Red Hat
Ansible Automation
Platform

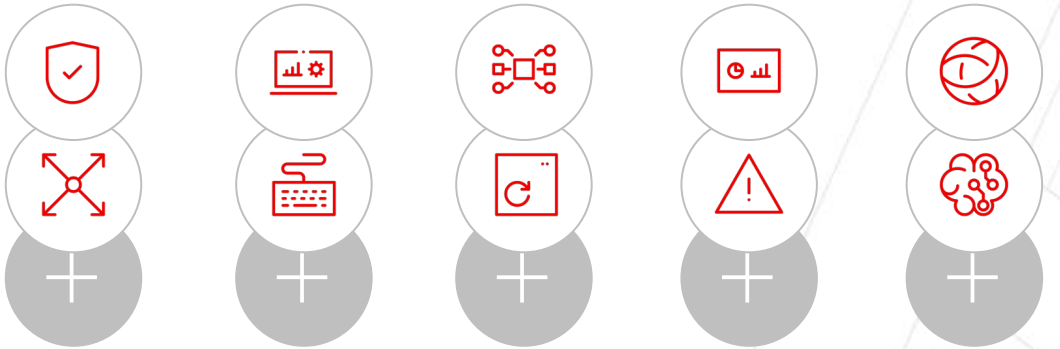
# Moderne IT Automatisierung
# mit
# Ansible Automation Platform

**Götz Rieger**
Principal Solution Architect, Red Hat

# Many organizations share the same challenge.

Differing skills, roles, and responsibilities


Growing number of use cases



Multiple platforms and locations

Across multiple domains


Governance



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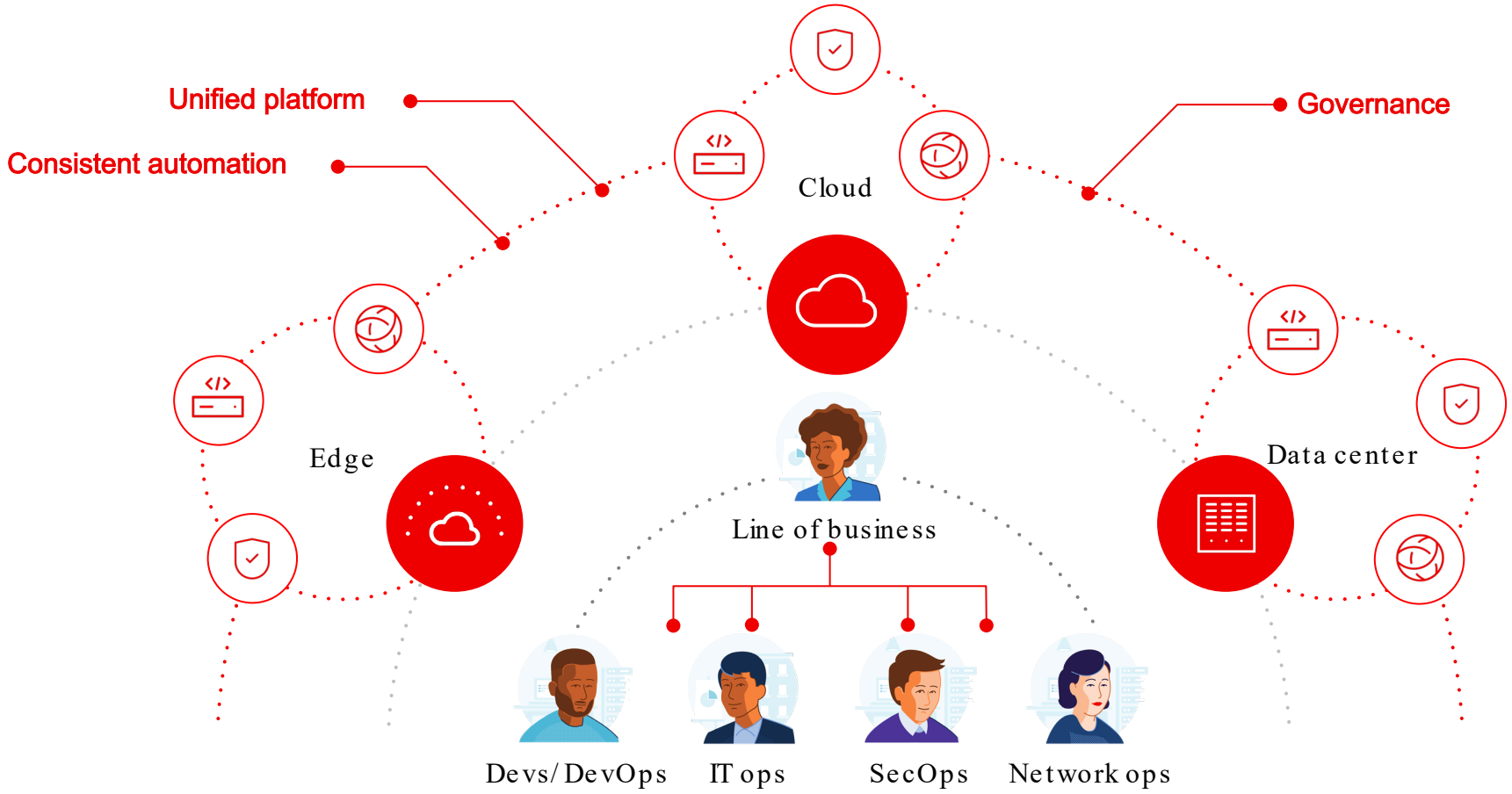
# The solution? Break down the silos.



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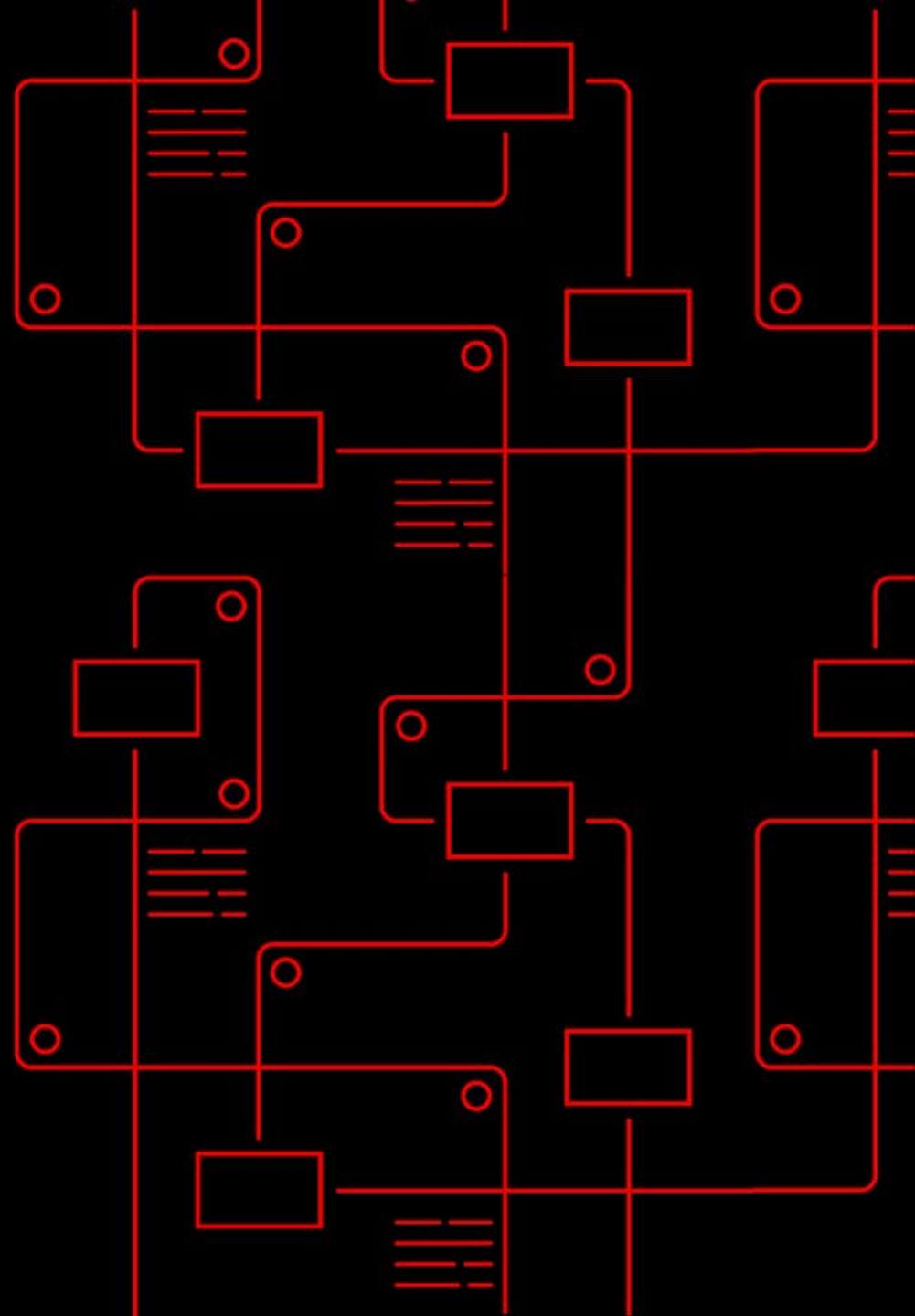
# What is Red Hat® Ansible ®Automation Platform?





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# A platform for the entire automation team.

## Architecture

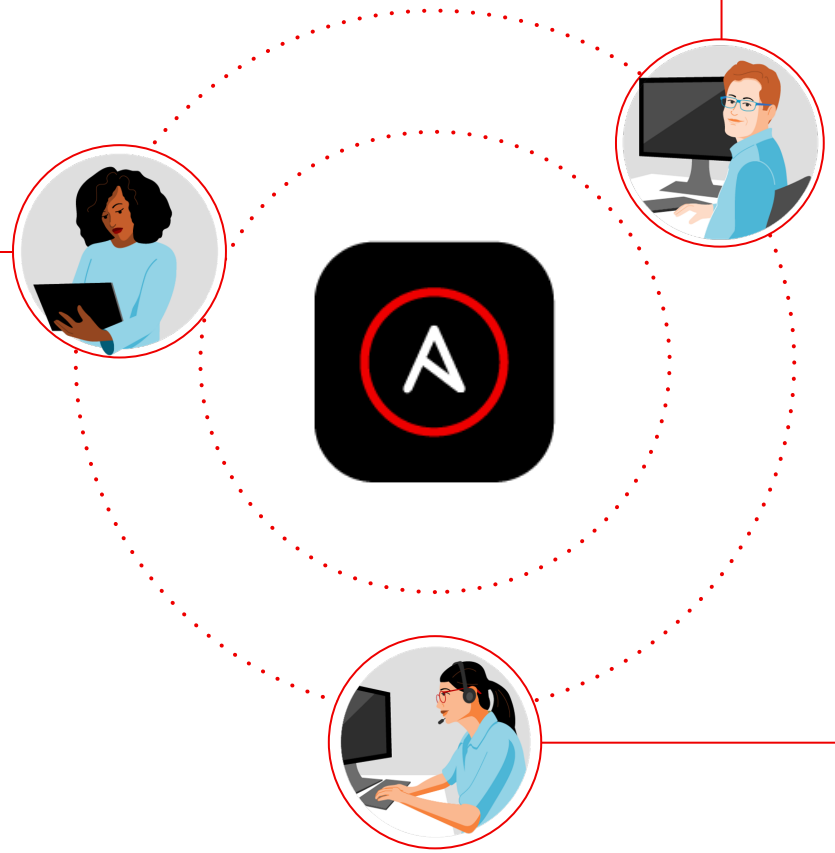
Flexible container-native architecture

Real-time analytics and reporting

Event-Driven Ansible

Containerized Installation

Available on all major cloud providers



## Content creation

Ansible developer tools package

Integrated generative AI

Build automation communities

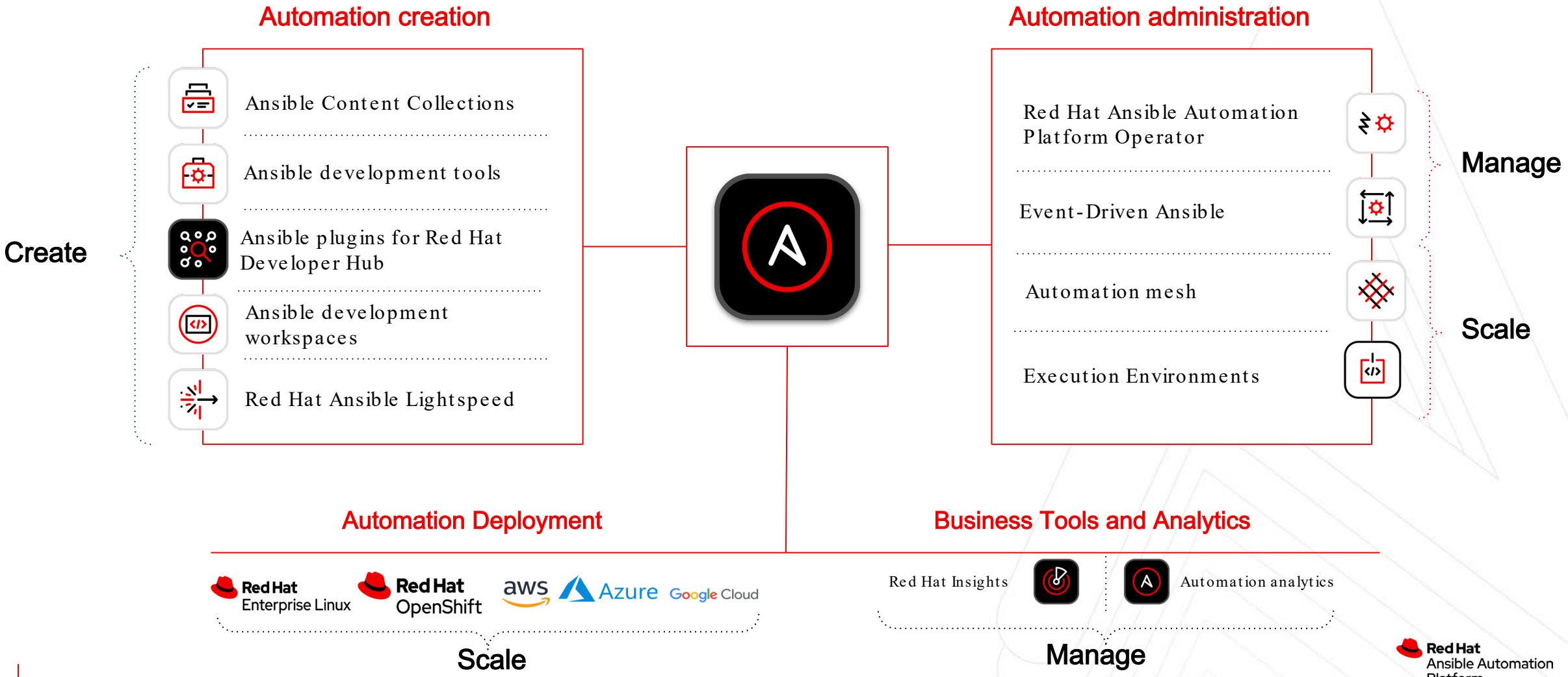
Large ecosystem of certified automation

## Operations

Unified UI provides cohesive platform experience

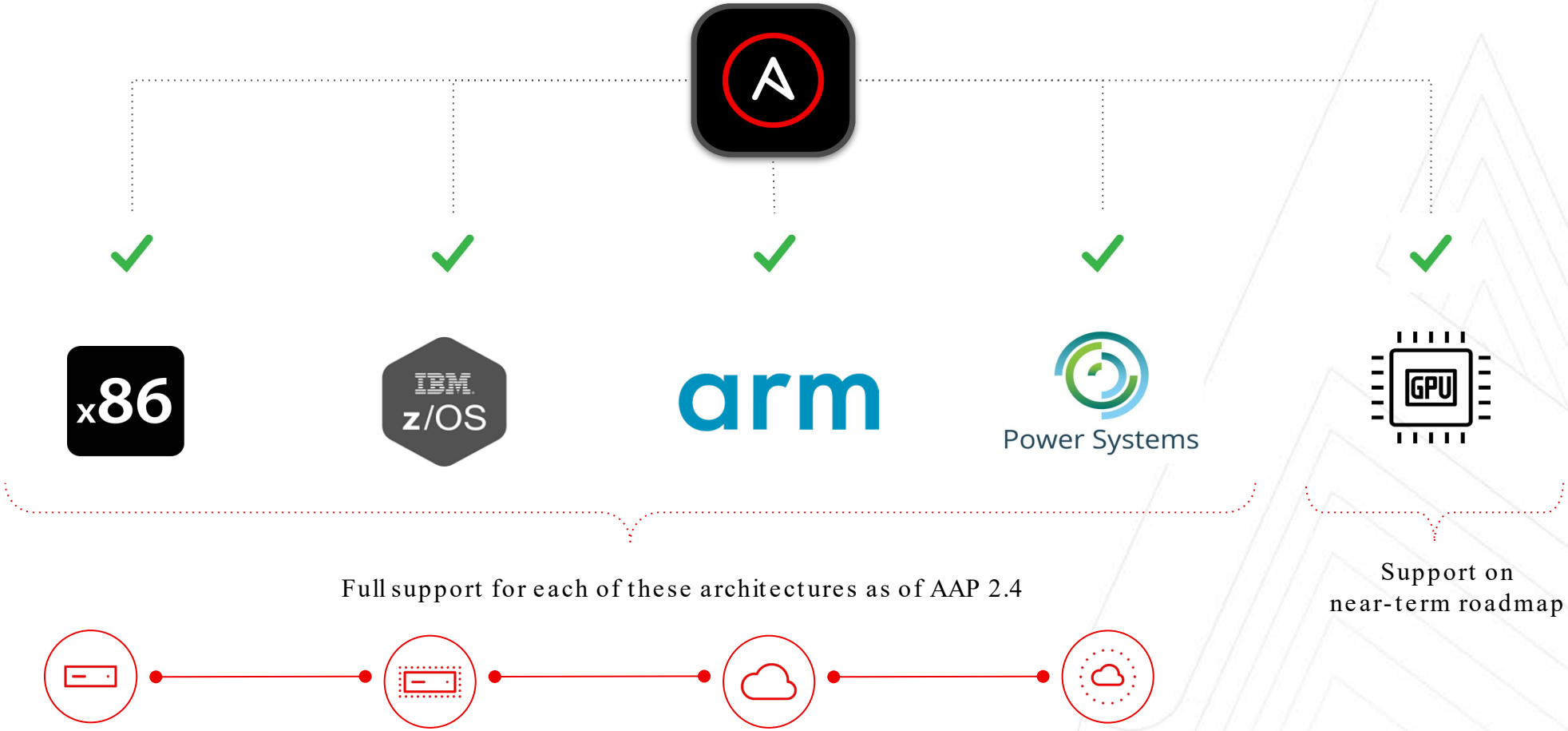
Enterprise features: WebUI, API, role-based access control (RBAC), auditing and workflows for managing at scale

# An integrated solution for the enterprise.



# Ansible Automation Platform across architectures.

Deployable on mission-critical architectures




*ARM release documentation*



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# Ansible Automation Platform installation options.

## RPM

- Suitable for traditional RHEL environments
- Deprecated with AAP 2.5 (removal TBD)

## Containerized

- Ideal for flexibility and rapid scaling
- Simplifies dependency management

## Openshift Operator

- Seamless integration with Openshift
- Automated lifecycle management

> RPM and containerized installers are available for customers through Red Hat Customer portal.

> AAP Operator is available through OperatorHub in Red Hat OpenShift Container Platform.

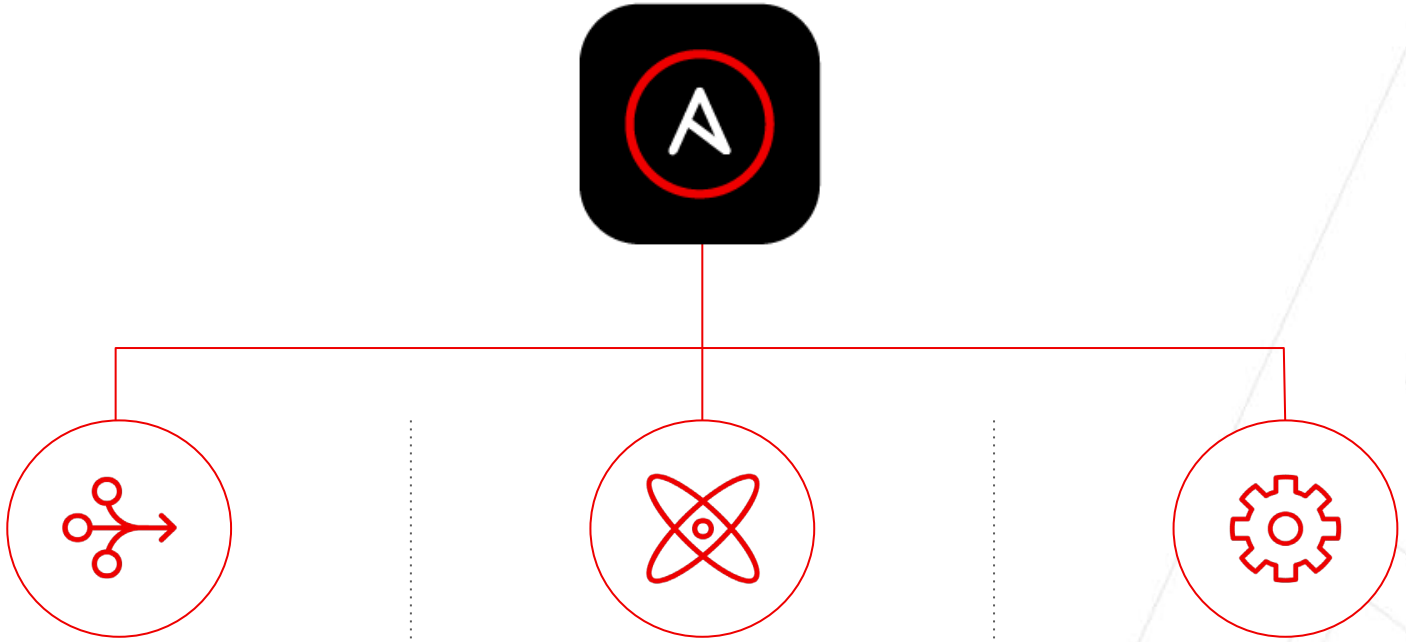
> For more information on installation, refer the documentation.

# Enabling your automation team to consistently…

Create Manage Scale

# Create

# Ansible is the de facto automation language.



## Simple

Human-readable language with quick adoption

## Powerful

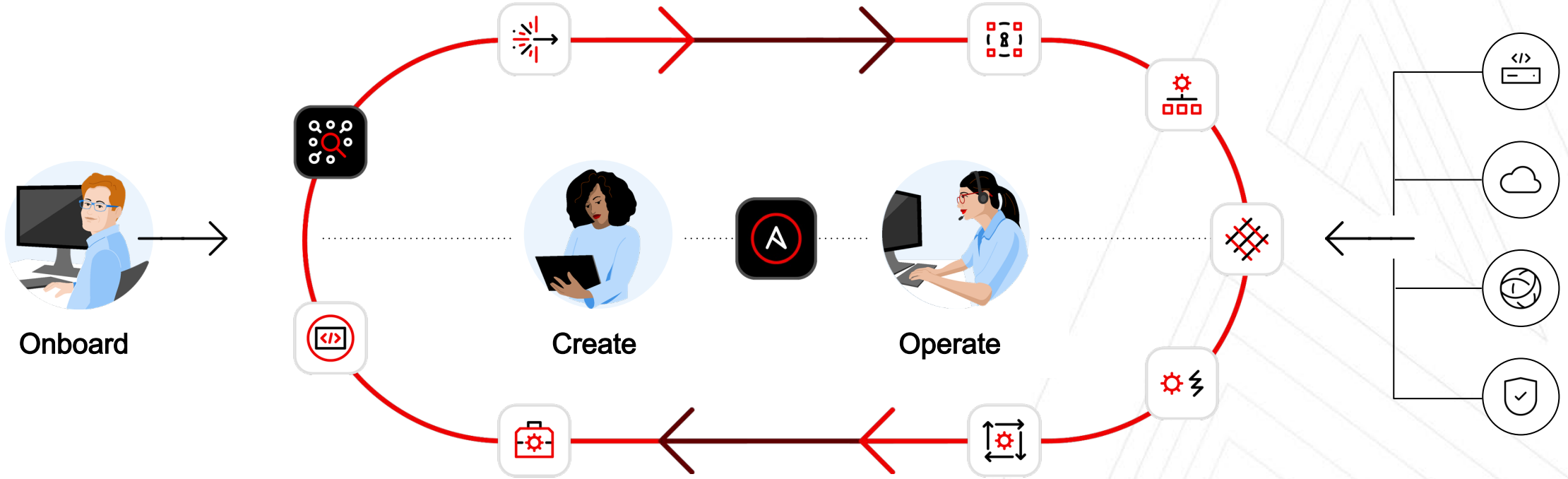
Universal language spanning multiple IT domains

## Agentless

Easily integrate with hybrid environments

# The automation content life cycle. Create.

Ansible plug-ins for Red Hat Developer Hub · Ansible Lightspeed · Automation hub · Automation Platform UI · Automation mesh




Ansible development workspaces · Ansible development tools · Event-Driven Ansible · Platform Operators



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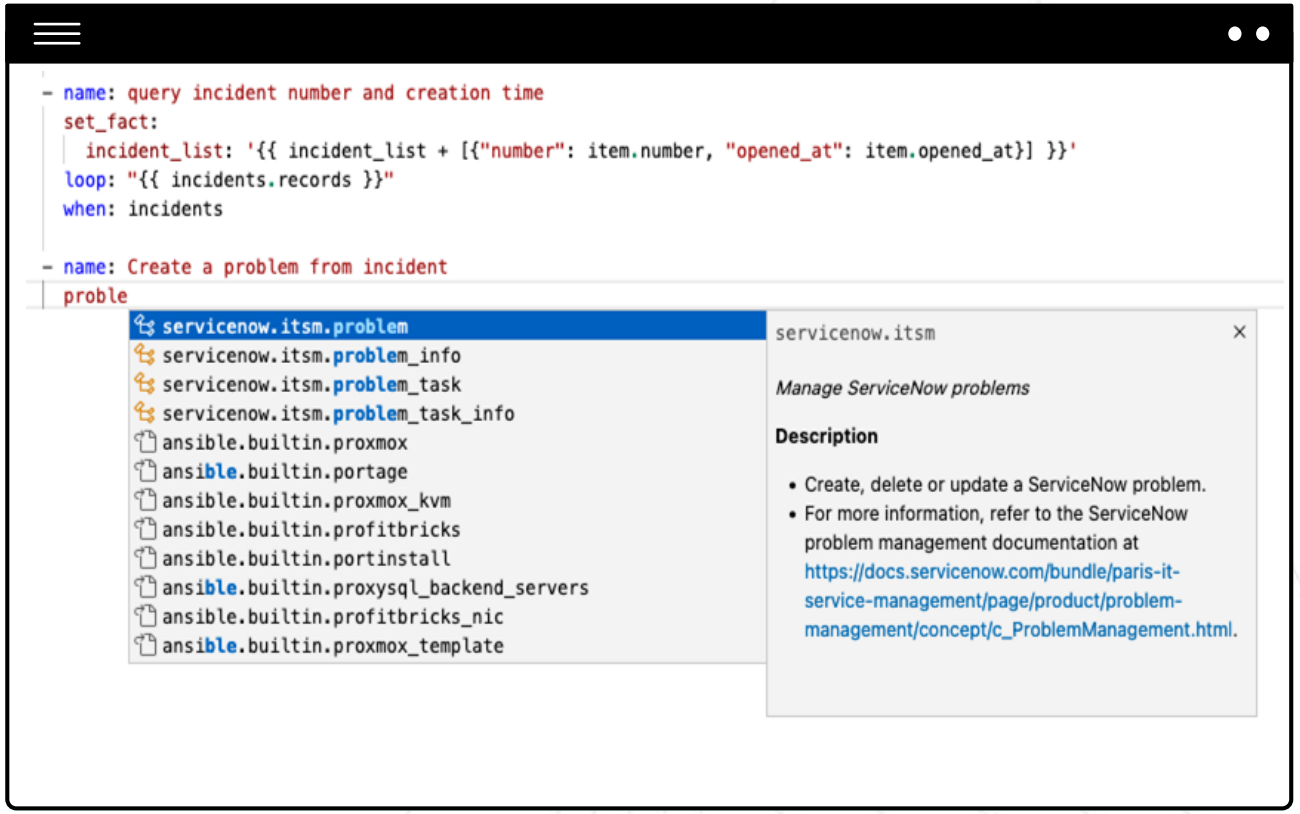
# Ansible VS Code extension. Simplifying content creation

## What is it?

- Syntax highlighting of keywords
- Live validation of your code while you type
- Hover and goto functionality
- Auto-completion on play, block, or task contents, hosts, etc
- Supports Ansible content development on Windows and Mac OS workstation



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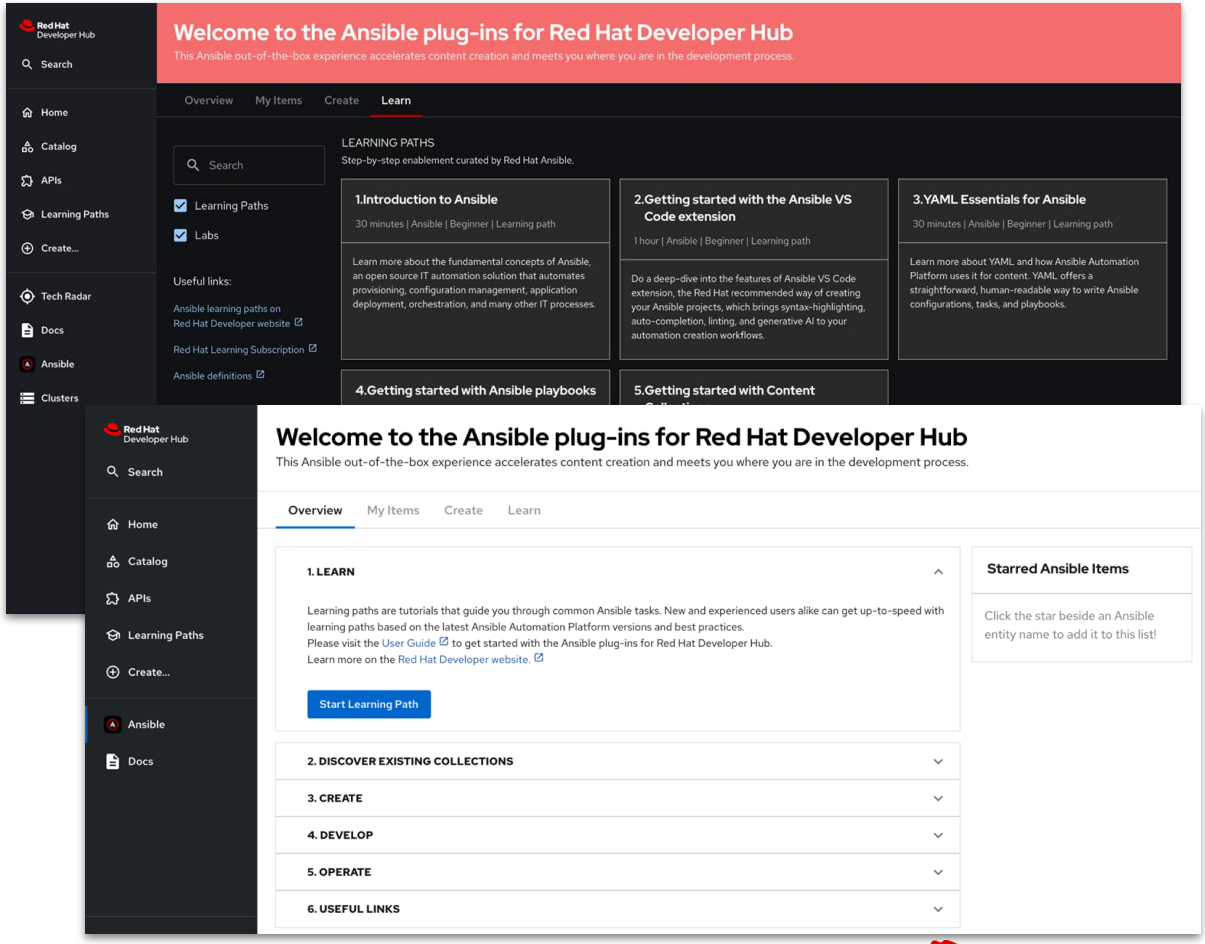
** ansible-lint is fully supported in Ansible Automation Platform version 2.3*

# Ansible plugins for Red Hat Developer Hub (Backstage)

## Tools for building and maintaining a vibrant automation Community of Practice

- An Ansible-specific portal experience featuring learning paths, labs, and other user onboarding resources, all designed to help your organization:
  - ✓ Onboard new users faster
  - ✓ Improve developer productivity
  - ✓ Reduce friction, context switching, and frustration
  - ✓ Get faster time-to-value from your automation investment
  - ✓ Establish better governance, consistent control, and more trust
- Enables push-button Ansible Playbook and collection creation with opinionated best practices
- RBAC integration with Red Hat Developer Hub
- Optional integration with OpenShift Dev Spaces

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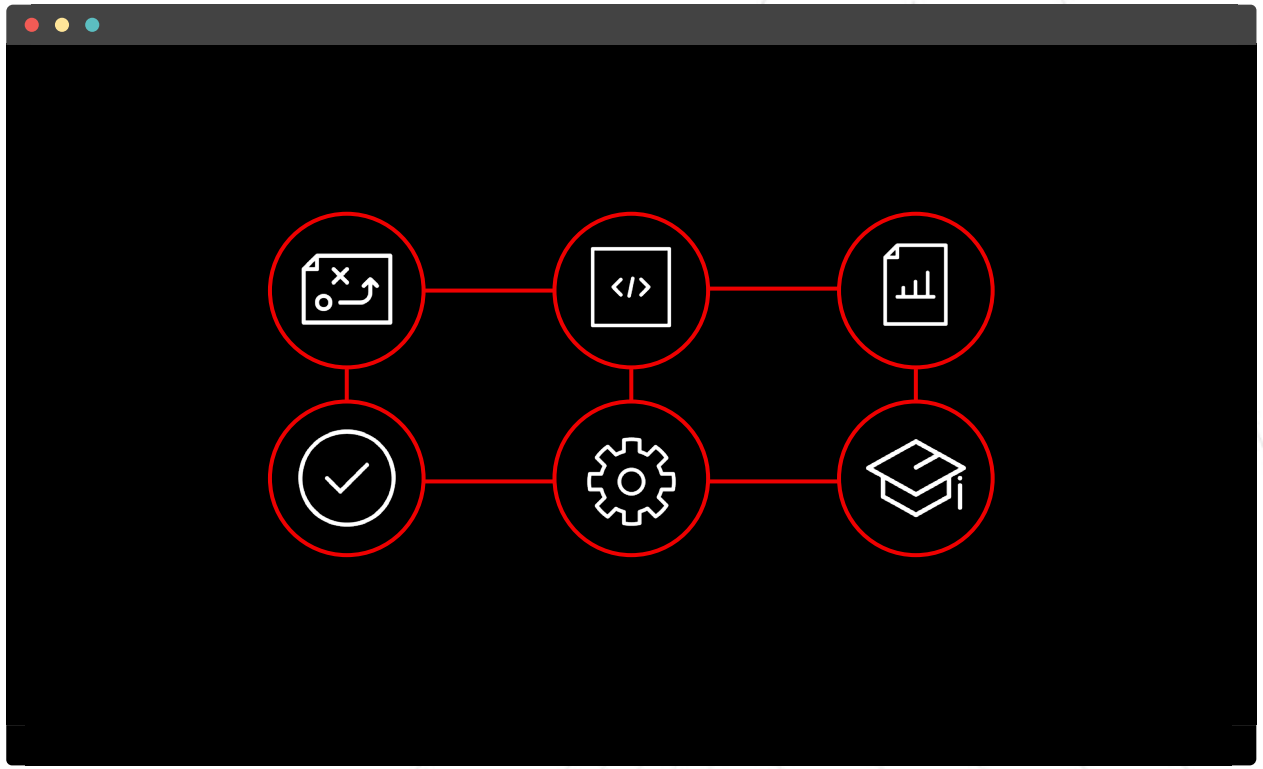
# Content Collections.
## Simplified, consistent content delivery.

### What are they?

- Contains automation content, including modules, multiple roles ,and playbooks
- Portable, reusable, and versioned enabling better collaboration

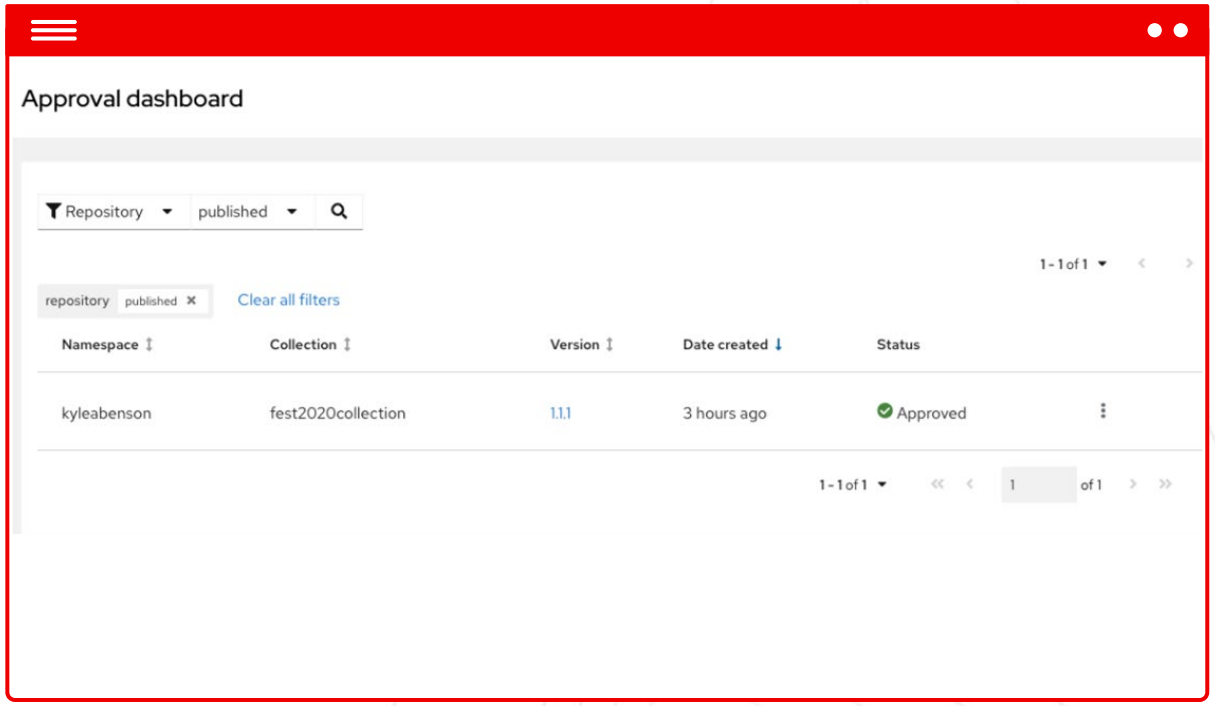


# Automation hub. Trusted automation content.

console.redhat.com

## What is it?

- Hosted source of trusted Red Hat, Validated and Certified Partner Content Collections
- Integrated documentation and examples
- Configurable as primary content collection source for your automation environment
- Access to hosted automation hub and content Included in subscription



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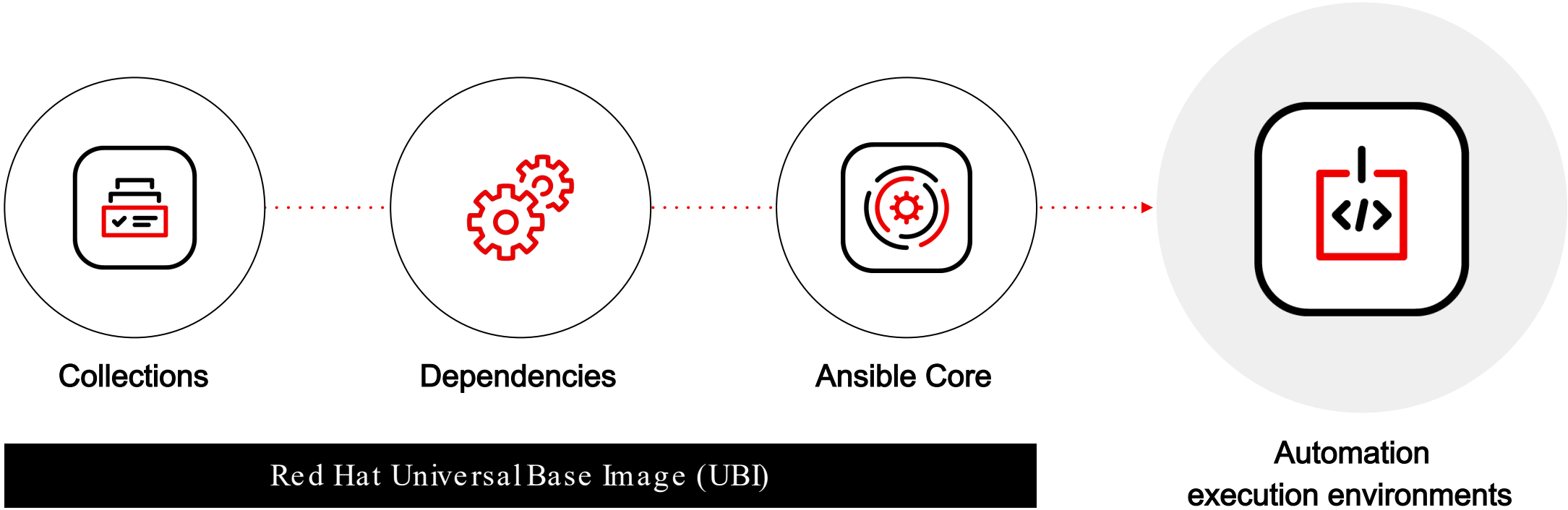
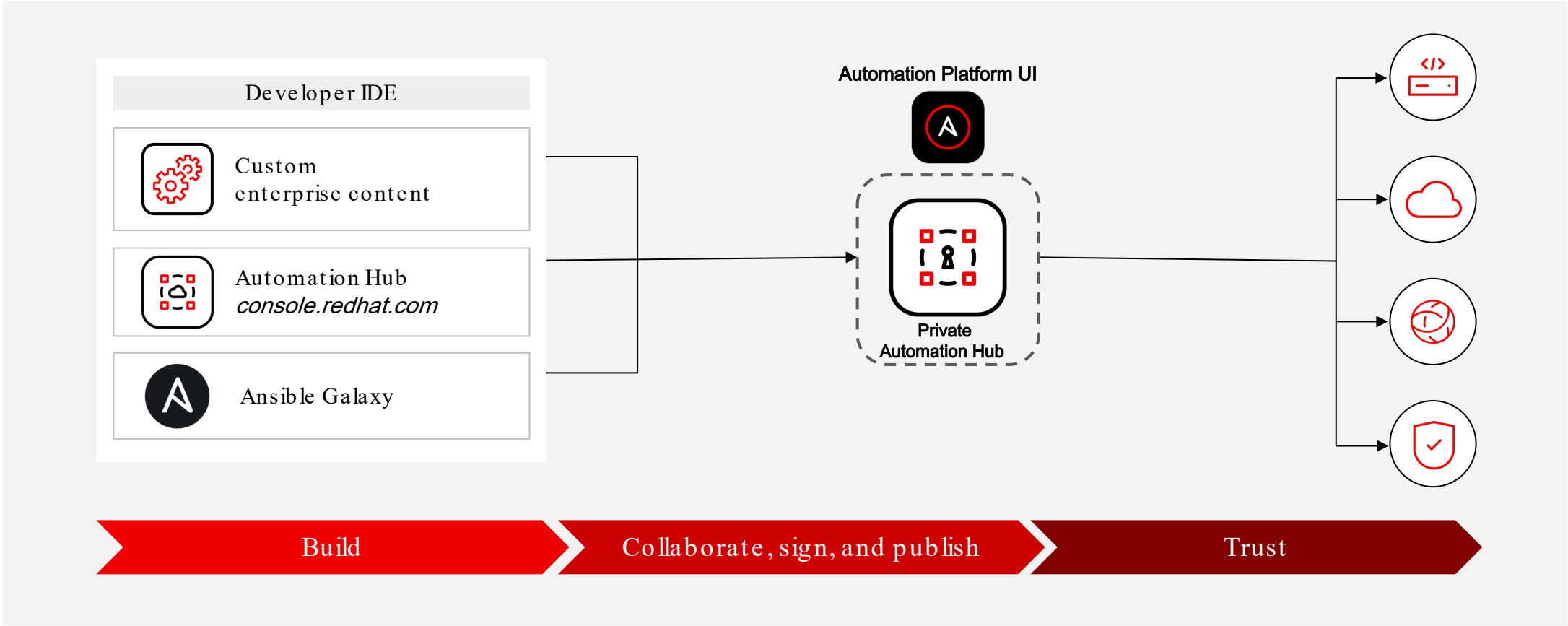
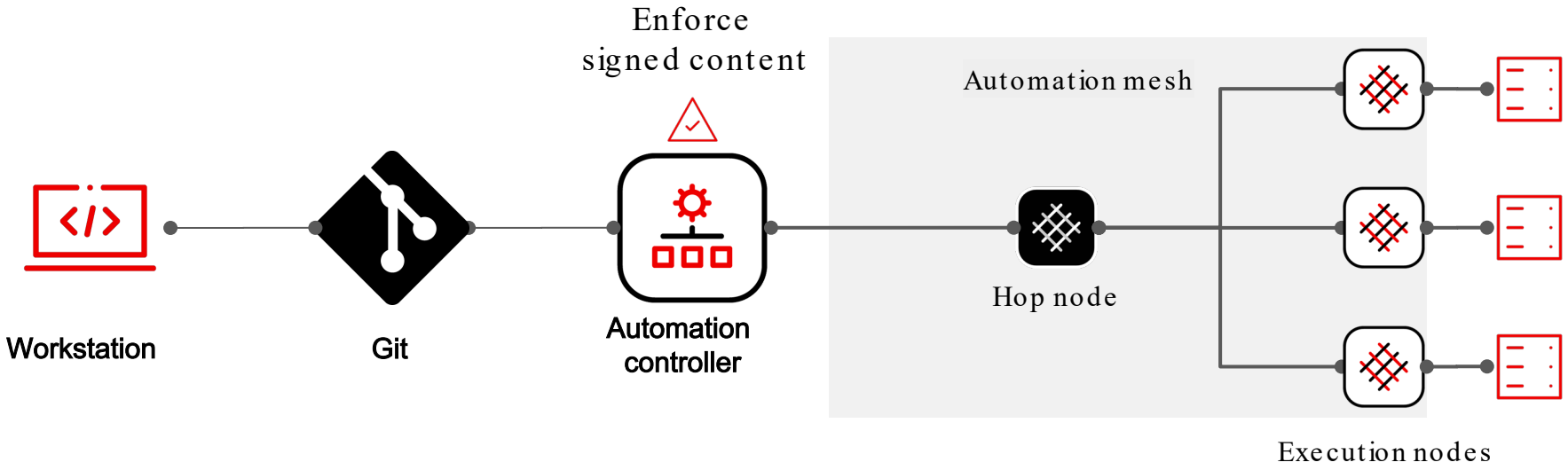
# Automation execution environments.
## Reuse and scale automation content.



# Private automation hub. Collaborate, sign, and publish.



# Project signing in Automation controller




1. Create GPG key pair
2. Create an ASC file (armored ASCII)
3. Create a MANIFEST.in for your Git project
4. Use `ansible-sign` utility to create signature for project
5. Create a GPG credential in Automation controller
6. Sync Project (will be enforced!)

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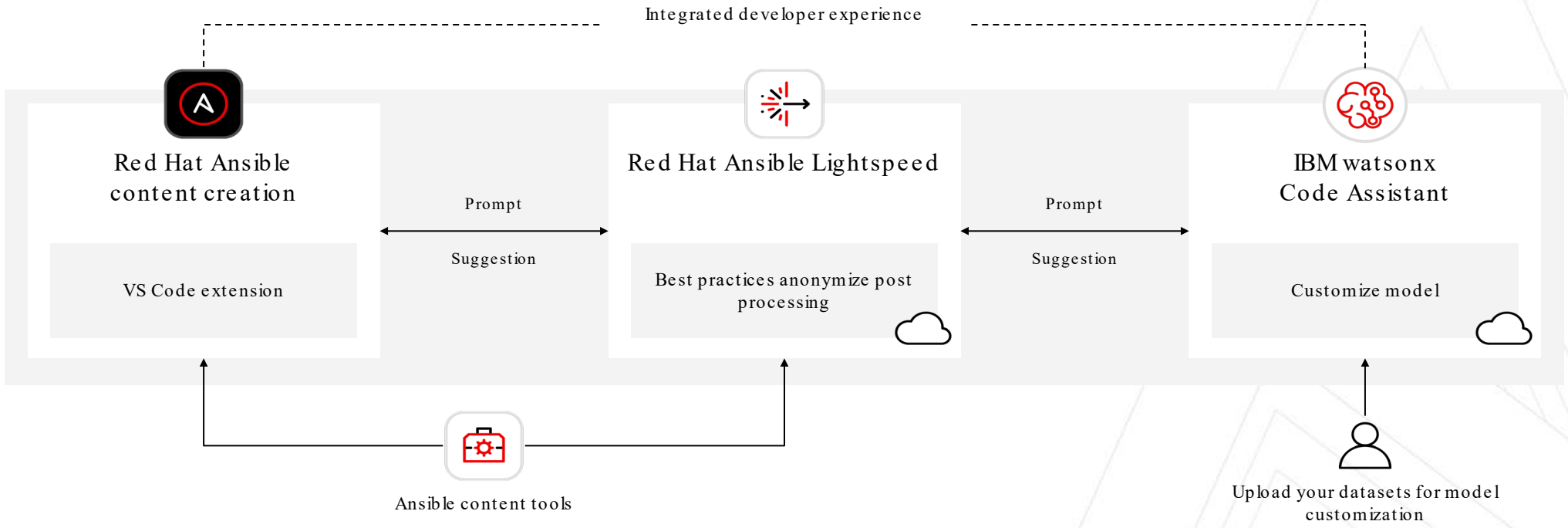
# Ansible Lightspeed. Generative AI the Ansible way.




**Data security**

- Prompt/ Suggestion data is encrypted in transit and at rest and is ephemeral
- Customer metadata and customized models are stored in customer-owned IBM cloud object storage and are not shared with IBM, Red Hat, or any other customers

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# Manage



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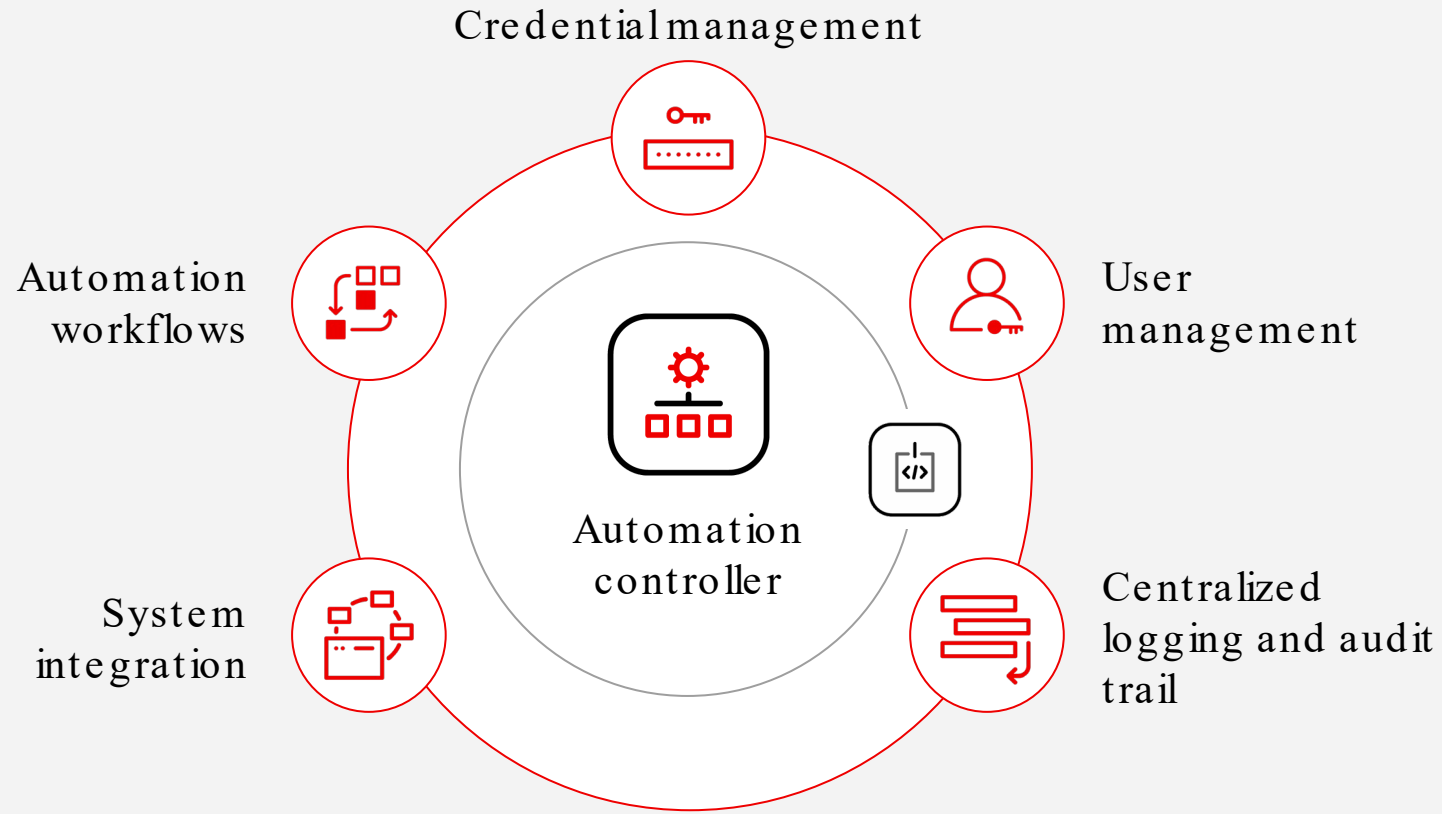
# Enterprises need more for their automation.



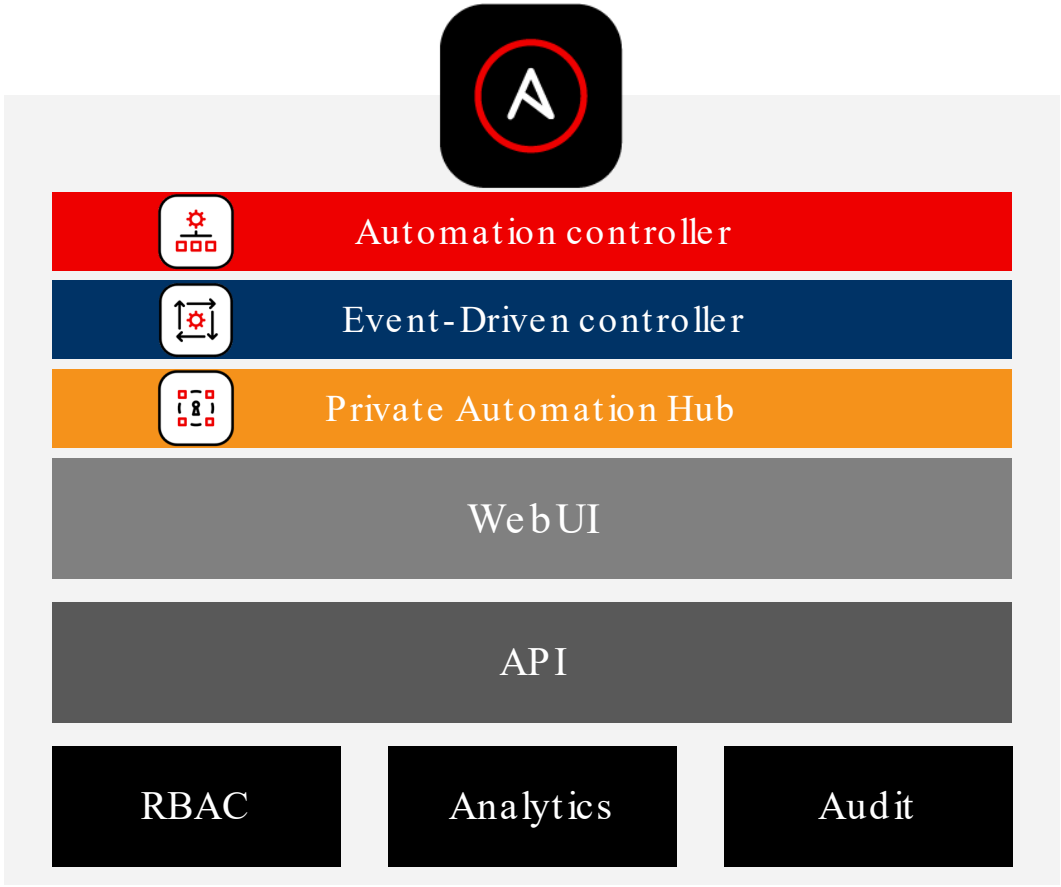
# Automation controller. Define, operate, and delegate.

## What is it?

Automation controller is the Ansible Automation Platform control plane which enables users to define, operate, and delegate automation across their enterprise

## Unified UI provides:

- Centralized control
- Web UI and API
- Role-based access control
- Centralized logging
- Credential management
- Ansible analytics integration

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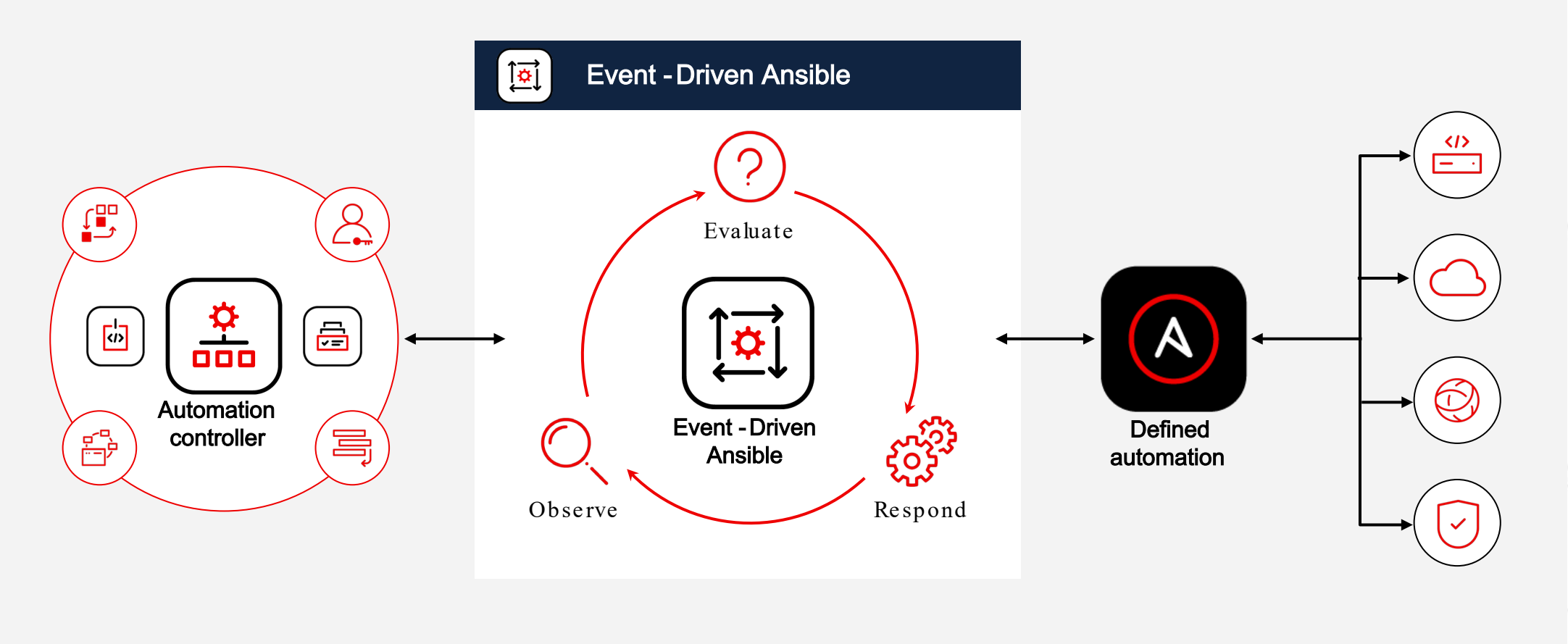
# Event - Driven Ansible. Observe, evaluate, respond.



# Event - Driven Ansible controller.

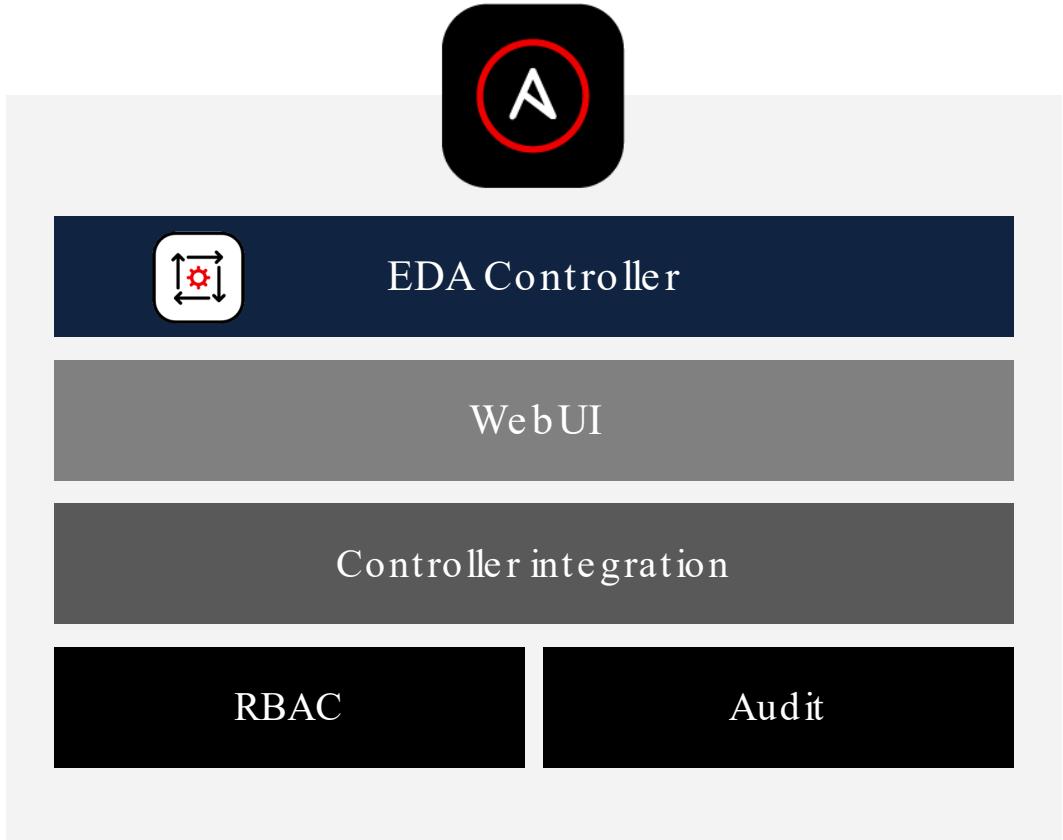
## Define and manage.

### What is it?

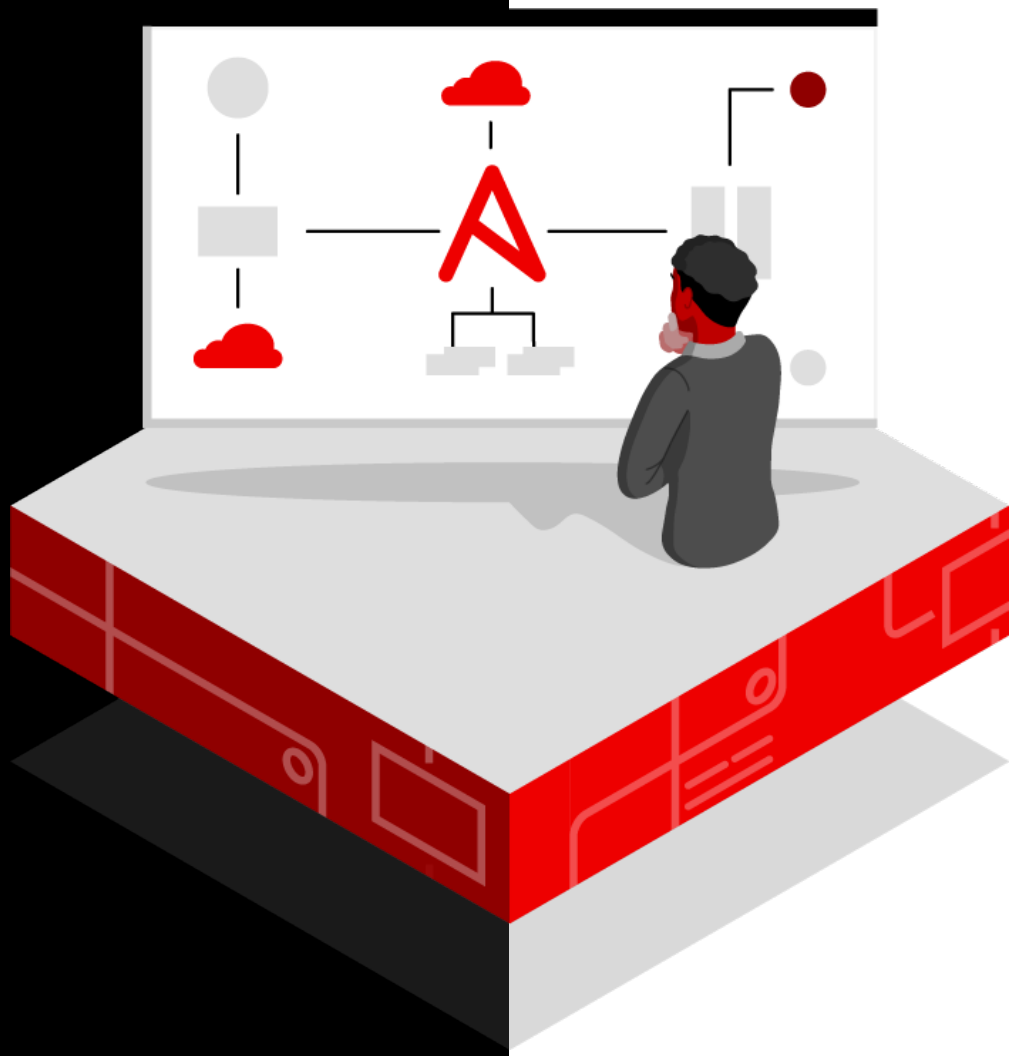
- EDA Controller enables users to centrally manage Event-Driven Ansible across the enterprise.

### EDA controller provides:

- Web UI.
- Rulebook activation.
- Event streams
- Role-based access control(part of Unified UI).
- Auditing trail.



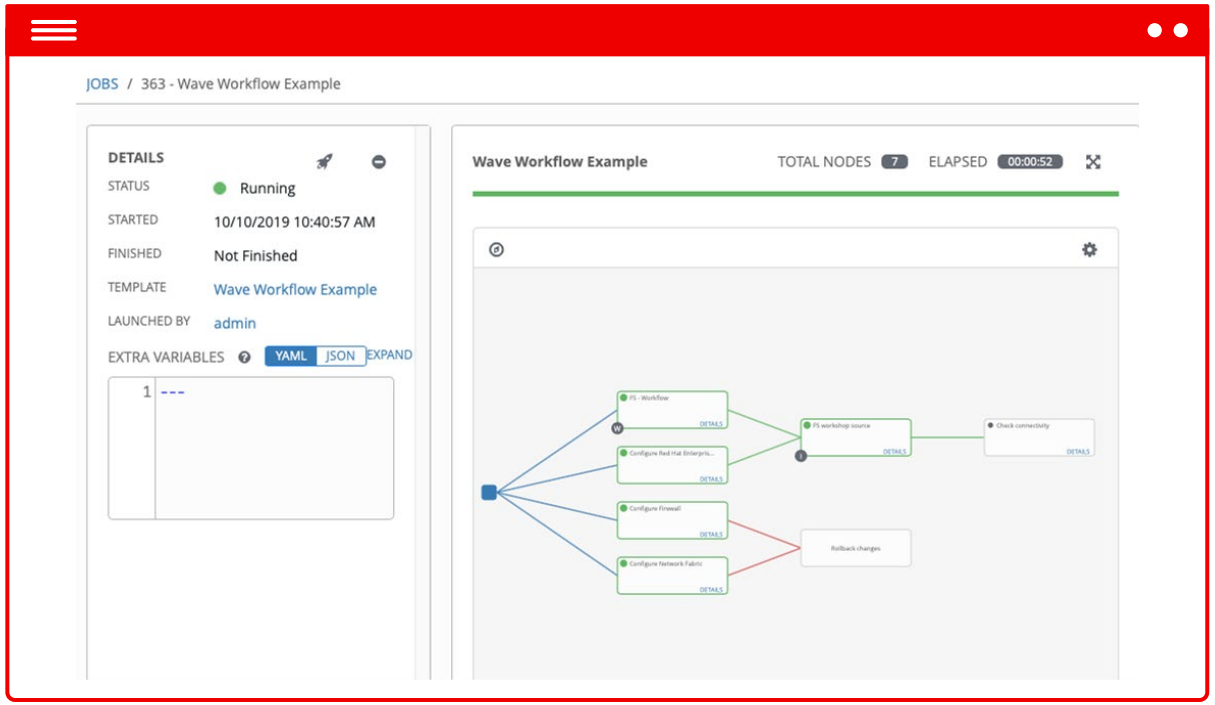
# Scale



# Workflows. Solve complex problems.

## What is it?

- Workflows enable the creation of powerful holistic automation, chaining together multiple pieces of automation and events
- Simple logic inside these workflows can trigger automation depending on the success or failure of previous steps
- Add approvals to your workflows to enhance governance
- Integrate other systems, such as ITSM to fit with your existing controls and processes

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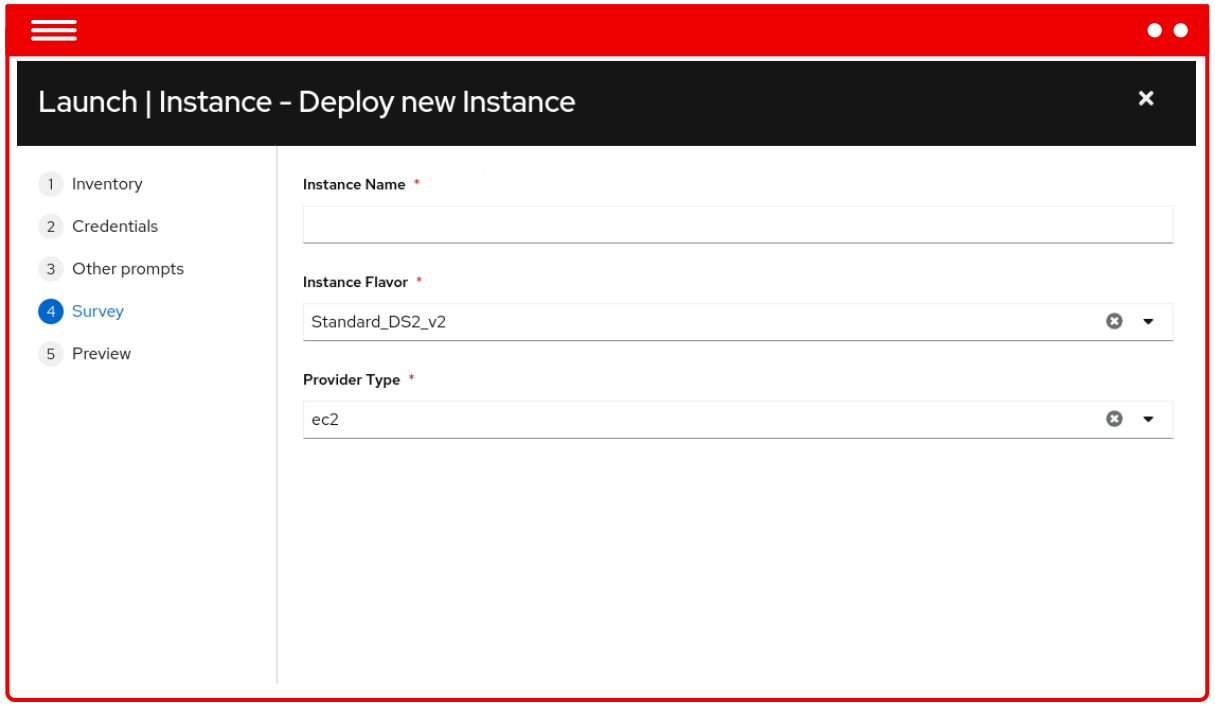
# Automation controller surveys.

## Adopt and grow.

### What is it?

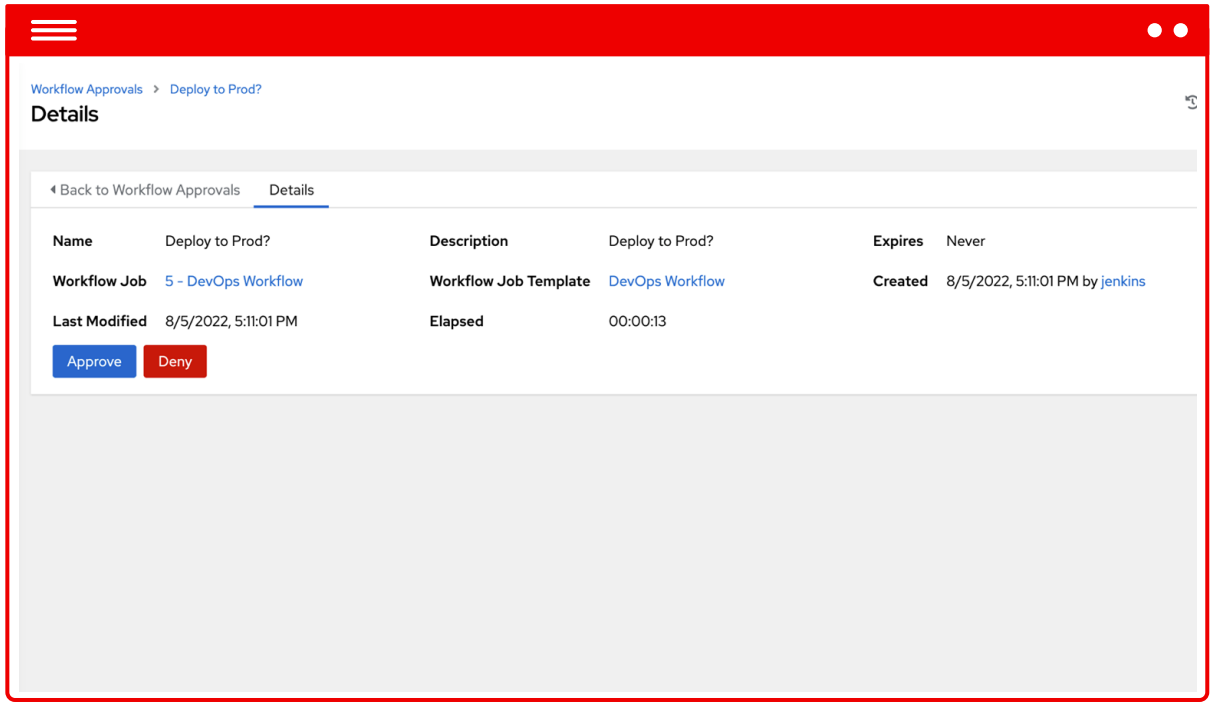
- User-friendly, self-service interface in automation controller
- Abstracts complexity using question and answer format
- Best suited for teams directly accessing automation and close to the automation practice
- Access and execution governed using controller features



# Automation controller approvals. Integrate and govern.

## What is it?

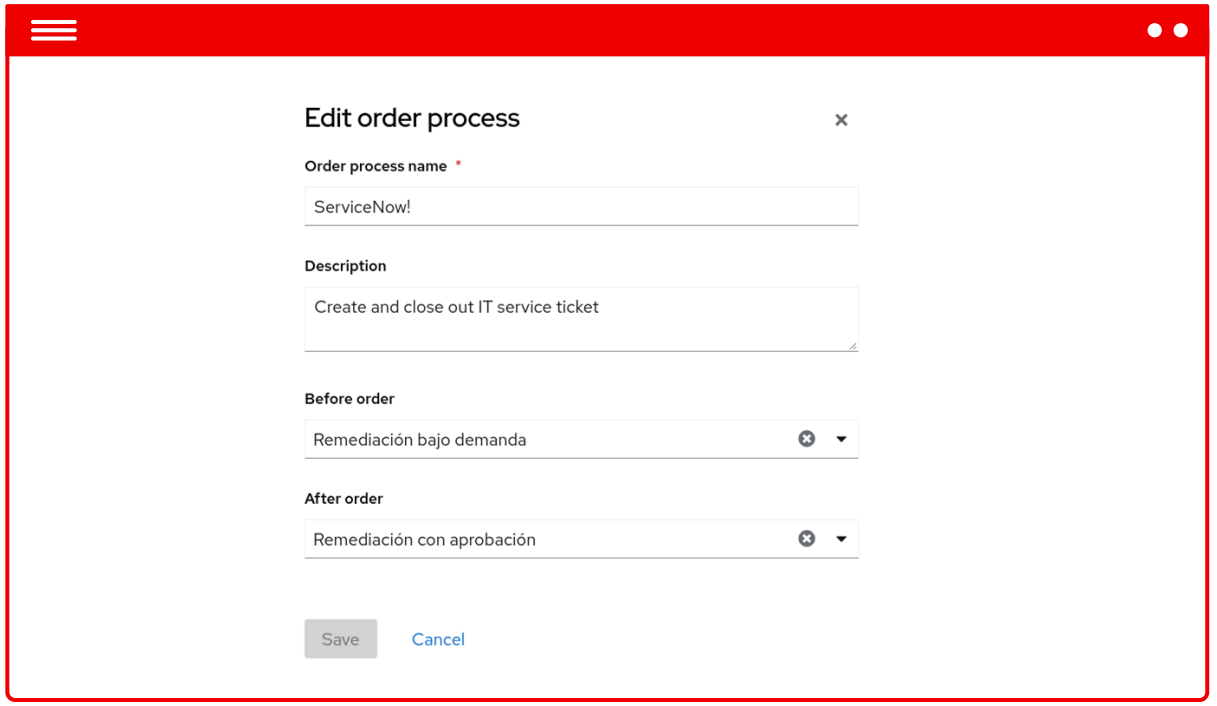
- Adds human interaction to the automation for administration and governance
- Available at the operational level on the Automation Platform UI



# IT service management integration (ITSM).
# Integrate and govern.

## Incorporate automation into your ITSM

- Integrate high level workflows in existing ITSM toolsets with the automation platform.
- Apply organization governance and integrate your automation to larger business processes
- Have the automation platform reach out to the ITSM system whenever things are changing, including data transmission between the tools



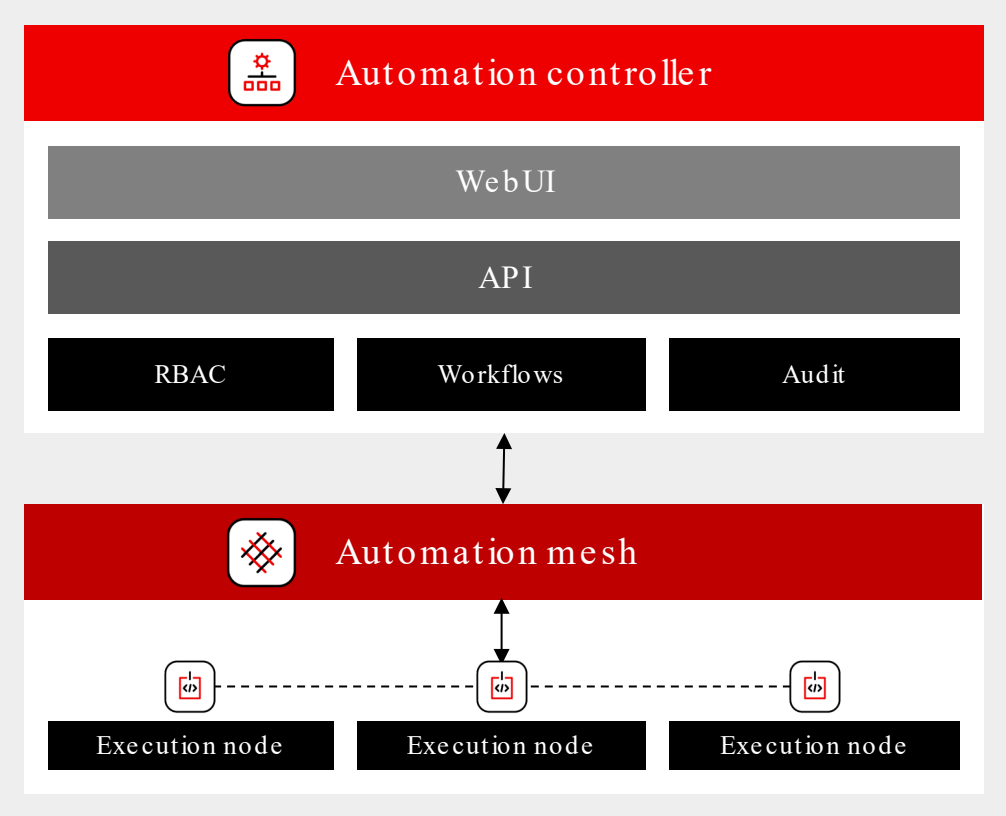
# Automation mesh. Design and expand.

## What is it?

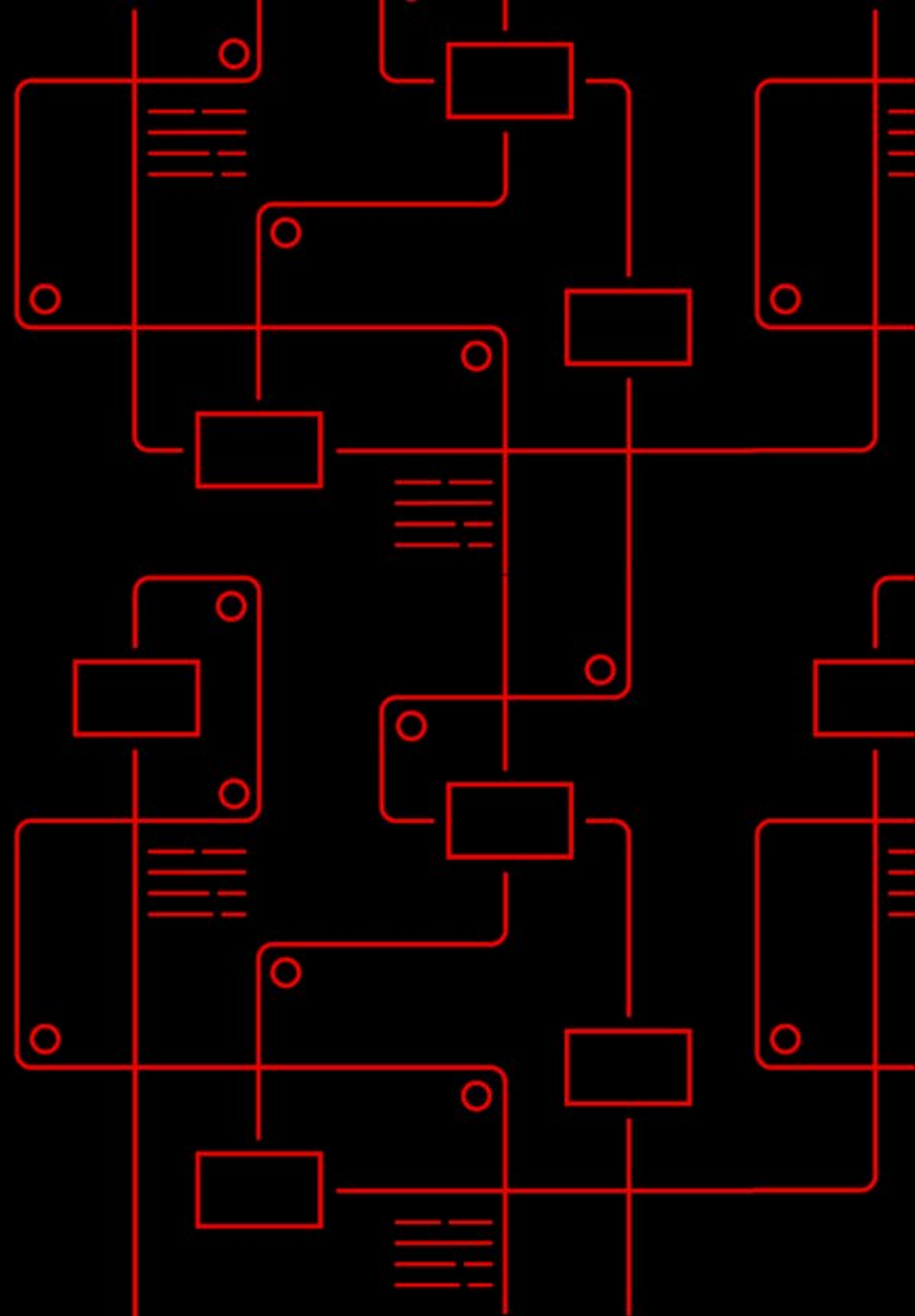
- Simple, reliable framework to scale automation independently with little or no downtime
- Distributed and localized execution across worker nodes
- Scale across segmented and remote networks with native resiliency
- Flexible design choices to deliver automation across networks and design redundant topologies

## Improved communication and security

- Worker node health checks
- Bi-directional, secured (TLS) communication between nodes
- Centralized, secured management with automation controller



# Thank you!





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