2.5.1/  
gems/rspec-support-3.8.2/lib /Users/Megan/.rvm/gems/ruby-2.5.1/gems/rspec-  
core-3.8.2/exe/rspec --pattern spec/\*/*\{,/\/\*\/\*\/\*\/\}\/\*_spec.rb
```



Seems like they're addressing it in an innocuous update.

5.0.0 (Apr 23, 2019)

- Remove support to Rails < 5.2.
- Support Rails 6.



```
# Gemfile
```

```
- gem 'coffee-rails', '~> 4.2'
```

```
+ gem 'coffee-rails', '~> 5.0'
```



```
$ bundle update coffee-rails
```



Much more reasonable!

```
/Users/Megan/.rvm/rubies/ruby-2.5.1/bin/ruby -I/Users/Megan/.rvm/gems/ruby-2.5.1/bundler/gems/rspec-core-77dbc84657c5/lib:/Users/Megan/.rvm/gems/ruby-2.5.1/bundler/gems/rspec-support-c69a231d7369/lib /Users/Megan/.rvm/gems/ruby-2.5.1/bundler/gems/rspec-core-77dbc84657c5/exe/rspec --pattern spec/\*/*\{,/\/\*/*\}/\*_spec.rb
DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block (3 levels) in <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/github-workshop/spec/controllers/posts_controller_spec.rb:47)
..DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block (3 levels) in <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/github-workshop/spec/controllers/posts_controller_spec.rb:55)
..DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block (3 levels) in <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/github-workshop/spec/controllers/posts_controller_spec.rb:62)
..DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block (3 levels) in <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/github-workshop/spec/controllers/posts_controller_spec.rb:70)
...DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block in matches? at /Users/Megan/.rvm/gems/ruby-2.5.1/bundler/gems/rspec-rails-9c6d8f3eaa80/lib/rspec/rails/matchers/redirect_to.rb:15)
...DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block in matches? at /Users/Megan/.rvm/gems/ruby-2.5.1/bundler/gems/rspec-rails-9c6d8f3eaa80/lib/rspec/rails/matchers/redirect_to.rb:15)
...DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block in matches? at /Users/Megan/.rvm/gems/ruby-2.5.1/bundler/gems/rspec-rails-9c6d8f3eaa80/lib/rspec/rails/matchers/redirect_to.rb:15)
..DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block (3 levels) in <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/github-workshop/spec/requests/posts_spec.rb:6)
.....

Finished in 0.769 seconds (files took 2.37 seconds to load)
25 examples, 0 failures
```



DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want just the MIME type, please use `#media_type` instead. (called from block (3 levels) in <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/github-workshop/spec/controllers/posts_controller_spec.rb:62)



DEPRECATION WARNING: **Rails 6.1 will return Content-Type header without modification.** If you want just the **MIME type**, please use ``#media_type`` instead. (called from block (3 levels) in <top (required)> at /Users/Megan/Code/Rails/upgrade-rails/github-workshop/spec/controllers/posts_controller_spec.rb:62)





btihen commented on ddb6d78 14 days ago



Hi,

I've just upgraded to Rails 6.0.0 RC2.

Now I'm getting this warning from this commit. I haven't yet figured out what the expectation is to make this warning go away. I have tried adding content information and calling with content types. But everything I have tried keeps giving this warning.

Can you let me know (concretely) what change in code (or in the test is expected)?

Thanks,

Bill

```
DEPRECATION WARNING: Rails 6.1 will return Content-Type header without modification. If you want  
just the MIME type, please use #media_type instead. (called from block (4 levels) in <top  
(required)> at  
/Users/btihen/Dropbox/devel/ruby/innclass/spec/requests/initiatives_as_attendee_spec.rb:59)
```

The rspec test that generates the warning is:

```
describe "GET /initiatives (index)" do  
  it "list initiatives on start page" do  
    get "/initiatives"  
    expect(response).to be_successful  
    ...  
  end  
end
```



This fix was recently merged!



eugeneius commented 7 days ago

Member



These `content_type` calls were triggering the deprecation from [#36490](#) in upgraded applications.

This problem was reported as a comment on the original pull request: [#36490 \(comment\)](#)

We can use `media_type` in all of these cases to avoid the deprecation.



5



7

Two options:

- Point rails at the master branch
- Use a new application config option



```
# config/application.rb  
config.action_dispatch  
  .return_only_media_type_on_content_type = false
```



.....

Finished in 0.83873 seconds (files took 2.43 seconds to load)
25 examples, 0 failures





One more thing...



```
$ rails server
```



**There's still one more
challenge in the repo!**





**Upgrading larger, more
complex systems**



Supporting multiple Rails versions

```
if GitHub.rails_4_2?  
  # 4.2 code  
elsif GitHub.rails_5_2?  
  # 5.2 code  
else  
  # all 6.0+ future code  
end
```



Multiple Gemfiles

Gemfile.lock

rails server

Gemfile_rails5.lock

RAILS5=1 rails server



Conclusion



We're running on Rails 6.0! 🎉



Upgrade process

bundle update rails

Let the error messages
guide you

Fix failing tests

Resolve deprecation
warnings

Upgrade process

bundle update rails

Let the error messages
guide you

Fix failing tests

Resolve deprecation
warnings

Mindset

Expect the unexpected

Upgrade as little as
possible

Document your work

Always read the
changelogs

Thank you!

