

# Ansible Automation Platform Maximise Automation; Minimise Effort

Mark Swinson

Enterprise Automation Specialist mark.swinson@redhat.com



# 6677

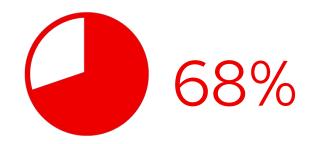


### Automation is now a "boardroom imperative."

Forrester



# IT Automation is a priority

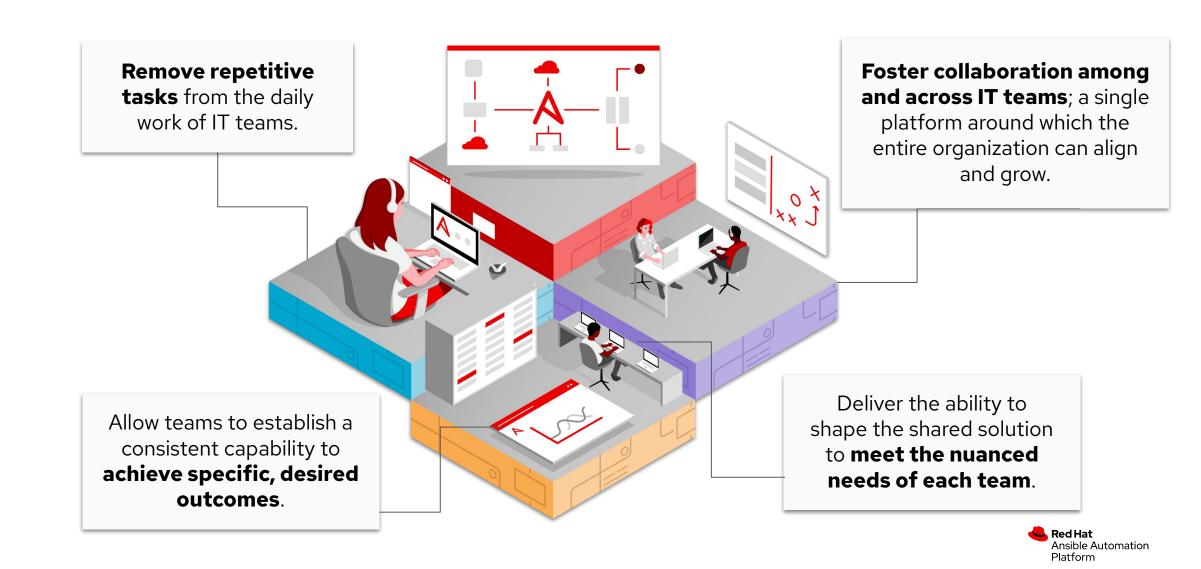


Of respondents agree that in the past 12 months, **IT automation at their organization has shifted** from a "nice to have" to a "must have" 53% of respondents say IT leaders should be serving as a proponent for culture change to ensure automation is accepted –but only 26% say IT leaders are doing this now.

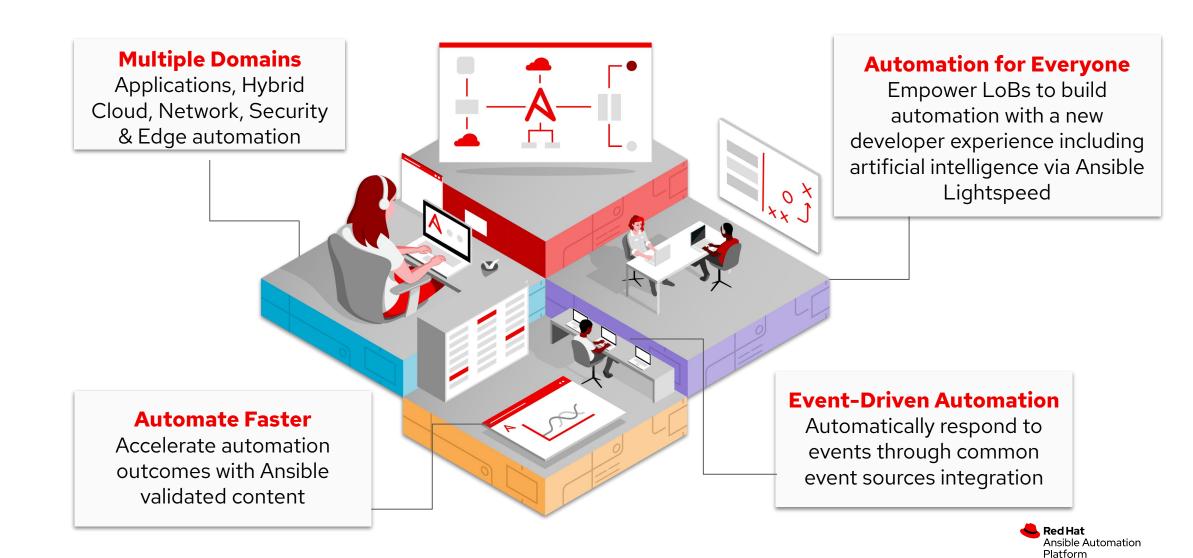
80% of respondents say IT adopting IT automation is "extremely important" or "very important to the future success of their organization.



### Red Hat Ansible is built around four core principles



#### **Red Hat Ansible Automation Platform**





Parametrized components with internal logic, representing a single step to be done.

The modules "do" things in Ansible.

Written in Python, or Powershell for Windows setups. But can be of any language.





Plugins are pieces of code that augment Ansible's core functionality.

Ansible uses a plugin architecture to enable a rich, flexible, and expandable feature set.





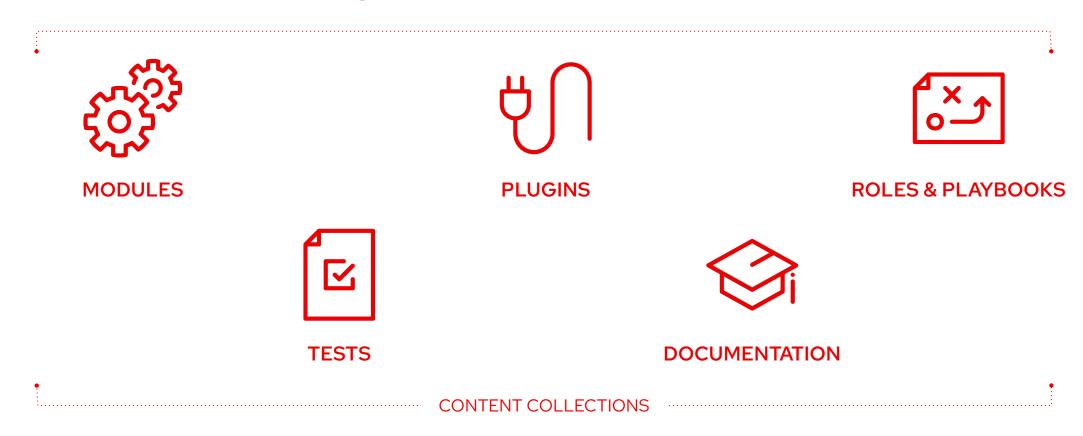
#### **ROLES & PLAYBOOKS**

A playbook contains the top level specification for a group of tasks executed with limited or no human involvement.

Roles group your tasks and variables of your automation in a reusable structure.



All together, delivered as content collections







### Red Hat Certified Content

What do I want to automate?



Establishes **integration** with Red Hat and 3rd-party platforms

From Red Hat and trusted industry partners

Tested and supported for security, quality, and reliability

Available through **console.redhat.com** 

### **Ansible Validated Content**

How should I automate it?



Provides an **opinionated path for performing operations** on Red Hat and 3rd-party platforms

From Red Hat and trusted industry partners

Tested for security, quality, and reliability

Now preloaded in **private automation hub** 



# Ansible Content Ecosystem: Value

Red Hat & Partners Developed Content



**TRUST** 



**ACCELERATE** 



**SIMPLIFY** 

Certified Content Collections grant an end-to-end supported experience directly by its creators. Validated Content Collections are curated to support domain-specific use cases helping to reduce time-to-production.

Certified and Validated Content together provide a more consistent user experience through a combination of best practices, resource modules and examples.



# 6677

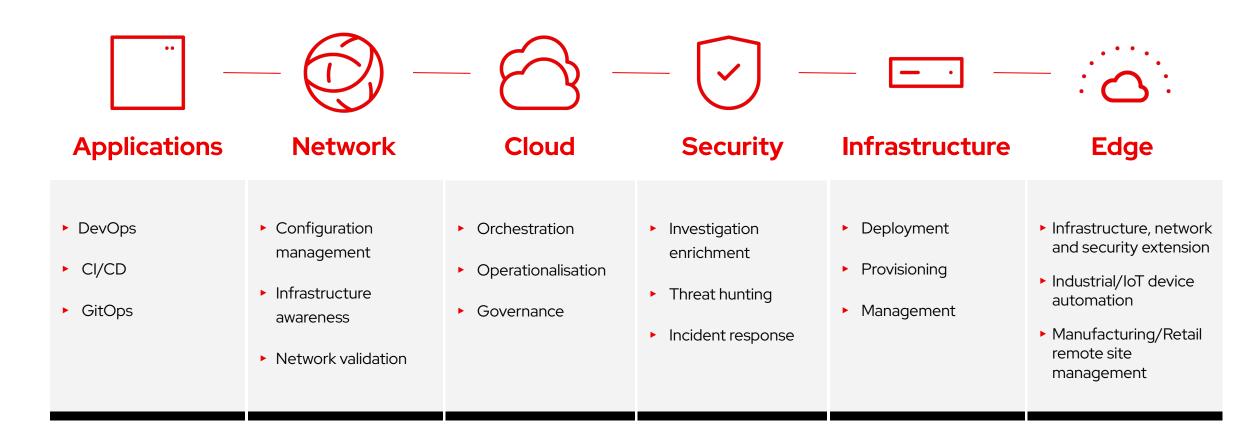


Identify high-value use cases for automation in your organization. Build those first.

Gartner



# Automate Everything You Need







### Infrastructure Automation



#### **PROVISIONING**

Deploy storage and hypervisors, VMs and their operating systems as well as applications on top of them.



#### **CONFIGURATION MANAGEMENT**

Prepare infrastructure, VMs and operating systems. Apply configuration golden standards at scale.



DAY 2 OPS

Maintain your entire stack ensuring operational consistency and compliance over time.







## Enterprise Applications Automation

From Day 0 to Day 2



#### Migration

Speed your SAP migration including provisioning, moving workloads to the cloud, database installation, and more.

#### Deployment

Streamline SAP and non-SAP IT management tasks through a single platform.

#### Lifecycle Management

Automate the entire SAP lifecycle and create the foundation to scale automation further and tackle networking, security, cloud, and more.





# Hybrid Cloud Automation







Support multi cloud operations via single management layer and reusable automation workflows.

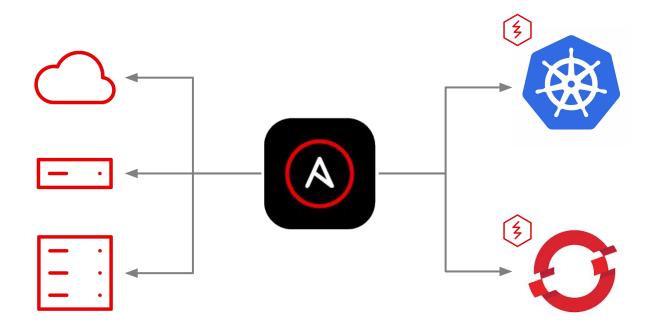
Expand Ansible outside of configuration management to holistic workload lifecycle management. From provisioning, ITSM integration and beyond.

Understand what you are running where, and programmatically access anything the cloud provider provides in an controlled fashion.





# Ansible + Red Hat OpenShift: better together

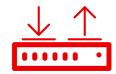


Ansible for Red Hat OpenShift enables organizations to automate the deployment and management of OpenShift systems and coordinate them with existing IT infrastructure using one simple language.





### **Network Automation**



# CONFIGURATION ACCURACY

Platform agnostic configuration management to standardize and enforce best-practices.



# OPERATIONAL STATE MANAGEMENT

Track network state through facts gathering, to perform preventive maintenance, reducing outage risks and make data-driven decisions.



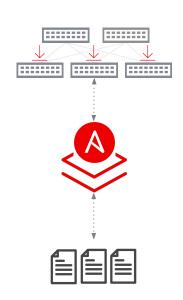
Enabling network governance through tracing & auditing configuration changes while keeping control of configuration & software versions through a single source of truth.





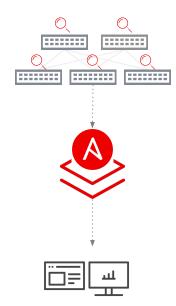
# Firewall Policy Automation

SecOps meet Security Analysts



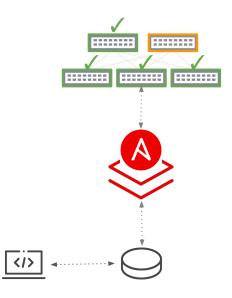
#### **Policy visibility**

- Read-only, no production config change
- Dynamic documentation and reporting
- Identify policy misconfigurations
- Create remediation plan



#### Policy hygiene

- Desired state policy definitions
- Single source of truth concepts
- Multi-vendor and multi-region
- Execute remediation plan



#### Policy life-cycle management

- Policy validation
- Event-driven enforcement (laaC)
- Integration into security response plan



# Security Automation



Enable programmatic access to log configurations such as destination, verbosity, etc.



Automate alerts, correlation searches and signature manipulation to preemptively identify threats.

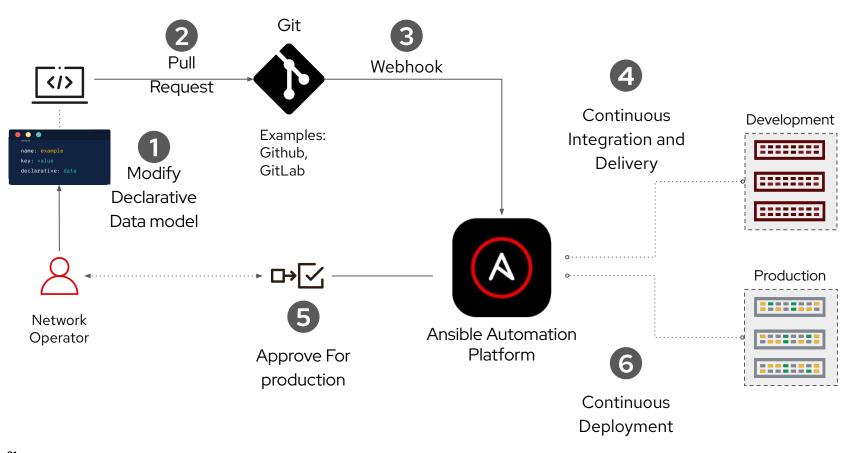


Creating new security policies to grant access, block or quarantine a machine.





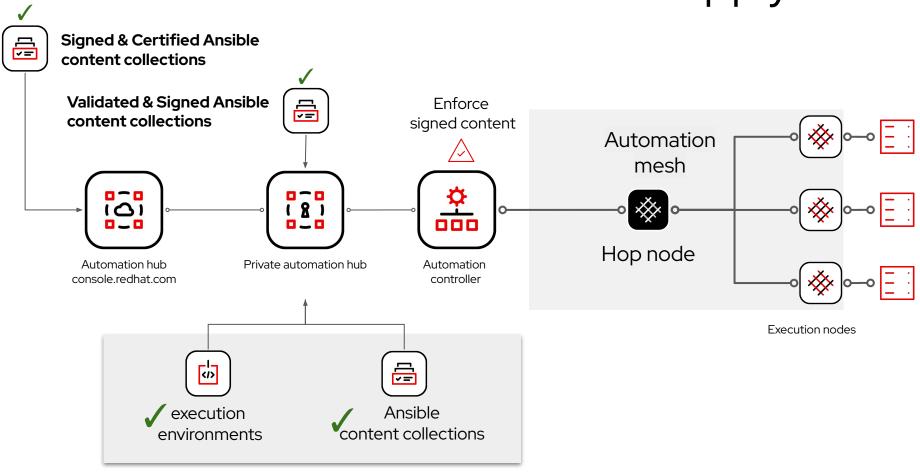
## GitOps meets IT Ops



- Apply data-centric approach to deploy, manage and automate the entire network thru one control plane
- Flexibility and freedom for how you need to work
- No specialized GitOps "agent" required



# Validated Content: Secure Supply Chain





# 6677



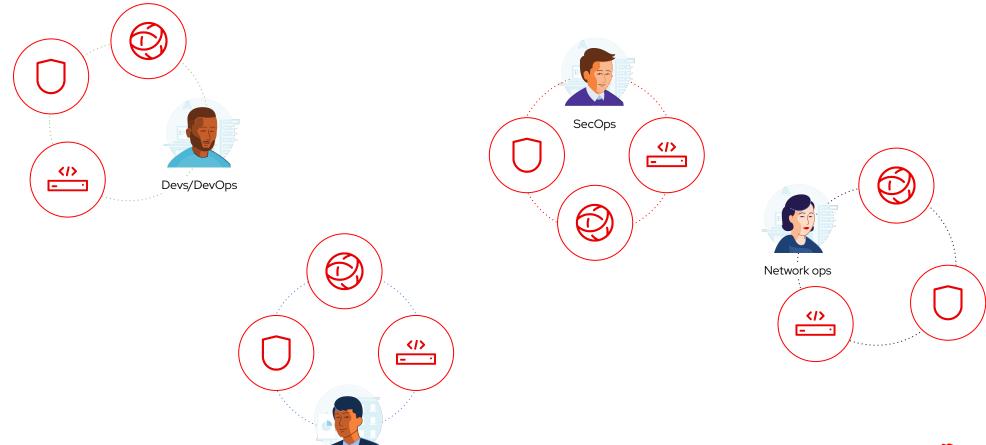
Find the pockets of ad hoc automation in your company, and grow them into a formal automation program. Bottom-up automation initiatives that grow organically are more likely to succeed than top-down, mandate-driven projects.

Gartner



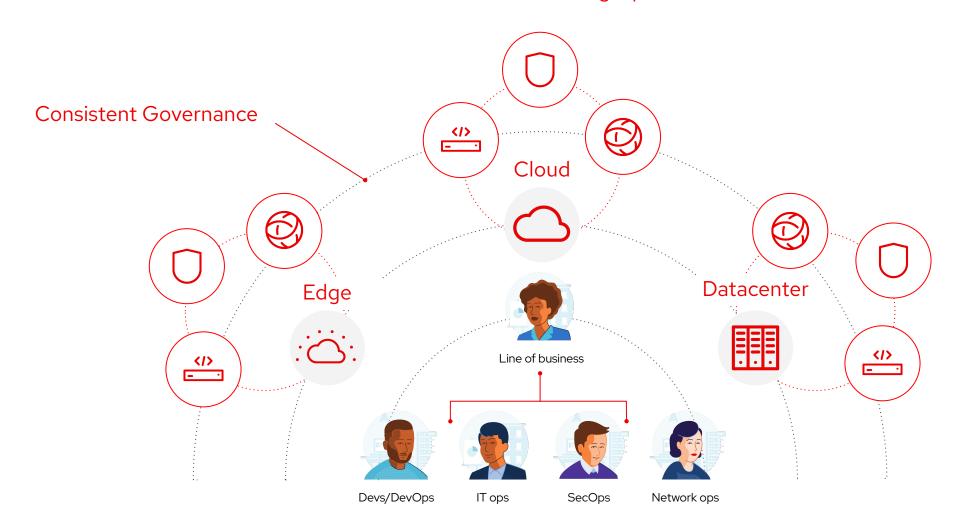
### Many organizations have a problem

Too many unintegrated, domain-specific tools



### Break down silos

Different teams on a single platform





#### Where Next?

#### **ROOM: CMD**

### Track 1: Enterprise Automation Strategy -Why Automate?

In this track, we cover why enterprise automation is an important initiative, how to approach it and the value it brings to all organisations.

Perfect for: Enterprise Architects and business stakeholders.

2:00pm Automate as One: the power of

automation communities of

practice

2:50pm Security, Compliance &

Governance

#### **ROOM: CTRL**

### Track 2: The Outcome of Automation - What to Automate?

Learn from delivery teams about the challenges and successes of implementation.

Perfect for: Anyone who wants to understand what you can automate with Ansible, and how to do it.

2:00pm Modernising the monolith:

automating on-prem like the

cloud.

2:50pm Migrating the developer

experience from Ansible Tower to

AAP

#### **ROOM: TAB/ALT**

# Track 3: Ansible Automation Platform How to Automate

This track is all about getting value out of the platform - join us to find out what's new and coming.

Perfect for: People who are already running the platform.

2:50pm Scaling your automation with AAP



# Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.

- facebook.com/ansibleautomation
- witter.com/ansible
- in linkedin.com/company/ansible/
- youtube.com/user/RedHatVideos

