



Solution Brief

What Is The Private Cloud?

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Around the globe, IT teams are being asked by their end users to match the agility of the public cloud. The ease by which public cloud resources are consumed has set the new standard that internal IT teams are now being held to. Meeting those expectations can be difficult to deliver with internal resources that were not designed to deliver that type of service.

The public cloud has provided an example of supporting changing requirements with ease, with immediate responsiveness to change requests and performance modifications. With a 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.

To deliver these expectations to an end user, an IT team may need to consider building the private cloud from a new platform that can scale with ease, deliver predictable performance to each workload, and take advantage of advanced automation to eliminate manual tasks.

How Does Private Cloud Work?

The private cloud is an internal equivalent to the public cloud. This is driven from the ability to easily consume and modify resource allocation through a self-service method that requires little interaction with users' internal IT teams. Many end users are looking to reduce the time it takes to provision new resources or modify existing instances to match changing requirements. With a private cloud, the desire is to reduce the reliance on external platforms that are not managed by the internal team, while delivering the responsiveness the end users are demanding.

To deliver a private cloud solution, an internal IT team needs to start from the [end-user experience](#) and align the technology resources to meet the associated requirements. To the end user, the way they request and allocate resources is through a self-service interface that gives them the ability to instantly select the resources they need for their project and have them quickly allocated for use. For the IT team, automation becomes a tool to reduce the overhead required to respond to those user requests, allocating available resources to the end users on demand.

With a private cloud, the friction between end users and the IT team can be reduced. By reducing the process of opening trouble tickets for each request, end users can spend more time being productive and less time waiting for resource availability. IT teams can spend less time addressing less strategic requests for provisioning and more time on strategic technology decisions.

Why is Private Cloud Important?

Today's changing consumption preferences are driven by the modern application-development environment. As companies are driving digital transformation efforts and building out new, highly distributed applications, the development requirements are being met more easily by the public cloud today. Private clouds, on the other hand, are built to address the needs of digital transformation and the responsiveness to changing customer requirements in the IT ecosystem. The goal is to be able to deliver the ease of use that end users expect without leaving the confines of the internal IT environment.

Benefits of Private Cloud

Allowing the freedom of self service found in the public cloud to be applied to an internal private cloud makes it easier for end users to consume the internal resources that are available to them.

With a private cloud instance available for the end users to consume resources in the same fashion as the public cloud, more choices are opened for teams to determine where applications should reside. Enterprise IT teams today are striking a smarter balance between on-premises workloads—running on a private cloud—and workloads in the public cloud. The success of this hybrid cloud approach requires a private cloud that can deliver [agility and self-service](#)—and full control over performance and availability—while reducing costs versus public cloud.

Private Cloud Use Cases

There may be situations where building and delivering applications on a private cloud are more desirable.

Regulatory Compliance and Security

When tighter control over data and accessibility is required, the ability to combine end-user self-service with internal control of hardware is critical to success. With a private cloud solution, IT organizations are able to deliver the consumption model end users are requesting while maintaining control over the platform and limiting access to sensitive data.

Cost Control

While the ease of consuming public-cloud resources remains high to end users, as the use of public cloud begins to sprawl, the costs may not be aligned with the benefits. By delivering a private cloud, it is possible to maintain better control over the resource costs while still delivering the self-service model end users are striving for.

Application Development and Testing

With the sporadic nature of spinning up and down resources for [development-and-test](#) efforts, the self-service nature of the public cloud matches perfectly with the development lifecycle. By delivering a private cloud platform, internal resources can be consumed in alignment with the development process without clogging up the traditional ticketing process many IT organizations use today.

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