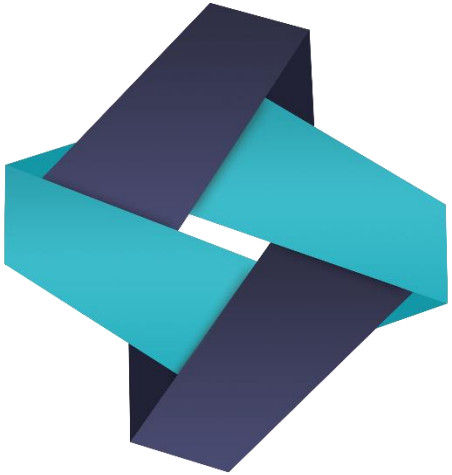


ANSIBLE

Introduction to

Ansible

Introduction to Ansible

Expected Learning

- Ansible Introduction
- Ansible Playbook
- YAML
- Ansible Installation and Configuration
- Ansible Inventory

What Is Ansible?

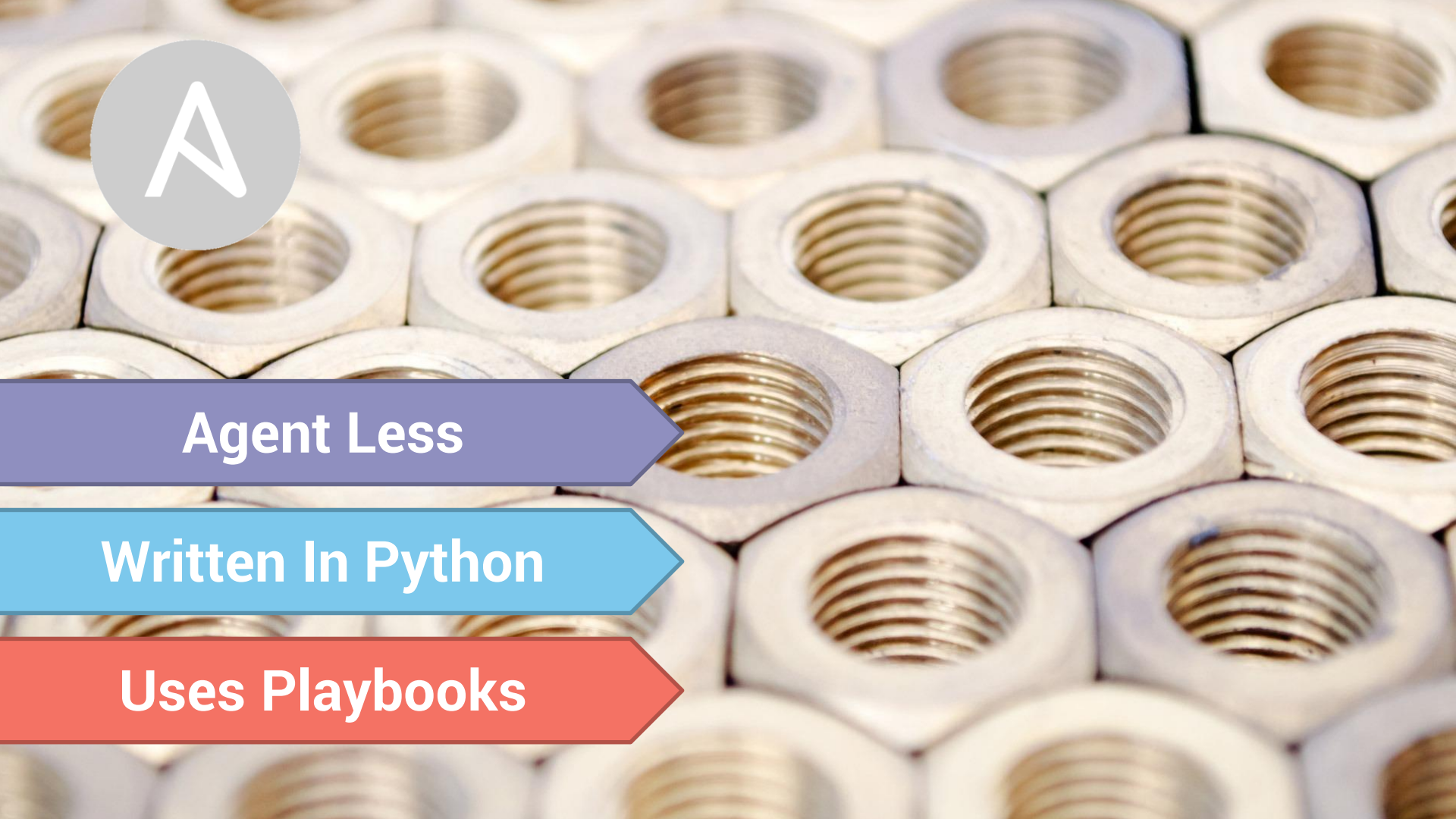
Infrastructure As Code

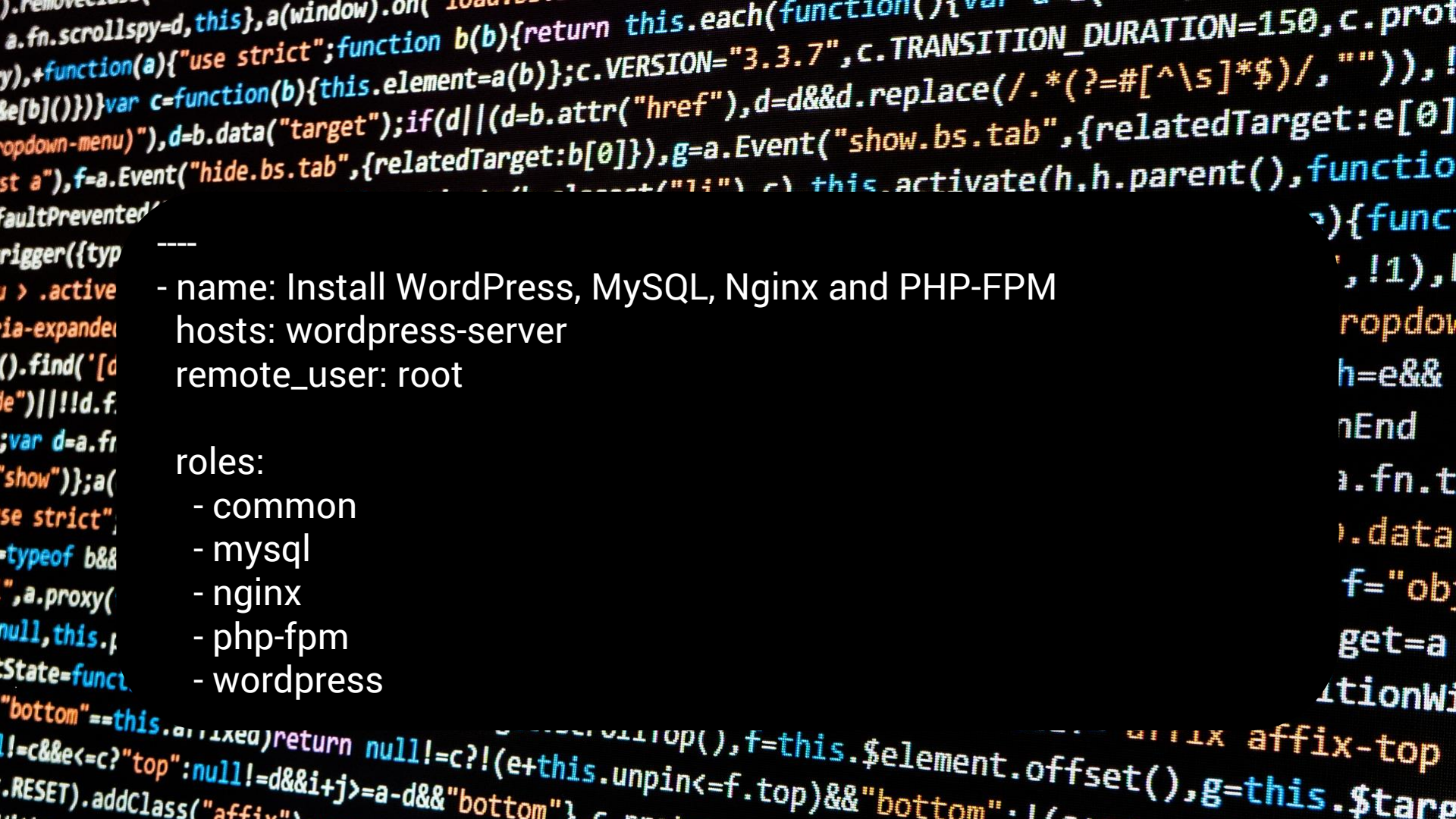
ANSIBLE

CHEF™

ANSIBLE

puppet


Agent Less
Written In Python
Uses Playbooks

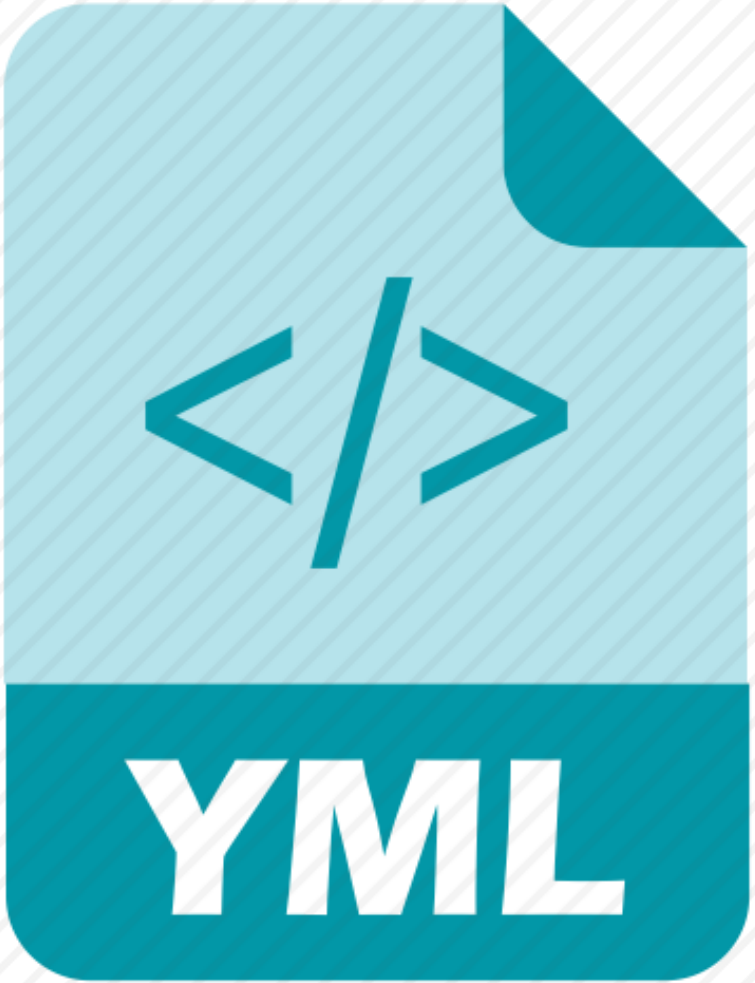


- name: Install WordPress, MySQL, Nginx and PHP-FPM
hosts: wordpress-server
remote_user: root
roles:
- common
- mysql
- nginx
- php-fpm
- wordpress

Python Lists

```
>>yaml.load(“‘
-Mango
-Orange
-Grapes
-Water melon
”’)
```

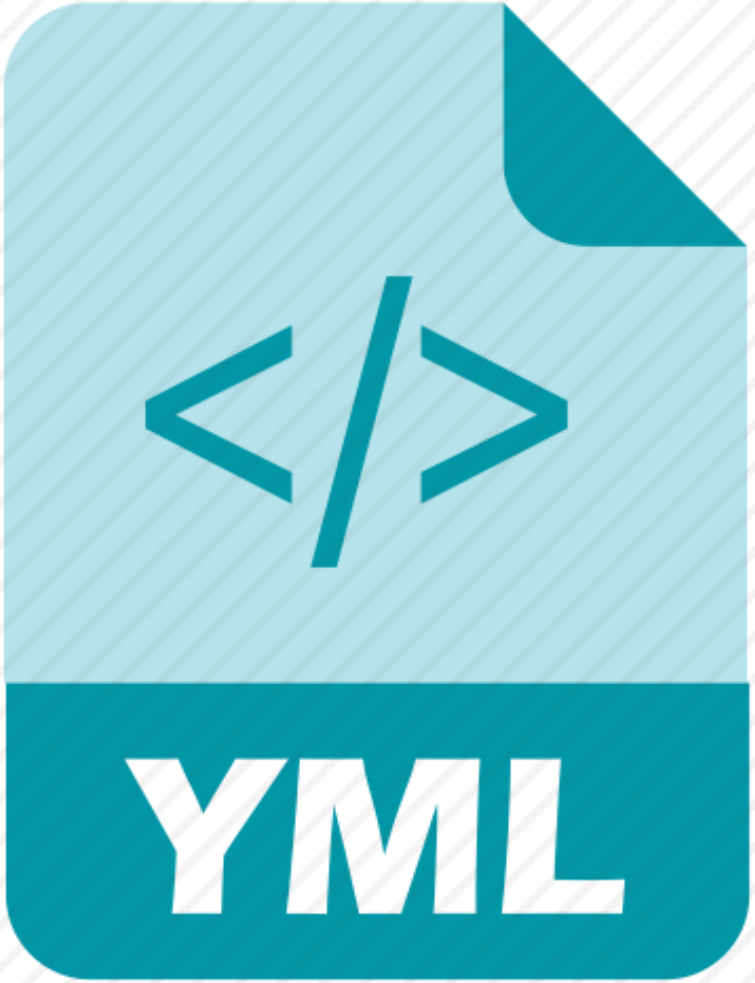
Output:
[‘Mango’, ‘Orange’, ‘Grapes’, 'Water melon’]



Python Dictionaries

```
.>>yaml.load(“‘
 Mango: Yellow
 Orange: Orange
 Grapes: Purple
 Water melon: Green
”’)
```

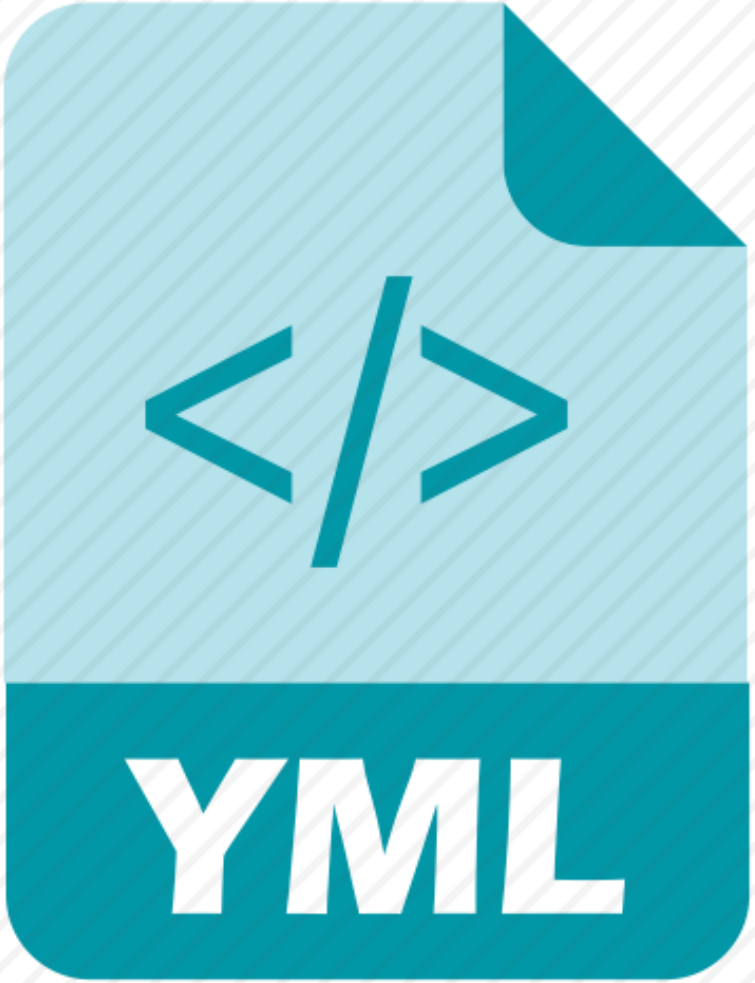
Output:
{ ‘Orange’: ‘Orange’, ‘Mango’: ‘Yellow’, ‘Grapes’: ‘Purple’, ‘Water melon’: ’Green’}



Complex Data Structures

```
>>yaml.load(“‘
Foods:
 -eggs
 -pizza
Drinks:
 - water
 - vodka
’”)
```

Output:
{ ‘foods’: [‘eggs’, ‘pizza’], ‘drinks’: [‘water’, ‘vodka’]}



```
yaml.load(“‘
---
-name: Install WordPress, MySQL, Nginx and PHP-FPM
hosts: wordpress-server
remote_user: root
# remote_user: user
# become: yes
# become_method: sudo

roles:
-common
-mysql
-nginx
-php-fpm
-wordpress
“’)
```

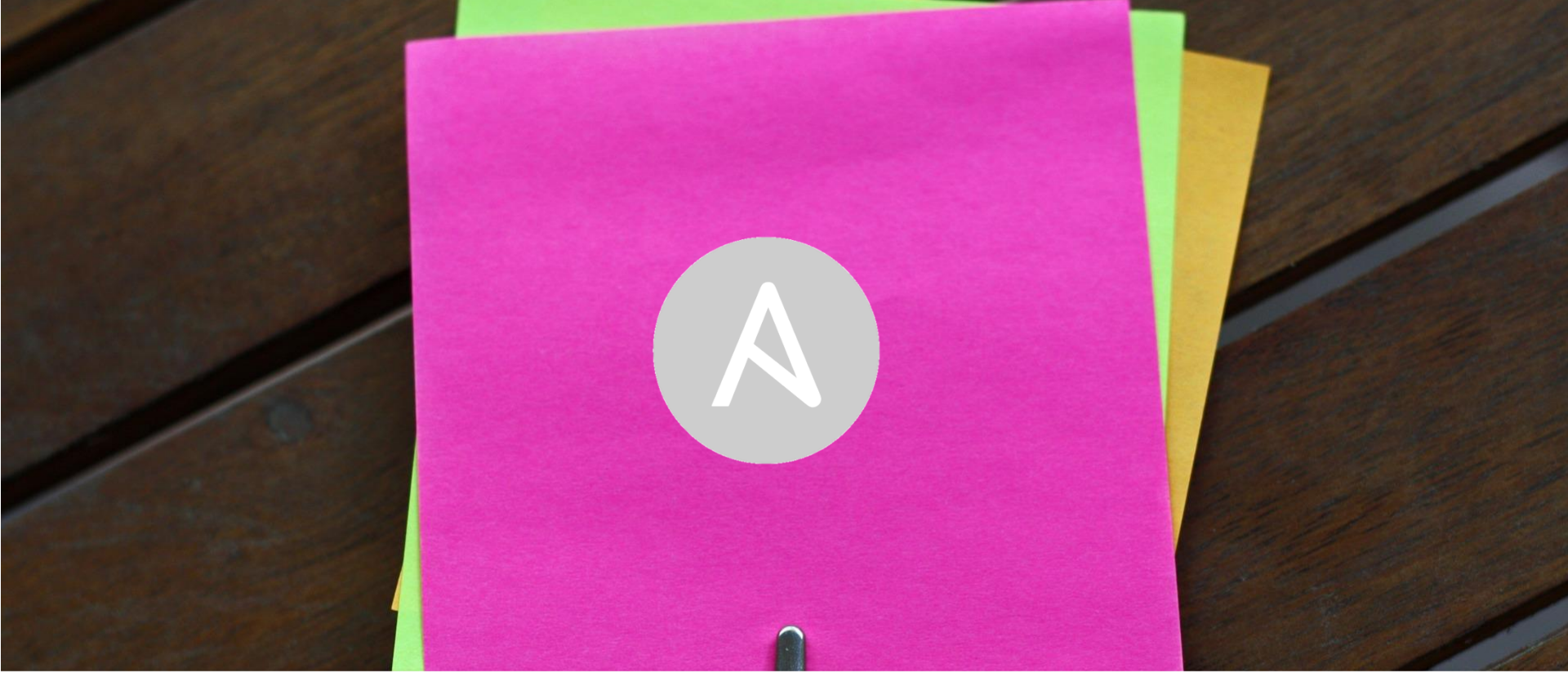
Output:

```
[{‘remote_user’: ‘root’, ‘hosts’: ‘wordpress-server’, ‘name’: ‘Install WordPress, MySQL, Nginx and PHP-FPM’, ‘roles’:[‘common’, ‘mysql’, ‘nginx’, ‘php-fpm’, ‘wordpress’]}]
```

Validate YAML

- http://www.yamllint.com/

- Three VMs (Linux)
- One Ansible host
- Two test hosts
- Minimal system requirements



http://go.tetranoodle.com/ansible

DEMO

Ansible Environment Set Up

$ sudo apt-get install-software-properties-common
$ sudo apt-add-repository ppa:ansible/ansible
$ sudo apt-get update
$ sudo apt-get install ansible

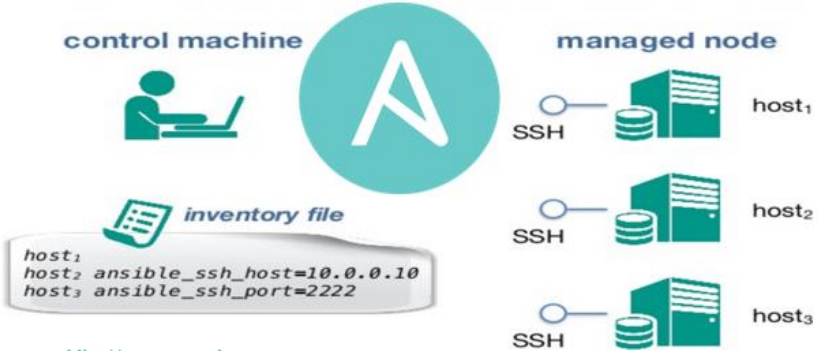
DEMO

Ansible Installation

- ANSIBLE_CONFIG (an environment variable)
- ansible.cfg (in the current directory)
- .ansible.cfg (in the home directory)
- /etc/ansible/ansible.cfg

DEMO

Ansible Configuration File



- /etc/ansible/hosts
  - INI format
- Host Variables
- Group Variables
- Group of Group

DEMO
Ansible Inventory