

Ansible Basic

An Ansible Training Course

PRESENTED BY:

Bittnet DevOps Team

ANSIBLE

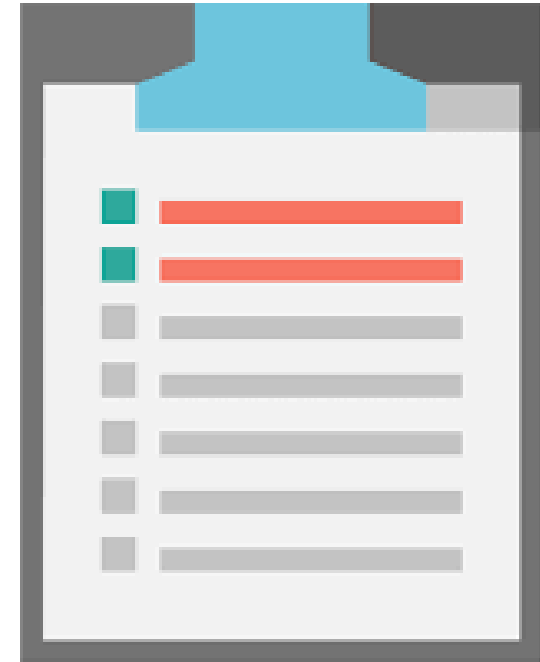
We Make Custom Trainings



FASTER
SMARTER
SAFER

Topics covered:

- What is Ansible
- Ansible history
- Installing Ansible



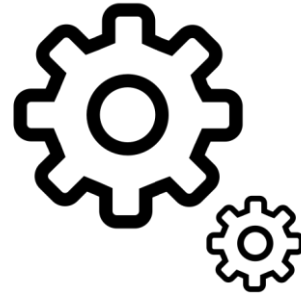
What is Ansible?

- Ansible is an automation tool, used for tasks such as configuration management, application deployment and provisioning.
- Ansible allows you to create machines, describe how these machines should be configured and/or what actions should be taken on them.

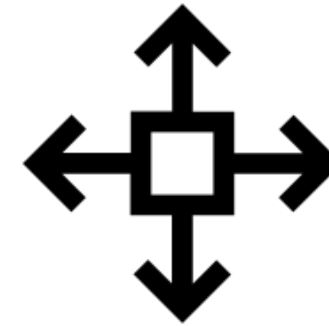
What is Ansible?



Provisioning



Configuration
Management



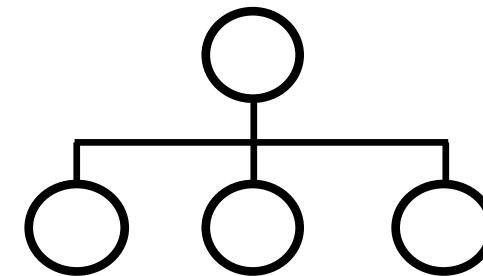
Application
Deployment



Continuous
Delivery



Security &
Compliance



Orchestration

Why Ansible?



Ansible uses an extraordinarily **simple** syntax written in YAML.



Ansible has **powerful** features that can enable you to model even the most complex IT workflows (infrastructure, networks, OS and services)

Why Ansible?

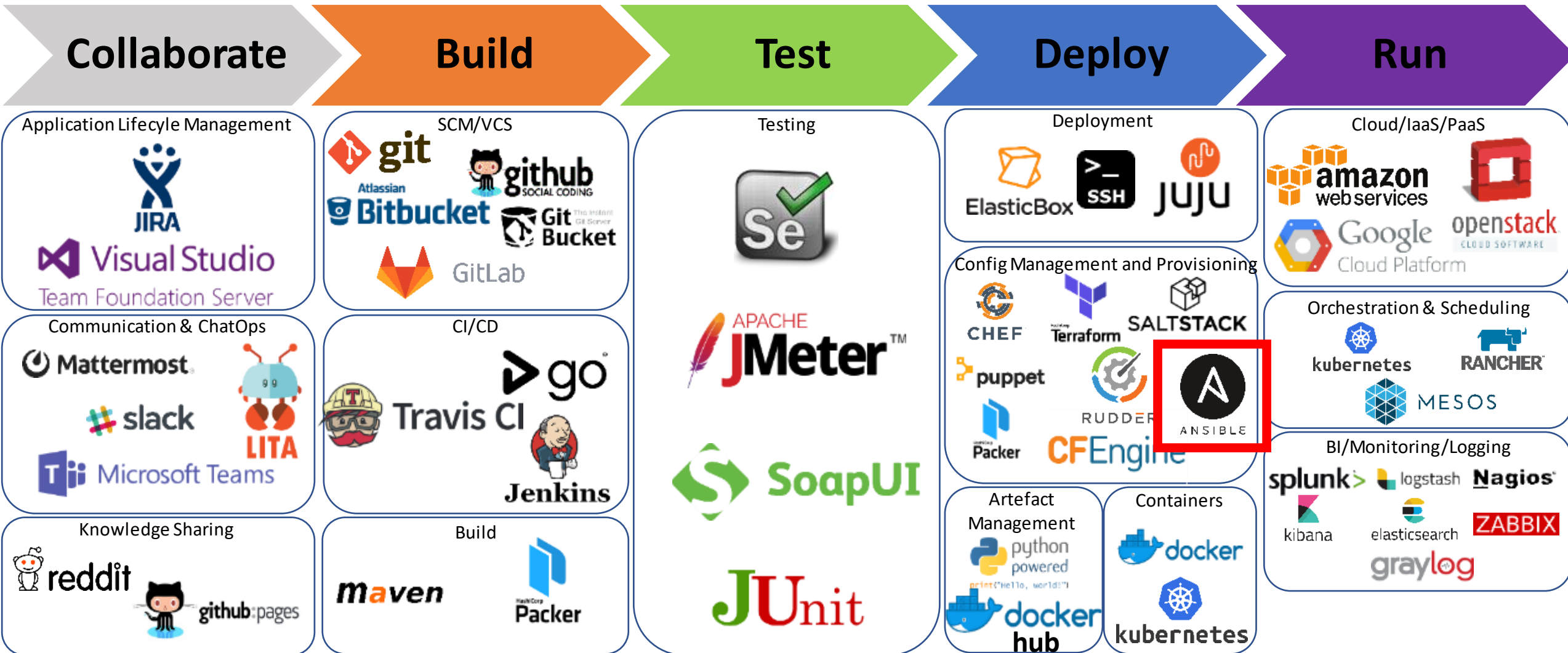


It is completely **agentless**, there are **no agents/software** or additional firewall ports that you need to install on the client systems



No extra software on your servers means more resources for your applications.

Ansible in DevOps



What Ansible Automates

CLOUD

AWS
Azure
Digital
Ocean
Google
OpenStack
Rackspace
+more

OPERATING SYSTEMS

RHEL and
Linux
UNIX
Windows
+more

VIRT & CONTAINER

Docker
VMware
RHV
OpenStack
OpenShift
+more

STORAGE

NetApp
Red Hat
Storage
Infinidat
+more

WINDOWS

ACLs
Files
Packages
IIS
Regedit
Shares
Services
Configs
Users
Domains
+more

NETWORK

Arista
A10
Cumulus
Bigswitch
Cisco
Cumulus
Dell
F5
Juniper
Palo Alto
OpenSwitch
+more

DEVOPS

Jira
GitHub
Vagrant
Jenkins
Bamboo
Atlassian
Subversion
Slack
Hipchat
+more

MONITORING

Dynatrace
Airbrake
BigPanda
Datadog
LogicMonitor
Nagios
New Relic
PagerDuty
Sensu
StackDriver
Zabbix
+more

Ansible History

- The term "**ansible**" was coined by **Ursula K. Le Guin** in her 1966 novel *Rocannon's World*, and refers to fictional instantaneous communication system.
- The Ansible tool **was developed** by **Michael DeHaan**, the author of the provisioning server application Cobbler.



Ansible History

- Ansible, Inc. (originally AnsibleWorks, Inc.) was the company set up to commercially support and sponsor Ansible.
- Red Hat acquired Ansible in October 2015.
- Ansible is included as part of the **Fedora** distribution of Linux, owned by Red Hat.
- Is also **available** for **Red Hat Enterprise Linux, CentOS, Debian, Scientific Linux, Oracle Linux** via Extra Packages for Enterprise Linux (**EPÉL**) and Ubuntu as well as for other operating systems.



Installing Ansible

1. Installing prerequisites

```
student:~$ sudo apt update
student:~$ sudo apt -y install software-properties-common
```

2. Add Ansible official repository

```
student:~$ sudo apt-add-repository ppa:ansible/ansible
[...]

http://ansible.com/
More info: https://launchpad.net/~ansible/+archive/ubuntu/ansible
Press [ENTER] to continue or Ctrl-c to cancel adding it.
[...]
Fetched 17.0 kB in 1s (17.6 kB/s)
Reading package lists... Done
```

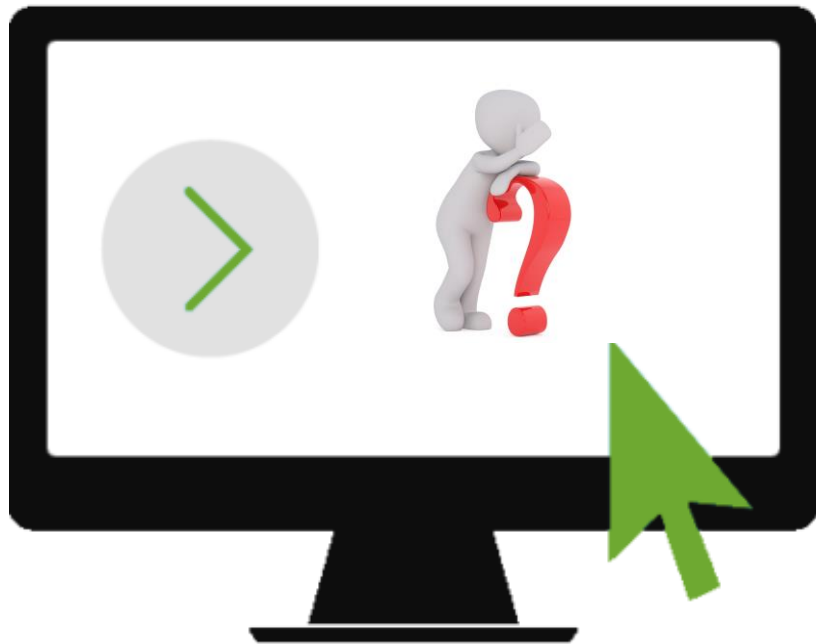
Installing Ansible

3. Install Ansible

```
student:~$ sudo apt install ansible -y
```

4. Check Ansible version

```
student:~$ ansible --version
ansible 2.9.1
  config file = /etc/ansible/ansible.cfg
  configured module search path = [u'/home/student/.ansible/plugins/modules',
u'/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python2.7/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 2.7.15+ (default, Jan 1 2040, 17:39:04) [GCC 7.4.0]
```



Lab 1: Installing Ansible





Solutions for training the world.