Installing Erlang

Contents

Riak requires Erlang R15B01.

For Erlang to build and install, you must have a GNU-compatible build system, and the development bindings of ncurses and openssl.

Erlang Version Note

The Riak binary packages for Debian and Ubuntu, Mac OS X, and RHEL and CentOS include an Erlang distribution, and do not require that you build Erlang from source. However, **you must download and install Erlang if you are planning on completing the Five-Minute Install**.

Install using kerl

You can install different Erlang versions in a simple manner with the kerl script. This is probably the easiest way to install Erlang from source on a system, and typically only requires a few commands to do so. Install kerl by running the following commands:

HTTP

```
curl -O https://raw.github.com/spawngrid/kerl/master/kerl
chmod a+x kerl
```

To compile Erlang as 64-bit on Mac OS X, you need to instruct kerl to pass the correct flags to the `configure` command. The easiest way to do this is by creating a `~/.kerlrc` file with the following contents:

Shell

```
KERL_CONFIGURE_OPTIONS="--disable-hipe --enable-smp-support
                        --enable-kernel-poll  --enable-darwi
```

Note that when building Erlang on a FreeBSD/Solaris system (including SmartOS), HIPE should be disabled on these platforms as well with the above `--disable-hipe` option.

Building with kerl on GNU/Linux has the same prerequisites as building from source.

Building the Erlang release of your choice involves one command. As of Riak version 1.2, you should build and use, say, Erlang version R15B01 like this:

Shell

```
./kerl build R15B01 r15b01
```

This builds the Erlang distribution and performs all of the steps required to manually install Erlang for you.

When successfully built, you can install the build as follows:

Shell

```
./kerl install r15b01 ~/erlang/r15b01
. ~/erlang/r15b01/activate
```

The last line activates the Erlang build that was just installed into `~/erlang/r15b01`. See the kerl readme for more details on the available commands.

If you prefer to install Erlang manually from the source code, the following section will show you how.

Installing on GNU/Linux

Most GNU/Linux distributions do not make the most recent Erlang release available, so you will need to install *from source*.

First, make sure you have a compatible build system and that you have installed the necessary dependencies.

Debian/Ubuntu Dependencies

Use this command to install the required dependency packages:

Shell

```
sudo apt-get install build-essential libncurses5-dev openssl
```

If you'll be using a graphical environment (such as for development purposes) and would like to use Erlang's GUI utilities, then you'll need to install some additional dependencies.

> Note that these packages are not required for operation of a Riak node and notes in the build output about missing support for wxWidgets can be safely ignored when installing Riak in a typical non-graphical server environment.

To install packages for graphics support, use this command:

Shell

```
sudo apt-get install libwxbase2.8 libwxgtk2.8-dev libqt4-ope
```

RHEL/CentOS Dependencies

Use this command to install the required dependency packages:

Shell

```
sudo yum install gcc glibc-devel make ncurses-devel openssl-
```

Erlang

Next, download, build, and install Erlang:

Shell

```
wget http://erlang.org/download/otp_src_R15B01.tar.gz
tar zxvf otp_src_R15B01.tar.gz
cd otp_src_R15B01
./configure && make && sudo make install
```

Installing on Mac OS X

You can install Erlang in several ways on OS X: from source, with Homebrew, or with MacPorts.

Source

To build from source, you must have Xcode tools installed from the Apple Developer website.

First, download and unpack the source:

Shell

```
curl -O http://erlang.org/download/otp_src_R15B01.tar.gz
tar zxvf otp_src_R15B01.tar.gz
cd otp_src_R15B01
```

Next, configure Erlang.

Mavericks (OS X 10.9), Mountain Lion (OS X 10.8), and Lion (OS X 10.7)

If you're on Mavericks (OS X 10.9), Mountain Lion (OS X 10.8), or Lion (OS X 10.7) you can use LLVM (the default) or GCC to compile Erlang.

Using LLVM:

```
Shell
CFLAGS=-O0 ./configure --disable-hipe --enable-smp-support -
--enable-kernel-poll --enable-darwin-64bit
```

Or if you prefer GCC:

```
Shell
CC=gcc-4.2 CPPFLAGS='-DNDEBUG' MAKEFLAGS='-j 3' \
./configure --disable-hipe --enable-smp-support --enable-thr
--enable-kernel-poll --enable-darwin-64bit
```

Snow Leopard (OS X 10.6)

If you're on Snow Leopard (OS X 10.6) or Leopard (OS X 10.5) with an Intel processor:

```
Shell
./configure --disable-hipe --enable-smp-support --enable-thr
--enable-kernel-poll  --enable-darwin-64bit
```

If you're on a non-Intel processor or older version of OS X:

```
Shell
./configure --disable-hipe --enable-smp-support --enable-thr
--enable-kernel-poll
```

Now build and install:

```
Shell
make && sudo make install
```

You will be prompted for your sudo password.

Homebrew

If you want to install Riak with Homebrew, follow the Mac OS X Installation

documentation, and Erlang will be installed automatically.

To install Erlang separately with Homebrew, use this command:

Shell

```
brew install erlang
```

MacPorts

Installing with MacPorts is easy:

Shell

```
port install erlang +ssl
```

Tutorial Nav: Installing and Upgrading

Installing and UpgradingInstalling on Debian and Ubuntu

These May Also Interest You

- Installing on AWS Marketplace
- Installing on Windows Azure
- Installing on Debian and Ubuntu
- Installing on FreeBSD
- Installing Riak from Source
- Installing and Upgrading