Reference Article

What Is Hybrid Cloud Infrastructure?

NetApp® HCI is advancing. While its hardware is a hyperconverged infrastructure, its next evolution incorporates consistent interconnection across private, public, and multicloud environments. Adjoining this is the Data Fabric strategy which bridges all these capabilities and data services across core, edge, and multiple clouds by connecting on-premises resources with cloud-connected flash, building clouds in which data can be managed across private and multiple public clouds as a single resource.

BUILDING A MULTICLOUD ENVIRONMENT

The ability to access a choice of all the biggest clouds is the cornerstone of this new environment.

- **Public cloud:** where a service provider makes resources, such as compute, third-party virtual machines (VMs), applications, or storage, available to the general public over the internet. Public cloud services may be free or on a pay-per-usage model. The public cloud has provided an example of supporting changing requirements with ease, with immediate responsiveness to change requests and performance modifications.
- **Private cloud:** end users experience the same ease of use offered in consuming resources from the public cloud, but from an internal platform. An effective private cloud will be able to deliver predictable performance and the ability to modify the performance on demand. Based on the diverse and changing growth patterns of multiple applications, the IT team needs the private cloud platform to scale with a great deal of agility.
- **Hybrid cloud:** this internal platform where end users to experience the same ease of use offered when consuming public cloud resources—such as Amazon Web Services (AWS) or Microsoft Azure each bring differentiated capabilities that bridge on-premises with the power of multiple clouds. Using a combination of public clouds, on-premises computing, and private clouds in your data center means that you have a hybrid cloud infrastructure.
- **Multicloud:** usage of multiple cloud computing and storage services in a single, heterogeneous architecture. This can refer as well to cloud asset distribution, software, applications, et all, across several hosting environments. With a typical architecture, utilizing a multicloud environment aims to eliminate the reliance on any single cloud provider. It differs from hybrid cloud by referring to multiple cloud services versus multiple deployment modes (public or private).

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BENEFITS OF A HYBRID CLOUD INFRASTRUCTURE

While it appears that a hyperconverged infrastructure's architectural design to simplify management of a traditional 3-tier IT stack through a combination of storage, compute, networking, and hypervisor was a tremendous leap forward, it still had room to grow. Adding a multicloud environment to create the Hybrid Cloud Infrastructure's extension of public clouds into a customer's data center is the next evolutionary step.

- Connected to the Data Fabric—an architecture and set of data services that provide consistent capabilities across a choice endpoints spanning on-premises and multiple cloud environments. Data Fabric simplifies and integrates data management to excel workloads on hyperconverged infrastructures only to a Hybrid Cloud Infrastructure.
- Part of the Hybrid Multicloud Experience—combined with the Data Fabric, Hybrid Cloud Infrastructure is elevated to a new experience; bringing together the best of public cloud and private cloud for a consistent user journey. Only organizations with NetApp HCI will be empowered to increase productivity, maintain simplicity, and deliver more services at scale.
- Partnerships with cloud providers (Google, AWS, and Microsoft) foster a true degree of choices so the best strategies can be implemented with the right provider.

CONTINUE READING ABOUT HYBRID CLOUD INFRASTRUCTURE

The days of silos and months of provisioning time are over—private clouds are responding at the speed of the public cloud. Advantage comes with creating a Hybrid Cloud Infrastructure based on frictionless consumption, self-service, automation, programmable APIs, and infrastructure independence. This advantage ensures customers can unleash agility and latent abilities in their own organizations to thrive with data.

Only NetApp HCI is able to drive business success and meet rising user expectations. Build your clouds and accelerate new services with NetApp HCI.

About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation, and optimize their operations. For more information, visit www.netapp.com. #DataDriven.

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