

Workstation Setup

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Introduction

These instructions will give quick steps into getting ready to run a Riak. The Linux steps were tested with a clean Ubuntu Server 64bit 10.04 LTS and the OS X steps were done on a fairly clean MacBook Pro running 10.6.8.

There are helper scripts in the root of the Riak folder for starting, stopping, and joining the Riak nodes.

Helper Commands

```
$ bash start.sh
$ bash join.sh
$ bash stop.sh
```

Linux

General Notes

Any version of Linux will be acceptable. If this is a clean virtual machine install, use Ubuntu 10.04 Server LTS. It is command-line only, but has a pretty small footprint. The instructions for setting up a Linux machine will be based on the Debian Linux family but any any should work using the appropriate controls. The assumption is that this is installed already with a base configuration. Nothing special is required from the OS perspective.

Software Installation

```
$ sudo apt-get install build-essential libncurses5-dev openssl
$ sudo apt-get install libssl-dev git-core curl
$ wget http://erlang.org/download/otp\_src\_R14B03.tar.gz
$ tar zxvf otp_src_R14B03.tar.gz
$ cd otp_src_R14B03
$ ./configure && make && sudo make install
$ cd ..
$ git clone git://github.com/jkirkell/riak.git
$ cd riak
$ make all
$ make devrel
```

* the only difference between Basho's repository and mine is that I added an additional dev host.

Follow the steps under Virtual Machine Adjustments to configure your Riak cluster to be accessible from your host computer.

OS X

General Notes

XCode must be installed prior to performing the install steps below.

Software Install

```
$ curl -O http://erlang.org/download/otp\_src\_R14B03.tar.gz
$ tar -zxvf otp_src_R14B03.tar.gz
$ cd otp_src_R14B03
$ ./configure --enable-hipe --enable-smp-support --enable-threads \
--enable-kernel-poll --enable-darwin-64bit
$ make && sudo make install
$ git clone git://github.com/jkirkell/riak.git
$ cd riak
$ make all
$ make devrel
```

* the only difference between Basho's repository and mine is that I added an additional dev host.

Make sure to set the ulimit so you do not run into an file limites

```
$ launchctl limit maxfiles 2048 8192
```

Windows

General Notes

If you are running Windows, you will have to install VirtualBox or some other virtualization software and follow the same steps under Linux.

Settings

A safe configuration will be 6-8GB of disk space, 1GB RAM, and 1-2 virtual processors. Take a snapshot also, it will allow you to start off at a good spot without having to redo everything if you want to clean things up.

Virtual Machine Adjustments

If you plan to access your Riak cluster from the host, change your network settings to be “Host Only” and run the following within the VM.

```
$ sudo dhclient -r
$ sudo dhclient
$ sed -i 's/127.0.0.1/10.37.129.4/g' ~/riak/dev/dev1/etc/vm.args
$ sed -i 's/127.0.0.1/10.37.129.4/g' ~/riak/dev/dev1/etc/app.config
#repeat prior 2 steps replacing dev1 with dev2 - dev5
$ sed -i 's/127.0.0.1/10.37.129.4/g' ~/riak/start.sh
$ sed -i 's/127.0.0.1/10.37.129.4/g' ~/riak/join.sh
$ sed -i 's/127.0.0.1/10.37.129.4/g' ~/riak/stop.sh
```

Final Steps

When everything is ready, we will start up the nodes and create the cluster.

```
$ ~/riak/start.sh
$ ~/riak/join.sh
```