Data Driven Applications

RHTE 2014 – Macau

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Overview

- Hands-on Session
- No programming experience needed
- Uses:
  - Openshift
  - Ruby
  - Ruby On Rails
  - Active Admin

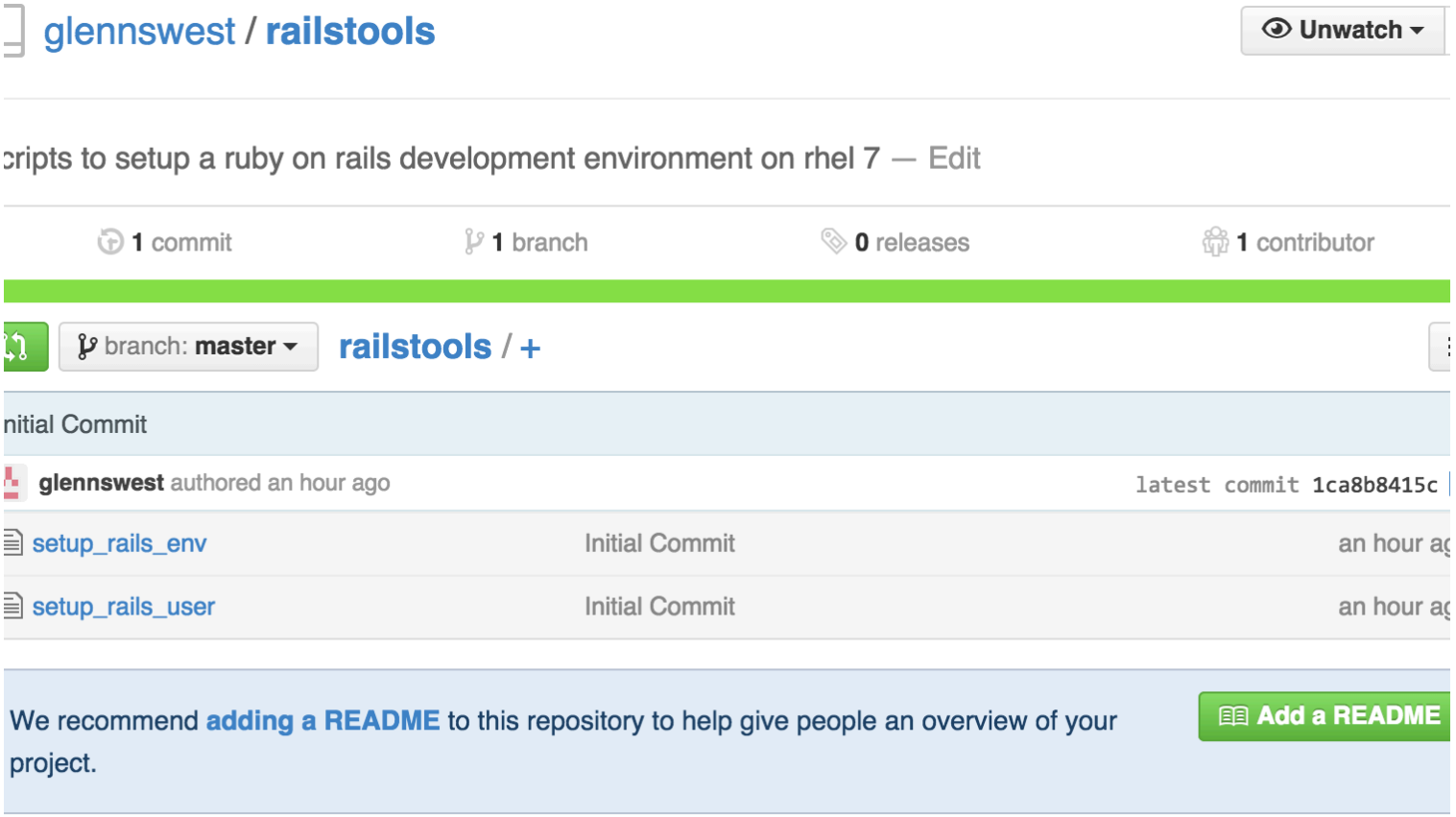
What You Need

- Rhel7/Centos 7 (Vm is fine)
- System subscribed to channels and up to date
- Access to RHN and GitHub and Openshift.com
- Openshift Account
- A Laptop
- Root login

Why?

- Need to create a Application Fast?
- Don't want to use Spreedsheet/Excel?
- Want to levarge Openshift for your apps?
- Don't know how to code?
- Want to learn more about Cloud Applications?

Getting Setup



git clone https://github.com/glennswest/railstools.git

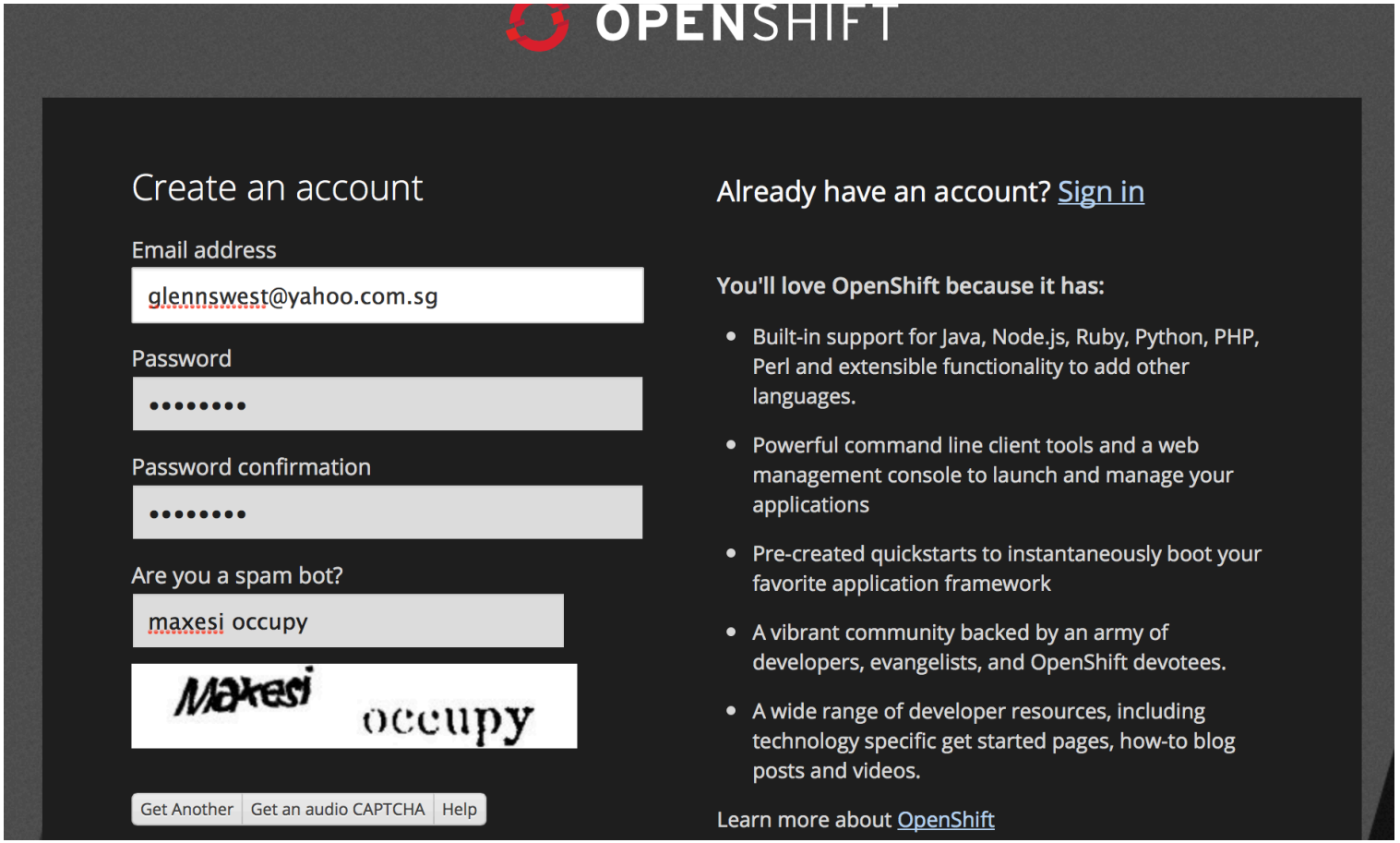
Setup the environment

- Su root
- yum install git –y
- git clone https://github.com/glennswest/railstools.git
- ./railstools/setup_rails_env

Setup User Env

- As your normal user
- ./railstools/setup_rails_user

Setup OpenShift Account

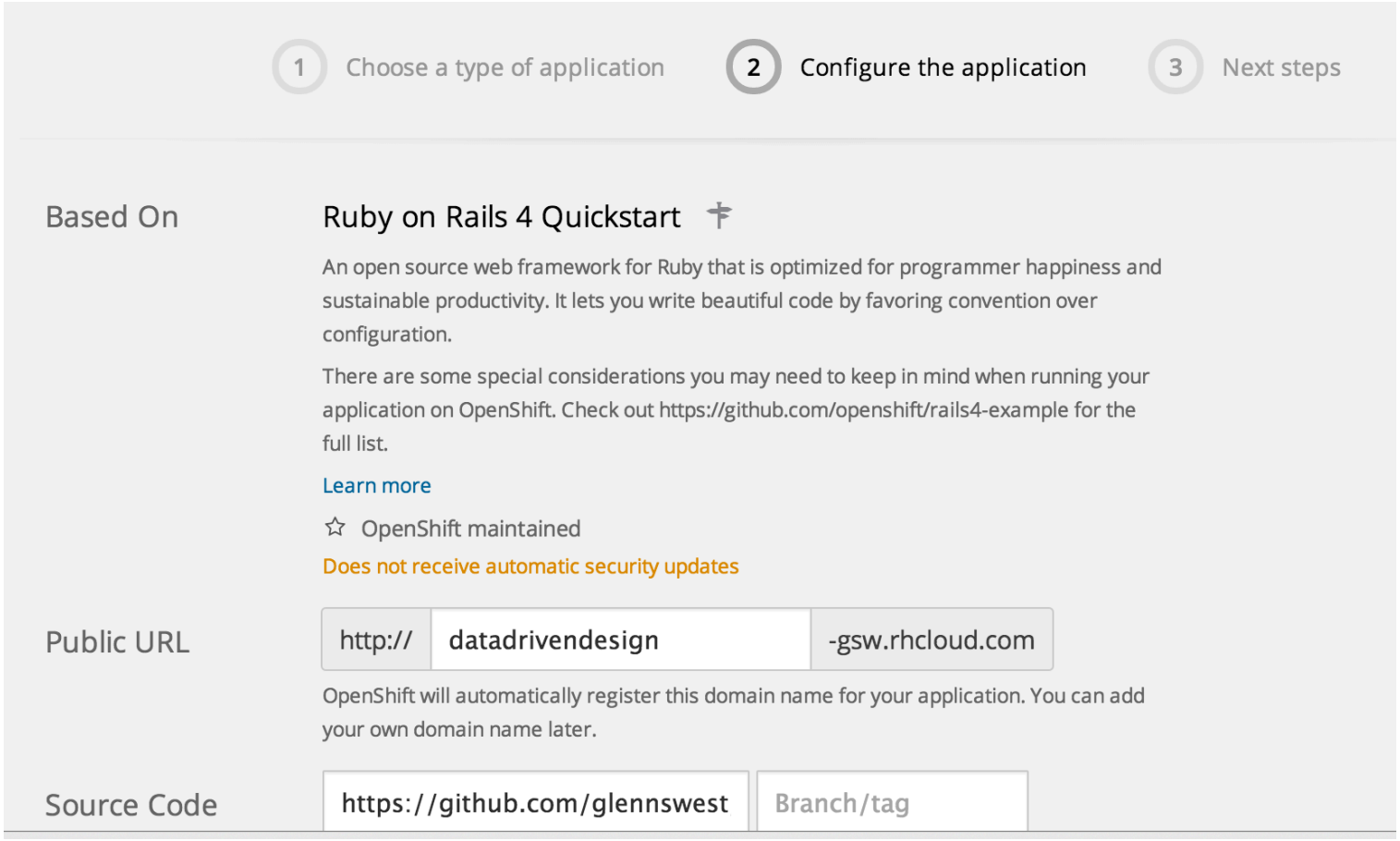


https://www.openshift.com/app/account/new

Setup Rhc

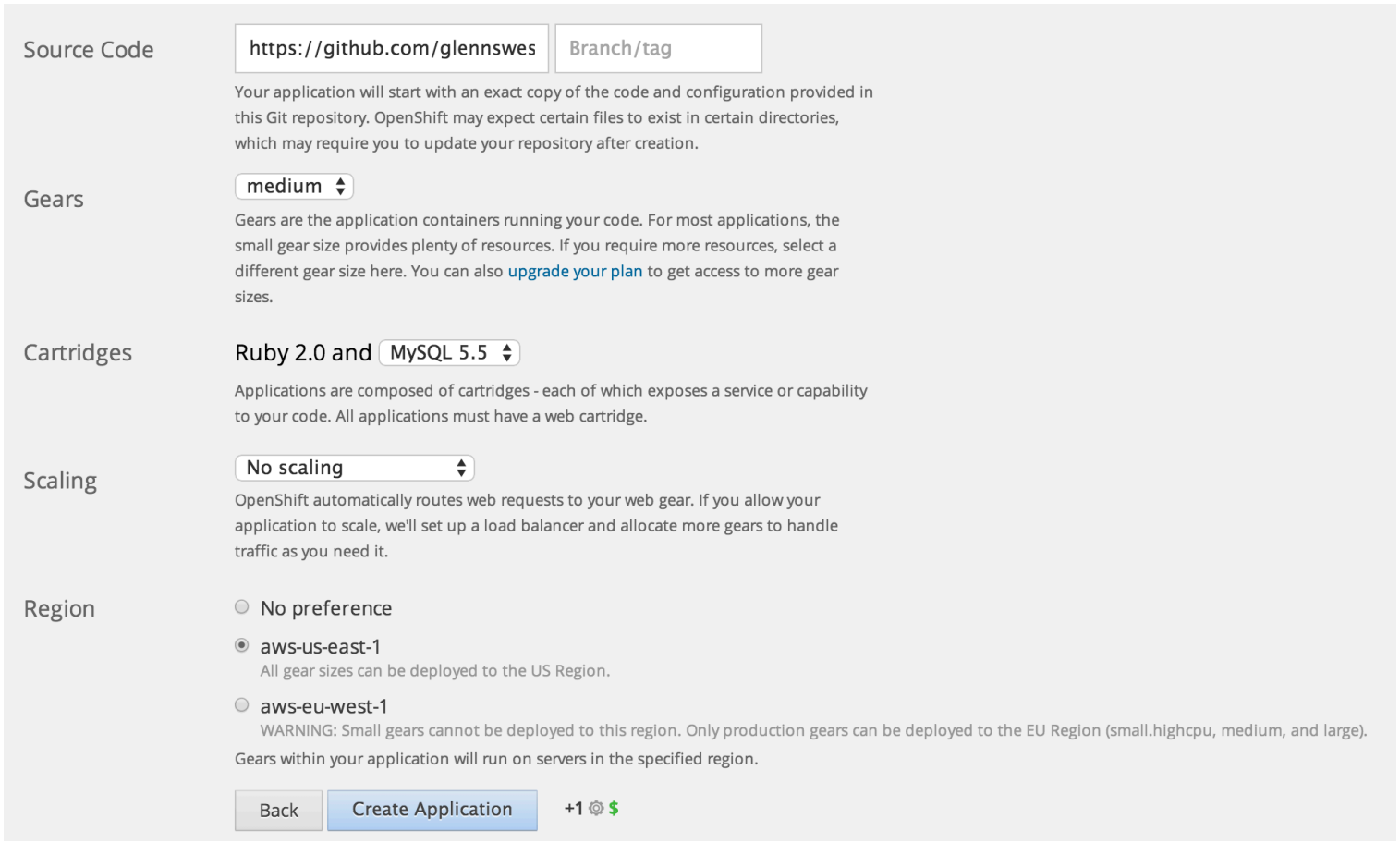
```
[cloud@localhost ~]$ source .bash_profile
[cloud@localhost ~]$ rhc setup
OpenShift Client Tools (RHC) Setup Wizard

This wizard will help you upload your SSH keys, set your application namespace,
and check that other programs like Git are properly installed.

If you have your own OpenShift server, you can specify it now. Just hit enter to
use the server for OpenShift Online: openshift.redhat.com.
Enter the server hostname: |openshift.redhat.com|

You can add more servers later using 'rhc server'.

Login to openshift.redhat.com: gwest@redhat.com
Password: ***************

OpenShift can create and store a token on disk which allows to you to access the
server without using your password. The key is stored in your home directory and
should be kept secret.  You can delete the key at any time by running 'rhc
logout'.
Generate a token now? (yes|no) yes
```

Create a new app

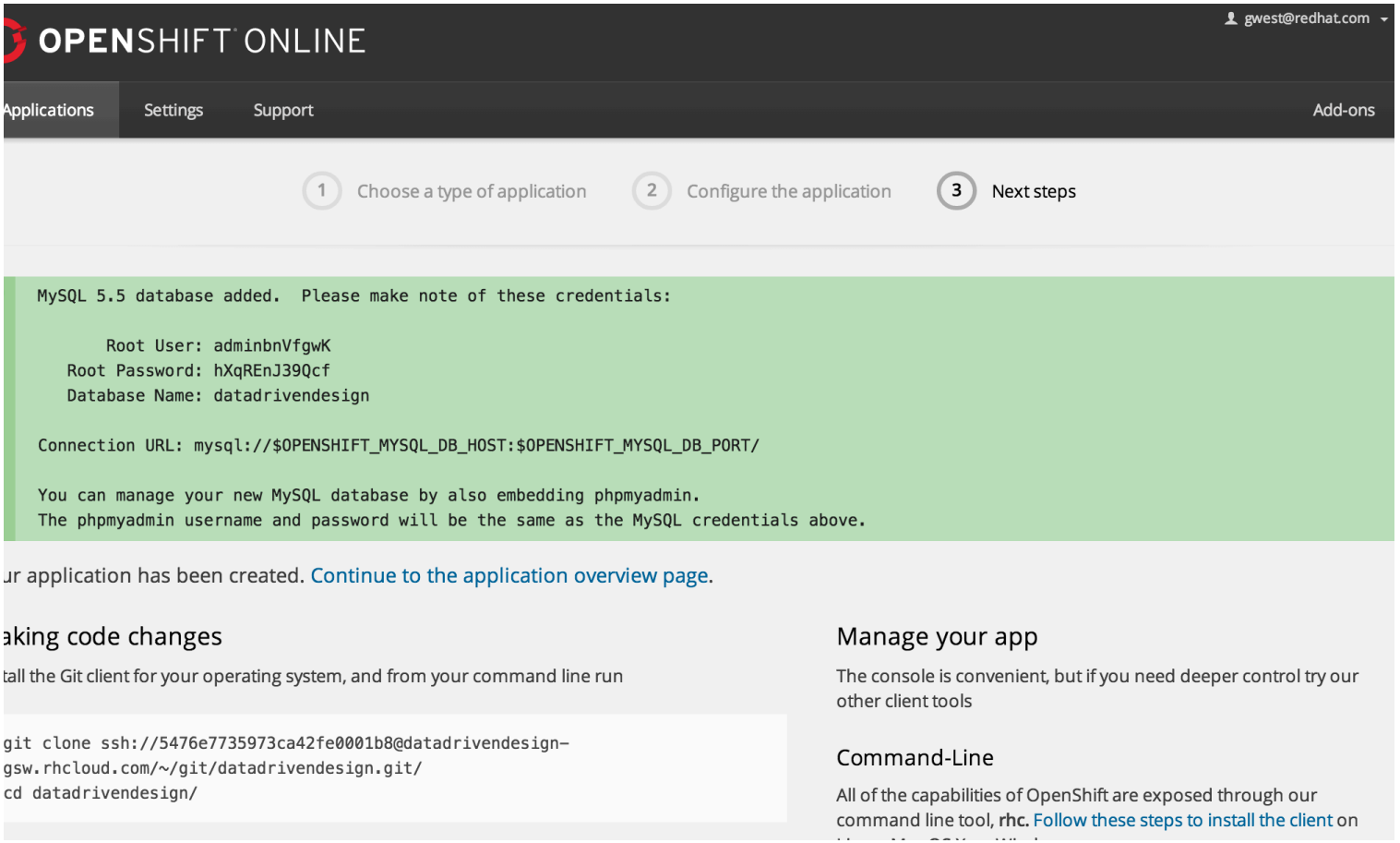


https://github.com/glennswest/datadrivenbase

Create a new app



Clone your app

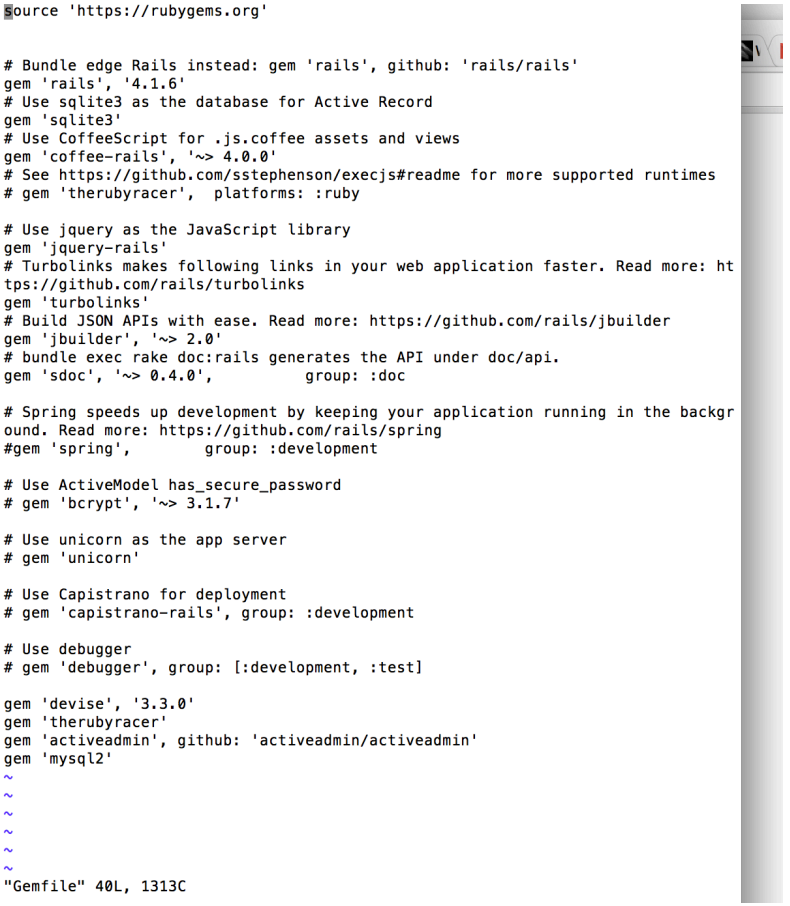


Clone you app

```
  datadriven     http://datadriven-gsw.rhcloud.com/
  keystonejstest http://keystonejstest-gsw.rhcloud.com/
  test           http://test-gsw.rhcloud.com/

  You are using 3 of 15 total gears
  The following gear sizes are available to you: small, medium

Your client tools are now configured.
[cloud@localhost ~]$ git clone ssh://5476e7735973ca42fe0001b8@datadrivendesign-g
sw.rhcloud.com/~/git/datadrivendesign.git/
Cloning into 'datadrivendesign'...
The authenticity of host 'datadrivendesign-gsw.rhcloud.com (23.20.242.119)' can'
t be established.
RSA key fingerprint is cf:ee:77:cb:0e:fc:02:d7:72:7e:ae:80:c0:90:88:a7.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'datadrivendesign-gsw.rhcloud.com,23.20.242.119' (RSA
) to the list of known hosts.
remote: Counting objects: 180, done.
remote: Compressing objects: 100% (117/117), done.
remote: Total 180 (delta 49), reused 180 (delta 49)
Receiving objects: 100% (180/180), 505.65 KiB | 153.00 KiB/s, done.
Resolving deltas: 100% (49/49), done.
[cloud@localhost ~]$
```

Bundle Install

- Execute “bundle install”



```
source 'https://rubygems.org'


# Bundle edge Rails instead: gem 'rails', github: 'rails/rails'
gem 'rails', '4.1.6'
# Use sqlite3 as the database for Active Record
gem 'sqlite3'
# Use CoffeeScript for .js.coffee assets and views
gem 'coffee-rails', '~> 4.0.0'
# See https://github.com/sstephenson/execjs#readme for more supported runtimes
# gem 'therubyracer',  platforms: :ruby

# Use jquery as the JavaScript library
gem 'jquery-rails'
# Turbolinks makes following links in your web application faster. Read more: ht
tps://github.com/rails/turbolinks
gem 'turbolinks'
# Build JSON APIs with ease. Read more: https://github.com/rails/jbuilder
gem 'jbuilder', '~> 2.0'
# bundle exec rake doc:rails generates the API under doc/api.
gem 'sdoc', '~> 0.4.0',          group: :doc

# Spring speeds up development by keeping your application running in the backgr
ound. Read more: https://github.com/rails/spring
#gem 'spring',        group: :development

# Use ActiveModel has_secure_password
# gem 'bcrypt', '~> 3.1.7'

# Use unicorn as the app server
# gem 'unicorn'

# Use Capistrano for deployment
# gem 'capistrano-rails', group: :development

# Use debugger
# gem 'debugger', group: [:development, :test]

gem 'devise', '3.3.0'
gem 'therubyracer'
gem 'activeadmin', github: 'activeadmin/activeadmin'
gem 'mysql2'
~
~
~
~
~
~
"Gemfile" 40L, 1313C
```

Data Types

- `:binary`
- `:boolean`
- `:date`
- `:datetime`
- `:decimal`
- `:float`
- `:integer`
- `:primary_key`
- `:references`
- `:string`
- `:text`
- `:time`
- `:timestamp`

```
[cloud@localhost testit]$ rails generate model product
name:string description:text
      invoke  active_record
      create    db/migrate/
20141203031945_create_products.rb
      create    app/models/product.rb
      invoke    test_unit
      create      test/models/product_test.rb
      create      test/fixtures/products.yml
[cloud@localhost testit]$
```

Migration – rake db:migrate

```
rake [cloud@localhost testit]$ rake db:migrate
== 20141126072949 DeviseCreateAdminUsers: migrating ============================
-- create_table(:admin_users)
   -> 0.0024s
-- add_index(:admin_users, :email, {:unique=>true})
   -> 0.0005s
-- add_index(:admin_users, :reset_password_token, {:unique=>true})
   -> 0.0005s
== 20141126072949 DeviseCreateAdminUsers: migrated (0.0035s) ===================

== 20141126072954 CreateActiveAdminComments: migrating =========================
-- create_table(:active_admin_comments)
   -> 0.0010s
-- add_index(:active_admin_comments, [:namespace])
   -> 0.0003s
-- add_index(:active_admin_comments, [:author_type, :author_id])
   -> 0.0004s
-- add_index(:active_admin_comments, [:resource_type, :resource_id])
   -> 0.0005s
== 20141126072954 CreateActiveAdminComments: migrated (0.0024s) ===============

== 20141203031945 CreateProducts: migrating ====================================
-- create_table(:products)
   -> 0.0009s
== 20141203031945 CreateProducts: migrated (0.0009s) ===========================

[cloud@localhost testit]$
```

Generate the screen

```
[cloud@localhost testit]$ rails generate
active_admin:resource product
      create  app/admin/products.rb
[cloud@localhost testit]$
```

Commit your changes

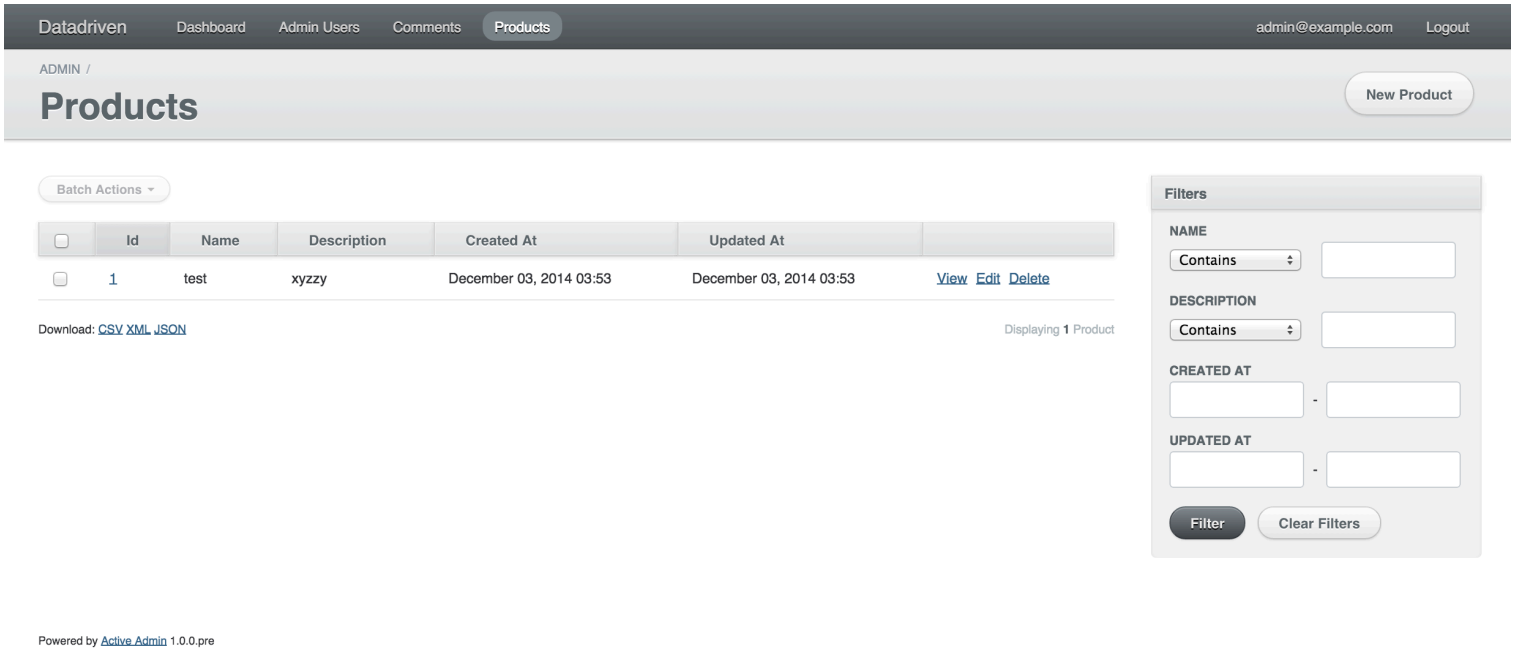
Execute:

git add –all

git commit –a –m “Add product screen and table”

git push origin master

Result


Datadriven
Dashboard
Admin Users
Comments
Products
admin@example.com
Logout
ADMIN /
Products
New Product
Batch Actions
Id
Name
Description
Created At
Updated At
1
test
xyzzy
December 03, 2014 03:53
December 03, 2014 03:53
View Edit Delete
Download: CSV XML JSON
Displaying 1 Product
Filters
NAME
Contains
DESCRIPTION
Contains
CREATED AT
UPDATED AT
Filter
Clear Filters
Powered by Active Admin 1.0.0.pre

Advanced Reading

- Activeadmin – Screens Menus all extensible
- Devise – Authentication – Fully customizable
- Rails Migrations - http://guides.rubyonrails.org/migrations.html