**Tutorial-Openshift: Deploying to Openshift**

Prerequisites

1. You’ve followed along in the tutorial­node and tutorial­git

2. You should have Node and Git installed.

Goals of this Tutorial

1. Sign up to Openshift
2. Deploy a simple nodejs project running a mongodb backend

Step 1: Sign Up to Openshift and Configure Your Environment

Create an account with Openshift at <https://www.openshift.com/app/account/new>

Install Openshift client tool at <https://www.openshift.com/developers/rhc-client-tools-install>

Openshift requires a SSH key for authentication. If you don’t already have a public/private ssh key pair, run:

$rhc setup

Running this command in your terminal/cmd will autogenerate a ssh key pair and upload it to Openshift. If you already have a ssh key, you can upload your public ssh key to Openshift on their website.

Step 2: Create Your App

Navigate to your designated app directory and run:

$ rhc app create myappName nodejs

This will create a nodejs project in Openshift with an example app. When Openshift created the app for you, it also created a remote git repository to which you can push your code. You can visit your new app at

http://myappName-yourDomain.rhcloud.com

Step 3: Add MongoDB to Your App

Addons to Openshift like MongoDB or Postgress are called cartridges. You can simply add these cartridges by running

$rhc cartridge add mongodb-2.4

To see a list of other cartridges you can add, run

$rhc cartridge list

Step 4: Integrate With Github

If you already have an app in a Github repo, you can integrate it with your new Openshift repo. By running the following in your newly created app directory, you can push and pull from your existing github repo.

$git remote add github <github repo url>

$git pull github master

Later, when you push to the Openshift repository, it will be referred to as “origin” just like you refer to your remote Github repository as “github”. When you update your Openshift repository, it will restart your app with the new changes.

**Important:** Remember to include the URL of your app in your Github repo in the “user\_proj/README.md”file before you turn in your project.

Notes:

1. Openshift provides each user with 3 free “gears” that each come with 1GB of storage.
2. When deploying to Openshift, it will try to automatically start the file called server.js in the main directory. If you wish to move your server to another location or rename it, add the following snippet of code in your packages.json.

"scripts": {

"start": "node $relative\_path\_from\_repo\_dir/serverName.js"

},

1. Openshift uses port 8080 and its own IP address. You can use the following to run your app on an Openshift gear.

var app = express();

var server = http.createServer(app);

var ipaddress = process.env.OPENSHIFT\_NODEJS\_IP || "127.0.0.1";

var port = process.env.OPENSHIFT\_NODEJS\_PORT || 8080;

server.listen( port, ipaddress);

1. You can access your Openshift server through the rhc client, or you can directly ssh into your server. The ssh command can be found on the side panel of the Openshift site. Openshift runs on standard Linux, and you can use standard commands.
   1. If you are a window’s user, you can ssh using PUTTY. More information can be found at <https://www.openshift.com/developers/install-and-setup-putty-ssh-client-for-windows>