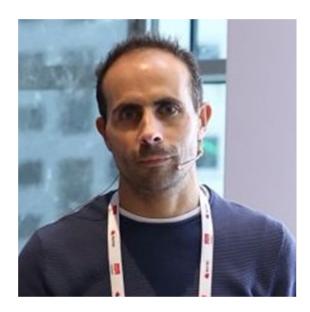


#### **Connect**

# Transform Your Operations Combining Ansible Automation and Al

Carlos Parada, Ansible Specialist Solution Architect Red Hat



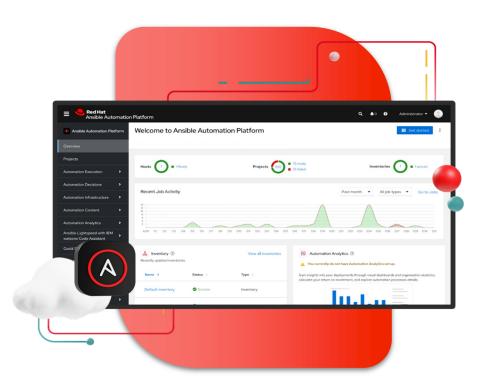


#### Carlos Parada

Ansible Specialist Solution Architect Red Hat

# Ansible Automation Platform: Overview

### Ansible Automation Platform





#### Increase speed

Reduce the number of manual steps and GUI-clicking, enable the orchestration of multiple tools and accelerate their interaction with each other



#### Reduce human error

Minimize risks with automated workflows, avoid human operator errors in time-sensitive, stressful situations



#### **Ensure consistency**

Enable auditable and verifiable deployment processes by using a single tool and common language

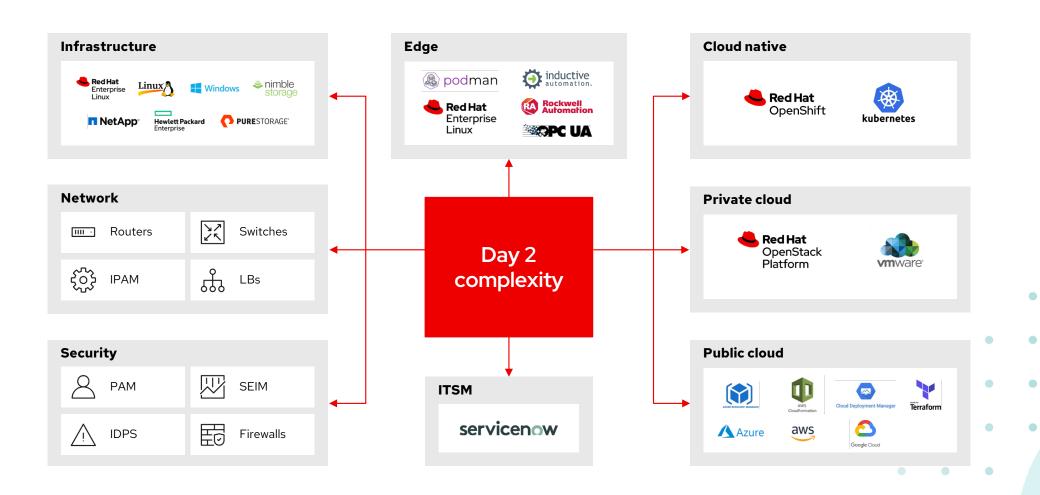


#### Improve security and compliance

Securely apply automation across your organization and ensure end-to-end code integrity with signed content.



### Reality of IT Operations



#### **Event-Driven Ansible**

**OBSERVE** 

#### EVENT

- Watch data / streaming data
- Identify event
- With or without notification





**EVALUATE** 

**RESPOND** 

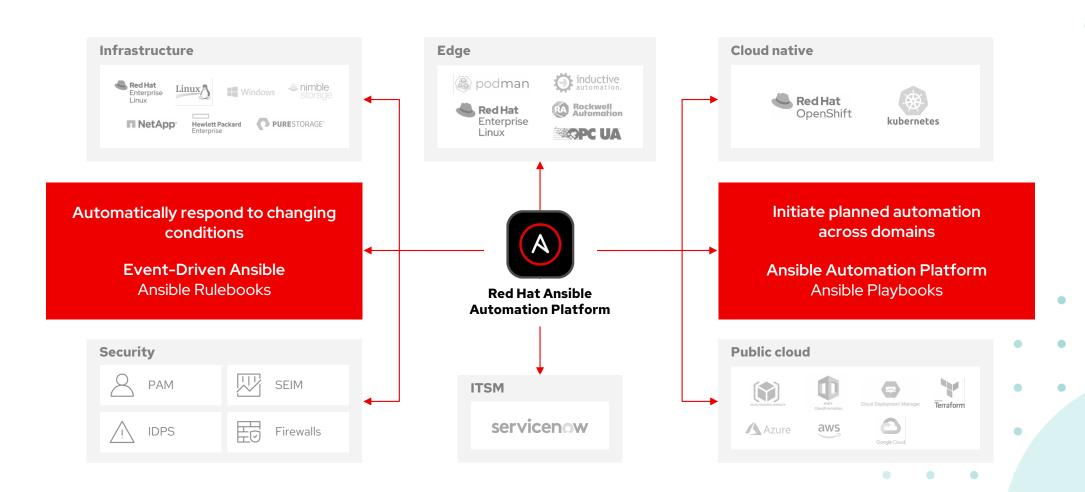
- > Routed for remediation
- Identify known problem
- > Trigger required workflow
- Create rulebooks in real-time with AI

#### **AUTOMATION**

- > No human action required
- Automated resolution triggered
- Remediation action completed
- > Shorter MTTR



### Closed-Loop with EDA



### Ansible Lightspeed Code Assistant

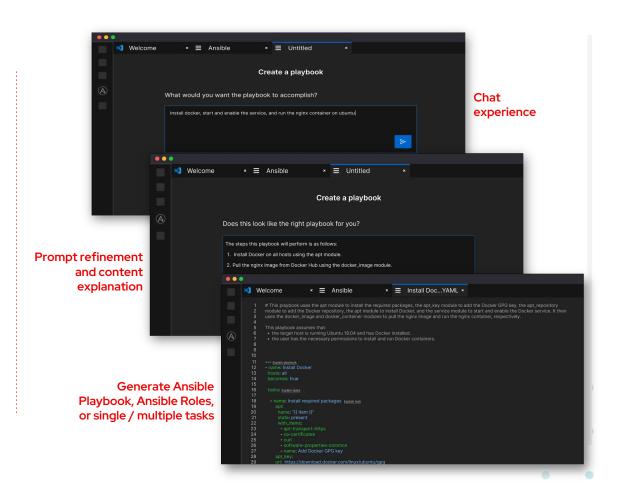
#### **CODE** ASSISTANCE

Ansible-specific code generation service to:

- Boost development productivity
- Democratize access to automation
- Establish trust and confidence in code
- Connect to IBM watsonx Code Assistant, powered by IBM Granite code models

#### Example prompts:

- "Write an Ansible Playbook to provision a VM on AWS."
- "Deploy LAMP stack on a RHEL server."
- "Show me an Ansible Playbook that will install RHEL AI"



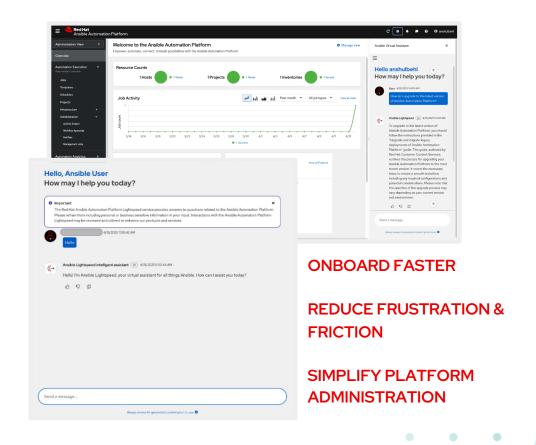


#### CA5.6

### Ansible Lightspeed Intelligent Assistant

#### **PLATFORM** ASSISTANCE

- Intuitive chat assistant embedded directly into Ansible Automation Platform UI
- Contextual support for faster troubleshooting, platform onboarding, and the day-to-day management of automation.
- Includes links to references and resources for source validation and accelerated learning.
- Flexible model connectivity: Red Hat AI or 3rdparty models
- Example prompts:
  - "What is an execution environment?"
  - "How do I upgrade to the latest version of Ansible Automation Platform?"



### Agentic AI and MCP

#### **IT WORKFLOW** ASSISTANCE

Expanded contextual support within Ansible Automation Platform to accelerate operational workflows:

- Perform root cause analysis and remediation within an intuitive chat experience.
- Gather facts and insights into system health and status to resolve issues faster.
- Leverages model context protocol (MCP) to query and troubleshoot operational issues within Ansible Automation Platform (near term) and external systems (roadmap)

#### Example prompts:

- "How can I reduce the runtime for this job template?"
- "Provide recommendations to optimize the performance of my current playbook"

#### Inside model context protocol (MCP)

- Allows Ansible Lightspeed intelligent assistant to connect to and act on data from Ansible Automation Platform and external systems and tools
- Will enable prompting from intelligent assistant to Ansible-connected systems
- Allows Red Hat to combine Lightspeed code generation feature with Lightspeed agent in a seamless user experience

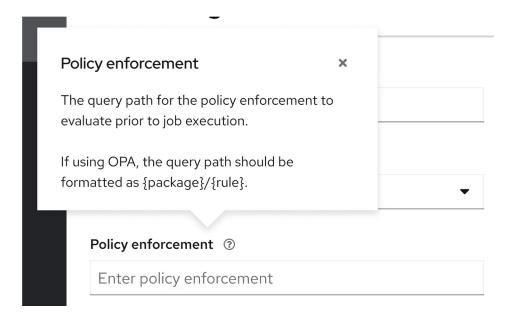
**MAKE BETTER DECISIONS** 

**REDUCE SWIVEL CHAIR OPERATIONS** 

**DEPLOY SELF-HEALING INFRASTRUCTURE** 



### Policy Enforcement

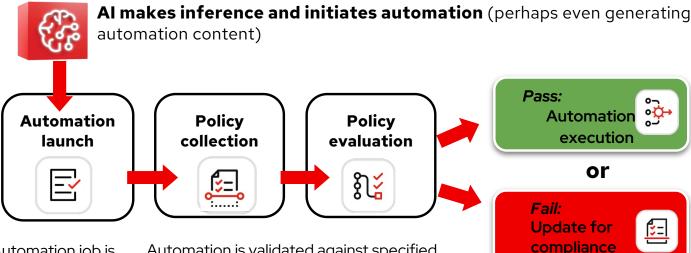


- ✓ Operate within boundaries for AlOps to ensure the best outcomes.
- ✓ Focus on compliance is accelerating so you must meet requirements across ITOps even as they grow and expand.
- Reduce risk minimize security issues, outages and downtime through operational controls.
- ✓ Automate with discipline control and provide boundaries for scaling enterprise automation scenarios.

red.ht/PolicyEnforcementExamples



### Policy Enforcement for Al



Automation job is initiated in a job template.

Automation is validated against specified policies stored externally and applied to job template, inventory or Ansible org.

Decision maker (a human) controls what policies are written and where they will be applied (inventory, Ansible org or job template).

*If it passes,* automation executes.

If it fails, automation must be updated for compliance before it successfully runs.

#### **TRUST**

- ✓ Control what Al-driven automation is able to do prior to completion.
- ✓ Improve compliance, auditability, and AI outcomes.
- ✓ Tightly align event-driven automated responses to company policies.



# Ansible Automation Platform: Unlocking AlOps

### Ansible Unlocks AlOps



- ✓ Event-Driven Ansible data. Ansible is engineered to gather data from whatever observability tools you have.
- ✓ Al technology integration. Ansible integrates with external and internal Al tools to get inference responses, and code generation.
- ✓ Policy enforcement guardrails. Ansible policies will make sure that AI doesn't go beyond certain limits.

### AlOps Use Cases

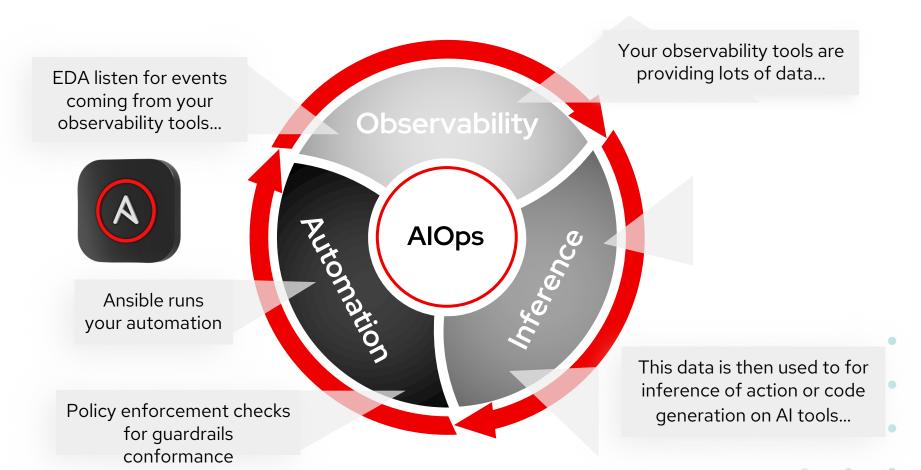
- > **Self-healing infrastructure and applications.** Deploy automation that responds to common alerts from your monitoring systems.
- > **Ticket enrichment for support teams.** Synchronize events and Al recommendations with ticketing and tracking.
- > **Cost + resource optimization.** Automatically discover and implement optimizations for nodes, clusters and projects attached to Al personas.
- > Automated configuration drift detection and correction.

  Continuously monitor system configurations against desired state baselines

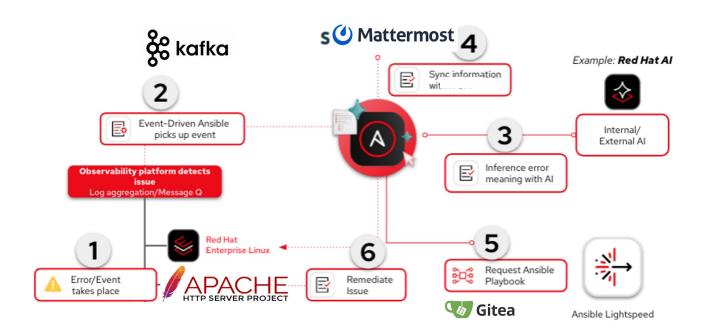




### AlOps: Self-healing



### AlOps: Self-healing Steps



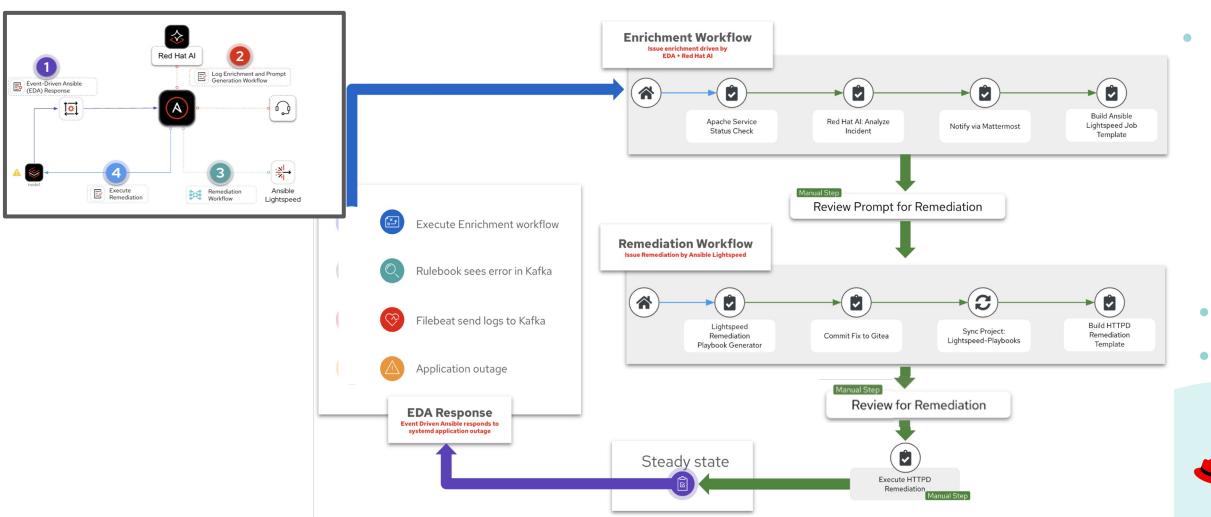
NEW! Al solution guides for Ansible Automation Platform

#### **RESILIENCE**

- √Maximize observability and AIOps investments with seamless integration.
- ✓ Decrease time spent diagnosing and manually responding to errors.
- ✓Shift from reactive to proactive model.
- ✓ Reduce downtime and MTTR by detecting and reacting to emerging issues.
- Minimize manual intervention and human error.
- ✓Address skills gaps with automated playbook generation and intuitive virtual assistant embedded directly into UI.

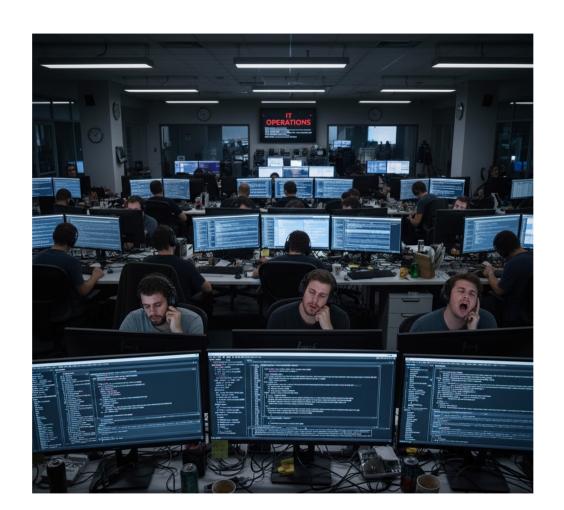


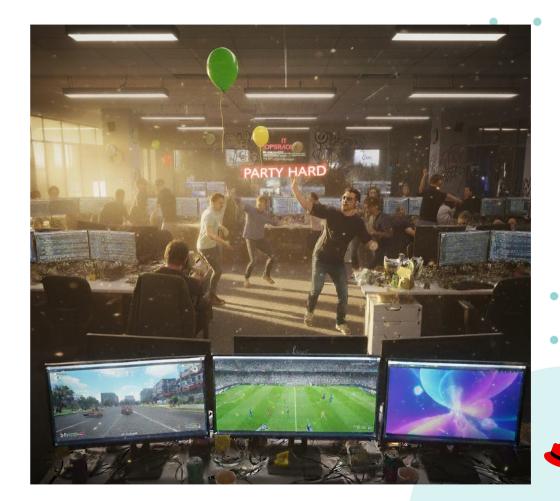
### AlOps: Self-healing Workflows



## Ansible Automation Platform: Demo Time!

### Stop working hard... and party hard!







### Thank you



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