ANSIBLE

Push Button to No Button Infrastructure

How Ansible Automates Your Environment

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Solutions Architect - Air Force June 18, 2019



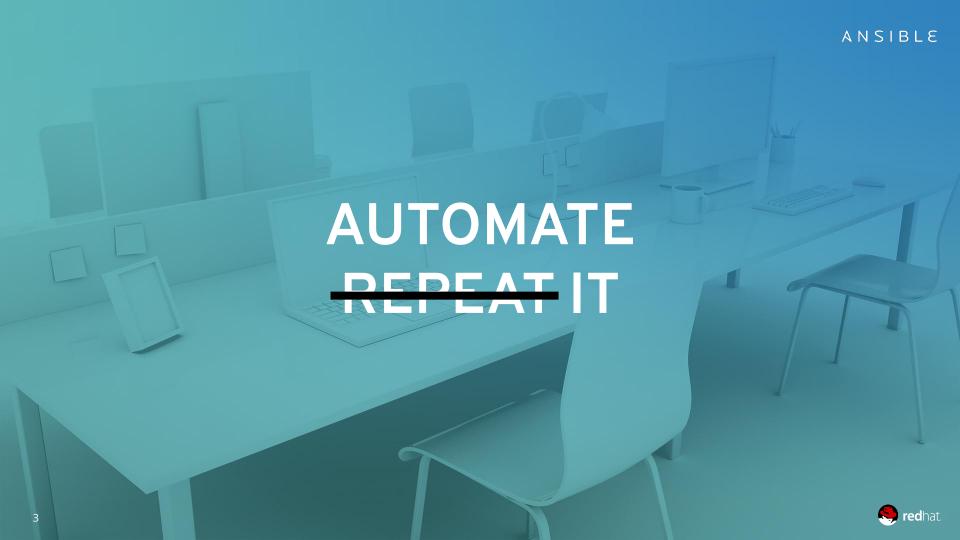
THE JOURNEY



Today







THE ANSIBLE WAY

CROSS PLATFORM

Agentless support for all major OS variants, physical, virtual, cloud and network devices.

HUMAN READABLE

Perfectly describe and document every aspect of your application environment.

PERFECT DESCRIPTION OF APPLICATION

Every change can be made by Playbooks, ensuring everyone is on the same page.

VERSION CONTROLLED

Playbooks are plain-text. Treat them like code in your existing version control.

DYNAMIC INVENTORIES

Capture all the servers 100% of the time, regardless of infrastructure, location, etc.

ORCHESTRATION PLAYS WELL WITH OTHERS

Every change can be made by Playbooks, ensuring everyone is on the same page.



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





Automate the deployment and management of your entire IT footprint.

Do this... Configuration Security and Application Continuous Orchestration Provisioning Management Deployment Delivery Compliance On these... Firewalls Load Balancers **Applications** Containers Clouds Servers Infrastructure Storage **Network Devices** And more...

```
- name: install and start apache
 hosts: web
 become: yes
 vars:
   http port: 80
  tasks:
 - name: httpd package is present
   yum:
     name: httpd
     state: latest
 - name: latest index.html file is present
   copy:
     src: files/index.html
     dest: /var/www/html/
  - name: httpd is started
   service:
     name: httpd
      state: started
```



ANSIBLE AUTOMATES TECHNOLOGIES YOU USE

Time to automate is measured in minutes

CLOUD	VIRT & CONTAINER	WINDOWS	NETWORK	DEVOPS	MONITORING
AWS Azure Digital Ocean Google OpenStack Rackspace +more OPERATING SYSTEMS RHEL and Linux UNIX Windows +more	Docker VMware RHV OpenStack OpenShift +more STORAGE NetApp Red Hat Storage Infinidat +more	ACLs Files Packages IIS Regedits Shares Services Configs Users Domains +more	Arista A10 Cumulus Bigswitch Cisco Cumulus Dell F5 Juniper Palo Alto OpenSwitch +more	Jira GitHub Vagrant Jenkins Bamboo Atlassian Subversion Slack Hipchat +more	Dynatrace Airbrake BigPanda Datadog LogicMonitor Nagios New Relic PagerDuty Sensu StackDriver Zabbix +more

ANSIBLE NETWORK AUTOMATION

Use Ansible to manage, validate, and continuously track heterogeneous network device configurations and deployments.

Network modules are included as part of the Ansible distribution.

40Networking platforms

570+
Networking Modules

ansible.com/networking



ANSIBLE WINDOWS AUTOMATION

Use Ansible to deploy and manage Windows systems and applications.

70+

Windows Modules

350+

Powershell DSC resources

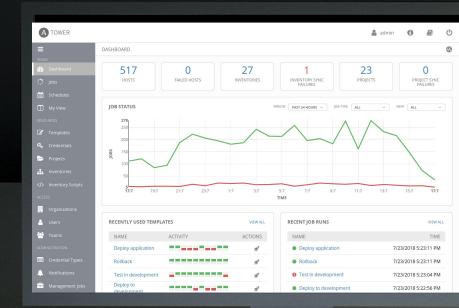
ansible.com/windows



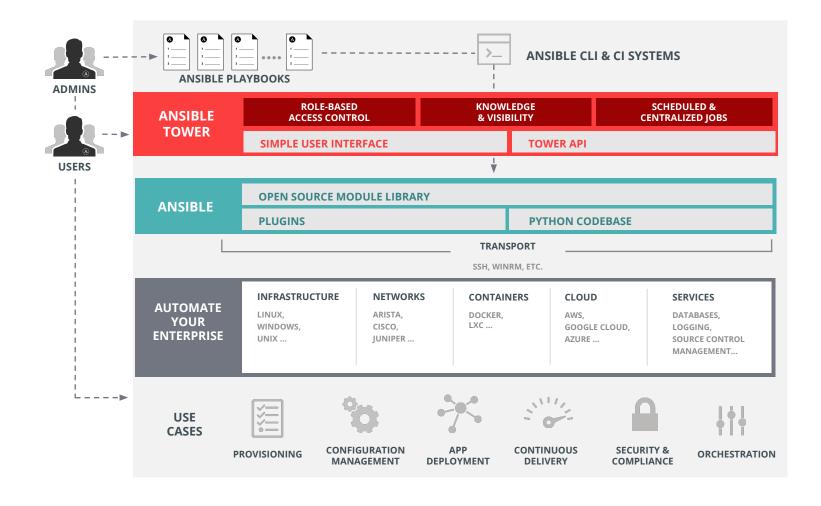
WHAT IS ANSIBLE TOWER?

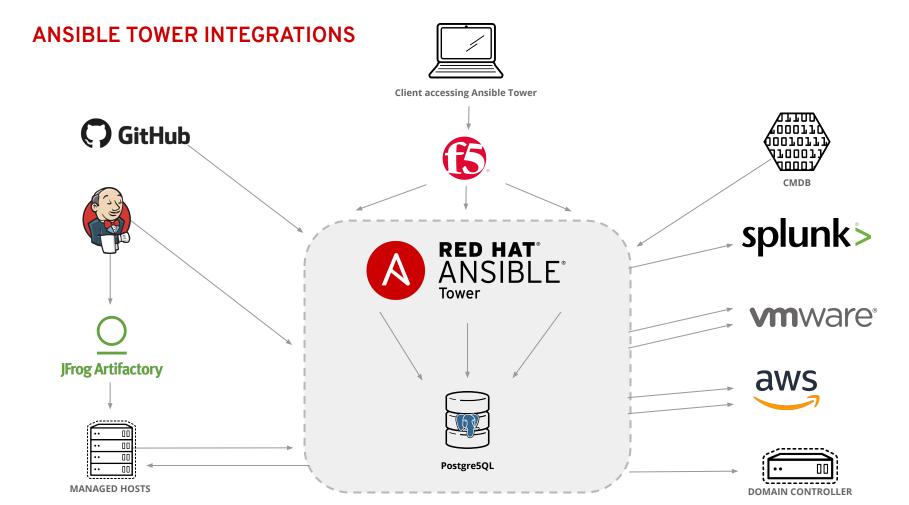
Ansible Tower is an **enterprise framework** for controlling, securing and managing your Ansible automation – with a **UI and RESTful API.**

- Role-based access control
- Deploy entire applications with push-button deployment access
- All automations are centrally logged

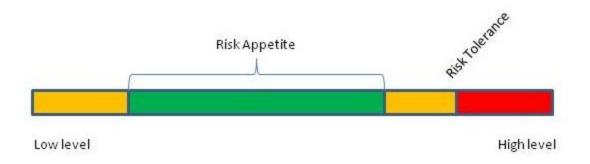




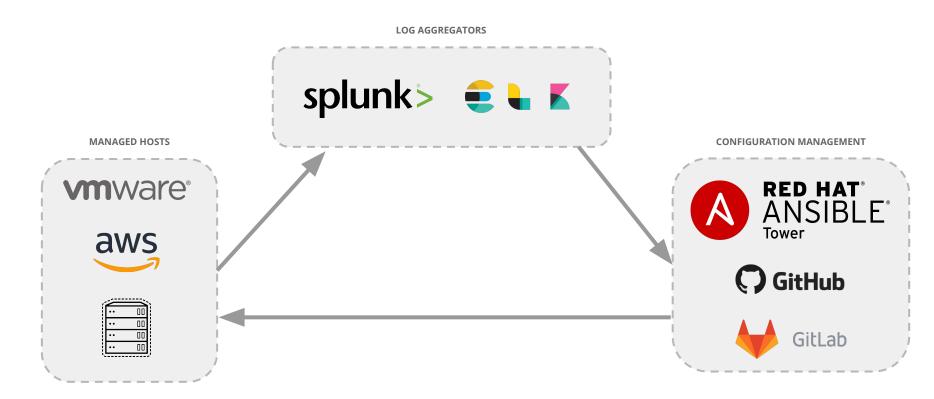




Tomorrow - Human in the Loop



No Buttons of Tomorrow (AlOps)



WWT Example



15,000 ROLES AT YOUR DISPOSAL

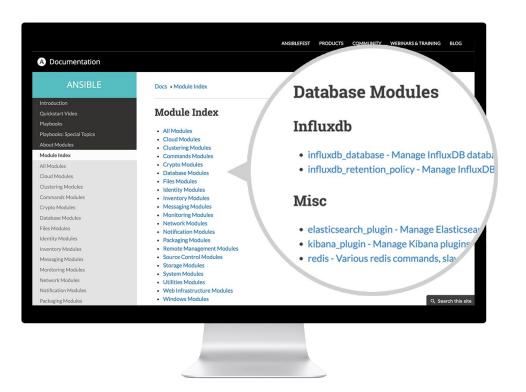
Reusable Roles and Container Apps that allow you to do more, faster

Built into the Ansible CLI and Tower

galaxy.ansible.com



docs.ansible.com





PLAYBOOK EXAMPLES

ANSIBLE

LAMP + HAPROXY + NAGIOS

github.com/ansible/ansible-examples/tree/master/lamp_haproxy

WINDOWS

github.com/ansible/ansible-examples/tree/master/windows

SECURITY COMPLIANCE

github.com/ansible/ansible-lockdown

NETWORK

github.com/privateip/network-demo

MORE...

galaxy.ansible.com github.com/ansible/ansible-examples



GETTING STARTED

Have you used Ansible already?

Try Tower for free: ansible.com/tower-trial

Would you like to learn Ansible?

It's easy to get started: ansible.com/get-started

Want to learn more?

Videos, webinars, case studies, whitepapers: ansible.com/resources



AUTOMATION = ACCELERATION

