



Red Hat
Summit

Red Hat Ansible Automation

Kompletní automatizace IT od A do Z

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Senior Solution Architect

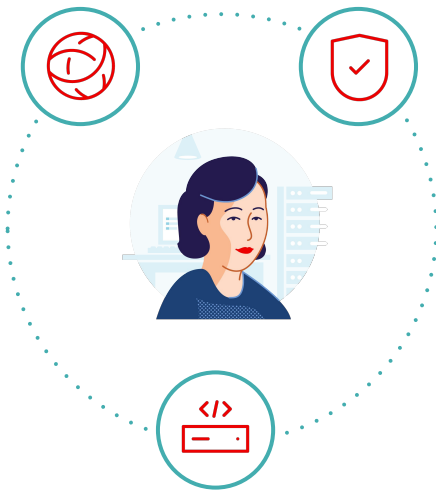


Anyone can automate...
but an enterprise needs
to coordinate and scale



Many organizations share the same challenge

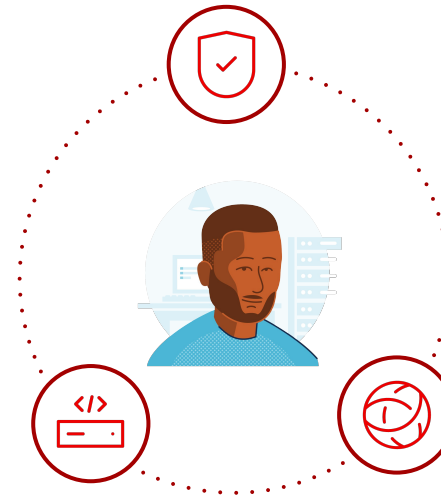
Too many unintegrated, domain-specific tools



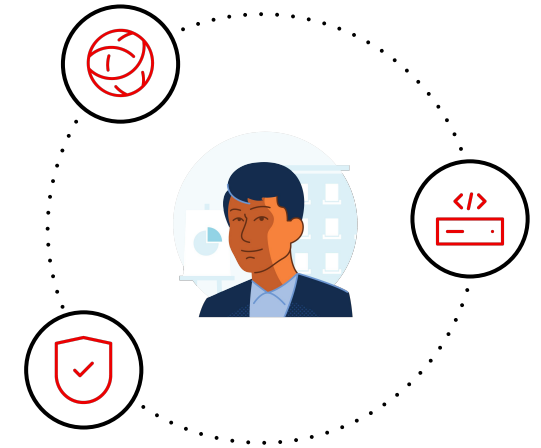
Network ops



SecOps



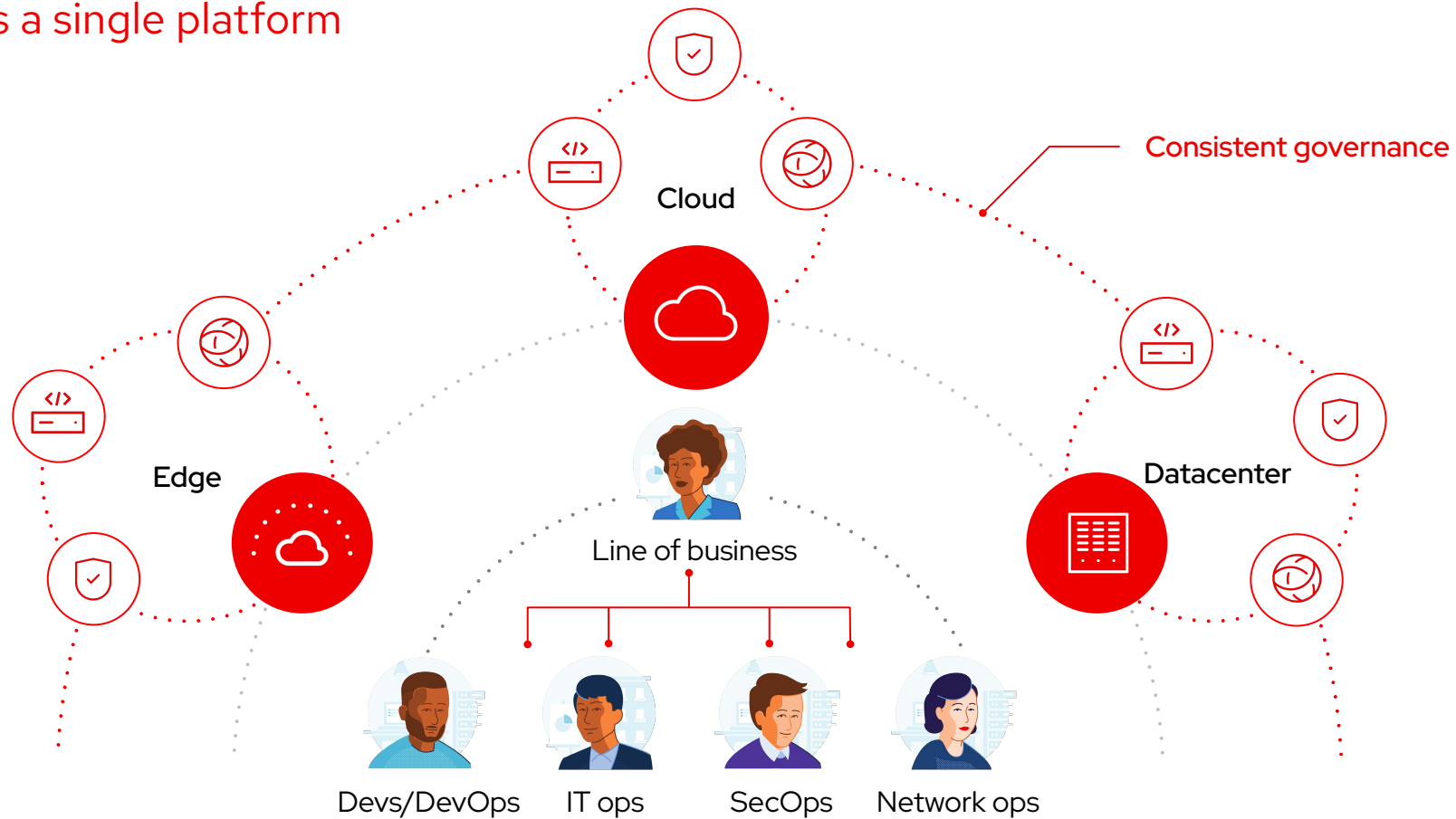
Devs/DevOps



IT ops

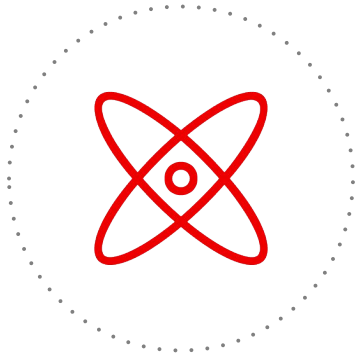
Break down silos

Different teams a single platform



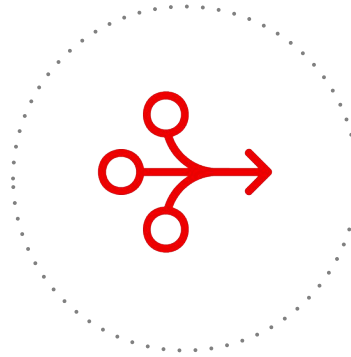
Why the Red Hat[®] Ansible[®] Automation Platform?

Why the Ansible Automation Platform?



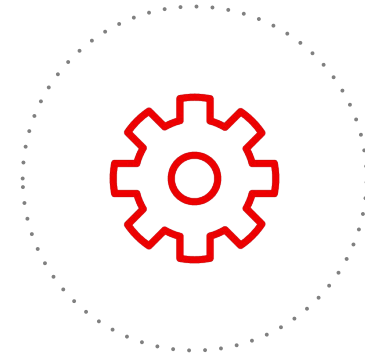
Powerful

Orchestrate complex processes at enterprise scale.



Simple

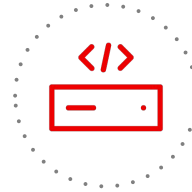
Simplify automation creation and management across multiple domains.



Agentless

Easily integrate with hybrid environments.

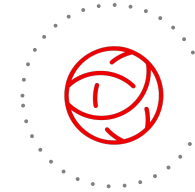
90+
certified platforms



Infrastructure



Cloud



Network



Security



ARISTA



Check Point®
SOFTWARE TECHNOLOGIES LTD



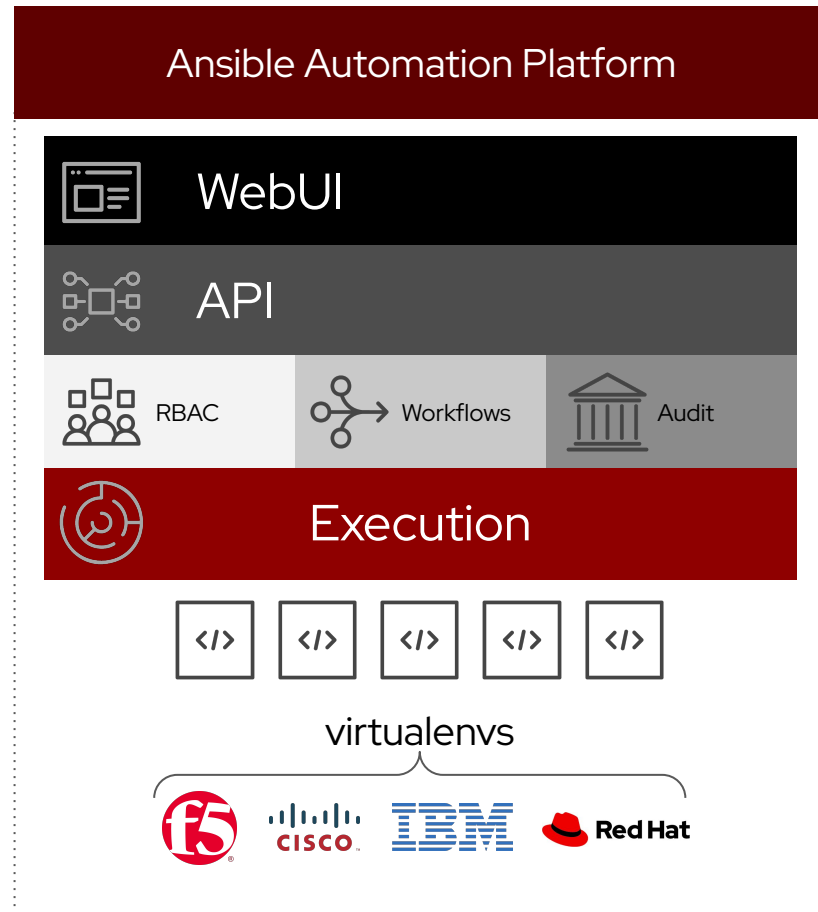
CYBERARK®



FORTINET®

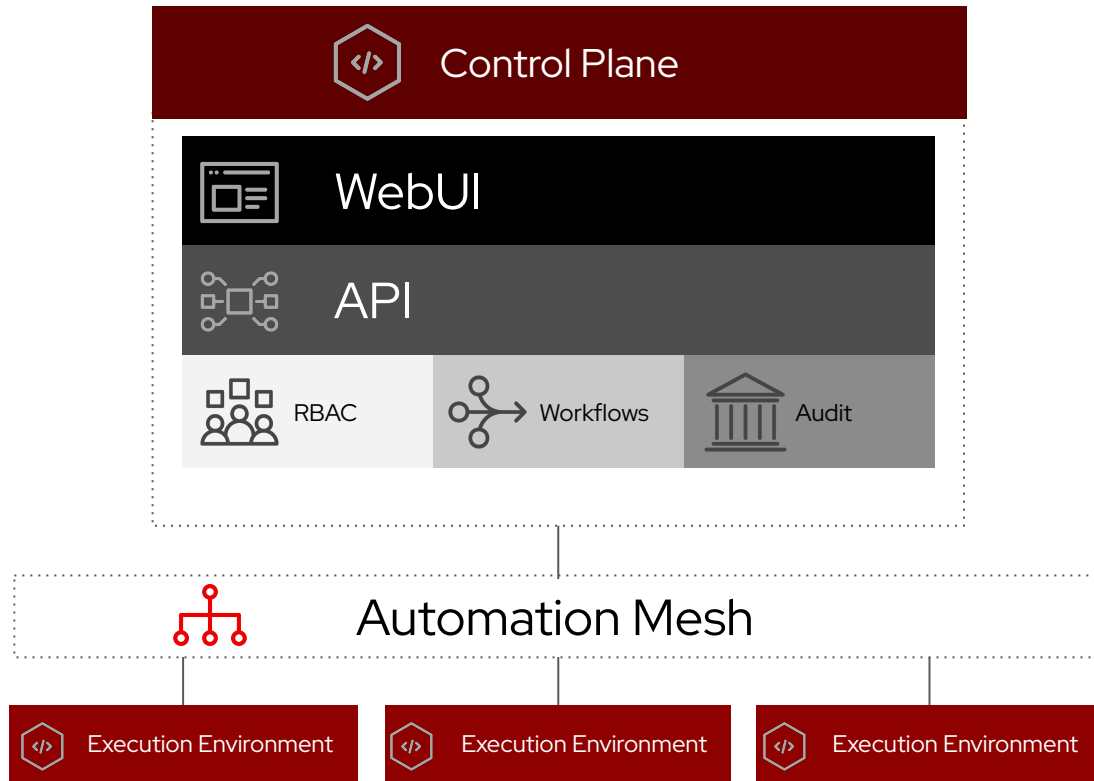
New platform?

Current Architecture



- Centralized, monolithic application
- Control node contains control plane and execution plane
- Poor scalability, rigid architecture

AAP 2.1 Architecture

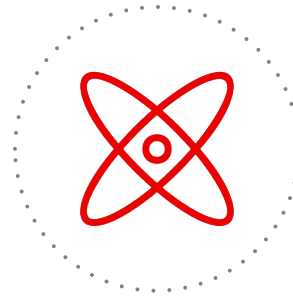


- Decentralized, modular application
- Decouple control plane and execution plane
- Containerized execution environments

What makes a platform?



Combining the universal automation language with cloud services and certified content for automating, deploying, and operating applications, infrastructure and services securely at enterprise scale.



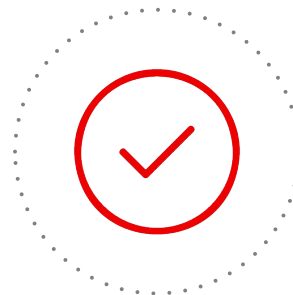
Ansible automation

Providing scalable, secure implementation for describing, building, and managing the deployment of enterprise IT applications across diverse enterprise architectures.



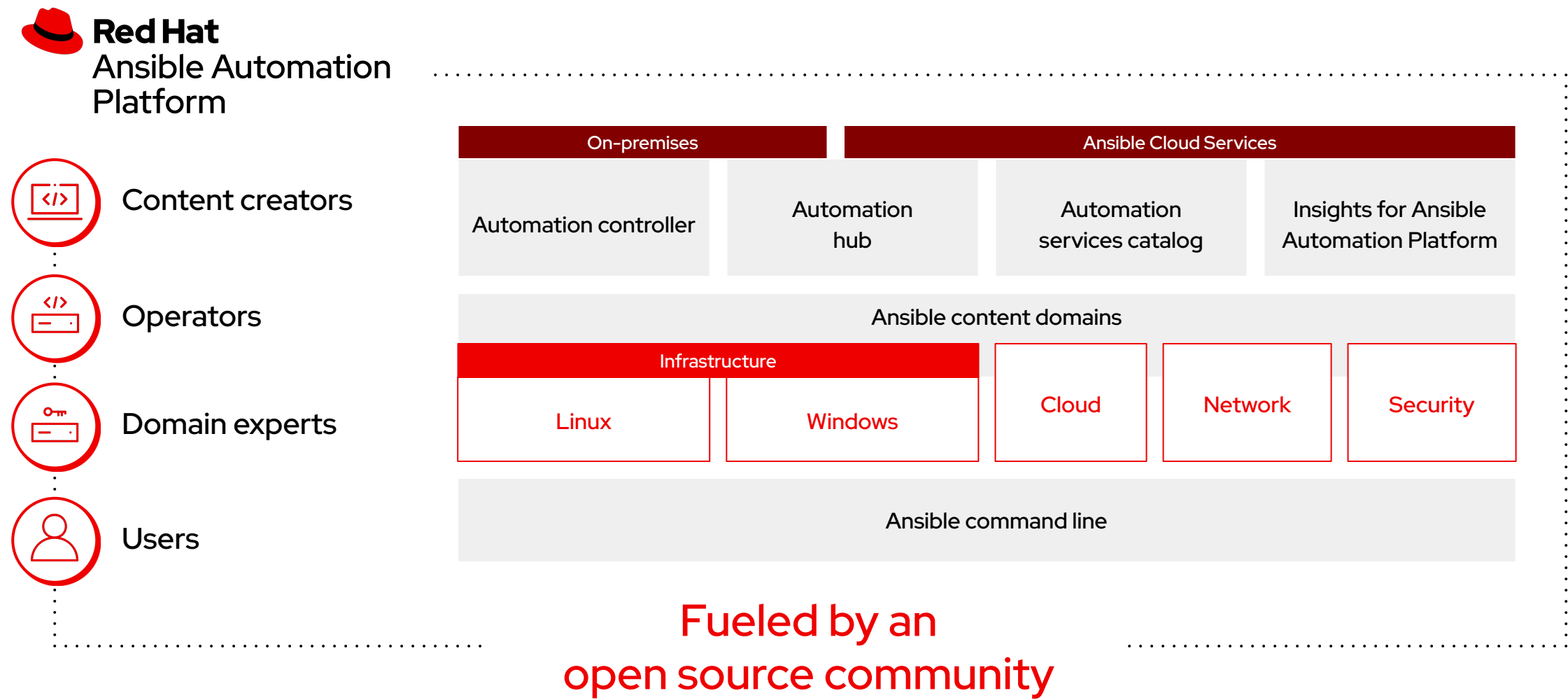
Cloud services

Cloud services that facilitate team collaboration and provide operational analytics for automating heterogeneous, hybrid environments.



Certified content

Extends native platform capabilities with certified, supported content designed to expand the automation domain and accelerate adoption for enterprise customers.





Create



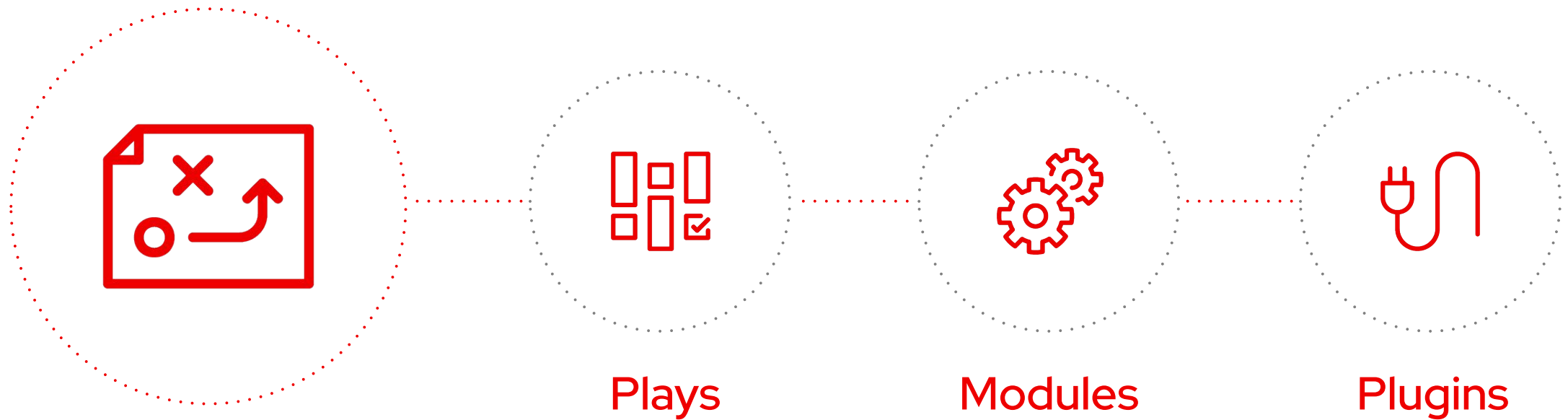
```
---
- name: install and start apache
  hosts: web
  become: yes

  tasks:
    - name: httpd package is present
      yum:
        name: httpd
        state: latest

    - name: latest index.html file is present
      template:
        src: files/index.html
        dest: /var/www/html/

    - name: httpd is started
      service:
        name: httpd
        state: started
```


What makes up an Ansible playbook?



Collections

Simplified and consistent content delivery



What are they?

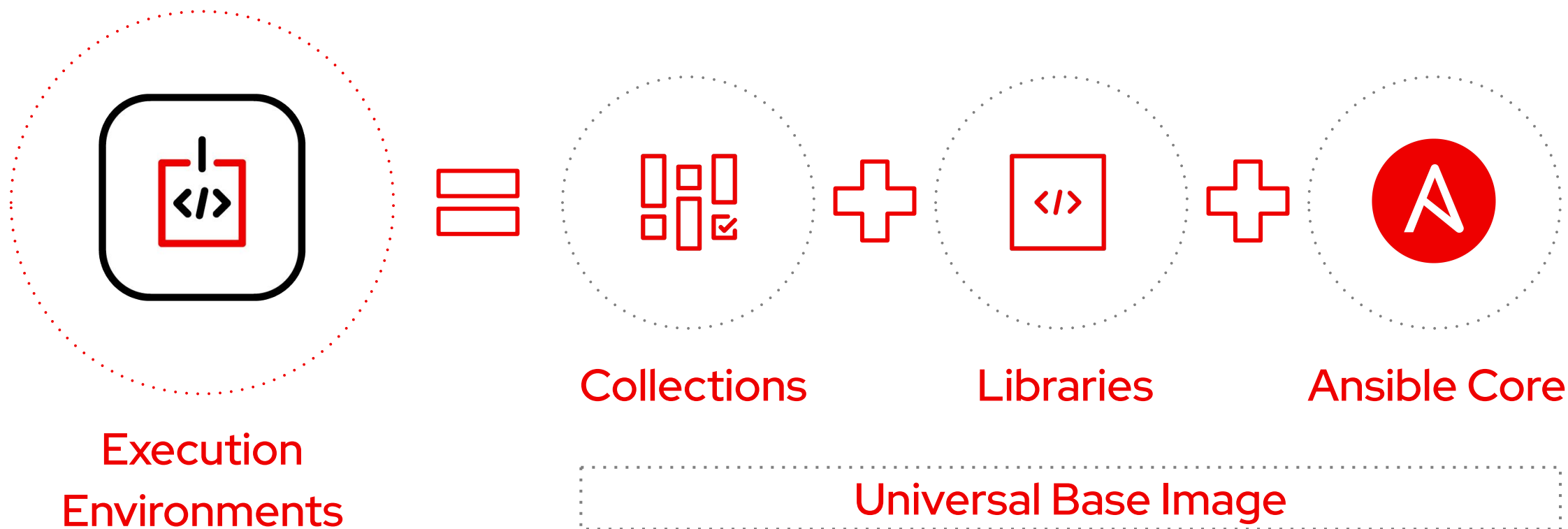
Collections are a data structure containing automation content:

- ▶ Modules
- ▶ Playbooks
- ▶ Roles
- ▶ Plugins
- ▶ Docs
- ▶ Tests



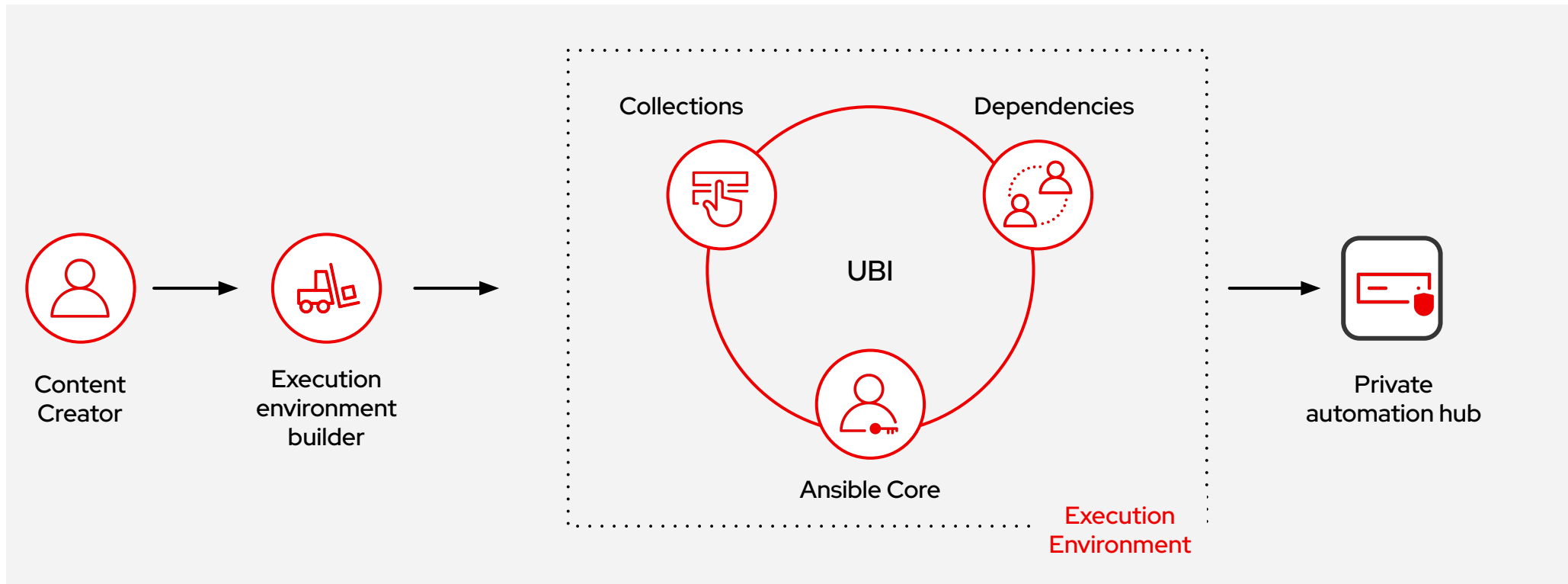
Automation Execution Environments

Components needed for automation, packaged in a cloud-native way



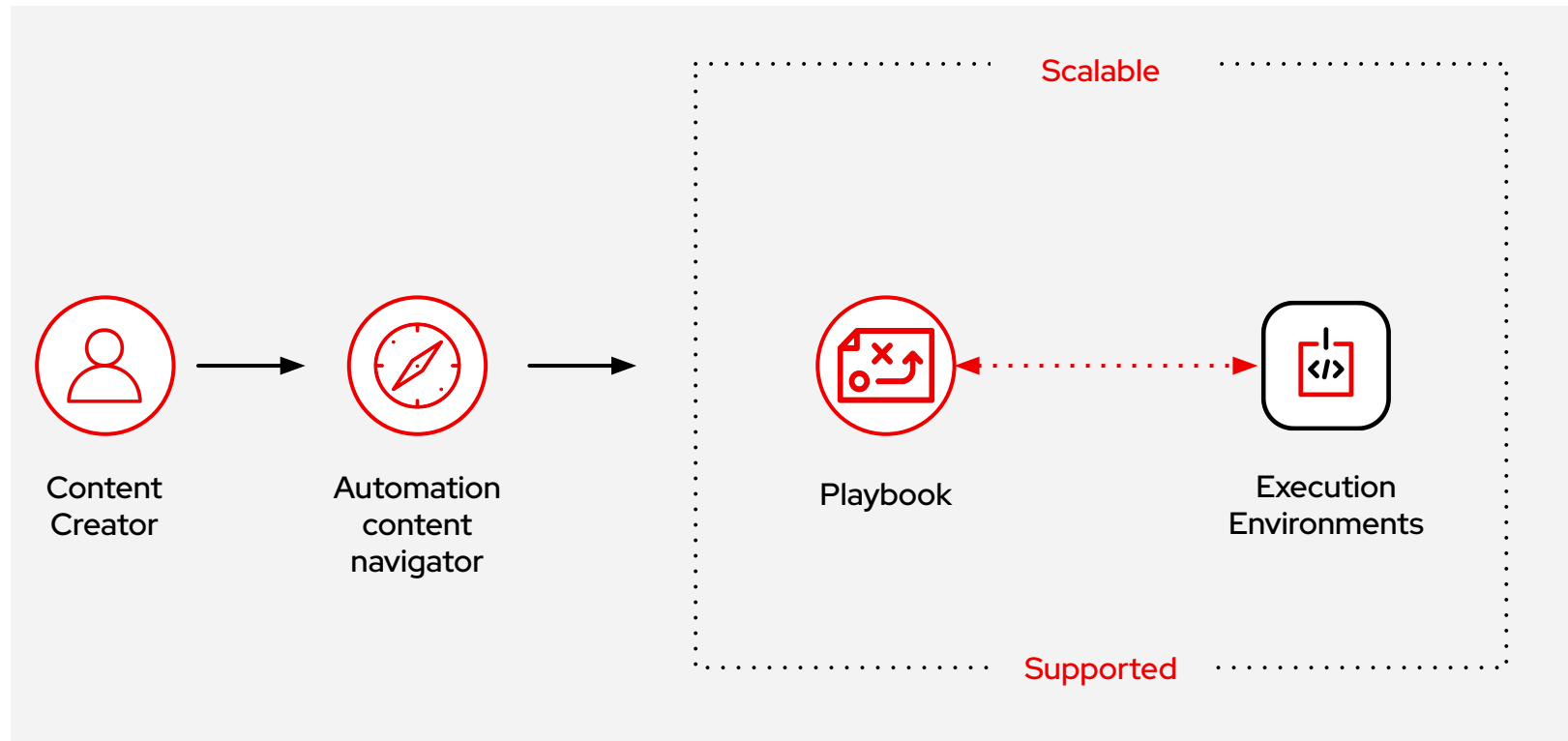
Build, create, publish

Development cycle of an automation execution environment



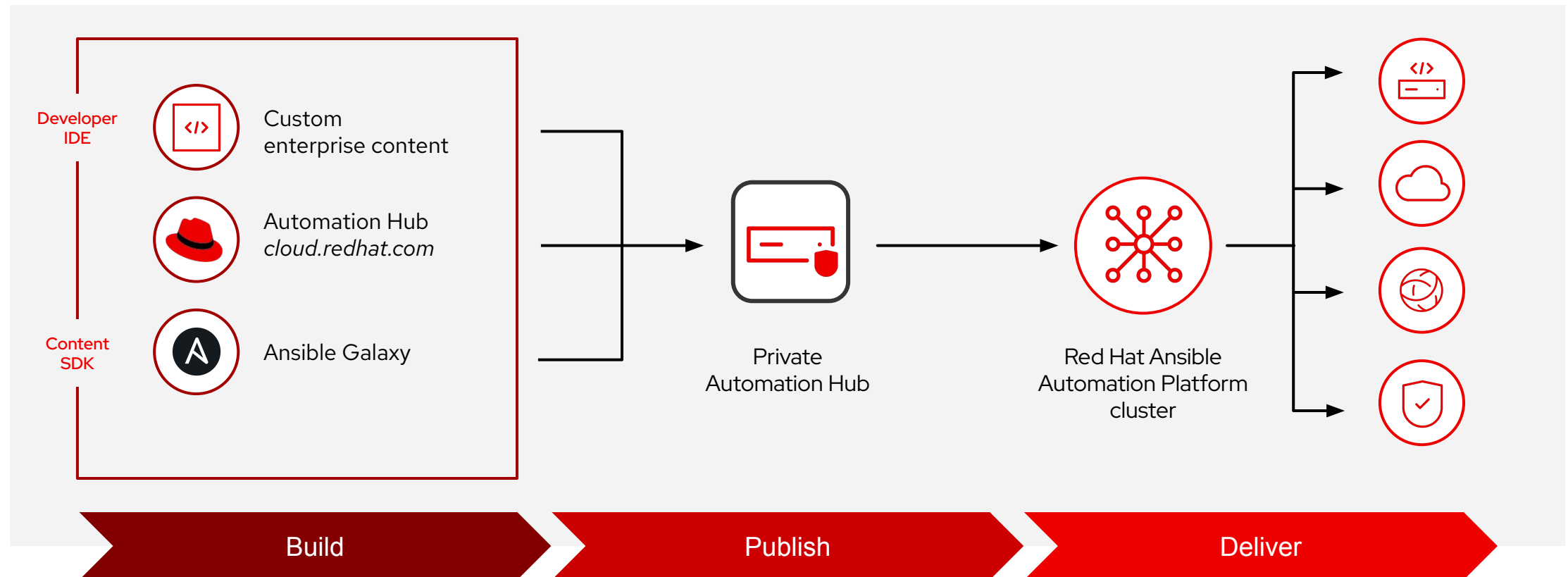
Develop, test, run

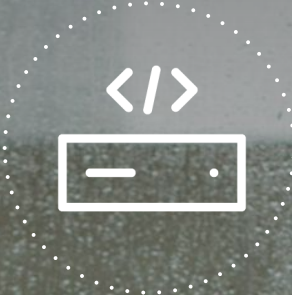
How to develop, test and run containerized Ansible content



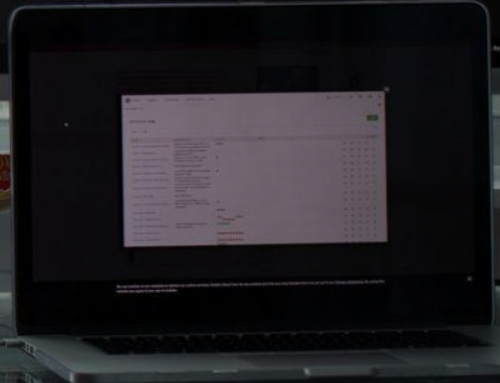
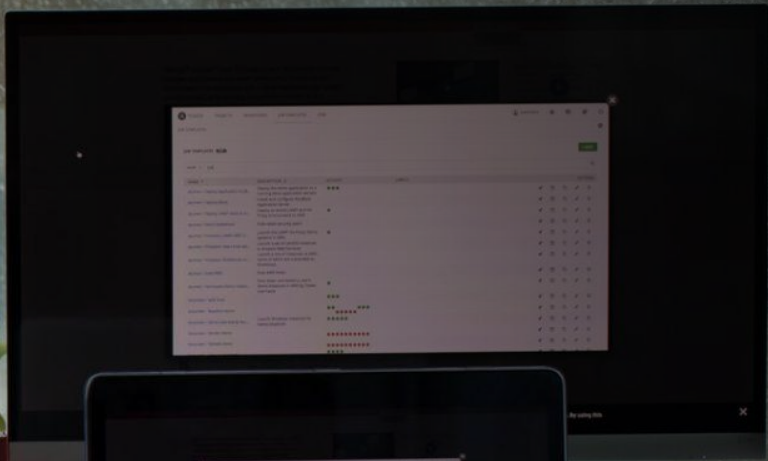
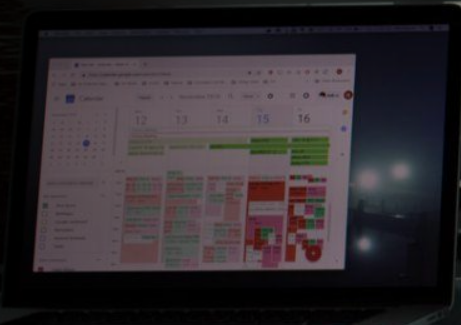
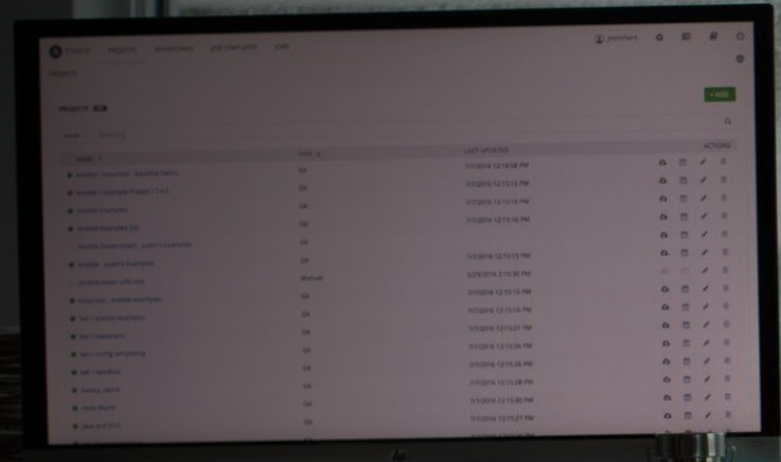
Private Automation Hub architecture

Value of Private Automation Hub

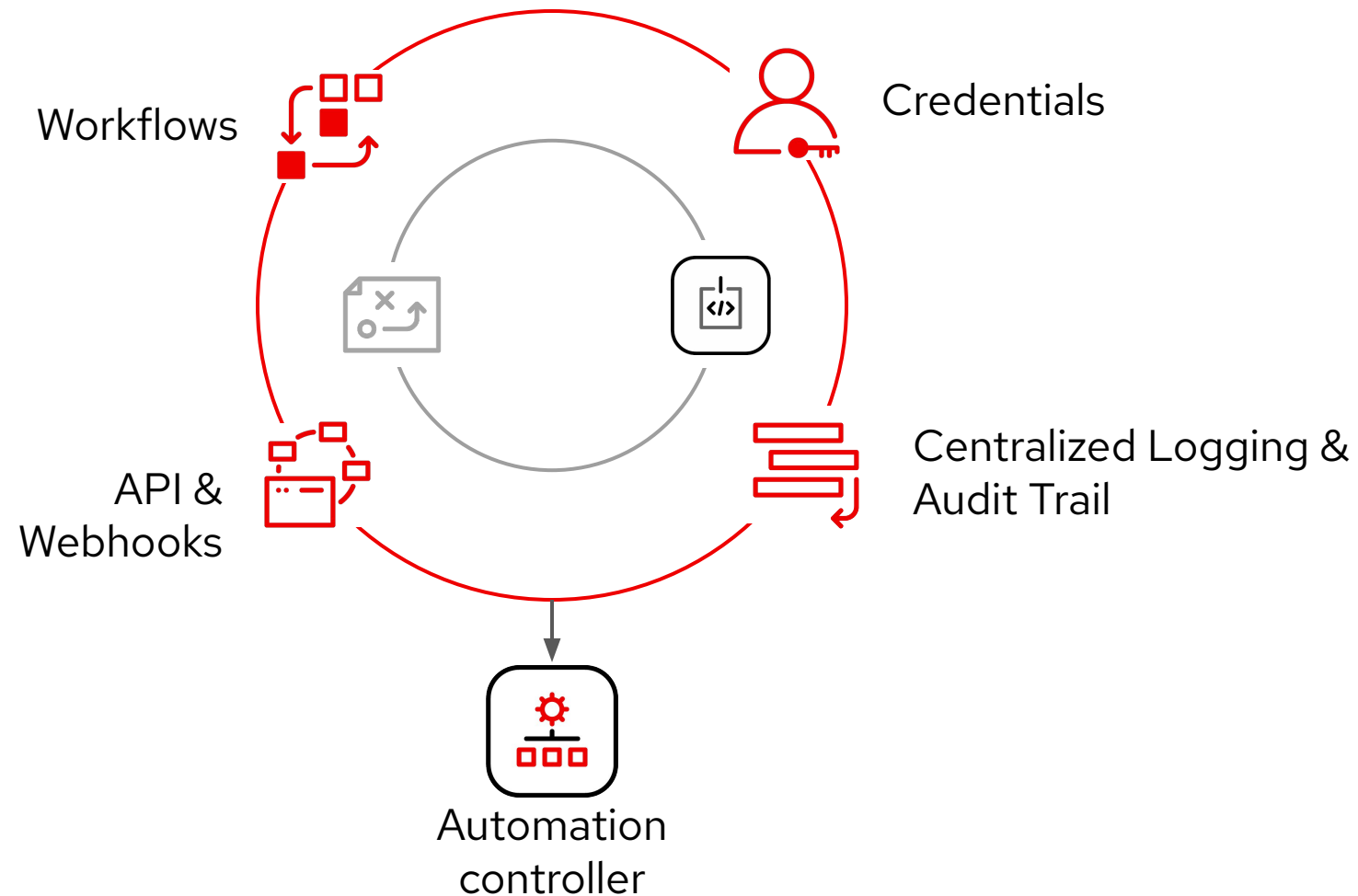




Operate



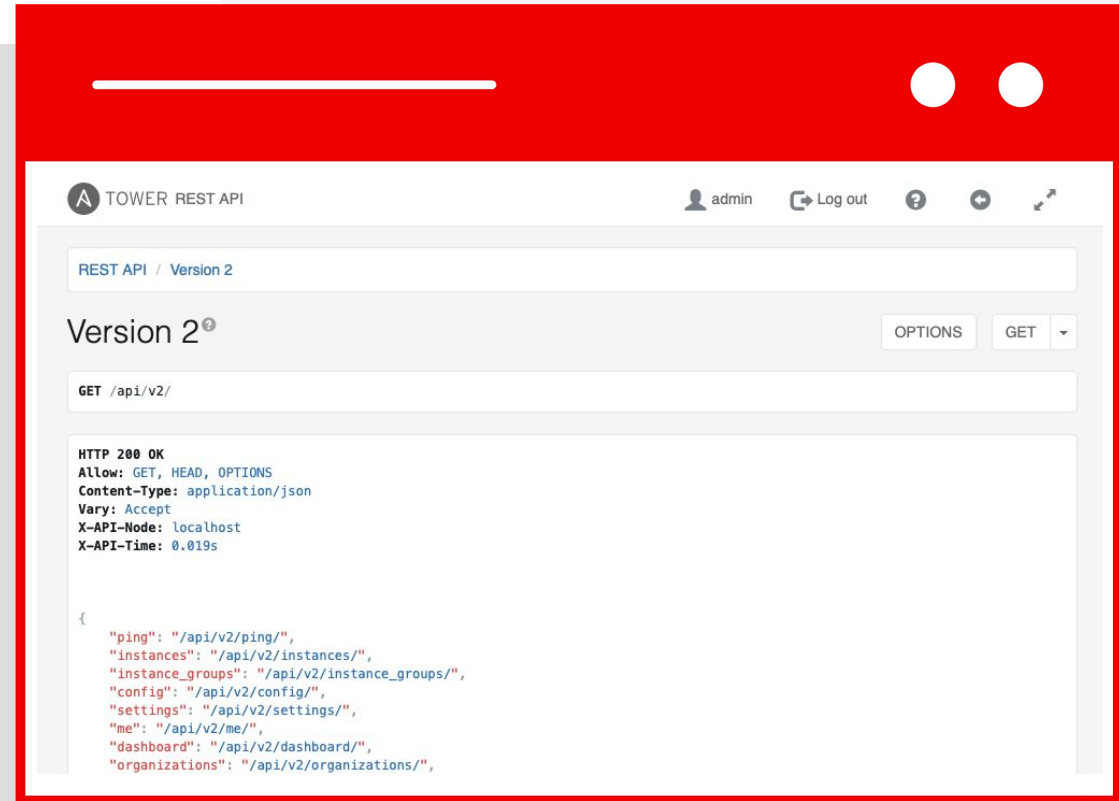
Anatomy of Automation Operation



API

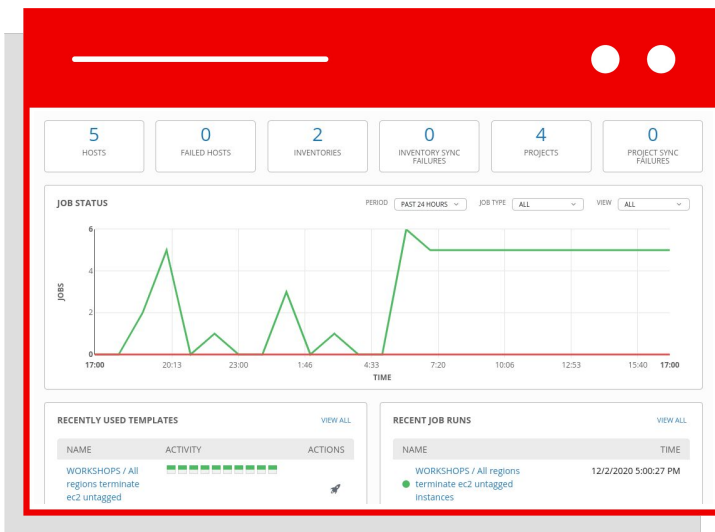
Integration of automation into larger workflows

- ▶ The API provides programmatic access to the automation via a defined interface.
- ▶ Underneath it is still powered by the same bits and pieces which are at the core: workflows, inventories, etc.
- ▶ It offers simple integration into other tools like ITSM, SOAR, etc.

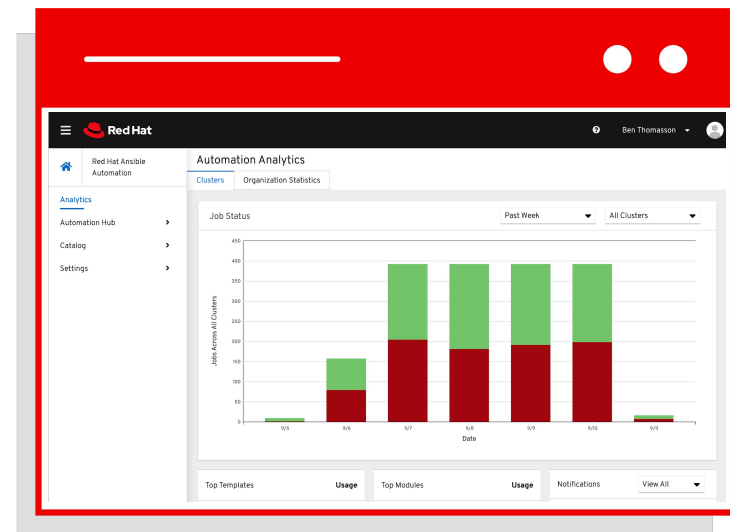


Dashboards

Understand what is going on



Overview of the actual cluster, the jobs happening, the nodes connected, what works and fails right at this moment.



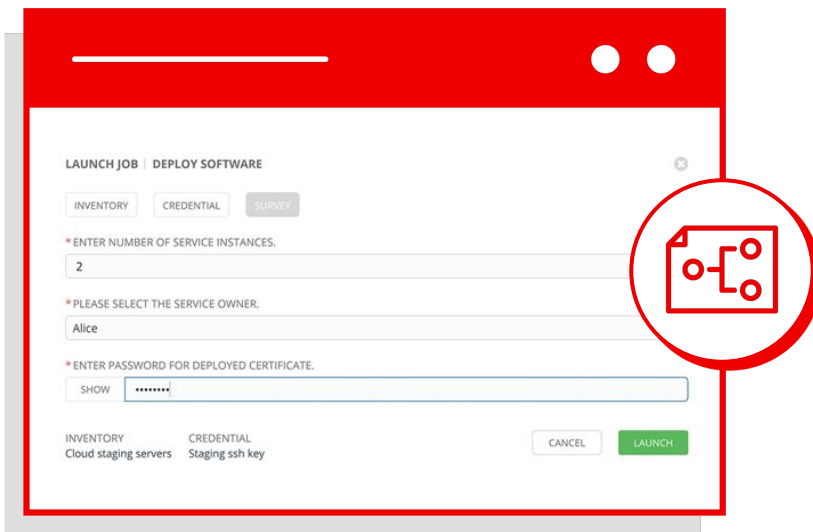
Overview across clusters, better insight into use cases of automation; insight into adoption of automation per organization.



Consume

Self service

Provide others the mean to consume



LAUNCH JOB | DEPLOY SOFTWARE

INVENTORY CREDENTIAL SURVEY

* ENTER NUMBER OF SERVICE INSTANCES.
2

* PLEASE SELECT THE SERVICE OWNER.
Alice

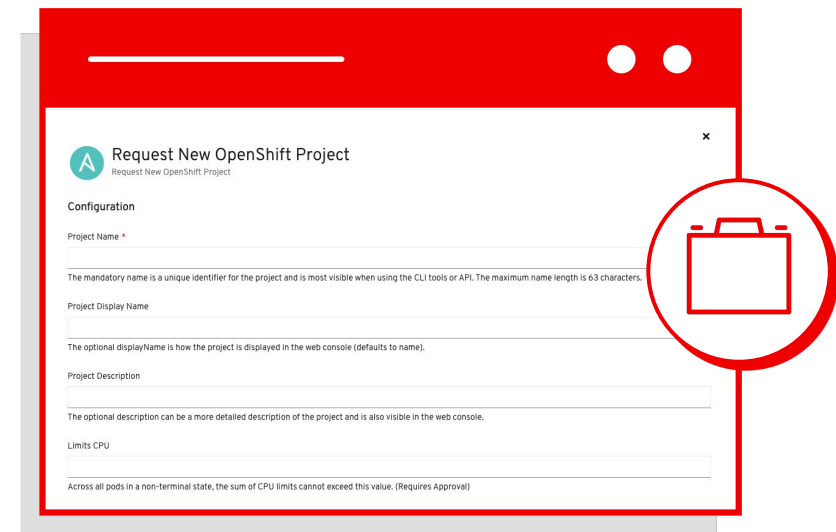
* ENTER PASSWORD FOR DEPLOYED CERTIFICATE.
SHOW *****

INVENTORY CREDENTIAL
Cloud staging servers Staging ssh key

CANCEL LAUNCH

A red circle highlights a document icon with a circuit-like symbol on the right side of the interface.

For teams **accessing directly** the automation environment and are close to the automation platform processes.



Request New OpenShift Project

Configuration

Project Name *

The mandatory name is a unique identifier for the project and is most visible when using the CLI tools or API. The maximum name length is 63 characters.

Project Display Name

The optional displayName is how the project is displayed in the web console (defaults to name).

Project Description

The optional description can be a more detailed description of the project and is also visible in the web console.

Limits CPU

Across all pods in a non-terminal state, the sum of CPU limits cannot exceed this value. (Requires Approval)

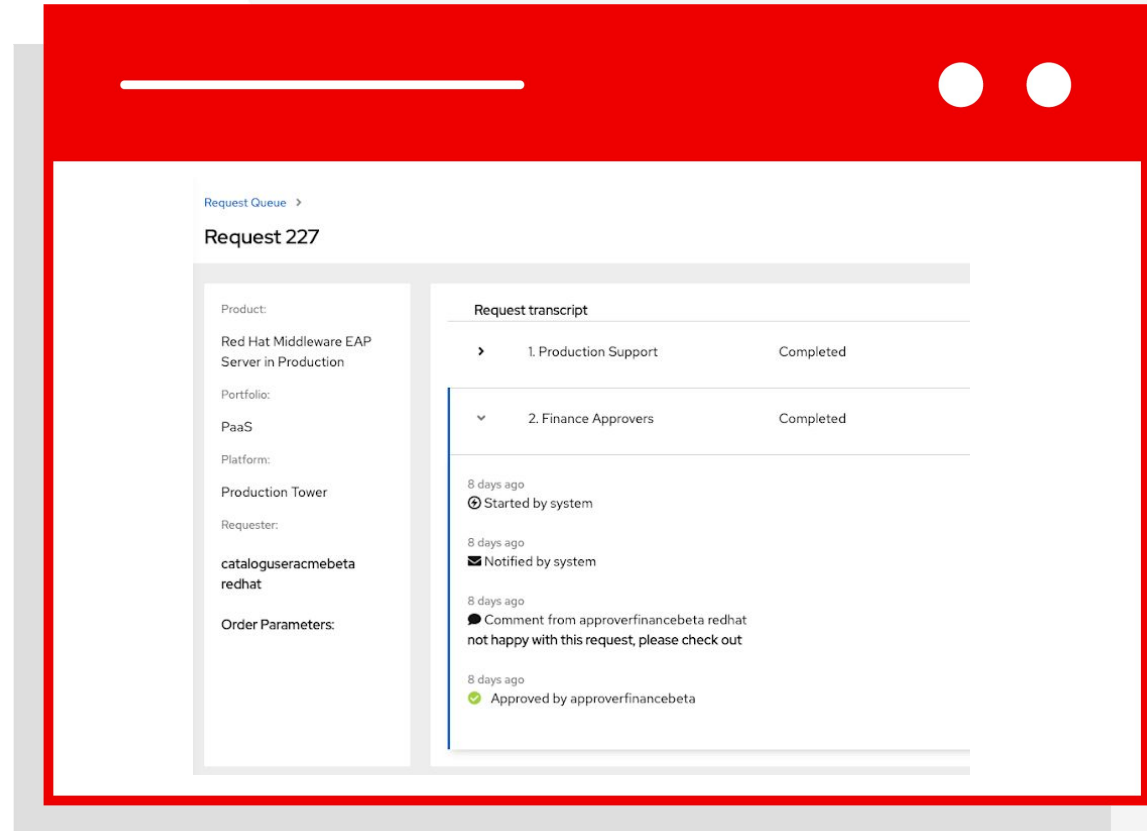
A red circle highlights a briefcase icon on the right side of the interface.

For **high level access** distant or not even aware of the underlying automation environment; lines of business for example.

Approval

Govern access

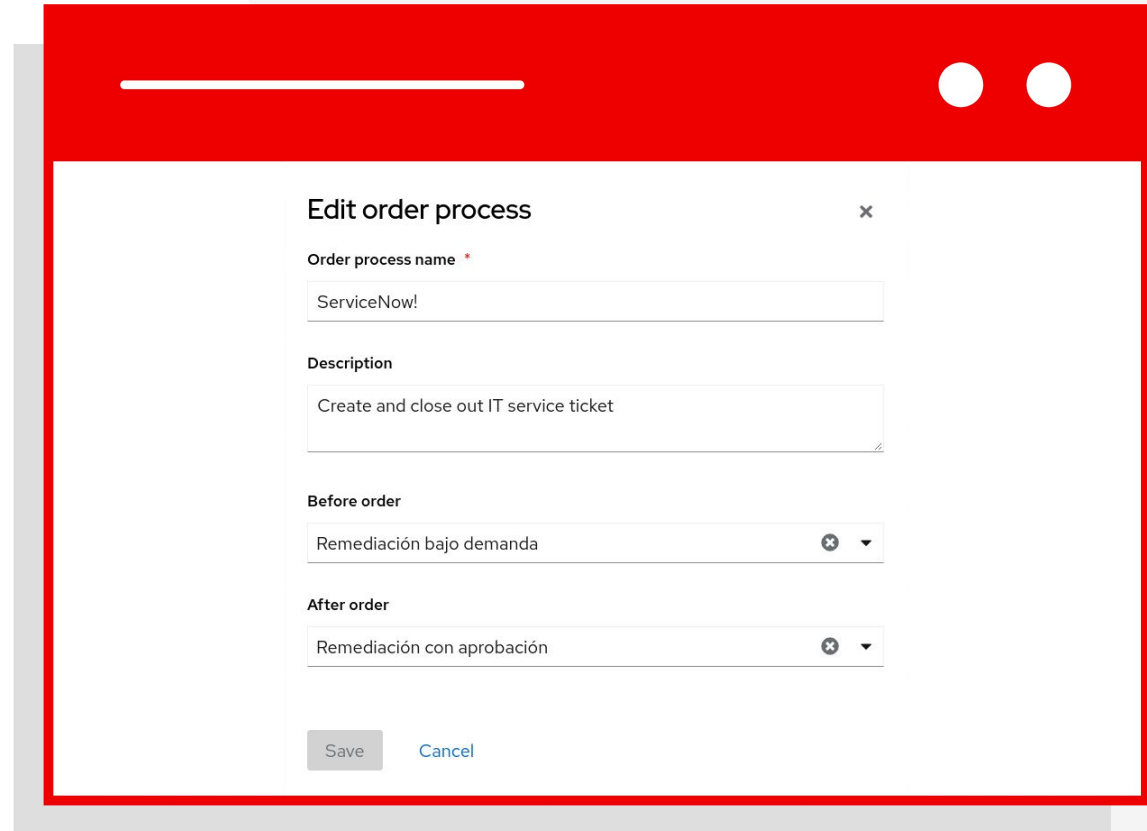
- ▶ Approval processes allow a human interaction to the automation, to add governance like human level administration.
- ▶ Both available at the operational level on the Automation controller UI as well as in the service catalog level.



IT service management integration (ITSM)

Incorporate automation into your ITSM

- ▶ Integrate high level workflows in existing ITSM toolsets with the automation platform.
- ▶ Have the automation platform reach out to the ITSM system whenever things are changing, including data transmission between the tools.



The screenshot shows a 'Edit order process' dialog box with a red header bar. The dialog contains the following fields:

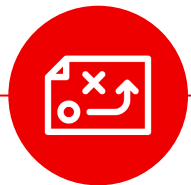
- Order process name ***: A text input field containing 'ServiceNow!'.
- Description**: A text area containing 'Create and close out IT service ticket'.
- Before order**: A dropdown menu with 'Remediación bajo demanda' selected.
- After order**: A dropdown menu with 'Remediación con aprobación' selected.

At the bottom of the dialog are two buttons: 'Save' (disabled) and 'Cancel' (active).

Automation adoption

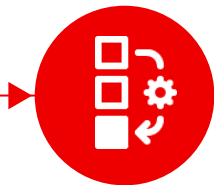
Empower business transformation with highly scalable automation, orchestration of capabilities, and evolved ways of working in a culture of collaboration.

Define your journey



Strategy

Chart a journey map from foundational use case to target state with measurable business outcomes.



Foundation

Empower a cross-functional team to automate and operate an initial set of workflows in an initial automation framework.



Adoption

Expand skills, integrations, and orchestrated workflows in increments with measurable value.



Technology

Establish automation framework, tooling, and techniques that empower process evolution and business-driven workflows.



Process

Adopt open practices to quickly develop, validate, and launch new services and workflows in response to changing demands.



Culture

Spark innovation and agility with new approaches to increase collaboration and communities that empower and inspire the organization



Red Hat Ansible Automation Platform

Where to go next

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Get serious

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Thank you



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