Red Hat Summit

Connect

# Event-Driven Automation with AAP

## From Alerts to Actions

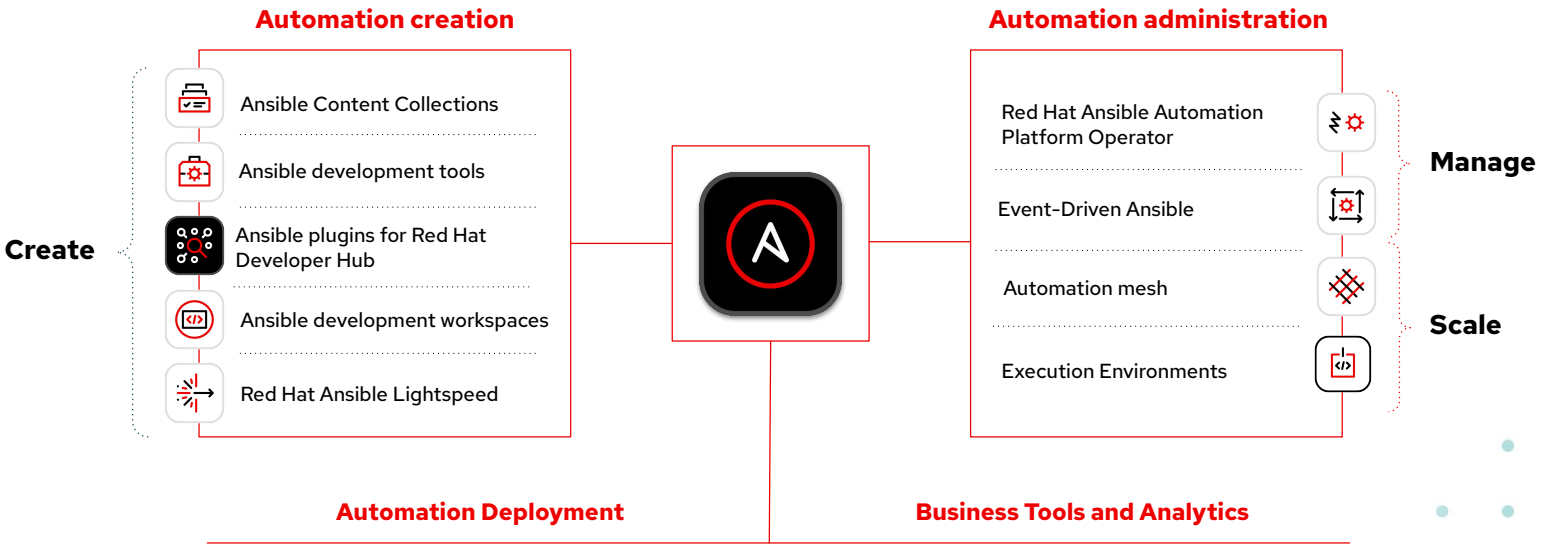
Chris Renwick
Specialist Solution Architect

# Chris Renwick

Specialist Solution Architect (Ansible)
Red Hat

# Ansible Automation Platform

# An integrated solution for the enterprise.



# Ansible Collections

## Supported and certified content you can trust.

**170+**

Certified and Validated Content Collections

**70+**

Certified technology partners

Infrastructure | Cloud | Network | Security | Edge

# Event-Driven Ansible

## What is event-driven automation?

The ability to

connect intelligence, analytics and service requests

for  an IT solution

to automated actions so that activities

can take place in a single motion.

# A typical event-driven automation process

## RECEIVE EVENT

- Work with third party sources of events
- Send important events to Event-Driven Ansible

## DECIDE ON RESPONSE

- Known problem identified
- Automated resolution triggered

## RESPOND AUTOMATICALLY

- Outage incident created
- Support team notified
- Remediation executed

## WORK ACROSS MULTI-VENDOR IT OPERATIONS

Work flexibly and well with multi-vendor monitoring and other solutions across the event driven architecture with appropriate approvals, controls and awareness

# Event-Driven Ansible is use case-friendly.

## Networking

- **Diagnose** network troubleshooting tasks
- **Remediate** configurations

## Edge

- **Trigger** and remediate app deployment
- **Automate** app scaling

## Cloud

- **Trigger** cloud estate checks
- **Remediate** tasks from service bus

## Infrastructure

- **Escalate** infrastructure issues
- **Ensure** compliance

**Red Hat**
**Ansible Automation Platform**
with Event-Driven Ansible

## Applications

- **Trigger** application events
- **Enrich** healing capabilities

## Security

- **Automate** log enrichment / response
- **Escalate** events

dynatrace
DIGITAL PERFORMANCE MANAGEMENT

ThousandEyes
part of Cisco

CYBERARK

INSTANA
an IBM Company

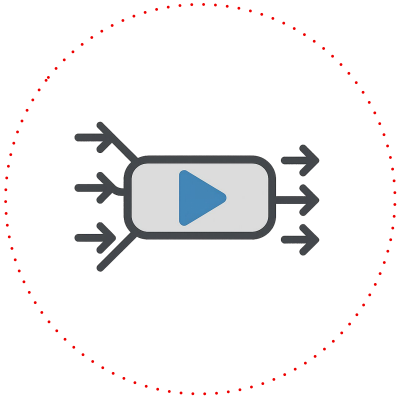
paloalto NETWORKS

IBM Turbonomic

ZABBIX

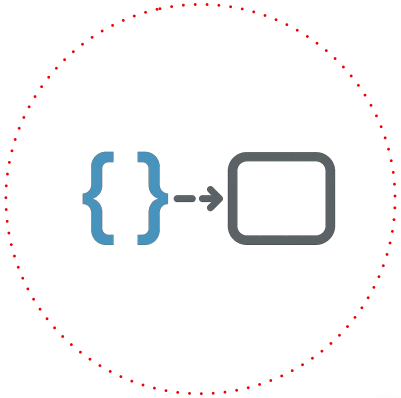
CROWDSTRIKE

# The Three Types of Event-Source Plugins



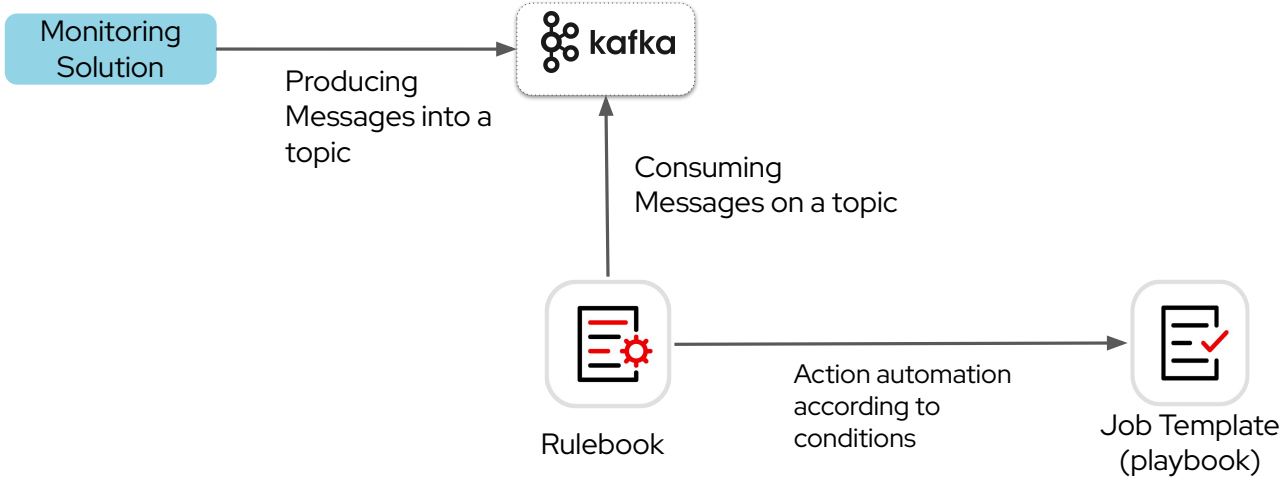
Event Bus

Scraper

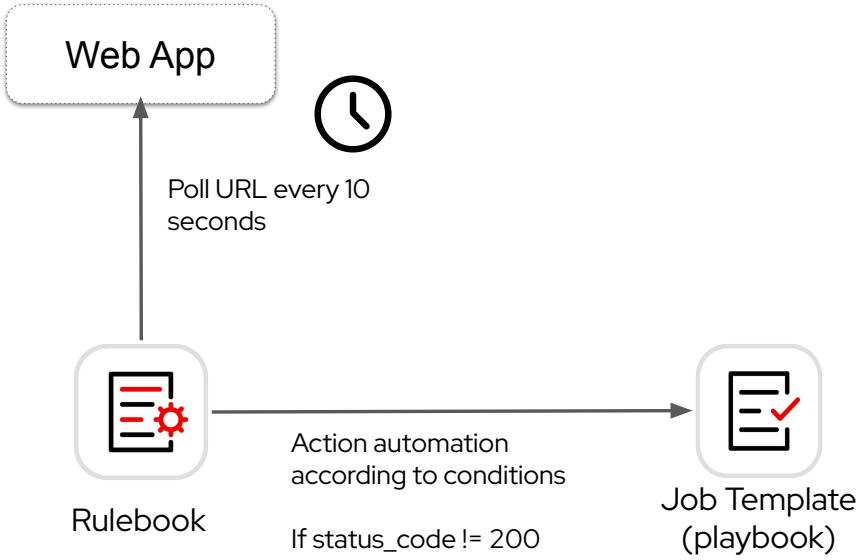


Callback

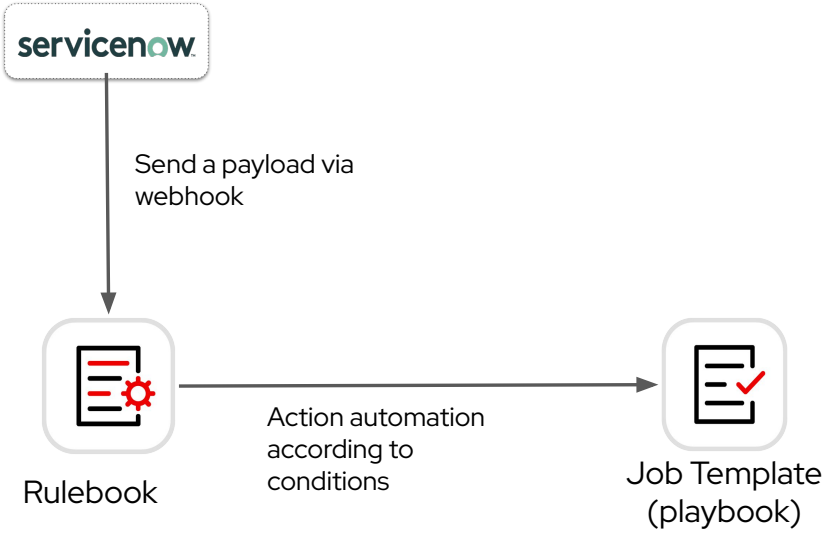
# Event Bus


Monitoring Solution
Producing Messages into a topic
kafka
Consuming Messages on a topic
Rulebook
Action automation according to conditions
Job Template (playbook)

# Scraper

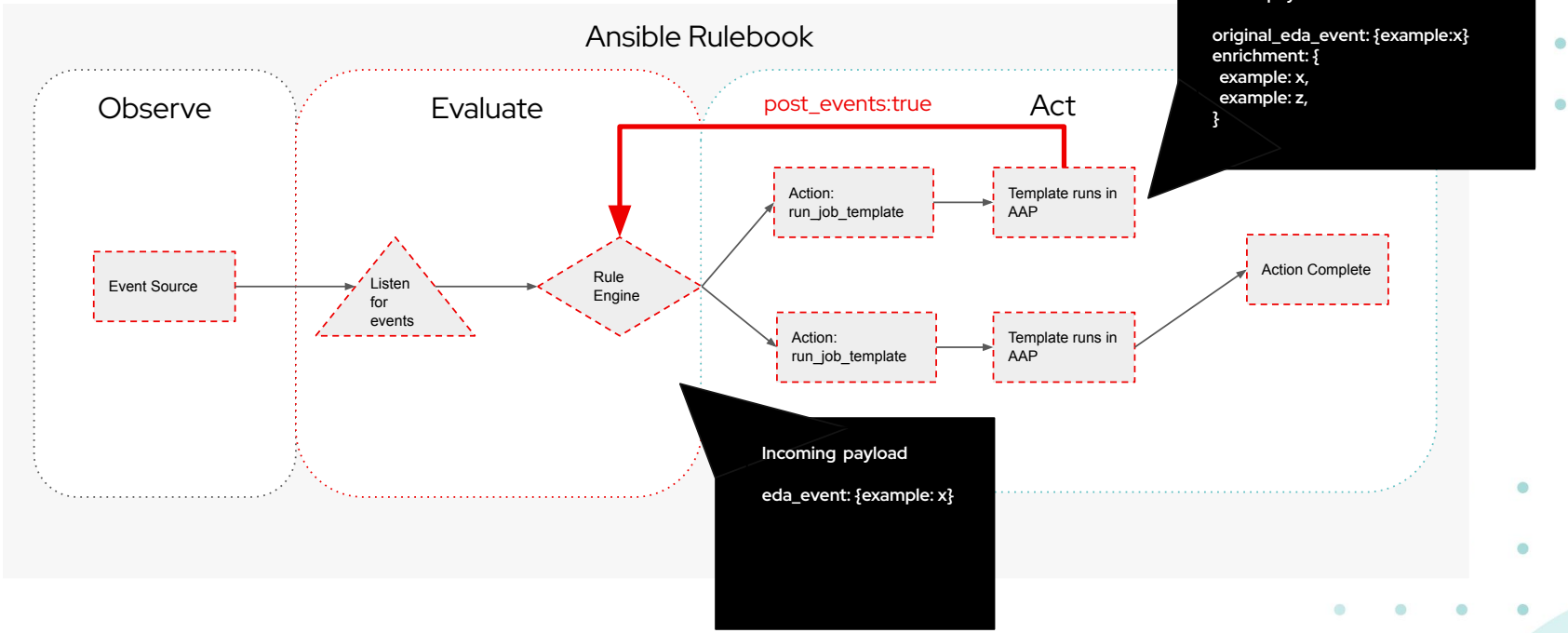

Web App
Poll URL every 10 seconds
Rulebook
Action automation according to conditions
If status_code != 200
Job Template (playbook)

# Callback


servicenow
Send a payload via webhook
Rulebook
Action automation according to conditions
Job Template (playbook)

# Enriching the event

# Enrichment Steps



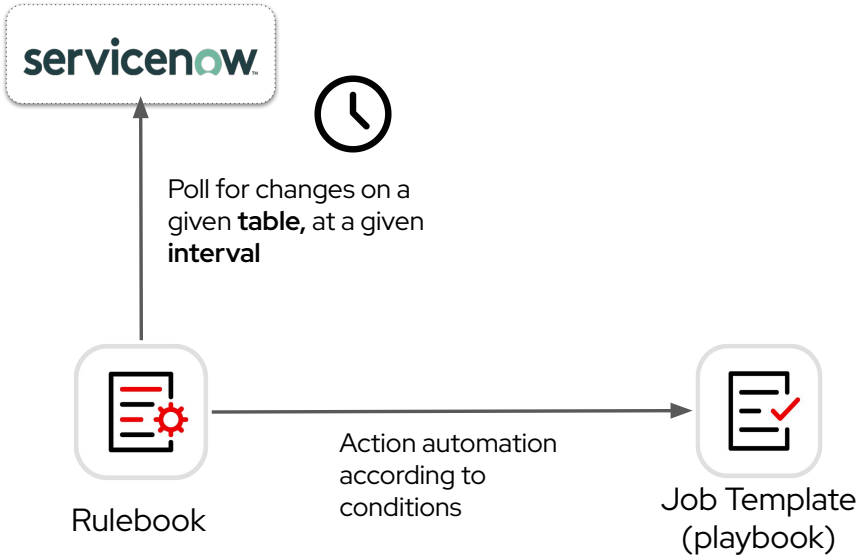
# Servicenow > Event-Driven Ansible Integration

servicenow

**Servicenow.itsm collection**

Event Source

# Servicenow.itsm Event Source Plugin



# Demo

# Event-Driven Flow

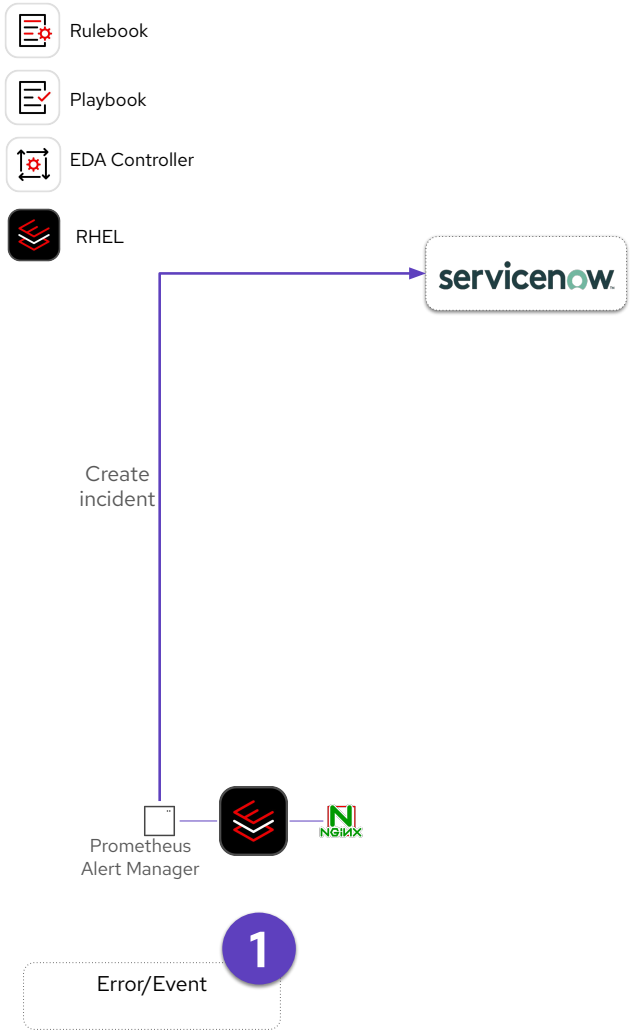
Rulebook

Playbook

EDA Controller

RHEL

# Initial Alert



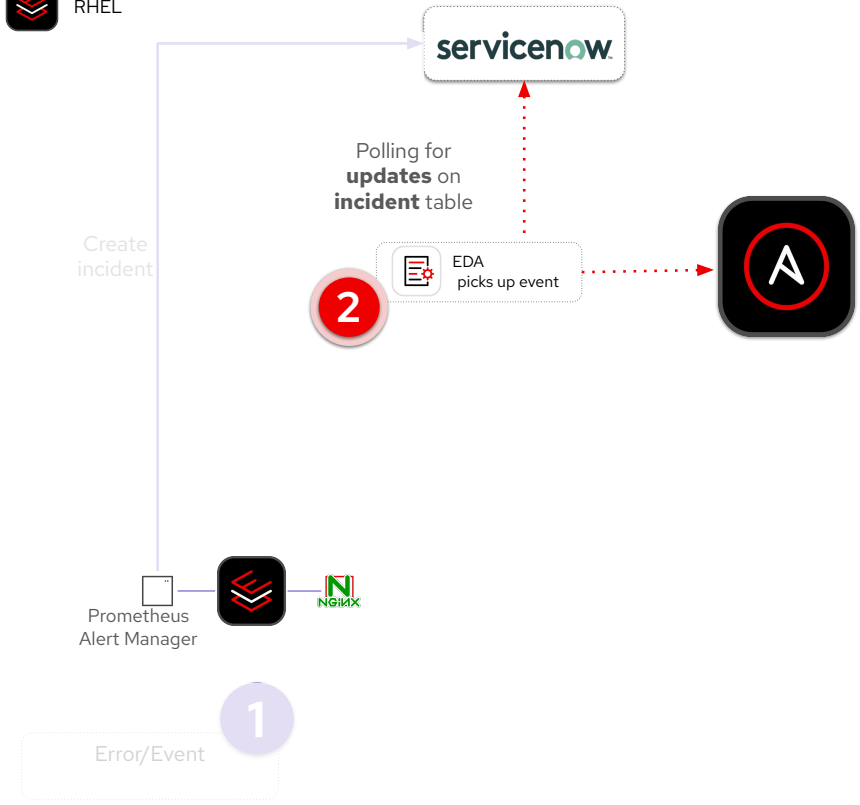
Rulebook

Playbook

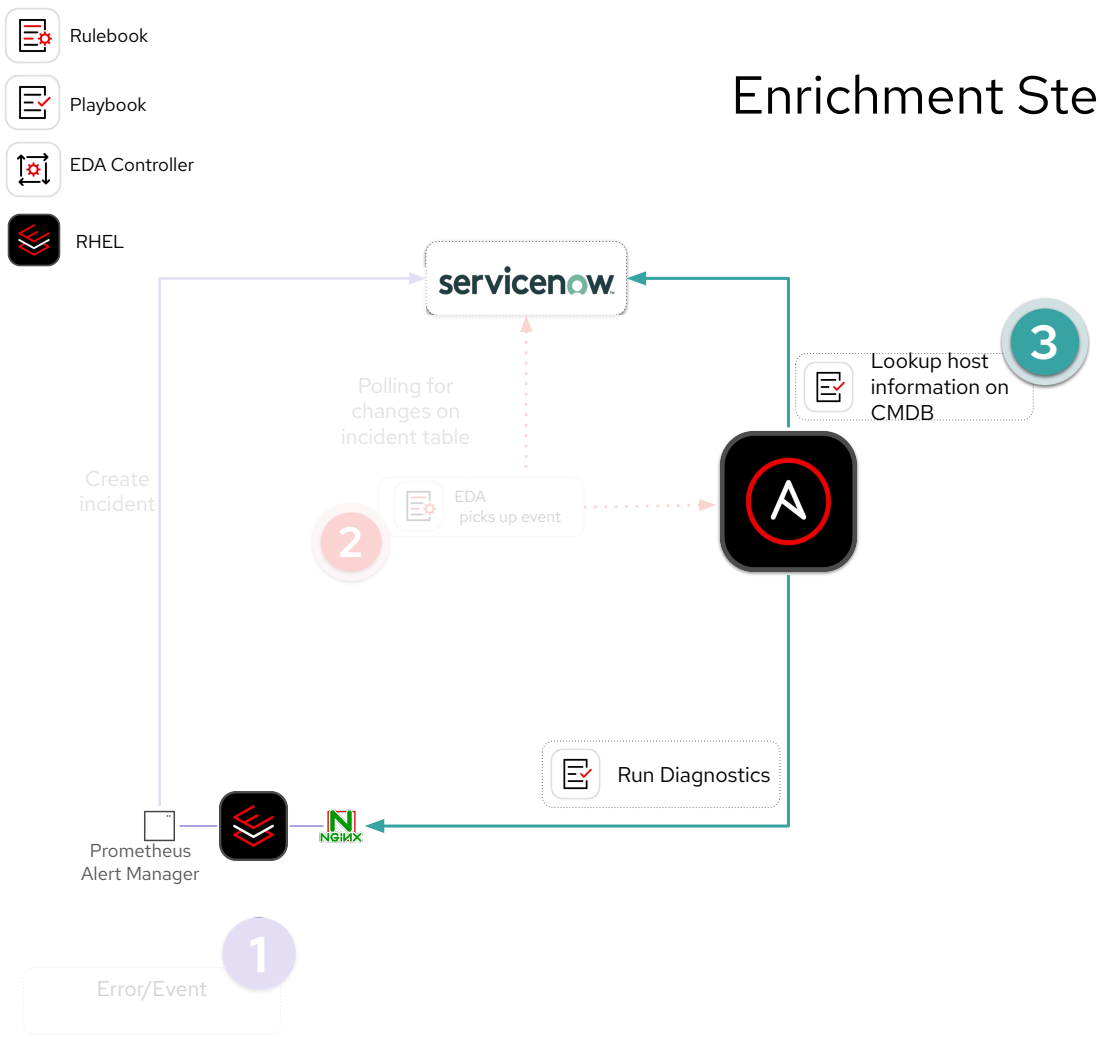
EDA Controller

RHEL

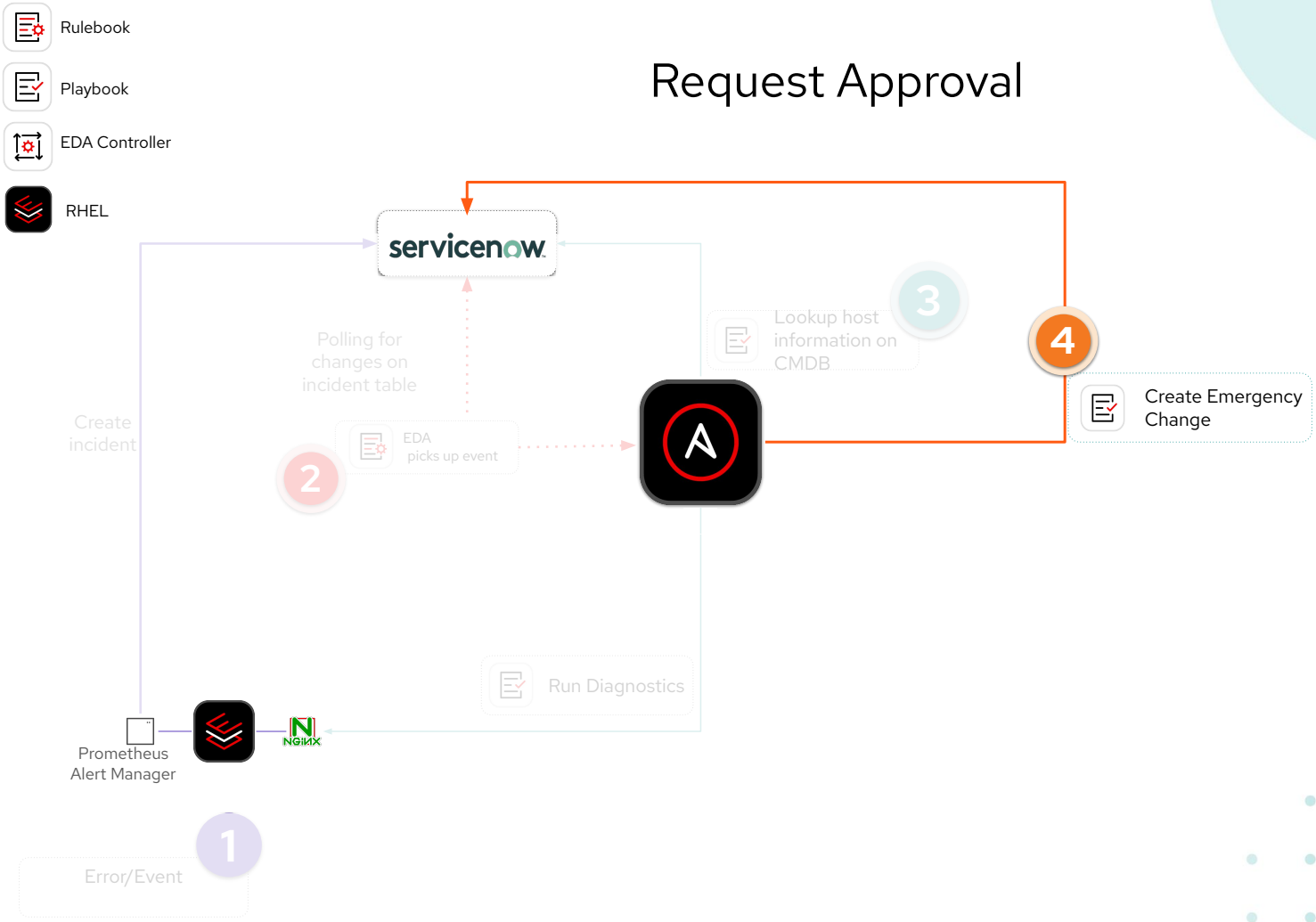
# Event-Driven Reaction to incident



# Enrichment Steps



# Request Approval



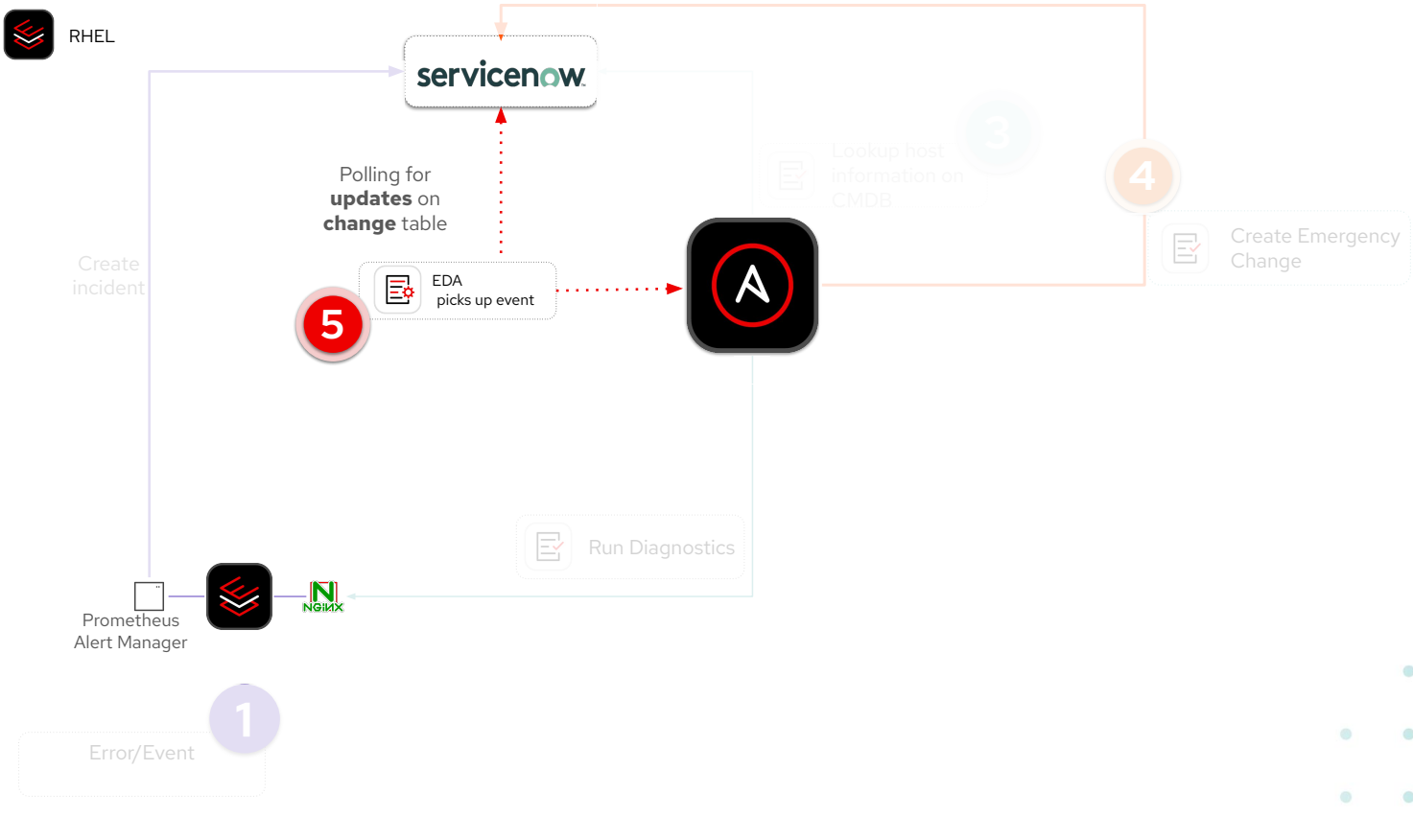
Rulebook

Playbook

EDA Controller

RHEL

# Event-Driven Reaction to change



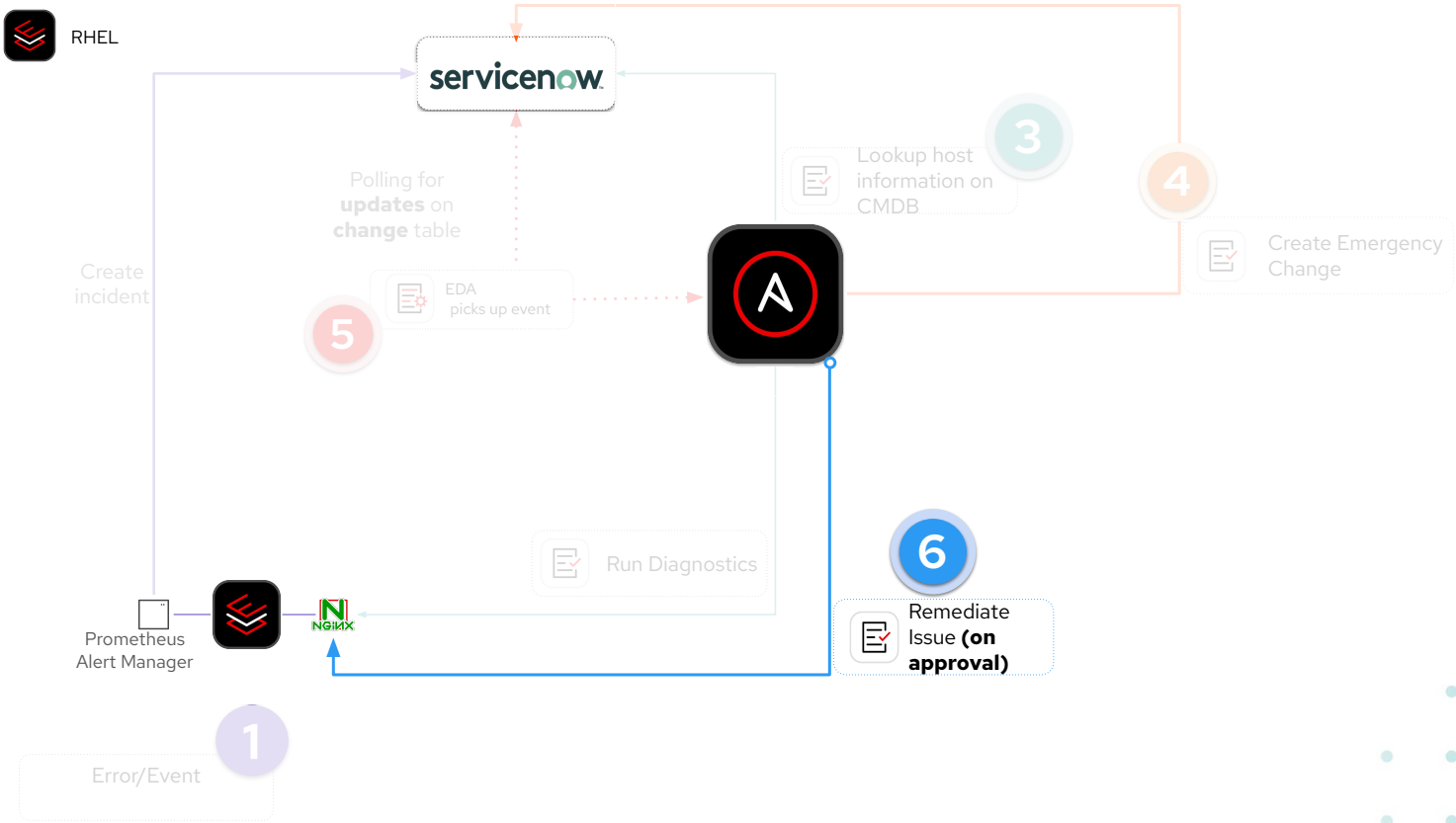
Rulebook

Playbook

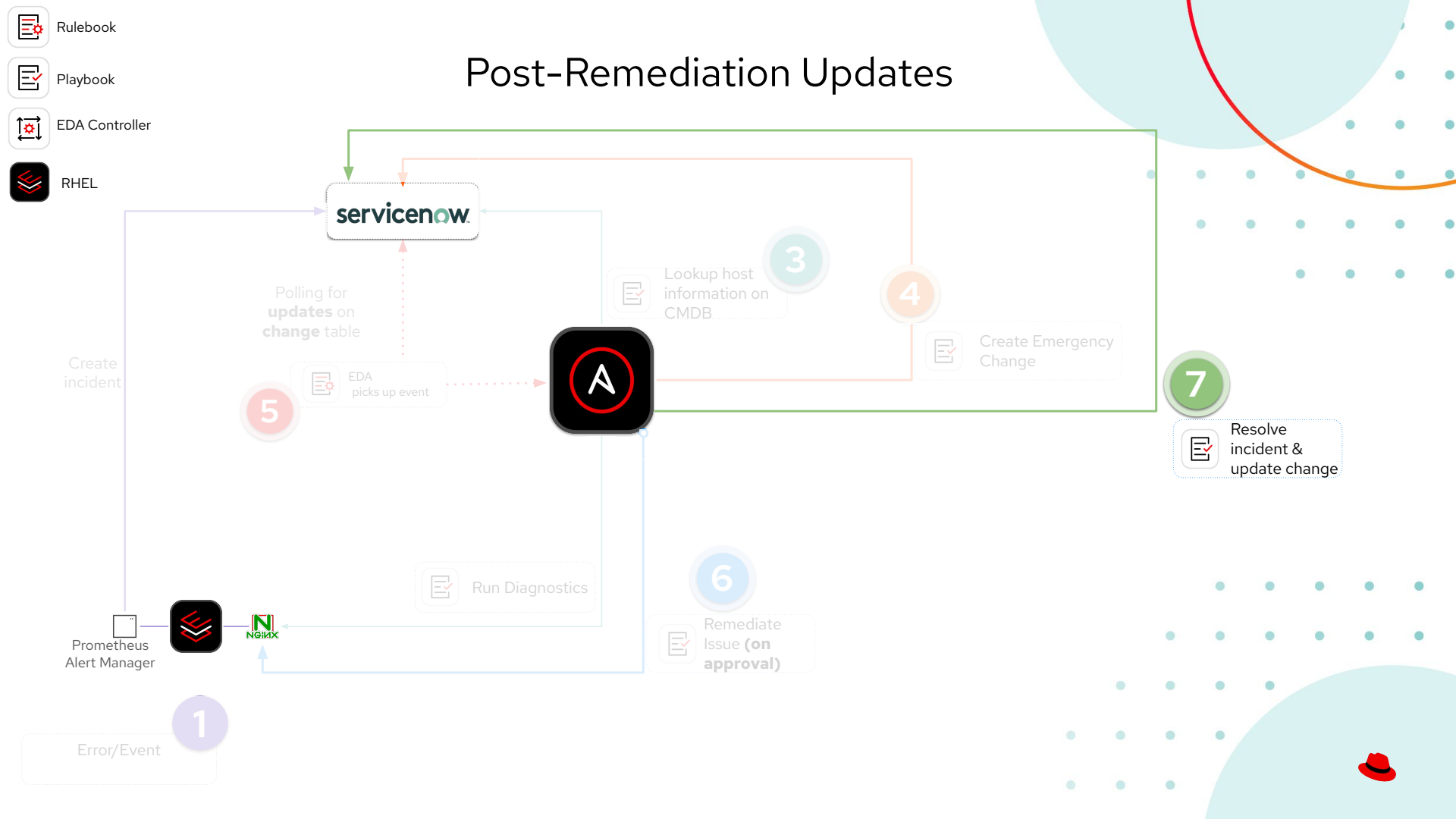
EDA Controller

RHEL

# Remediation after approval



# Post-Remediation Updates



# Let’s see it in action

# Key Takeaways

## Value at a Glance

**Faster MTTR with self-healing**

Detect → diagnose → remediate in minutes (or seconds)

Run fixes and open/update tickets in parallel

**Human-in-the-loop for prod**

Open a Change, wait for approval/window, then remediate and sync INC/CHG.

**Rich context on first touch**

Auto-attach diagnostics

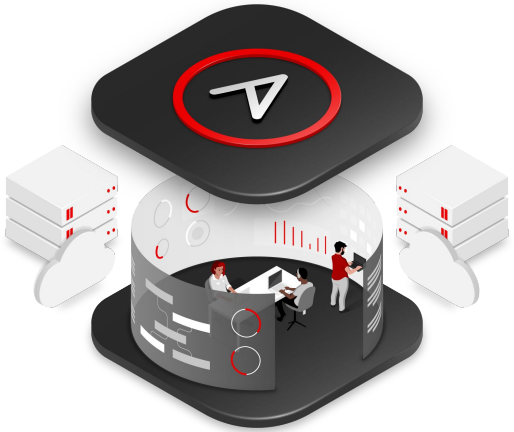
Give support engineers a head start

**Reliable incident intake (ServiceNow scraper plugin)**

Uses the new ServiceNow Event Source to poll for changes.

# AIOps

# Red Hat Ansible unlocks AIOps



- ✓ **Event-Driven Ansible.** Engineered to turn data (of any kind) into action.
- ✓ **Industry-leading technology ecosystem.** Ansible will work seamlessly with whatever observability tools you have.
- ✓ **Comprehensive automation capabilities.** If your tools can see it, Ansible can automate it.

# Useful links

**Ansible Basics course: Automation Technical Overview**
red.ht/AAP-intro-course

**Self-guided Labs**
red.ht/SGL

**Ansible Sandbox**
red.ht/AAP-sandbox

**Ansible Automation Platform Solution Guides**
(Red Hat subscription required)
https://access.redhat.com/articles/7117333

**Ansible Community Meetups**
https://www.meetup.com/ansible-london/events/

# Questions

Red Hat Summit

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