

ANSIBLE

AUTOMATION FOR EVERYONE

Ansible technical introduction and overview

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AUTOMATE ~~REPEAT IT~~

NAVIGATION SYSTEMS

Tell us where to turn

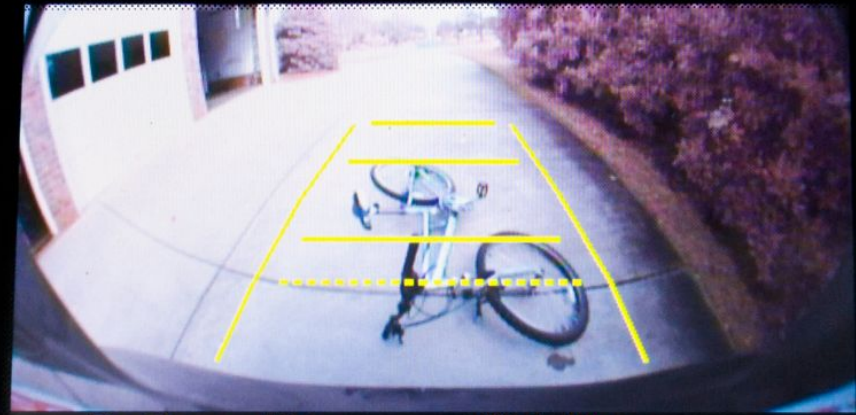




REAR CAMERAS
Guide us to places
we can't easily see

BACKUP SENSORS

Alert us when to stop



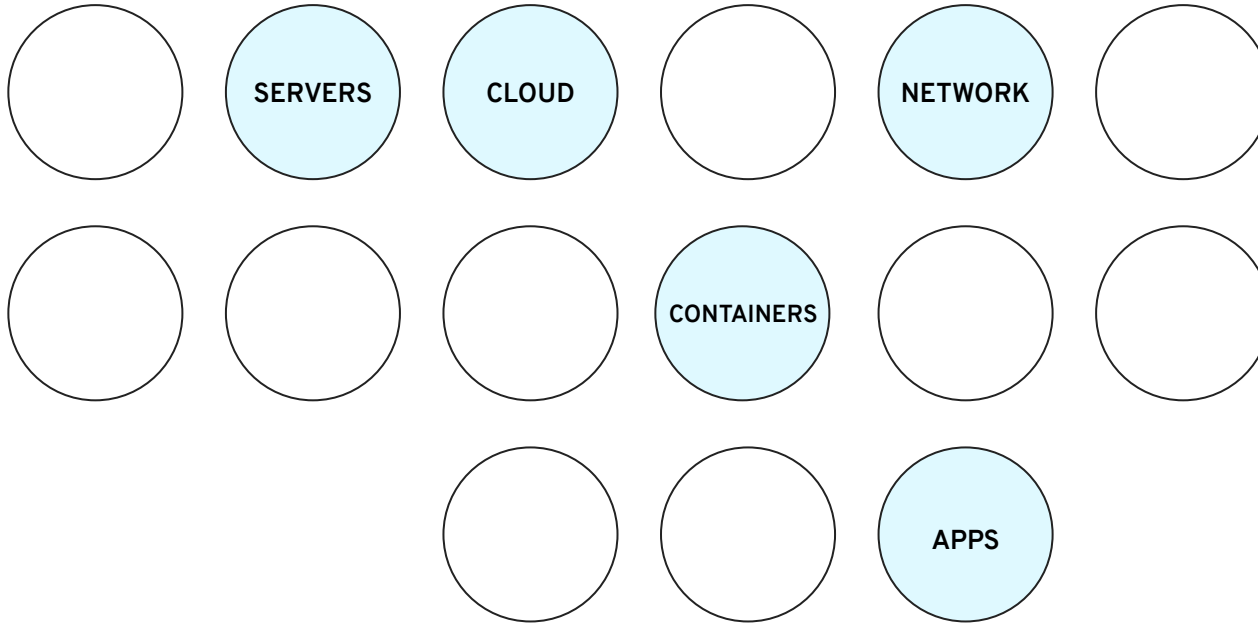
Change View

Wide View

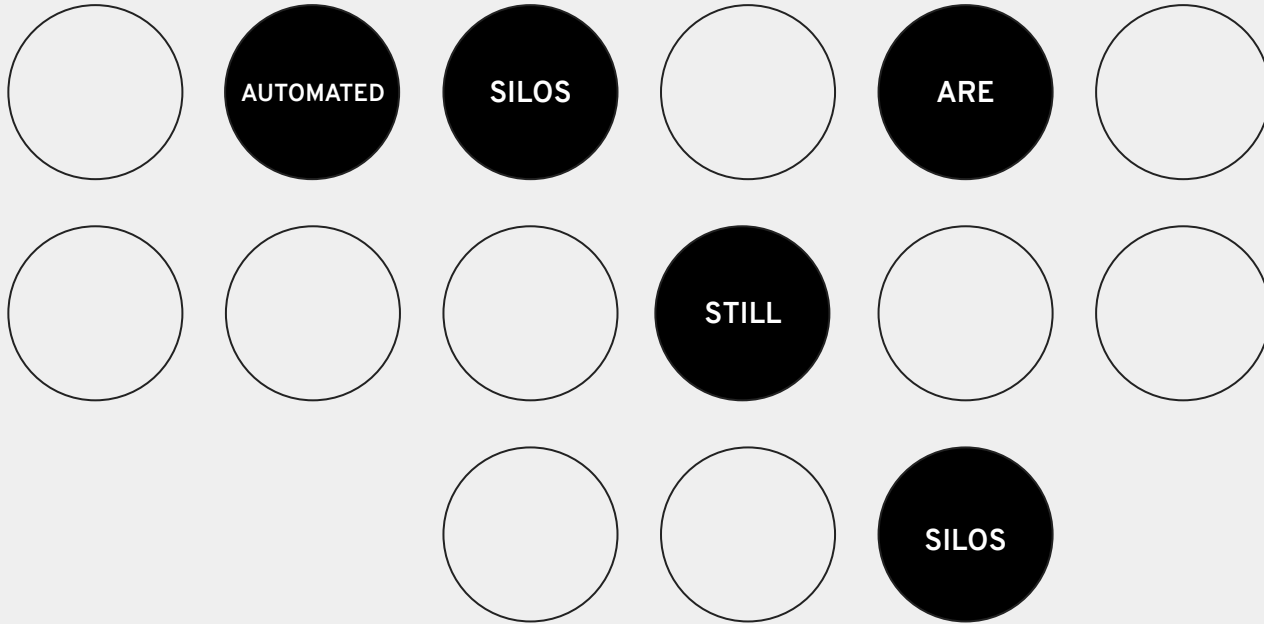


BUT THIS IS WHAT WE REALLY WANT
Systems that don't just talk to us,
but talk to each other

AUTOMATION IN ENTERPRISE IT TODAY

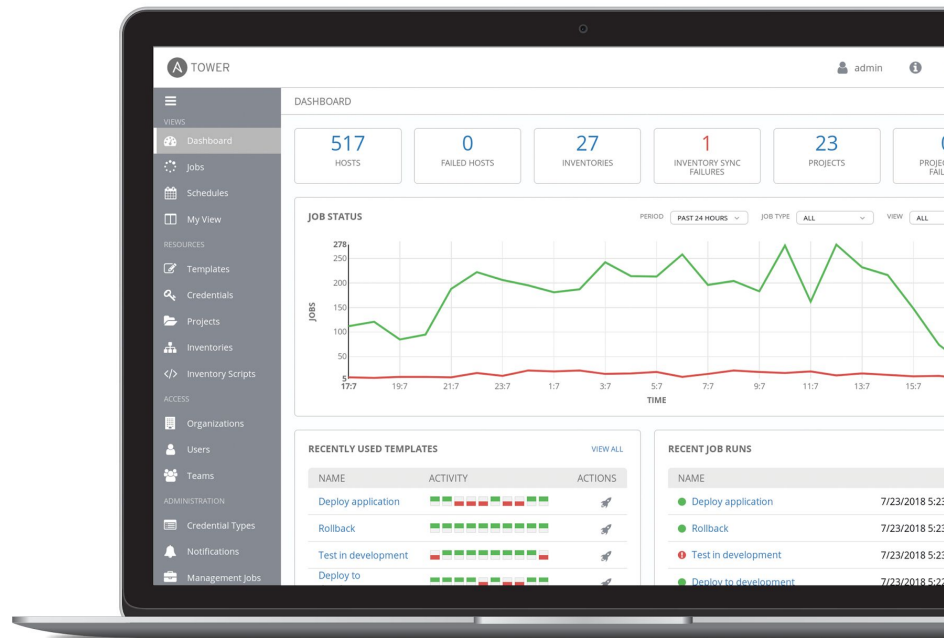


AUTOMATION IN ENTERPRISE IT TODAY



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

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





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

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

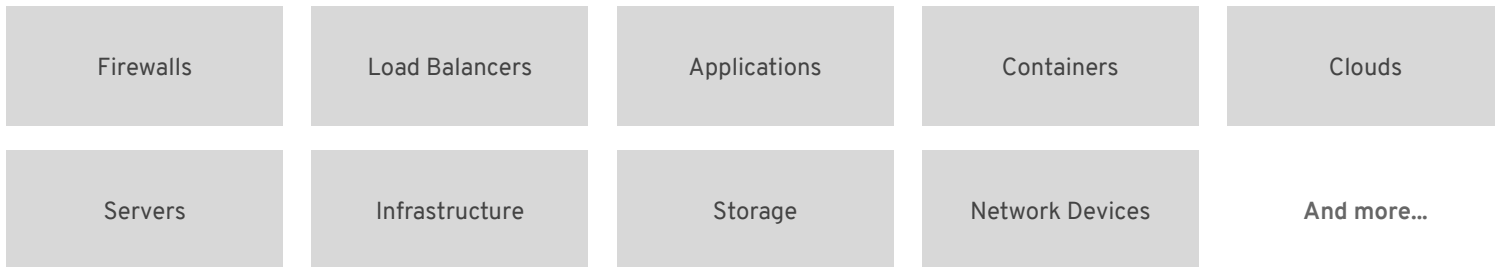
Every change can be made by Playbooks, ensuring everyone is on the same page.

Automate the deployment and management of your entire IT footprint.

Do this...



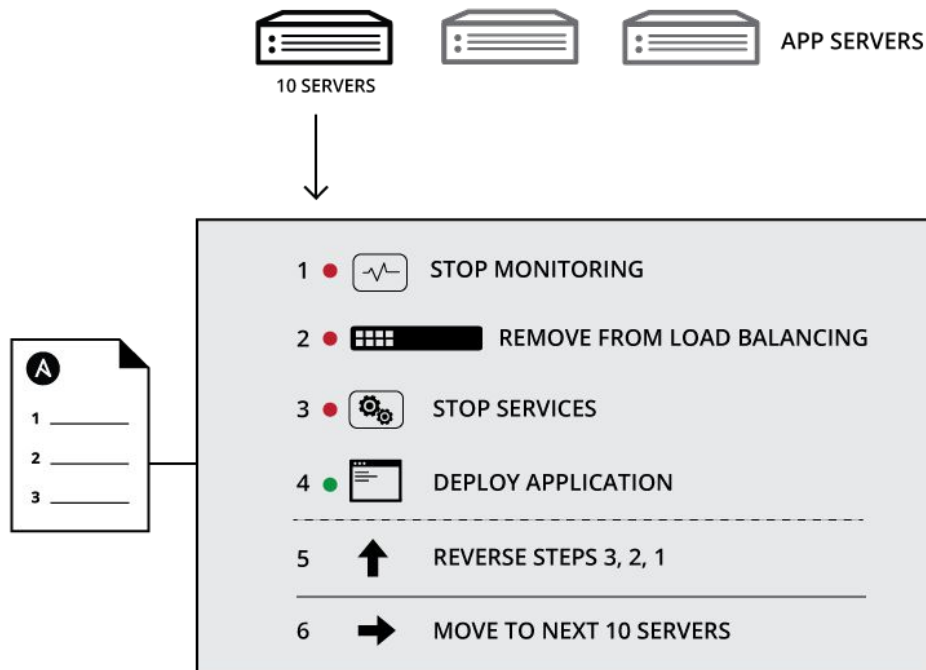
On these...



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**.

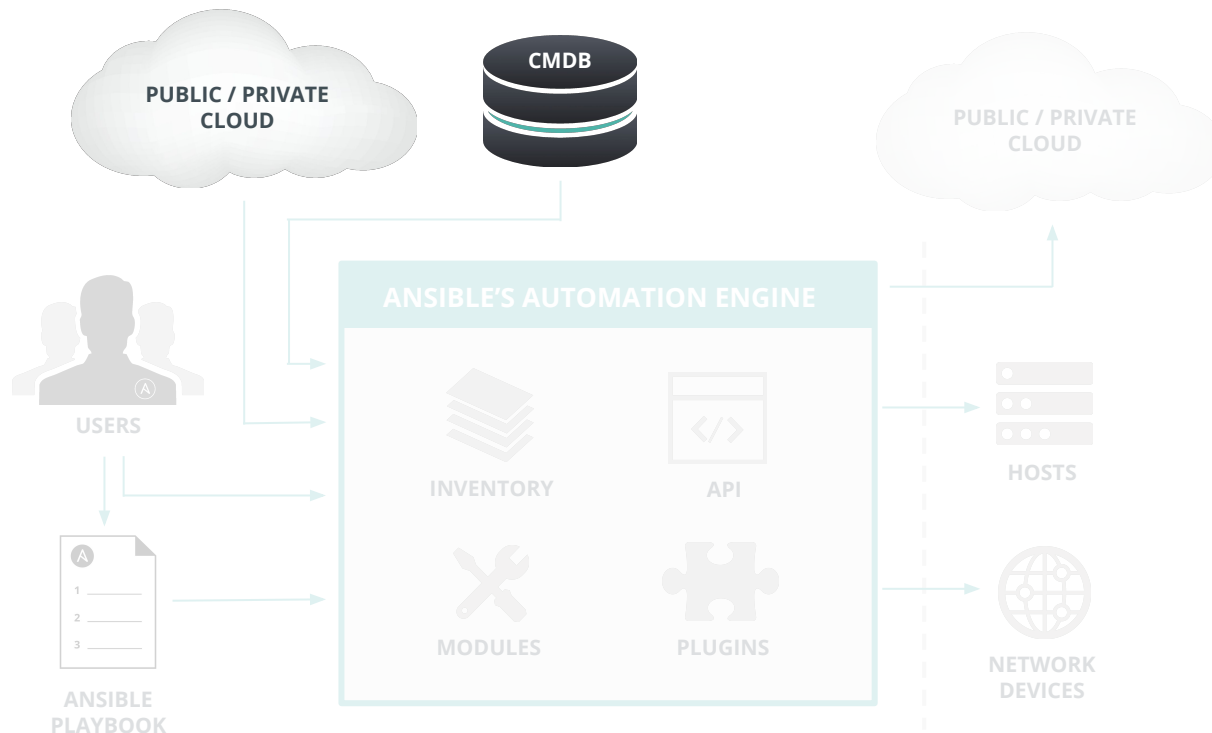
Ansible can do it all:

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



HOW ANSIBLE WORKS

ANSIBLE



CLOUD

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

CUSTOM CMDB

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



v1 - Set config file to use on boot

1. Write multiple configuration files
 - For each environment/region
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31,000+

Stars on GitHub

1900+

Ansible modules

500,000+

Downloads a month

ANSIBLE

THE LANGUAGE OF DEVOPS

```
---
- 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

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

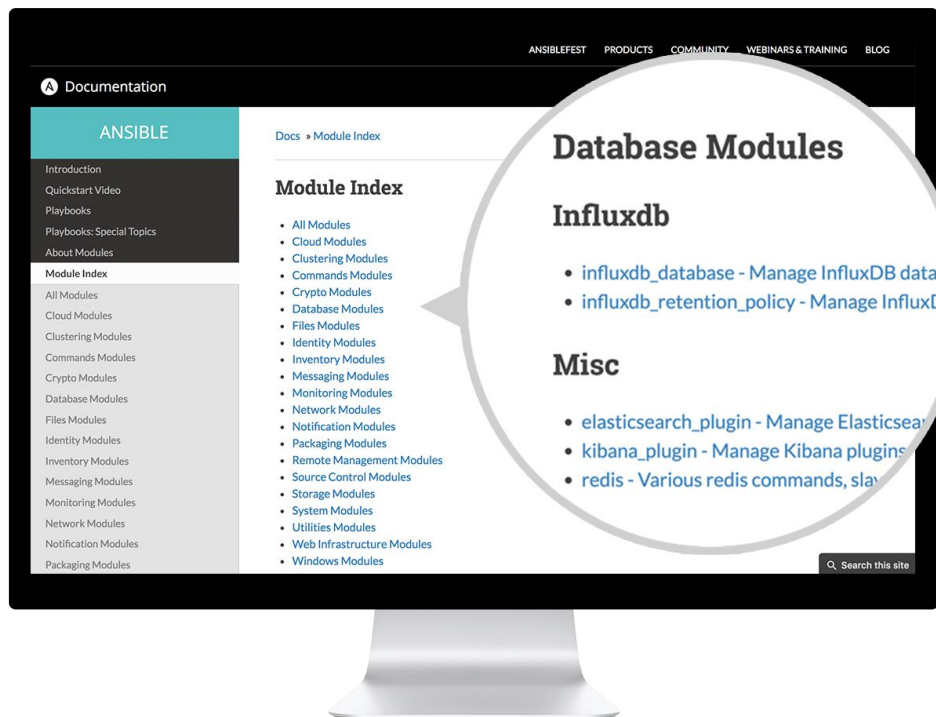
Arista
A10
Cumulus
Bigswitch
Cisco
Cumulus
Dell
F5
Juniper
Palo Alto
OpenSwitch
+more

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



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



RED HAT
ANSIBLE
Tower

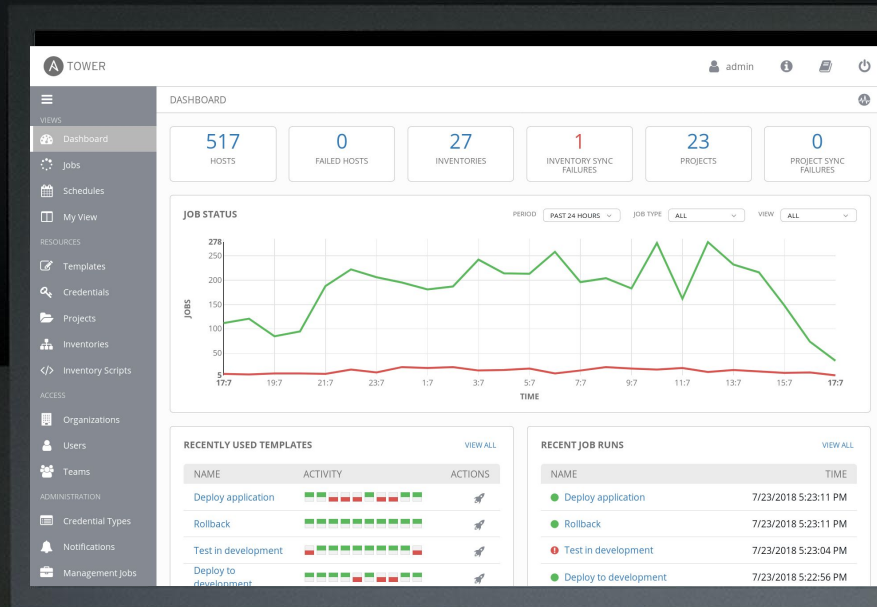
AUTOMATION FOR TEAMS

Ansible Tower technical introduction and overview

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**





RED HAT®
ANSIBLE®
Automation

RED HAT ANSIBLE TOWER

Scale + operationalize your automation

CONTROL

KNOWLEDGE

DELEGATION

RED HAT ANSIBLE ENGINE

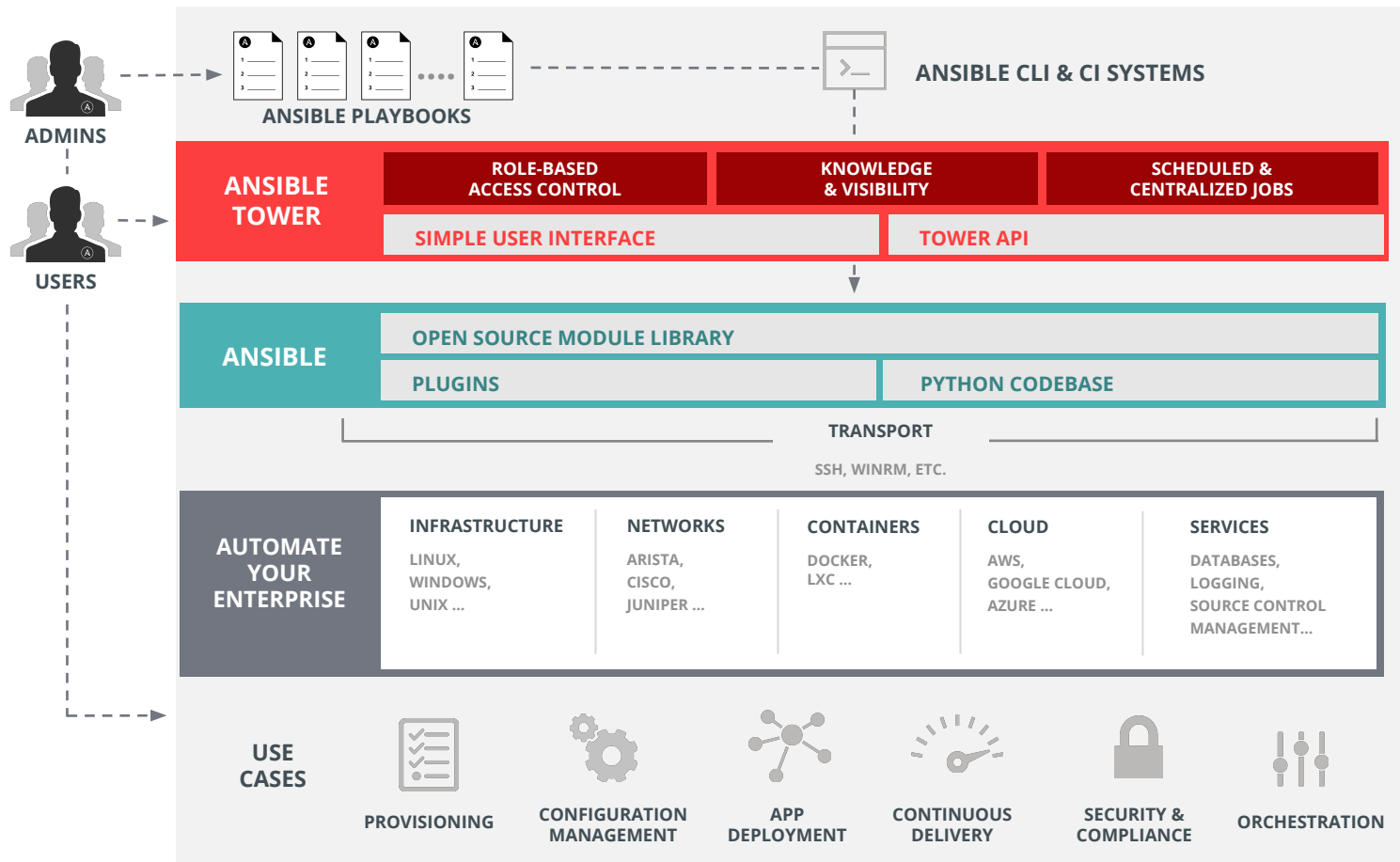
Support for your Ansible automation

SIMPLE

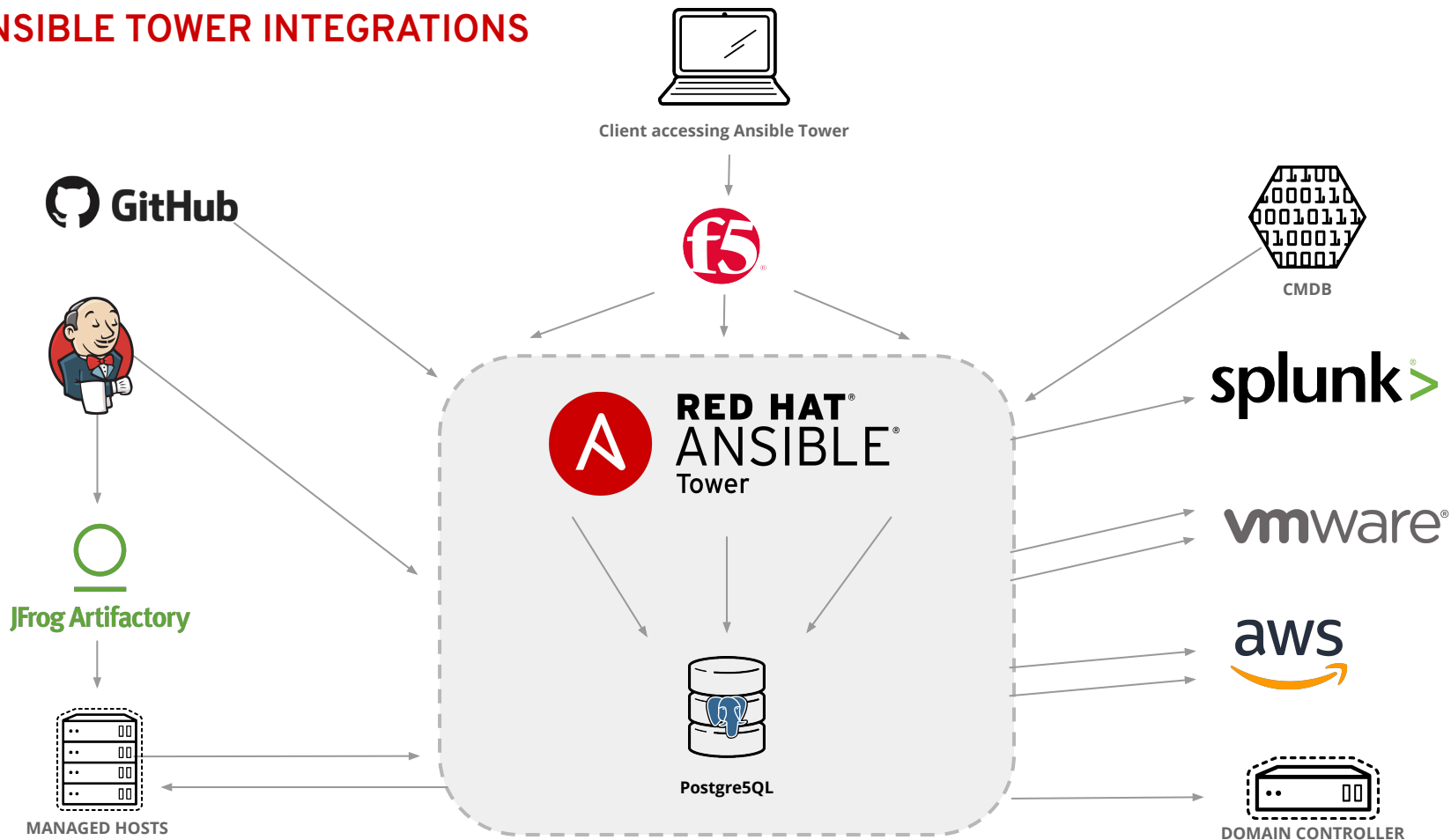
POWERFUL

AGENTLESS

FUELED BY AN INNOVATIVE **OPEN SOURCE** COMMUNITY



ANSIBLE TOWER INTEGRATIONS



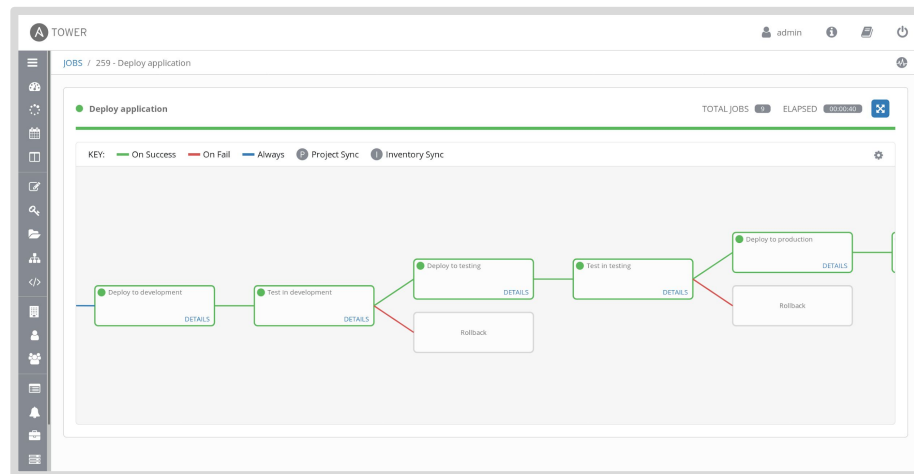


RED HAT[®]
ANSIBLE[®]
Tower

FEATURE OVERVIEW

MULTI-PLAYBOOK WORKFLOWS

Tower's multi-Playbook workflows chains any number of Playbooks together to create a single workflow. Different Jobs can be run depending on success or failure of the prior Playbook.



LAUNCH JOB | DEPLOY SOFTWARE

INVENTORY

CREDENTIAL

SURVEY

* ENTER NUMBER OF SERVICE INSTANCES.

2

* PLEASE SELECT THE SERVICE OWNER.

Alice

* ENTER PASSWORD FOR DEPLOYED CERTIFICATE.

SHOW

INVENTORY

CREDENTIAL

Cloud staging servers

Staging ssh key

CANCEL

LAUNCH

SELF-SERVICE IT

Tower lets you launch Playbooks with just a single click. It can prompt you for variables, let you choose from available secure credentials and monitor the resulting deployments.

UPCOMING IN TOWER 3.3

ISOLATED NODES

Deploy automation workloads into a DMZ, or other remote locations

ADVANCED INSIGHTS INTEGRATION

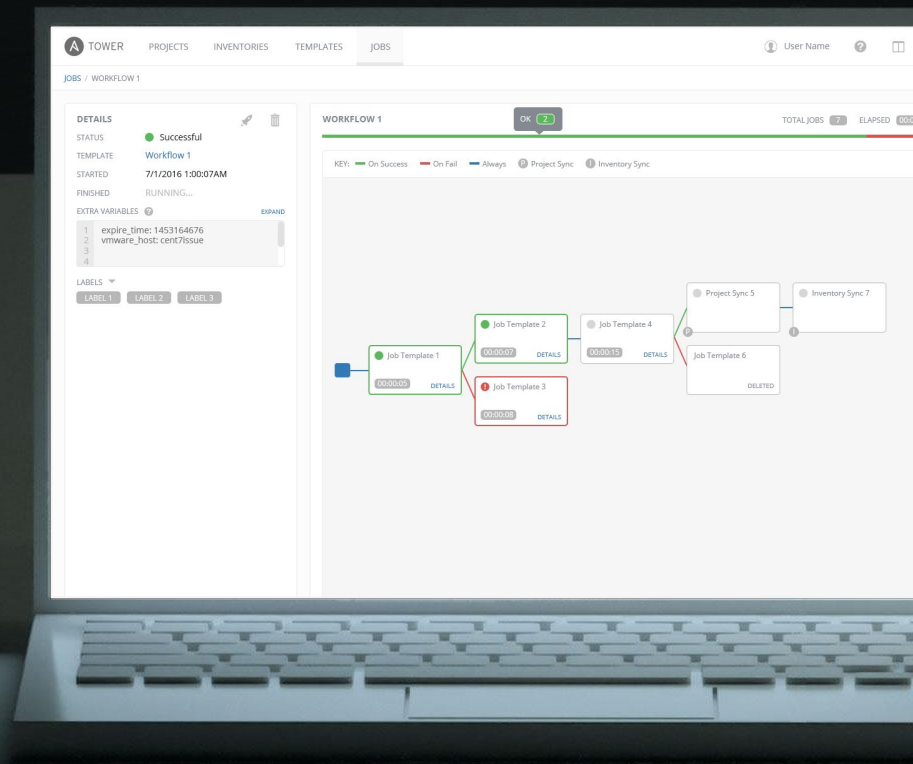
Directly view Red Hat Insights findings, and automatically remediate them

RESERVED EXECUTION CAPACITY

Limit job capacity available to certain user groups

SMART INVENTORY GROUPS

Customize and dynamically create groups of servers based on fact data





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