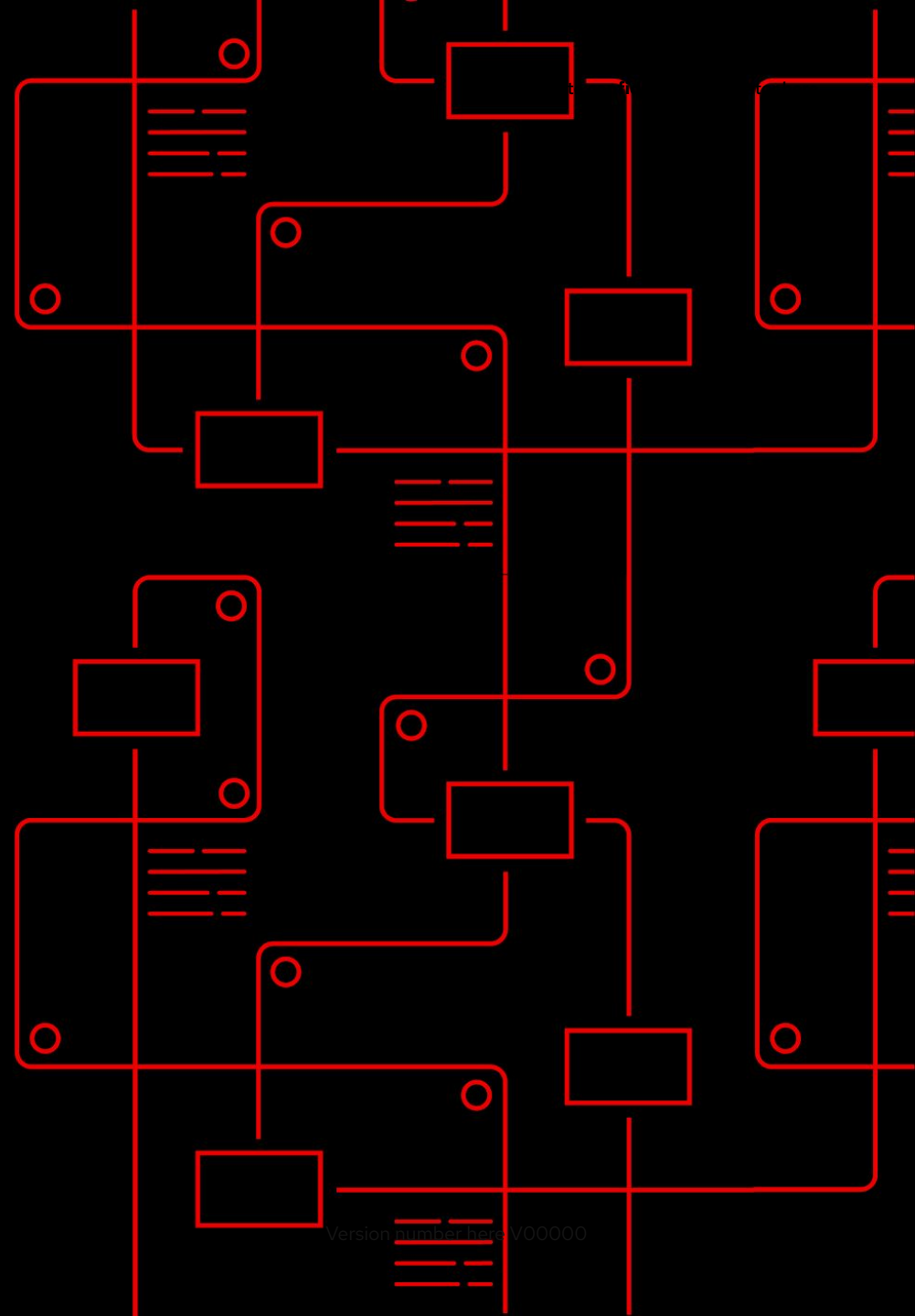
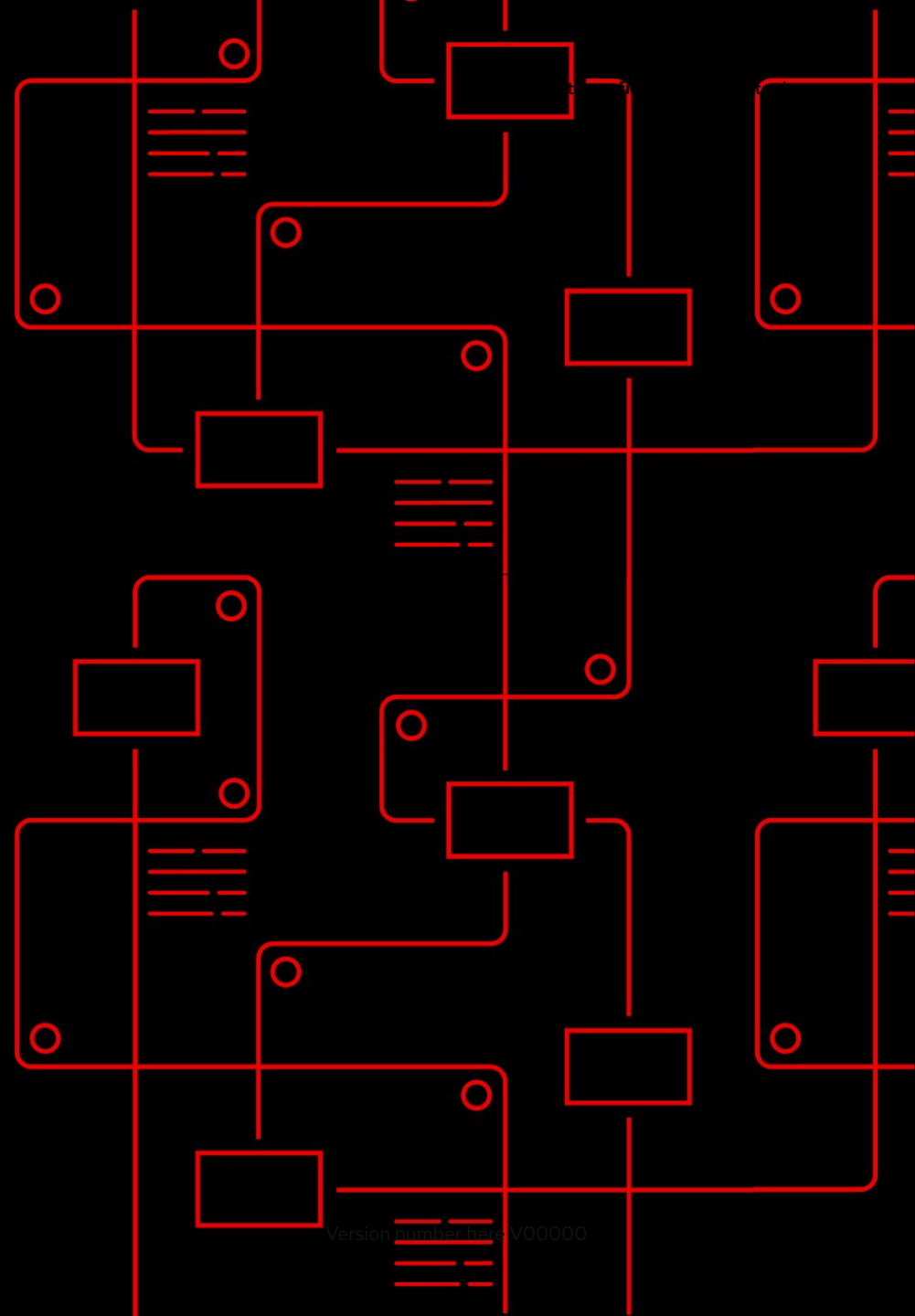
Strategy & Roadmap



Red Hat
Ansible Automation
Platform

Version number here V00000

PLACEHOLDER
Intro Loic



Red Hat
Ansible Automation
Platform

Red Hat Ansible Automation Platform

A comprehensive IT automation solution

Ansible is the **de facto** language of automation.

Simple | Human readable | YML

Ansible Automation Platform is engineered to help IT teams **create, manage, and scale** their automation.

Applications

- DevOps
- CI/CD
- GitOps

Network

- Network visibility
- Configuration management
- Network operations

Cloud

- Orchestration
- Operationalization
- Governance

Security

- Investigation enrichment
- Threat hunting
- Incident response
- Endpoint protection

Infrastructure

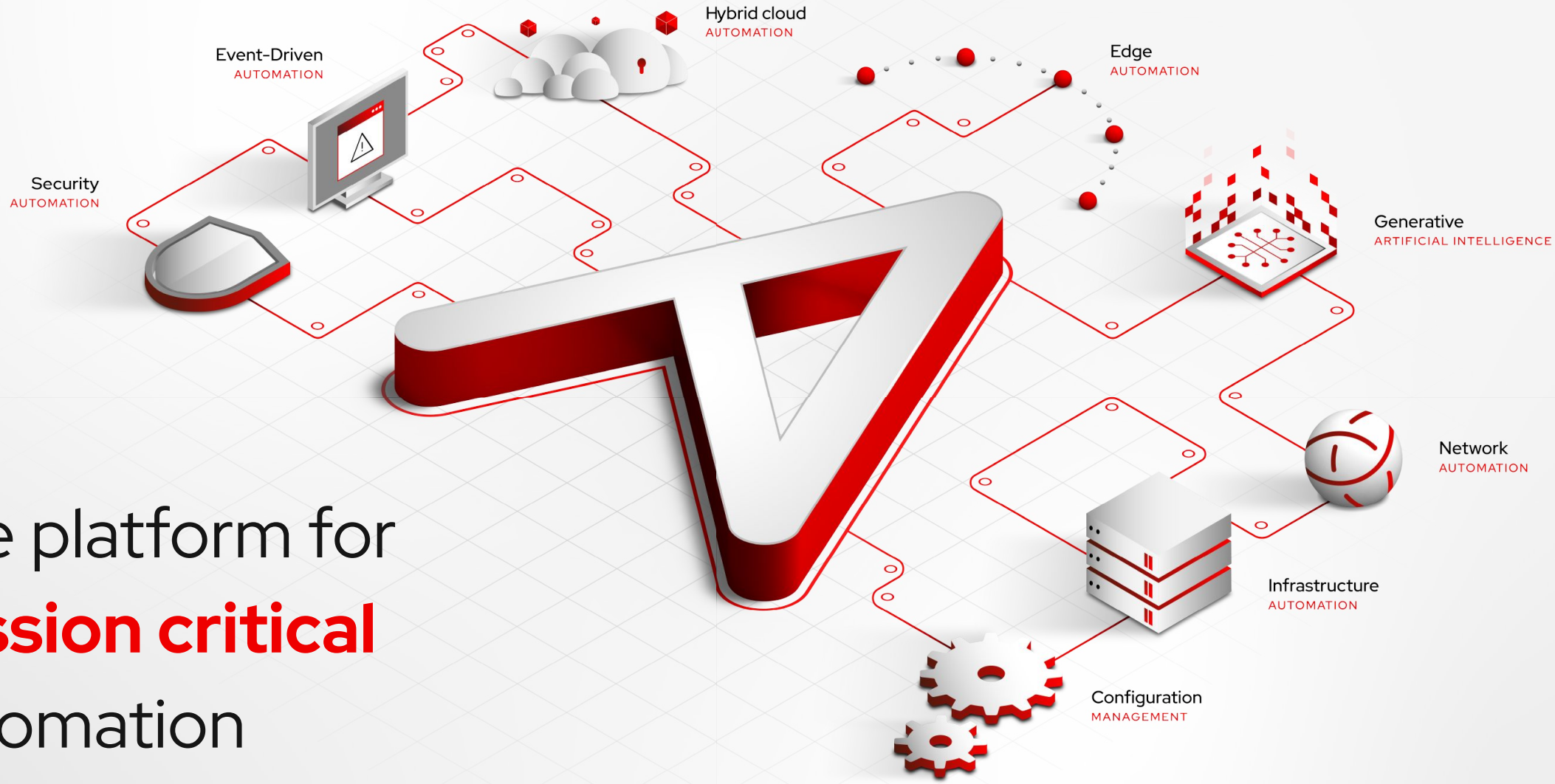
- Deployment
- Provisioning
- Management

Edge

- Infrastructure, network and security extension
- Industrial/IoT device automation
- Manufacturing/Retail remote site management

The mission critical automation mindset shift

- **Concentration drives criticality**. Customers adopting automation need to plan at a systems level across the enterprise.
- Complexity can be a blocker. Customers a **need a force multiplier** to get the most out of their technology investments
- Customers need to **better prepare** themselves **for the impending AI revolution.**



The platform for **mission critical** automation

Red Hat
Red Hat

The platform for mission critical automation

Red Hat Ansible Automation Platform

More efficiency

- ✓ Generative AI to lower barriers to entry *(Ansible Lightspeed)*
- ✓ Unified UI for true platform experience
- ✓ Enhanced developer tooling

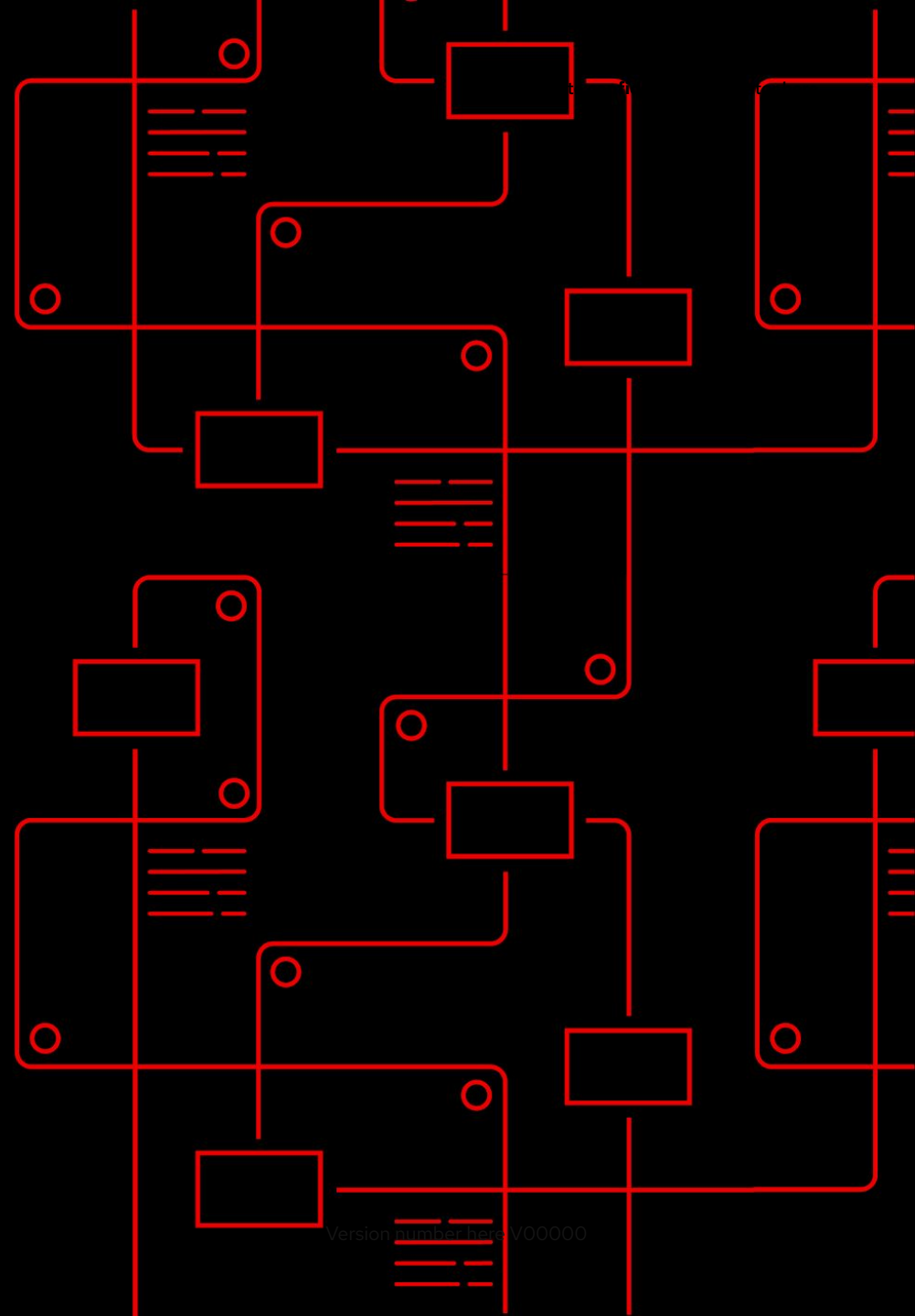
More consistency

- ✓ Out of the box integrations across domains
  - Network
  - Infrastructure
  - Security
  - Edge
  - Applications
- ✓ *Ansible on Clouds*; flexibility across environments
- ✓ "*Policy as Code*" (GRC)

More reliability

- ✓ *Event-Driven Ansible* for observability + response
- ✓ Trusted automation supply chain
- ✓ Consulting, services, and support for sustainable automation practices

Concentration requires more consistency



"Automation helped support a positive cultural shift, ***resulting in better collaboration between teams****. Red Hat is collaborating with us to implement best practices and* ***learn from their expertise across our entire organization****."*

- **Automation manager**
European energy company

The Automation Platform Engineering Model

Adopt platform engineering to maximize the flow of value from self-service teams, and capture the potential of managing IT delivery using proven product management practices.

Gartner

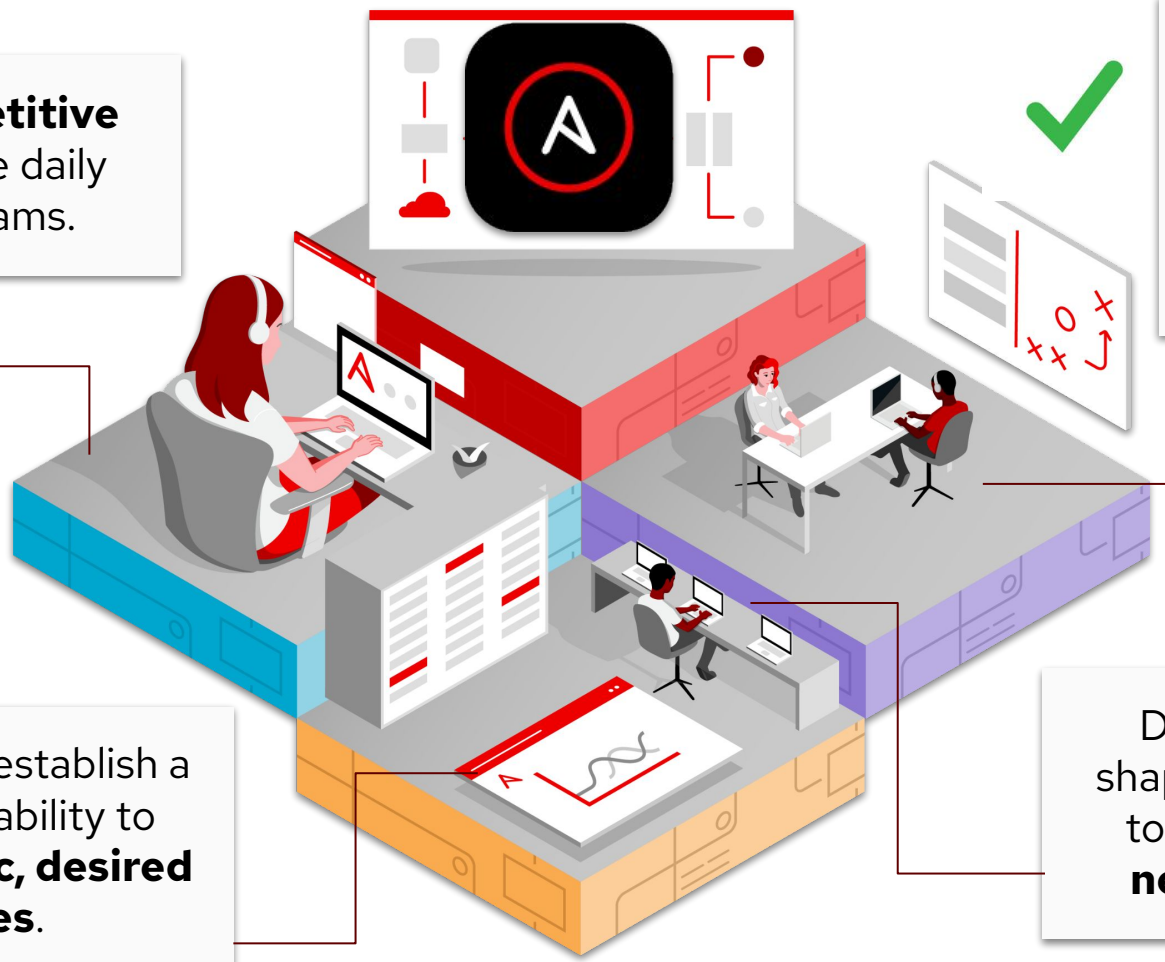
Which challenges are they trying to solve?

- Applying organizational **security policy requirements**
- **Lack of compatibility** with preferred tooling
- **Varied tool preferences** among users
- The **automation skills gap**; varied level of Ansible expertise
- **Technical debt** hinders innovation
- **Cultural resistance** to learning new skills and behaviors
- No **standards or best practices** in place to align teams

Source: 2024 Planning Guide for IT Operations and Cloud Management

Built to support a Platform Engineering approach to automation

Removes repetitive tasks from the daily work of IT teams.



Fosters collaboration among and across IT teams; a single platform around which the entire organization can align and grow.

Allows teams to establish a consistent capability to **achieve specific, desired outcomes**.

Delivers the ability to shape the shared solution to **meet the nuanced needs of each team**.

Seamless integration with other mission critical tools

Building mission critical workflows across the open hybrid cloud ecosystem

Applications

- CyberArk
- Datadog
- dynatrace
- IBM
- splunk>

Networking

- Arista
- aruba Networks
- Cisco
- Infoblox
- F5
- Juniper Networks

Edge

- Arista
- aruba Networks
- Cisco
- F5
- Juniper Networks
- NetApp
- vmware

Cloud

- aws
- Azure
- Google Cloud
- IBM Cloud
- Red Hat OpenStack Platform

Security

- Check Point Software Technologies Ltd
- CyberArk
- Fortinet
- IBM Security
- paloalto Networks
- Resilient an IBM Company

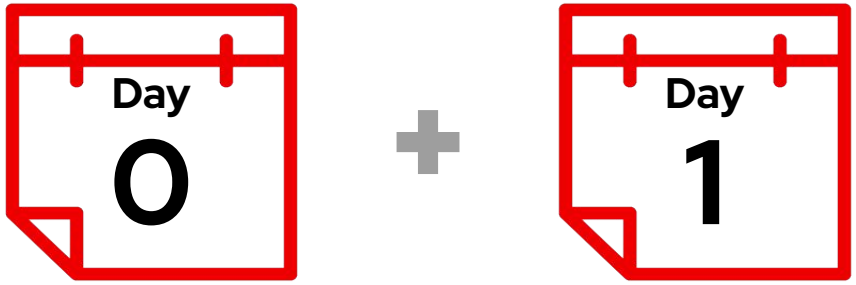
Infrastructure

- Red Hat Enterprise Linux
- NetApp
- vmware
- Windows Server

servicenow

Red Hat Ansible Automation Platform

Where we see the market going



Infrastructure as Code

- "*Build, Provision, Configure, Deploy*" - with a more focused, automation-first mindset.
- Extend and leverage "legacy knowledge"
- Expand into additional IT domains and footprints (network, edge, cloud, etc)

Operations as Code

- Standardize operations processes IT-wide
- Observability is easy, remediation is hard
- A skills vacuum is coming soon

Growth in end-to-end automation across the entire lifecycle

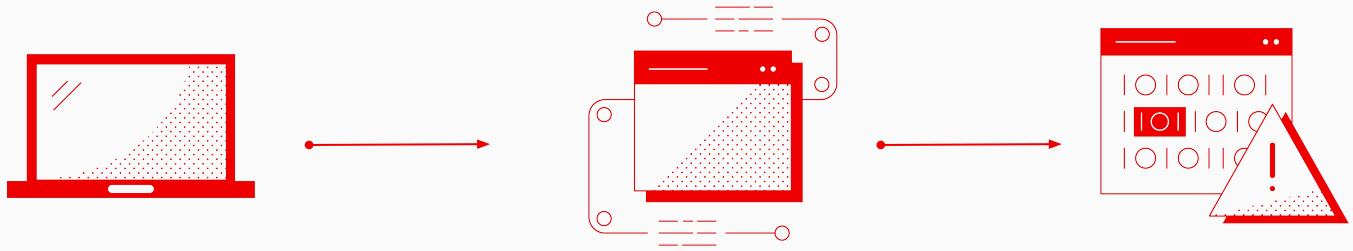
Policy as Code

Goal:
Extend AAP directly into the realms of governance, risk and compliance (GRC)

Who:
Developers, Operators + Admins. CISO, CAIO.*
**New avenue for C-suite conversations.*

When: Summit & H2 2024

Policy as Code for GRC



Governance

- **Check policy enforcement during the development cycle**
- Standardised policy schema and format based on YAML
- Ansible Lightspeed integration to accelerate development
- Integration into Ansible plugins for Integrated Development Environments (IDE)s

Risk

- **Provide an integrated mechanism for policy enforcement based on unique needs**
- Discretionary or mandatory checks before or during automation runs
- Hook into a wider ecosystem for defining, selecting, finding and using policies for checks and enforcement

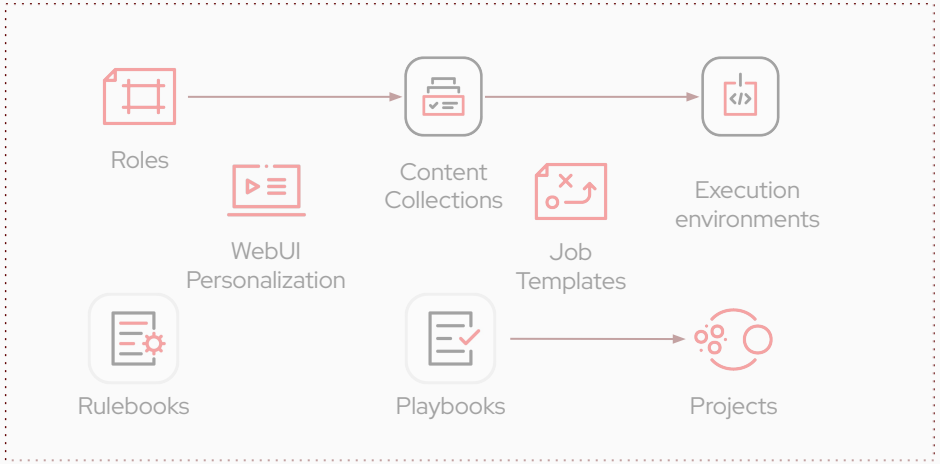
Compliance

- **Reporting mechanisms to aid in compliance status and audit tracking.**
- Output to common output data schemas to allow third party tools easy access to results
- Customizable alerts and notifications for policy status

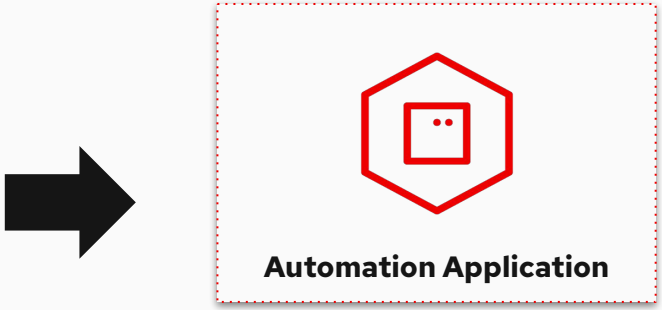
Automation applications

Automation Applications

An automation application is an **all-in-one package** that makes it simple to distribute and use automation tasks.



Traditional Ansible content development



One **easy** unit of automation

Experience for Cloud Engineers

Experience for Network Engineers

Experience for Sysadmins

Goal:
Simplify the automation experience by creating better connections between content creators and content users.

Who:
Developers, Automation engineers

When:
Q4+

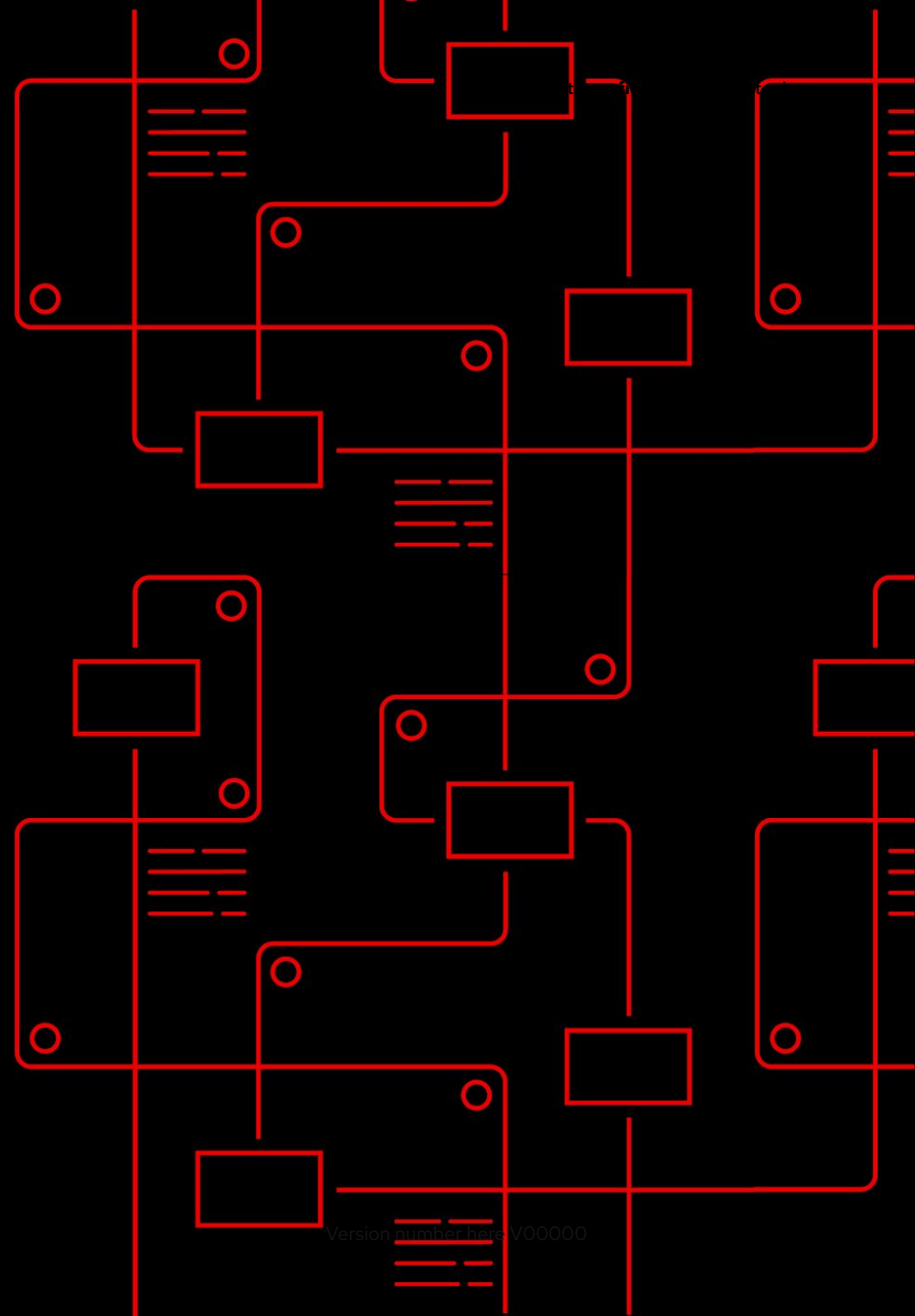
Delivery will happen in stages:

Stage 1: Content seeding, allowing AAP to be provisioned with Projects, Job Templates, Workflows and more; will also Allow easy importing of Ansible content collections into usable Automation jobs

Stage 2: Composable automation allowing content to be logically stacked together to fulfill more complex uses cases

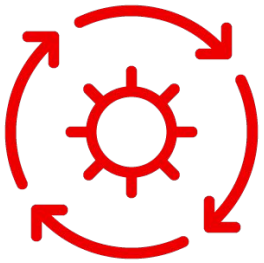
Stage 3: Self contained & autonomous automation capable of running as a function; Automation execution environments automatically created on the fly

Complexity requires more efficiency



By 2026, 30% of enterprises will **automate more than half** of their network activities.
This figure was **under 10%** in mid-2023

Source: Gartner



By 2025, **70% of organizations** will implement structured infrastructure automation. The goal? To deliver **more flexibility + efficiency.**
This figure was **20% in 2021**.

Source: Gartner Hype Cycle

Filling the IT Skills Gap

By 2027, 75% of enterprises will combine their siloed automation initiatives to improve overall value, which is a significant increase from fewer than 10% in 2022.

Gartner

Through 2025, 80% of the operational tasks will require skills that less than half the workforce are trained in today.

Gartner

Accelerating time to automation

Certified + validated content

Set automation projects into motion

Ready-made roles, modules, plug-ins, and templates

Ansible Lightspeed

Collaboration with IBM to bring generative AI to Ansible

Faster and easier to create Ansible content

Ansible development tools

Suite of supported components

Build, test, and deploy Ansible content

2024 Roadmap

Ansible development experience

Opinionated, integrated dev environment

Dev tools, VS code, RHDH for Ansible, and Ansible Lightspeed

Enhanced developer experience:
AI for automation

Goal:
Harness AI to empower engineers to create, manage and scale their automation more efficiently

Who:
Developers, automation engineers, operators, platform admins

When: Available now, with improvements introduced continually

Create | Red Hat Ansible Lightspeed

- On-premises capability (IBM WCA) - 1H ‘24
- Full Ansible Playbook generation - 1H ‘24

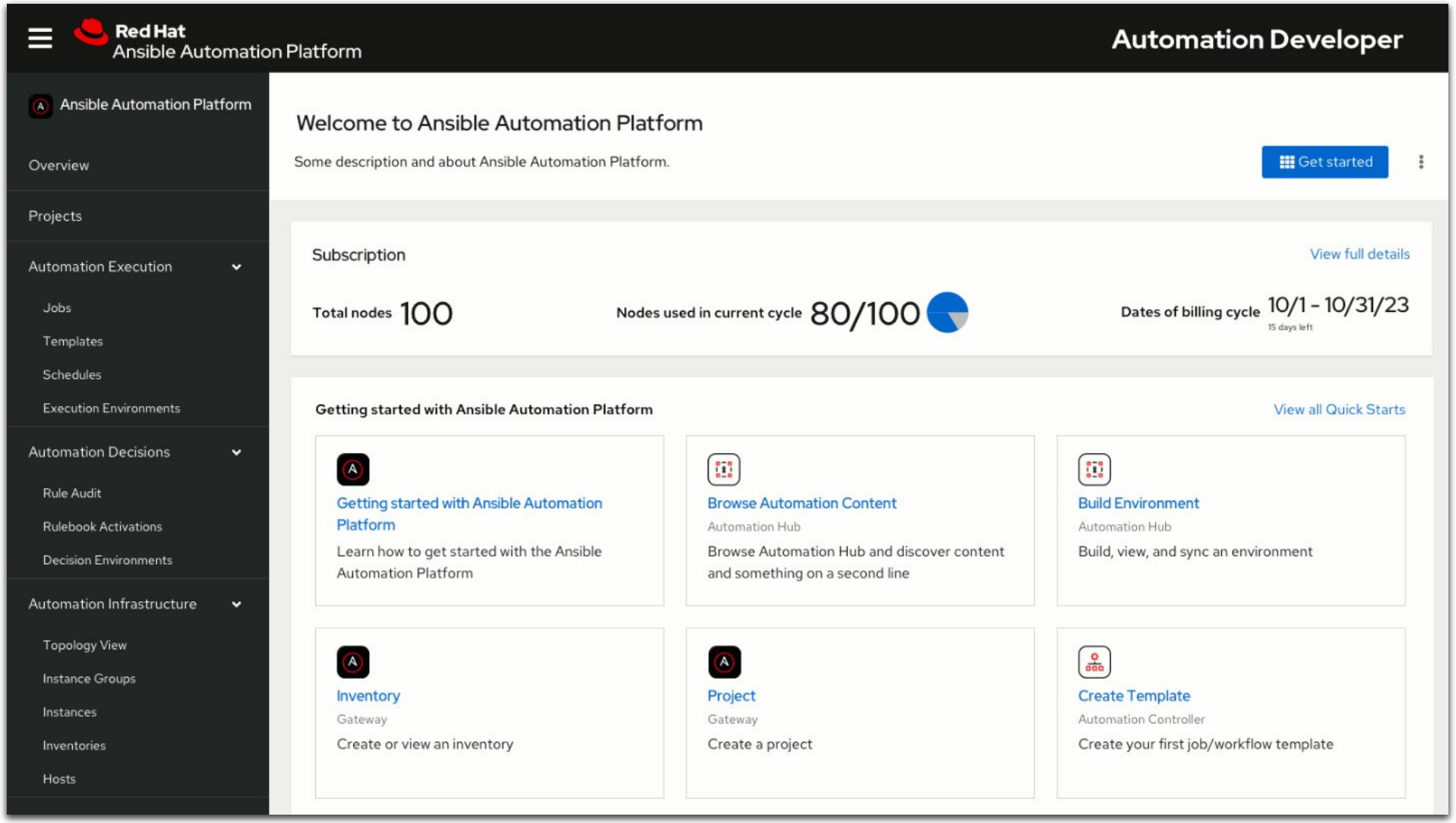
Adopt | DevOps Integration

- Ansible Risk Insights integration
- Pipeline integration and REST APIs

Maintain | Ansible Codebot

- General availability + full support - Q1 ‘24
- Gitlab and Bitbucket integrations - Q2 ‘24

Unified platform experience



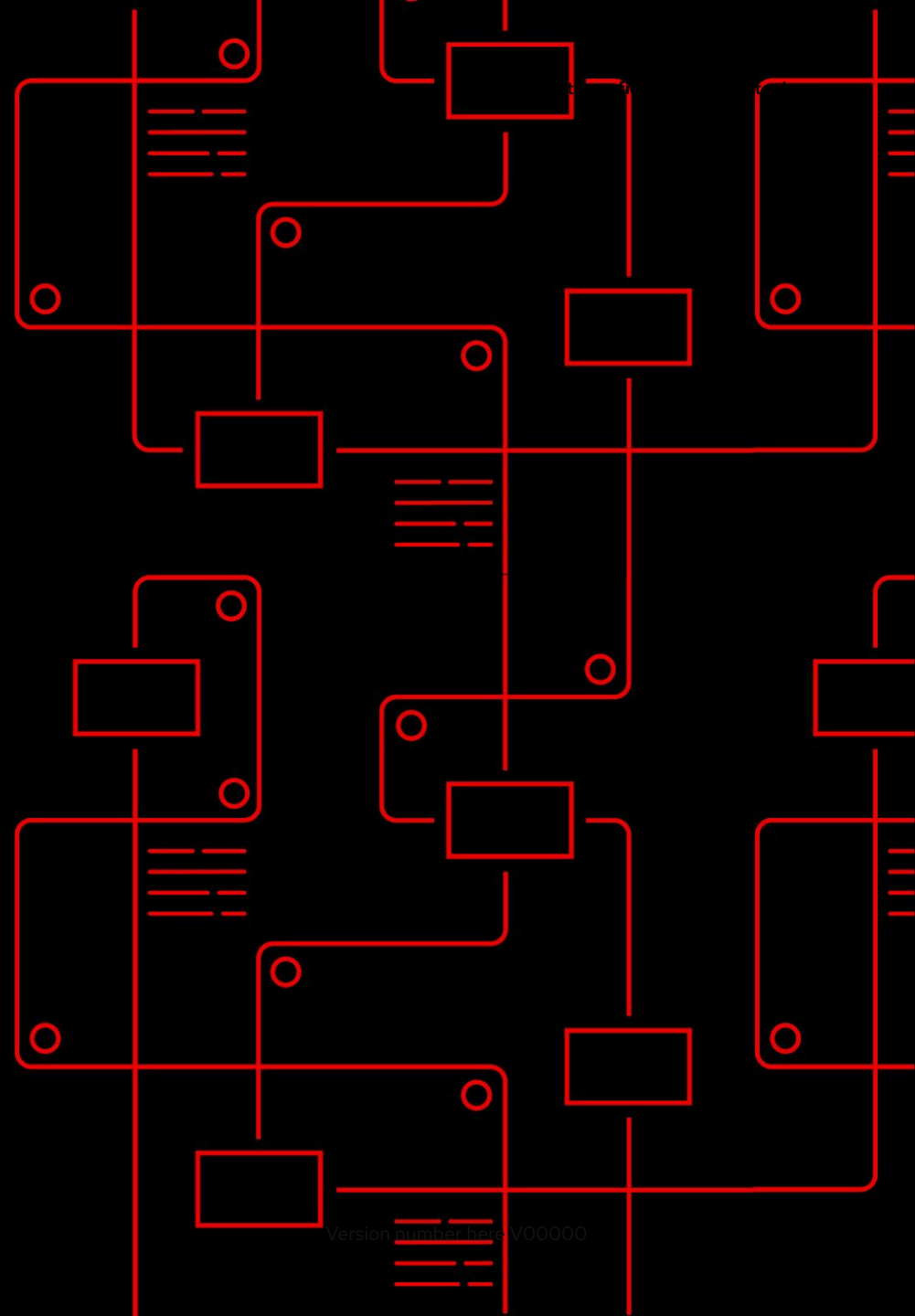
Goal:
Simplify the platform experience for all users

Who:
Automation engineers, Operators, Platform Admins, Automation architects

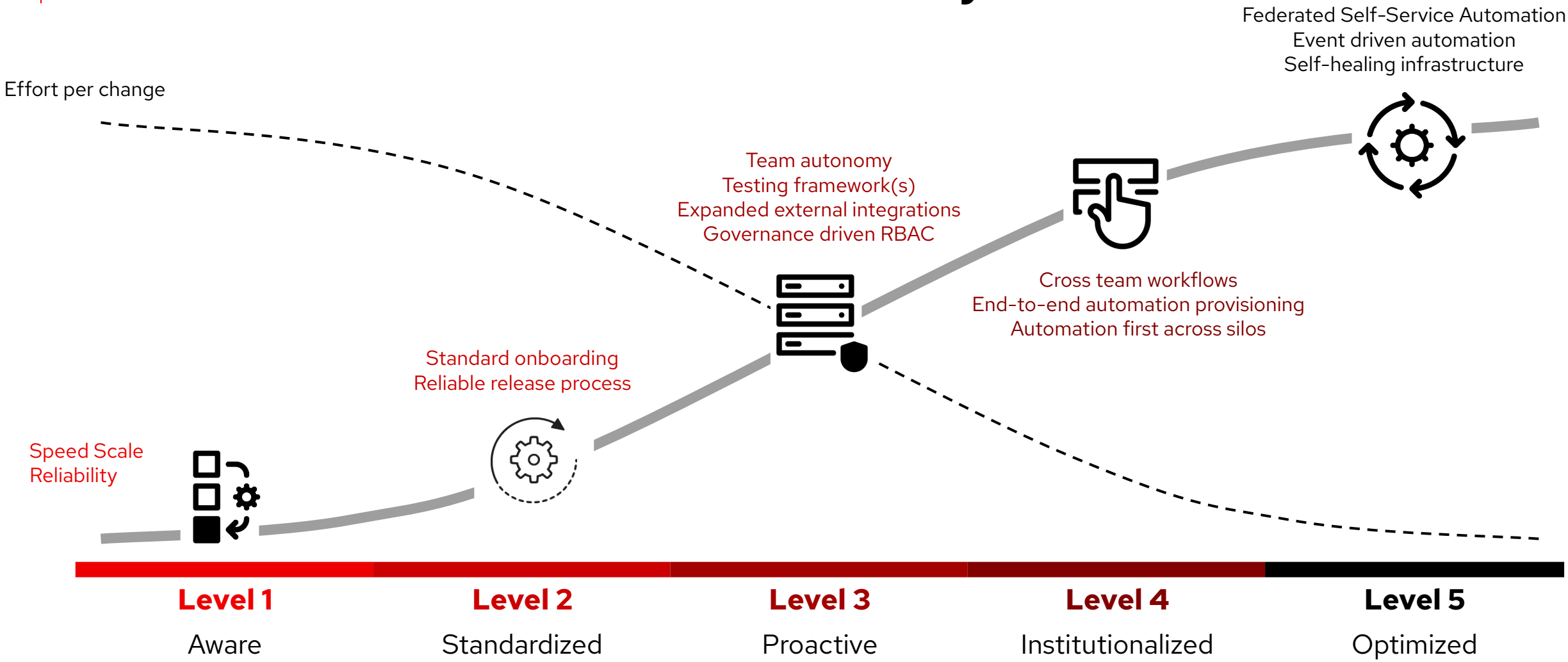
When: *Beta*: March
GA: Q2 (AAP 2.5 release)

Note: Experience for public cloud subscriptions may vary pending final development

The future requires more reliability

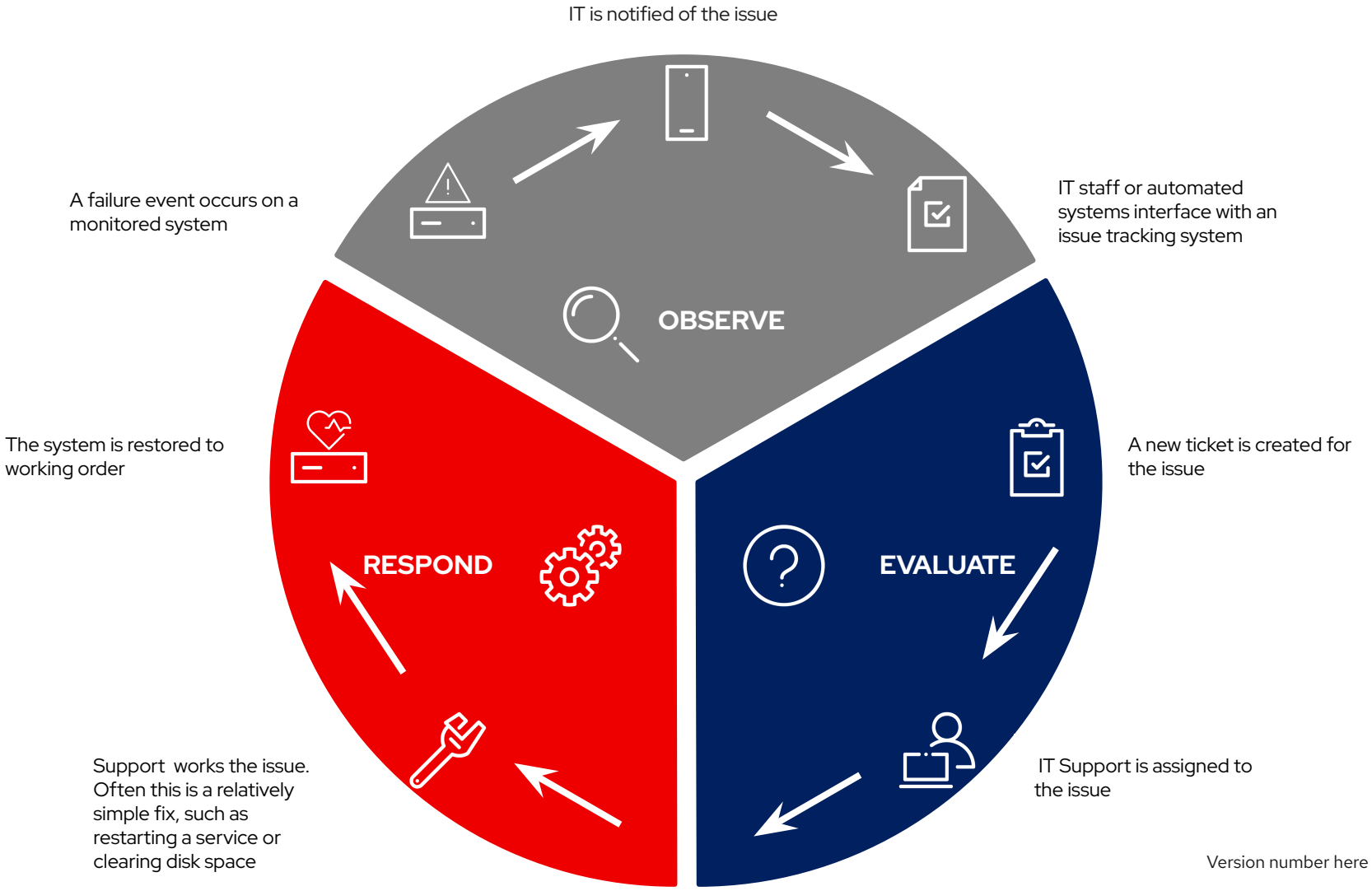


Automation Maturity Curve



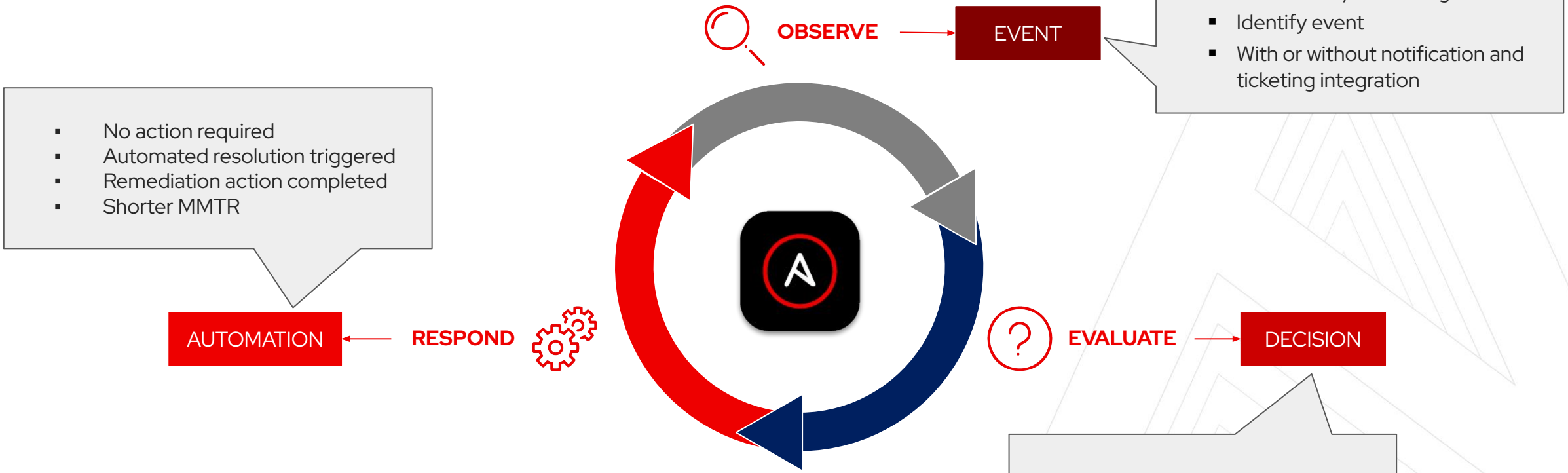
Traditional Operations Workflow

Rely on manual remediation of issues



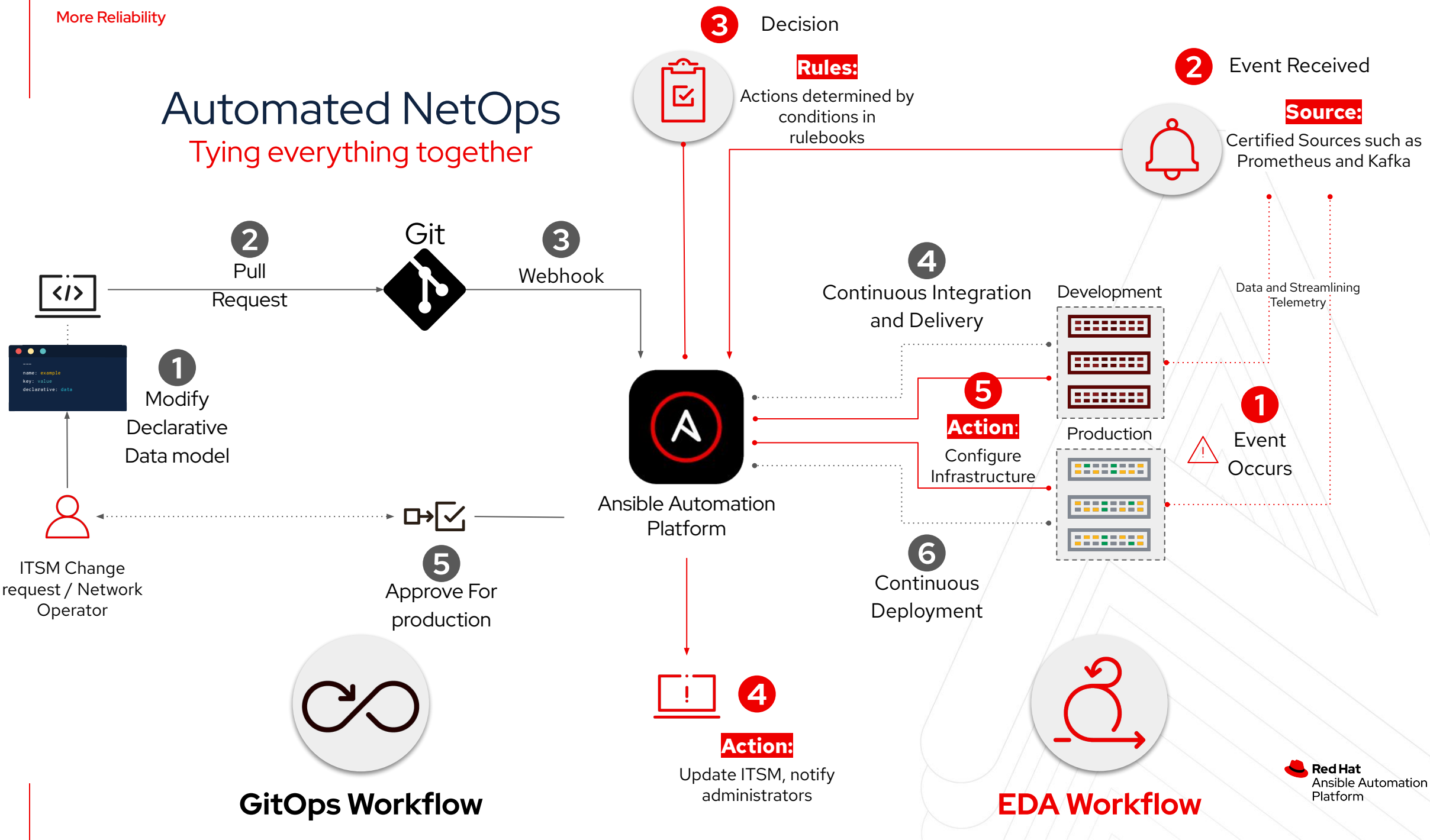
Event-Driven Ansible

Automation Supporting Mission Critical Workloads



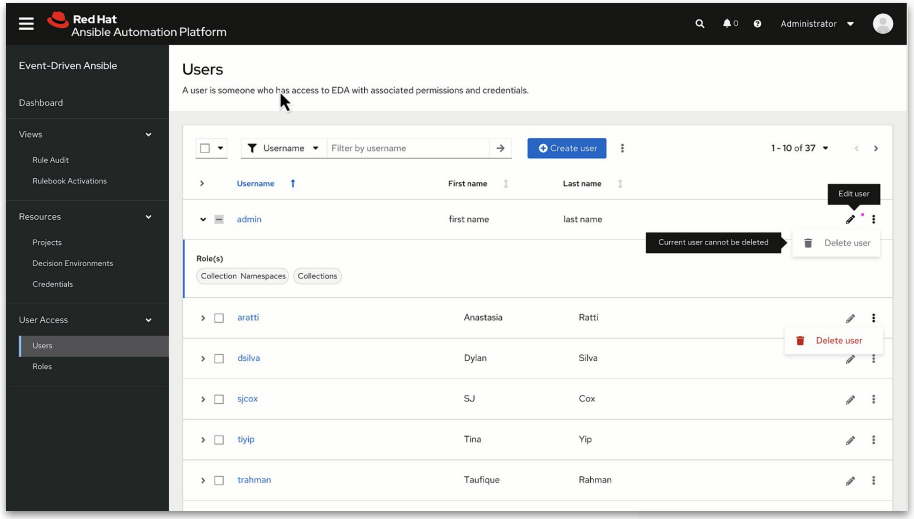
Automated NetOps

Tying everything together

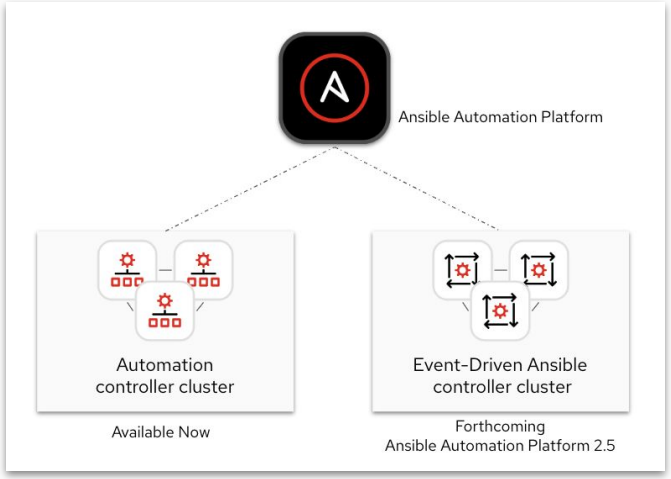


Event-Driven Ansible:

Single Sign On

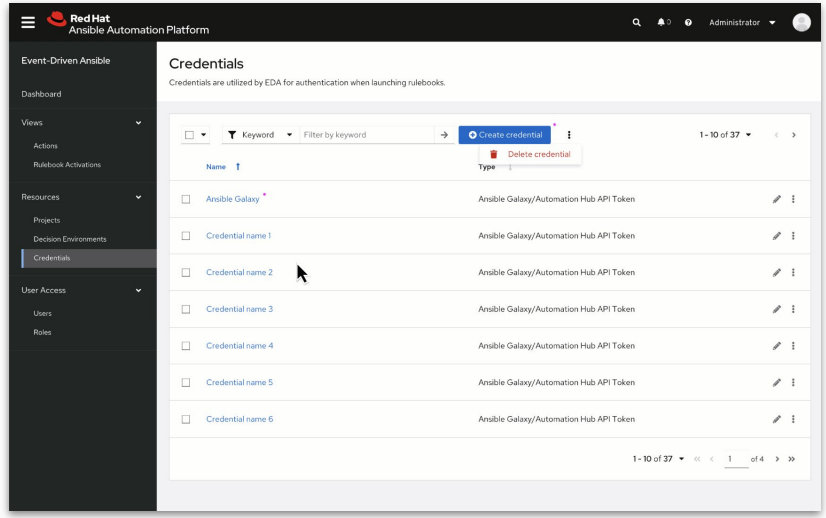


High Availability, performance and scale



- ✓ Increased resiliency and capacity through Event-Driven Ansible failover capabilities
- ✓ Easily configurable via bundled installer or Openshift Operator

Credential management



Goal: Mission critical capabilities for Event-Driven Ansible

Who: All platform users

When: Q3 FY2024

What was delivered in 2023

AAP 2.4 release

- Event-Driven Ansible - *generally available*
- Collection repository management
- Validated content integration
- Ansible-builder 3.0
- Platform install support for ARM, IBM Z and Power Platforms

Ansible on Cloud

- Buying subscriptions on AWS
- Self-managed Ansible on Azure
- Ansible on Azure
  - Automation scaling
  - Customer deployment enhancements
- Self-managed Ansible on Google Cloud

Z Streamless

- Ansible Lightspeed
  - Ansible code bot
- Ansible Molecule
- Containerized AAP*

* Technology Preview | **Developer preview

What's coming in 2024

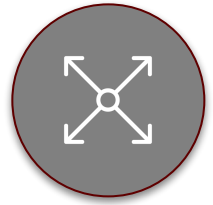
CREATE

- Enhanced developer experience
  - Ansible development tools
  - Red Hat Developer Hub
  - Developer spaces
  - AI for automation
- Automation applications
- Automation content experiences
- State management for AAP

MANAGE

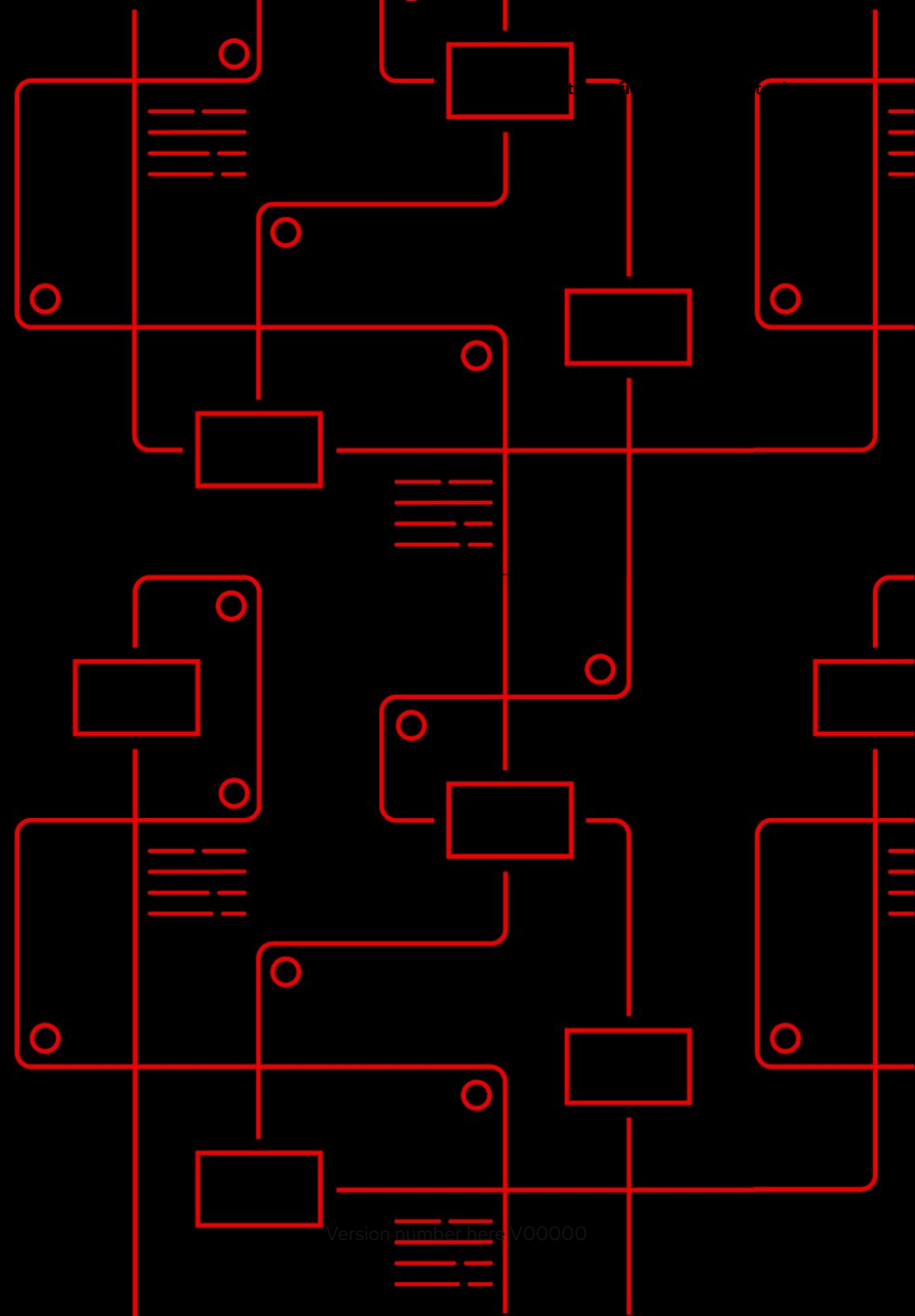
- Ansible as a Service: AWS
- Unified platform experience
- Containerized AAP
- Policy as Code initiatives for Governance, Risk + Compliance (GRC)

SCALE



- Automation mesh for cloud deployments
- Event-Driven Ansible improvements
  - SSO + RBAC
  - Credential management
  - High Availability, performance and scale
- Availability on mission critical infrastructure

Thank You



Red Hat
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