## Tasty Infrastructure

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# Systems Integration Framework

#### Tenets of Chef

- Manage servers with code, not command lines.
- Repeatable, documented, and revision controlled.
- Make decisions based on a global view, not just a local one.

## Building Blocks

```
cookbooks/
  cookbook name/
    metadata.rb
    README.rdoc
    attributes/
    definitions/
    files/
    libraries/
    recipes/
    templates/
```

#### Metadata

```
maintainer
                "Opscode, Inc."
maintainer email "<a href="maintainer.cookbooks@opscode.com"">cookbooks@opscode.com</a>"
                    "Apache 2.0"
license
                    "Installs passenger for Apache2"
description
                   IO.read(File.join(File.dirname(__FILE__), 'README.rdoc'))
long description
version
                    "0.7"
%w{ packages ruby apache2 rails }.each do |cb|
  depends cb
end
%w{ redhat centos ubuntu debian }.each do |os|
  supports os
end
attribute "gems path",
  :display name => "Gems Path",
  :description => "Get the gem env gemdir",
  :default => "gem env gemdir"
```

## Recipes

- Resources
- Attributes
- Templates
- Definitions
- Libraries

#### Resources

- Cron
- Directory
- Execute
- File
- Group
- HTTP Request
- Link
- Mount
- Package

- Remote Directory
- Remote File
- Route
- Script
- Service
- Template
- User

#### Attributes

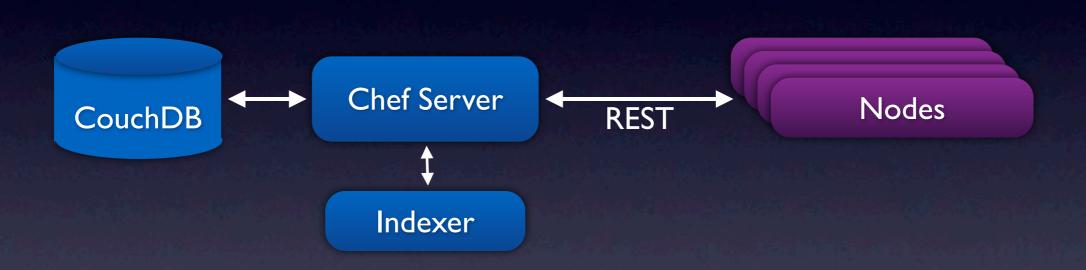
- Just JSON. No magic.
- Merged with the persisted node data at runtime.
- Can be overriden or have defaults set in roles/recipes.
- {"haproxy": {"port": "8000" } }
   node[:haproxy][:port] #=> 8000

## Templates

- Plain old ERB files. Variables are usually bound to the node attributes.
- Contrived example: /etc/sudoers

```
# Grant sudo access to the following group:
%<%= node[:sudo][:admin_group] %> ALL=(ALL) ALL
```

## Moving Parts



#### Ohai!

```
{
"kernel": {
  "machine": "x86_64",
  "name": "Linux",
  "os": "GNU\/Linux",
  "version": "#1 SMP Wed Apr 1 21:34:13 UTC 2009",
  "release": "2.6.27-11-server"
},
"platform_version": "8.10",
"platform": "ubuntu",
"ipaddress": "192.168.2.85",
},
"network": {
    "eth0": {
      "flags": [
        "UP",
        "BROADCAST",
```

# Stop. Demo Time.

#### Learn More

- Opscode Blog:
  - http://blog.opscode.com/
- Chef Wiki:
  - http://wiki.opscode.com/display/chef/Home
- Freenode IRC: #chef