Open Source Systems Administration

SCaLE12x Infrastructure.Next
21 February 2014

Elizabeth Krumbach Joseph
Automation & Tools Engineer @ HP

lyz@princessleia.com
@pleia2

Elizabeth Krumbach Joseph

- Linux hobbyist since 2002

- Professional systems administrator since 2006

- Contributor to Ubuntu, Debian and OpenStack projects

- But perhaps most importantly...

OpenStack Infrastructure

We have open sourced our infrastructure!

Grab:

```
git clone git://git.openstack.org/openstack-infra/config
```

Or just browse:

https://git.openstack.org/cgit/openstack-infra/config/tree

All projects:

```
https://git.openstack.org/cgit/openstack-infra/
```

Elizabeth Krumbach Joseph
@pleia2

Why?

Examples are awesome

(read: I don't want to spend all month figuring out how to use your crazy infrastructure)

Elizabeth Krumbach Joseph
@pleia2

Why?

Encourages better practices

Elizabeth Krumbach Joseph
@pleia2

Why?

Allows others in your organization to suggest changes

Elizabeth Krumbach Joseph
@pleia2

Why?

Sharing is nice

Elizabeth Krumbach Joseph
@pleia2

OK, so how?

- Prepare policies

- Segregate code

- Document

- Share!

Elizabeth Krumbach Joseph
@pleia2

Have an open source policy

All software used in your infrastructure is
Open Source

...if not, segregate out proprietary

Elizabeth Krumbach Joseph
@pleia2

Licenses!

Add a license to your configuration files :)

Seriously.

This is important.

Elizabeth Krumbach Joseph
@pleia2

Puppet: Step 1

For anything generic that others may want to use, leverage existing modules or write your own with the intent of sharing

Apache
MySQL
Reviewday

(You're already doing this, right?)

Elizabeth Krumbach Joseph
@pleia2

Puppet: Step 2

Split out non-sensitive custom configurations into your own module

Elizabeth Krumbach Joseph
@pleia2

Puppet: Step 3

Use Hiera for sensitive data

(Hiera is my favorite thing ever)

Elizabeth Krumbach Joseph
@pleia2

Document

- Links to source

- Work flows

- Contribution instructions

  - Direct commits/reviews

  - Bug reports

- Bootstrapping and glue

Elizabeth Krumbach Joseph
@pleia2

Share!

(Oh, and make sure you have a license)

Elizabeth Krumbach Joseph
@pleia2

Who else is doing it?

Debian: https://dsa.debian.org/

Fedora: https://fedoraproject.org/wiki/Infrastructure

Mozilla: https://wiki.mozilla.org/ReleaseEngineering/PuppetAgain

Elizabeth Krumbach Joseph
@pleia2

Resources

OpenStack Project Infrastructure docs:
http://ci.openstack.org/

OpenStack Infrastructure repository:
https://git.openstack.org/cgit/openstack-infra/

Elizabeth Krumbach Joseph
@pleia2