

# Dev/Stage/Prod Parity with Vagrant

DITCH /(WIMIX)AMP(P)?/ AND NEVER LOOK BACK!

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# Who am I?

- Web Developer, Parallel Public Works
  - <http://parallelpublishing.com>
- Dual background: IT/WebDev
  - Yay DevOps!
- Linux enthusiast since late 90's



# Who are We?



- Servicing public sector (mostly), with Drupal (mostly)
  - Making government digital services more efficient and affordable
- Event-based Crowdfunding platform:
  - <http://www.canopygiving.com/>
- Clients



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# W4 (What's Wrong With WAMP)?

- Configuration mismatch
- Software version mismatch
- Missing performance enhancements
- Applies to MAMP, XAMPP, and other local AMP stacks as well

# Why Vagrant?

- Cross-platform
- Nearly everything can be scripted
- Not a permanent resident (hence the name)
- Useful plugins
- What about Docker?
  - Still needs VM to run on Mac/Windows
    - Usually Virtualbox (e.g. Kitematic)

# Why Vagrant: Cross Platform

- Linux
- Mac
- Windows\*

\*Additional/alternate configuration may be required

# Why Vagrant: Scripting

- Multiple Provisioners available
  - Chef
  - Puppet
  - Ansible
  - BASH (including one-off, “inline” commands)
- Vagrantfile is a simple Ruby script
  - Configuration can be broken out into JSON files
    - Good for sensitive info

# Why Vagrant: Not Permanent

- Disposable: “vagrant destroy” command
- Everything in synced folders is preserved
- Provisioner scripts preserve configuration



# Why Vagrant: Plugins

- Cachier (“vagrant plugin install vagrant-cachier”)
  - Caches deb, rpm, npm, Ruby Gems, Composer, etc. packages
- HostsUpdater (“vagrant plugin install vagrant-hostsupdater”)
  - Adds specified domains to HOST machine’s hosts file on “vagrant up”, “vagrant reload”.
  - Deletes on “vagrant halt”, “vagrant suspend”, “vagrant destroy” commands
- Many more...

# Where can I use Vagrant?

- Hypervisors
- Containers
- Cloud
- Even bare metal (once OS installed, not as useful)
- Plugins called “Providers”

# Where Vagrant: Hypervisors

- Virtualbox (Linux, Windows, Mac—default provider)
- (paid plugin) VMWare Desktop (Win), Fusion (Mac)
- (open source) VMWare Vsphere
- Hyper-V (Windows Server and desktop)
- Parallels (Mac)
- KVM, Xen (Linux)

# Where Vagrant: Containers

- Linux-only
  - Mac containers on the way?
- LXC
- Docker
  - Still requires Dockerfile configuration in addition to Vagrantfile

# Where Vagrant: Cloud

- AWS
- Google
- Rackspace
- DigitalOcean
- Vultr
  - Cheap, unmanaged, KVM-based VPS, like DO

# Vagrant Tips

- Store sensitive configuration details in JSON files
- Store critical synced folders outside of Vagrant box root folder
  - e.g. “../www” instead of “./www” for webroot
- Sync sites/default folder separately from webroot
  - (combined in guest VM when Vagrant syncs)
- Save commonly-used variables in Vagrantfile or external JSON
  - Can be passed to provisioner scripts as command switch

# Thank You!!!

Project at <https://github.com/stereoplegic/Drupal-DevStageDrop>  
Connect with me at <http://mikebybee.com> or by clicking the links below!

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