

# Red Hat Ansible Automation Platform

## Configuration as Code

Streamlining Automation with Version-Controlled Configuration

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# Evolving the focus and impact of automation



# What is Configuration Management?

**Is a process for maintaining a desired state of IT systems and components.**

## Expectations:

- Consistency and security
- Avoid configuration draft
- Prevent undocumented changes
- Repeatability

## Why it matters?

- Too many systems, environments, networks, storage, servers, and devices.
- Do it right and only once!
- Security incidents due to misconfigurations
- High availability and disaster recovery plans

# What is Configuration as Code (CaC)?

**Is managing system configuration through machine-readable files.**

## Why? Because it enables...

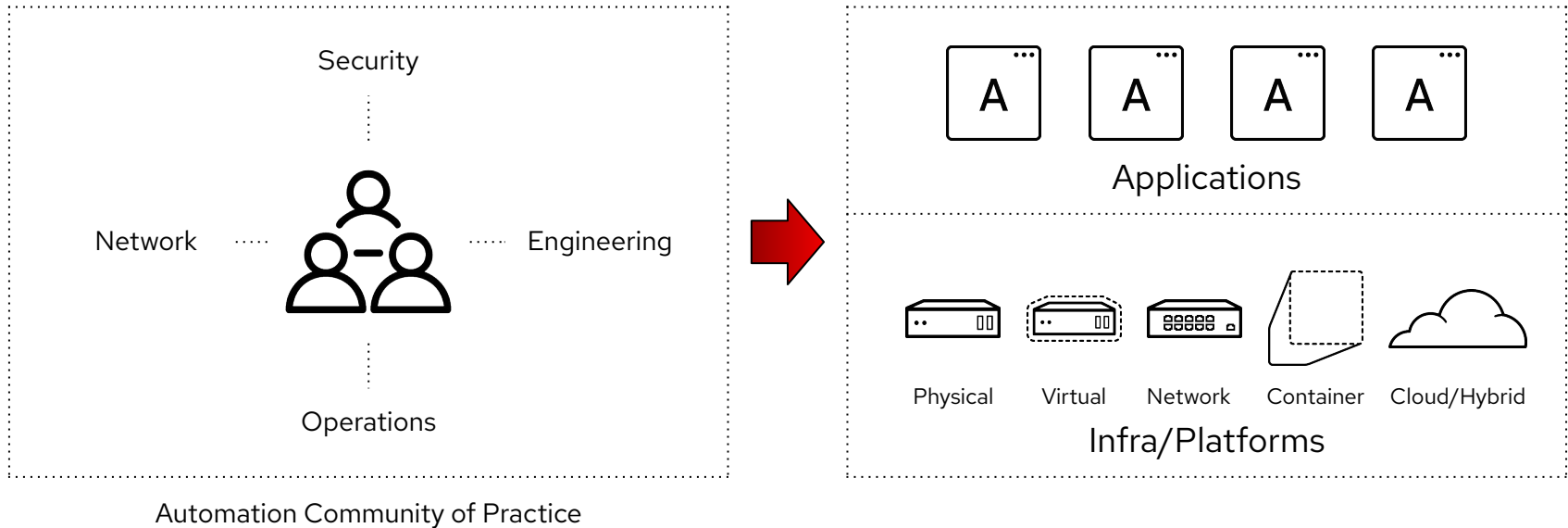
- Consistency and security
- Avoid configuration draft
- Prevent undocumented changes
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## Why it matters?

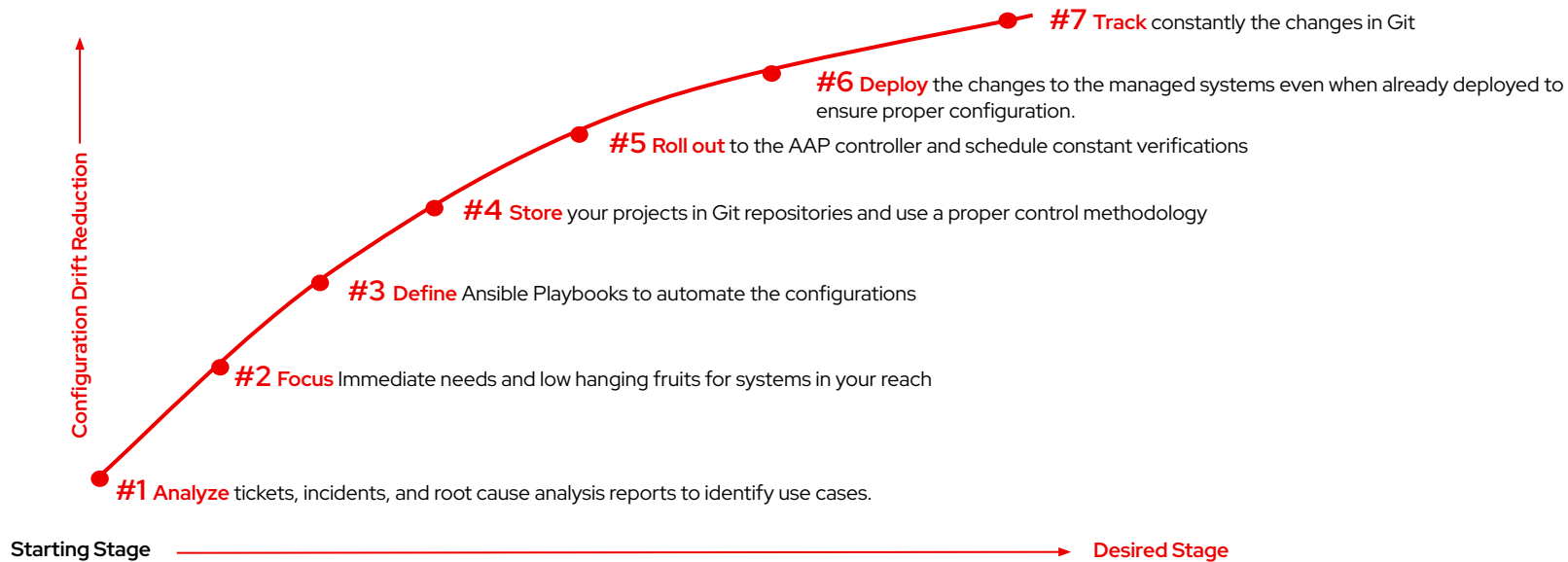
- Repeatable deployments
- Collaboration via Git
- Governance and auditability

# Unify your automation efforts into a single strategy

**Reduce the cost and complexity of engineering and operations**



# CaC Lifecycle in AAP



# Business Hurdles of Configuration Management

GOVERNANCE

SECURITY

PREDICTABILITY

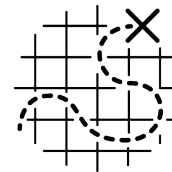
MODERNIZATION

SUPPORTABILITY

SOURCE OF TRUTH

SCALABILITY

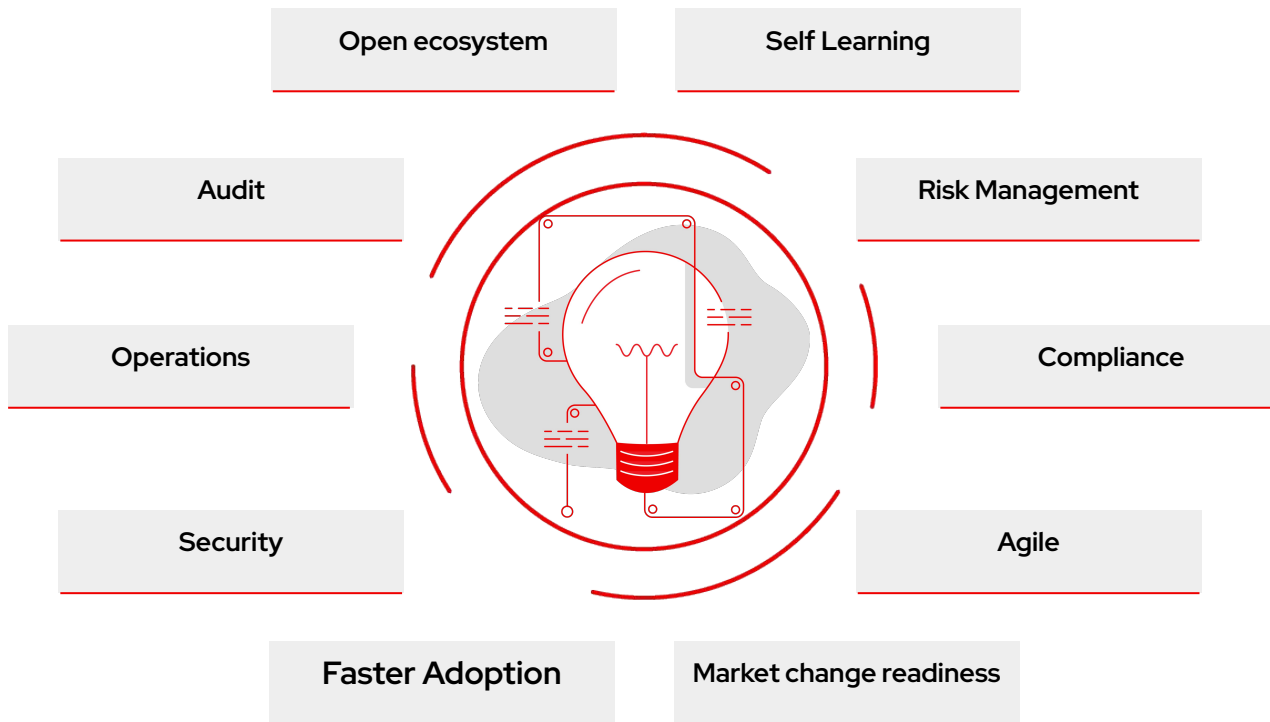
RESILIENCY



IT organizations typically spend **64%** of their budget on running their current IT environment, leaving less budget for growth and innovation.

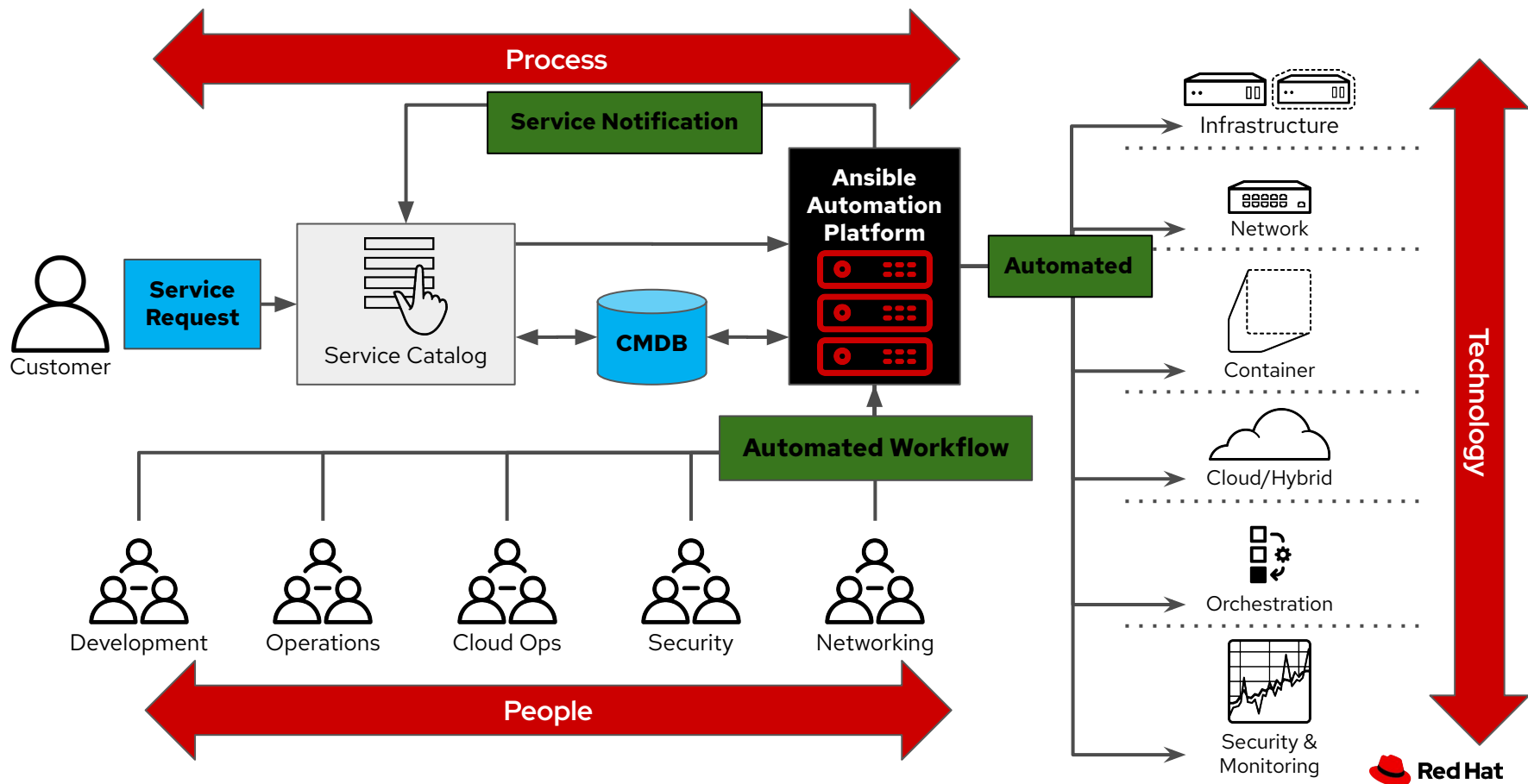
# Enhancing innovation, with business as usual

## Advantages of modern governance

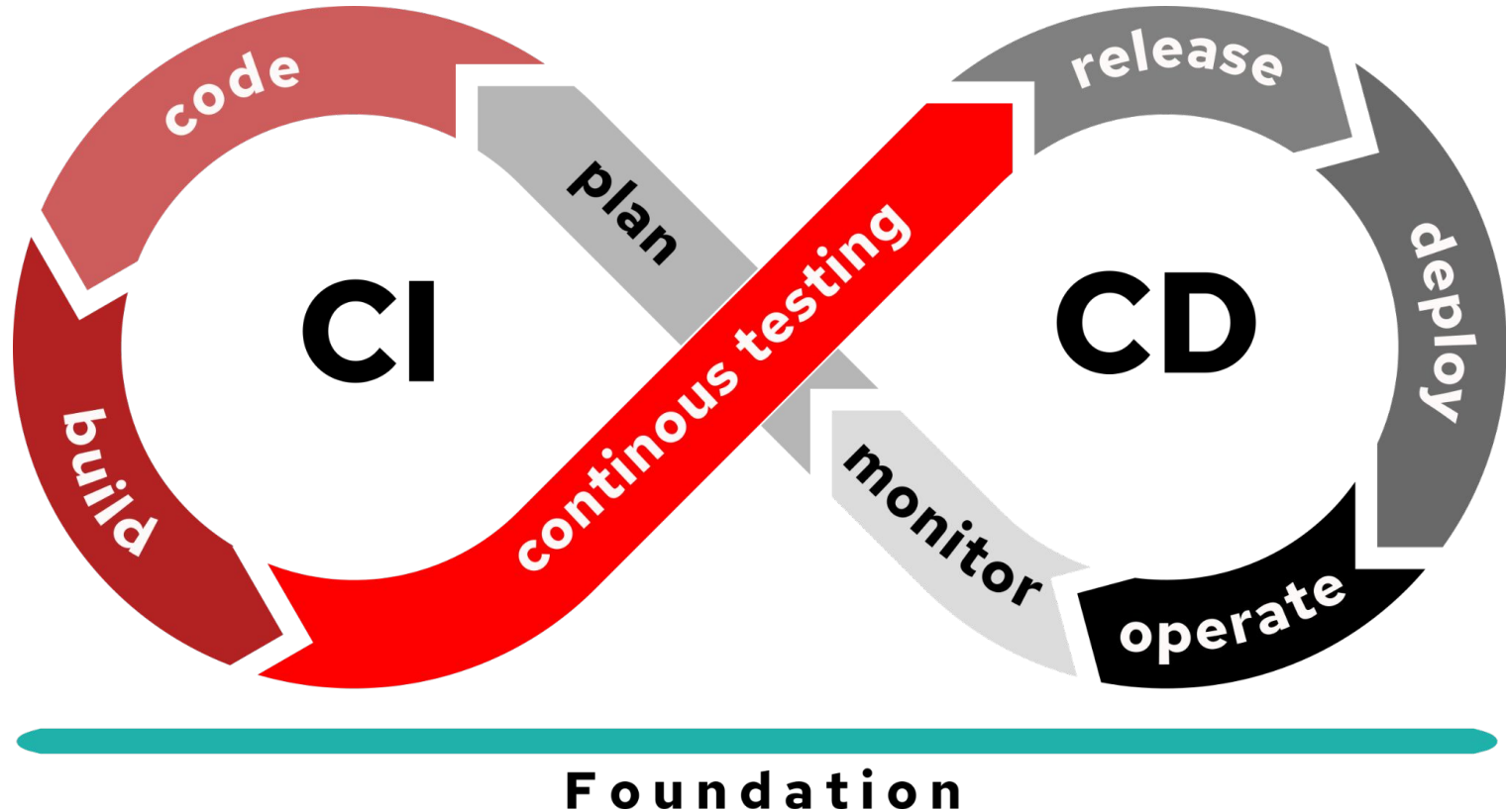




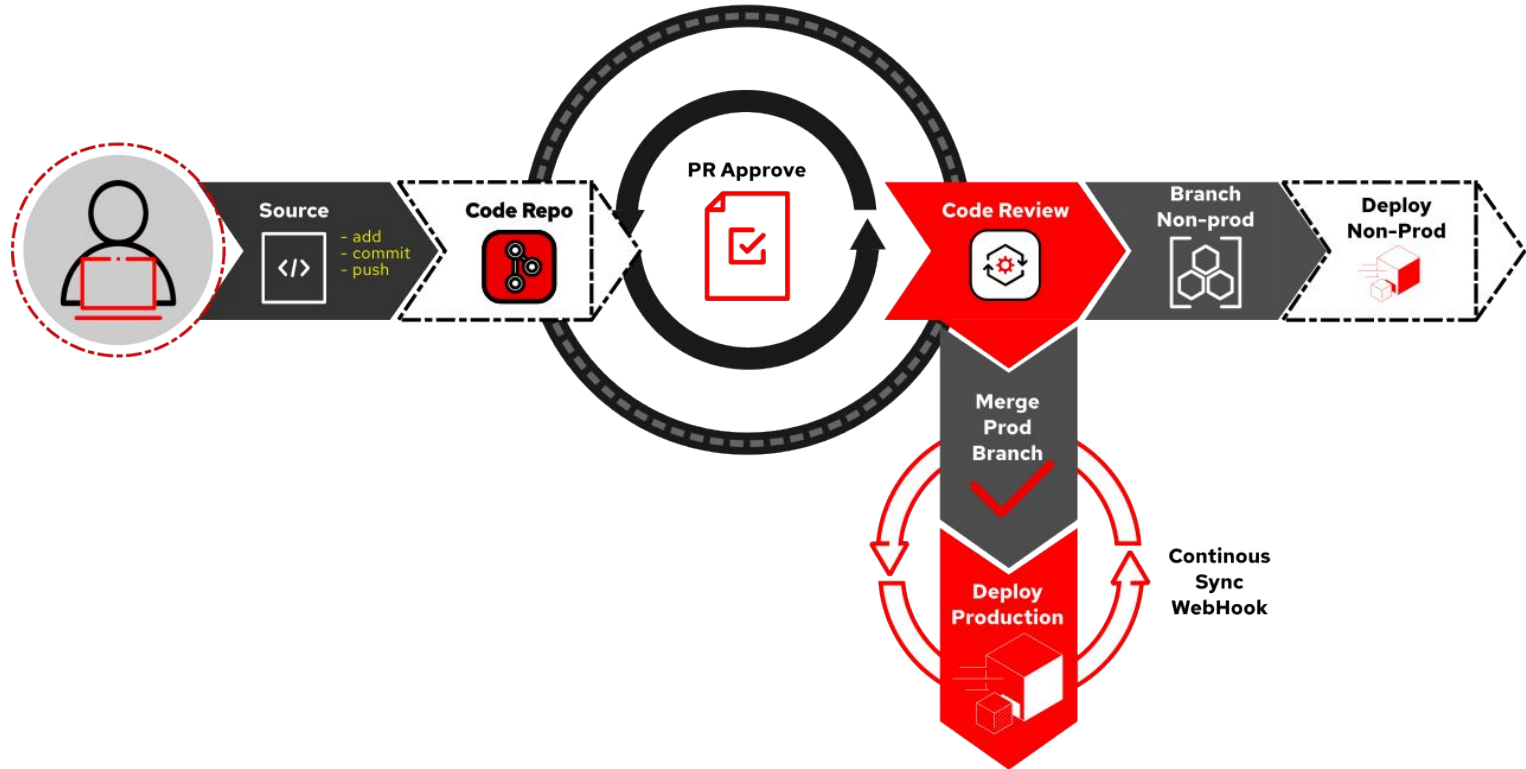
# Cross-Organization Automation Governance



# Continuous Integration and Delivery CI/CD



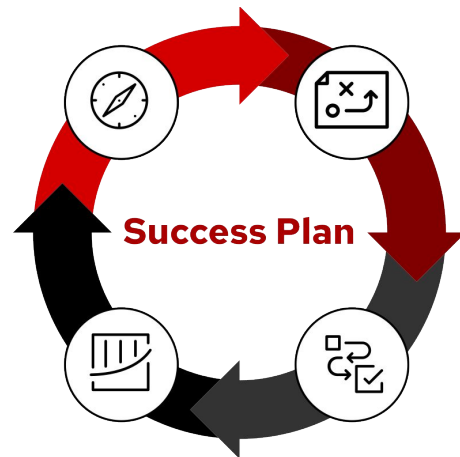
# GitOps LifeCycle



# Recommended Practices

**Is managing system configuration through machine-readable files.**

- Store configurations in Git from the start
- Use a consistent and logical directory structure
- Use templates to enhance readability and maintainability
- Implement Git workflows (branches, PRs)
- Make your playbook your documentation
- Test changes in a non-production environment
- Use CI/CD pipelines for deployment



# Thank you



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