

Building the Ansible Environment



JP Toto

INFRASTRUCTURE DEVELOPER

@jptoto <http://jptoto.jp>



Globomantics Servers



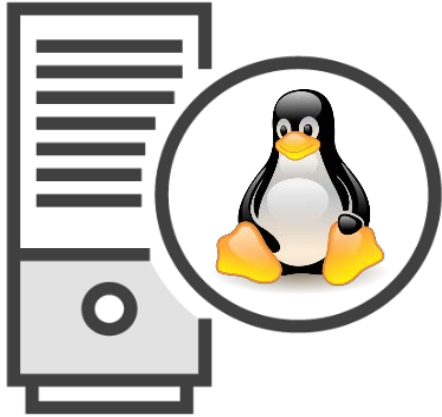
We'll create local virtual servers to represent the Globomantics servers

Two Windows web servers, one Windows database server

We'll need one Linux server as the Ansible "control" computer



Start with a Small Test



Ansible Linux Control Server



Windows Target Server



Windows Desktop



We'll Need a Hypervisor

 **Parallels®**

- Free
- Open Source
- Works great
- Runs on any platform



vmware®



Microsoft

Hyper-V

- Ruby manifest files
- Automates virtual machines



Platform Considerations



Mac OS X (host)



Windows (host)



**** If you're hosting / running your hypervisor on Windows, you don't need a Windows VM**

Demo



Create a Vagrant file with details about how to create the virtual machines

I've got a Windows instance already built – more on that in a bit

Once set up, we'll test our connections between virtual machines

VirtualBox: <http://virtualbox.org>

Vagrant: <https://www.vagrantup.com>



Where'd Those VM Images Come From?



```
config.vm.define "control" do |ctl|
  ctl.vm.box = "ubuntu/trusty64"
  ctl.vm.hostname = "ubuntu-control"
  ctl.vm.network "private_network", ip: "192.168.57.2"
  ctl.vm.provider "virtualbox" do |vb|
    vb.memory = 1024
  end
end
```

https://atlas.hashicorp.com/ubuntu/boxes/trusty64

boxes / ubuntu/trusty64 / box versions

This version was created 10 hours ago. This is the **currently released version**.

There isn't a description.

virtualbox

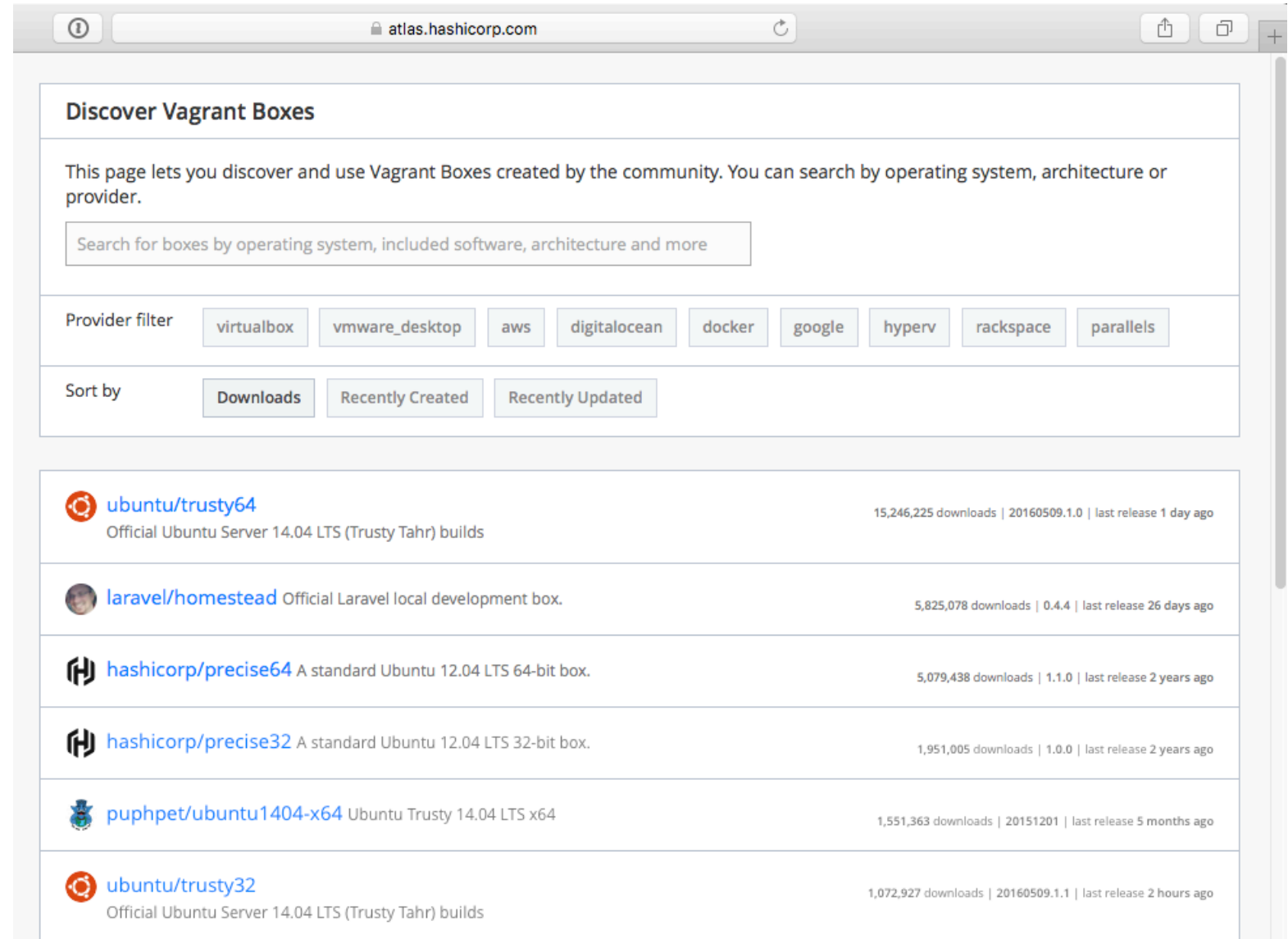
✓ External

vagrant init ubuntu/trusty64; vagrant up --provider virtualbox

i 1 provider for this version.



Atlas Has Many Linux Images



The screenshot shows the 'Discover Vagrant Boxes' page on atlas.hashicorp.com. It features a search bar, provider filters (virtualbox, vmware_desktop, aws, digitalocean, docker, google, hyperv, rackspace, parallels), and sort options (Downloads, Recently Created, Recently Updated). A list of boxes is displayed, including ubuntu/trusty64, laravel/homestead, hashicorp/precise64, hashicorp/precise32, puphpet/ubuntu1404-x64, and ubuntu/trusty32.

Box Name	Description	Downloads	Version	Last Release
ubuntu/trusty64	Official Ubuntu Server 14.04 LTS (Trusty Tahr) builds	15,246,225	20160509.1.0	1 day ago
laravel/homestead	Official Laravel local development box.	5,825,078	0.4.4	26 days ago
hashicorp/precise64	A standard Ubuntu 12.04 LTS 64-bit box.	5,079,438	1.1.0	2 years ago
hashicorp/precise32	A standard Ubuntu 12.04 LTS 32-bit box.	1,951,005	1.0.0	2 years ago
puphpet/ubuntu1404-x64	Ubuntu Trusty 14.04 LTS x64	1,551,363	20151201	5 months ago
ubuntu/trusty32	Official Ubuntu Server 14.04 LTS (Trusty Tahr) builds	1,072,927	20160509.1.1	2 hours ago

Lots of Linux
image options
to choose from
for Vagrant



Atlas Has Few Windows Images

- Windows is not free but is available as a 180 trial download from Microsoft



ATLAS



Produce Your Own Vagrant Images!



You can use Hashicorp's "Packer" tool to build your own images

Read Matt Wrock's blog

<http://www.hurryupandwait.io/blog/>

For Windows Desktop, it's not really worth it

I'll do my best to keep the Windows 2012R2 Server image fresh



Summary



Setup Ansible environment using Vagrant and VirtualBox

Created Vagrant files to easily provision virtual machines

Now we'll install Ansible on the control instance

