Hands-on BOSH training

Please check in and log into your VM within 15 min

BOSH Training Program Notes

- Get an IP from the list on-screen
- Goal is show the puzzle box top - not do the puzzle
- Will do a fast run-through and will have time to explore and ask questions
- There are several CF staff to help you

Login and verify (within 15 min)

- wget -q -O- http://goo.gl/5ubNLm > ~/tmp/id_rsa_meetup
- chmod 400 ~/tmp/id_rsa_meetup
- ssh-add ~/tmp/id_rsa_meetup
- *ssh -A ubuntu@<IP>*
- try: '*bosh status*'

✦ BOSH tl;dr

- BOSH is packaging, distribution, orchestration and management tool
- Director - the main actor
- Hands-on:
  - The "stemcell" - Ubuntu image with an agent
  - The "release" - Like an SRPM
  - The manifest - details about your particular deployment of a release

Upload the stemcell (20 secs)

- *bosh stemcells*
- *bosh upload stemcell ~/bosh-stemcell-389-warden-boshlite-ubuntu-trusty-go_agent.tgz*
- *bosh stemcells*

The dummy release (12 secs)

- The 'dummy-boshrelease' is a training release
- *cd ~/workspace/dummy && bosh create release --force # take the default*
- *bosh upload release*
- *bosh releases # note the sha1*

✦ Deploy the release (45 sec)

- *bosh vms*
- *bosh deployment ~/workspace/dummy/meetup/deploy-i-*-manifest.yml*
- *bosh status*
- *bosh deploy* # type 'yes' to all
- *bosh vms*

VM info

- *bosh vms --details*
- *bosh vms --vitals*
  - can be supplied to metrics/monitoring systems

Updating a deploy

- *EDITOR=vim bosh edit deployment*
  - *`/^jobs:`*
  - increment instance count line 9
  - add another static IP after line 14
    - *"   - 10.244.0.6"*
  - *`wq!`*
- *bosh deploy && bosh vms*

✦ Add a new deploy

- There's another deployment, same release, but additional components
- *bosh deployment ~/workspace/dummy/meetup/all-dummy-deploy-*-manifest.yml*
- *bosh -n deploy # great for CI*
- *bosh vms*

ssh onto a job vm

- *bosh ssh*
- select 3
- SET a passwd (use '*f*')
- Press "return" at the ssh passphrase prompt
- *sudo -i*
- enter '*f*'

Going to reboot all the bosh-lites!

- *bosh vms --details # note 'CID' & 'Agent ID'*
- REBOOT!
- Check your 'uptime' to make sure it's really rebooted
- boxes will be rebooting!
- Will do a recovery

BOSH cloud check

- After VMs reboot, will reinstantiate deployments
- *bosh cck*
- *ls ~/workspace/dummy/meetup/*
- *bosh deployment ~/workspace/dummy/meetup/dep*yml*
- *bosh cck --auto*

BOSH download manifest

- *bosh deployments*
- *bosh download manifest <deployment-name> ~/dummy.yml*

✦ BOSH recreate

- bosh ssh to a VM;
- *sudo rm -rf /var/vcap/jobs/**
- *exit*
- *bosh vms --details*
- *bosh recreate <job> <index>*
- *bosh vms --details*

BOSH releases

- The community repos
  - https://github.com/cloudfoundry-community
  - 100+ repos
- CF Platform teams
  - BOSH Releases for the newest tech
  - Various Docker releases
  - Alpha GCE CPI for BOSH bosh-google-cpi

✦ Resources

- https://github.com/pivotal-cf-experimental/bosh-classroom

  - Uses tools from https://github.com/pivotal-cf-experimental/basic-env

  - The scripts are rough, but functional - YMMV