How to Accelerate the Deployment of Cloud Native Apps in Hybrid Multicloud Environments

Kubernetes, containers, microservices, and other cloud native technologies enable platform engineering teams to build apps faster and run them anywhere – in datacenters, public clouds and the edge.

Unfortunately, some organizations may have little or no experience with the nuances of Kubernetes, containers and microservices.

As a result, you may need to modernize your skills and knowledge to successfully develop and deploy containerized apps at scale while avoiding Day 2 operational barriers.

Challenges

Configuring and managing a cloud native environment – including storage, networking, monitoring, and Kubernetes lifecycle management – are formidable challenges. Anyone deploying cloud native for the first time is likely to face challenges in four key areas:

- **Deployment and management.** Designing, deploying and operating a full-stack solution requires a lot of time and expertise, especially across datacenters, clouds and edge.

- **Expertise.** Expertise is in short supply. Many solutions in the cloud native arena are open source, making operational support difficult to find.

- **Ecosystem.** Cloud native ecosystems are growing fast and evolving, making it critical to identify technology partners that can help you separate signal from noise.

- **Data.** Container instances are transient and require flexibility to address persistent storage needs for file, object and block storage and different types of databases.

Considerations

Cloud native techniques enable loosely coupled systems that are resilient, manageable and observable. Combined with robust automation, they allow platform engineers to make high-impact changes frequently and predictably with minimal effort.

How Nutanix Helps

Nutanix makes it incredibly easy to deploy a consistent end-to-end production-ready cloud native environment anywhere – in the datacenter, across multiple clouds and at edge locations.

Runs Everywhere

Whether you run cloud native workloads on-premises, in a public cloud, at a service provider datacenter, or at the edge, Nutanix has you covered with consistent management and security across all environments.

Nutanix Kubernetes Platform

Nutanix Kubernetes Platform (NKP) simplifies platform engineering by reducing operational complexity without locking you into a single Kubernetes option. Strategic partnerships with Red Hat, Microsoft, Google Cloud, and AWS enable you to use your preferred Kubernetes platform.

The benefits of NKP include:

- Comprehensive data services

- Nutanix Data Services for Kubernetes (NDK)

- Resilience

- Tightly integrated

- Easy upgrades

Use-case: One-stop Cloud Native with Nutanix

A pharmaceutical company wanted to integrate and connect everything it needed for its cloud native environment. The IT team was concerned about its ability to manage the disparate environment because it was difficult to get support and guidance when problems arose.

With Nutanix, the IT team created a feature-rich, scalable and manageable cloud native environment. Today, the team saves substantial time and effort with a resilient and cost-effective virtualization platform for the Nutanix-validated Red Hat OpenShift Plus solution.

With Nutanix, the company gained a trusted partner that shares best practices and roadmaps and provides help when and where it is needed.

Additional Guidance

For more guidance, download the recently published eBook, The Essential Guide to Navigating AI and Cloud Native Deployments.

This indispensable guide explains what you need to build and deploy AI models that speed-up code and content creation, enrich the customer experience, and strengthen security as well as how to accelerate the deployment of cloud native apps.

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