

AUTOMATION FOR EVERYONE

Accelerating your journey to the Hybrid Cloud with Ansible Tower

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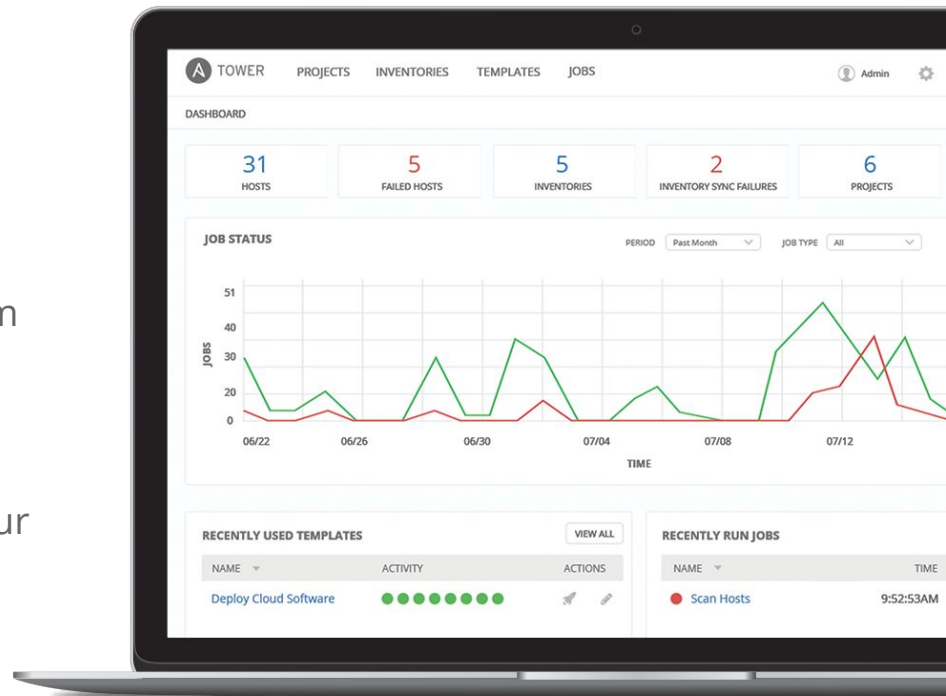
Solution Architect, Red Hat



The Ansible project is an open source community sponsored by Red Hat. It's also a **simple automation language** that perfectly describes IT application environments in **Ansible Playbooks**.

Ansible Engine is a **supported product** built from the Ansible community project.

Ansible Tower is an **enterprise framework** for controlling, securing, managing and extending your Ansible automation (community or engine) with a **UI and RESTful API**.



v1 - Set config file to use on boot

1. Write multiple configuration files
 - For each environment/region
2. Inspect metadata on boot and use the matching config file



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24,000+

Stars on GitHub

1250+

Ansible modules

400,000+

Downloads a month

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.



RED HAT®
ANSIBLE®
Automation

RED HAT ANSIBLE TOWER

Scale + operationalize your automation

CONTROL

KNOWLEDGE

DELEGATION

RED HAT ANSIBLE ENGINE

Support for your Ansible automation

SIMPLE

POWERFUL

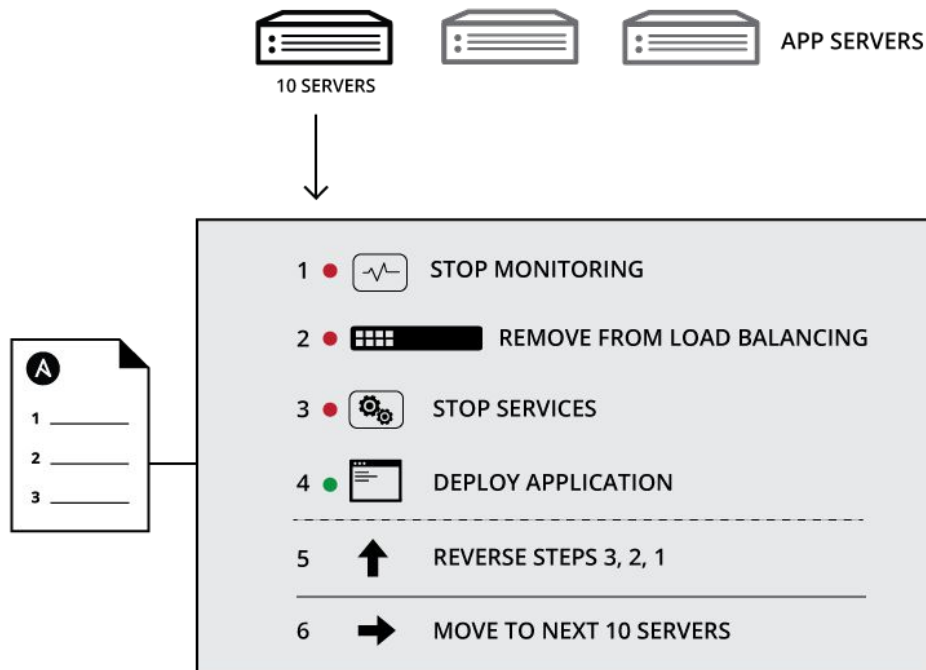
AGENTLESS

FUELED BY AN INNOVATIVE **OPEN SOURCE** COMMUNITY

Your applications and systems **are more than just collections of configurations**. They're a finely tuned and **ordered list** of tasks and processes that result in **your working application**.

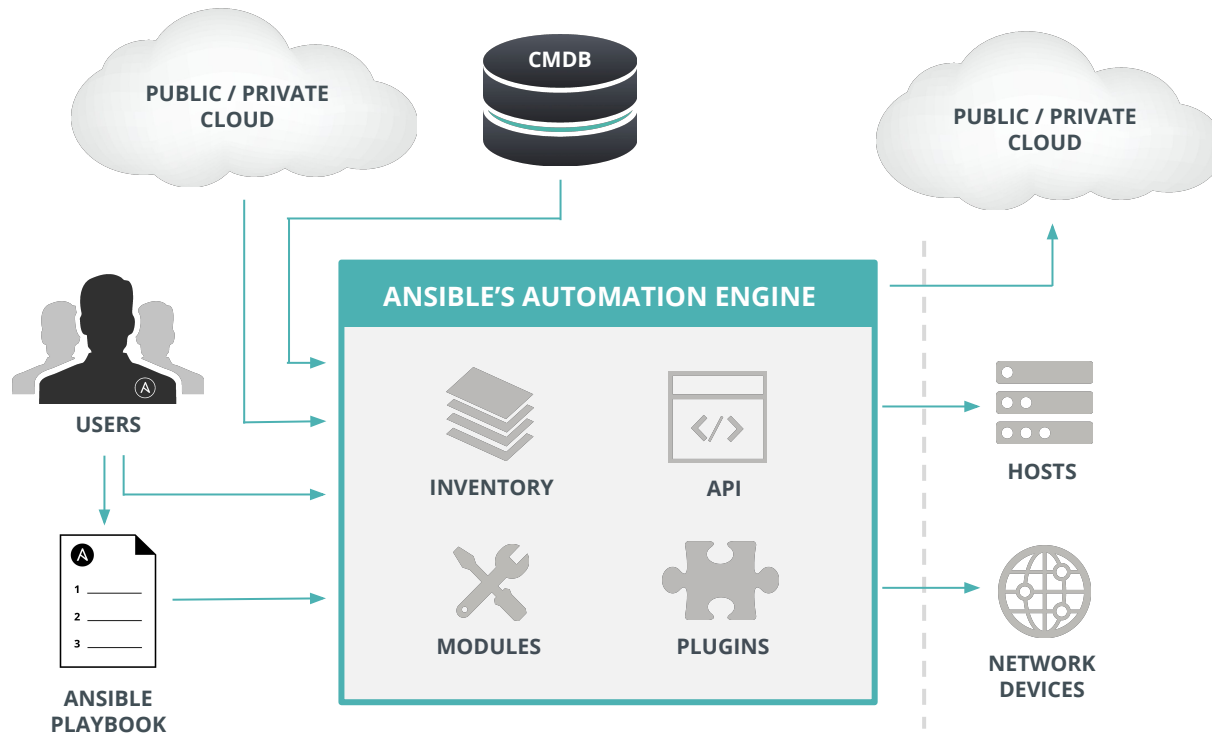
Ansible can do it all:

- Provisioning
- App Deployment
- Configuration Management
- Multi-tier Orchestration



HOW ANSIBLE WORKS

ANSIBLE



CLOUD

OpenStack, VMware, EC2,
Rackspace, GCE, Azure,
Spacewalk, Hanlon, Cobbler

CUSTOM CMDB


```
---
- 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 WINDOWS AUTOMATION

Use Ansible to deploy and manage Windows systems and applications.

70+

Windows Modules

350+

Powershell DSC
resources

ansible.com/windows

```
- hosts: new_servers
  tasks:
    - name: ensure common OS updates are current
      win_updates:
        register: update_result

    - name: ensure domain membership
      win_domain_membership:
        dns_domain_name: contoso.corp
        domain_admin_user: '{{ domain_admin_username }}'
        domain_admin_password: '{{ domain_admin_password }}'
        state: domain
        register: domain_result

    - name: reboot and wait for host if updates or domain change require it
      win_reboot:
        when: update_result.reboot_required or domain_result.reboot_required

    - name: ensure local admin account exists
      win_user:
        name: localadmin
        password: '{{ local_admin_password }}'
        groups: Administrators

    - name: ensure common tools are installed
      win_chocolatey:
        name: '{{ item }}'
        with_items: ['sysinternals', 'googlechrome']
```

ANSIBLE SHIPS WITH OVER 1250 MODULES

ANSIBLE

CLOUD

AWS
Azure
CenturyLink
CloudScale
Digital Ocean
Docker
Google
Linode
OpenStack
Rackspace
And more...

VIRT AND CONTAINER

Docker
VMware
RHEV
OpenStack
OpenShift
Atomic
CloudStack
And more...

WINDOWS

ACLs
Files
Commands
Packages
IIS
Regedits
Shell
Shares
Services
DSC
Users
Domains
And more...

NETWORK

Arista
A10
Cumulus
Big Switch
Cisco
Cumulus
Dell
F5
Juniper
Palo Alto
OpenSwitch
And more...

NOTIFY

HipChat
IRC
Jabber
Email
RocketChat
Sendgrid
Slack
Twilio
And more...



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Tower

INFRASTRUCTURE AS CODE

Leverage Ansible Tower to manage the Hybrid Cloud

Infrastructure as Code

- Systems can be easily reproduced (with confidence)
- Systems are disposable
- Cattle, not pets
- Systems are consistent
- Processes are repeatable
- Design is always changing



Infrastructure as Code - Goals

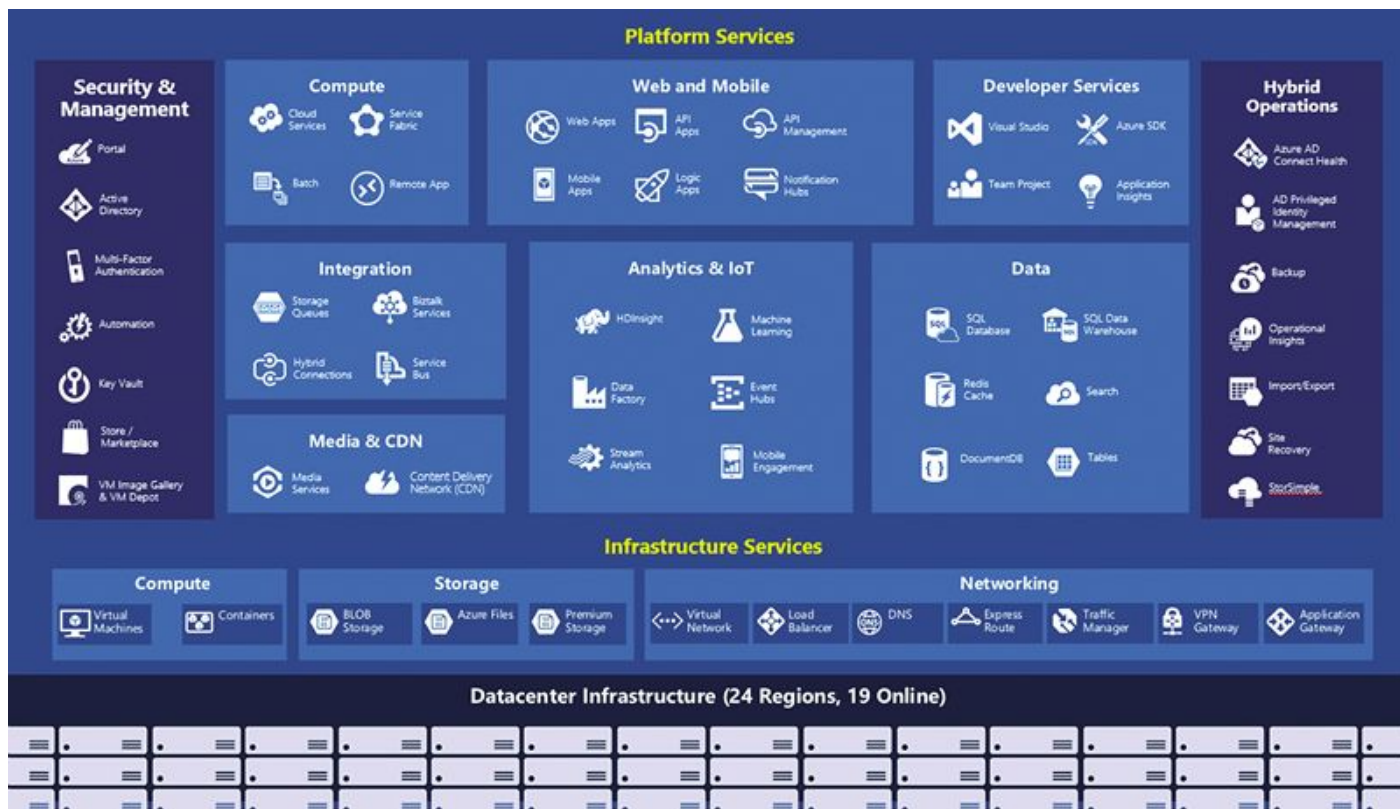
- IT infrastructure supports and enables change
- Changes to the system are routine
- IT staff spends their time on valuable things that engage their abilities
- Users can define, provision, manage resources they need
- Teams are able to easily and quickly recover from failures
- Improvements are made continuously
- Solutions to problems are proven through implementing, testing, and measuring them



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ANSIBLE
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ANSIBLE WITH MICROSOFT AZURE

Automate application deployment on the Microsoft Azure Cloud



Availability sets

DNS

Function App

Load balancer

Managed disk

Network

PublicIP

Security Group

Storage

Virtual Machines

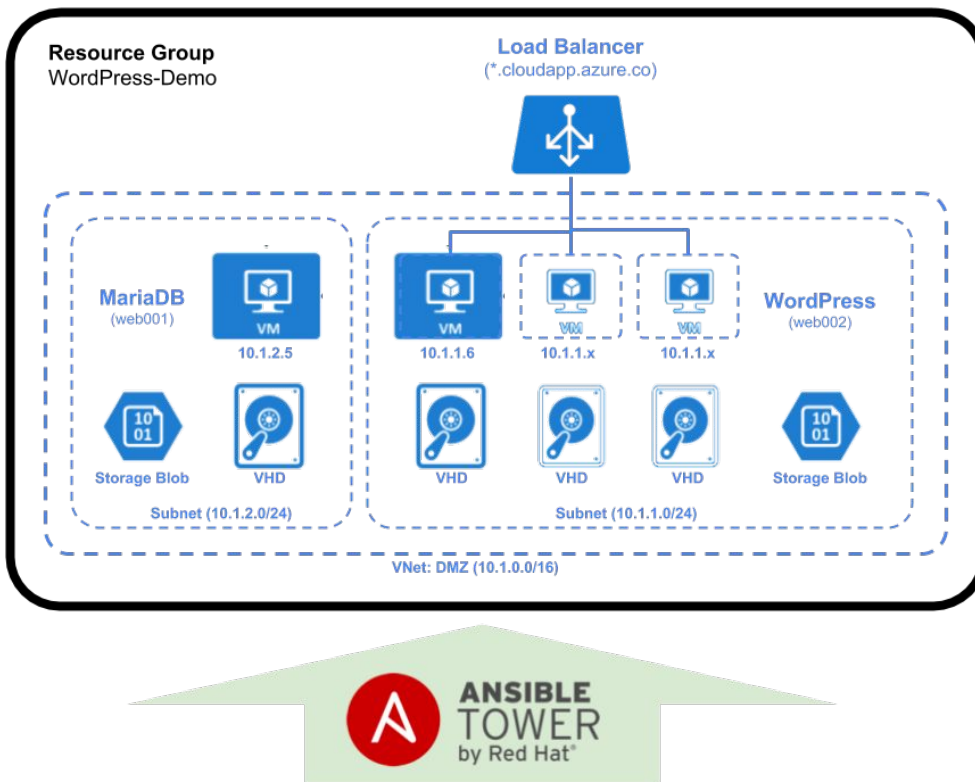
Virtual Machine Scale Sets

VNET

...

DEMO

DEPLOY SERVICE ON AZURE



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***