

the State of the Union 2012



OpenShift State of the Union brought to you by JBoss

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First things first, sign up!

<http://openshift.redhat.com>

DEVELOP AND SCALE APPS IN THE CLOUD

OpenShift is Red Hat's free, auto-scaling Platform as a Service (PaaS) for applications. As an application platform in the cloud, OpenShift manages the stack so you can focus on your code.

GET STARTED IN THE CLOUD FOR FREE

TRY IT NOW >



Java, Ruby, Node.js, Python, PHP, or Perl

Code in your favorite language, framework, and middleware. Grow your applications easily with resource scaling.

Want to keep up to date?

Keep up to date with the latest news and announcements from the OpenShift team. Our team is constantly bringing you the latest advice and tutorials.



Super Fast!

Code and deploy to the cloud in minutes. Faster and easier than it has ever been.

Try out the new console preview

We're rapidly improving the new management console to make OpenShift as easy to build your apps on as possible. The old control panel is still available.



No Lock-In

Built on open technologies so you can take it with you.

Meet the OpenShift team

We're in your area - check out the event list and join us!

→ [Learn about OpenShift](#)

→ [Read the OpenShift blog](#)



OPENSIFT

Sign up for OpenShift

Email

Password

Retype Password

Promotional Code: **JUDCON**

Are you human?



By signing up you agree to the [Terms of Service](#) and the [Privacy Policy](#)

or [sign in if you have an account](#)



State of the Union:

“A speech given by the US President to Congress every year describing the condition of the country...”

OpenShift, a little history

- Nov 2010 – Makara acquired
- In 2011 – merged into OpenShift project
- May 2012 – Open Sourced OpenShift
 - LiveCD launched for local PaaS
 - GitHub code base
 - Activity: blogs, howto's, quickstarts, webinars
- June 2012 – JBoss World, stay tuned!

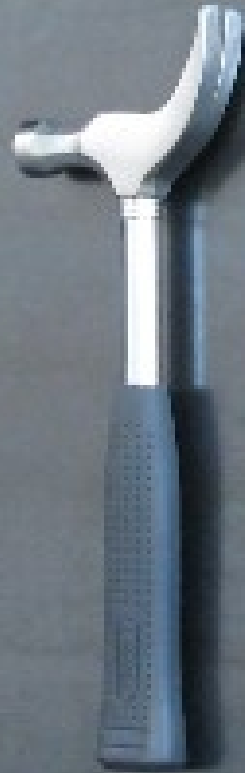
JUDCon PaaS Training

- Day 1:
 - 1400 hrs – Mobilize your application using JBoss (Grant)
 - 1530 hrs – Deployment of JEE6 apps on OpenShift made easy (Xavier)
- Day 2:
 - 1100 hrs – Deploying the JBoss Portfolio in the Cloud (William (aka Bill))

An OpenShift Primer

Get your code into the Cloud!

Book coming soon... DeveloperPress.com!



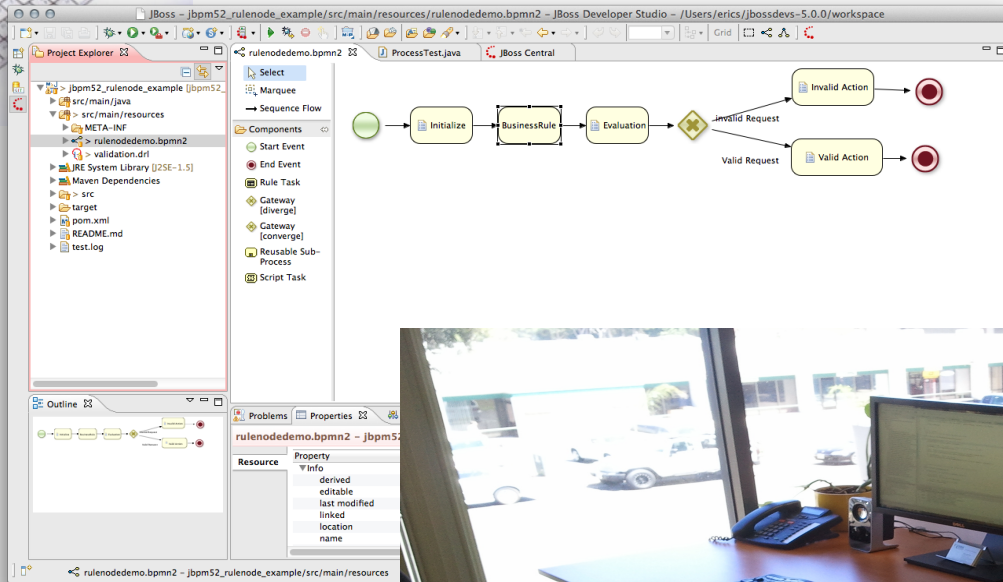
© 2011/12 by the University of Queensland



Never look back...



PaaS?



*Why am i DORKING
with the stack?!*





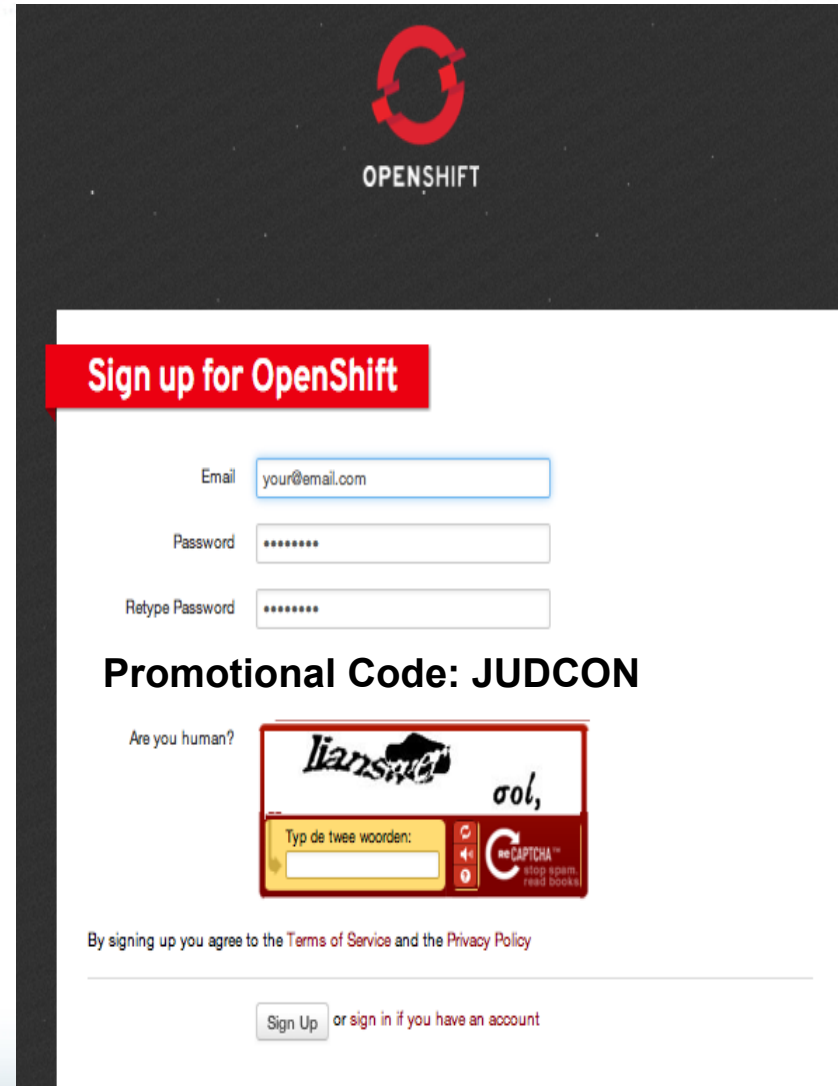
OPENSIFT

Quickstart

1. Sign Up
2. Install Client Tools
3. Create Domain
4. Create Application
5. Deploy Application (GIT)

Sign up, it's free!

- <http://openshift.redhat.com> –
“Sign up and Try it!”
- Example projects you can deploy now!
 - <https://www.github.com/openshift>
- Help?
 - IRC: freenode #openshift
 - Forums:
<http://www.redhat.com/openshift/community/forums>
 - Email: openshift at redhat dot com



Sign up for OpenShift

Email

Password

Retype Password

Promotional Code: JUDCON

Are you human?

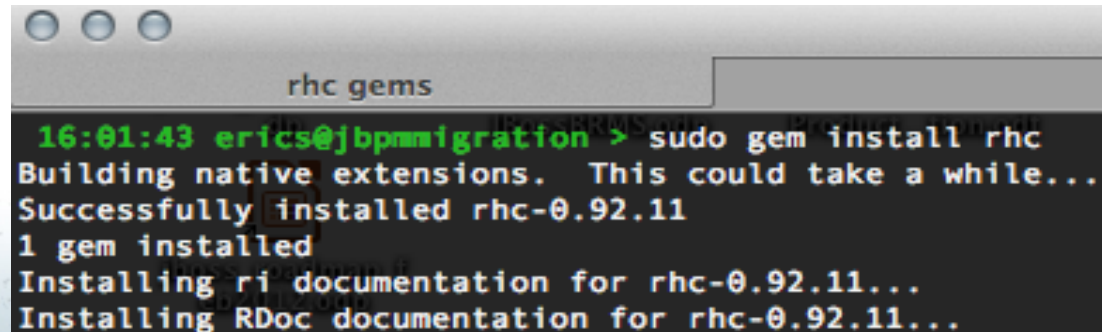
Typ de twee woorden:

By signing up you agree to the [Terms of Service](#) and the [Privacy Policy](#)

or [sign in if you have an account](#)

Install Client Tools

- Fedora / RHEL
 - openshift.repo
- Move to yum.repos.d
 - \$ sudo mv openshift.repo /etc/yum.repos.d
- Install client tools
 - \$ sudo yum install rubygem-rhc
- The rest (osX, Ubuntu, Cygwin):
 - gem install rhc (json_pure)
 - see forums, blogs



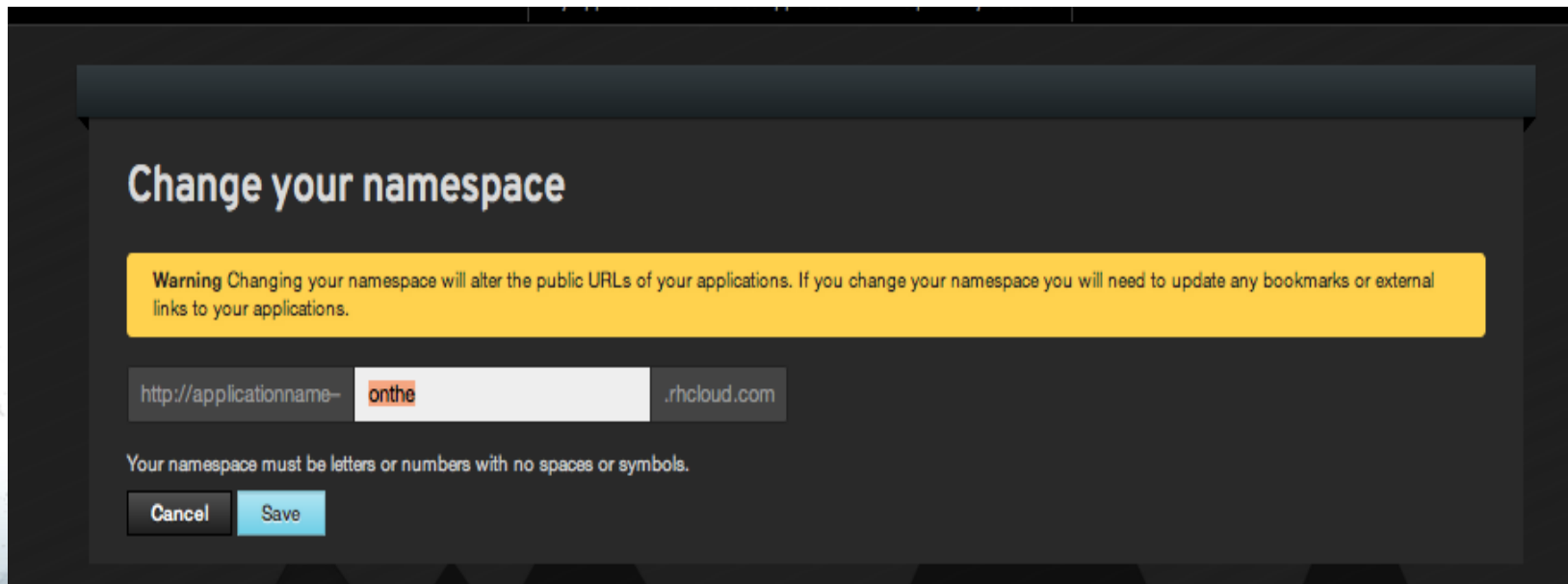
```
rhc gems
16:01:43 erics@jbpmigration > sudo gem install rhc
Building native extensions. This could take a while...
Successfully installed rhc-0.92.11
1 gem installed
Installing ri documentation for rhc-0.92.11...
Installing RDoc documentation for rhc-0.92.11...
```

Create Domain

- Use rhc command

```
$ rhc domain create -n mydomain -l openshiftlogin
```

- Use admin console!



Change your namespace

Warning Changing your namespace will alter the public URLs of your applications. If you change your namespace you will need to update any bookmarks or external links to your applications.

http://applicationname- .rhcloud.com

Your namespace must be letters or numbers with no spaces or symbols.

All Applications

Web Administration

babygame

<http://babygame-onthe.rhcloud.com>

jbpmmigration

<http://jbpmmigration-onthe.rhcloud.com>

cloudtour

<http://cloudtour-onthe.rhcloud.com>

wordpress

<http://wordpress-onthe.rhcloud.com>

nluug

<http://nluug-onthe.rhcloud.com>

ceylon

<http://ceylon-onthe.rhcloud.com>

OPENSIFT HELP

[OpenShift User Guide](#)

[Installing OpenShift client tools on Mac OSX, Linux, and Ruby on Rails Quickstart Guide](#)

[How can I add JBoss modules to an OpenShift App](#)

[Sync your OpenShift repo with an existing Git repo](#)

[More help »](#)

POPULAR FAQs

[How do I start a new Forum discussion?](#)

[How do I install the rhc client tools on Windows?](#)

[More FAQs »](#)



ADD APPLICATION

Instant Applications

1 Choose a type of application

2 Configure and deploy the application

3 Next steps

Choose a web programming cartridge (from scratch) or kick the tires with a preconfigured application. After you create the application you can add cartridges to enable additional capabilities like databases, metrics, and continuous build support with Jenkins.

Instant Applications

The preconfigured applications below contain a web cartridge, any other required cartridges (such as a database), and all of the code needed to get you up and running in seconds.

Kitchensink Example

EXPERIMENTAL

This quickstart uses JBoss AS7 to show off all the new features of Java EE 6 and makes a great starting point for your Java project.

Select »

WordPress

EXPERIMENTAL

A semantic personal publishing platform written in PHP with a MySQL back end, focusing on aesthetics, web standards, and usability.

Select »

Drupal

EXPERIMENTAL

An open source content management platform written in PHP powering millions of websites and applications. It is built, used, and supported by an active and diverse community of people around the world.

Select »

Ruby on Rails

EXPERIMENTAL

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.

Select »

Didn't Find What You Were Looking For?

If you would like to try another framework, [more quickstarts are available here](#). If there are another applications you would like to see here or as a quickstart, please suggest or vote for it.

1 Choose a type of application

2 Configure and deploy the application

3 Next steps

Configure New Application

Kitchensink Example

EXPERIMENTAL

Website: <https://docs.jboss.org/author/display/AS71/Kitchensink+quickstart>

Version: 7.0.0

This quickstart uses JBoss AS7 to show off all the new features of Java EE 6 and makes a great starting point for your Java project.

What you get:

- jbossas-7

This application will be created from the OpenShift repository <http://github.com/openshift/kitchensink-example>. Deploying this application may take a bit longer than normal while we download and configure the necessary cartridges.

Please be sure to read the source repository README for any additional configuration that may be required. Some templates may have hard coded passwords or other security related settings that must be modified after creation.

Public URL

Your application name uniquely identifies the application and becomes part of your public URL. You can add your own domain names to the application later.

Back

Create Application

Web Cartridges

The web cartridge is the heart of your application, handling incoming web requests and dishing out web pages, business APIs, or the content for your next hot mobile app.

Node.js 0.6

Node.js is a platform built on Chrome's JavaScript runtime for easily building fast, scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.

Select »

Ruby 1.8.7

Ruby is a dynamic, reflective, general-purpose object-oriented programming language. Rack provides a minimal, modular and adaptable interface for developing web applications in Ruby. Popular development frameworks include: Ruby on Rails and Sinatra.

Select »

JBoss Application Server 7.1

The leading open source Java EE6 application server for enterprise Java applications. Popular development frameworks include Seam, CDI, Weld, and Spring.

Select »



Do-It-Yourself

The Do-It-Yourself (DIY) application type is a blank slate for trying unsupported languages, frameworks, and middleware on OpenShift. See the community site for examples of bringing your favorite framework to OpenShift.

Select »

Python 2.6

Python is a general-purpose, high-level programming language whose design philosophy emphasizes code readability. The Web Server Gateway Interface (WSGI) defines a simple and universal interface between web servers and web applications or frameworks for the Python programming language. Popular development frameworks include: Django, Bottle, Pylons, Zope and TurboGears.

Select »

PHP 5.3

PHP is a general-purpose server-side scripting language originally designed for Web development to produce dynamic Web pages. The mod_php Apache module is used to execute PHP applications. Popular development frameworks include: CakePHP, Symfony, and Code Igniter. Popular applications include: Drupal, Wordpress, and Mediawiki.

Select »

Jenkins Server

Jenkins is a continuous integration (CI) build server that is deeply integrated into OpenShift. When you add Jenkins as an application you will enable your other applications to run complex builds whenever you push code. See the Jenkins info page for more.

Select »

Perl 5.10

Perl is a high-level, general-purpose, interpreted, dynamic programming language. mod_perl is an optional module for the Apache HTTP server. It embeds a Perl interpreter into the Apache server, so that dynamic content produced by Perl scripts can be served in response to incoming requests, without the significant overhead of re-launching the Perl interpreter for each request.

Select »

Configure Application

1 Choose a type of application

2 Configure and deploy the application

3 Next steps

Configure New Application

JBoss Application Server 7.1

Website: <http://www.jboss.org/jbossas>

Version: JBoss AS 7.1.0.Final

The leading open source Java EE6 application server for enterprise Java applications. Popular development frameworks include Seam, CDI, Weld, and Spring.

Public URL

http://

guvnor|

-onthe.rhcloud.com

Your application name uniquely identifies the application and becomes part of your public URL. You can add your own domain names to the application later.

Back

Create Application

Ready to code!

MY APPLICATIONS / DROOLSGUVNOR / NEXT STEPS

1 Choose a type of application

2 Configure and deploy the application

3 Next steps

Your application has been created. If you're new to OpenShift check out these tips for where to go next.

Accessing your application

Your application has one or more cartridges that expose a public URL to the Internet. Click the link below to see your application:

<http://droolsguvnor-onthe.rhcloud.com>



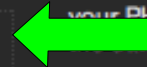
The application overview page provides a summary of your application and its cartridges.

Making code changes

OpenShift uses the [Git version control system](#) to manage the code of your application. Each cartridge has a single [Git repository](#) that you'll use to check in changes to your application. When you [push](#) a change to your Git repository we'll automatically deploy your code and restart your application if necessary. [Learn more about uploading code](#)

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

```
git clone ssh://94122f0beb774794a46cf8fdf33e8097@droolsguvnor-onthe.rhcloud.com/~/.git/droolsguvnor.git/
cd droolsguvnor/
```



This will create a folder with the source code of your application. After making a change, [add](#), [commit](#), and [push](#) your changes.

```
git add .
git commit -m 'My changes'
git push
```

When you push changes the OpenShift server will report back its status on deploying your code. The server will run any of your configured [deploy hooks](#) and then restart the application.

Managing your application

Most of the capabilities of OpenShift are exposed through command line tool, [rhc](#). Whether it's adding cartridges, checking uptime, or pulling log files from the server, you can quickly get your finger on the pulse of your application. Follow these steps to get the client on Linux, Mac OS X, or Windows.

After installing the command line tool follow our [User Guide](#) to manage your application from the command line

Adding capabilities

Cartridges are the components of an OpenShift application that include databases, build systems, and management capabilities. [Adding a cartridge](#) to an application provides the desired capabilities without forcing you to administrate or update that feature.

To run a PHP application with MySQL (the M and P in LAMP), you can [embed](#) the MySQL cartridge into your application. OpenShift will give your PHP code access to your new MySQL database, but you'll need a database server for you.

You can see the [list of available cartridges online](#) or from the command line with

```
rhc app cartridge list
```

You may also add a cartridge to your application by running

```
rhc app cartridge add -a droolsguvnor -c <cart_id>
```

Application Details

MY APPLICATIONS / PORTAL

Portal

Delete

Cartridges

Add Cartridge +

JBoss Application Server 7.1

CREATED
4 MINUTES AGO

GIT REPOSITORY

```
ssh://f25bae27b6134bb18a252addb3cb6df8@portal-onthe.rhcloud.com/~/.git/portal.git/
```

URL

<http://portal-onthe.rhcloud.com>

ALIASES

No alias set

NEW TO OPENSIFT?

See the getting started tips for this app →

NEED HELP?

[OpenShift User Guide](#)

[Sync your OpenShift repo with an existing Git repo](#)

ADD CARTRIDGE

Other Options

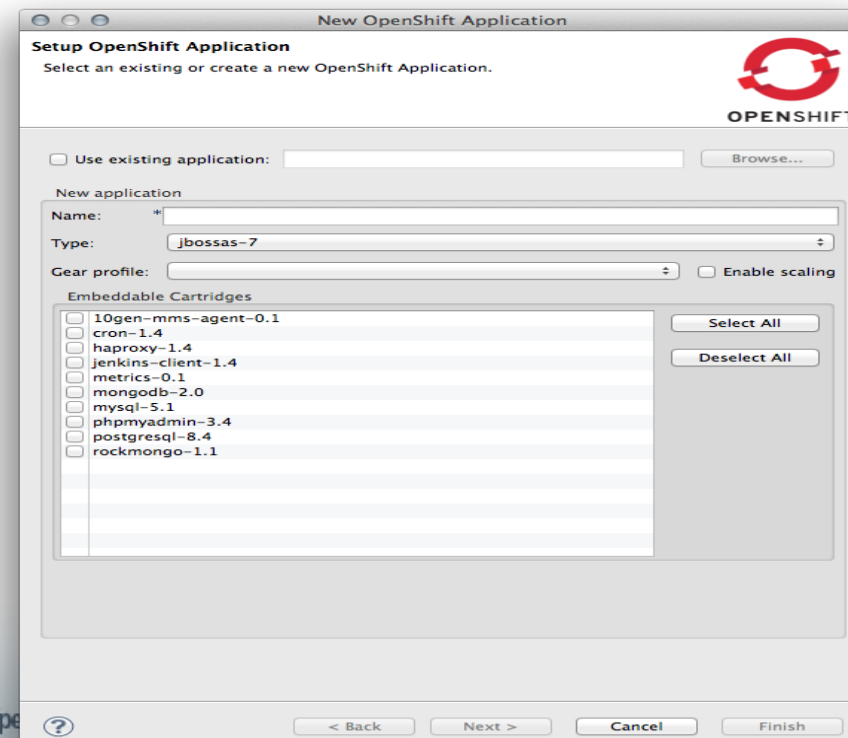
- Name app and define type

```
$ rhc app create -a appname -t apptype -l openshiftlogin
```

(Node.js, DIY, Jenkins, PHP, Ruby, Python, Perl and most important, Java!)
- Add application to local repo

```
$ git add .
```
- Commit changes

```
$ git commit -m "Initial app import."
```



Deploy to Cloud

- Push the code to Express

```
$ git push
```

- Congratulations, your app is in the cloud!



Welcome To OpenShift, JBossAS7 Cartridge

Place your application here

In order to commit to your new project, go to your projects git repo (created with the `rhc app create` command) directory.

For example, if you named your application `myfirstapp` (by passing in `-a myfirstapp` to the `rhc app create` command), you would find the contents of this app located under `myfirstapp/src/main/webapp`. You can edit that and push your changes from the `myfirstapp` directory by running:

```
git commit -a -m 'Some commit message'
git push
```

Then reload this page.

See the `myfirstapp/README` file for more information on the options for deploying applications.

Sample Applications

To get started you can either modify the default war or try one of these samples:

<https://github.com/openshift/kitchensink-example> this quickstart showcases some of the exciting Java EE6 features available on JBoss AS 7.1.



EASY PEASY

Gears



500MB memory + 1GB storage

JBoss Developer Studio

The screenshot displays the JBoss Developer Studio interface. At the top, the title bar shows several open files: `singleTask.bpmn2`, `singleSubFlow.bpmn2`, `processdefinition.xml`, and `JBoss Central`. The main window is divided into several panes:

- Left Pane:** Contains navigation options such as "Create Projects" (with sub-links for Dynamic Web Project, Java EE Web Project, HTML5 Project, Spring MVC Project, OpenShift Application, Java EE Project, RichFaces Project, and GWT Web Project), "Project Examples" (with a link to JBoss Quickstarts), "Documentation" (with links for New and Noteworthy, Reference, FAQ, Screenscasts, User Forum, Developer Forum, Wiki, and Issue Tracker), and "Settings" (with a checkbox for "Show on Startup").
- Right Pane:** Features a "News" section with three articles: "This week in JBoss (31 May 2012) Heads going down for JBoss World 2012", "This week in JBoss (24th May 2012): Spreading like wildfire", and "This week in JBoss (17th May 2012): How to JBoss". Below the news is a "Blogs" section with an article titled "JBoss Tools and Developer Studio Beta 3 - Use the Source!".
- Bottom Pane:** A wizard titled "Select a wizard" is active, showing the option to "Create a new OpenShift Application". Under "Wizards:", a search filter is present, and a list of wizard categories is shown, with "OpenShift Application" selected.

At the bottom of the interface, there are navigation buttons: a help icon (?), "< Back", "Next >", "Cancel", and "Finish".

Demo JUDCon Mobile App



```
$ rhc app create -a judcon -t jbossas-7
```

```
$ cd judcon
```

```
$ git remote add upstream -m master
```

```
git://github.com/eschabell/openshift-judcon.git
```

```
$ git pull -s recursive -X theirs upstream master
```

```
$ git push
```

[http://judcon-\\$your_domain.rhcloud.com](http://judcon-$your_domain.rhcloud.com)

Demo jBPM Web Designer



```
$ rhc app create -a editor -t jbossas-7
```

```
$ cd editor
```

```
$ git remote add upstream -m master
```

```
git://github.com/eschabell/openshift-webdesigner-  
jbpmmigration.git
```

```
$ git pull -s recursive -X theirs upstream master
```

```
$ git push
```

[http://editor-\\$your_domain.rhcloud.com/designer/editor?profile=jbpm&uuid=123](http://editor-$your_domain.rhcloud.com/designer/editor?profile=jbpm&uuid=123)

Demo jBPM Migration Project



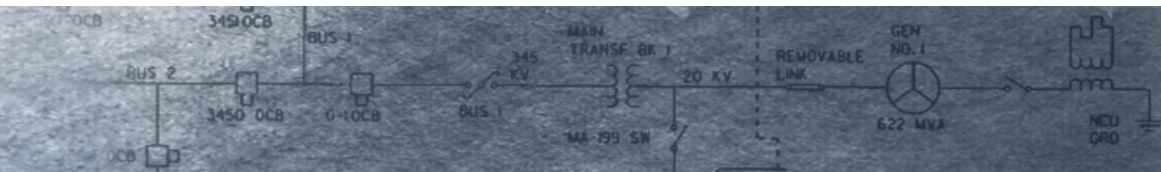
```
$ rhc app create -a jbpmmigration -t jbossas-7  
$ cd jbpmmigration  
$ git remote add upstream -m master  
git://github.com/eschabell/openshift-jbpmmigration.git  
$ git pull -s recursive -X theirs upstream master  
$ git push
```

[http://jbpmmigration-\\$your_domain.rhcloud.com/jbpmmigration_upload-0.4](http://jbpmmigration-$your_domain.rhcloud.com/jbpmmigration_upload-0.4)

Demo Switchyard Project

```
$ rhc app create -a swyesb -t jbossas-7  
$ cd swyesb  
$ git remote add upstream -m master  
git://github.com/eschabell/switchyard-openshift.git  
$ git pull -s recursive -X theirs upstream master  
$ git apply standalone.diff  
$ git push
```

[http://swyesb-\\$your_domain.rhcloud.com/swydws/OrderService?wsdl](http://swyesb-$your_domain.rhcloud.com/swydws/OrderService?wsdl)



Demo Ceylon Project



```
$ rhc app create -a ceylon -t jbossas-7  
$ cd ceylon  
$ git remote add upstream -m master  
git://github.com/eschabell/ceylon-openshift.git  
$ git pull -s recursive -X theirs upstream master  
$ git push
```

[http://ceylon-\\$your_domain.rhcloud.com](http://ceylon-$your_domain.rhcloud.com)

Demo GateIn Project

```
$ rhc app create -a portal -t jbossas-7
```

```
$ cd portal
```

```
$ git remote add upstream -m master
```

```
git://github.com/eschabell/openshift-portal.git
```

```
$ git pull -s recursive -X theirs upstream master
```

```
$ git push
```

[http://portal-\\$your_domain.rhcloud.com/portal](http://portal-$your_domain.rhcloud.com/portal)

Demo Drools Planner

```
$ rhc app create -a droolsplanner -t jbossas-7
```

```
$ cd droolsplanner
```

```
$ git remote add upstream -m master
```

```
git://github.com/eschabell/openshift-droolsplanner.git
```

```
$ git pull -s recursive -X theirs upstream master
```

```
$ git push
```

```
http://droolsplanner-\$your\_domain.rhcloud.com/droolsplanner
```



Demo JBoss BRMS 5.3

```
$ rhc app create -a brms53 -t jbossas-7
```

```
$ cd brms53
```

```
$ git remote add upstream -m master
```

```
git://github.com/eschabell/openshift-brms53.git
```

```
$ git pull -s recursive -X theirs upstream master
```

```
$ git push
```

```
http://brms53-\$your\_domain.rhcloud.com:8080/jboss-brms
```

What will the future bring?

JBoss++

Commercial Service / Pricing

Mobile

Open Source (SDK + project)



Loving your hammers?





- OpenShift: <http://openshift.redhat.com>
- OpenShift Express: <https://openshift.redhat.com/app/express>
- Blogs: <https://www.redhat.com/openshift/community/blogs>
- Repository for all OpenShift demos shown here:
<https://github.com/eschabell>
- OpenShift demo repository: <https://github.com/openshift>
- Rise above the Cloud hype with OpenShift:
<http://www.schabell.org/2012/01/rise-above-cloud-hype-with-openshift.html>