

## Introduction to ANSIBLE

## **TOPICS**

- 1. What is Ansible
- 2. What Ansible can do
- 3. Features of Ansible
- 4. Ansible Architecture
- 5. Ansible Flow
- 6. Installation

It's a **simple automation language** that can perfectly describe an IT application infrastructure in Ansible Playbooks.

It's an **automation engine** that runs Ansible Playbooks.

Ansible Tower by Red Hat is an enterprise framework for controlling, securing and managing your Ansible automation with a **UI and restful API**.

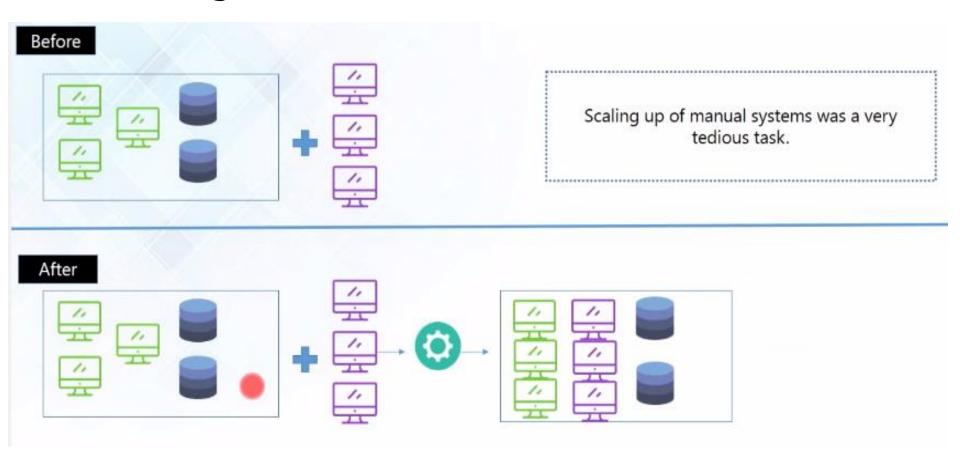




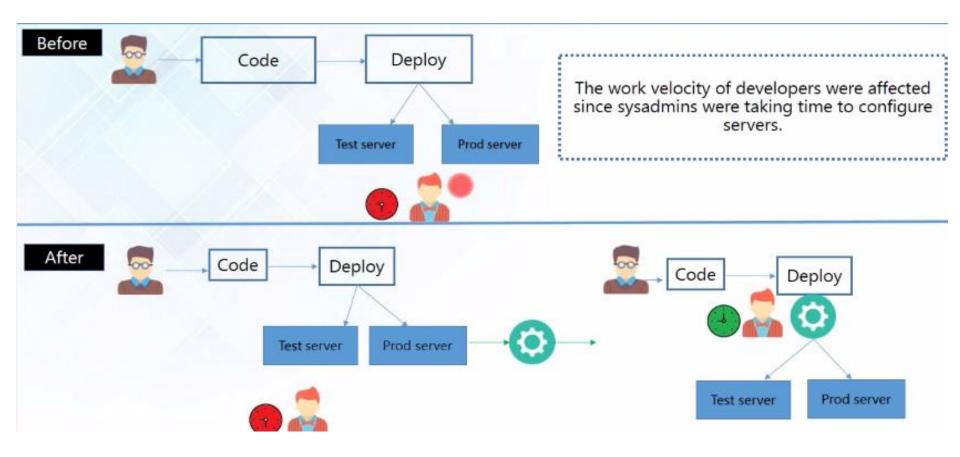
### What is Ansible



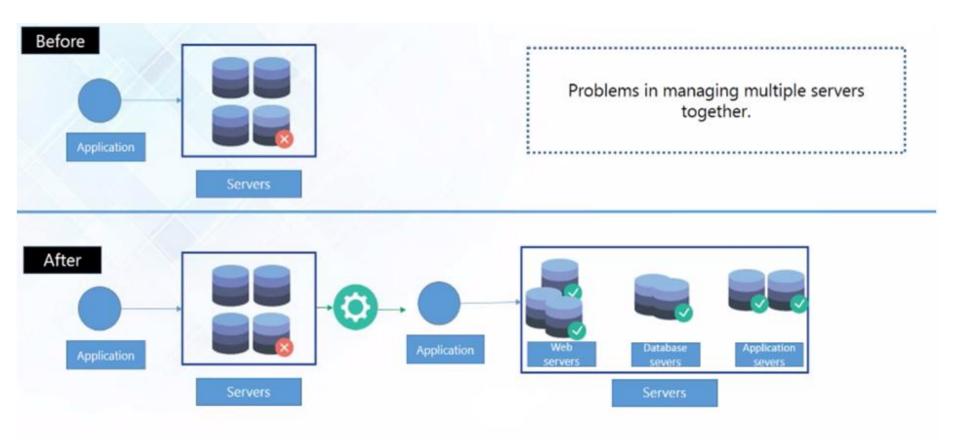
## Provisioning & Orchestration



## **Application Deployment**



## **Configuration Management**



## PUSH vs PULL



**Pull Configuration** 



**Push Configuration** 



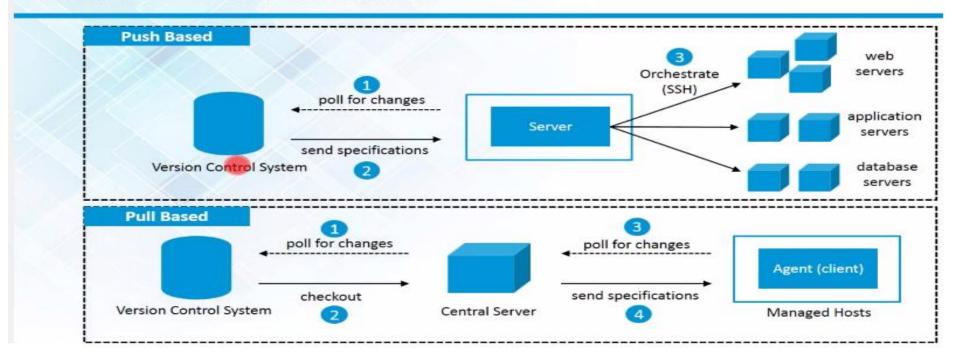
**Push Configuration** 



**Pull Configuration** 

## Push vs Pull Configuration

#### **Push Based vs Pull Based**



WHY ANSIBLE?





#### **SIMPLE**

Human readable automation

No special coding skills needed

Tasks executed in order

Usable by every team

**Get productive quickly** 



#### **POWERFUL**

App deployment

Configuration management

Workflow orchestration

Network automation

Orchestrate the app lifecycle



#### **AGENTLESS**

Agentless architecture

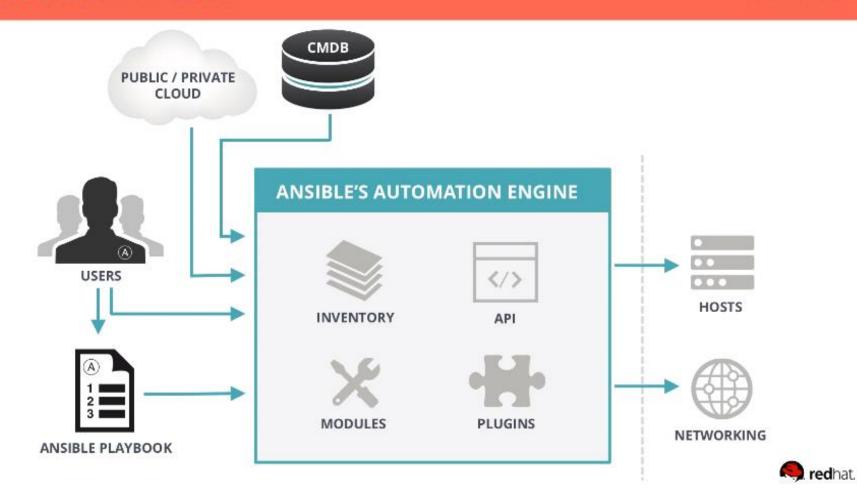
Uses OpenSSH & WinRM

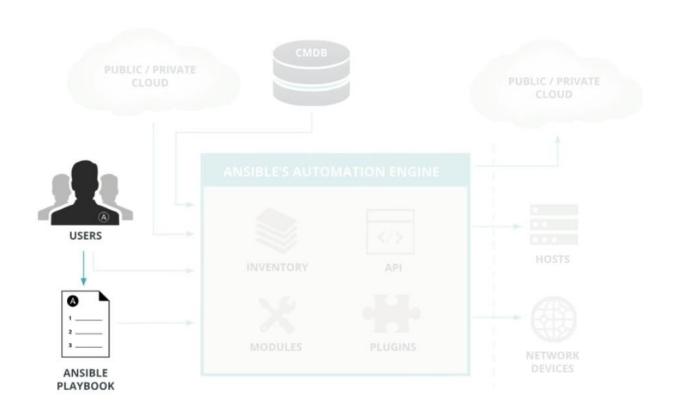
No agents to exploit or update

Get started immediately

More efficient & more secure



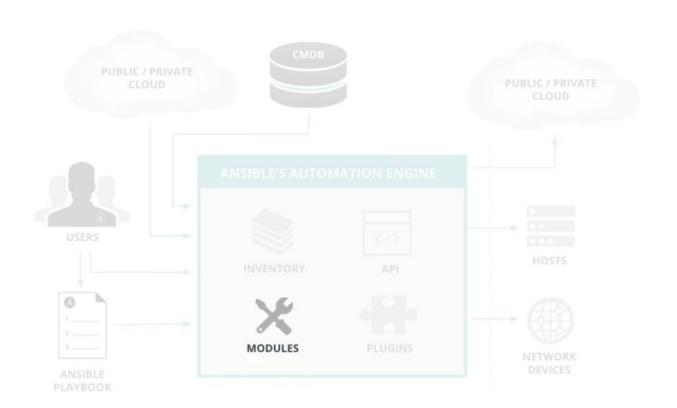




#### **PLAYBOOKS**

- · Written in YAML
- · Tasks are executed sequentially
- · Invokes Ansible modules

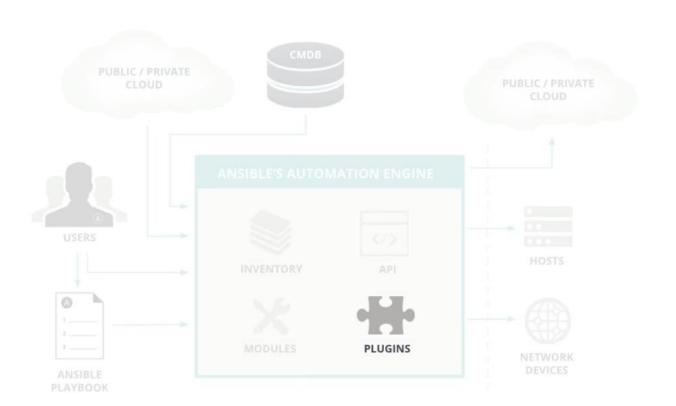




#### MODULES

- · Tools in the toolkit
- Python, Powershell or any language
- Extend Ansible simplicity to entire stack



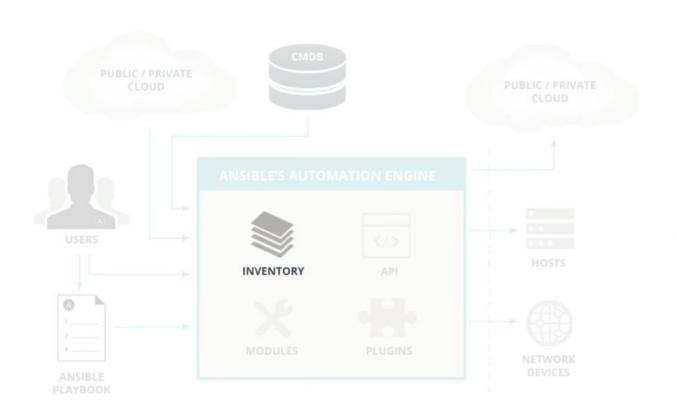


#### **PLUGINS**

- · Gears in the engine
- Python that plugs into the core engine
- Adaptability for various uses
   & platforms



#### ANSIBLE



[web]

webserverl.example.com webserver2.example.com

[db]

dbserver1.example.com



#### CLOUD

OpenStack, VMware, RHEV, Cloud Platforms (Like GCP)!

#### **CUSTOM CMDB**



#### webservers.yml name: Configure webservers hosts: webservers tasks: name: Install nginx apt: name=nginx - name: install config file template: src=nginx.conf.j2 How Ansible handlers: Works - name: notify nginx service: name=nginx state=restarted web1 web2 Stacy web3 \$ ansible-playbook webservers.yml

#### WHERE TO GET IT AND HOW TO INSTALL

OS Packages (recommended)

- EPEL
- APT

Also available from

- Pypi
- Sources (via GitHub)



# Q&A