

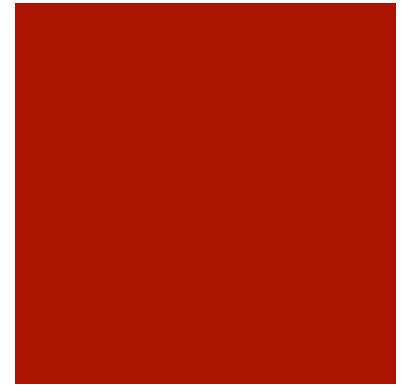


Data Driven Applications

RHTE 2014 – Macau
Glenn West

Overview

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



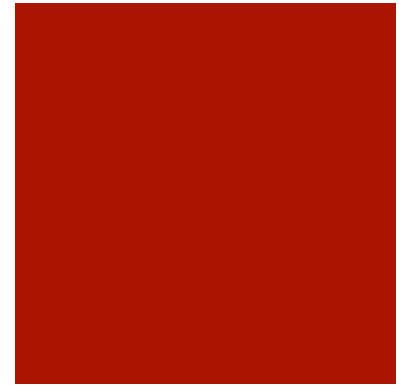
What You Need

- 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 Spreadsheet/Excel?
- Want to leverage Openshift for your apps?
- Don't know how to code?
- Want to learn more about Cloud Applications?



Getting Setup

glennswest / railstools

Unwatch

Scripts to setup a ruby on rails development environment on rhel 7 — Edit

1 commit

1 branch

0 releases

1 contributor

branch: master railstools / +

Initial Commit

glennswest authored an hour ago

latest commit 1ca8b8415c

setup_rails_env

Initial Commit

an hour ago

setup_rails_user

Initial Commit

an hour ago

We recommend adding a README to this repository to help give people an overview of your project.

Add a README

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


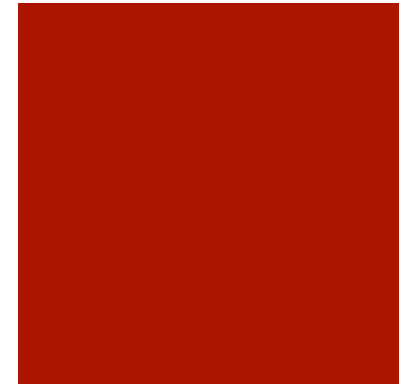


Setup User Env

- As your normal user
- `./railstools/setup_rails_user`



Setup OpenShift Account



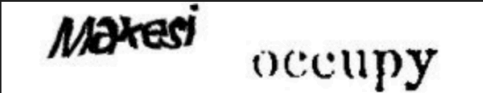
Create an account

Email address

Password

Password confirmation

Are you a spam bot?



[Get Another](#) [Get an audio CAPTCHA](#) [Help](#)

Already have an account? [Sign in](#)

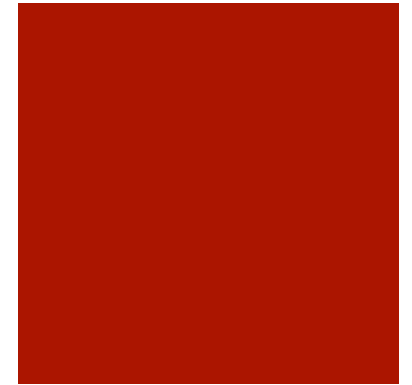
You'll love OpenShift because it has:

- Built-in support for Java, Node.js, Ruby, Python, PHP, Perl and extensible functionality to add other languages.
- Powerful command line client tools and a web management console to launch and manage your applications
- Pre-created quickstarts to instantaneously boot your favorite application framework
- A vibrant community backed by an army of developers, evangelists, and OpenShift devotees.
- A wide range of developer resources, including technology specific get started pages, how-to blog posts and videos.

Learn more about [OpenShift](#)

<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'.

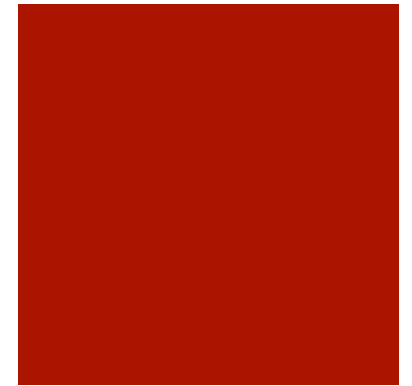
Login to openshift.redhat.com: gwest@redhat.com

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



1

Choose a type of application

2

Configure the application

3

Next steps

Based On

Ruby on Rails 4 Quickstart

An open source web framework for Ruby that is optimized for programmer happiness and sustainable productivity. It lets you write beautiful code by favoring convention over configuration.

There are some special considerations you may need to keep in mind when running your application on OpenShift. Check out <https://github.com/openshift/rails4-example> for the full list.

[Learn more](#)

☆ OpenShift maintained

Does not receive automatic security updates

Public URL

http://

datadrivendesign

-gsw.rhcloud.com

OpenShift will automatically register this domain name for your application. You can add your own domain name later.

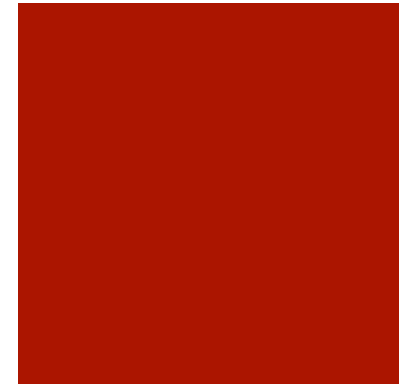
Source Code

<https://github.com/glennswest>

Branch/tag

<https://github.com/glennswest/datadrivenbase>

Create a new app



Source Code

Your application will start with an exact copy of the code and configuration provided in this Git repository. OpenShift may expect certain files to exist in certain directories, which may require you to update your repository after creation.

Gears

Gears are the application containers running your code. For most applications, the small gear size provides plenty of resources. If you require more resources, select a different gear size here. You can also [upgrade your plan](#) to get access to more gear sizes.

Cartridges

Applications are composed of cartridges - each of which exposes a service or capability to your code. All applications must have a web cartridge.

Scaling

OpenShift automatically routes web requests to your web gear. If you allow your application to scale, we'll set up a load balancer and allocate more gears to handle traffic as you need it.

Region

☐ No preference

☒ aws-us-east-1

All gear sizes can be deployed to the US Region.

☐ aws-eu-west-1

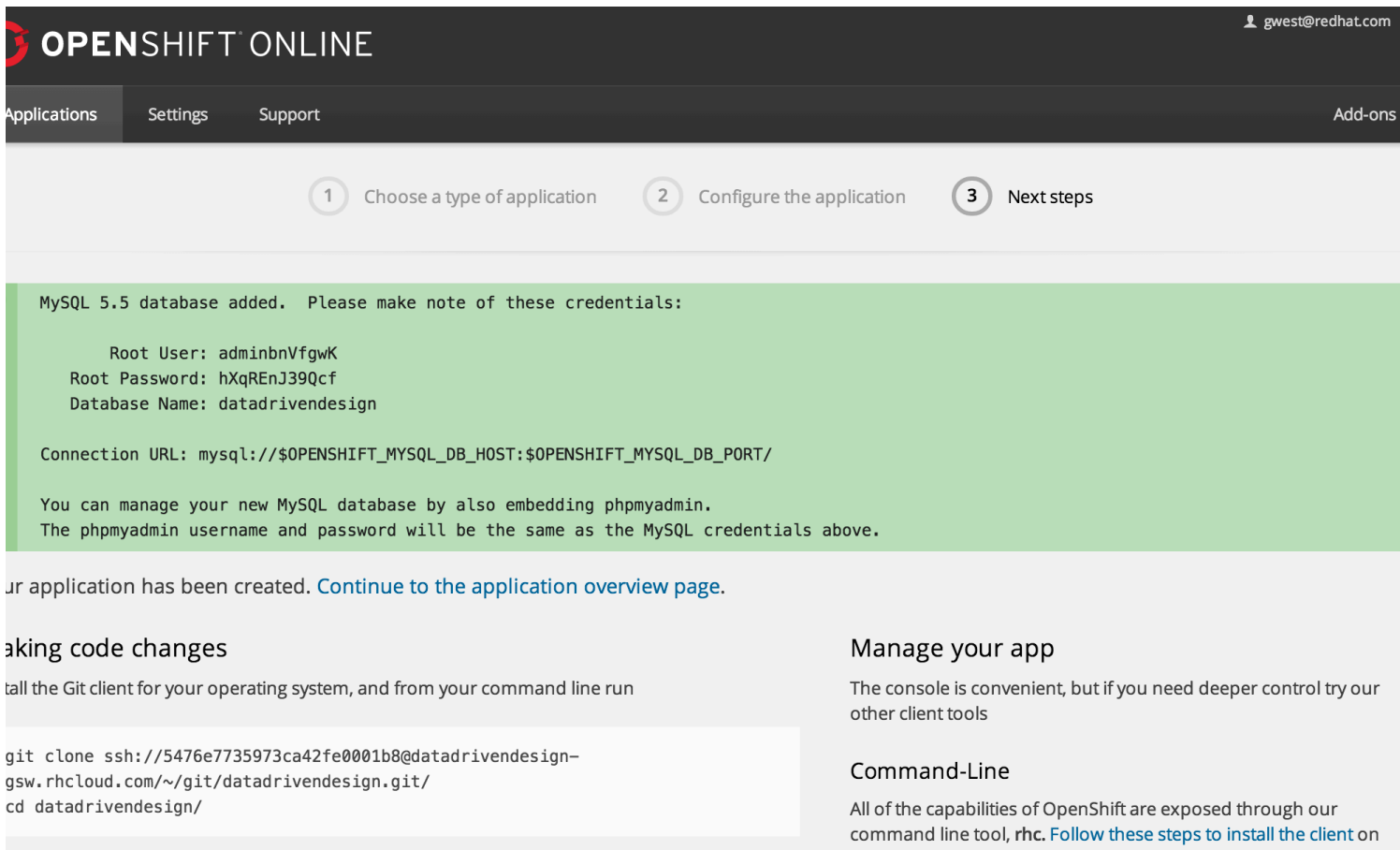
WARNING: Small gears cannot be deployed to this region. Only production gears can be deployed to the EU Region (small.highcpu, medium, and large).

Gears within your application will run on servers in the specified region.

[Back](#)[Create Application](#)

+1

Clone your app



OPENSIFT ONLINE gwest@redhat.com

Applications Settings Support Add-ons

1 Choose a type of application 2 Configure the application 3 **Next steps**

MySQL 5.5 database added. Please make note of these credentials:

```
Root User: adminbnVfgwK
Root Password: hXqREnJ39Qcf
Database Name: datadrivendesign

Connection URL: mysql://$OPENSIFT_MYSQL_DB_HOST:$OPENSIFT_MYSQL_DB_PORT/
```

You can manage your new MySQL database by also embedding phpmyadmin.
The phpmyadmin username and password will be the same as the MySQL credentials above.

Your application has been created. [Continue to the application overview page.](#)

Making code changes

Install the Git client for your operating system, and from your command line run

```
git clone ssh://5476e7735973ca42fe0001b8@datadrivendesign-
gsw.rhcloud.com/~/.git/datadrivendesign.git/
cd datadrivendesign/
```

Manage your app

The console is convenient, but if you need deeper control try our other client tools

Command-Line

All of the capabilities of OpenShift are exposed through our command line tool, **rhc**. [Follow these steps to install the client](#) on

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-gsw.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 ~]$ █
```

100

- Execute “bundle install”

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

```
# Bundle edge Rails instead: gem 'rails', github: 'rails/rails'
gem 'rails', '~> 4.0.0'
# 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 ActiveRecord 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 ▾

<input type="checkbox"/>	Id	Name	Description	Created At	Updated At	
<input type="checkbox"/>	1	test	xyzy	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>

