Datacenter, Rete, Sicurezza Proattiva e Cloud automatizzati con Ansible Tower

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#RedHatOSD
33,000+ Stars on GitHub
7500+ Contributors
1900+ Ansible modules
500,000+ Downloads a month
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 with a UI and RESTful API.
AUTOMATION FOR EVERYONE
EVEN I CAN RUN A PLAYBOOK :-)
A SIMPLE PLAYBOOK

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- 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
Module code is executed locally on the control node.

Module code is copied to the managed node, executed, then removed.

- Networking Devices
- Local Execution
- Remote Execution
- Linux/Windows Hosts
WHAT CAN I DO WITH ANSIBLE?

Automate the deployment and management of your entire IT footprint.

Do this...

- Orchestration
- Configuration Management
- Application Deployment
- Provisioning
- Continuous Delivery
- Security and Compliance

On these...

- Firewalls
- Load Balancers
- Applications
- Containers
- Clouds
- Servers
- Infrastructure
- Storage
- Network Devices
- And more...
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
10,000 ROLES AT YOUR DISPOSAL

Re-usable Roles and Container Apps that allow you to do more, faster

Built into the Ansible CLI and Tower

galaxy.ansible.com
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
A Tower Isolated Node is a **headless Ansible Tower** that can be used for local execution capacity either in:

- Constrained networking environment (DMZ)
- Virtual Private Cloud
- Remote Data center/Plants/POPs
- Edge Computing

The only prerequisite is that there is **SSH connectivity** from the Tower Cluster to the Isolated Node

[https://developers.redhat.com/blog/2017/12/20/understanding-ansible-tower-isolated-nodes/](https://developers.redhat.com/blog/2017/12/20/understanding-ansible-tower-isolated-nodes/)
TRADITIONAL AUTOMATION SETUP SCENARIO

Build OS

Updates

Tower Install

Tower Config

Use Cases
END-TO-END AUTOMATION
POWERED BY ANSIBLE

https://youtu.be/89IZv6-roso
WHAT’S NEW IN ANSIBLE TOWER 3.3

TOWER AS A SERVICE
- Now deployable as a container in OpenShift
- Dynamically scale & add capacity Ansible Tower at runtime
- Push-button Ansible Tower deployment for OpenShift users

SECURITY
- More granular role-based permissions
- Run multiple versions of Ansible Engine in parallel
- New set of permissions for admin users

https://www.ansible.com/blog/ansible-tower-3.3-available-now

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WHAT’S NEW IN ANSIBLE TOWER 3.3

IMPROVED SCALING

○ Scale up and down based on job capacity
○ Manage Instance Groups by policy
○ Instance Groups can be defined by percentage of total cluster capacity
DEMO TIME
SECURITY AS A CODE
https://youtu.be/akN7LOKjwSQ
AUTOMATION AS A SERVICE

https://youtu.be/Ol3whU_BgXw
ANSIBLE NETWORKING
173+ modules developed, maintained and tested by Red Hat

ansible.com/networking
Configure, validate, & ensure continuous compliance for network devices

**BUILD**

with Red Hat Ansible Engine

- Get automating quickly.
- Integrate multi-vendor configurations.
- Ideal for both brownfield and greenfield

Automate discrete tasks

**MANAGE**

with Red Hat Ansible Engine

- Methodically track configuration drift.
- Make changes across any set of network devices.
- Validate that changes were successful.

Automate business processes

**SCALE**

with Red Hat Ansible Tower

- Ensure ongoing steadystate on a schedule.
- Use role-based access controls with specific teams.
- Integrate external third-party solutions with RESTful API.

Orchestrate & operationalize automation
RESOURCES

- Get Started with Red Hat Ansible Tower
- The Total Economic Impact of Red Hat Ansible Automation
- Supporting GDPR compliance with automation
- The Automated Enterprise
GRAZIE PER L’ATTENZIONE

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