

Connect

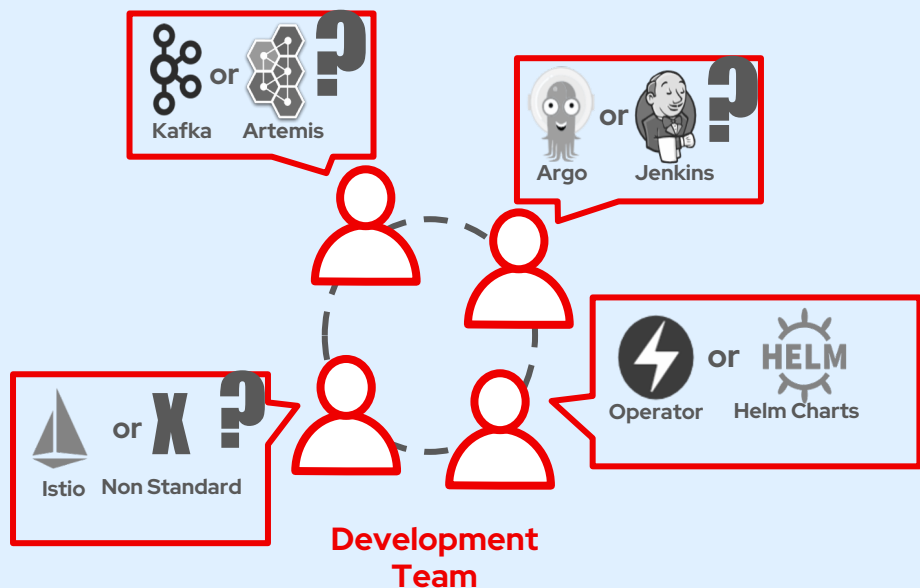
(self-service) Secure Application & Developer onboarding on OCP



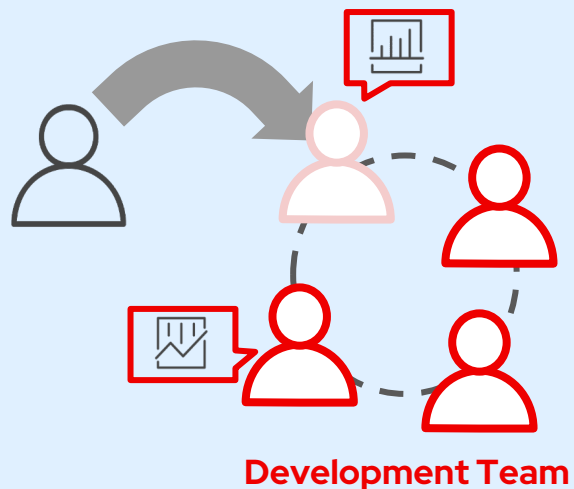
Patrik Plachý
Senior Solution Architect

Development teams are under pressure

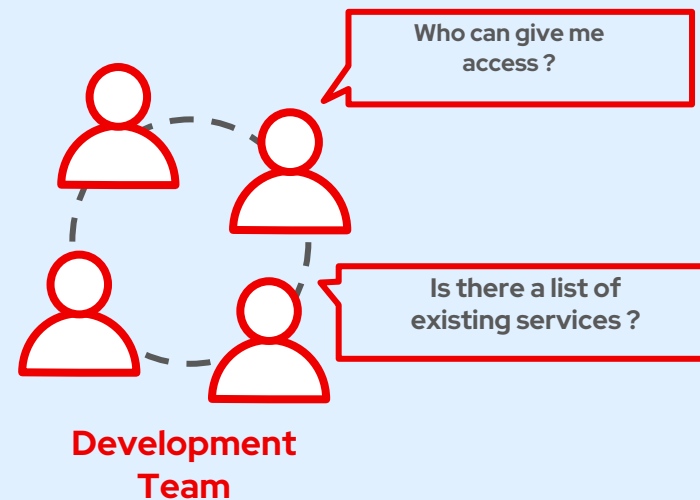
Analysis Paralysis - too many choices



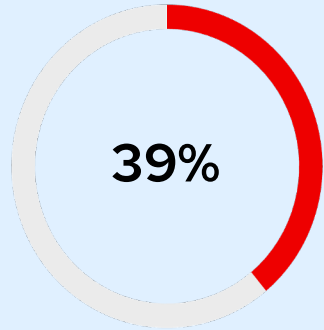
Onboarding Chaos



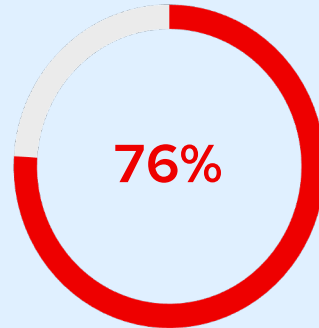
Lack of Standardization



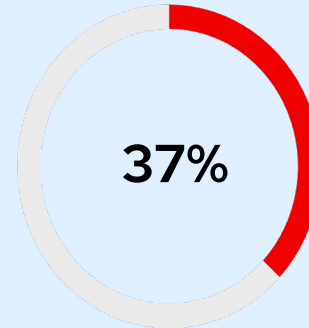
Impact of cognitive overload on productivity



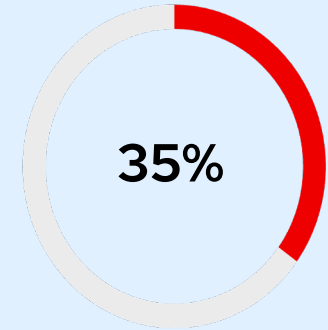
Increasing workload / demand from other teams leads to increased overhead.



More than three-quarters of organizations say the **cognitive load is high enough to negatively impact productivity.**¹



Adapting to the pressures of digital transformation is third biggest challenge.¹



Learning skills to adapt to new technologies and approaches.¹

Securing the Software Supply Chain - Why?

Software supply chain attacks: a matter of when, not if

Ransom paid but a mere fraction to the overall downtime
and recovery costs of a data breach



742%

average annual increase in software
supply chain attacks over the past 3
years ¹

45%

of organizations worldwide will
experience supply chain
attacks by 2025 ²

1 in 5

data breaches are due to a
software supply chain
compromise ³

71%

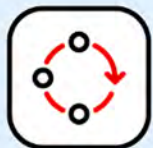
YoY increase in cost of
average ransom
payment ⁴

Architecture

Component overview



Red Hat OpenShift GitOps



Red Hat OpenShift Pipeline



OpenShift Data Foundation



Red Hat Quay



Red Hat Trusted Artifact Signer



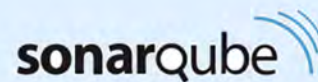
Red Hat Developer Hub



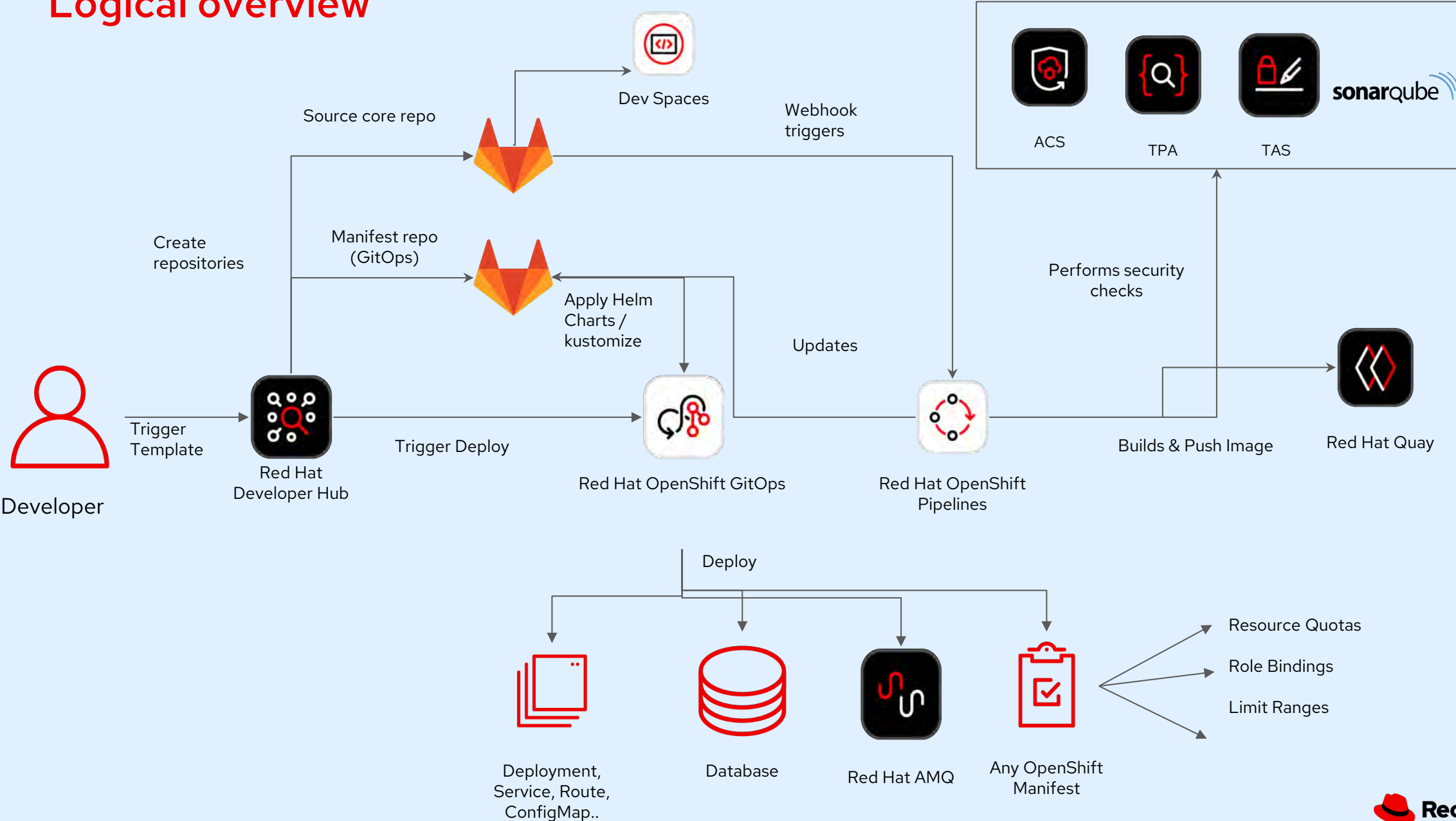
Red Hat Trusted Profile Analyzer



Red Hat Trusted Application Pipeline



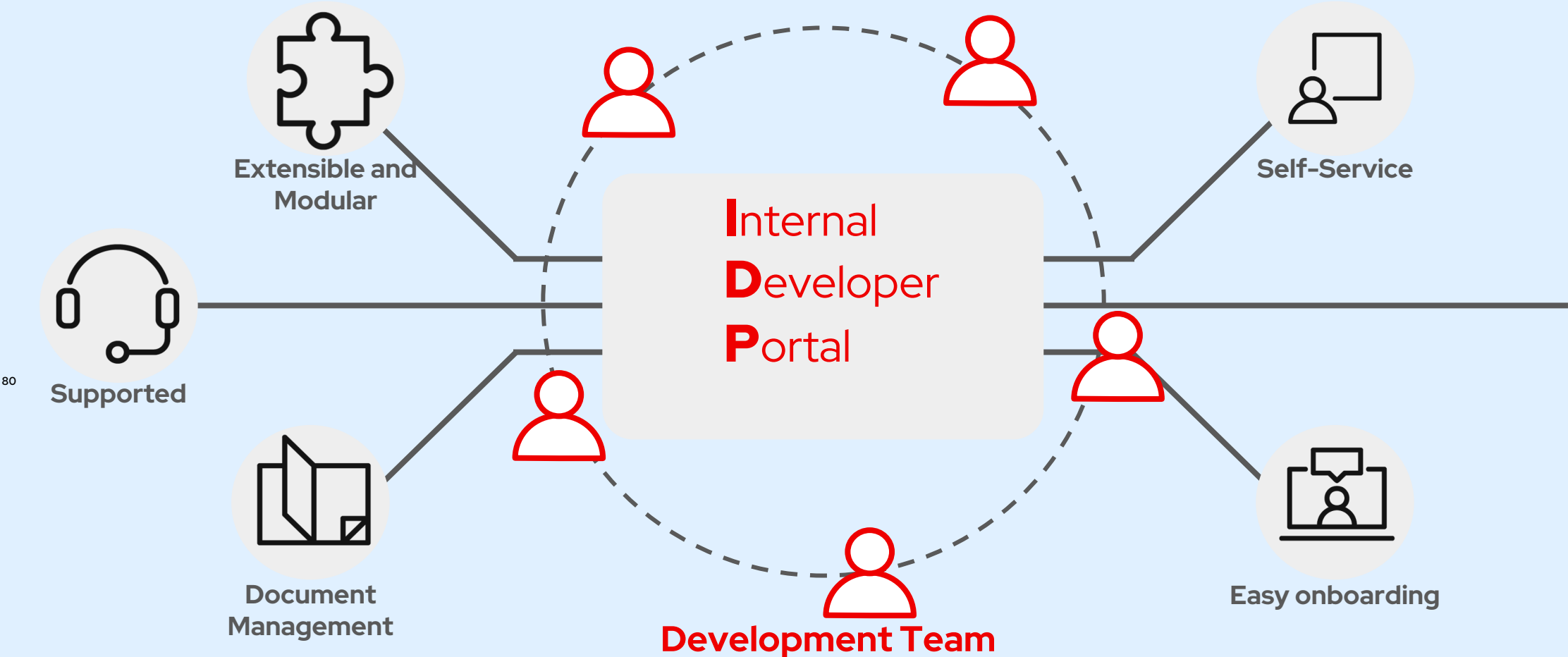
Logical overview



Components

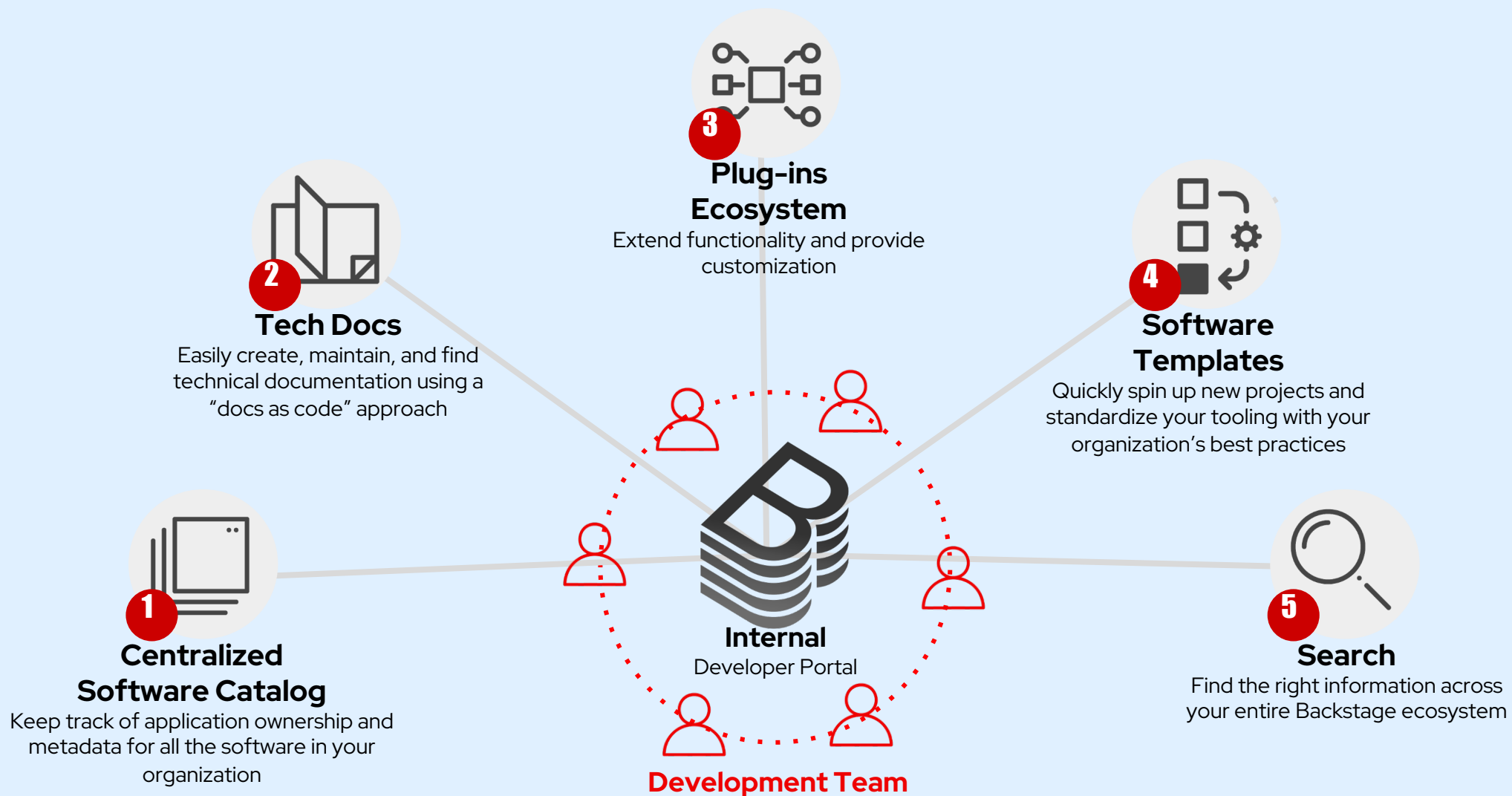
Challenges: Solution: Internal Developer Portal

Requirements to boost the development team productivity



80

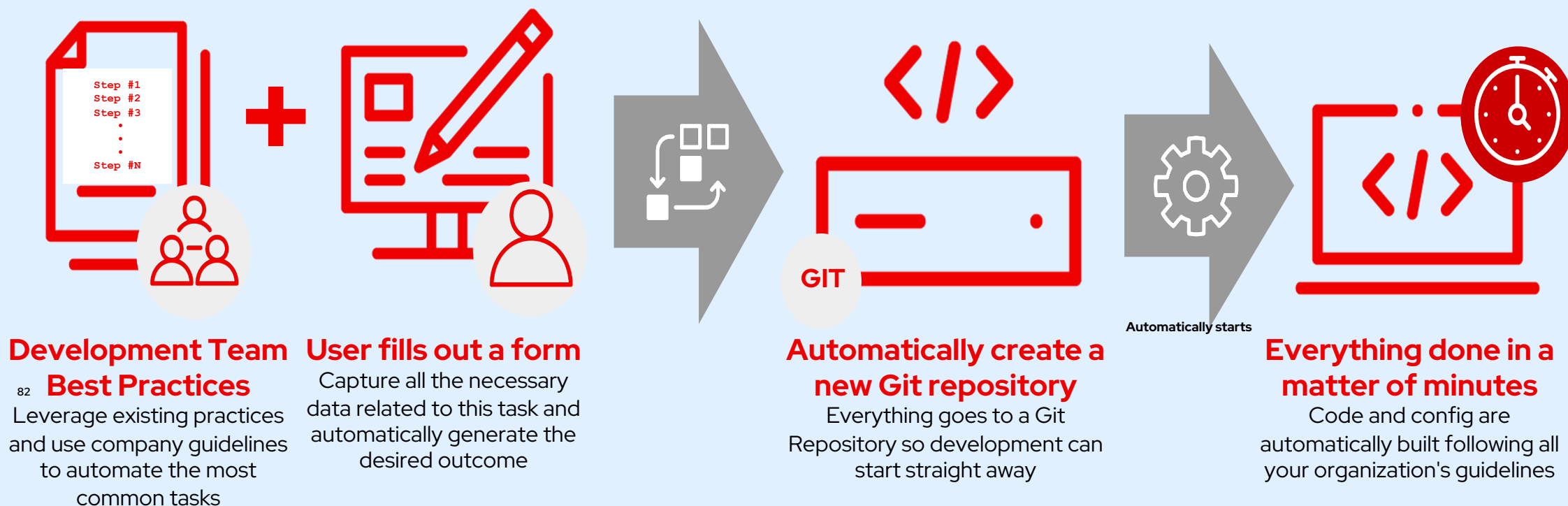
What is CNCF Backstage?: The 5 pieces



What is CNCF Backstage? : Software Templates

Simplified Onboarding with Software Templates

Quickly spin up new projects and standardize your tooling with your organization's best practices



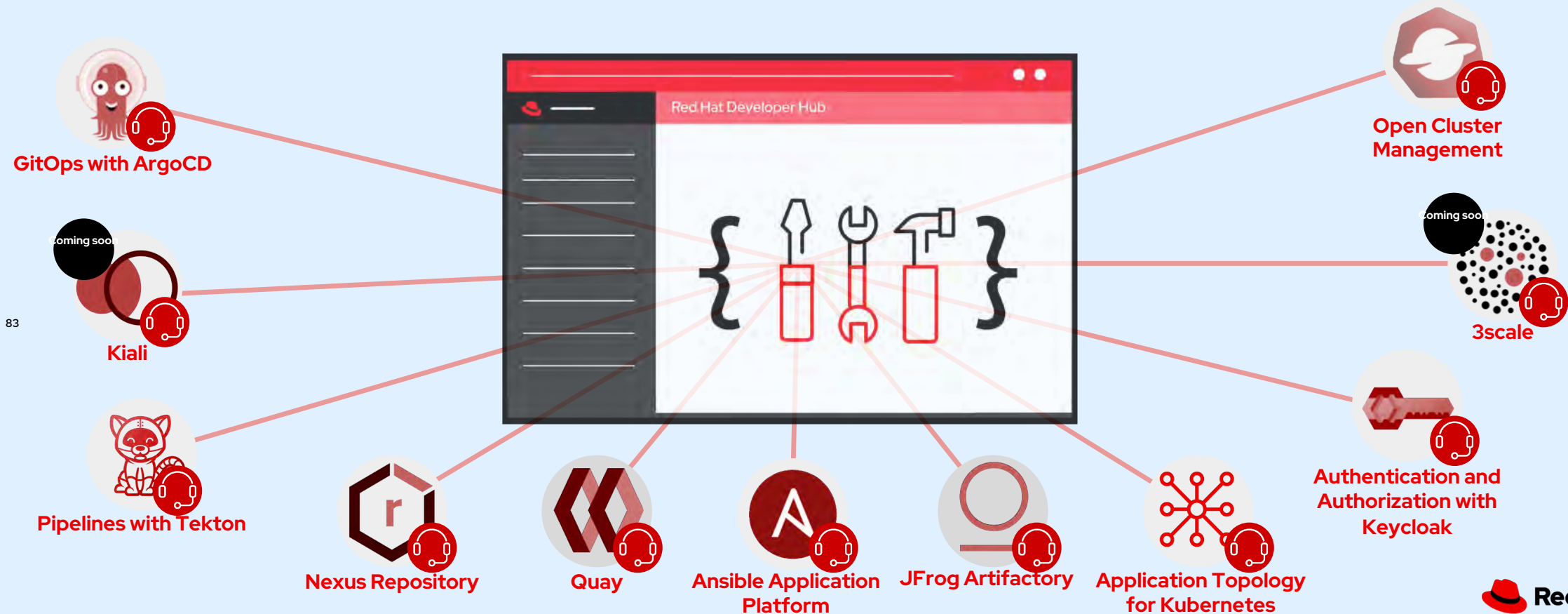
Red Hat Value Added: Support for Red Hat Plug-Ins



Red Hat
Supported

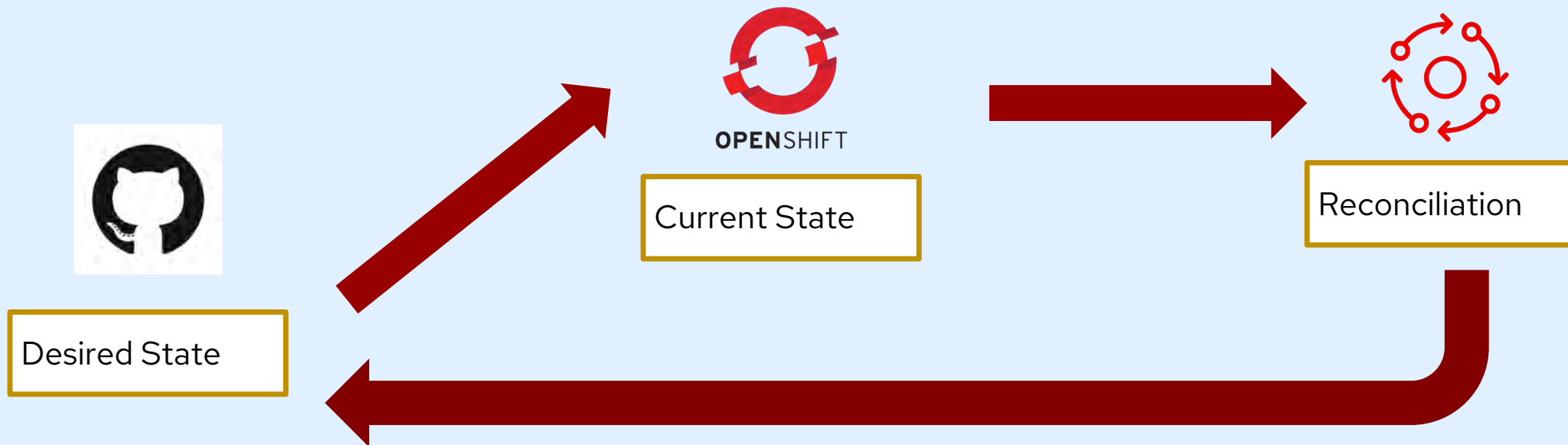
Supported for Red Hat Plug-ins

Red Hat is continuously adding new Red Hat plug-ins to Developer Hub

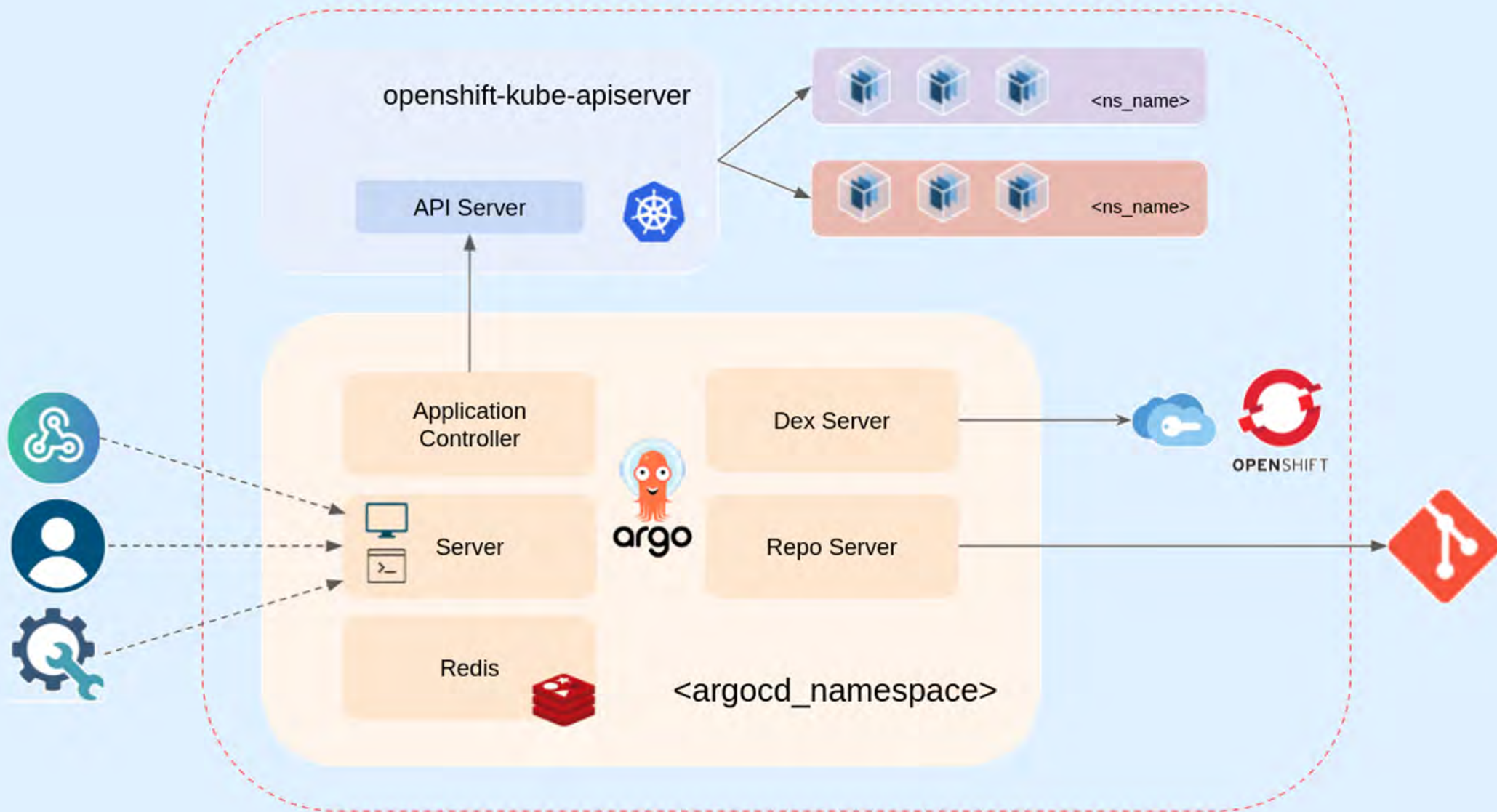


What's GitOps?

GitOps is a set of practices that leverages Git workflows to manage infrastructure and application configurations. By using Git repositories as the source of truth, it allows the DevOps team to store the entire state of the cluster configuration in Git so that the trail of changes are visible and auditable.

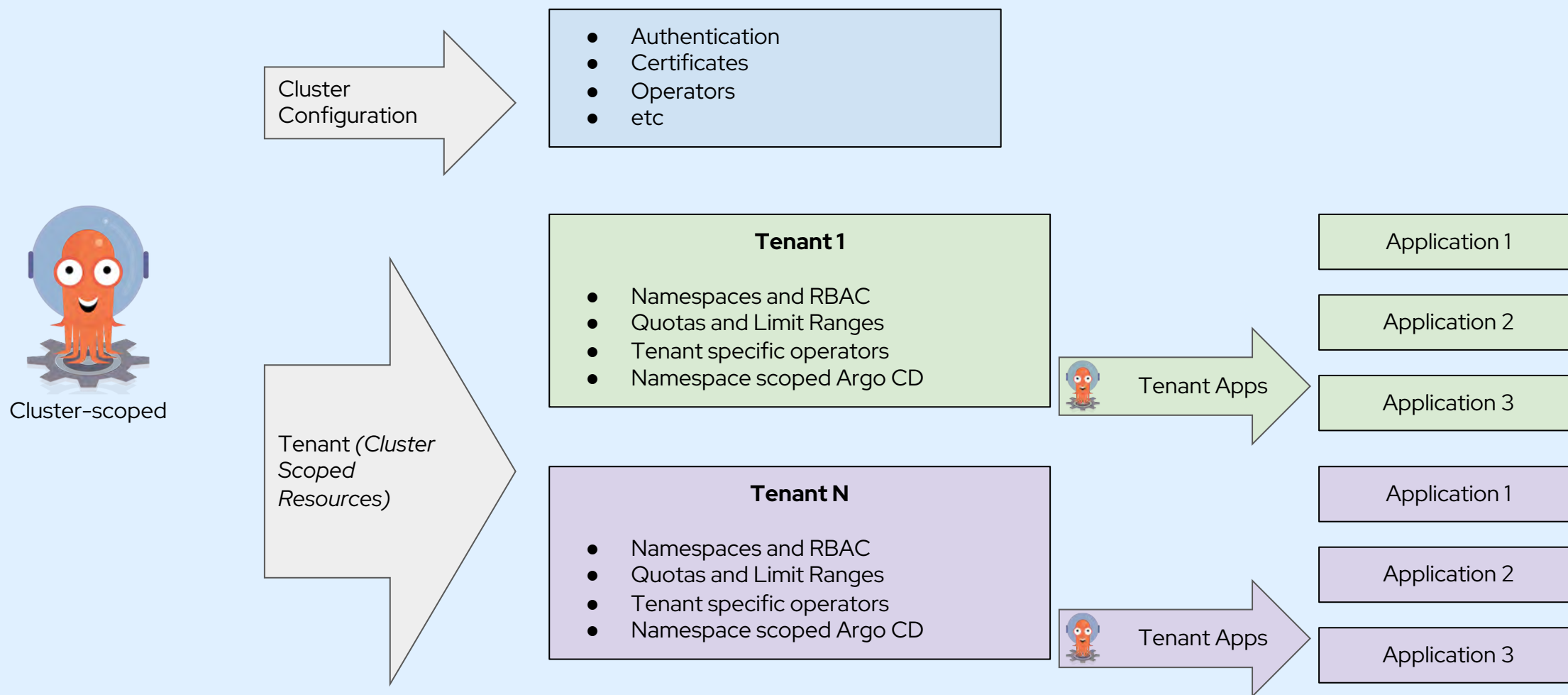


Argo CD Architecture

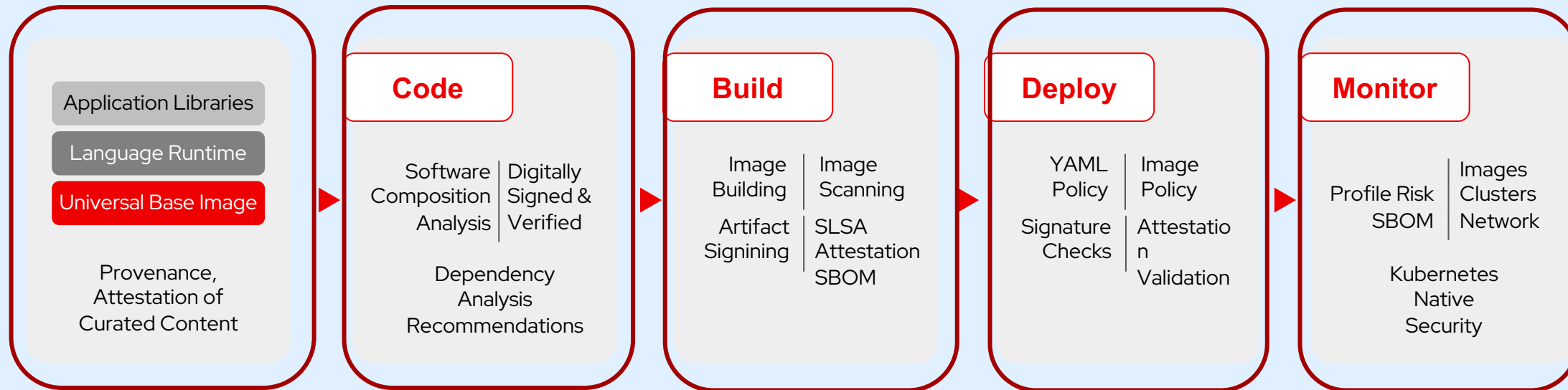


Argo CD Multi-Tenancy

GitOps In A Multi-Tenant Cluster



Red Hat Trusted Software Supply Chain



Start by using Supply Chain Levels for Software Artifacts (SCSA) to form

87

- Only build from signed and verified SBOMs and VEX files.
- Only use signed and verified images to manage your risk profile.
- Only deploy signed and verified artifacts without some additional steps.
- Monitor vulnerability scanning and policy enforcement.
- Attest the integrity of your artifacts and build pipelines Supply Chain Levels for Software Artifacts (SLSA)
- Create SBOMs in the build process so you know what is used.
- Attest the integrity of your artifacts and build pipelines Supply Chain Levels for Software Artifacts (SLSA)



Connect

Thank you



linkedin.com/company/red-hat



facebook.com/redhatinc



youtube.com/user/RedHatVideos



twitter.com/RedHat