

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.



Super Fast!

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



No Lock-In

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

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.

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.

Meet the OpenShift team

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

→ Learn about OpenShift

→ Read the OpenShift blog

The screenshot shows the OpenShift sign-up page. At the top is the red OpenShift logo. Below it is a large red button labeled "Sign up for OpenShift". Underneath are three input fields: "Email" with placeholder "your@email.com", "Password" with placeholder "*****", and "Retype Password" with placeholder "*****". Below these is a section for a promotional code with the text "Promotional Code: JUDCON". There is a "Are you human?" checkbox followed by a reCAPTCHA field containing the text "Jianswei sol," and a yellow "Typ de twee woorden:" input field. At the bottom, a note states "By signing up you agree to the [Terms of Service](#) and the [Privacy Policy](#)". A "Sign Up" button is at the very bottom.



State of the Union:

“A speech given by the US President to Congress every January 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!

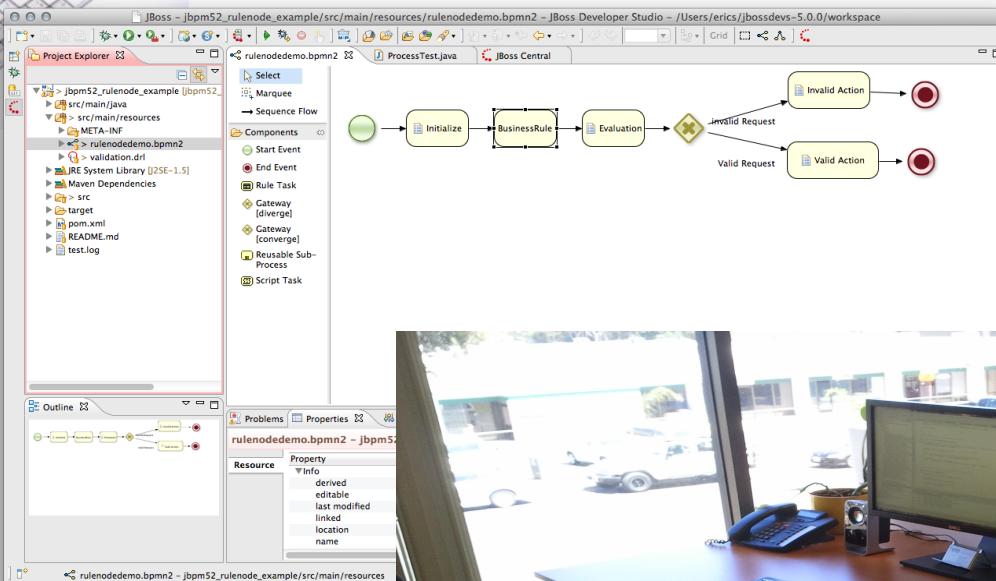
A wide-angle photograph capturing a stunning sunset or sunrise over a vast expanse of low-hanging clouds. The sky is a dramatic canvas of orange, yellow, and deep blue. In the lower-left foreground, the dark silhouette of a snow-capped mountain peak rises, its slopes partially covered in white snow. The clouds below are dense and textured, stretching across the middle ground. The horizon line is flat, emphasizing the scale of the sky and the sea of clouds.

Book coming soon... [DeveloperPress.com!](http://DeveloperPress.com)





Never look back...



A woman in a dark blue business suit and white shirt is shouting at a computer monitor. She has her mouth wide open and is holding the sides of the monitor with both hands, pushing it forward. The monitor is black and sits on a stand. A keyboard and a mouse are on the desk to the left. A telephone is to the right. A large thought bubble above her head contains the text.

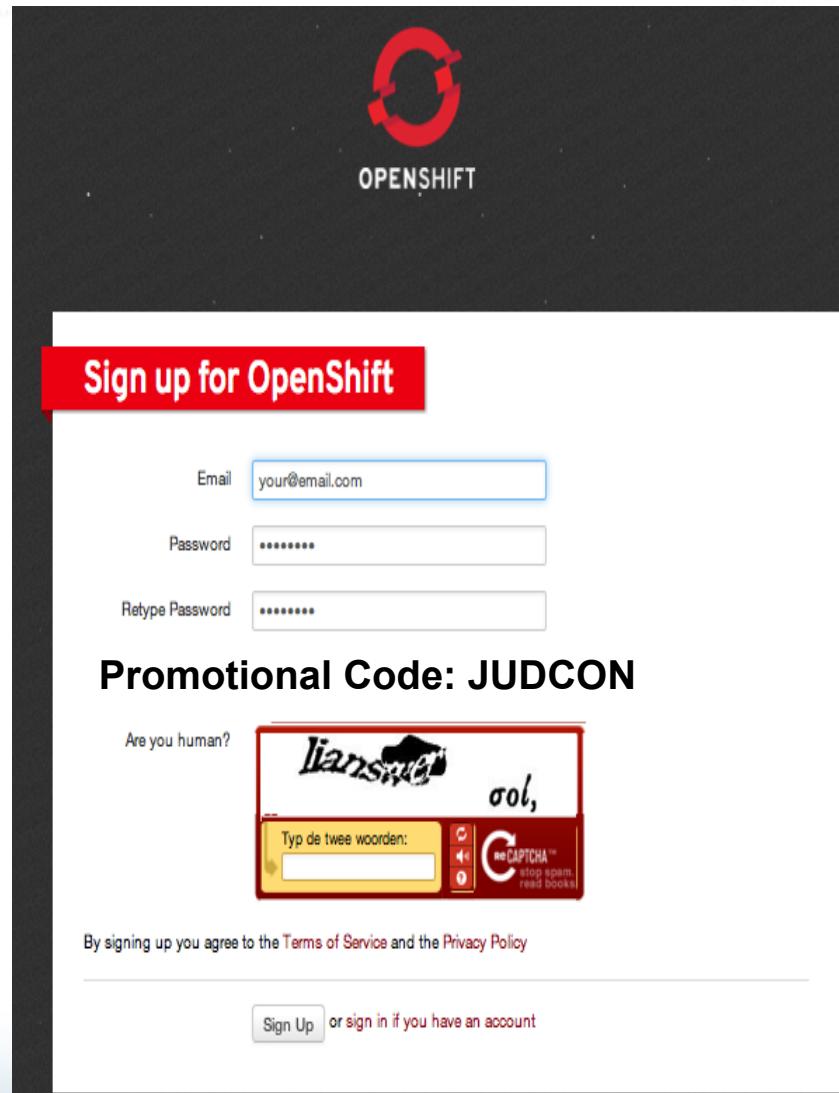
*Why am I DORKING
with the stack?!*

Quickstart

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

Sign up, it's free!

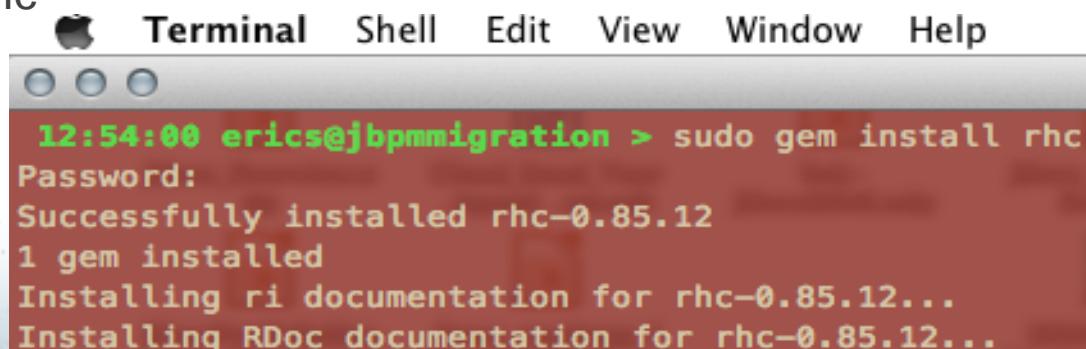
- <http://openshift.redhat.com> –
“Sign up and Try it!”
- Example projects you can deploy now!
 - <https://www.github.com/openshift>
- Help?
 - IRC: freenode #openshift
 - Forums:
<http://www.redhat.com/openshift/community/forums>
 - Email: openshift at redhat dot com



The screenshot shows the OpenShift sign-up interface. At the top is the OpenShift logo (a red stylized 'O' icon) and the word "OPENShift". Below it is a large red button with the text "Sign up for OpenShift". The form has three input fields: "Email" (containing "your@email.com"), "Password" (containing "*****"), and "Retype Password" (containing "*****"). Below the form is a section titled "Promotional Code: JUDCON". Underneath the promotional code is a CAPTCHA challenge with the text "Are you human?". The CAPTCHA itself features a distorted version of the word "lianshui" and the word "sol," above a yellow input field containing "Typ de twee woorden:". To the right of the input field is a "reCAPTCHA" box with the text "stop spam, read books!". At the bottom of the page, a note states "By signing up you agree to the [Terms of Service](#) and the [Privacy Policy](#)". At the very bottom, there are "Sign Up" and "or sign in if you have an account" buttons.

Install Client Tools

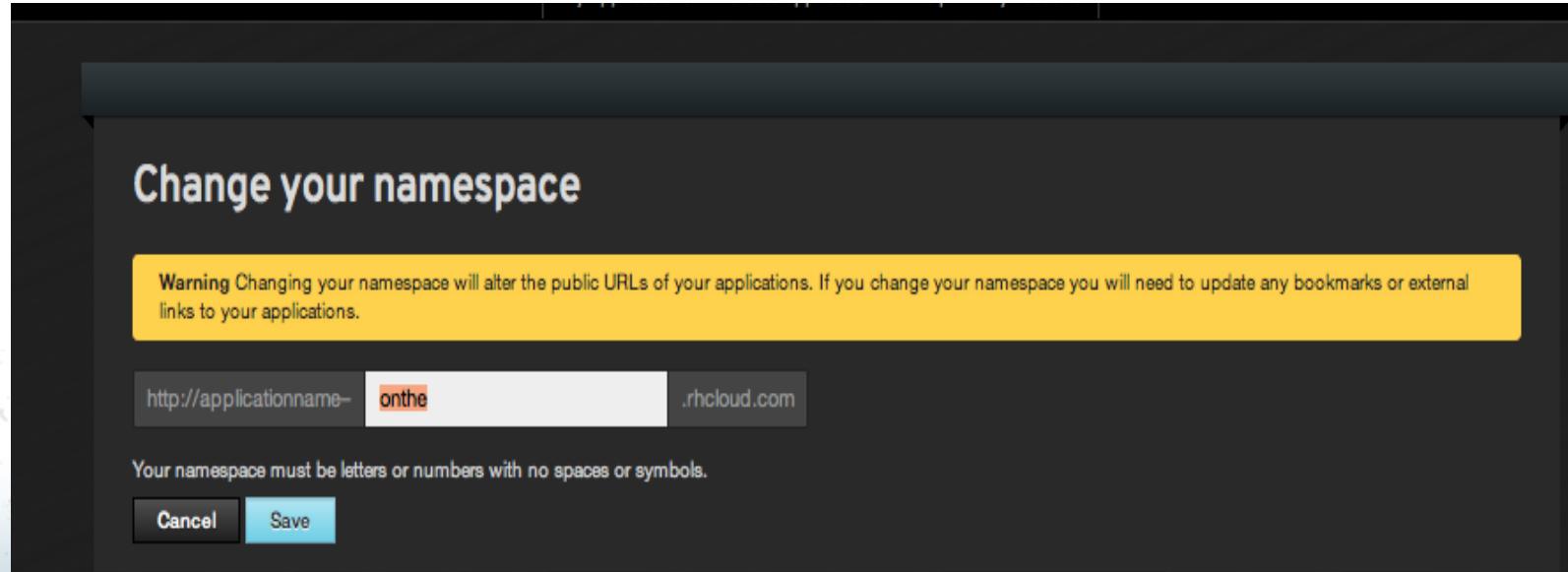
- Fedora / RHEL
 - openshift.repo
 - Move to yum.repos.d
\$ sudo mv openshift.repo
/etc/yum.repos.d
 - Install client tools
\$ sudo yum install rubygem-rhc
- The rest (osX, Ubuntu, Cygwin):
 - gem install rhc (json_pure)
 - see forums, blogs



```
12:54:00 erics@jbpmmigration > sudo gem install rhc
Password:
Successfully installed rhc-0.85.12
1 gem installed
Installing ri documentation for rhc-0.85.12...
Installing RDoc documentation for rhc-0.85.12...
```

Create Domain

- Use rhc command
 - \$ rhc domain create -n mydomain -l openshiftlogin
- Use admin console!





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**

Create Application

1 Choose a type of application

2 Configure and deploy the application

3 Next steps

Choose a web programming framework for your application. After you create the application you can add cartridges to enable additional capabilities like databases, and continuous build support with Jenkins.

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 »](#)

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 »](#)

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 »](#)

Perl 5.10

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 »](#)

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 »](#)

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

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!

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 finger on the pulse of your application. Follow these steps to install 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. They include databases, build systems, and management capabilities. Adding a cartridge to an application provides the desired capability without forcing you to administrate or update that feature.

To run a PHP application with MySQL (the M and P in LAMP), you embed the MySQL cartridge into your application. OpenShift provides your PHP code access to your new MySQL database, but manages the base server for you.

You can see the list of available cartridges online or from the command line with

```
rhc app cartridge list
```

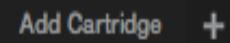
You may also add a cartridge to your application by running

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

Application Details

MY APPLICATIONS / PORTAL

Portal 

JBoss Application Server 7.1 

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





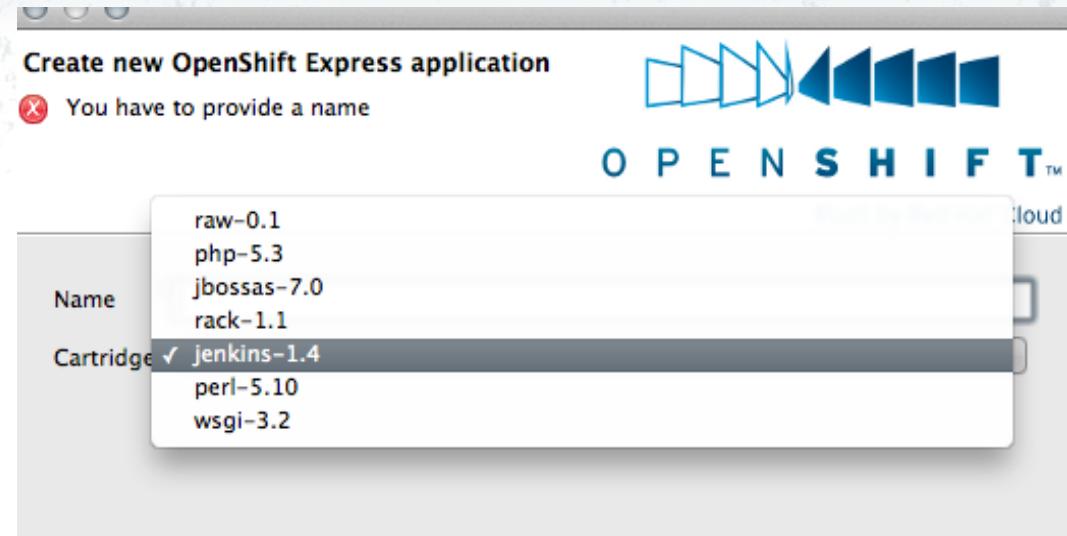
URL
`http://portal-onthe.rhcloud.com`

ALIASES
No alias set

NEW TO OPENSHIFT?
See the getting started tips for this app →

NEED HELP?
OpenShift User Guide
Sync your OpenShift repo with an existing Git repo

Other Options: create apps



- 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!

The screenshot shows the OpenShift web interface with a dark theme. At the top, there's a red header bar with the text "Welcome To OpenShift, JBossAS7 Cartridge". Above the header is the OpenShift logo. Below the header, there's a section titled "Place your application here" with instructions: "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 PEAZY

Gears



500MB memory + 1GB storage

JBoss Developer Studio

The screenshot shows the JBoss Developer Studio interface with the JBoss Central perspective selected. The top menu bar includes tabs for "ProcessMain.java", "sample.bpmn", and "JBoss Central". The left sidebar contains sections for "Create Projects" (Dynamic Web Project, Java EE Web Project, HTML5 Project, RichFaces Project), "Project Examples" (JBoss Quickstarts), and "Documentation" (New and Noteworthy, Reference, FAQ, Screencasts). The main area features a "Wizards:" section with a filter bar and a list of wizards: Maven, OpenShift (selected, showing OpenShift Express Application), Plug-in Development, and Remote System Explorer. The right side displays a "News" and "Blogs" feed with recent posts.

JBoss Central

JBoss Central

Search JBoss Community

Create Projects

- Dynamic Web Project
- Java EE Web Project
- HTML5 Project
- RichFaces Project

OpenShift Express Application

- Java EE Project
- Spring MVC Project

Project Examples

JBoss Quickstarts

Documentation

- New and Noteworthy
- User Forum
- Reference
- Developer Forum
- FAQ
- Wiki
- Screencasts
- Issue Tracker

Settings

Show on Startup

Wizards:

type filter text

- Maven
- OpenShift
 - OpenShift Express Application
- Plug-in Development
- Remote System Explorer

News

- This week in JBoss (22th March 2012): JBoss and its community 2 hours ago by Heiko Braun
- Community Matters JBoss Community accepted into GSOC 12 We are happy to announce that JBoss Community (<http://www.jboss.org>) has been officially...
- This week in JBoss (15th March 2012): JBoss Renewed 7 days ago by Burr Sutter
- Hello and welcome! We have been insanely busy for the last two weeks and managed to miss an editorial publication. :-(We will endeavor to...
- This week in JBoss (1st March 2012): Leaping ahead in creativity 3 weeks ago by Kevin Conner
- Another week goes by and the productivity and diversity of JBoss and its...

Blogs

- JBoss Tools and Developer Studio Beta1 - Chiliad! 1 week ago by Max Rydahl Andersen
- In celebration that @dhinojosa became our chiliad follower on @jbosstools we are releasing Beta1 of both JBoss Tools and JBoss Developer Studio...
- Excited about JBoss AS 7.1 Part III: Quickstarts Frenzy 3 weeks ago by Max Rydahl Andersen

Getting Started Software/Update

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 jbpmigration  
$ 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 Drools Guvnor

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

[http://droolsguvnor-\\$your_domain.rhcloud.com:8080/guvnor-webapp](http://droolsguvnor-$your_domain.rhcloud.com:8080/guvnor-webapp)



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



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>