

Rolling Your Own Ruby Package

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What are we doing?

- Compile Ruby from source into an OS package (RPM for CentOS 7)
- Install package to a “server” as system Ruby
- Verify Ruby works

Why?

- Don't feel like using rbenv in production
- Would like Ruby managed by the system's package manager
- Use to help build a docker image
- Use with chef to provision a server
- Because you can

How we're going to do it

- Virtual Machine with the same distro version as production with all updates applied (CentOS 7)
 - Non-root user with sudo
- Install build tools
- Prep build environment
 - Download Ruby source code
 - Create/download/edit build configuration file
- Create package
- Install package

Build tools

```
$ sudo yum groupinstall 'Development Tools'
```

- gcc
- patch
- wget
- rpm-build
- redhat-rpm-config
- etc, etc, etc

Prep build environment

```
$ mkdir -p ~/rpmbuild/{BUILD,BUILDROOT,RPMS,SOURCES,SPECS,SRPMS}
```

```
$ echo '%_topdir %(echo $HOME)/rpmbuild' > ~/.rpmmacros
```

- Creates directories used by rpmbuild
- Sets configuration to tell rpm-build where folder structure is located

Prep build environment (Directories of interest)

- SOURCES
 - Holds the compressed source code
- SPECS
 - Files that describe how the package is to be built
 - Metadata about the package along with instructions on how to compile
- RPMS
 - When the package is built, the resulting .rpm file is placed in here

Prep build environment

- `$ cd ~/rpmbuild/SOURCES`
- `$ wget ftp://ftp.ruby-lang.org/pub/ruby/ruby-2.4.3.tar.gz`
- `$ cd ~/rpmbuild/SPECS`
- `$ # Write/fetch/get somehow spec file here`

Build the package

```
$ rpmbuild -ba ~/rpmbuild/SPECS/my_spec.spec
```

```
|
```

```
|
```

```
|>> File writes to ~/rpmbuild/RPMS/
```

Live Demo Goes Here...

For those playing the home game...

```
$ rpmbuild -ba ~/rpmbuild/SPECS/ruby243.spec
```

```
$ sudo yum install readline-devel ncurses-devel gdbm-devel openssl-  
devel libyaml-devel libffi-devel zlib-devel
```

```
$ rpmbuild -ba ~/rpmbuild/SPECS/ruby243.spec
```

```
$ sudo yum --nogpgcheck install ruby-2.4.3-1.el7.centos.x86_64.rpm
```

```
# In /etc/profile.d/ruby.sh to install gems (or in the user's .bashrc) ...
```

```
# export PATH=$HOME/.gem/ruby/2.4.0/bin:$PATH
```

```
# export GEM_HOME=$HOME/.gem/ruby/2.4.0
```

The end!

- View the "text version" of this presentation at:
<https://t27duck.com/posts/3-building-own-ruby-rpm-for-centos>
- Find me at:
 - Twitter: @t27duck
 - Github: t27duck
 - IndyHackers Slack + Flowdock: t27duck
- Slides found at:
 - <https://github.com/t27duck/showandtell>