

SOLUTION BRIEF

Simplify multicluster Kubernetes management with Rancher on NetApp HCI

Drive your business forward,
empower DevOps, and simplify IT



Delivering modern, cloud-native applications

Keeping up in today's world requires the ability to quickly release and update applications when and where you want to. These modern, cloud-native applications run and scale reliably and predictably in cloud environments, taking advantage of technologies such as microservices and containers. But many companies are realizing that not all applications can or should be developed in a public cloud. Data governance, regulatory compliance, and cost concerns are pressuring companies to bring application development on premises. To make this move, organizations today are looking to modernize their infrastructure through digital transformation projects and use of the gold standard: containers and Kubernetes. DevOps teams have quickly adopted cloud-native technologies to enable rapid development, but IT operations has struggled with delivering the on-premises infrastructure that modern, cloud-native applications demand.

What companies today need is the simplicity of the cloud in the data center. This environment must enable building, deployment, and management of applications more rapidly and more securely, with faster development iterations and a supporting infrastructure. It must be enterprise class, easy to consume and to manage, and resilient. It also must have high availability, scale easily and linearly, and help support multiapplication development and deployment without performance degradation, across multiple hybrid clouds.

NetApp HCI + Rancher

Rancher on NetApp HCI is the solution that you have been waiting for. First, start with NetApp HCI, a modern private cloud infrastructure foundation. You get fluid scaling to meet your changing demands, automation so that you can scale your infrastructure without scaling your team, and guaranteed performance for all your applications.

Next, add push-button deployment of Rancher for multicloud Kubernetes management. Rancher is a complete software stack for teams who are adopting containers. It eliminates the operational and security challenges of managing multiple Kubernetes clusters across any infrastructure, while it provides DevOps

Key Benefits

Easiest enterprise Kubernetes deployment

- Automate deployment and lifecycle management for Rancher on NetApp® HCI.

Single point of sale and support

- Avoid guesswork and simplify support.

Hybrid cloud-ready environment

- Deploy Kubernetes clusters on your premises on NetApp HCI or in your cloud provider environment, all centrally managed.

teams with integrated tools to run containerized workloads. With Rancher, you get all the control and flexibility that you demand with superior enterprise-class Kubernetes solutions, but without being locked into one vendor. You can deploy and use Rancher, free open-source software, with the click of a button in the NetApp Hybrid Cloud Control management plane. If and when you need it, Rancher enterprise support is available with simplified, core-based pricing.

With Rancher on NetApp HCI, you can:

- Drive your business forward
 - Beat the competition by building, deploying, and managing new services faster.
 - Deliver innovative applications to market more rapidly and iteratively.
- Empower your DevOps teams:
 - Get centralized management of multiple Kubernetes clusters. Each cluster can be managed by a DevOps team for building and for deploying applications and their components.
 - Enable simple infrastructure management with robust and extensive code-based APIs and automation.
 - Deliver enterprise-grade Kubernetes with strong security capabilities for policy-based controls and automation for application management.
 - Benefit from the Rancher open-source ecosystem.

- Simplify IT:
 - Turnkey deployment and easy setup with Rancher integration in Hybrid Cloud Control to help get IT going with Kubernetes environments that support multiple DevOps teams.
 - Lifecycle management of the Rancher server management cluster is easy through Hybrid Cloud Control.
 - Automated installation of Trident for user clusters.
 - Deliver performance at scale with simplicity.
 - Consolidate thousands of performance-hungry applications on one cluster without compromising performance, even at scale.

A win-win for IT operations and DevOps

With Rancher on NetApp HCI, both IT operations and DevOps teams benefit. Your IT operations teams can centrally provision Kubernetes services while maintaining control and visibility of all clusters, resources, and security. The provisioned services are then available for use by your DevOps teams to efficiently build, deploy, and manage fully featured containerized applications. In the end, IT operations gets what it needs, DevOps gets what it needs, and your organization attains the key benefits of a successful Kubernetes strategy.

Built on trusted NetApp and Rancher technologies

- **NetApp HCI** is designed for enterprise clouds to deliver infrastructure and platform services with simplicity, dynamic scale, and operational efficiency economics that are equivalent to public clouds.
- **Rancher** is an open-source Kubernetes multicluster management platform with simple, consistent cluster operations; automated policies for security and user management; and a rich ecosystem catalog of services to build, deploy, and scale containerized applications.
- **NetApp Trident** is an open-source project that enables microservices and containerized applications to harness enterprise-class storage services (such as quality of service, storage efficiencies, and cloning) to meet their persistent storage demands.

For more information check out netapp.com/hci and rancher.com.

About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds.

As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services and applications to the right people—anytime, anywhere. www.netapp.com

