

**Enjoy! This month's food provided by...**

vmware®

# Agenda

6:30pm - 7:00pm: Introductions and updates

7:00pm - 8:30pm: Developer tools with OpenStack

# Quick updates

- April meeting will be **re-scheduled** to avoid conflicting with OpenStack Summit in Austin, TX
- Exact date of April meeting will be announced soon
- What interest in resuming building OpenStack on our laptops?
- Any questions/concerns/suggestions?

**So you have an OpenStack cloud...now what?**



openstack™  
CLOUD SOFTWARE

# Developer tools with OpenStack

- Devs have a number of "low-friction" tools they're already using
- These tools include Vagrant, Docker Machine, and Terraform
- Let's look at how users can use these tools with OpenStack
- All materials from this presentation are available via GitHub (<https://github.com/lowescott/openstack-denver-meetup>)

# Vagrant and OpenStack

- Vagrant (<http://www.vagrantup.com>) is well-known for manipulating local VMs, but you can also use it with OpenStack
- Allows users to use same vagrant up commands they already use
- Consumes capacity on your OpenStack cloud instead of on local laptops, but the user experience is virtually identical
- So what are the difference pieces that are involved?

**Demo:**

Vagrant and OpenStack

# Docker Machine and OpenStack

- Docker Machine (<https://www.docker.com/products/docker-machine>) is very similar to Vagrant, but tailored for use with Docker
- VMs/instances created by Docker Machine are automatically provisioned with Docker Engine
- Can leverage a number of different providers, including OpenStack
- How about a demo?



**Demo:**

Docker Machine and OpenStack

# Terraform and OpenStack

- Terraform (<https://www.terraform.io/>) may be slightly more Ops-oriented than Dev-oriented
- Similar to Heat, but supports multiple providers, platforms, and services
- If using *only* OpenStack, then Heat is fine
- If using multiple platforms/providers/services, then Terraform may make more sense
- Ready to see a demo?

**Demo:**

Terraform and OpenStack

# Questions & Answers

# Thanks!

*We (the meetup organizers) are always open to your feedback!*

Blog: <http://blog.scottlowe.org>

Twitter: [@scott\\_lowe](#)

GitHub: <https://github.com/lowescott>

Life: Colossians 3:17