CHEF

IT AUTOMATION FOR SPEED AND AWESOMENESS

PRESENTATION BY JUSTIN MCBRIDE

PURPOSE

- Manage software packages across many servers
- Maintain configuration across the different machines
- Ensure process uptime and service reliability

- Easily do this through Ruby code files, not management interfaces

PURPOSE EXPLAINED

- One Ruby file +
- Many servers
- =
- Unified and consistent machine environments

SIMPLE EXAMPLES

file: webserver.rb

```
package 'apache2'
```

When the 'chef-apply' command is run on this file, the machine will install the package 'apache2', and configure it appropriately.

LESS SIMPLE BUT MORE USEFUL EXAMPLE

file: webserver.rb

```
package 'apache2'
service 'apache2' do
   supports :status => true
   action [:enable, :start]
end
```

- Installs the package 'apache2'
- Tells Chef that the apache2 package supports the 'status' variable
- Requests that Chef enables and starts the apache2 service

COMMON USES

- Distributed Database Systems
- Load distribution for web services
- Workstations

LARGE SCALE USERS

- Facebook
- AirBnB
- Expedia
- Prezi
- Rackspace

BASICS OF CHEF

- Uses the Ruby language to describe system configurations
- Each file is called a 'recipe'
- Multiple recipes can be run together, called 'cookbooks'
- Can be run in Client-Server mode, or in 'Solo' mode
- Each client is called a 'node'

OTHER FEATURES

- Full analytics
  - Changes made by Chef
  - Updates that need to be made
  - Efficiency reports
- Community Marketplace
  - Other users can share their Cookbooks
- Server Replication (Premium)
- Management Console (Premium)

SUPERMARKET

apache 0.0.5 Updated March 13, 2012 — melezhik

various apache server related resource provides (LWRP)

```
cookbook 'apache', '~> 0.0.5'
```

SUPPORTED PLATFORMS

5,276,696 TOTAL DOWNLOADS 8 FOLLOWERS Follow

apache2 3.0.1 Updated February 18, 2015 — svanzoest

Installs and configures all aspects of apache2 using Debian style symlinks with helper definitions

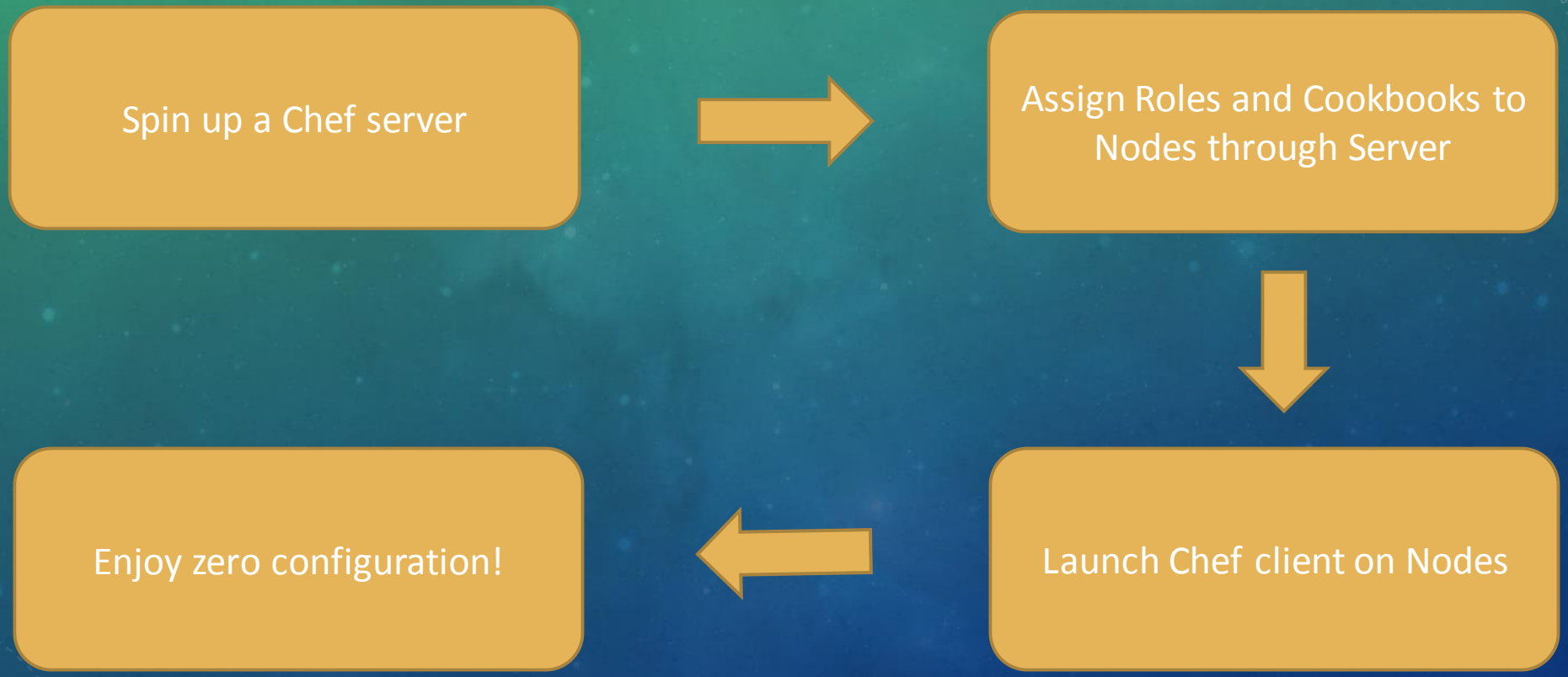
```
cookbook 'apache2', '~> 3.0.1'
```

SUPPORTED PLATFORMS

58,005,928 TOTAL DOWNLOADS 431 FOLLOWERS Follow

zen_apache 1.1.0 Updated April 4, 2015 — chammer

GENERAL FLOW



INTERFACING WITH CHEF

- Utility named 'Knife'
- Command line utility to manage all nodes
- Can add recipes to nodes
- Create roles for nodes