



2022 T3 Class EMEA for Linux on IBM zSystems and LinuxONE

June 27-28 - onsite and virtual

Modernize IBM zSystems with Red Hat Ansible Automation Platform

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About me

- Working in IT since 2004, mostly consulting
- Ansible user since 2013
- Associate Principal Solution Architect EMEA for IBM



Project Diamond



- Reduce complexity
- Make every process explicit
- Avoid dependence of a process to certain people

Project Diamond Coal



- Complexity increased
- Every process was kind of explicit
- Avoided dependence of a process to certain people
- Changing a process depended on certain people



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

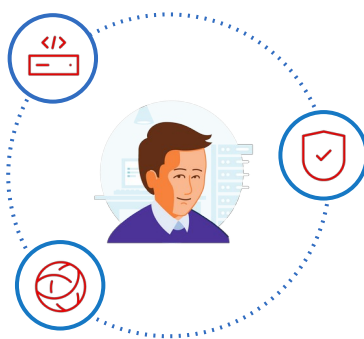


Many organizations share the same challenge

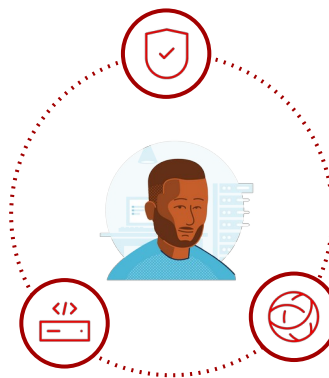
Too many unintegrated, domain-specific tools



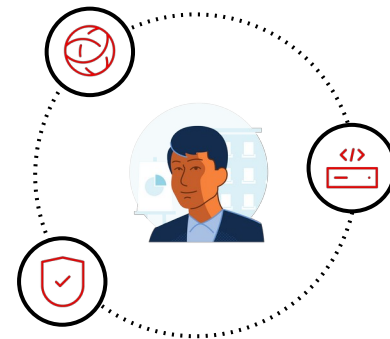
Network ops



SecOps



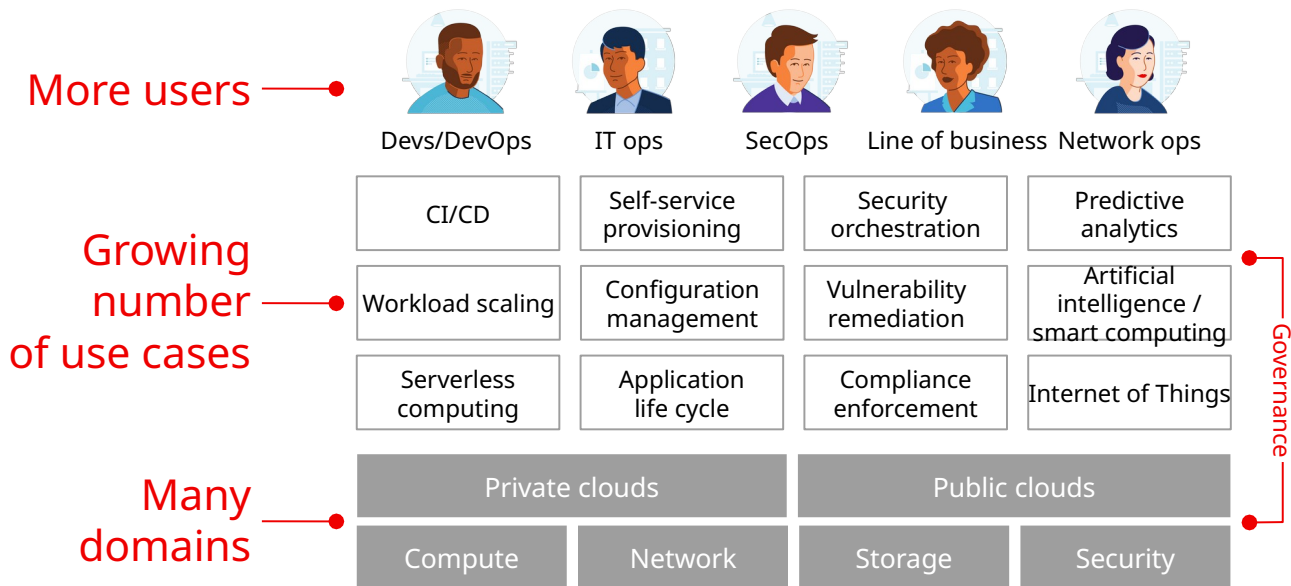
Devs/DevOps



IT ops

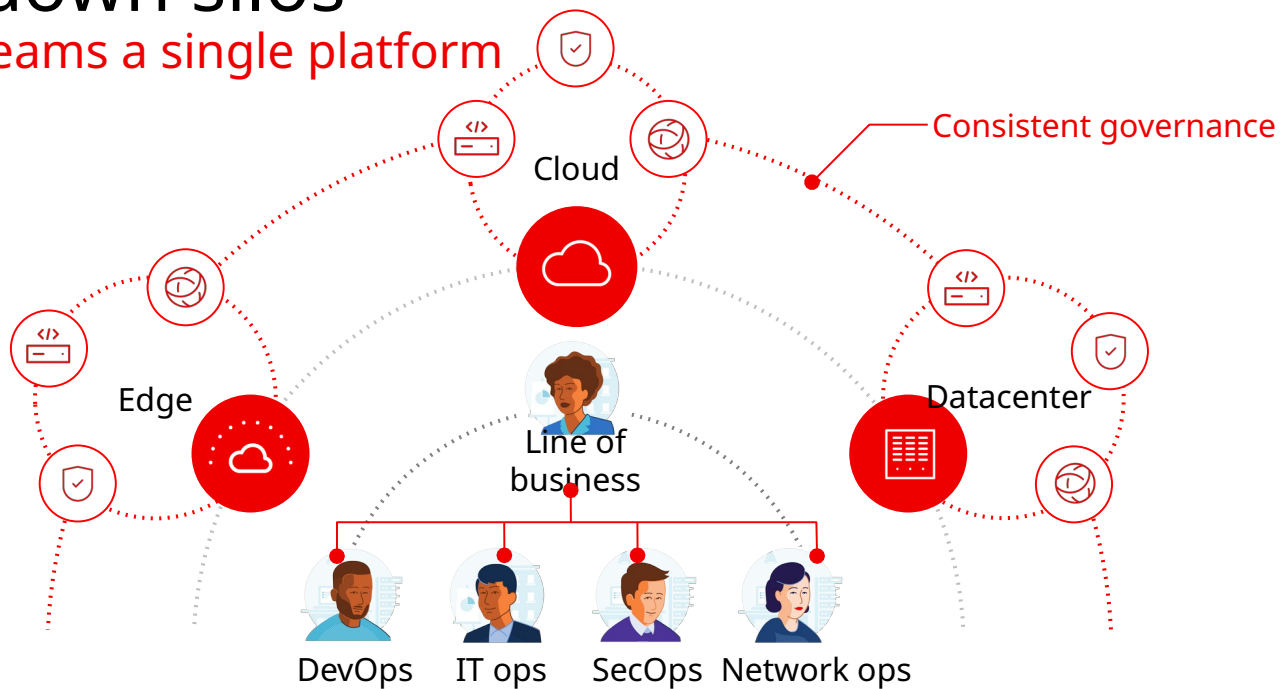
Many organizations have a problem

Too many unintegrated, domain-specific tools



Break down silos

Different teams a single platform



Why Ansible?

- Lingua franca for IT automation
- Easy to learn
- Easily auditable
- Agentless
- Sequential order
- Idempotent

Automate the deployment and management of automation

Your entire IT footprint

Do this...

Orchestrate

Manage
configurations

Deploy
applications

Provision /
deprovision

Deliver
continuously

Secure and
comply

On these...



Firewalls



Load balancers



Applications



Containers



Clouds



Servers



Mainframes



Storage

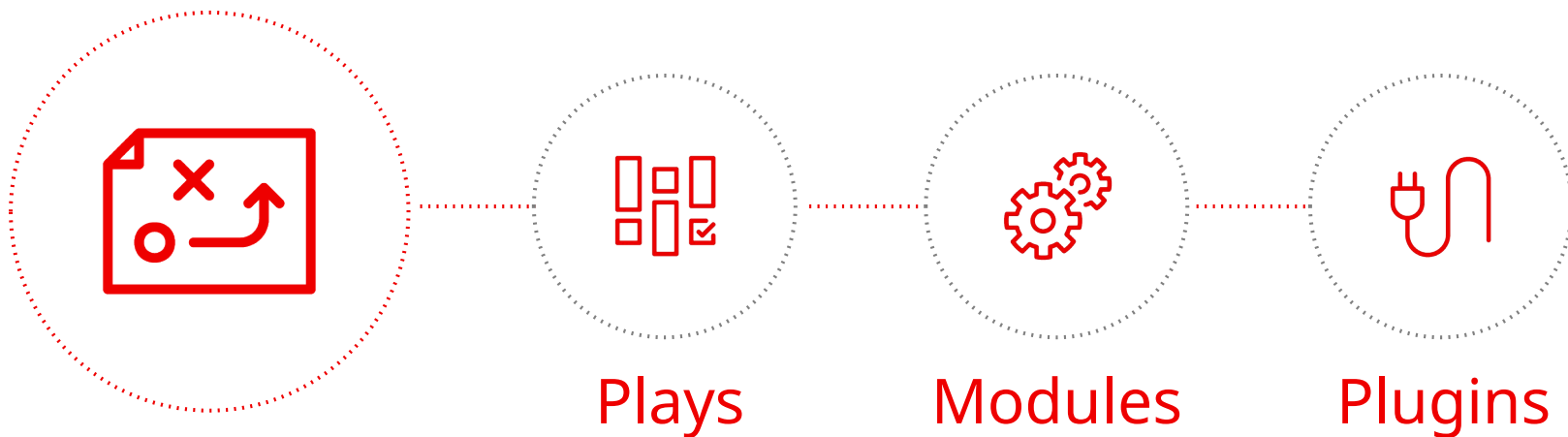


Network devices



And more ...

What makes up an Ansible playbook?





Ansible playbooks

```
---
- 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
```

Collections

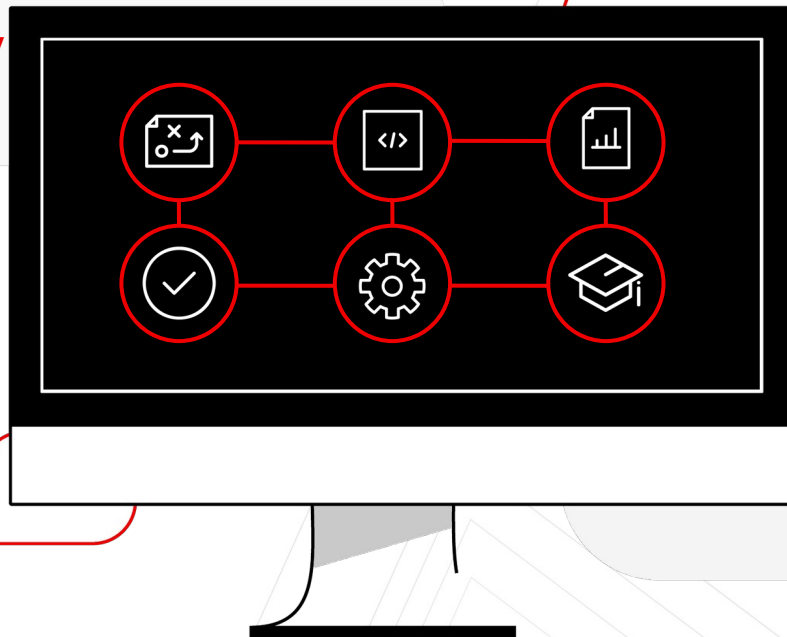
Simplified and consistent content delivery



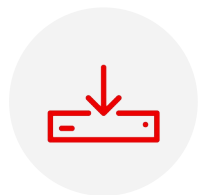
What are they?

Collections are a data structure containing automation content:

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

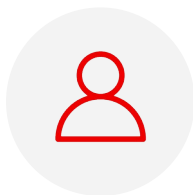


Growth by the numbers



2M

downloads per
month



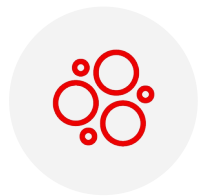
2K

customers



4K

modules



7th

of 96M projects on GitHub by
contributors



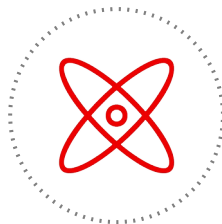
4M+

systems managed by
Red Hat

Why the Red Hat® Ansible® Automation 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.



Automation tools

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.



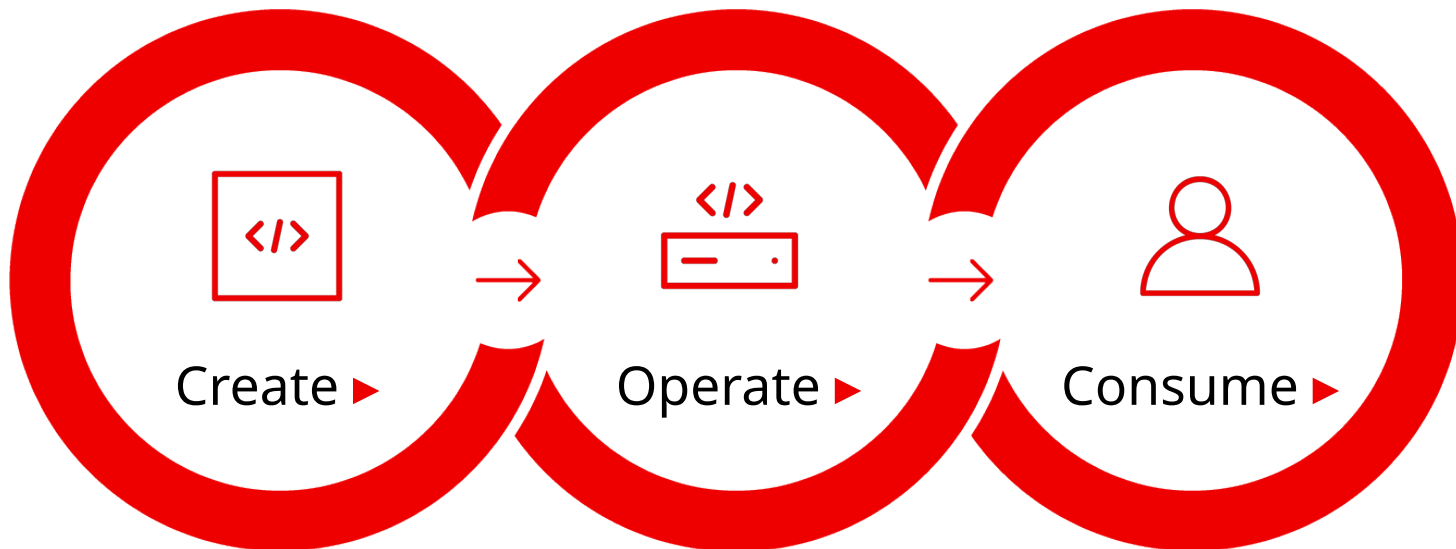
Certified content

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

What makes a platform?



Holistic automation for your enterprise

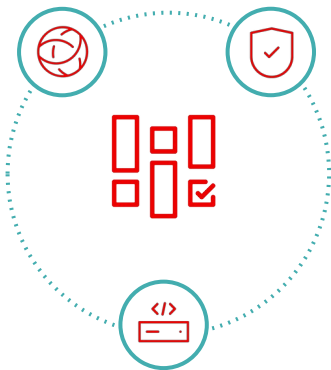




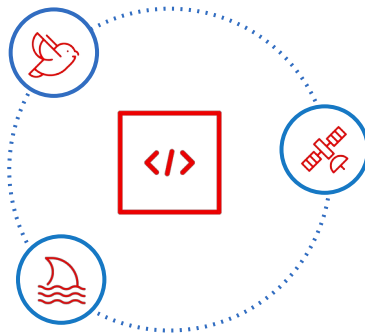
Create

Many technologies, different life cycles

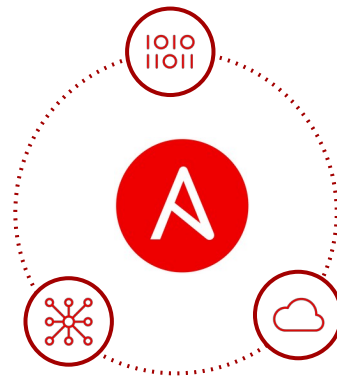
How to keep runtime environment, collections and dependencies aligned?



Collections



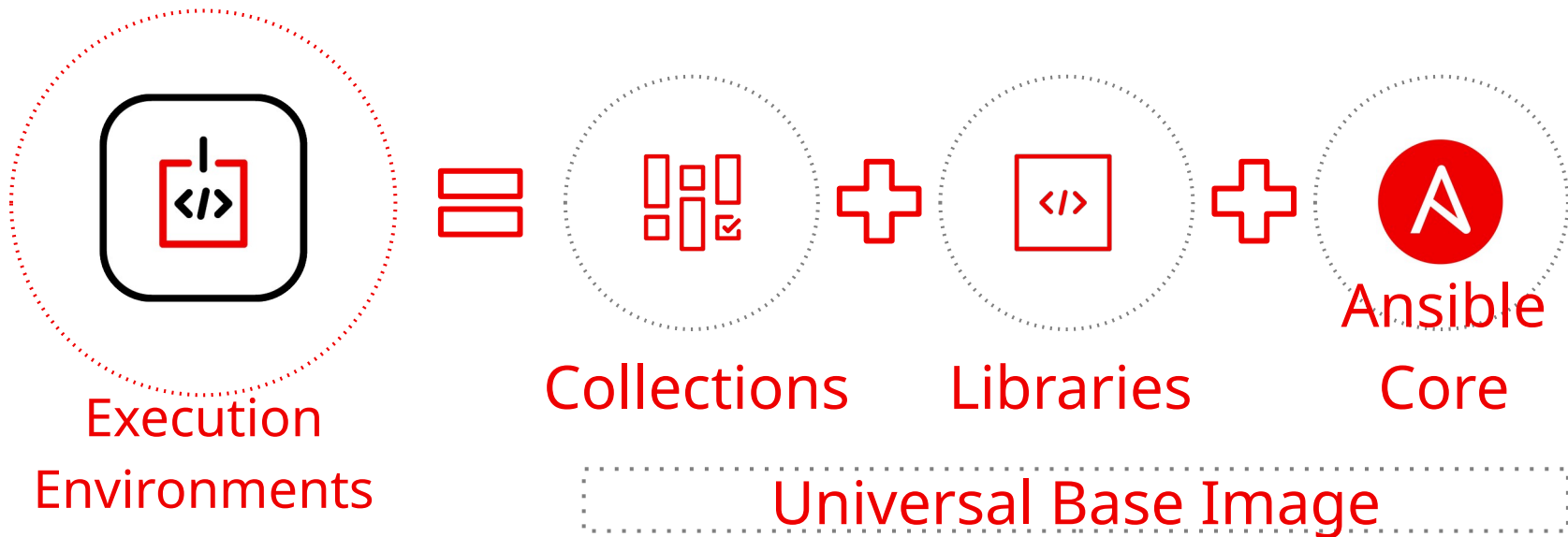
Dependencies



Runtime

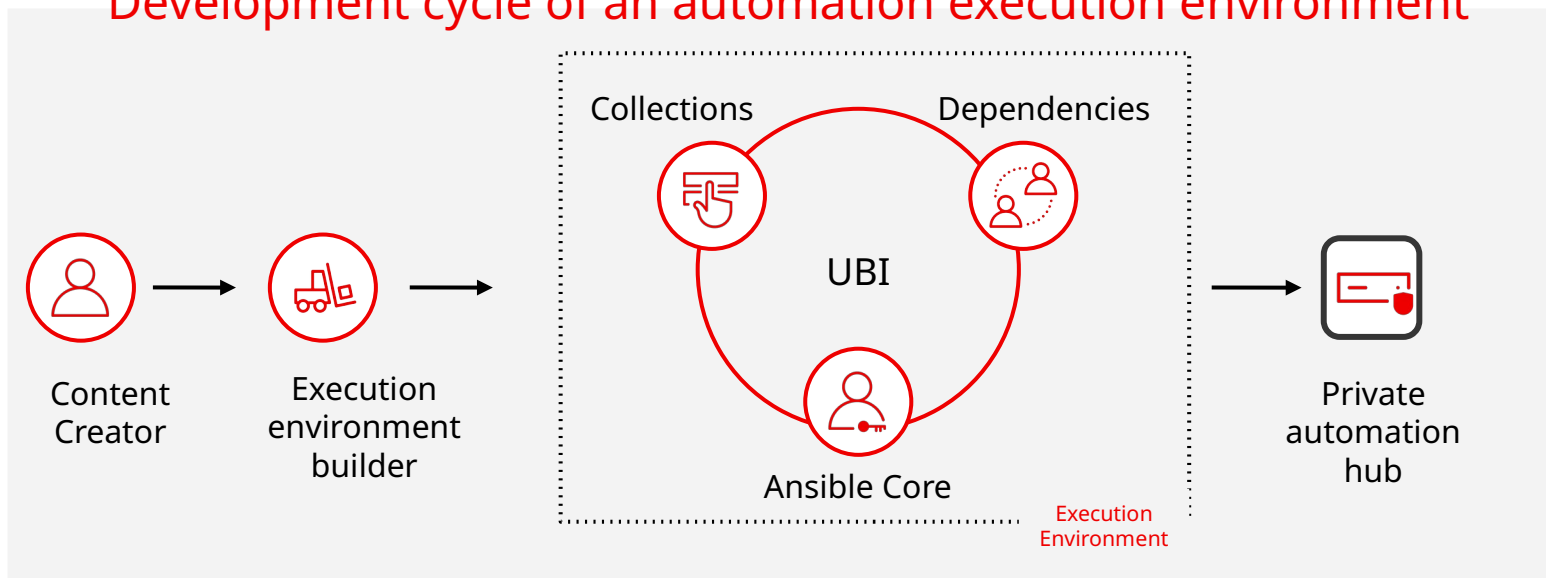
Automation Execution Environments

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



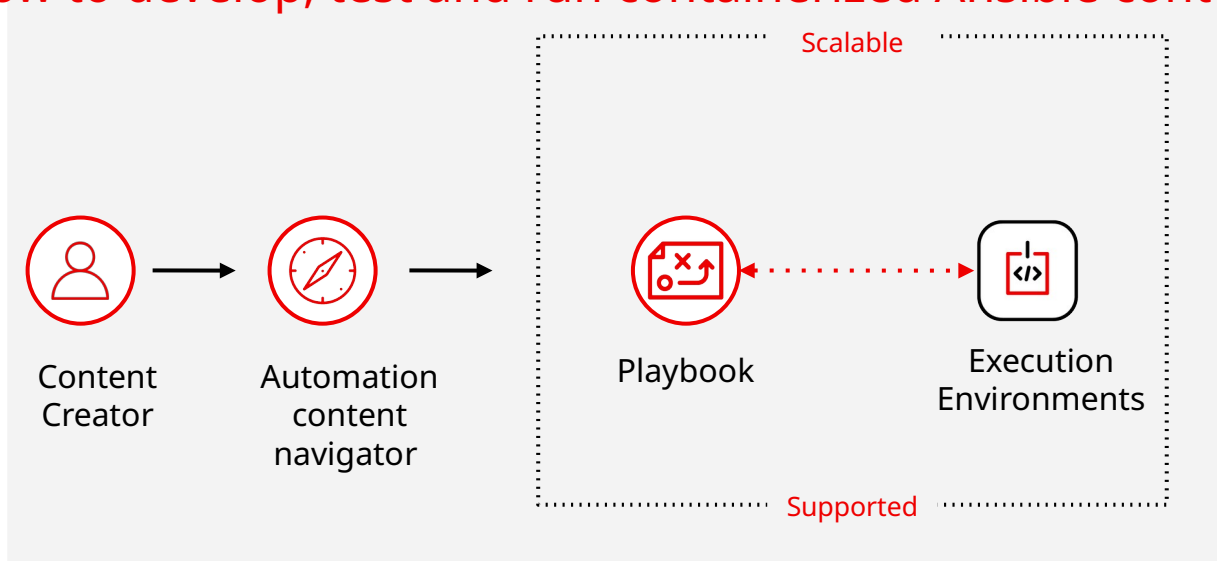
Build, create, publish

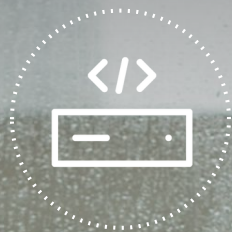
Development cycle of an automation execution environment



Develop, test, run

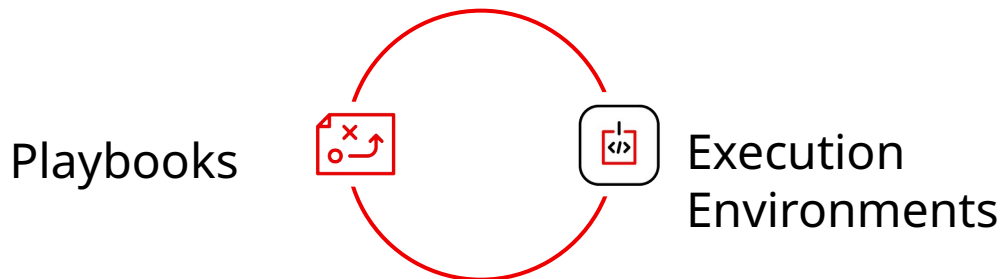
How to develop, test and run containerized Ansible content



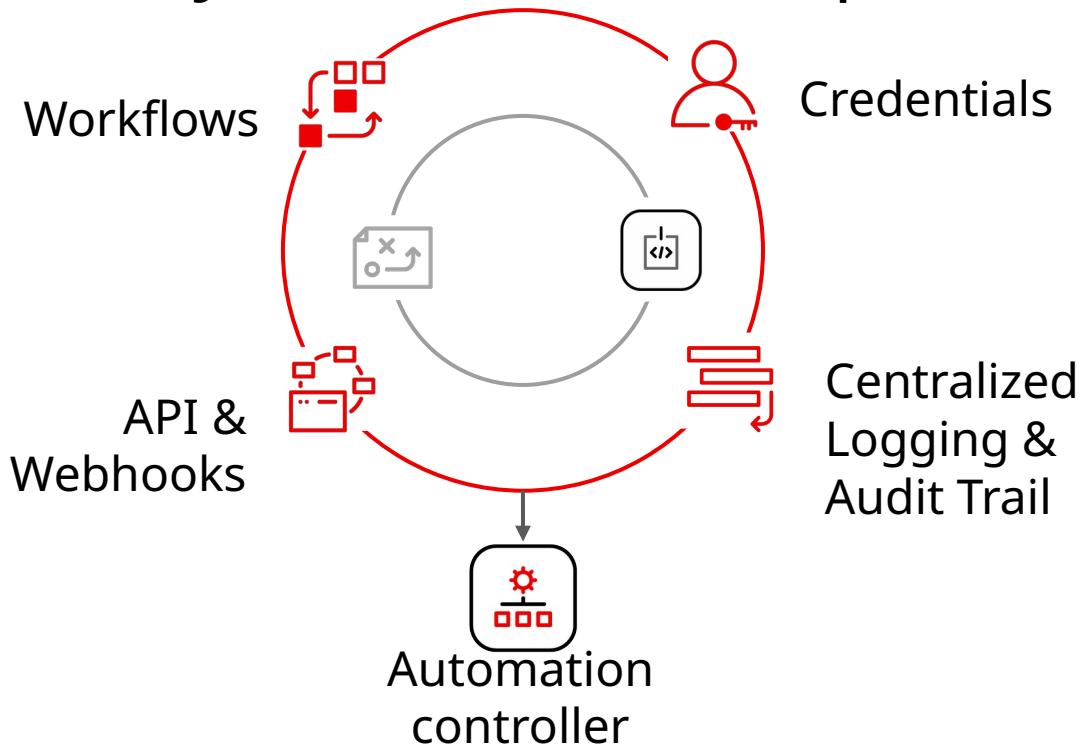


Operate

Components of Automation

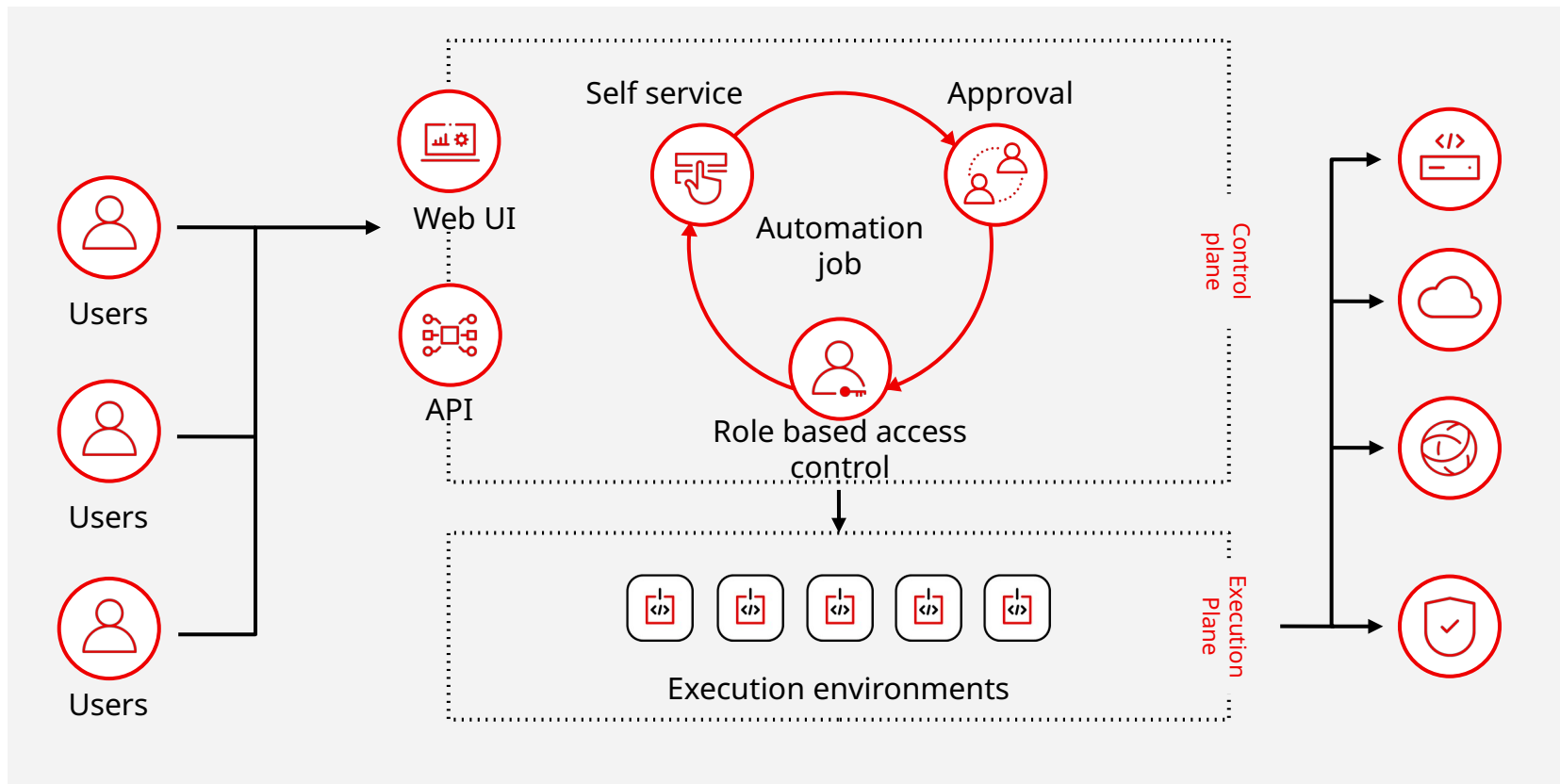


Anatomy of Automation Operation





Consume





Content Creator Tools

NEW



Execution environment builder



Ansible content tools

NEW



Ansible Content Collections



Automation
content navigator

ansible-
navigator

NEW

Operations Tools



Automation controller

NEW



Execution environments



Automation mesh

NEW



Private automation hub

UPDATED

Platform Operators



Business Tools and Analytics



Red Hat Insights for Ansible



Automation services catalog

100+
certified
platforms



Infrastructure



Cloud



Network



Security



ARISTA





One subscription. One platform.



Ansible Content Collections

A new method of building and consuming Ansible content



Automation services catalog

A venue for developers and business users to manage, provision, and retire automation resources



Automation Hub

Private content repository for sharing automation



Content packages

Opinionated, focused content, targeting key automation use cases, from Red Hat and certified partners



Scalable execution

Extending Red Hat Ansible Tower to support automation whenever and wherever you need it



Automation Analytics

Analytical insights into the automation runtime



"Adopting Red Hat Ansible Automation has not only changed how our networks are managed, but also sparked a cultural transformation within our organization."

Bart Dworak
Software Engineering Manager, Infrastructure
and Operations, Network











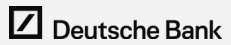














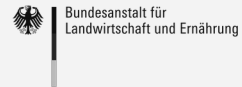


Source:

["Red Hat Ansible Automation Accelerates Past Major Adoption Milestone, Now Manages More Than Four Million Customer Systems Worldwide,"](#)

11 Sep. 2019.



Red Hat Ansible Automation Platform customers

Healthcare	Financial services	Oil and gas	Tech	Government	Other
    	     	 	       	 	    

Summing it up

- Automation is key to simplify and optimize IT operations
- A single automation system will provide more value, by being shared
- An automation system requires way more than just an automation tool

Thanks!

Questions?

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