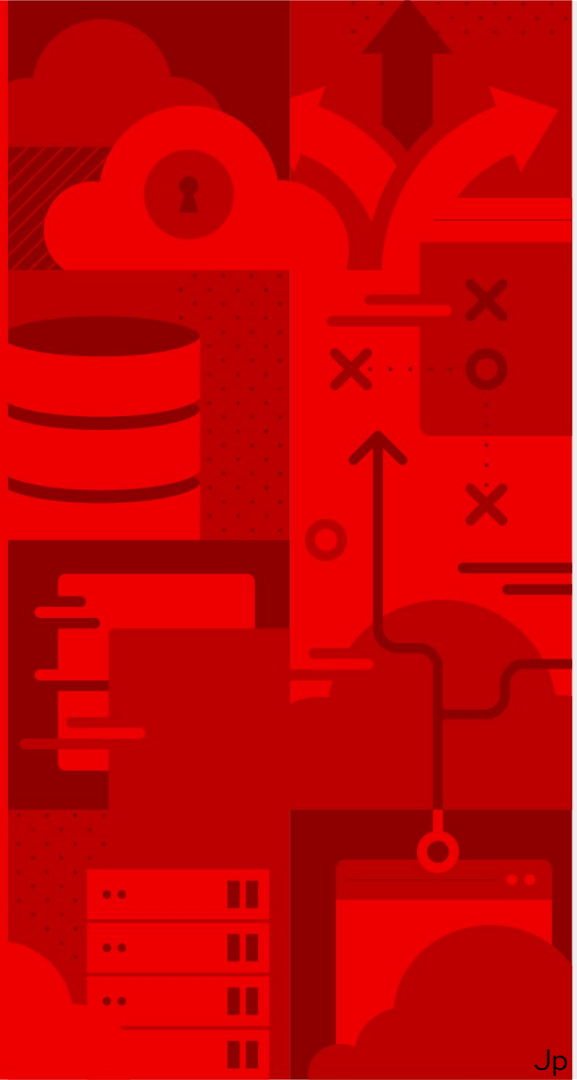


OpenShift & Kubernetes Show-and-Tell Series | Extending the Value of Your Investments

From first-mile multicluster provisioning to last-mile application delivery with Red Hat Advanced Cluster Management for Kubernetes and Red Hat OpenShift GitOps

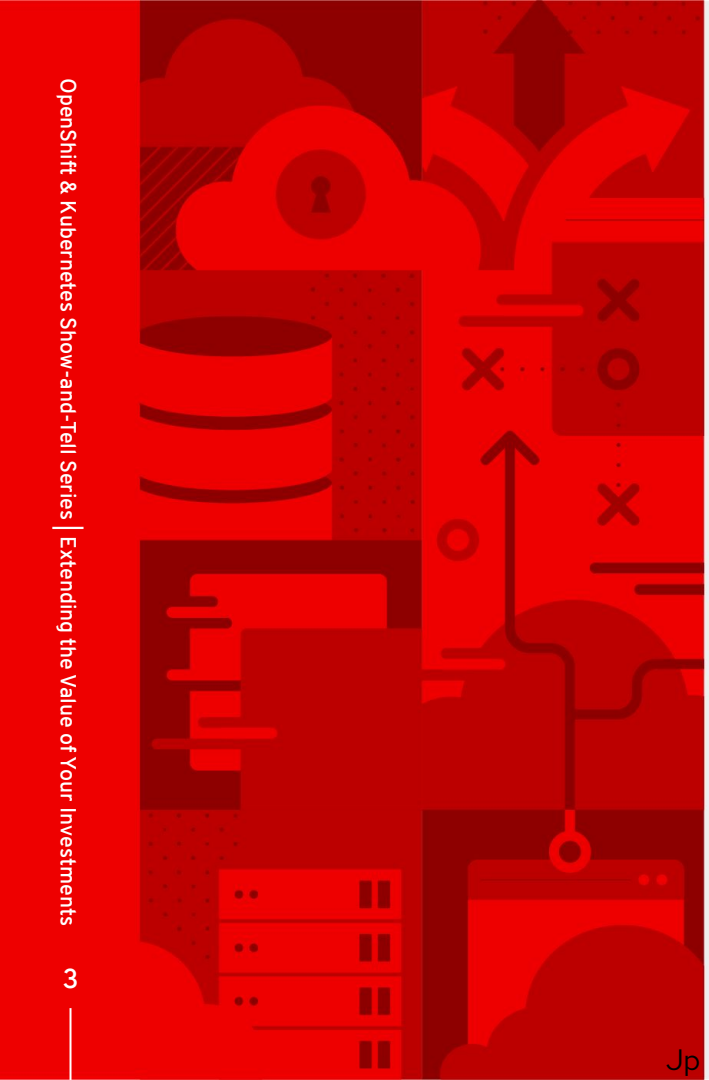
Girish Krishnan
Principal Architect

Vinay Bhalerao
Sr Solutions Architect

Red Hat

OpenShift & Kubernetes Show-and-Tell Series

- Please direct your Q&A into the primetime forum.
- We have technologists from our Hybrid Cloud business unit and the field monitoring the Q&A
- Any outstanding questions will be addressed at the end of the presentation or responses will be facilitated after the briefing.
- The content will be made available after the call on the Red Hat BrightTALK channel.
- For questions regarding these sessions, please contact your Red Hat account team



From first-mile multicluster provisioning to last-mile application delivery with Red Hat Advanced Cluster Management for Kubernetes and Red Hat OpenShift GitOps

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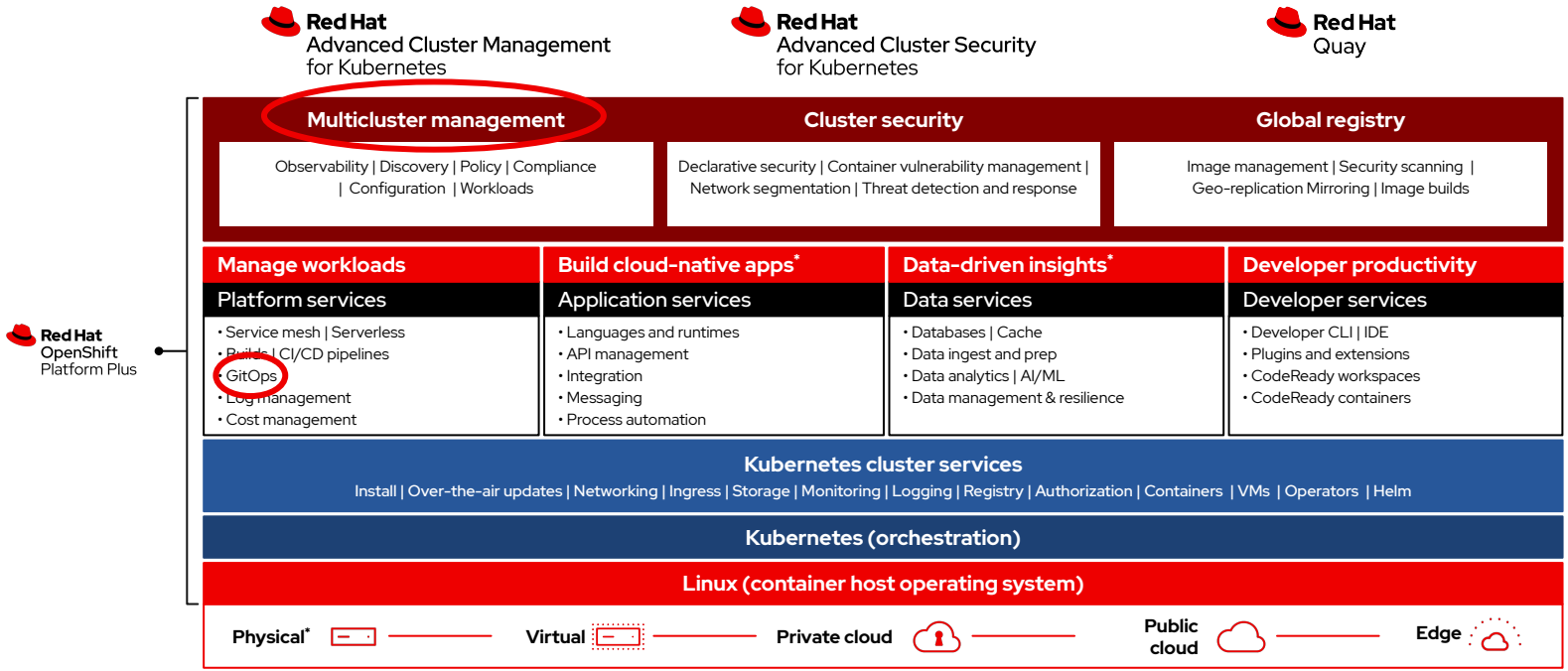
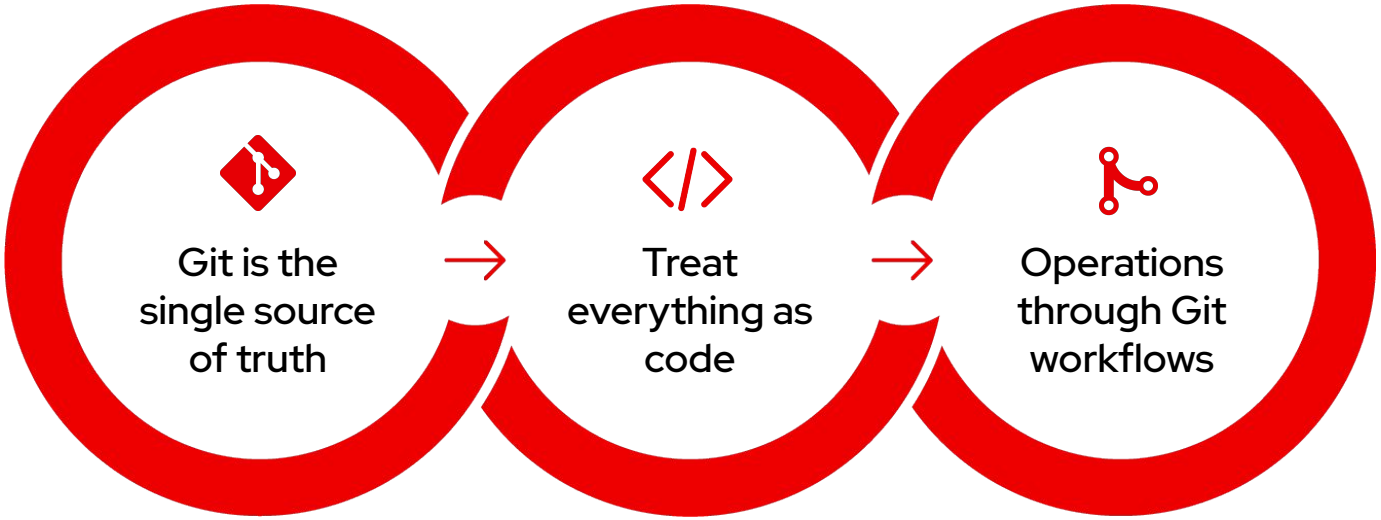
Draw Me a Picture!



* Red Hat OpenShift® includes supported runtimes for popular languages/frameworks/databases. Additional capabilities listed are from the Red Hat Application Services and Red Hat Data Services portfolios.

What is GitOps?

An developer-centric approach to Continuous Delivery and infrastructure operation



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Why GitOps?

Standard Workflow

Familiar tools and Git workflows from application development teams

Enhanced Security

Review changes beforehand, detect configuration drifts, and take action

Visibility and Audit

Capturing and tracing any change to clusters through Git history

Multi-cluster consistency

Reliably and consistently configure multiple Kubernetes clusters and deployment

OpenShift GitOps

Declarative GitOps for multi-cluster continuous delivery

Multi-cluster config management

Declaratively manage cluster and application configurations across multi-cluster OpenShift and Kubernetes infrastructure with Argo CD

Automated Argo CD install and upgrade

Automated install, configurations and upgrade of Argo CD through OperatorHub

Opinionated GitOps bootstrapping

Bootstrap end-to-end GitOps workflows for application delivery using Argo CD and Tekton with GitOps Application Manager CLI

Deployments and environments insights

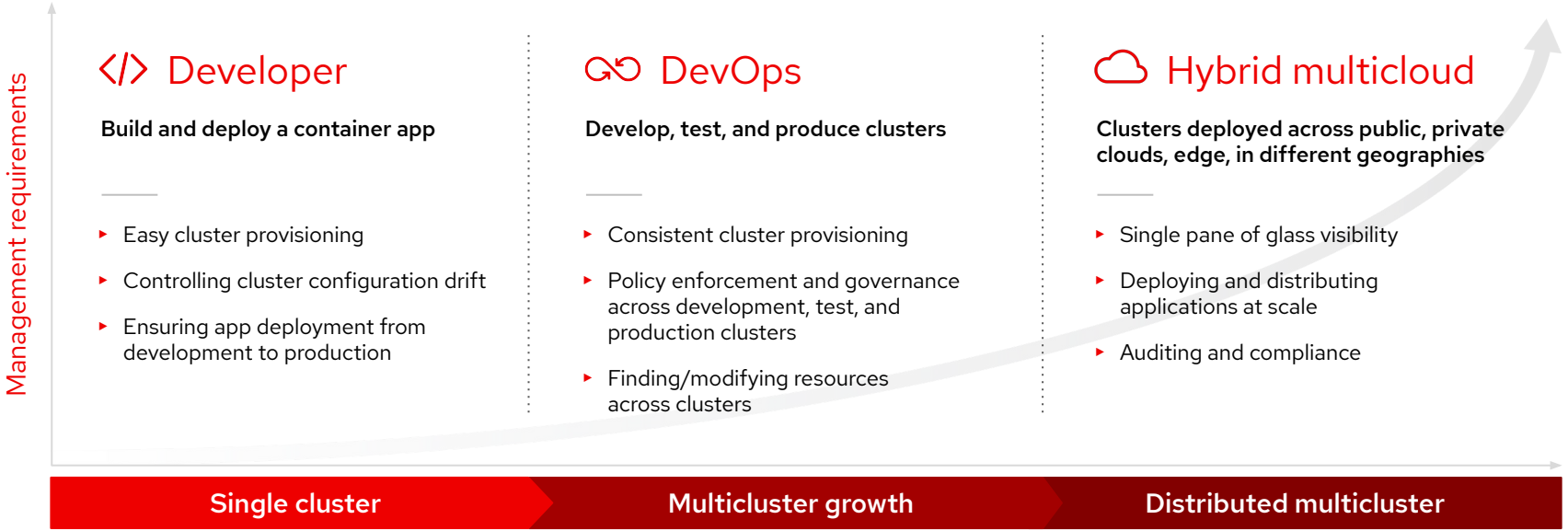
Visibility into application deployments across environments and the history of deployments in the OpenShift Console

Powered by argo

Red Hat

Multicluster management challenges

How do I normalize and centralize key functions across environments?



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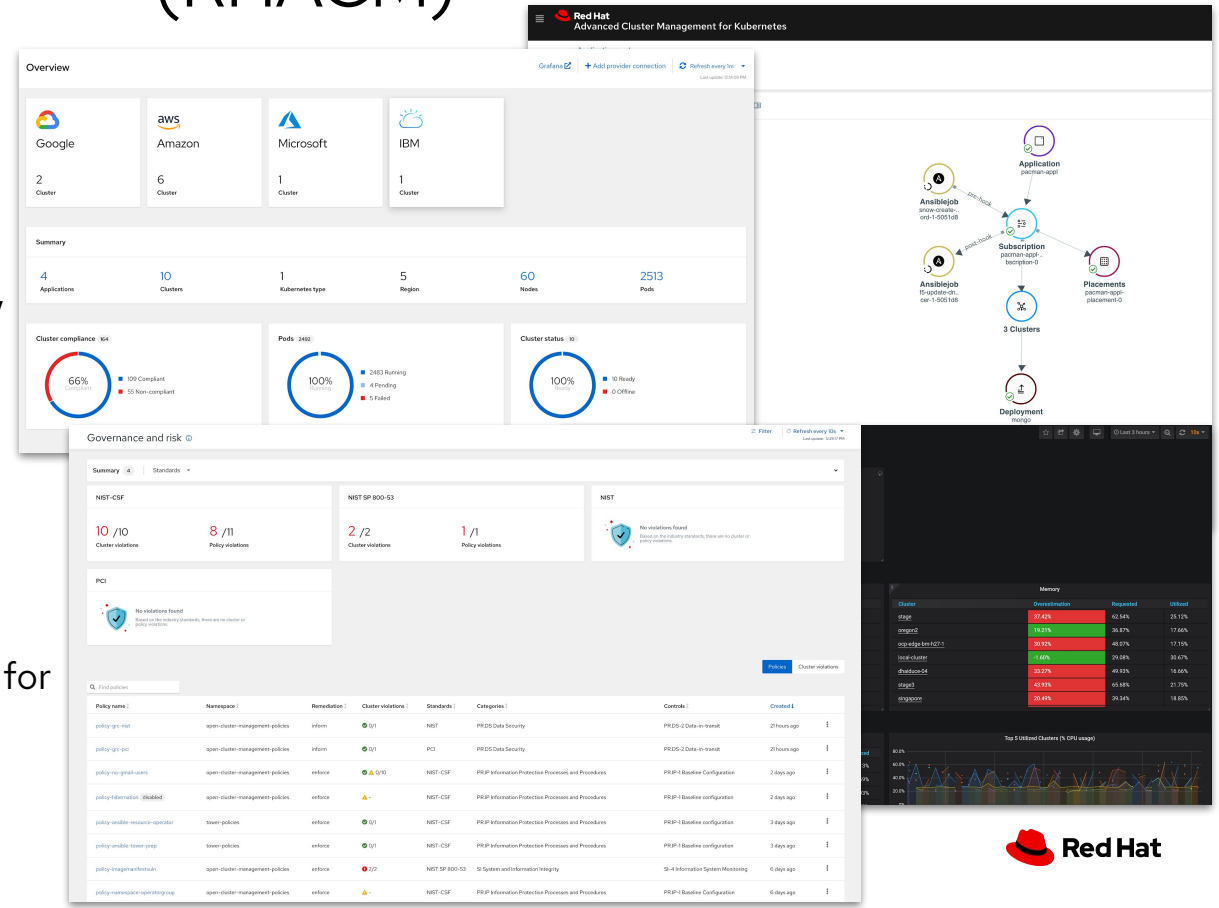
Red Hat Advanced Cluster Management for Kubernetes (RHACM)

- Multicluster lifecycle management
- Policy driven governance, risk, and compliance
- Advanced application lifecycle management
- Multicluster observability for health and optimization



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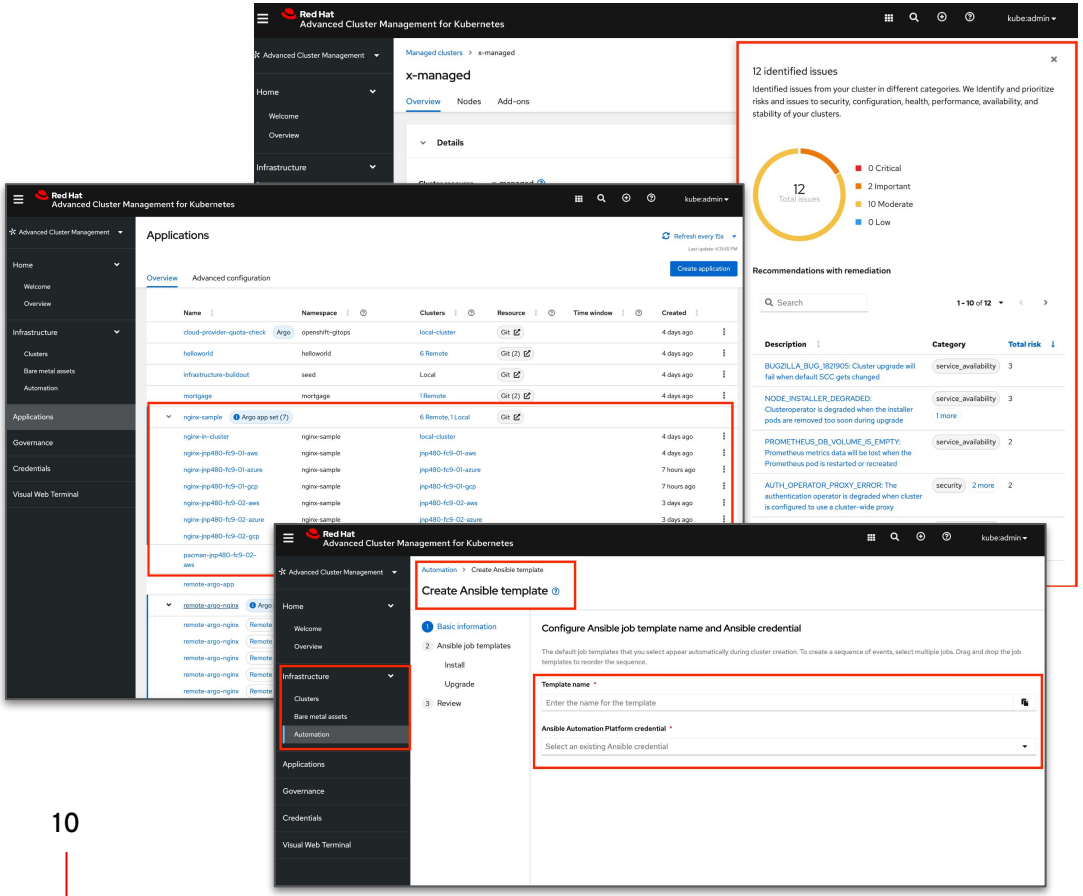
What's new in RHACM 2.3



Expand Portfolio and Embrace Open Source

- RHACM is now **Fully Open Source**
  - http://open-cluster-management.io/
- Red Hat Ansible Automation Platform Integration **is now GA**
  - Cluster Lifecycle pre/post hook
  - Governance Risk and Compliance (GRC)
    - Trigger remediation based on policy violations
    - Run once, or continuously
  - Application Lifecycle pre/post hook
- RH OpenShift GitOps (**Argo CD**) full integration with Application Lifecycle
- More GRC policies!
  - Operator Install Policy - Black Duck Operator
  - FIPS Policy
  - Policy to install Scribe (data replication)
  - And many more. Available in GitHub Repo

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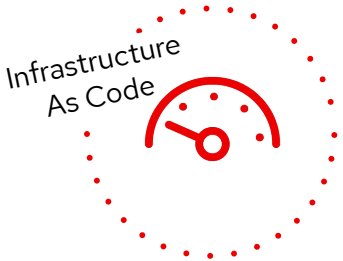
Tell me what you are about to show me

Infrastructure Provisioning

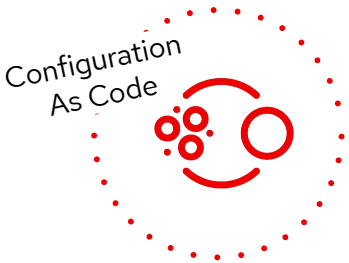
Central provisioning of OpenShift Clusters



Using Kubernetes CRs/GitOps practices to manage infrastructure

Cluster Configuration

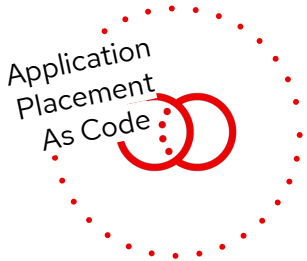
Standardize Clusters Config At Scale



Utilizing GitOps and RHACM policies or ArgoCD integration to provide configuration as code.

Application Rollout

Put applications anywhere



RHACM App-Subs functions for automated application lifecycle

Closing Thoughts

Accelerate development to production

Self-service provisioning allows app dev teams to request clusters directly from a catalog removing central IT as a bottleneck.

Increase application availability

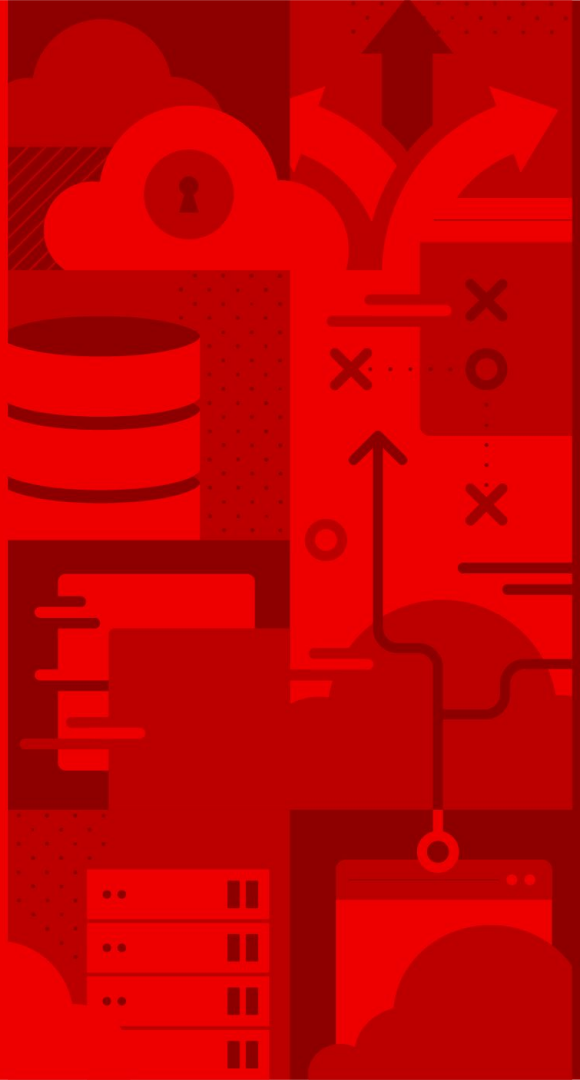
Placement rules can allow quick deployment of clusters across distributed locations for availability, capacity, and security reasons.

Reduce costs

Centralized management of clusters reduces operational cost, makes the environment consistent, and removes the need to manually manage individual clusters.

Ease compliance

Policies can be written by the security team and enforced at each cluster, allowing environments to conform to your policy.



Q&A

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Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.

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