Red Hat

The City Police's Journey to End-to-End Automation with Event-Driven Ansible



Fred van Zwieten



Ismail

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Please Pay attention: Quiz at the end. With prizes...





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



Unlock your automation advantage with AAP 2.5

Red Hat Ansible is becoming increasingly mission-critical for customers who rely on automation to bridge skills gaps, tame operational complexity across the enterprise, and mitigate costly tool sprawl.

Our goal with Red Hat Ansible Automation Platform 2.5 is to make it easier for every customer to fully unlock the potential of automation to transform IT - and deliver strategic advantages to the business.

This latest release is engineered to help our customers:

- > Accelerate automation adoption at scale, with a reimagined automation platform experience, new features for enhanced usability, and tools for more effective collaboration and coordination.
- > Empower automation engineers, with integrated developer tooling and generative AI capabilities designed to bolster ease and efficiency for a range of skill sets and experience across the entire automation creation lifecycle.
- > Orchestrate across the enterprise, with event-driven automation capabilities that make intelligence from other tools more actionable, along with a robust ecosystem of integrations that put true end-to-end automation within reach.





The flexibility to scale, wherever that may be.





What is Red Hat[®] Ansible[®] Automation Platform?



An integrated solution for the enterprise.

Create



New unified UI for a more cohesive platform experience



Ansible Automation

Platform

What is it?

The unified UI in Ansible Automation Platform delivers a seamless and consistent experience for operators, developers, and platform administrators to manage automation across their enterprise.

Unified UI provides:

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



New unified UI for a more cohesive platform experience

- > A new interface that delivers an improved experience for operators, developers and platform administrators, with a more consistent and centralized:
 - > WebUI
 - > API
 - > Authentication and authorization
 - > Role based access controls (RBAC)
- > Use Ansible Analytics directly within the unified UI to generate reporting at scale.
 - Automation Calculator: ROI reporting to demonstrate the value and impact of automation initiatives.
- > Upgrades in AAP 2.5 lay the foundation for future enhancements to the Day 2 operations platform experience.





Improving the incident timeline for mission-critical apps and more



Ansible Automation Platform

MMTD: Mean Time to Detect MTTI: Mean Time to Investigate MTTA: Mean Time to Action MTTR: Mean Time to Repair MTRS: Mean Time to Restore Service MTBF: Mean Time Between Failures MTBSI: Mean Time Between Service Incidents

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Event-Driven Ansible. Observe, evaluate, respond.





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Ansible Rulebooks

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```
- name: Capture alertmanager alerts
hosts: all
sources:
   - ansible.eda.alertmanager:
       host: 0.0.0.0
       port: 5050
       data alerts path: alerts
       data_host_path: labels.instance
       data path separator: .
       skip original data: true
rules:
  - name: SELinux was disabled
    condition: event.alert.labels.alertname == "selinux disabled" and
                event.alert.status == "firing"
    action:
       run job template:
         name: Apply baseline
         organization: Default
         job args:
           limit: "{{ event.meta.hosts }}"
```

Ansible Automation Platform

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What makes up an Ansible Rulebook?



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:

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







Orchestrate across the enterprise

Advance your automation with the ability to automatically respond to changing IT conditions



Automate at scale

Take on any automation use case, across any IT domain, and tap into the huge ecosystem of Ansible technology partners and integrations

Turn intelligence into action

0.

Event-Driven Ansible helps make your observability tools more actionable, turning events from a variety of sources into automated workflows.

Orchestrate across the enterprise

Make end-to-end automation a reality, with automated workflows that connect across the entire stack, integrate with all of your tooling, and use real-time intelligence from your observability platforms to deliver performance and resilience at scale.





Event-Driven Ansible | Enterprise enhancements



High availability + scalability

- Increased resiliency through Active/Active failover between multiple deployments
- Easily configurable via bundled installer or OpenShift Operator

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- Enterprise Credential Management for securing Event Sources.
- Encrypted Credentials can be passed to Event Sources or Event Streams can be configured with Credentials to secure event authentication.

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Integrated platform experience

- Event Driven Ansible is now a fully integrated Ansible Automation Platform component.
- Leverages platform features such as Unified UI, Centralized RBAC, Single-Sign On and 3rd Party Authentication like LDAP.





Some Use Cases







Certificate Renewal and Rotation



Unsecure Access Check to see if certificates are valid across all servers



Automate Certificate Lifecycle If a certificate is invalid or expired. Contact the certificate authority and renew certificate



Install Certs Automatically If a new server is provisioned without a cert. Check and install new valid cert of server



Update tasks within ITSM When a certificate is found to be invalid or missing. Open ticket in ITSM instance, update ticket with what was done, and close ticket.





Self Healing Services



Web Service Is Not Responding Through a log from one of our many intelligence sources a web service is found to be down.



Ticket In ITSM Is Opened

Rulebook initiates the action to open a ticket in the ITSM system of the customer त्र हि

Web Service Restarted Web service is restarted, and verified to come back up to a functioning state

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Ticket In ITSM Is Updated And Closed ITSM ticket is updated with status, and automatically closed





Auto-Scaling for Hybrid Cloud



Application Needs To Scale During Peak Usage Times During Peak Usage times, such as Christmas season for retailers, applications need to be able to scale on demand



Event Driven Ansible Rises To the Occasion Event Driven Ansible gets a notification of resource constraint. Opens a ticket in ITSM

Increases Servers/Resources Depending on the need, Event Driven Ansible can increase the affected resource contention in the server. If that is not enough, then a rulebook can be created to instantiate a fully

populated new VM



Problem Is Resolved Ticket is updated in ITSM instance. Event Driven Ansible continues to listen for new issues of server scaling





Delegation







Demo Time!



Tech Day The Netherlands 2025

CONFIDENTIAL

City Police Station Architecture



Resources

Get started on your event-driven automation journey

MANAGERS

Event-Driven Ansible web page

<u>451 Research: The Impact of</u> <u>Event-Driven Automation</u> <u>on IT Operations</u>

IDC QuickTake AnsibleFest 2922. including Event-Driven Ansible

Blog: Highly Efficient, Resilient IT operations

Blog: Introducing Event-Driven Ansible

TECHNICAL ROLES

Event-Driven Ansible web page

Free self-paced labs

Ansible Rulebook documentation

Event-Driven Ansible blog series

Blog: Getting started with Event-Driven Ansible

Blog: Creating custom plugins

PARTNERS

Event-Driven Ansible web page

Free self-paced labs

Blog: Creating custom plugins blog

Contact the partner team: <u>ansible-partners@redhat.com</u>





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ansible.com/event-driven



Ansible Community of Practice – Good practices

