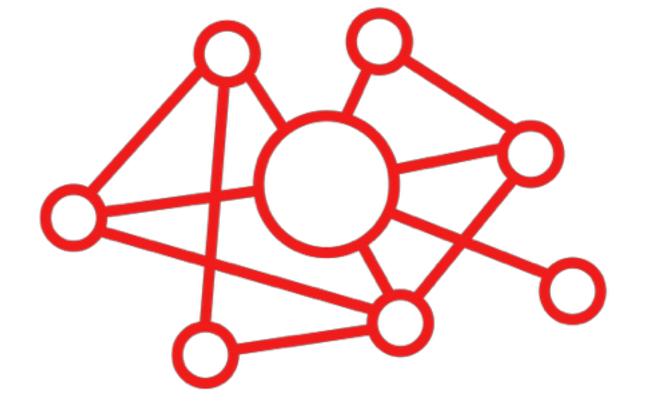
# SCIENCE & ART OF SYSTEMS ENGINEERING

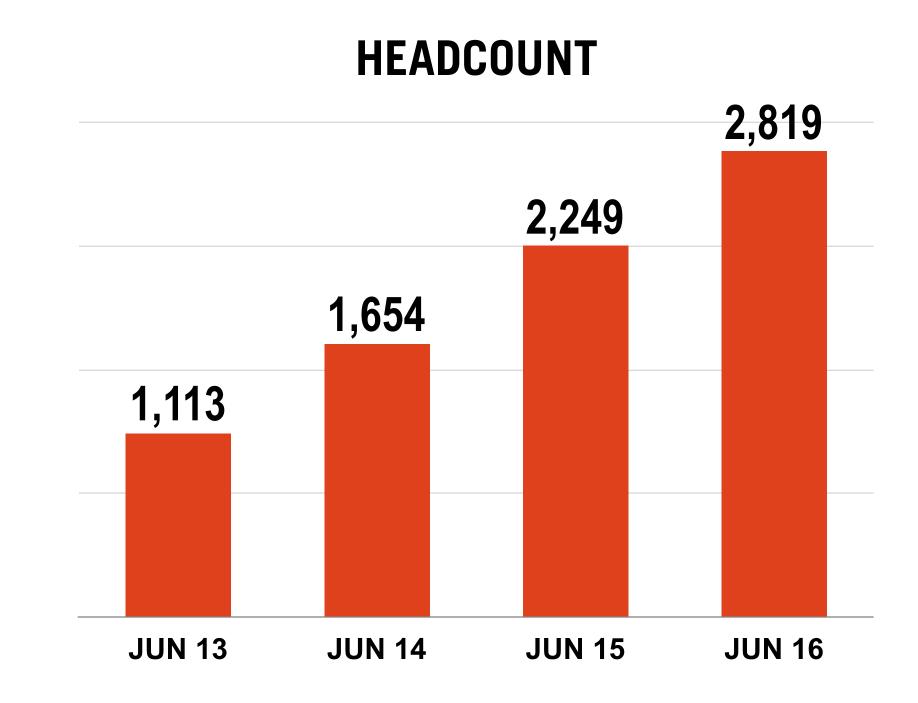


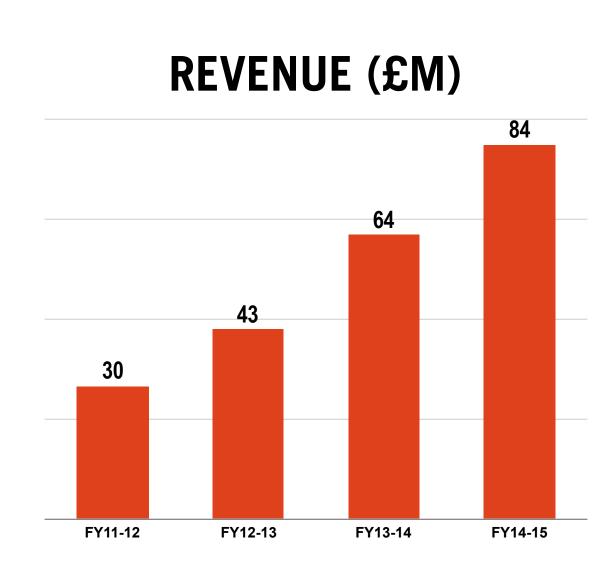


#### HI AND WELCOME TO ENDAVA

Endava is a privately-owned IT services company, with over 15 years of experience of working with some of the world's leading Finance, Insurance, Telecommunications, Media, Technology, and Retail companies, helping them evolve and transform their businesses to meet the needs of today's and tomorrow's customers.

We have over 2,800 employees located in offices in North America and Western Europe and delivery centres across Central Europe and Latin America.





#### WE HELP OUR CLIENTS DELIVER REAL BUSINESS RESULTS

We have developed a set of services and propositions that support our customers on their journey from initial idea through to production, enabling them to become more agile and responsive and get relevant products and services to their customers faster, with a higher degree of quality than their competition.

Successfully delivering 85% of our services from our delivery centres in Central Europe and Latin America, our value proposition is more powerful and effective than those of traditional offshore vendors.

### **OFFICES**

NEW YORK, LONDON, FRANKFURT, ATLANTA, NEW JERSEY, OXFORD, GLASGOW

### **DELIVERY CENTRES**

BELGRADE, BUCHAREST, CLUJ, CHISINAU, IASI, SKOPJE, BOGOTA





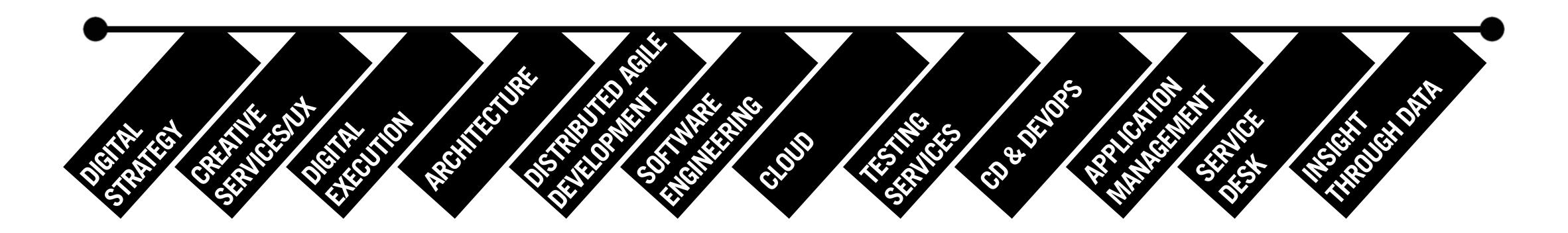


### **OUR SERVICES**

**AGILE TRANSFORMATION** 

**DIGITAL TRANSFORMATION** 

### WE SUPPORT OUR CLIENTS FROM IDEA TO PRODUCTION



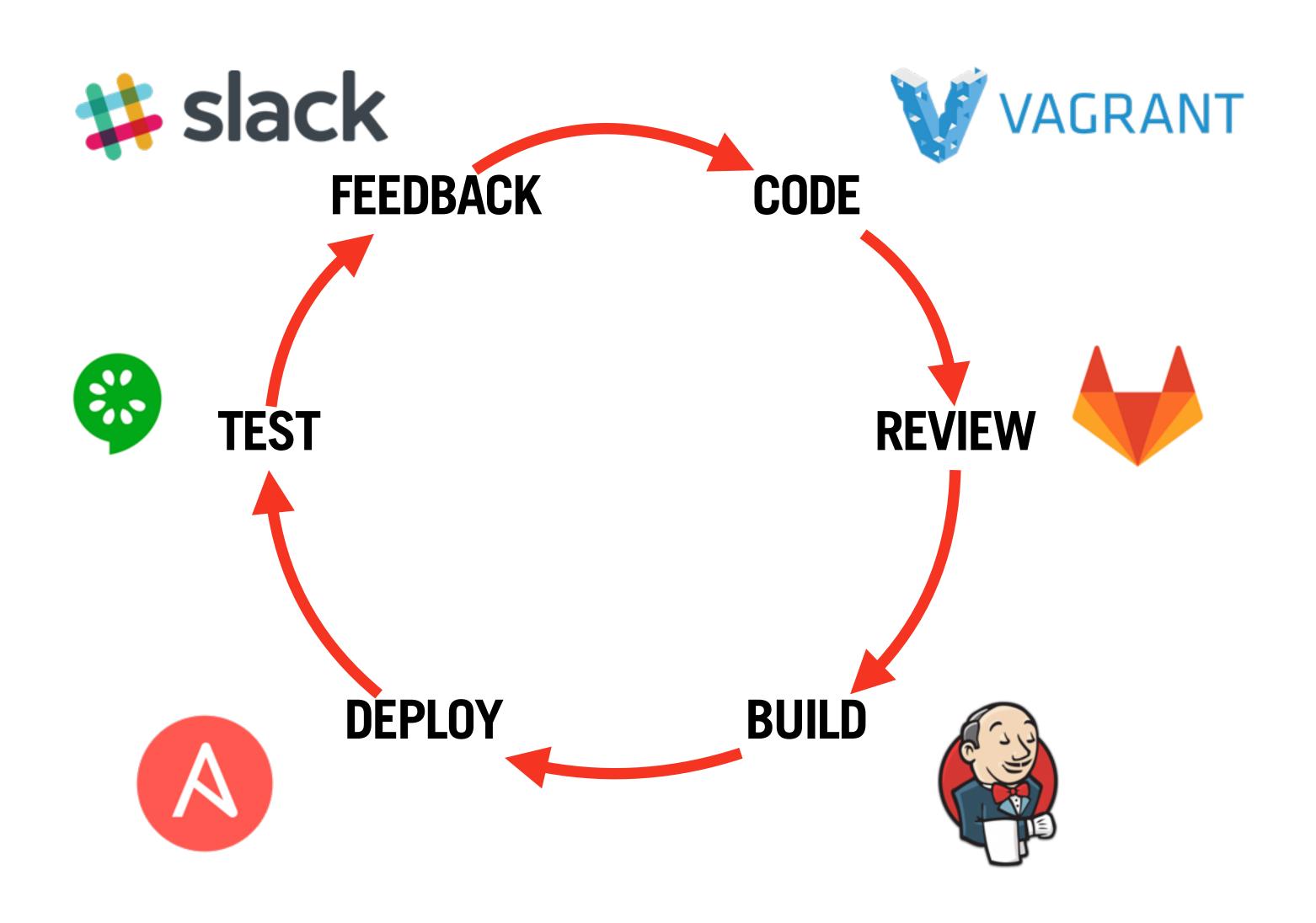
FULL COVERAGE = FULL ACCOUNTABILITY

# WHY HAS ENDAVA BEEN SUCCESSFUL?

# OUR CLIENTS RELY ON US TO DELIVER HIGH QUALITY DEPENDABLE SOFTWARE REPEATABLY

# HOW?

## CONTINUOUS DELIVERY





### WHY?

# "CREATE AND CONFIGURE LIGHTWEIGHT, REPRODUCIBLE, AND PORTABLE DEVELOPMENT ENVIRONMENTS"

### VAGRANTFILE

```
# -*- mode: ruby -*-
# vi: set ft=ruby :
# All Vagrant configuration is done below. The "2" in Vagrant.configure
# configures the configuration version (we support older styles for
# backwards compatibility). Please don't change it unless you know what
# you're doing.
Vagrant.configure(2) do |config|
  config.vm.box = "ubuntu/trusty64"
  config.vm.provision "file", source: "provisioning/desktop_img.jpg", destination: "desktop_img.jpg"
  config.vm.provision :shell, path: "provisioning/bootstrap.sh"
  config.vm.provision :shell, path: "provisioning/install_pycharm.sh"
  config.vm.provision :shell, path: "provisioning/install_docker.sh"
  config.vm.provision :shell, path: "provisioning/install_chrome.sh"
  config.vm.provider "virtualbox" do |v|
    v.gui = true
    v.name = "pydata-demo"
    v.customize ["modifyvm", :id, "--cpus", "4"]
    v.customize ["modifyvm", :id, "--cpuexecutioncap", "100"]
    v.customize ["modifyvm", :id, "--monitorcount", "1"]
    v.customize ["modifyvm", :id, "--memory", "4096"]
    v.customize ["modifyvm", :id, "--vram", "128"]
    v.customize ["modifyvm", :id, "--ioapic", "on"]
    v.customize ["modifyvm", :id, "--accelerate3d", "on"]
  end
end
```

### **BOOTSTRAP.SH**

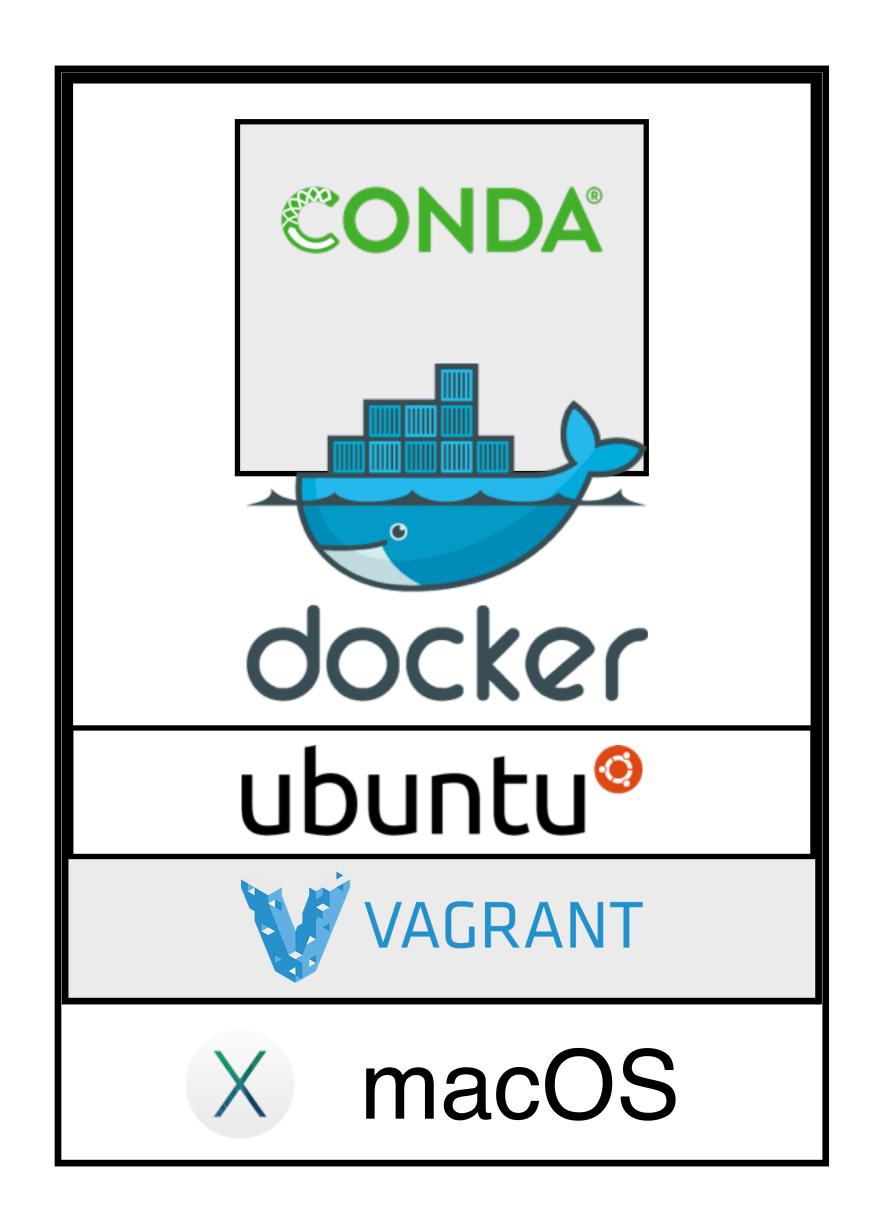
```
## Install Development Tools
echo "Installing developer packages..."
sudo apt-get -y --force-yes -qq install \
git \
gitk \
putty-tools \
dos2unix \
wmctrl \
byzanz \
tree \
jq \
ldap-utils \
>/dev/null 2>/dev/null
## Install the libraries for VirtualBox Guest Additions
echo "Installing libraries for VirtualBox Guest Additions"
sudo apt-get -qq update >/dev/null 2>/dev/null
sudo apt-get -qq install dkms >/dev/null 2>/dev/null
sudo apt-get -qq install linux-headers-generic >/dev/null 2>/dev/null
```

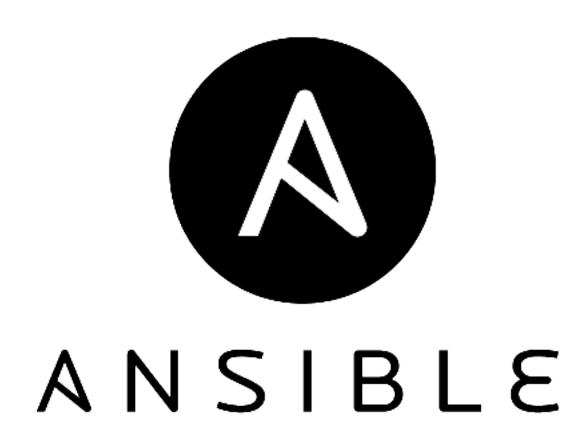
# DEMO

# "HANG ON. WE HAVE DOCKER AND OTHER TOOLS TO HELP US MANAGE ENVIRONMENTS.

WHY WOULD I USE VAGRANT?"

## YOU STILL CAN!





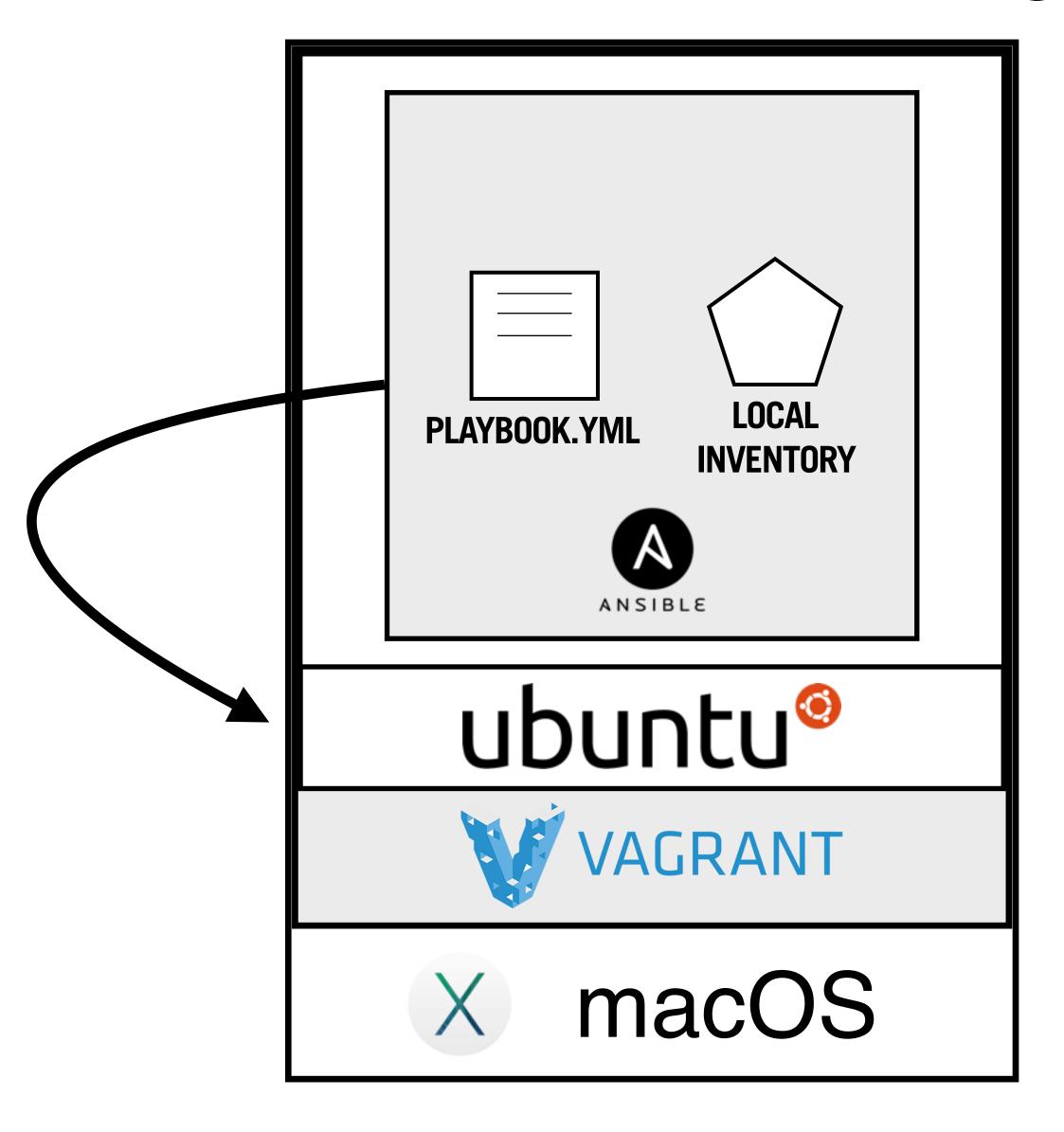
### WHY?

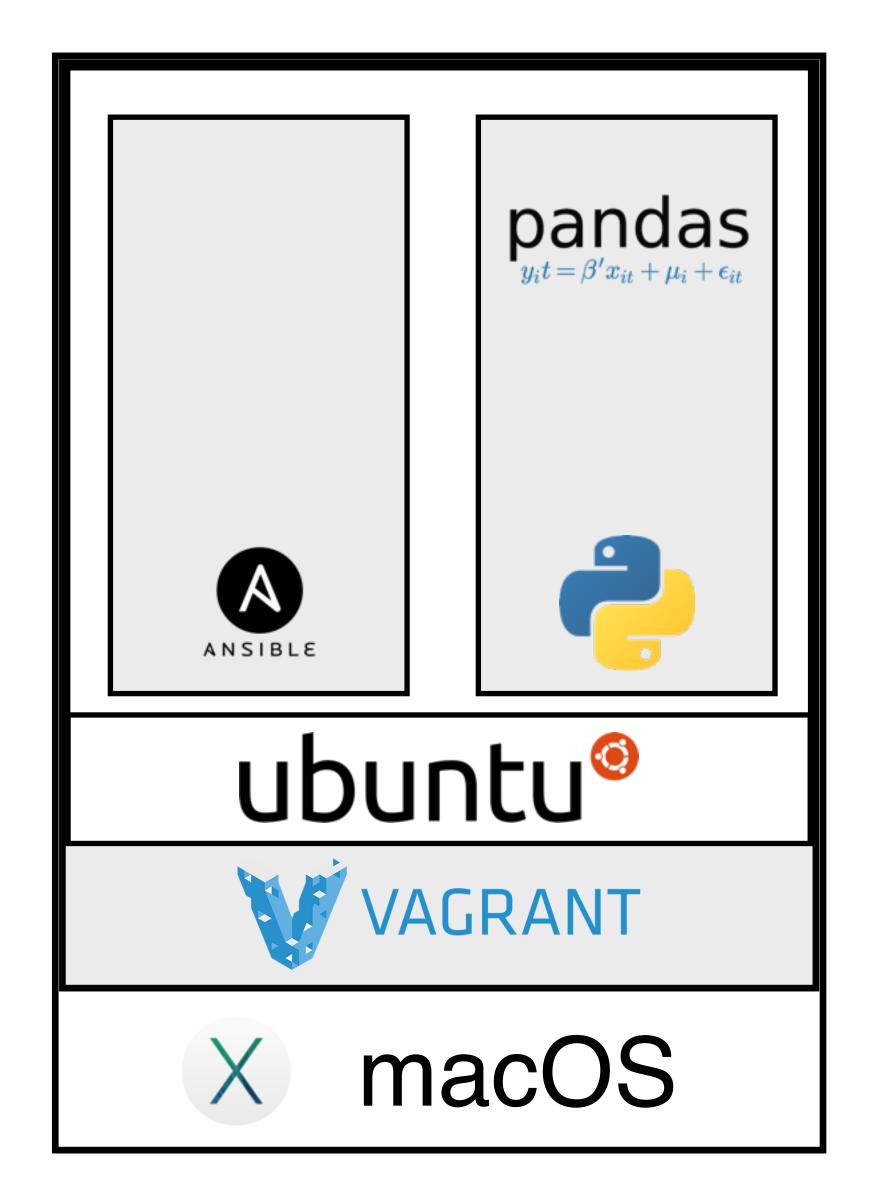
# "AUTOMATION FOR EVERYONE Deploy apps. Manage systems. Crush complexity."

### IMMUTABLE INFRASTRUCTURE

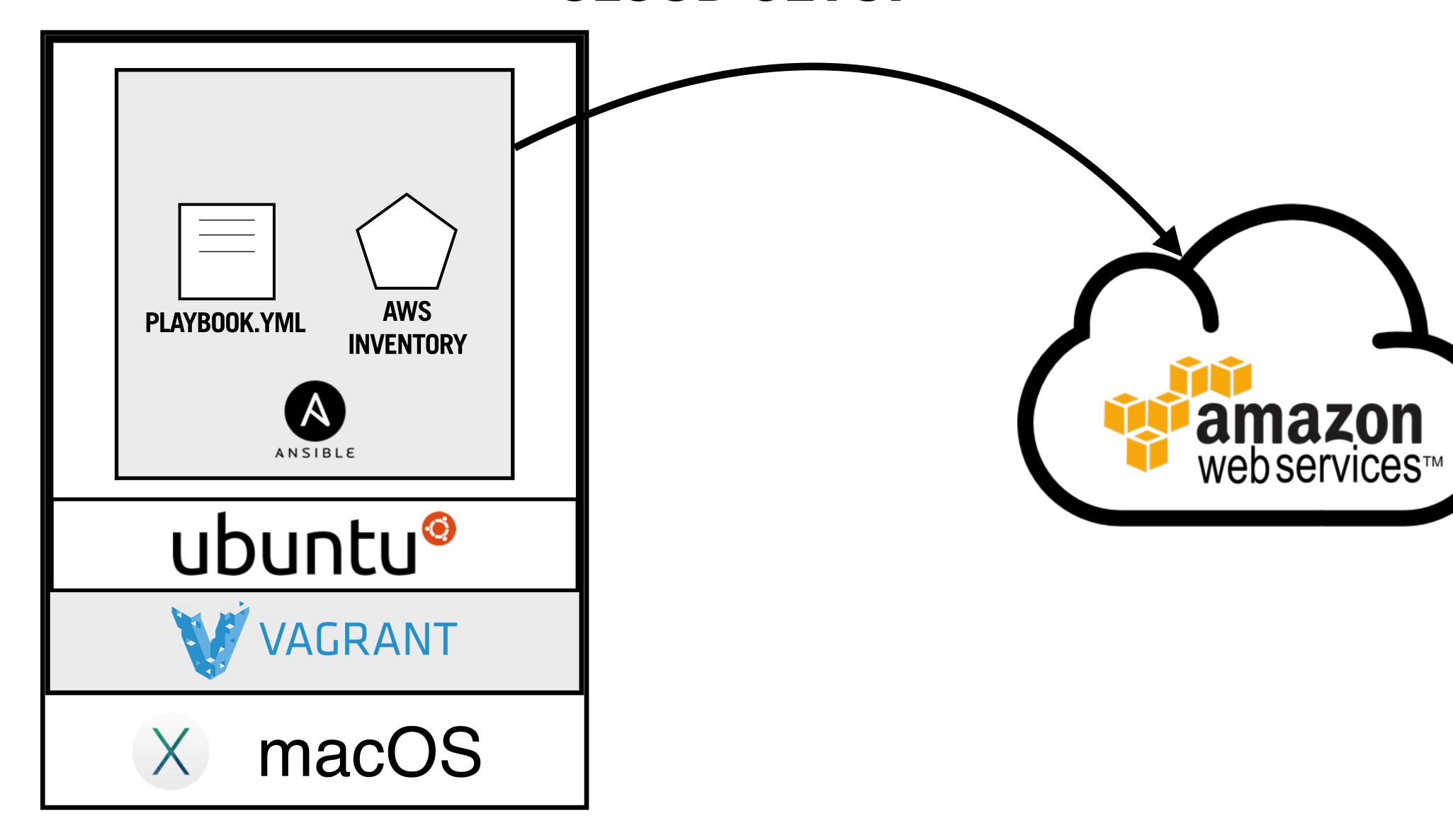
OH, AND PYTHON!

### LOCAL SETUP





### **CLOUD SETUP**



### VAGRANTFILE

```
# -*- mode: ruby -*-
# vi: set ft=ruby :
Vagrant.configure(2) do |config|
  config.hostmanager.enabled = true
  config.hostmanager.manage_guest = true
  config.hostmanager.manage_host = true
  config.hostmanager.include_offline = true
  config.vm.define "dev-machine", primary: true do |machine|
    machine.vm.box = "CentOS_7.1"
    machine.vm.hostname = 'local.dev-machine.pydata.com'
    machine.vm.network :private_network, :ip => '10.20.1.2'
    machine.vm.provider "virtualbox" do |vb|
      vb.gui = true
      vb.memory = "8192"
    end
    machine.vm.provision "shell", path: "infrastructure/shell_provisioners/install_ansible.sh"
    machine.vm.provision "ansible_local" do |ansible|
      ansible.playbook = "/vagrant/infrastructure/playbook.yml"
      ansible.inventory_path = "/vagrant/infrastructure/inventory/local"
      ansible.limit = "local.dev-machine.pydata.com"
    end
  end
end
```

### VAGRANTFILE

### PLAYBOOK.YML

## LOCAL INVENTORY

```
---
- name: Install wget
yum: name=wget state=installed
become: yes
become_method: sudo

- name: Install Python 3.4
yum: name=python34 state=installed
become: yes
become_method: sudo

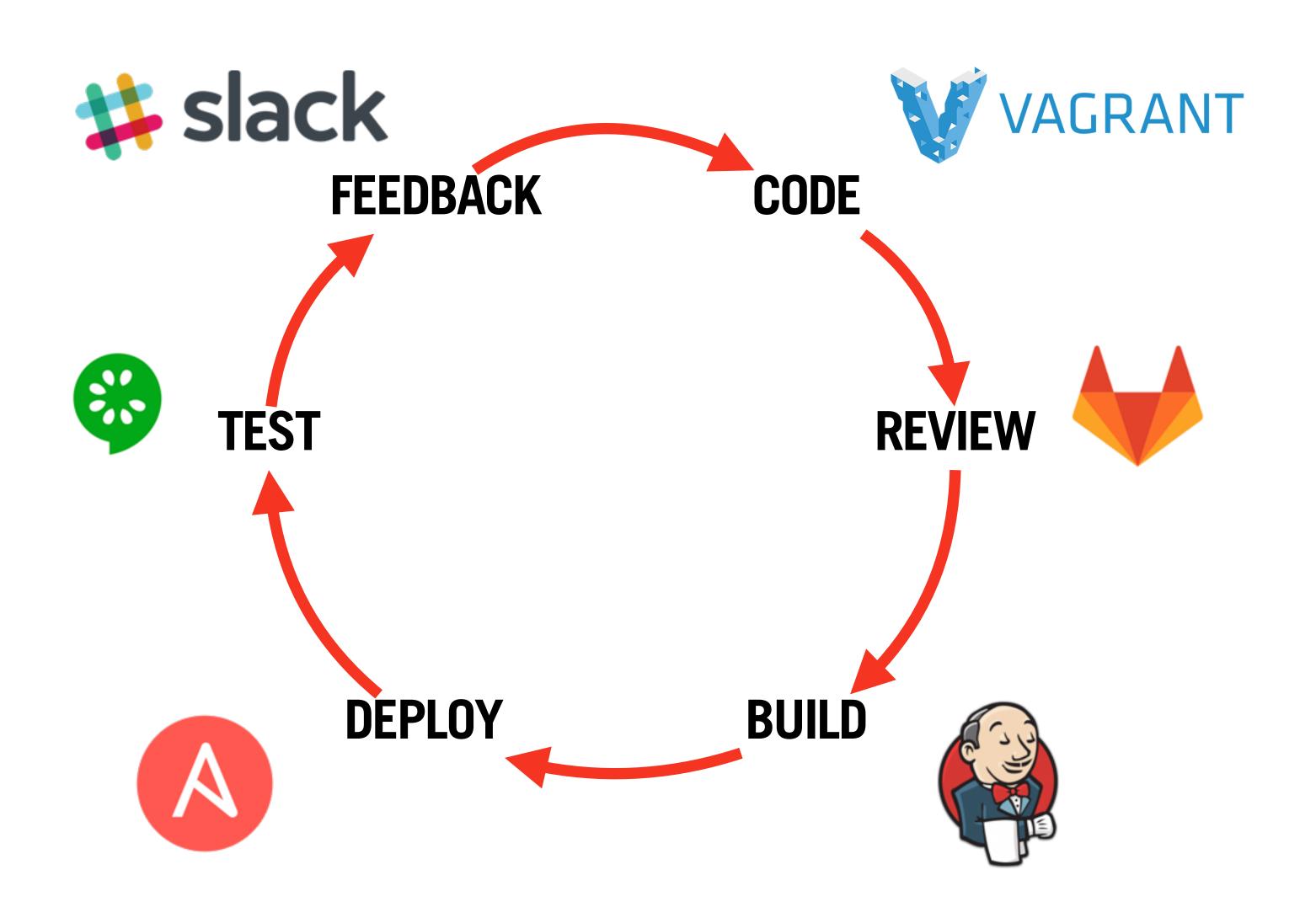
- name: Install Pandas
pip: name=pandas version=0.13.1 state=present
```

```
[development-machines]
local.dev-machine.pydata.com ansible_connection=local
[all:vars]
```

inventory\_vars=local.config.yml

# WRAPPING UP

## CONTINUOUS DELIVERY



### THANKS!

matt.cloke@endava.com narendra.tumkur@endava.com

