

# Presenting Chef Solo

Tell me again: Why didn't you automate that?

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# whoami

- Head of Technology @ Relay Network
- Consumer  $\Leftrightarrow$  Billers
- I Love Open Source

(and don't begrudge commercial software)



# What's my Goal?

Should I...

- Teach you how to write a recipe?
- Teach you how to run chef?
- Contrast with CFEngine, Puppet, etc.?

For the love of Pete:  
Automate!

# Why: Repeatability

- AKA: Configuration Management
- Not just for ‘Software’
- “But I’m only going to do this once”

# Why: A Record

- Forces you to plan, to write down what you expect to happen.
- Can now start to measure and document the unexpected
- Lets you see where you can introduce checkpoints and recovery plans
- You can see exactly what you did...months from now

# Why: Good Habit

- You brush your teeth every day, it's a good habit.
- All of this gets easier if you just do it.
- Practice is worth more than I can tell you.

# How'd I Get Here?

- 'Traditional' Software Developer
- Joined Highly Skilled Team: had to set up environment w/no docs
- Demo Day + Hosting Provider Issues
- Joined Relay This Year: 1, 2, 1, 2



# Enough!

# What is Chef?

- A tool for Devops
- A Framework

# WTF is Devops?

- Blurring of Development and Operations
- Operations == Traditional IT
- System Administrators already knew this
- Simply the idea that the dichotomy wasted resources, time, lead to inefficiencies
- Brought on by the move to virtualization, to the cloud.

# Chef Solo

- Cookbooks, Recipes, Resources, Nodes, Roles, Providers, Templates
- Confession: I am partway through my journey with Chef.

# What For?

- Workstations
- Staging and Testing Environments
- I now get a scary feeling when I work on systems that I haven't used these kinds of tools to set up - I know I can't reproduce their state (crap!)
- Production Systems

# Getting Started

- You won't do it 'right' the first time.
- Who the F\*&%!K cares?
- I'm not doing it 'right' (things have changed since I started)
- Do it anyway, you'll learn, use what you learn to improve as you go.
- Practice, above all, Practice

# How I Got Started (mostly)

- `gem install chef`
- `git clone git://github.com/opscode/chef-repo.git`
- `cd chef-repo`
- `rm -rf cookbooks`
- `git clone git://github.com/opscode/cookbooks.git`

# How I Got Started (mostly)

- `mkdir site-cookbooks`
- `cp -r cookbooks/postgresql/ site-cookbooks/my-recipe`
- modify the recipe



# How You Should Get Started

- Read The Current Introduction
- Learn Knife
- Don't follow my example too closely

# Running Chef Solo

- Create a node config: config/app-server.json
- rsync or scp -r the whole chef-repo to a node
- ssh to the node and run:
  - `chef-solo -c config/solo.rb \`  
`-j config/app-server.json`

# Node Configuration

```
{ "snapclean": {  
  "users": [ { "name": "kyle" },  
              { "name": "snapclean" },  
              ... },  
  "recipes": [  
    "snapclean-base",  
    "snapclean-nginx",  
    "snapclean-unicorn"  
  ]  
}
```

# Recipes

- Gotcha!
  - Names: not just a string
  - Declarative: what runs and when
- Using Standard Recipes
  - Overriding Defaults
- Creating Your Own

# recipes/default.rb

- show some examples and best practices here
- Talk about ohai(?)
- How configuration presents it self (node global)
- Running Scripts
- Installing Packages
- Directories, Tempaltes

# templates/default/foo.config

- Show an example and discuss best practices
- Passing Parameters
- Accessing Node Configuration

# Managing

- Your Cookbooks and Recipes
- Develop Shared Libraries
- Keep an eye on when to make something configurable vs making things too flexible to maintain.

# Automate Please

- Get Started
- Share your Experiences
- Continually Improve



# Good Luck!

Luck Favors the Paranoid, I mean Prepared  
(practice).

# Thank You!

# References

- <http://wiki.opscode.com/display/chef/Home>