

Ansible / Vagrant Runbook

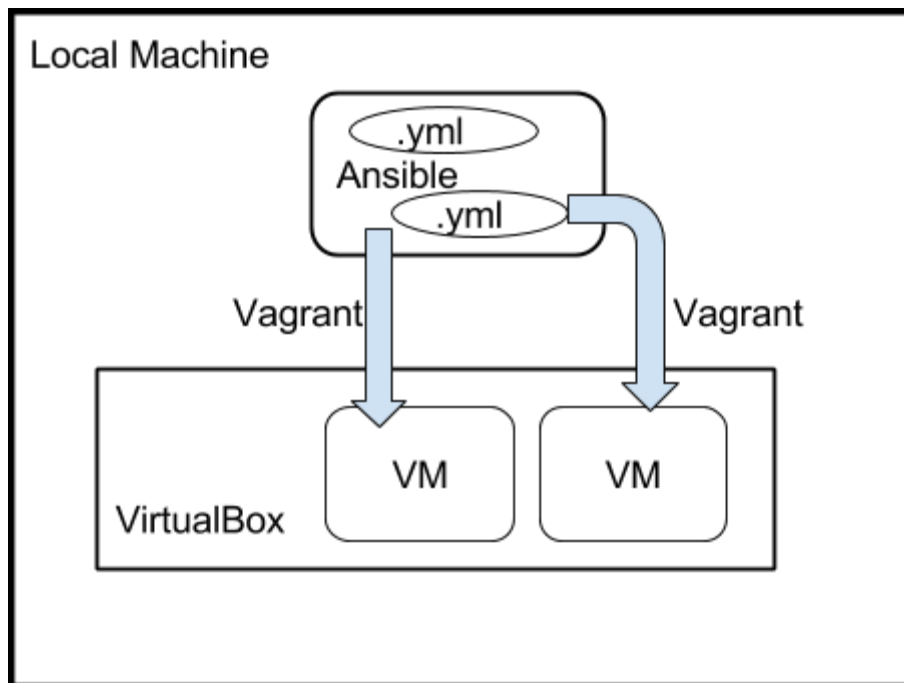
Short Description

Using Ansible to create web and database playbooks and Vagrant to quickly spin up and destroy VMs.

Required Software

Some terminal software (if not Mac or Linux), Ansible, Vagrant, Virtualbox, vagrantfile (if not downloaded yet)

Architecture Diagram



Deployment

Download Ansible:

http://docs.ansible.com/ansible/intro_installation.html

Download Vagrant:

<https://www.vagrantup.com/downloads.html>

Download Virtualbox:

<https://www.virtualbox.org/wiki/Downloads>

Make sure you have a vagrantfile (with iso)

If not:

`vagrant init`

Spin up vm:

`vagrant up`

In case of authentication error: <https://github.com/mitchellh/vagrant/issues/7610>

Edit local ssh-config file:

`vagrant ssh-config`

Copy output

`sudo vi /etc/ssh/ssh_config`

Paste output

Command ssh hostname should immediately log into vm

Once ansible playbooks are finished and debugged, run command to run playbooks:

`ansible-playbook -i hosts.ini playbook.yml`

To shut in vault:

`Ansible-vault create secrets.yml`

Input vault password

List passwords and keys in opened file. Save file.

If file needs to be edited: `ansible-vault edit secrets.yml`

Return to other playbooks and remove those passwords and keys

Now run playbooks with command:

`ansible-playbook -i hosts.ini playbook.yml --ask-vault-pass`

That's all folks!

Issues

Title: *Memory Full*

Description: *Logs fill up all the memory.*

Remediation Steps: *Automate logs to be copied to another location. Delete logs. Repeat every week or so.*

Title: *Service Process Dies*

Description: *When a service process stops working on a vm.*

Remediation Steps: *Vagrant destroy, vagrant up, run ansible playbook on vm.*

Title: *Blackout*

Description: *When the power is going down and service must stay up.*

Remediation Steps: *Back up server / vms. Cloud computing like AWS is recommended. Safely shut down servers before intentional blackout and point IPs to backup service. Start servers back up and resume service on them.*

Title: Memory Overload

Description: *When a process(es) try to use too much memory and freeze vm.*

Remediation Steps: *Ctrl - C or open a new terminal and vagrant destroy. Use vagrant up to spin up a new vm. Run ansible to reload information back on server.*