whoami

DigitalOcean

phpwomen

dev-human

phpansible

amsterdam PHP

DRIVE with Vagrant and Ansible
@erikaheidi / International PHP Conference 2015
Back to 2006...
PHP Development Environments

DRIVE with Vagrant and Ansible
@erikaheidi / International PHP Conference 2015
# Sharing the Project

![WinZip window](image)

## File List

<table>
<thead>
<tr>
<th>Name</th>
<th>Modified</th>
<th>Size</th>
<th>Ratio</th>
<th>Packed</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>index.htm</td>
<td>2/4/00 1:00 PM</td>
<td>6,363</td>
<td>68%</td>
<td>2,041</td>
<td></td>
</tr>
<tr>
<td>index_next_active.gif</td>
<td>2/4/00 1:00 PM</td>
<td>109</td>
<td>2%</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>index_next_disable...</td>
<td>2/4/00 1:00 PM</td>
<td>88</td>
<td>0%</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>index_prev_active.gif</td>
<td>2/4/00 1:00 PM</td>
<td>111</td>
<td>2%</td>
<td>109</td>
<td></td>
</tr>
<tr>
<td>index_prev_disable...</td>
<td>2/4/00 1:00 PM</td>
<td>92</td>
<td>0%</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>index_outline_colla...</td>
<td>2/4/00 1:00 PM</td>
<td>129</td>
<td>3%</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>index_outline_expan...</td>
<td>2/4/00 1:00 PM</td>
<td>133</td>
<td>2%</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>index_space.gif</td>
<td>2/4/00 1:00 PM</td>
<td>807</td>
<td>91%</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>index_endshow.htm</td>
<td>2/4/00 1:00 PM</td>
<td>373</td>
<td>37%</td>
<td>235</td>
<td></td>
</tr>
<tr>
<td>index_navigation_b...</td>
<td>2/4/00 1:00 PM</td>
<td>1,916</td>
<td>62%</td>
<td>731</td>
<td></td>
</tr>
<tr>
<td>index_navigation_navi...</td>
<td>2/4/00 1:00 PM</td>
<td>628</td>
<td>45%</td>
<td>345</td>
<td></td>
</tr>
</tbody>
</table>

**Selected 0 files, 0 bytes**  **Total 18 files, 24KB**

---

**DRIVE with Vagrant and Ansible**  
@erikaheidi / International PHP Conference 2015
Deployment
Hosting
Now back to 2015...
What a time to be alive!
But, still...

“It works on my machine”
What if I told you...

There's a way to make your development process more consistent, while also smoothing the transition from dev to prod?
Presenting: D.R.I.V.E

- Disposable
- Replicable
- Isolated
- Versioned
- Environment
Presenting: D.R.I.V.E

- Disposable
- Replicable
- Isolated
- Versioned
- Environment
D.R.I.V.E

Disposable & Isolated

- Virtual Machines, Containers
  - VirtualBox, VMWare, KVM, etc
  - Docker

Replicable & Versioned

- Configuration Management
  - Ansible, Puppet, Chef, Salt, etc
DRIVE with Vagrant and Ansible
@erikaheidi / International PHP Conference 2015
Vagrant

- Virtual Machines + Configuration Management
- Easy DRIVE for DEV
- Made Conf. Management popular with developers
  - And we nailed it!
"Otto is very young and while we tout it as a successor to Vagrant, it'll take time to reach the maturity level that Vagrant is already at. We don't recommend dropping Vagrant today, but look to Otto for the future."
How Vagrant Works

- VirtualBox
- VMWare
- DigitalOcean
- AWS
- (…)

- Puppet
- Chef
- Ansible
- Shell
- (…)

DRIVE with Vagrant and Ansible
@erikaheidi / International PHP Conference 2015
The Vagrantfile

```ruby
Vagrant.configure("2") do |config|
  config.vm.box = "ubuntu/trusty64"
  config.vm.network "forwarded_port", guest: 80, host: 8080
  config.vm.synced_folder "/vagrant", "."
  config.vm.provision "shell", inline: "echo hello"
end
```

DRIVE with Vagrant and Ansible
@erikaheidi / International PHP Conference 2015
This whole provisioning thing...

1.21 GIGAWATTS?!?
ANSIBLE
Ansible

- Simple and straightforward language (YAML)
- Agentless Architecture
- Huge collection of built-in modules
- Great community, very popular on Github - 13k+ stars and almost 4k forks
Playbook Example

---

- hosts: all
  sudo: true
  tasks:
    - name: Update apt-cache
      apt: update_cache=yes
    - name: Install Nginx
      apt: pkg=nginx state=latest
Playbook Resources

- Variables
- Loops
- Conditionals
- Templates
- Ansible Vault
LET'S DRIVE?
#Vagrantfile
Vagrant.configure("2") do |config|

config.vm.box = "ubuntu/trusty64"
config.vm.network "forwarded_port", guest: 80, host: 8080

config.vm.provision "ansible" do |ansible|
  ansible.playbook = "demo.yml"
end

end
---
- hosts: all
  sudo: true
  vars:
    packages: ["nginx", "php5-fpm"]
  tasks:
    - name: Update apt-cache
      apt: update_cache=yes
    - name: Install Packages
      apt: pkg={{ item }} state=latest
      with_items: packages
    - name: Change Nginx Vhost File
      template: src=default.tpl dest=/etc/nginx/sites-available/default
      notify: restart nginx
  handlers:
    - name: restart nginx
      service: name=nginx enabled=yes state=restarted
DEMO

When this baby hits 88 miles per hour... You're gonna see some serious shit

DRIVE with Vagrant and Ansible
@erikaheidi / International PHP Conference 2015
when this baby hits 88 mph...
1. Keep things organized with Roles

# playbook.yml
---
- hosts: all
  sudo: true
  vars:
    doc_root: /vagrant/web
  roles:
  - init
  - webserver

- roles:
  - init
    tasks:
      - main.yml
  - webserver
    handlers:
      - main.yml
    tasks:
      - main.yml
    templates:
      - vhost.tpl
2. Use Phansible as bootstrapper
2. Use Phansible as bootstrapper

```yaml
# inventories/dev
[phansible-web]
192.168.33.10
```
3. Use group_vars for multistage

```yaml
#inventories/prod
[web-prod]
myapp.io

#group_vars/web-prod.yml
project_root: /var/www
doc_root: /var/www/web
sys_packages: ["vim","fail2ban"]
```
4. Use ansible-vault for sensitive data, like credentials

$ ansible-vault encrypt group_vars/web-prod.yml

before

```
twitter:
  app_token: MYSUPERTOKEN
  app_secret: MYSUPERSECRET

otherthing:
  secret_thing: SECRET
  secret_other: TOPSECRET
```

after

```
$ANSIBLE_VAULT;1.1;AES256
3935616630316539333061363437393561663031653933306136343739356166303165393330613634373
63661343834313564386262323234303063353965613863383732353631303265623232306338303
32665306531633835630a36306133653938353134386232346132653432623766366161333234613265343262376636616133
334663939643962613036373133356464636232653532366333
```
4. Use ansible-vault for sensitive data, like credentials

$ ansible-vault view path/to/varfile.yml

$ ansible-vault edit path/to/varfile.yml

$ ansible-playbook (...) --ask-vault-pass
Vagrant Cookbook

bit.ly/vc-ipc15
QUESTIONS?
Please rate the talks you attend!

https://joind.in/event/view/4907
THANKS!

@erikaheidi
erikaheidi.com

See you in the future.