**Openshift Tutorial for Mac Users**

**Make an Openshift account**

**Set up Ruby and Git and Openshift Client Tools (rhc)**

1. To verify ruby installation, run the following commands in the command line (terminal):

$ ruby -e 'puts "Welcome to Ruby"'

Welcome to Ruby

2. To verify Git installation, run:

$ git --version

git version 1.9.3 (Apple Git-50)

3. Use RubyGems library system to install and run OpenShift gem (rhc) by running:

$ sudo gem install rhc

**Making Your Project**

$ rhc setup

Login to openshift.redhat.com: [user@example.com](mailto:user@example.com)

Password: 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 Generating an authorization token for this client ... lasts about 1 day

No SSH keys were found. We will generate a pair of keys for you. Created: C:\Users\User1\.ssh\id\_rsa.pub

Your public ssh key must be uploaded to the OpenShift server to access code. Upload now? (yes|no) yes

Since you do not have any keys associated with your OpenShift account, your new key will be uploaded as the 'default' key Uploading key 'default' from C:\Users\User1\.ssh\id\_rsa.pub ... done

IMPORTANT: remember name and location of your ssh key. In this case, the name of the public ssh key is default.pub. The name of the private one is default.

IMPORTANT: IF you want to create your own ssh keys, then see **PAGE 5**

Checking for a domain ... none Your domain is unique to your account and is the suffix of the public URLs we assign to your applications. You may configure your domain here or leave it blank and use 'rhc domain create' to create a domain later. You will not be able to create applications without first creating a domain. Please enter a domain (letters and numbers only) |<none>|: MyDomain Your domain name 'MyDomain' has been successfully created

Now to create the main cartridge for your application:

Checking for applications ... none Run 'rhc app create' to create your first application. Do-It-Yourself rhc app create <app name> diy-0.1 JBoss Application Server 7.1 rhc app create <app name> jbossas-7 JBoss Enterprise Application Platform 6.0 rhc app create <app name> jbosseap-6.0 Jenkins Server 1.4 rhc app create <app name> jenkins-1.4 Node.js 0.10 rhc app create <app name> nodejs-0.10 PHP 5.3 rhc app create <app name> php-5.3 PHP 5.4 rhc app create <app name> php-5.4 Perl 5.10 rhc app create <app name> perl-5.10 Python 2.6 rhc app create <app name> python-2.6 Python 2.7 Community Cartridge rhc app create <app name> python-2.7 Python 3.3 Community Cartridge rhc app create <app name> python-3.3 Ruby 1.8 rhc app create <app name> ruby-1.8 Ruby 1.9 rhc app create <app name> ruby-1.9 Tomcat 6 (JBoss EWS 1.0) rhc app create <app name> jbossews-1.0 Tomcat 7 (JBoss EWS 2.0) rhc app create <app name> jbossews-2.0 Zend Server 5.6 rhc app create <app name> zend-5.6 You are using 0 of 3 total gears The following gear sizes are available to you: small Your client tools are now configured.

Now create the main cartridge for your application with:

$ rhc app create <app\_name> <web\_cartridge\_name>

For example, to create a PHP 5.4 cartridge, I would run:

$ rhc app create myfirstphpapp php-5.4

By creating your Openshift application in this way, using the command line, Openshift automatically creates a git clone for your application, which you can then access and edit. To make changes:

$ git add .

$ git commit -m "A change to my application"

$ git push

However, this method is very stupid and clumsy. The better way is to connect with remote access to Netbeans. You will need your ssh key.

**Go to File > New Project**

**Create new PHP Application from Remote Server**

**Name your project**

**Set project URL to your Openshift application’s url.**

Ex: <http://yourappname-yourdomainname.rhcloud.com/>

**Set Upload Directory to /app-root/repo/php**

If that doesn’t work, try /app-root/repo

**Now comes the tricky path: Configure the Remote Connection**

1. Click manage

2. Name: Openshift

3. Host Name: yourappname-yourdomainname.rhcloud.com

4. User Name: 52bo372df292829308

Get this by going to your application page and get its URL, which should look like:

<https://openshift.redhat.com/app/console/application/52bo372df292829308-yourappname>

5. Password: leave blank

6. Private key file: /Users/joeshmo/.ssh/default

\*replace joeshmo with the name of the user for your computer

If you created your own ssh then replace default with the name of your own private ssh. In that case be sure that you’ve added it onto the settings tab of your account

7. Known Hosts File:

\*don’t make changes to this.

8. Initial Directory: /var/lib/openshift/52bo372df292829308

9. Click okay, you have created your remote connection. Now click next, wait for everything to load, a message should show up notifying you that the files from the Openshift application will be downloaded onto netbeans. There should be at least one index.php file.

10. Alright, now whenever you add a file to this project or make any changes and save it the Openshift application will be automatically updated.

**Next Step: Adding Database:**

**Add MySQL Database to existing Openshift Application:**

$ rhc cartridge-add <dbcartridge> --app <myappname>

For example, run this command in the command line:

$ rhc cartridge add mysql-5.5 –a yourappname

**Add phpMyAdmin**

$ rhc cartridge add phpmyadmin-4 –a myapp

Make note of all the credentials associated with your MySQL database cartridge. Record the User, Password, Database, Host, and Port.

If you forget, you can find this info with the command line, or look at the MySQL cartridge and phpmyadmin.

For the purposes of this tutorial I will provide the following credentials for a MySQL database:

User: admin1234

Password: bwoie9184bs02

Database: yourappname

Host: 127.1.2.3

Port: 3306

**Port-Forward**

$ rhc port-forward -a <app\_name>

example:

$ rhc port-forward –a yourappname

**Remote Access of MySQL Database from Netbeans**

1. Go to Services tab.

2. Right click on Databases

3. Select from the menu: New Connection

4. Click Next

5. Set Host to localhost

6. Set Port to the port of the port-forward (should still be 3306)

7. Set Database to yourappname

8. Enter User Name and Password for your MySQL database (this will let you access it)

9. Go to the steps of the rest of the setup wizard. It should be straightforward.

Now you can terminate the port forward with control-c on command line.

**Creating Your Own SSH Keys**

Say your user is joeshmo.

In the command line run:

$ cd /Users/joeshmo/.ssh/

To view your keys:

$ ls

To make new key:

**$ ssh-keygen –t rsa**

**Generating public/private rsa key pair.**

**Enter file in which o save the key (/Users/joeshmo/.ssh/id\_rsa): my\_key**

\* you can name it whatever you want.

Then command line will then generate all the info. There is no need to set password

To verify you made the key, run

$ ls

To view the full tag of your public ssh key (which in this case is my\_key.pub), download a text editor such as ATOM.

On ATOM click on ATOM>Install shell commands

Then install shell commands.

On command line, run:

$ atom my\_key.pub

This will open up ATOM text editor and display full tag for the my\_key.pub ssh public key.

**References:**

[**https://developers.openshift.com/en/getting-started-osx.html#client-tools**](https://developers.openshift.com/en/getting-started-osx.html#client-tools)

[**https://blog.openshift.com/getting-started-with-sftp-and-openshift/**](https://blog.openshift.com/getting-started-with-sftp-and-openshift/)

[**https://developers.openshift.com/en/managing-port-forwarding.html**](https://developers.openshift.com/en/managing-port-forwarding.html)

[**https://www.youtube.com/watch?v=udWzBQaIyUw&index=3&list=LLmT6T0T0RT9EMGkOXZmdBRg**](https://www.youtube.com/watch?v=udWzBQaIyUw&index=3&list=LLmT6T0T0RT9EMGkOXZmdBRg)