



Connect

Event Driven Ansible: the next level of automation

Come utilizzare eventi per eseguire processi di automazione e self-remediation

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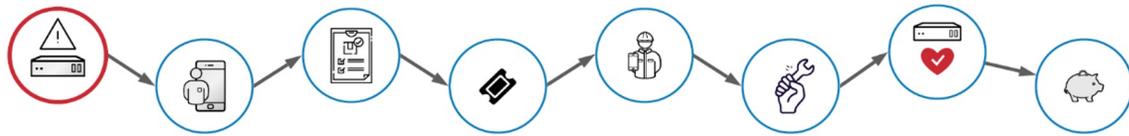
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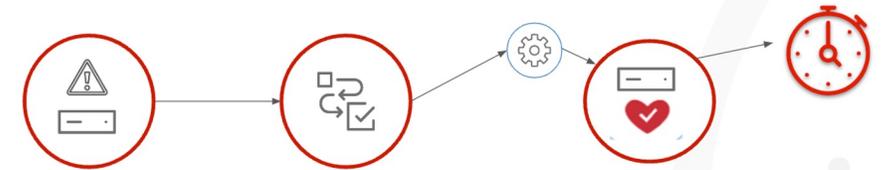


A brief history of IT Operations

The Old Way: Toil and Churn



The new way: Event-Driven Automated Ops



Outage resolution:

Follow a people-intensive multi-step manual process including opening tickets and multiple handoffs.

Event-Driven outage resolution:

Receive event, matching to rule, respond and act automatically

Security risk resolution:

Monitor to identify risk, notify and open a ticket, manually apply a patch or manually initiate automation job.

Event-Driven security risk resolution:

Receive risk event, match to rule, automatically apply patch to impacted inventory.

Introducing Event-Driven Ansible

Achieve new milestones in IT service efficiency

Automate decision making

Leverage numerous sources of events



Implement event-driven automation within and across multiple IT use cases

Achieve new milestones in efficiency, service delivery excellence and cost savings

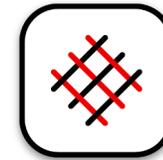
One subscription. One integrated platform.



Automation controller
Automation control plane

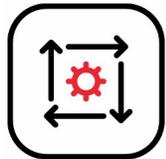


Automation execution environments
Scalable packaging and runtime execution plane



Automation mesh
Connectivity across diverse enterprise automation environments

NEW



Event-Driven Ansible
Automatic response to environment changes based on environment intelligence



Ansible-builder
Ansible containerized execution environment builder



Automation analytics & Red Hat Insights
Visibility, predictive analytics, and more



Ansible Content Collections
100+ certified content collections



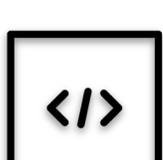
Automation hub
Hosted certified content repository.



Ansible-navigator
Execution environment orchestration tooling



Ansible Platform Operator
Package, deploy and manage this platform on Red Hat OpenShift



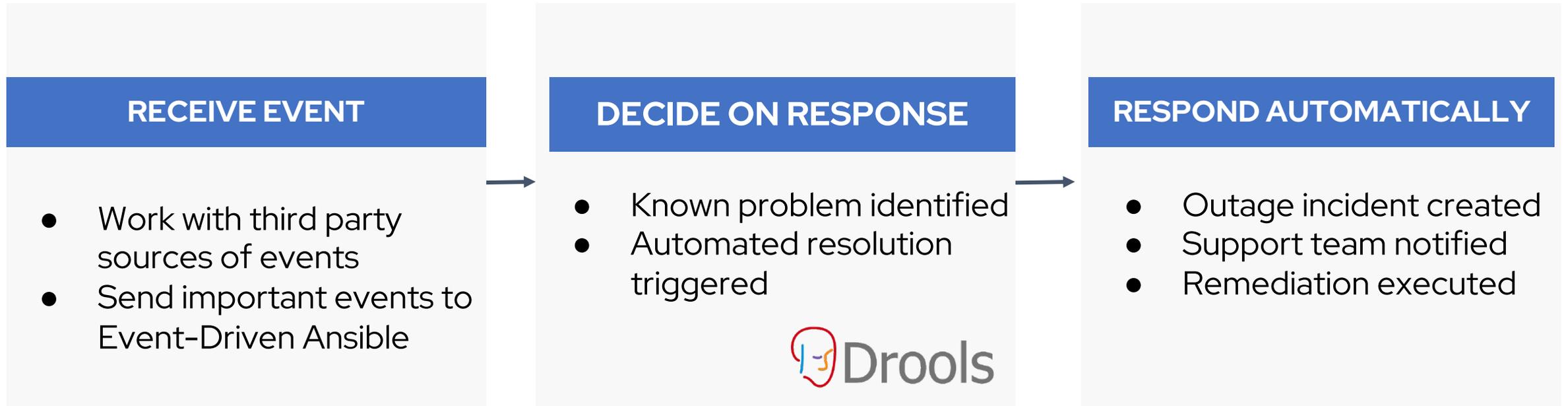
Microsoft VS code plugin
Write and manage Ansible code with Visual Studio



 **Red Hat**
Ansible Automation Platform

Event Driven Ansible

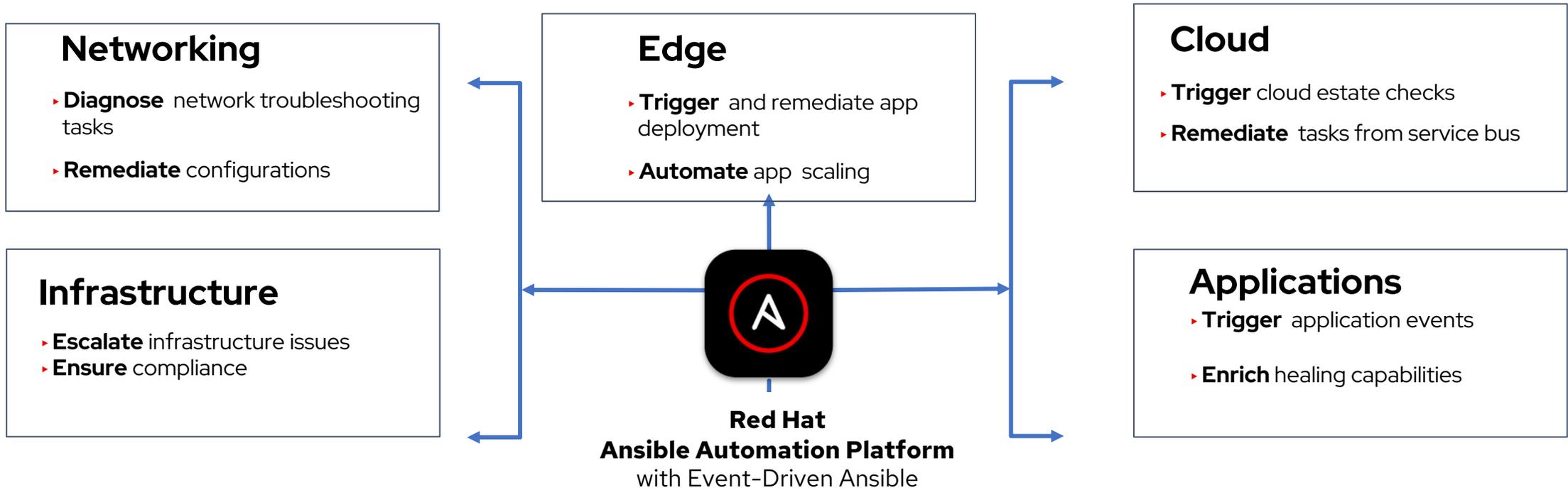
A typical event driven automation process



WORK ACROSS MULTI-VENDOR IT OPERATIONS

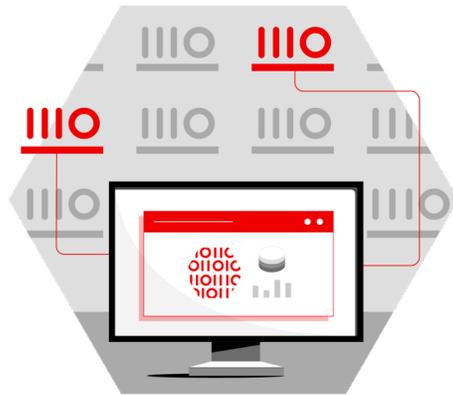
Work flexibly and well with multi-vendor monitoring and other solutions across the event driven architecture with appropriate approvals, controls and awareness

Event-Driven Ansible is **use case-friendly.**



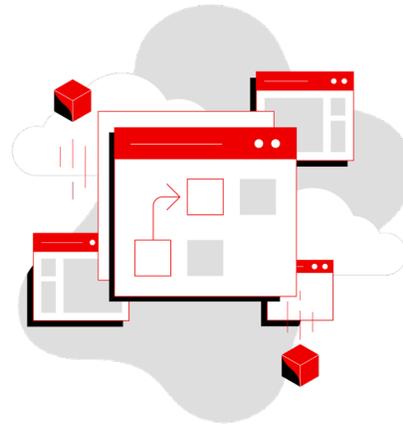
Key building blocks in Event-Driven Ansible

Simple, powerful, agentless



Sources

All the sources of event data you want to use



Rules

What you will create using Event-Driven Ansible®



Actions

When a condition or event is met, the Ansible Rulebook executes

Ansible Rulebooks contain the source of the event, as well as the instructions on what steps to perform when a certain condition is met—and it is all very flexible.

A broad choice of **Source plugins.**

PARTNER SOURCE PLUGINS @ LAUNCH

- Arista (validated)
- Dynatrace
- F5
- Instana
- Red Hat Insights
- Turbonomic
- Zabbix

CERTIFIED COMMUNITY PLUGINS @ LAUNCH

- AWS SQS
- Azure Service Bus
- GCP Pub/Sub
- Kafka (AMQ Streams)
- Kubernetes (Openshift)
- Prometheus/Alertmanager
- Webhooks

COMMUNITY PLUGINS @ LAUNCH

- watchdog (file system watcher)
- url_check (url status check)
- range (event generation plugin)
- file (loading facts from yaml)

ROADMAP FOR INTEGRATIONS

- AppDynamics/FSO
- Cyberark
- Palo Alto Networks
- Sensu
- Splunk
- ThousandEyes

Anatomy of an Ansible Rulebook

Smart automation from conditional rules

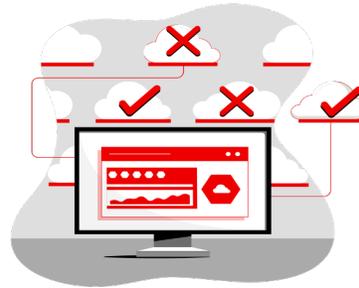


Suggested use cases for getting started



Service ticket enhancement

Automate fact gathering
Network administration
Edge device management



Remediation

Drift
Slow performance
Outages



User management

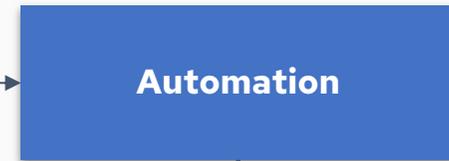
User authentication and access
Login issues
Group and role access

Use Case: Infrastructure Remediation

Event-Driven Ansible and Infrastructure remediation



EDA



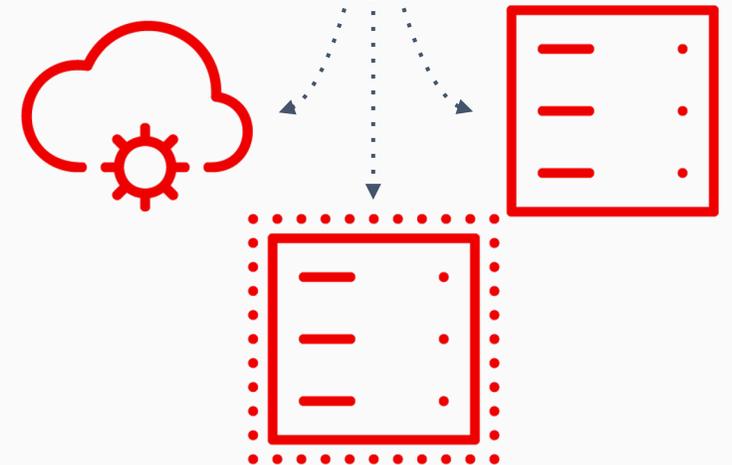
- ▶ **Listen for event notifications**

- ▶ Proactive advisories coming from Red Hat Insights
- ▶ Webhooks triggered by heterogeneous platforms

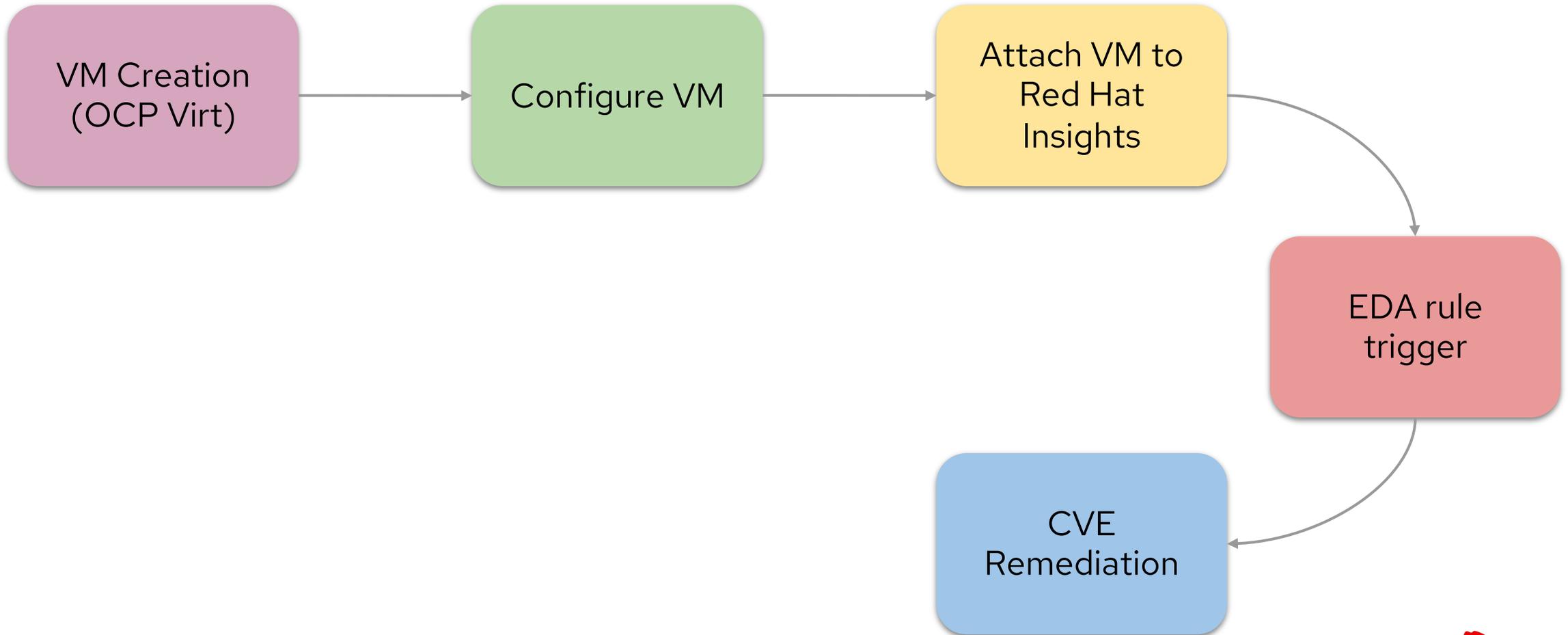
- ▶ **React promptly**

- ▶ Perform remediations following best practices
- ▶ Streamline provisioning and deployment

Event Source



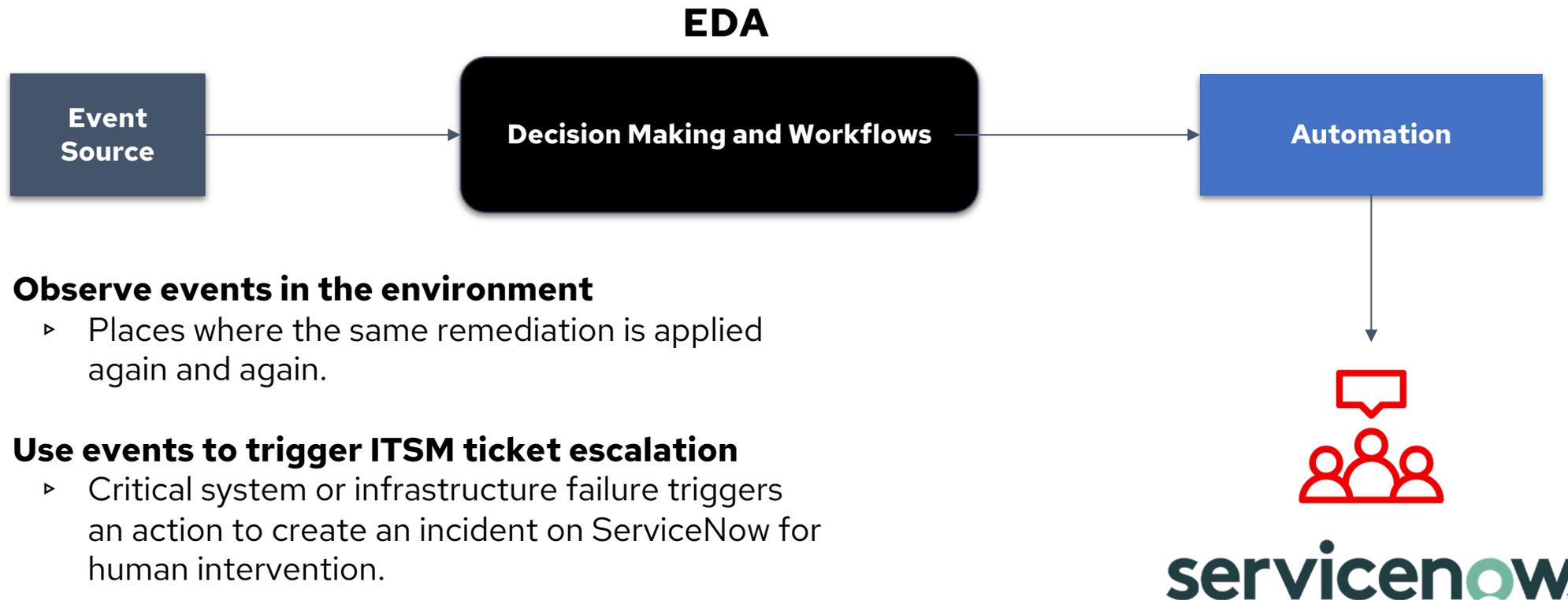
Demo Workflow



Infrastructure Remediation

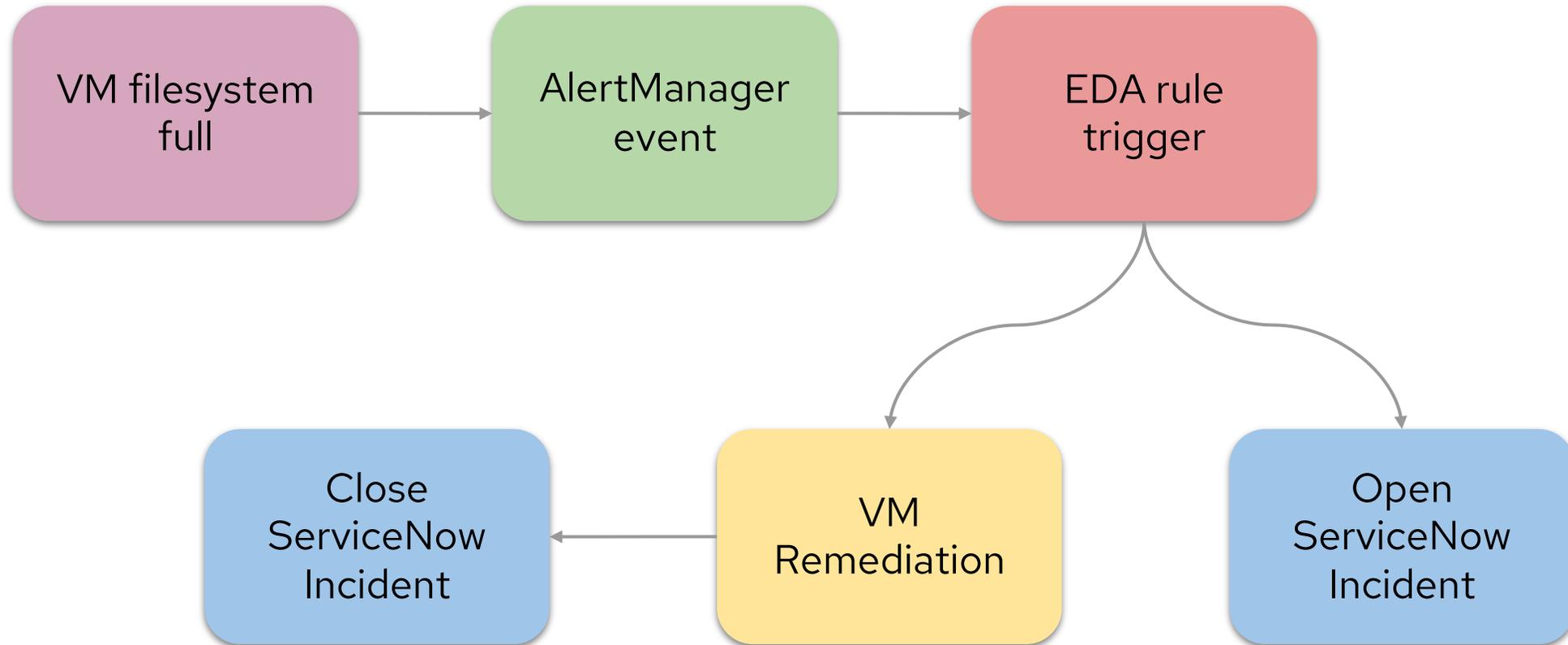
Use Case: ITSM Integration

Event-Driven Ansible and ServiceNow ITSM integration



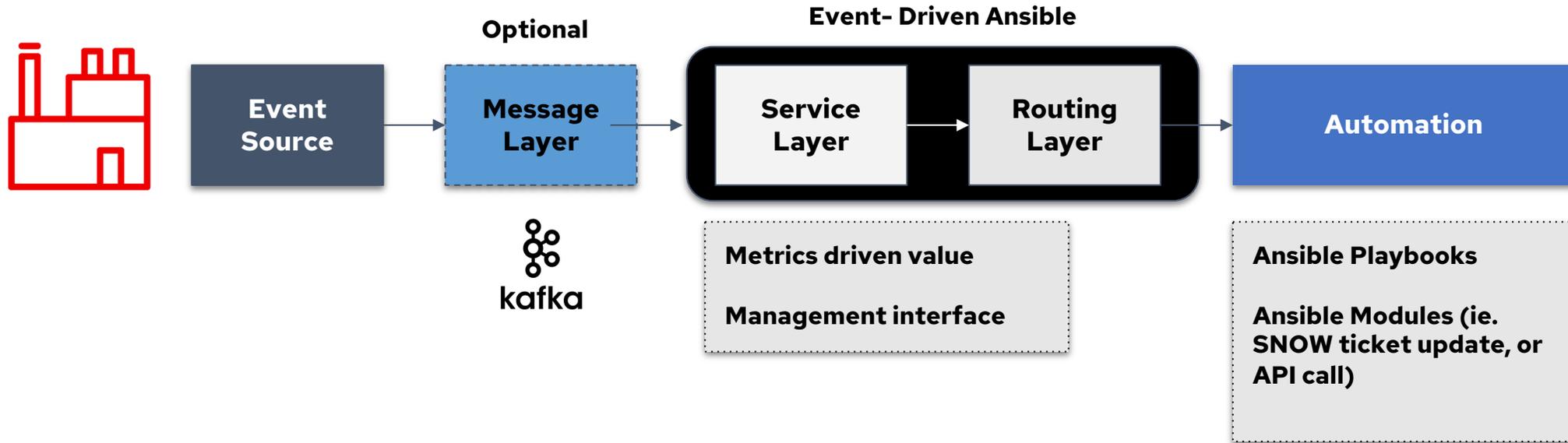
- ▶ **Observe events in the environment**
 - ▶ Places where the same remediation is applied again and again.
- ▶ **Use events to trigger ITSM ticket escalation**
 - ▶ Critical system or infrastructure failure triggers an action to create an incident on ServiceNow for human intervention.
- ▶ **Update ServiceNOW CMDB**
 - ▶ Infrastructure changes can be observed and used to trigger ServiceNow to update its inventory

Demo Workflow

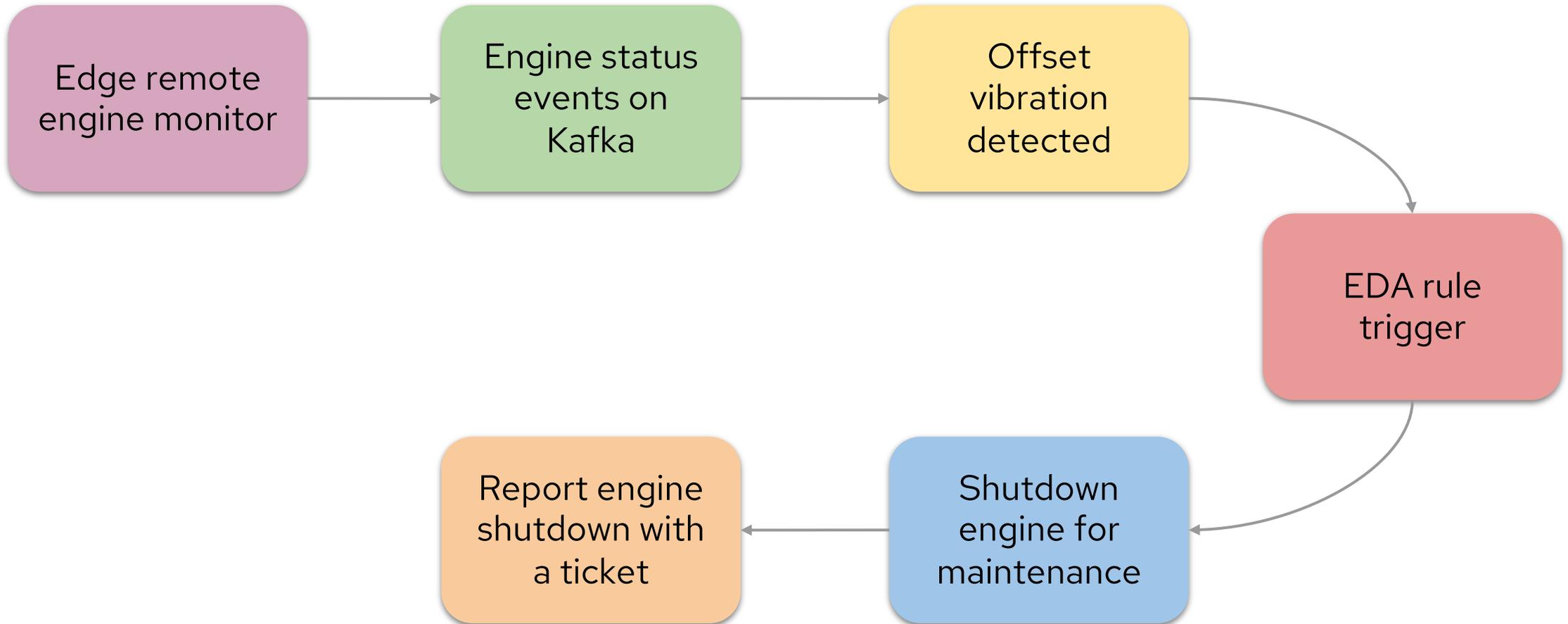


Use Case: Edge monitoring and remediation

Execution layers of event driven automation



Demo Workflow



Try it yourself!

All the materials in this session are available in the following Github repository:

<https://github.com/redhat-italy/redhat-sc23-eda>

Everybody is welcome to use, fork and suggest improvements.

Global Learning Resource: <https://www.ansible.com/resources>



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