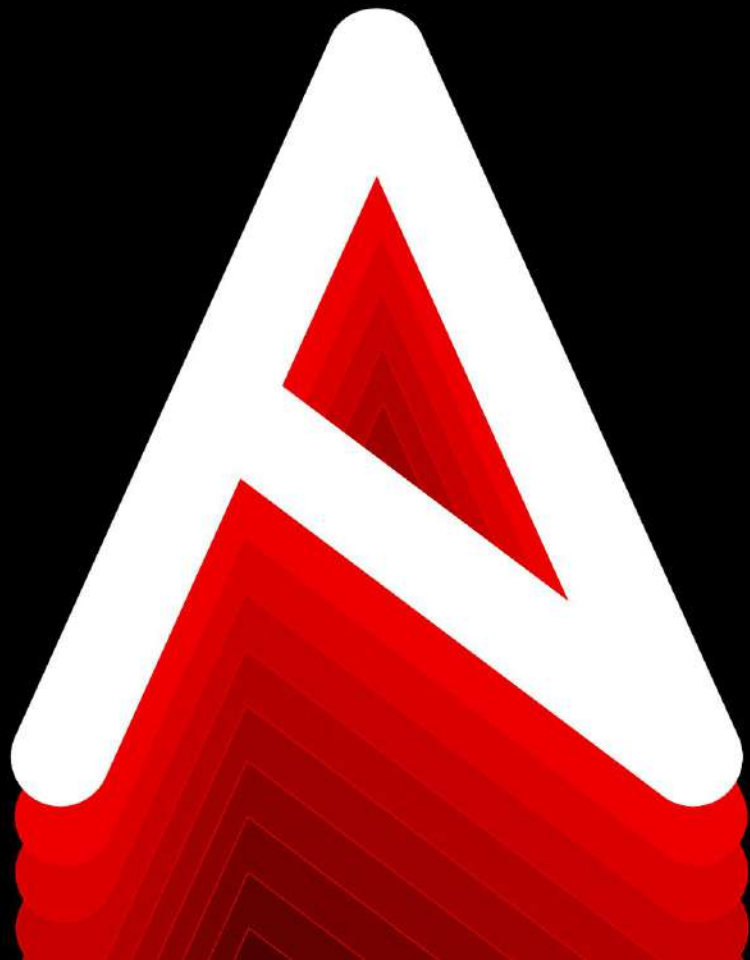




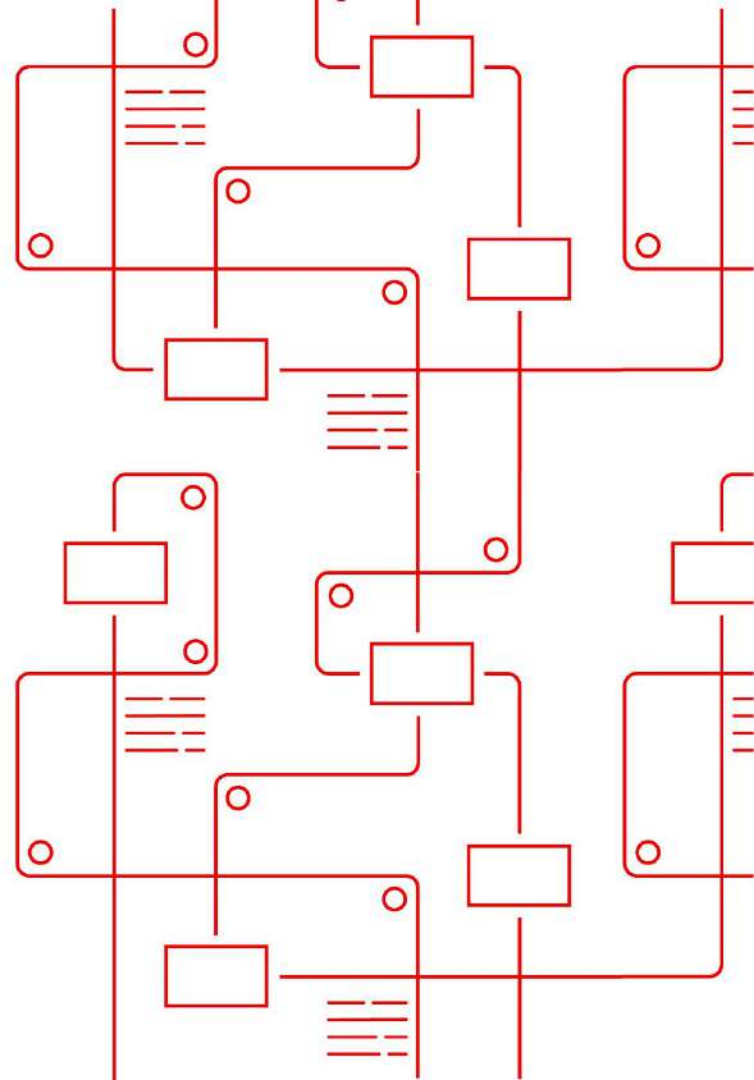
Ansible Automation Platform 2.5

Unlocking the New AAP 2.5 for
Network Automation Use Cases

Carlos Parada, **Senior Specialist Solution Architect**
Ansible Automation Platform, **Red Hat**



Ansible Automation Platform 2.5



Unlock your automation advantage with AAP 2.5

Release overview:

Unlock your automation advantage

Accelerate automation adoption

Empower automation engineers

Orchestrate across the enterprise

Getting Started with AAP 2.5

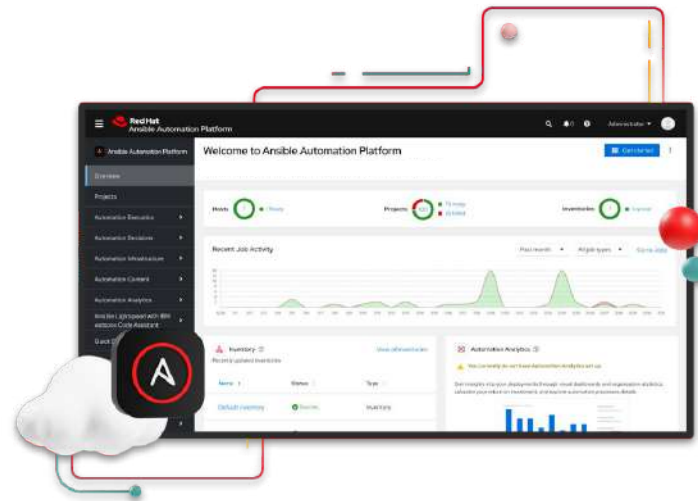
Next steps + resources

Red Hat Ansible **automation 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.

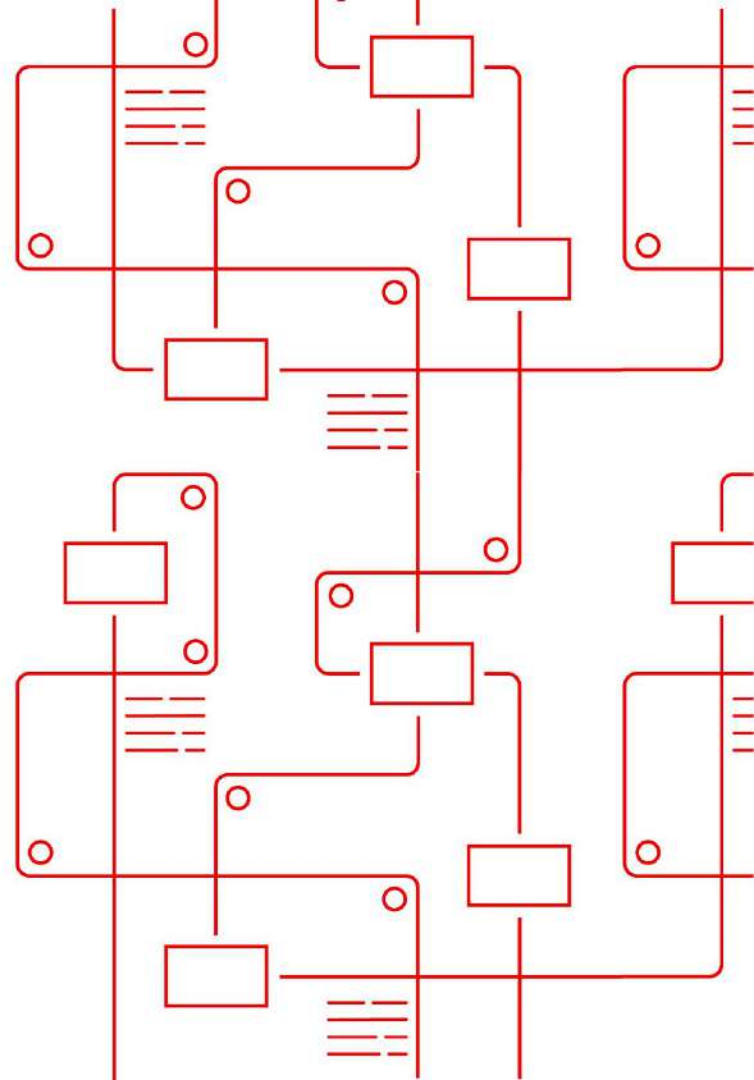
Our goal with Red Hat Ansible Automation Platform 2.5 is to **make it easier** for every customer to fully **unlock the potential** of automation to transform IT - and deliver strategic advantages to the business.

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.



Accelerate automation adoption



AAP 2.4 and older: per component UI

Release
overview

Accelerate
automation
adoption:
Unified UI

Empower
automation
engineers

Orchestrate
across the
enterprise

Getting Started
with AAP 2.5

Next steps +
resources

Controller
(Tower)

The image displays several overlapping screenshots from the Red Hat Ansible Automation Platform (AAP) 2.4 and older user interface. The top-left screenshot shows the 'Jobs' page for 'AWS: RHEL Deployment', indicating a 'Successful' status. The top-right screenshot shows the 'Collections' page, featuring a grid of certified collections such as 'powermax', 'eos', 'ispim', and 'openshift'. The bottom-left screenshot shows the 'Event-Driven Ansible controller' page, with a sidebar menu listing various sections like 'Dashboard', 'Rule Audit', and 'Resources'. The bottom-right screenshot shows the 'Automation Hub' page, displaying a grid of collections including 'mgmt'.

EDA Controller

Automation Hub



New unified UI for a more cohesive platform experience

Release
overview

**Accelerate
automation
adoption:**
Unified UI

Empower
automation
engineers

Orchestrate
across the
enterprise

Getting Started
with AAP 2.5

Next steps +
resources

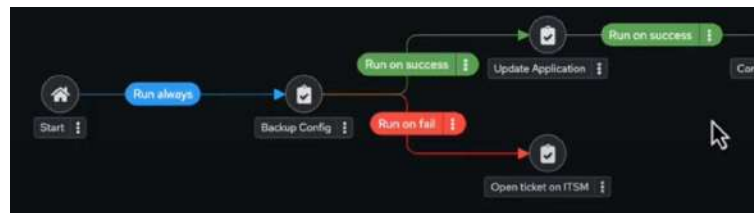
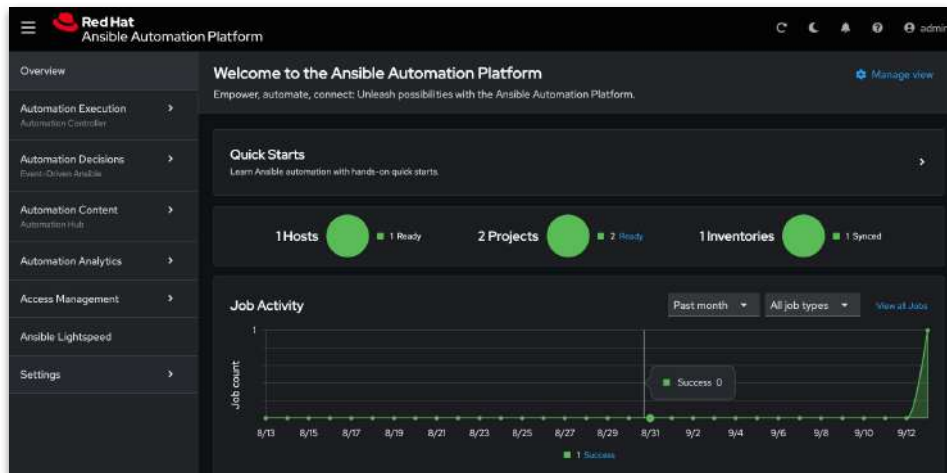
- > A **New User Interface** that delivers an **improved experience** for operators, developers and platform administrators, with a more consistent and centralized:

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

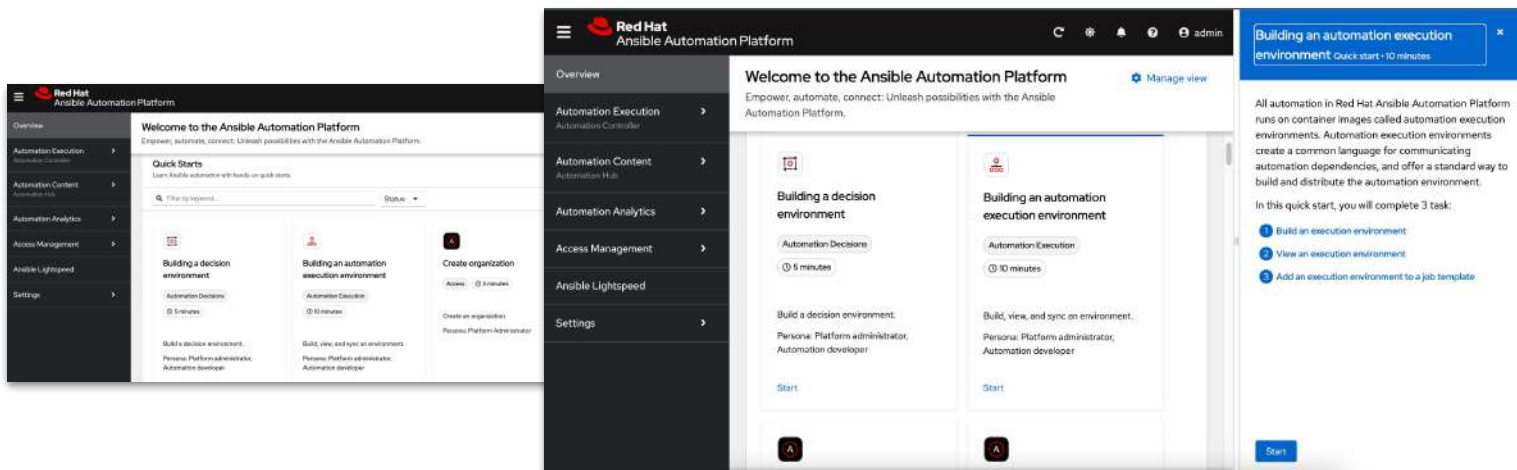
- > Use **Ansible Analytics** directly within the unified UI to generate **reporting** at scale.

- > *Automation Calculator*: **ROI reporting** to demonstrate the value and impact of automation initiatives .

- > Completely **New Workflow Visualizer** with **better look** and **more flexible**



Ansible quick starts



- New **interactive, step-by-step guides** for **getting started quickly** with key Ansible Automation Platform tasks and functions, accessed directly in the platform GUI
- Enable **new users** in your organization to **learn the pieces** of Ansible Automation Platform that are most relevant to their needs
- **Create pre-configured 'units' of automation** such as execution environments and decision environments that teams can use as **consistent, compliant project jump-starts**, and establish the building blocks for running a centralized automation practice with flexibility and control

New collections for managing AAP

Release
overview

Accelerate automation adoption:

New collections
for managing
AAP

Empower
automation
engineers

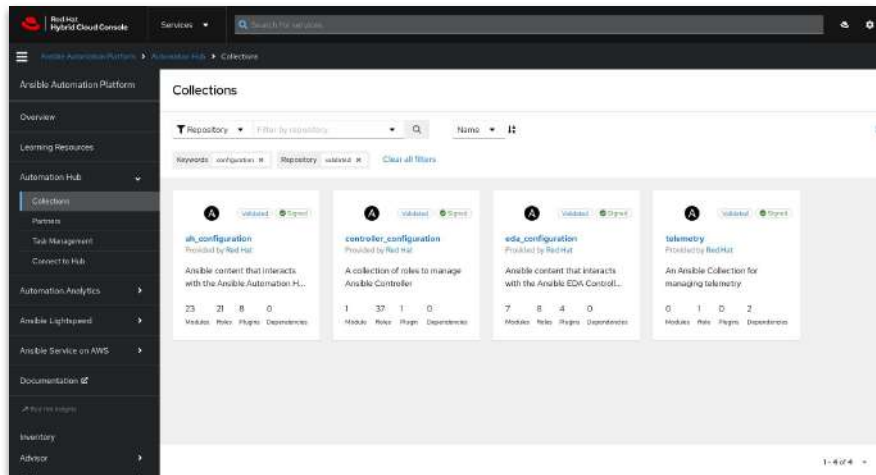
Orchestrate
across the
enterprise

Getting Started
with AAP 2.5

Next steps +
resources

- > Use Ansible Playbooks to **configure and manage AAP** with new and updated content collections for automating your automation'
- > Use a standardized **gitops 'as-code'** approach to provide both automation content and platform configuration
- > New or updated **certified** collections for platform services configuration:
 - > **ansible.hub** for Automation Hub **new**
 - > **ansible.eda** for Event Driven Ansible controller **updated**
 - > **ansible.controller** for Automation controller **updated**
 - > **ansible.platform** for configuration of centralized platform services **new**
- > New **validated** collections:
 - > **infra.hub_configuration**
 - > **infra.platform_configuration**
 - > **infra.controller_configuration**
 - > **Infra.eda_configuration**

- > Collections can be used by the **platform installer**



Containerized platform installation

Release
overview

**Accelerate
automation
adoption:**
Containerized
install

Empower
automation
engineers

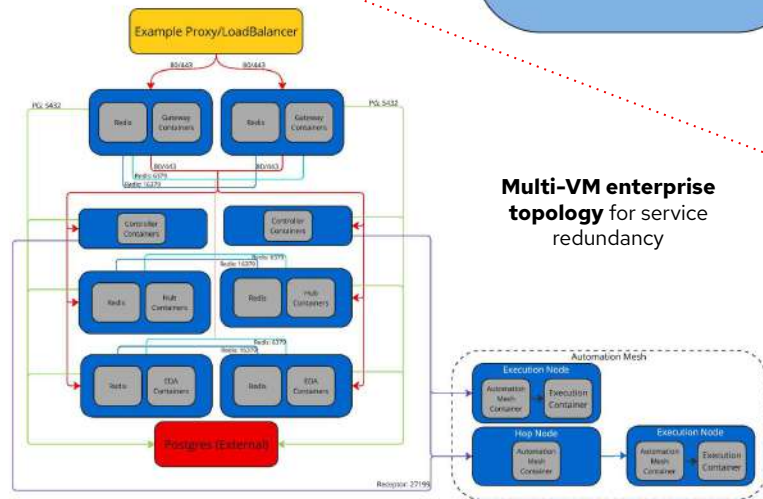
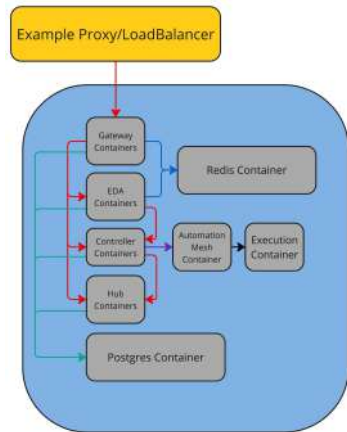
Orchestrate
across the
enterprise

Getting Started
with AAP 2.5

Next steps +
resources

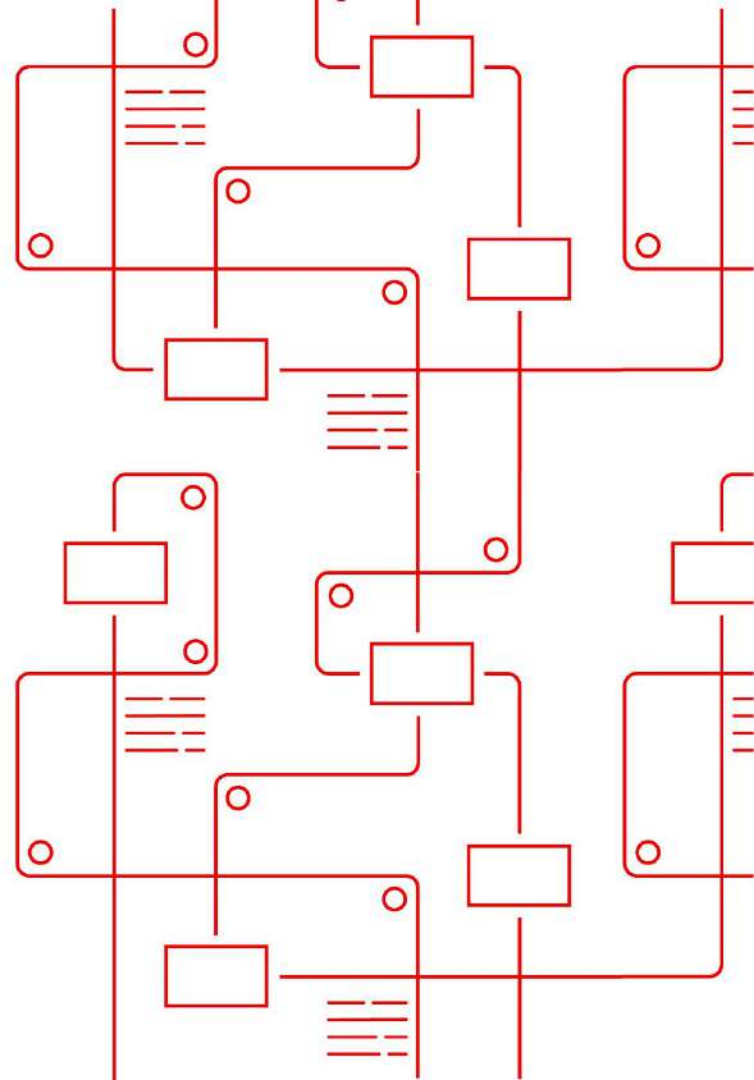
- > A **new deployment type** for those wishing to use containers for AAP but not fully embrace or need the complexity of kubernetes
- > Underpinned with proven RHEL and **podman technologies**
- > Smallest AAP platform footprint potential from just a **single VM**
- > **Scalable** to enterprise standards as per other recommended deployment options
- > Designed specifically for environments where ease of installation, **minimal footprint** are essential
- > Exact **same platform functionality** as any other AAP deployment option
- > Ability to seed automation content and **configuration at installation time** providing a one-stop solution

Single VM Topology for growing accounts (testing, PoCs, etc.)



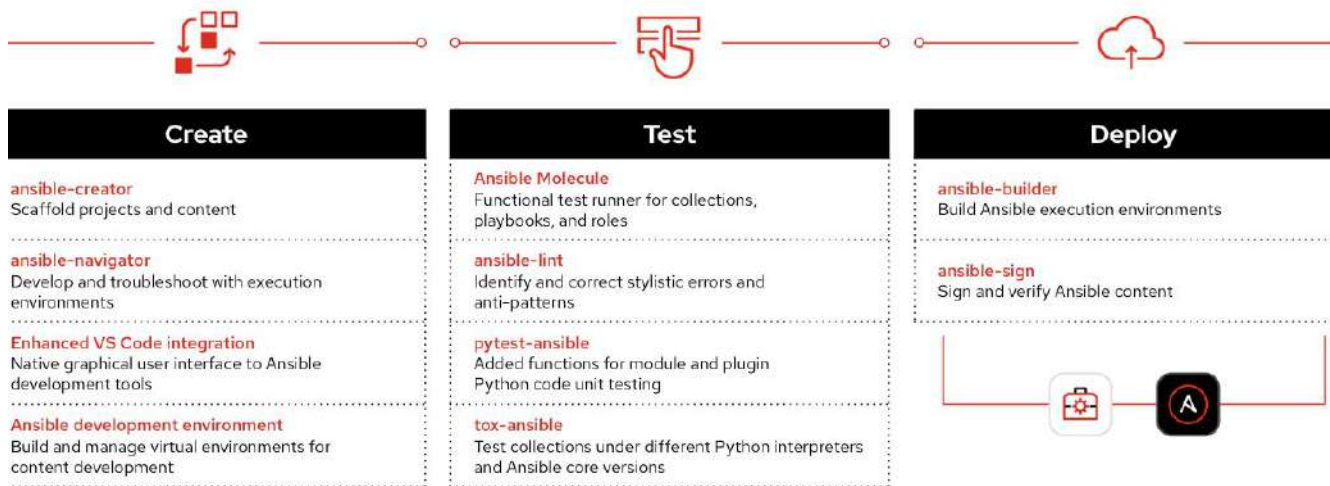
**Multi-VM enterprise
topology** for service
redundancy

Empower automation engineers



Ansible development tools

Supported, enterprise-grade components to enable building, testing, and deployment of Ansible

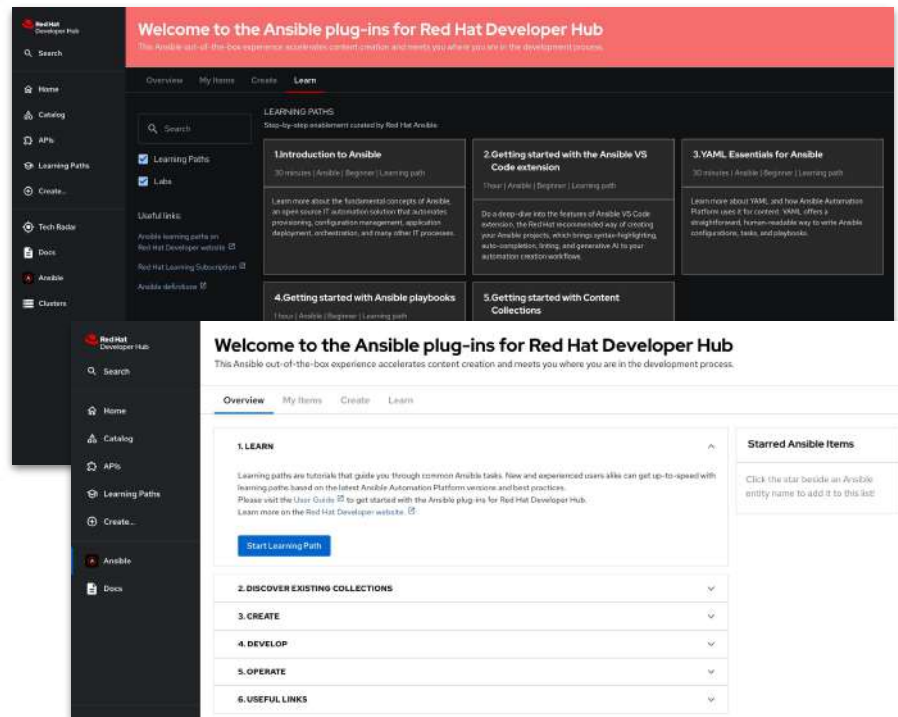


- > A comprehensive suite of **enterprise-grade** automation development capabilities that are packaged, curated, supported, and opinionated to make it easier for automation **developers to build, test, and deploy** Ansible content
- > **Integrates easily into** existing secure **pipelines**, enabling more experienced content creators to write Ansible content quickly and accurately
- > Dedicated tooling for establishing a trusted software supply chain (Ansible-sign)
- > Included in a **dedicated Container** for containerized installations

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



Upgrades to Red Hat Ansible Lightspeed with IBM watsonX code assistant

Release
overview

Accelerate
automation
adoption

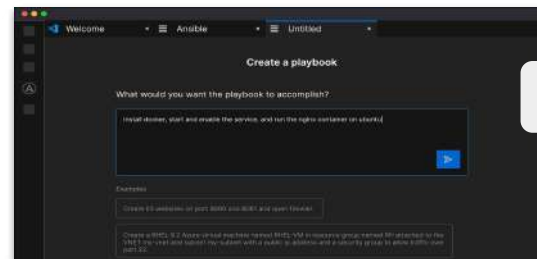
**Empower
automation
engineers:**
Ansible
Lightspeed
upgrades

Orchestrate
across the
enterprise

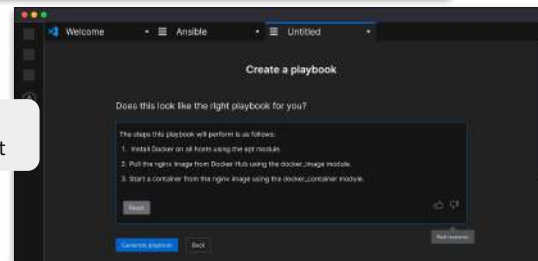
Getting Started
with AAP 2.5

Next steps +
resources

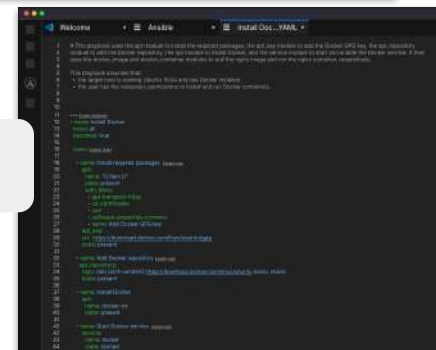
- **New capabilities** and features that expand the impact of generative AI on the Ansible experience:
 - ✓ Integrated user guide interface for maximum ease of use
 - ✓ On-the-fly prompt refinement for better contextual clarity and correctness
 - ✓ Generation of a **full Ansible Playbook** with a simple text prompt
- Workstation, Devcontainer, OpenShift Dev Spaces Authentication support.
- **On-prem deployment** now available for disconnected/regulated environments
- Easily let your teams gauge value for themselves with a **[free 90 day trial of Red Hat Ansible Lightspeed with IBM watsonX Code Assistant](#)**



Guided
interface

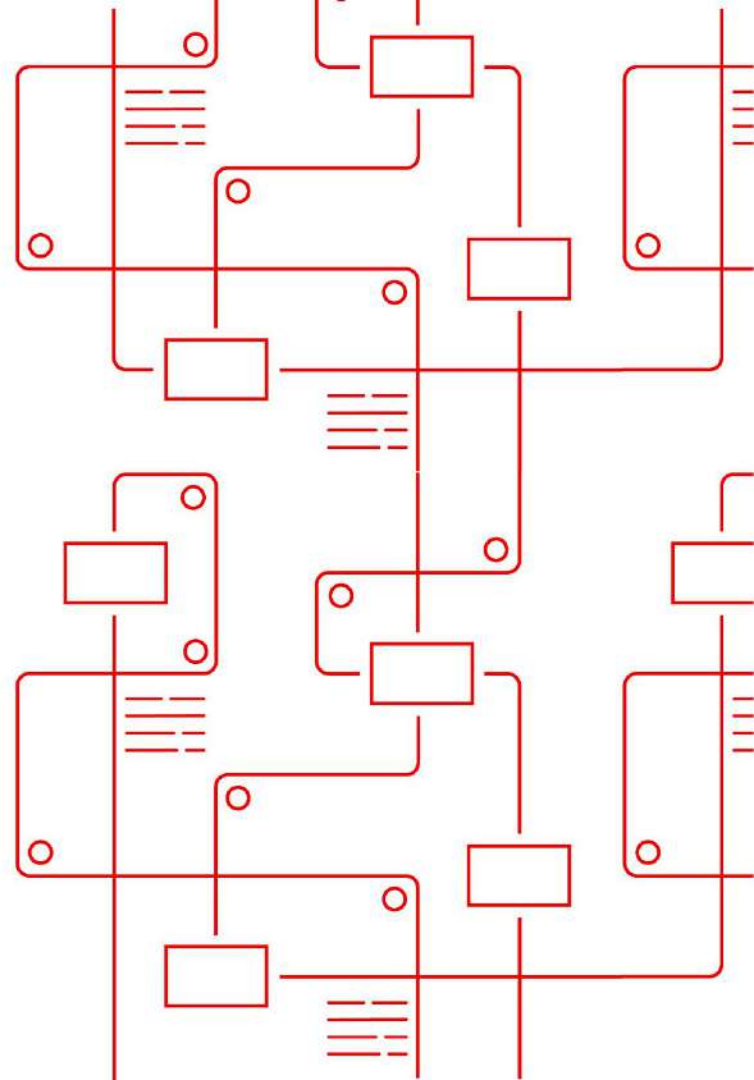


Prompt
refinement



Full Playbook
generation

Orchestrate across the enterprise



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



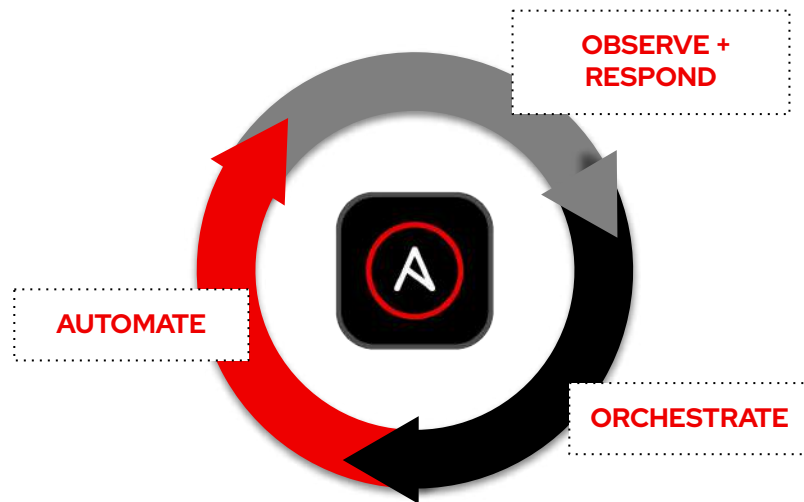
Turn intelligence into action

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 | Event Streams

Build more connections for orchestrating across your stack

Release
overview

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automation
adoption

Empower
automation
engineers

**Orchestrate
across the
enterprise:**
*Event-Driven
Ansible*
Event Streams

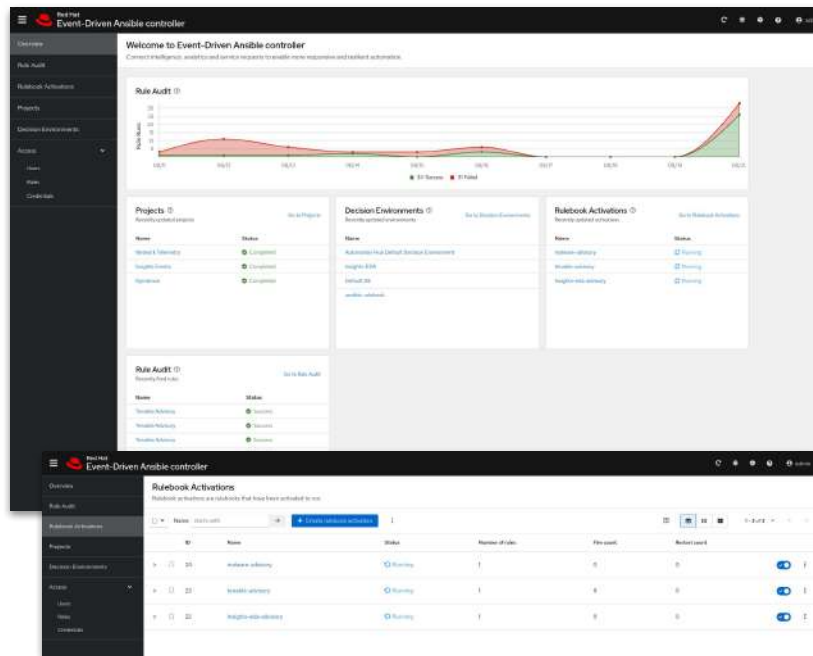
Getting Started
with AAP 2.5

Next steps +
resources

We are excited to introduce **event streams** as part of the AAP 2.5 release. This new feature greatly simplifies how event routing works to get events from their source to your rulebooks.

Event streams are an easy way to **connect sources to Ansible Rulebooks**, and they enable:

- Webhook-based sources, automatically **routed to one or many** configured rulebook activations.
- EDA to handle delivery of events to **horizontally scaled** rulebook activations.
- EDA to receive events from even more sources. Any system that can emit webhooks (*GitHub*, *Service-Now*, *Gitlab*, etc.) can now **directly send events** for Ansible Automation Platform to process.



Event-Driven Ansible | Event Streams

Example use cases



Release
overview

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automation
adoption

Empower
automation
engineers

**Orchestrate
across the
enterprise:**

*Event-Driven
Ansible*

Event Streams

Getting Started
with AAP 2.5

Next steps +
resources

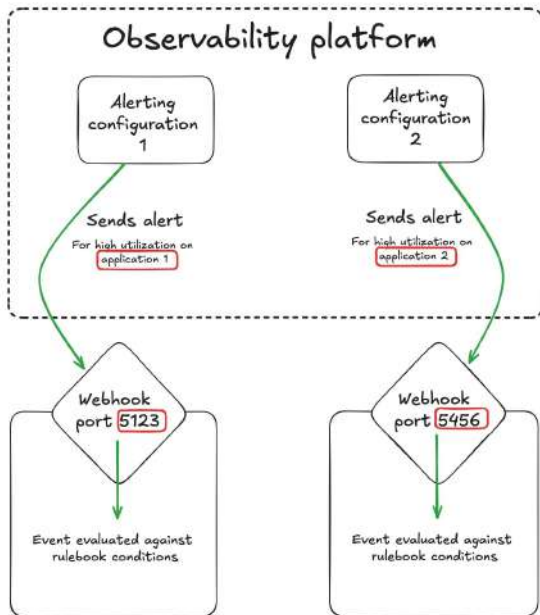
As a **developer**, I would like to reload and refresh my web servers when I commit new code to my repo.

As a **virtual infrastructure administrator**, I would like that when the system detects virtual machines that have not been used for 1 month that EDA is sent an event to call automation that archives the virtual machine and reclaims the resources in the datacenter.

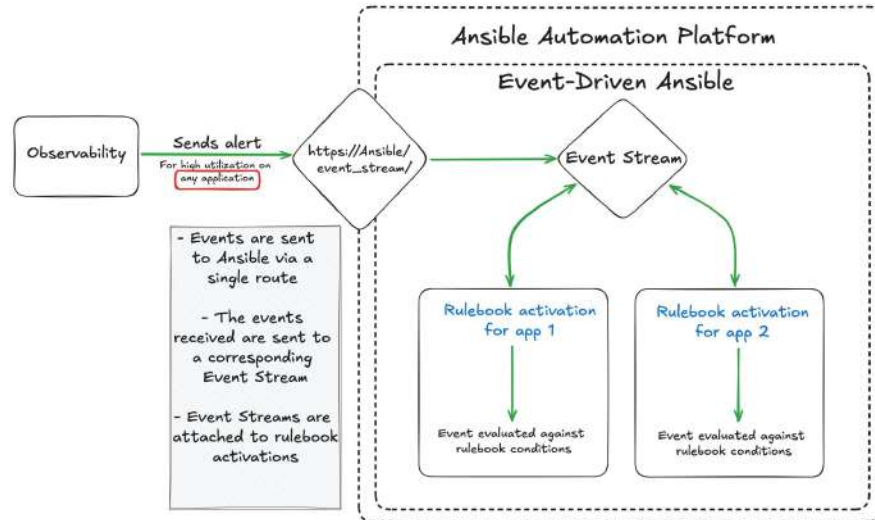
As a **Service Now administrator**, I want to be able to execute ansible automation that will automatically fail over my data center if the number of support tickets that alert me to network failure goes above my threshold.

Event-Driven Ansible | Simplified event routing

Without Simplified event routing



With Simplified event routing



Event-Driven Ansible | Enterprise enhancements

Release
overview

Accelerate
automation
adoption

Empower
automation
engineers

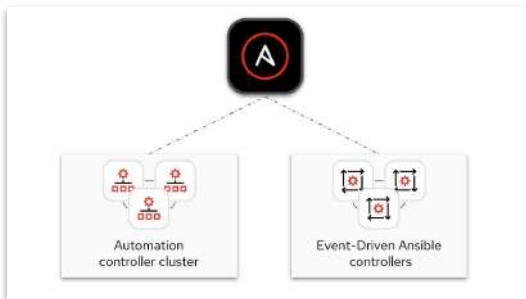
**Orchestrate
across the
enterprise:**

*Event-Driven
Ansible*

Enterprise
enhancements

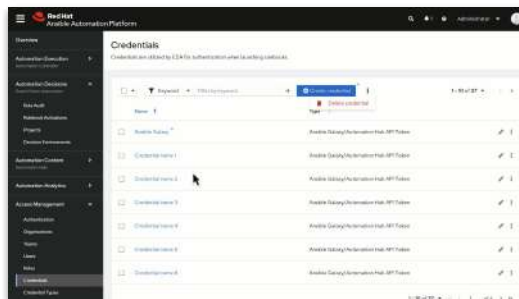
Getting Started
with AAP 2.5

Next steps +
resources



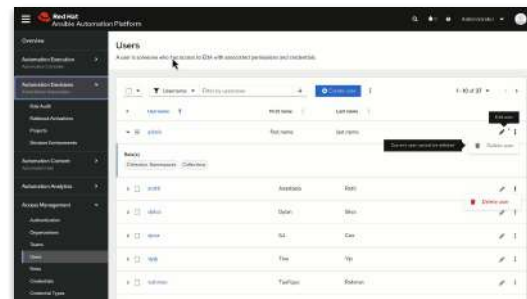
High availability + scalability

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



Credential management

- > 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.**



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.

Event-Driven Ansible | Integrations

Release
overview

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adoption

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automation
engineers

**Orchestrate
across the
enterprise**
*Event-Driven
Ansible
Integrations*

Getting Started
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Next steps +
resources

Established



New for AAP 2.5

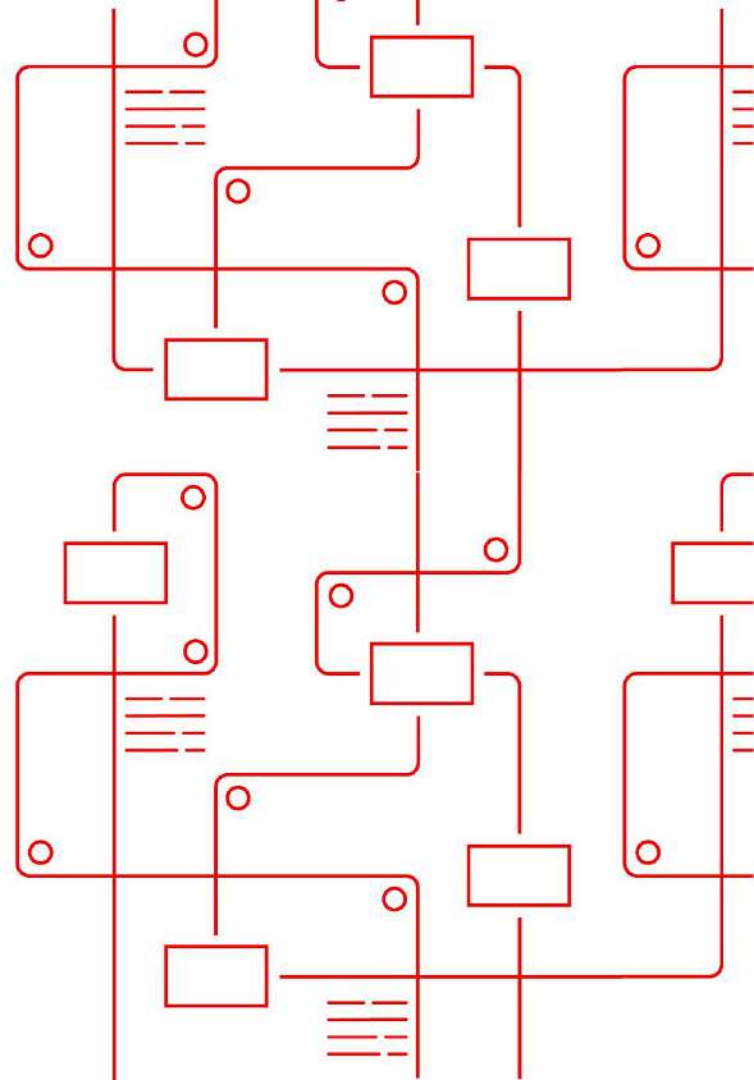


Coming soon



* Any system able to send **webhook** events can be integrated, even without EDA specific plugins

Getting Started with AAP 2.5



Ansible Automation Platform | **Installation options**



RPM

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



Containerized ***New***

- > 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.
- > There are **six infrastructure topologies** (2 for each above - *growth* and *enterprise*). Refer to the Tested Deployment Models [documentation](#) which details the following 6 topology diagrams.
- > In addition, you can also deploy AAP in the **cloud via Marketplaces**

Release
overview

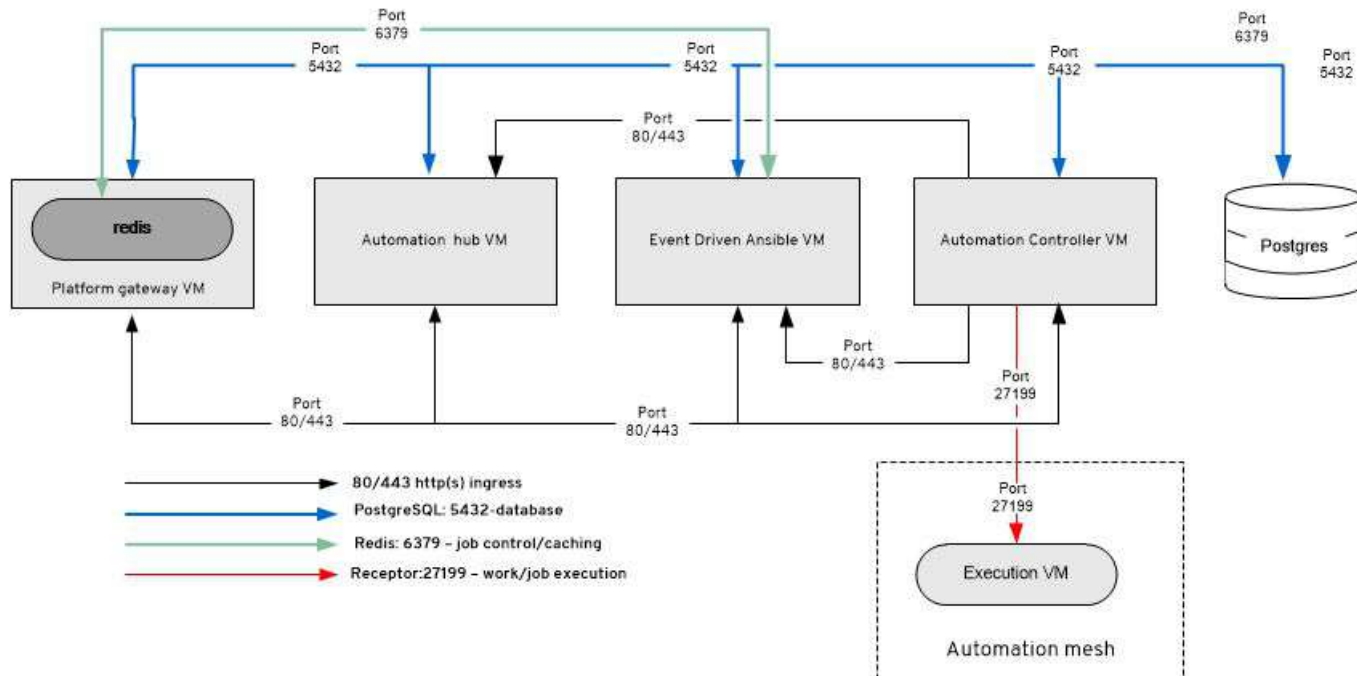
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engineers

Orchestrate
across the
enterprise

**Getting
started with
AAP 2.5:** RPM
Growth
Topology

Next steps +
resources



RPM Growth Topology
Source: [AAP 2.5 Docs](#)

Release
overview

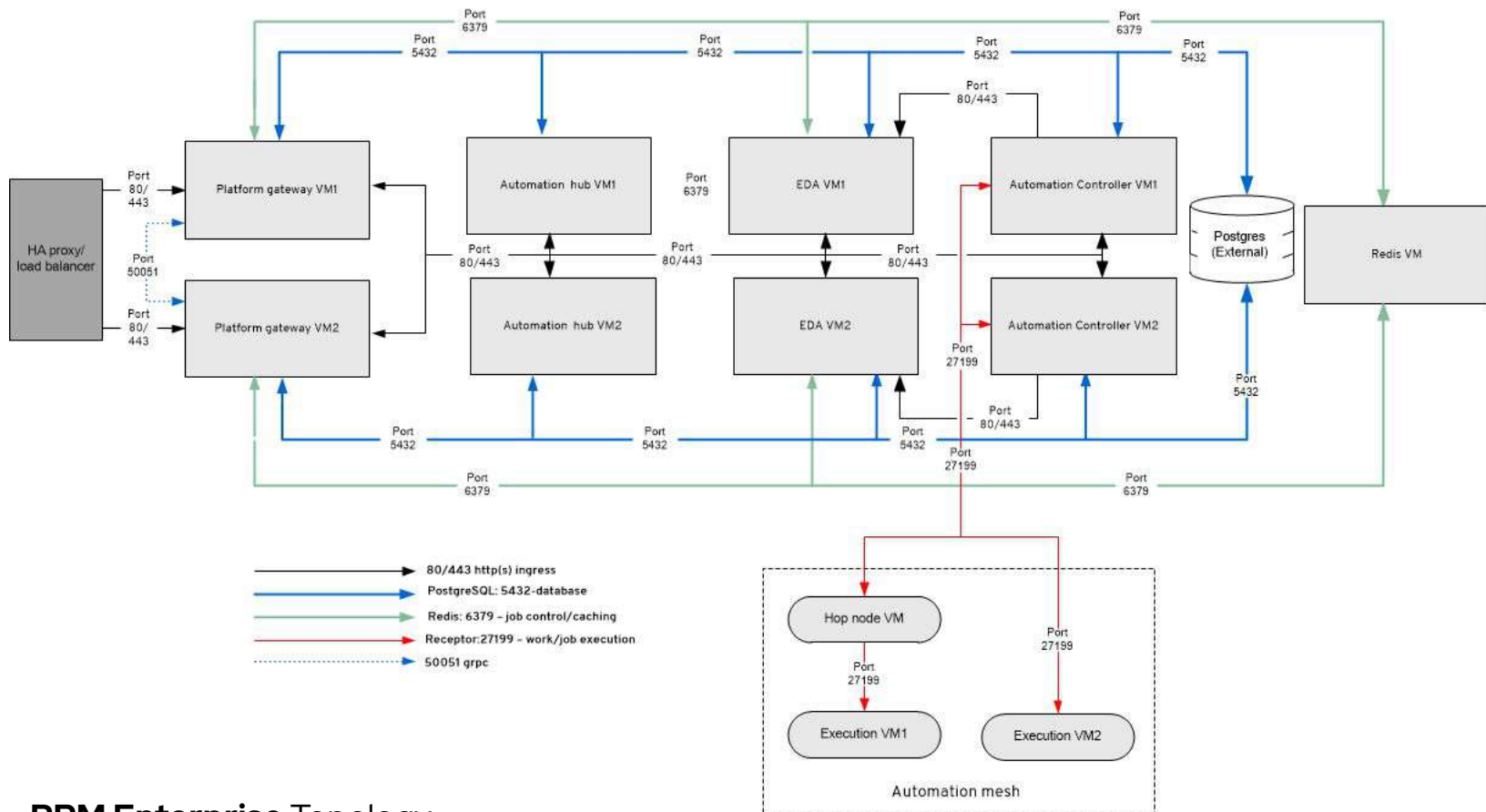
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**Getting
started with
AAP 2.5:** RPM
Enterprise
Topology

Next steps +
resources



RPM Enterprise Topology

Source: [AAP 2.5 Docs](#)

Release
overview

Accelerate
automation
adoption

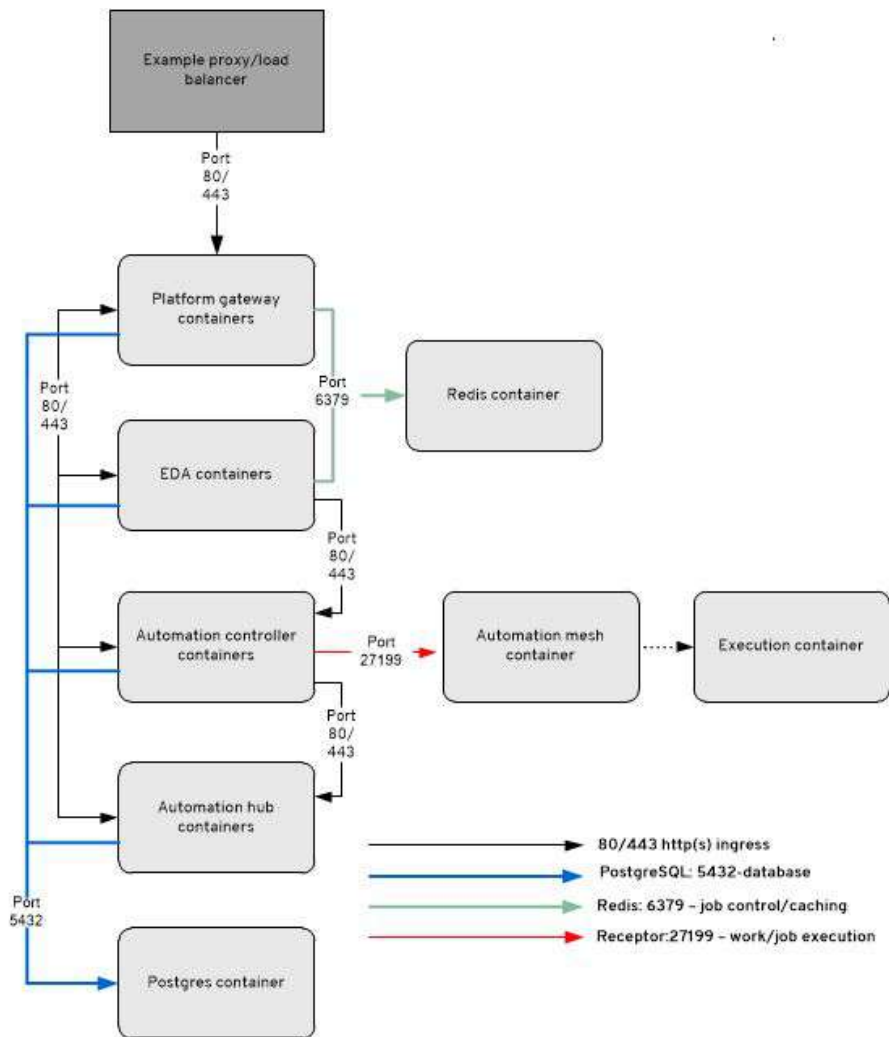
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Orchestrate
across the
enterprise

**Getting
started with
AAP 2.5:**
Container
growth topology

Next steps +
resources

Container Growth Topology
Source: [AAP 2.5 Docs](#)



Release
overview

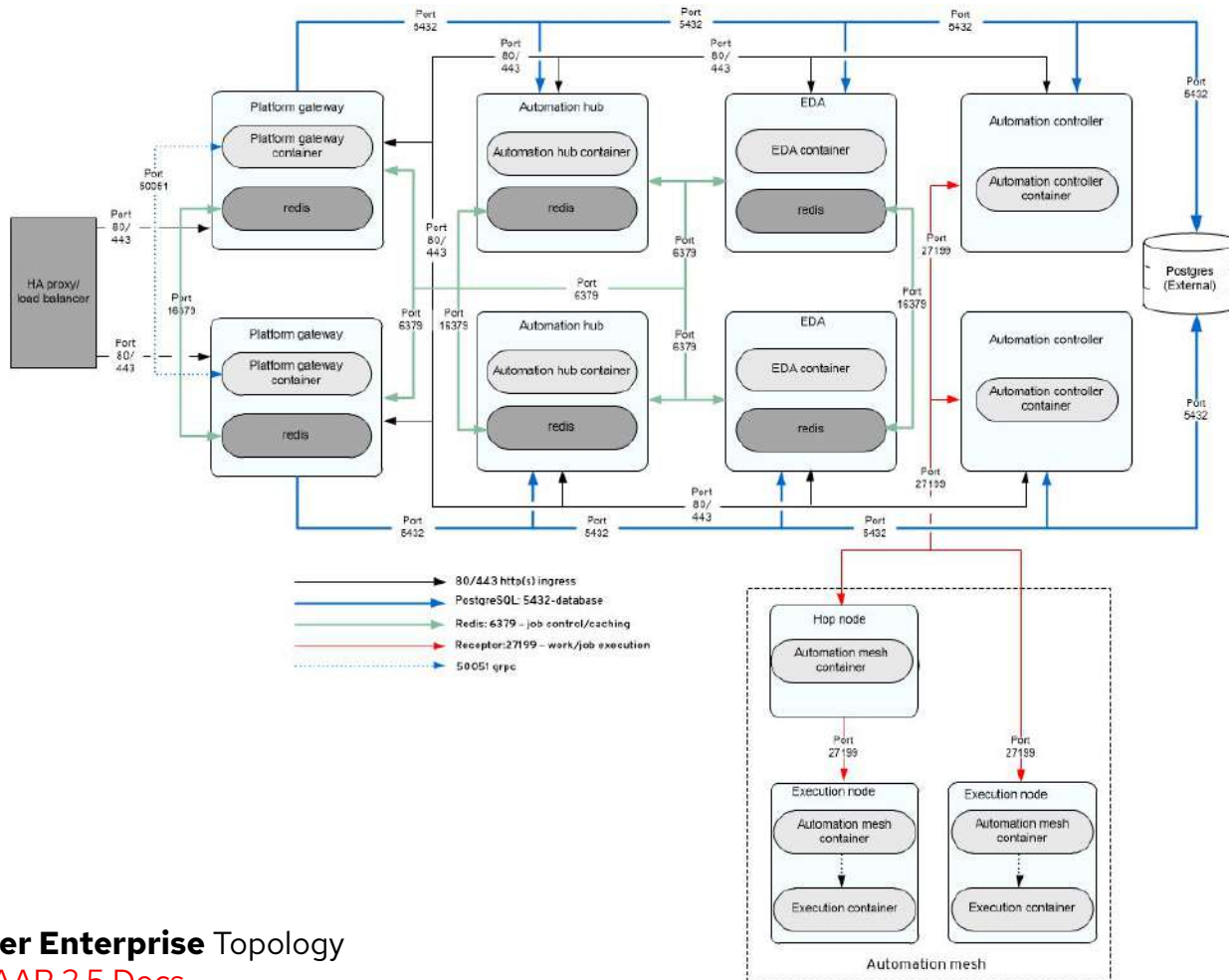
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engineers

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across the
enterprise

**Getting
started with
AAP 2.5:**
Container
enterprise
topology

Next steps +
resources



Container Enterprise Topology

Source: [AAP 2.5 Docs](#)

Release
overview

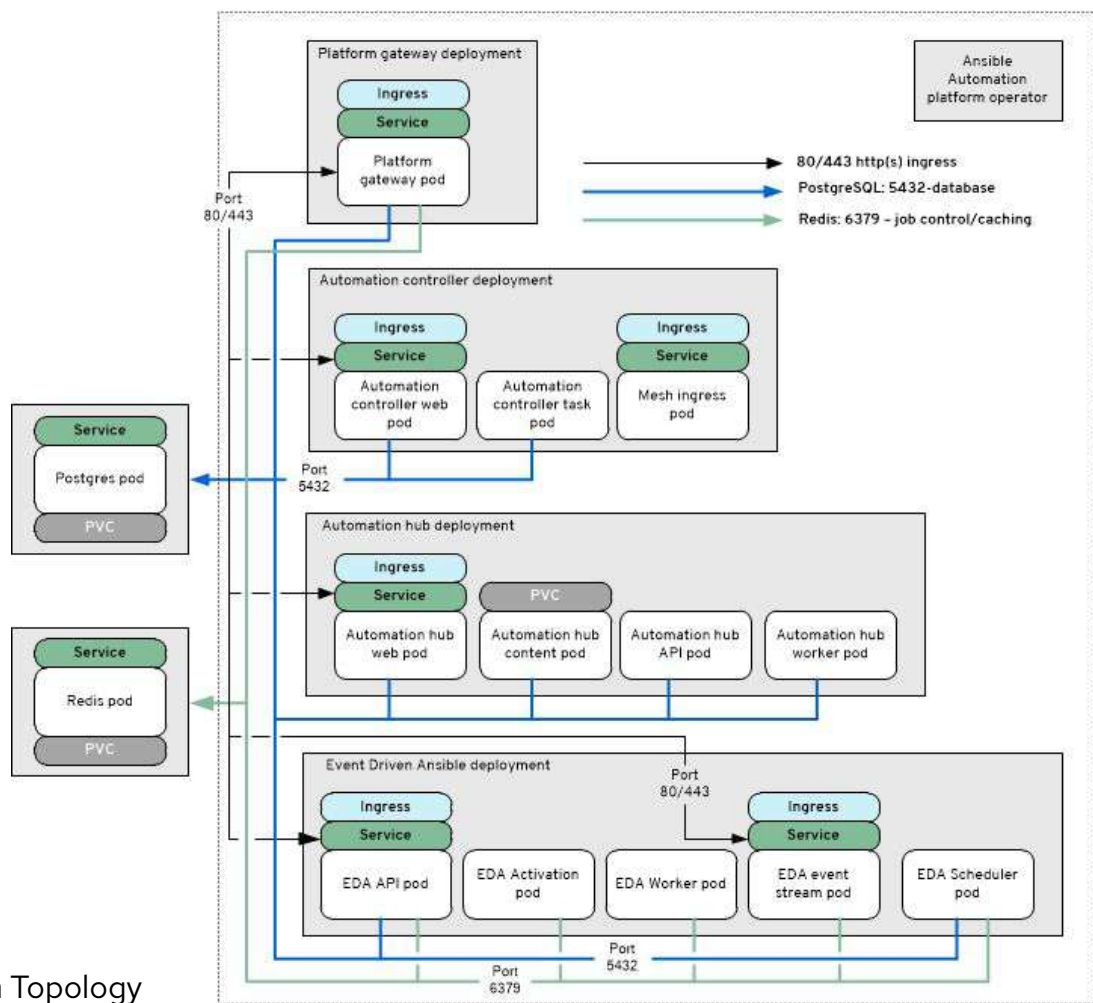
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enterprise

**Getting
started with
AAP 2.5:**
Operator growth
topology

Next steps +
resources

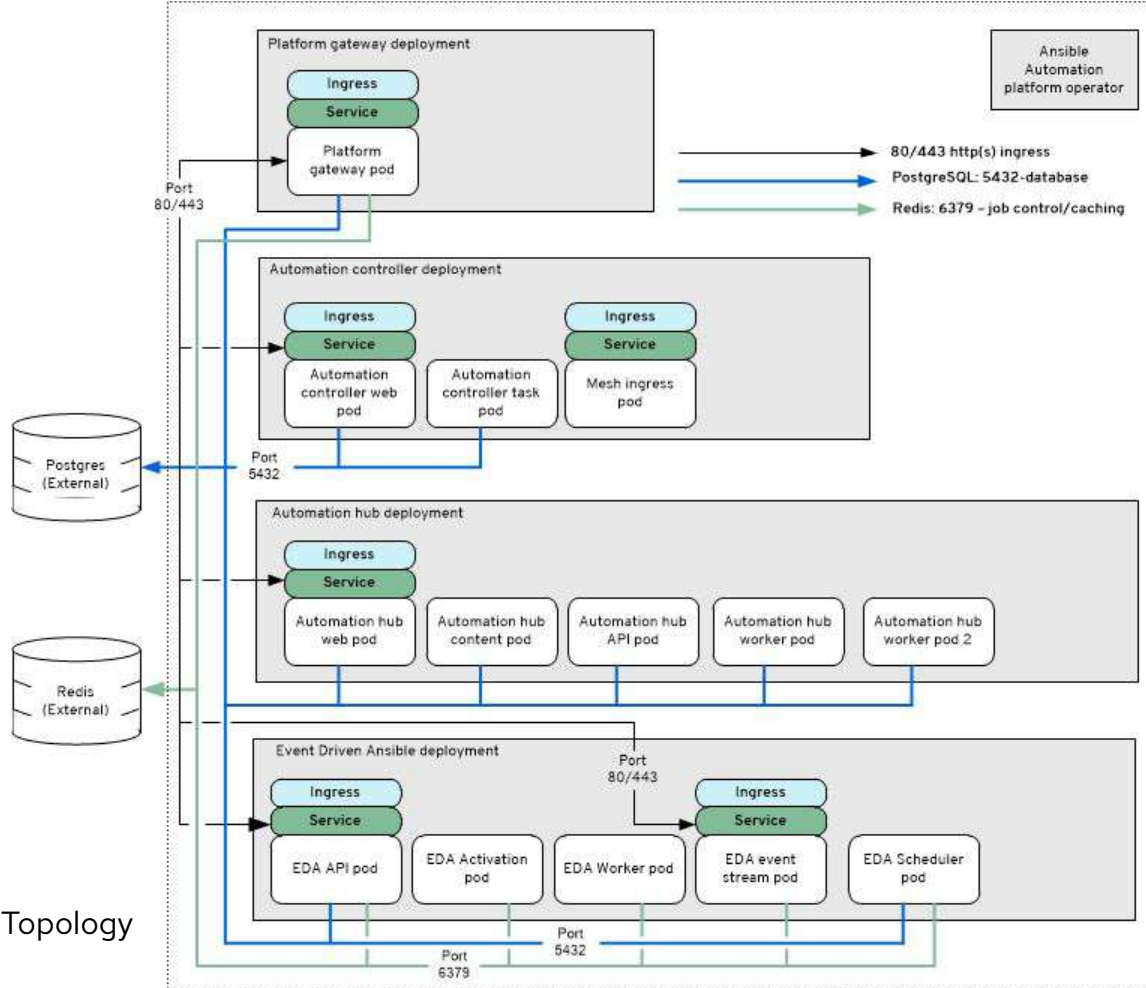


Operator Growth Topology

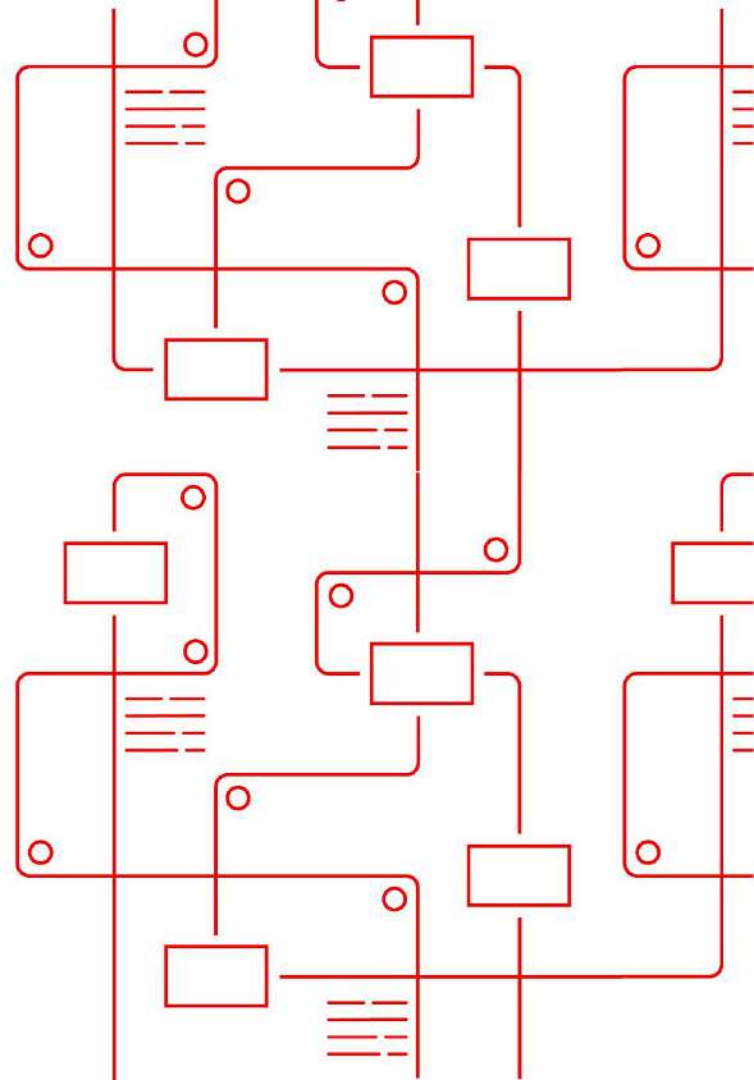
Source: [AAP 2.5 Docs](#)

Operator Enterprise Topology

Source: [AAP 2.5 Docs](#)



Network Automation Use Cases (Telco Booth)



Network Demos (Booth) **Ansible Automation Platform**



DEMO

Cisco/Juniper: Multi-vendor
VLAN, IP, BGP Configuration



DEMO

Netbox: CMDB Population
and Management



DEMO

Cisco: Workflow to Upgrade
a Switch Cisco Nexus



DEMO

Fortinet: Deployment and
Configuration of Fortinet Nodes



DEMO

Paloalto: EDA-based Compliance
Enforcement on Security Rules

Thank you



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