

HPE Brings Multi-Cloud Storage to the Enterprise

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Companies in every industry and from every corner of the world are increasingly adopting cloud storage, addressing use cases such as backup, archiving and disaster recovery. More than 96% of organizations we recently surveyed are housing at least some of their data in the cloud, up from just 65% five years before. Firms deploying storage in the cloud are looking to increase IT agility and workload scalability, while taking advantage of a more flexible, pay-as-you-go consumption model.

But for enterprises and mid-sized organizations alike, the cloud journey nearly always starts on premises. A large majority of organizations still run the core of their business-critical workloads in the data center, supported by significant and proven investments in on-premises hardware, workflows and business processes that support key business apps and ensure maximum value to users and other stakeholders. Not surprisingly, IT decision makers tread carefully when it comes to considering public cloud deployments for their critical apps or data.

To get the best of the cloud without compromising current IT investments, a growing majority of decision makers are now focusing on solutions with hybrid and multicloud capabilities. Hybrid cloud enables them to gain value from the cloud from day 1, while fully leveraging their on-prem infrastructure. Under a hybrid model, companies can deploy selected apps that make sense to run in the public cloud, but still run a majority of their core business workloads on-premises. They can also employ a dev-ops approach to begin to develop and run cloud-native apps.

Multicloud takes those benefits one step further, enabling portability of workloads between two or more clouds. Organizations we surveyed are now working with at least two major public cloud providers, on average, enabling them to avoid lock-in to a single provider and to choose the provider that best meets the needs of each app and use case. Together, hybrid and multicloud offer an attractive and measured approach for companies looking to deploy some of their workloads in the cloud.

In this piece we'll examine the customer journey to cloud storage, including some important considerations companies should keep in mind as they decide what approach will work best for them. We'll then describe HPE's storage platforms, which are built for cloud and provide a powerful and unique approach to multicloud storage. Finally, we'll look at the advantages that HPE storage delivers over other cloud storage deployment models, and show how these HPE platforms are helping enterprises to maximize the potential of their cloud storage initiatives.

THE WORLD IS GOING TO HYBRID AND MULTI-CLOUD

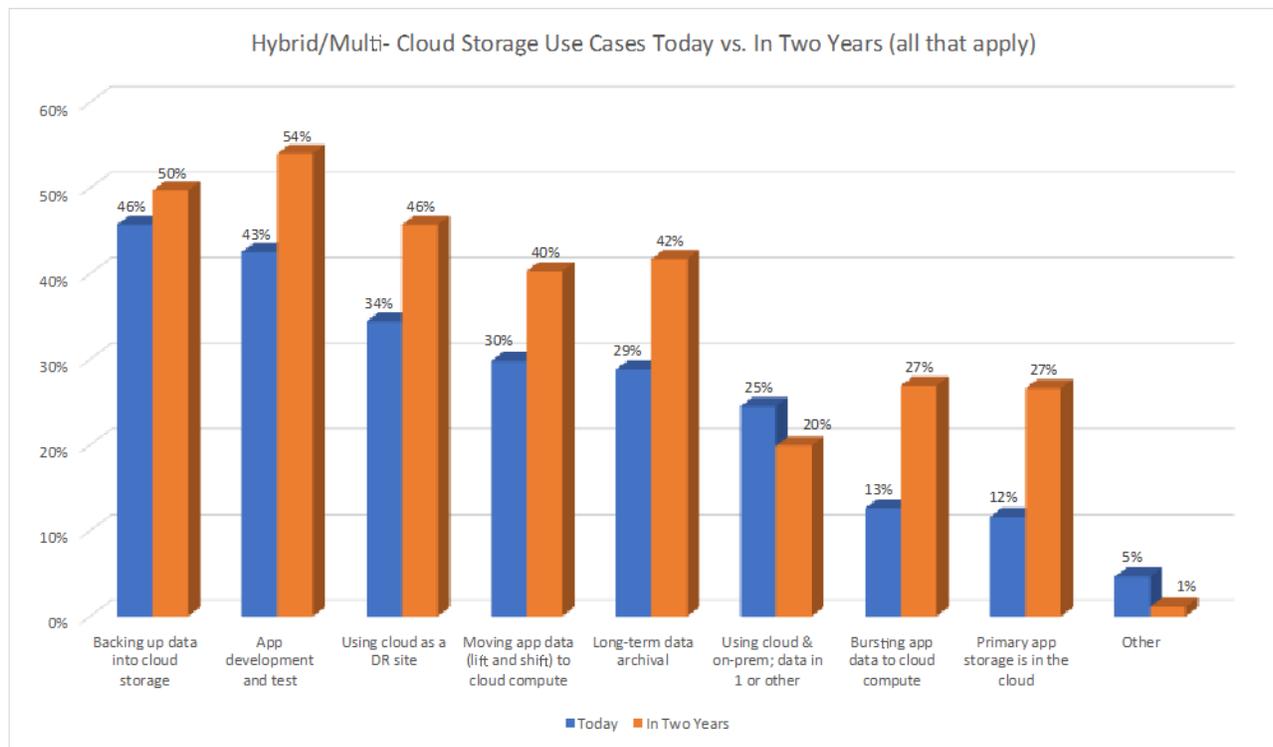
When it comes to cloud storage, deploying in a single provider's public cloud no longer cuts it. Instead, companies are looking to maintain their on-premises storage investments as they transition workloads to cloud, while also taking advantage of more than one provider. More than 84% of IT decision makers in a recent Taneja Group survey said that hybrid/multicloud is their preferred cloud storage architecture for the future, vs. putting storage in a private cloud or simply maintaining their existing on-premises storage. These firms are looking to avoid vendor lock-in and increase deployment flexibility for key workloads, enabled in part by cross-cloud data portability and enhanced data availability and DR options.

Companies also plan to significantly increase the percentage of their primary storage in one or more public clouds over the next two years. Nearly 80% of survey participants plan to deploy 20% or more of their primary storage in the cloud within the next two years, vs. roughly 30% of companies that are doing so today. With at least some of organizations' future primary storage destined for the cloud, production apps will ultimately follow.

But with companies' journey to a hybrid and multicloud world beginning on-premises, the movement of key apps and data to the cloud tends to be gradual and evolutionary. For example, firms look to continue to run a majority of their business-critical apps on-premises, especially during the first few years of cloud deployments. Based on recent Taneja Group research, just 1 in 6 companies plan to initially shift some of their business-critical apps to the public cloud, vs. 1 in 4 that plan to shift a significant percentage of their non-critical workloads.

Firms are also focusing mainly on deploying non-primary storage use cases in the early days, qualifying and gaining value from backup, dev/test, DR and archiving before trying out primary storage use cases (see Figure 1). This allows firms to begin to take advantage of cloud agility and economics where it makes the most sense, while preserving their existing data center investments in infrastructure and business apps. As Figure 1 shows, customers are clearly open to deploying primary storage use cases in the future, as the cloud evolves and matures to meet their enterprise requirements, but for most companies that move will be gradual.

Figure 1: Planned Growth of Cloud Storage Use Cases (today vs. in two years)



SOURCE: TANEJA GROUP

PLANNING YOUR CLOUD STORAGE JOURNEY: HOW BEST TO GET THERE

Though a large majority of enterprises are convinced that they must invest in cloud storage, there is much less agreement on how best to get there. While many options are available, the choice of approach is critical to the success of a company's cloud storage deployment.

Companies can employ one or more of a variety of methods to begin to transition some of their data storage to the cloud. These range from "toe-in-the-water" approaches such as virtual cloud appliances

and cloud storage gateways, to migrating data wholesale to the cloud and running it under one or more providers' storage services. We have described these alternative approaches in Figure 2 below.

Firms that don't want the responsibility of managing infrastructure may consider outsourcing cloud storage (and often other infrastructure) services to a managed service provider, reducing the management burden but also sacrificing agility and control, as well as the ability to satisfy users' needs. For example, in this scenario, you can often lose the self-services, dev-ops and automation that line-of-business folks are looking for.

In the middle of this spectrum is an approach we'll explore in more detail later, which involves co-locating data storage at a major cloud provider's point-of-presence, and connecting it to one or more public clouds via large pipes. This approach gets your data close to the cloud, but doesn't by itself enable self-service and agility, because in the end, you're still managing hardware rather than a service.

Figure 2: Exploring Different Cloud Storage Approaches

<u>Cloud Storage Approach</u>	<u>Description</u>
Virtual Cloud Appliance	Virtual appliance that moves data from local site to remote cloud storage service provider, usually based on software-defined storage
Cloud Gateway	Physical device or system that allows tiering of local storage to a public cloud, often using a cache to improve on-prem performance
Lift and Shift Data to Native Cloud Storage Services	Migrating block, file or object data en masse to the cloud for use with native cloud storage services
Move to HCI in Cloud	Moving on-premises data storage to hyperconverged infrastructure (e.g. VMware Cloud Foundation) to enable hybrid cloud
Outsource to MSP	Outsource to a managed service provider who provides cloud storage as a service
Co-lo Storage at Public Cloud Provider's Point of Presence	Position storage systems close to the public clouds you're using, so that data is accessible from apps running in the cloud or on prem

SOURCE: TANEJA GROUP

Key Considerations in Choosing the Best Cloud Storage Approach

We are often asked, what is the best way to sort through these various options, and determine the one that will work best for my organization? We believe there are a few key considerations IT decision makers should take into account as they decide on the best approach to adopt cloud storage.

Specifically, does each approach:

- **Enable your choice of cloud provider?** With the freedom to choose a cloud provider, you have the ability to select the best-fit cloud for each use case, allowing you to avoid lock-in and better meet your SLA commitments.
- **Allow you to deploy data where it makes the most sense, based on the needs of each workload and use case?** Data mobility, along with the choice of where best to deploy the data, is key to enabling and increasing the value of many hybrid and multicloud use cases.
- **Provide a fast on-ramp for business apps and data to the cloud, including efficient and secure data transfers, with little or no changes to existing infrastructure, workflows, or business processes?** As we've seen, companies are reluctant to employ rip-and-replace approaches to move storage to the cloud, not only because they're costly and time-consuming, but also because firms prefer to continue to run on-premises infrastructure to support their hybrid cloud storage needs.

- **Enable the levels of data availability, efficiency and storage performance you're accustomed to achieving from your storage systems on-premises?** If your data center storage is proven and producing the results you need, why should you compromise enterprise features just to move to the cloud?
- **Support all of the storage use cases you need over the course of the data lifecycle?** Your cloud storage solution should support use cases from primary storage to backup, to archiving and disaster recovery, even if you're not deploying all of these use cases in the cloud today.
- **Facilitate rapid recovery in case of an outage, with minimal-to-no downtime or data loss?** Consider the consequences of a prolonged outage, and how you'll recover and bring your storage back online. Public cloud storage services can be a lonely and dangerous place, often with little or no recourse if the service goes offline.
- **Provide integration between on-premises hardware and the cloud?** Such integration can not only enable a better hybrid cloud, but also allow you to protect your current investments while taking advantage of the latest cloud innovations, such as container-based deployments.
- **Allow you to easily see and manage data across clouds, including the ability to diagnose performance issues and reduce spikes in usage and costs?** As the old IT adage goes, you can't manage what you can't see. Cross-cloud visibility enables you to anticipate and remediate reliability and performance issues before they become big problems, while cost monitoring and management solutions can prevent costs from spiraling out of control.

When all of these factors are taken into account, we believe one solution to cloud storage stands out above the rest, particularly for companies that want to embrace the advantages of both hybrid and multicloud.

As we'll see, HPE's storage offerings check off all the boxes in the list of considerations we've outlined above, while accelerating the journey to hybrid and multicloud. Let's take a closer look at HPE storage, and learn what differentiates it from other on-premises approaches to cloud storage.

BUILT FOR CLOUD, HPE STORAGE POWERS INTEGRATED HYBRID CLOUD SOLUTIONS

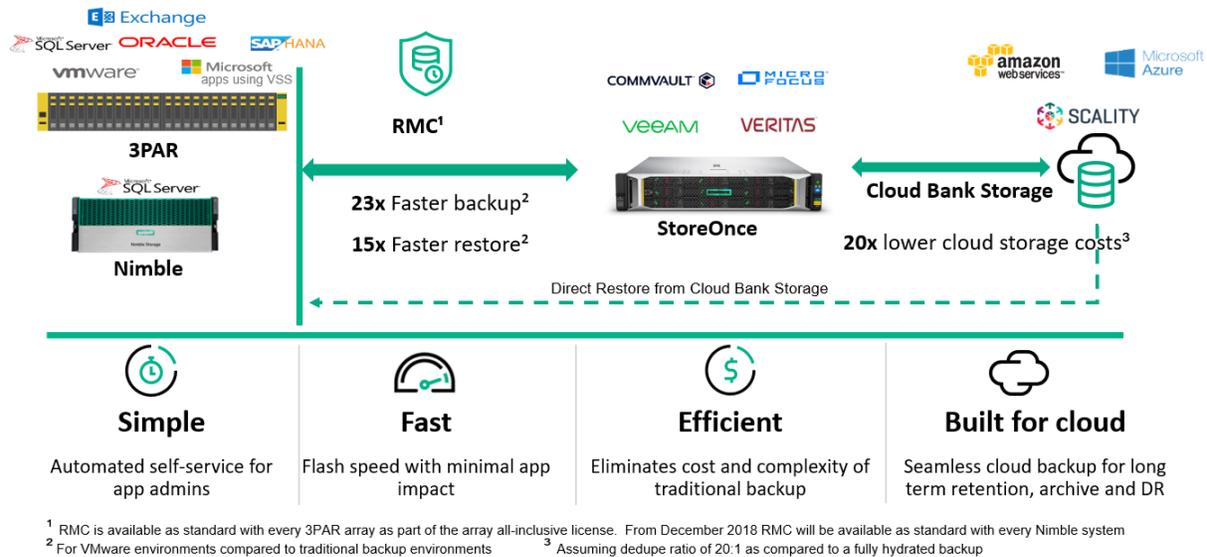
As outlined above, our research tells us that businesses prefer to take a hybrid cloud approach. This preference means they will maintain on-premises storage for mission-critical workloads while also creating and sending appropriate workloads to the public clouds. This hybrid-first approach is the scenario around which HPE has built its current storage portfolio for the cloud. What if your existing enterprise-proven on-premises storage could in fact seamlessly get you to a future state of hybrid cloud and multicloud? Would that not be the ideal solution? We are not talking about a public cloud façade using cloud storage as some low-cost archive tier while maintaining all primary access on premises. We are talking about seamless cloud integration of on-premises storage with public-cloud capabilities without changing the storage management paradigm or restricting workloads as they move across on-premises to native cloud deployments.

In this section, we will explore how HPE Storage is built for cloud by examining three use cases with three HPE storage products. The first two scenarios are around secondary storage capability to cover the data protection use case. The third use case will focus on primary storage for enterprise workloads. As we outline how HPE storage is built for cloud via these use cases, we will demonstrate that HPE's approach to on-premises storage is seamlessly cloud integrated and will be a popular approach for many companies. Businesses will want enterprise capability on-premises while leveraging that same infrastructure investment into hybrid cloud and multicloud deployments and this is an area where HPE delivers.

HPE StoreOnce with HPE Cloud Bank Storage

HPE Cloud Bank Storage extends the usable capacity of HPE StoreOnce systems by combining low public cloud and/or private object storage costs with HPE StoreOnce deduplication in a hybrid cloud solution. Deduplicating and compressing the data before storing it in the cloud reduces the storage costs of long-term backup data retention by 20X and enables offsite data protection without investing in offsite facilities. The solution integrates seamlessly into existing workflows. Backup data is written to HPE StoreOnce and then, according to policies set within the backup application, all or some of this backup data is copied to the cloud for long-term retention.

Figure 3: HPE Cloud Bank Storage Overview



SOURCE: HEWLETT PACKARD ENTERPRISE

The key benefits of HPE Cloud Bank Storage are as follows:

- Accelerated local recovery:** Many cloud-based backup solutions offer a direct-to-cloud backup approach; however, for enterprise businesses we recommend a local on-premises copy of more recent backup copies to restore critical data more quickly. Also, one of the most expensive portions of public cloud costs are the egress fees charged to pull data out of low-cost object stores. The HPE Cloud Bank Storage approach means there is a portion of the on-premises backups that remain local for fast restores. For smaller businesses, the flexibility of using a local HPE StoreOnce Virtual Storage Appliance (HPE StoreOnce VSA) lowers the cost versus using a physical HPE StoreOnce appliance.
- Long-term retention and archive of backups:** Using HPE Cloud Bank Storage for long-term archive of backups is a perfect use case for low-cost object storage technology. HPE Cloud Bank Storage further reduces the effective cost of object storage by deduplicating and compressing the data before writing to the store. When combined with modern backup software, this makes for a great data lifecycle management approach to meet many compliance and regulatory requirements.
- Offsite copies of backups for disaster recovery:** A major benefit of using a public cloud as a backup repository is the fact it is offsite. Public cloud storage can be a viable, low-cost disaster recovery option for smaller enterprises or an extra insurance policy for larger enterprises. HPE Cloud Bank Storage stores backups in the cloud using a self-describing format. This approach makes a site-level disaster recovery real and faster because these cloud backups can be reattached to any other HPE StoreOnce appliance in the world, or, if needed, within the public cloud itself using an HPE StoreOnce VSA deployed in the cloud.

- **Multi-cloud choice:** HPE Cloud Bank Storage supports multiple S3 compatible object-storage vendors including the leading public cloud providers AWS and Azure and on-premises object-storage vendors such as Scality.
- **Cloud-native integration and security:** One of the keys to being cloud-ready is the simplicity and completeness of native cloud integration. Adding the HPE Cloud Bank store option to an HPE StoreOnce appliance is simple because the integration is already natively built into the product. Figure 4 below shows how easy it is to create a Cloud Bank store on Microsoft Azure. End-to-end encryption to secure the data in flight and at rest is just a single-click option. Direct cloud integration enables seamless backup and restores of backup data to a cloud of your choice without the need for a separate cloud gateway or virtual appliance.

Figure 4: Screenshot demonstrating the ease of creating an HPE Cloud Bank store on Microsoft Azure

The screenshot shows the 'New Store' configuration page in the HPE Catalyst interface. The 'Catalyst Store Details' section includes fields for Name (CloudBank-Store), Description (CloudBank Store), and various retention periods. The 'Primary (Default) Transfer Policy' is set to 'Low Bandwidth' and the 'Secondary Transfer Policy' is 'High Bandwidth'. A red box highlights the 'CloudBank' section, which is checked. Below it, the 'Cloud Service Provider' is set to 'Azure'. The 'Account Name' is 'mystorageaccount' and the 'Account Key' is a long alphanumeric string. The 'Container Name' is 'testcontainer'. A red arrow points to the 'Account Key' field with the text 'Simply Enter Cloud Credentials Here'.

SOURCE: HEWLETT PACKARD ENTERPRISE

HPE Cloud Bank Storage offers an end-to-end solution that significantly reduces the costs associated with backing up to and restoring from the cloud. By leveraging a broad collection of backup applications and database backup tools already integrated with HPE StoreOnce systems, HPE Cloud Bank Storage provides an easy-to-implement hybrid data protection solution that amplifies the cost benefits of object storage with HPE StoreOnce deduplication. HPE Cloud Bank can extend the storage of an HPE StoreOnce system by more than 100 PB and has an offline capability that enables unlimited scalability. With the offline capability, a business could archive long-term backup datasets by changing from AWS S3 to Glacier saving even more money. The overall result is an economical, efficient, flexible, and secure backup and recovery infrastructure for short-term and long-term backup data.

HPE Primary Storage Native Data Protection with HPE Cloud Bank Storage

HPE 3PAR and HPE Nimble primary storage arrays leverage the unique features of HPE Recovery Manager Central (RMC) and HPE StoreOnce to create an industry-unique copy data management and direct backup solution. The solution works whether controlled by leading backup ISVs using RMC APIs or standalone with RMC controlled natively within the array management interface such as the HPE 3PAR management GUI. HPE RMC (free with 3PAR and Nimble) in conjunction with HPE StoreOnce transfers the array-based snapshots directly to a StoreOnce appliance while maintaining the native array snapshot format. Direct backup is valuable because, after the initial full copy, only small delta snapshots are transferred, enabling the StoreOnce appliance to maintain

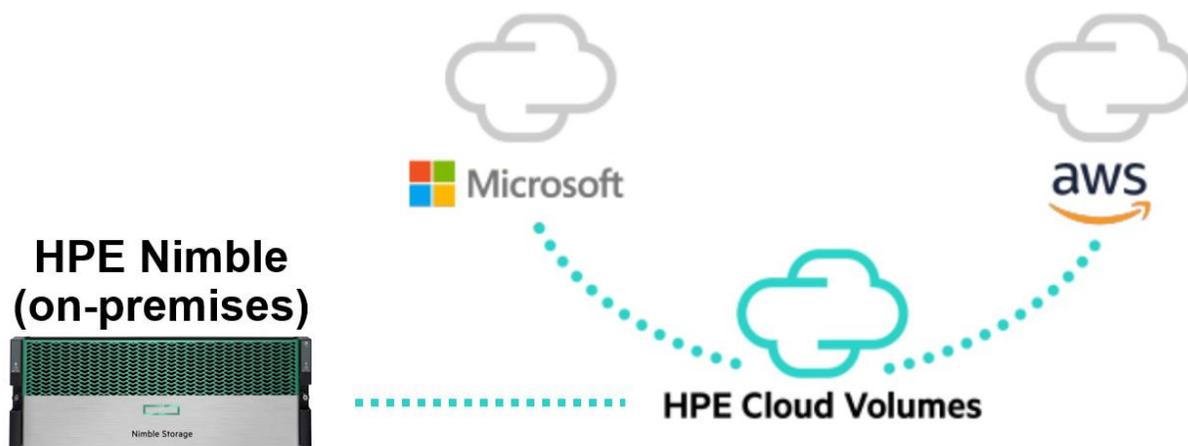
hundreds of versions of the HPE array snapshots for varying lengths of time. This policy-based, long-term retention of snapshots is even more valuable in an all-flash environment where flash storage costs are at a premium and backup times need to keep up with array speed.

With HPE Cloud Bank Storage, direct backup can be extended to the cloud through one simple policy change in RMC and the HPE StoreOnce appliance. HPE has enhanced the solution by enabling HPE primary storage to restore a snapshot directly from HPE Cloud Bank Storage bypassing HPE StoreOnce (See Figure 3 above). HPE 3PAR and HPE Nimble Storage direct cloud restore increases the options for HPE Cloud Bank Storage use and may improve the disaster recovery speed, especially for smaller data sets. HPE Cloud Bank Storage could be used for transferring data stored on HPE primary storage from remote locations leveraging public cloud infrastructure bandwidth. HPE primary storage direct restore from HPE Cloud Bank Storage is also useful for test and dev purposes or even low-bandwidth data migration needs.

HPE Nimble Primary Storage with HPE Cloud Volumes

HPE Cloud Volumes with HPE Nimble Storage provides enterprise-grade, primary block storage for multicloud and hybrid environments. As a complement to public cloud block storage, HPE Cloud Volumes focuses on workloads requiring enterprise features and proven reliability. HPE Cloud Volumes is compatible with on-premises HPE Nimble Storage but delivered to a cloud workload using a native cloud as-a-service approach, just like you would provision AWS EBS. To maintain low-latency performance, HPE hosts Cloud Volumes in data centers close to AWS and Microsoft Azure. Other enterprise storage vendors that provide locally hosted storage near AWS or Azure typically make you manage and provision the storage in the cloud exactly as if it was on premises. That approach is more of a hosted infrastructure service versus a true public cloud experience. Figure 5 below outlines logically how HPE Cloud Volumes fits with both AWS and Microsoft Azure.

Figure 5: HPE Cloud Volumes Hybrid Storage Overview



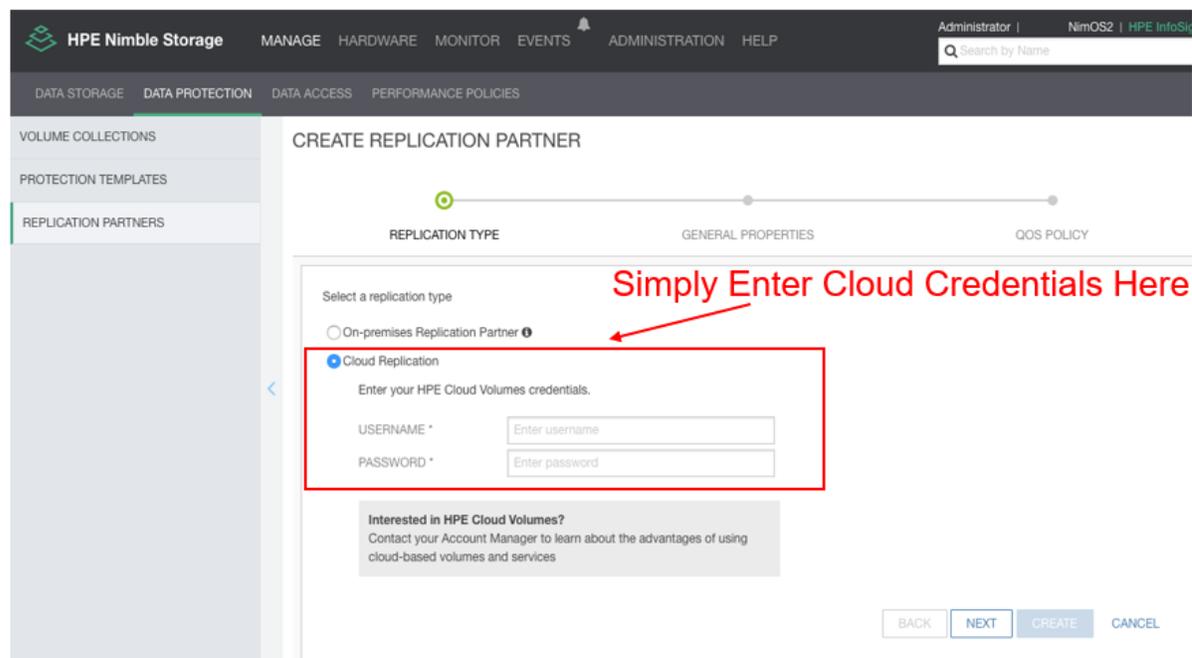
SOURCE: HEWLETT PACKARD ENTERPRISE

HPE Cloud Volumes is compatible with HPE Nimble Storage on premises while still having close proximity to both AWS and Azure. This unique cloud-integrated compatibility approach enables the following key attributes for solutions that rely on HPE Cloud Volumes:

- Enterprise-grade features:** HPE Cloud Volumes is based on HPE Nimble Storage technology, which means it comes with many enterprise-grade features not found in cloud-provided block storage. Zero-copy clones, snapshots, millions of times more data durability, and compatible replication of data between on-premises and multi-cloud environments are just some of the unique features. The entire multicloud environment can be monitored and managed with HPE InfoSight.

- **Multicloud data portability:** Data that is visible to AWS is also available to Microsoft Azure. This dual access eliminates one of the primary lock-ins these public cloud companies rely on. Public cloud vendors lure businesses with very low-cost storage for a reason, as they know that if they have your data you are pretty much locked in for all their other services. Having data portability between clouds and on-premises minimizes cloud lock-in.
- **Low-risk cloud on-ramp:** Many businesses cannot afford to refactor all applications for native cloud environments, and yet it still makes sense to leverage cloud infrastructure for some critical workloads. For example, some critical applications could benefit from colocation with other cloud services or other applications the business may already have refactored for the cloud such as mobile apps. HPE Cloud Volumes provides a low-risk way to ensure a workload is going to run in the public cloud because the workload can first be proven on-premises and then when ready migrated to public cloud infrastructure. Figure 6 below demonstrates how easy it is to pair an HPE Nimble Array with HPE Cloud Volumes all integrated directly in the Nimble GUI. This is available on all HPE Nimble arrays without the need to purchase any additional software or hardware.

Figure 6: HPE Nimble Screenshot demonstrating ease of replication to HPE Cloud Volumes

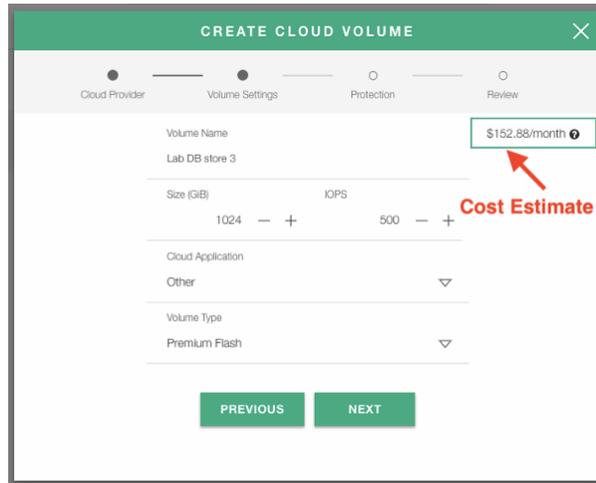


SOURCE: HEWLETT PACKARD ENTERPRISE

- **DR, test, and dev in the cloud for on-premises applications:** HPE Cloud Volumes provides an easy way to enable cloud compute for test and development and bursting in the cloud. Compatible features such as Zero-copy clones allow numerous clones to be available for testing at near zero incremental cost. A complementary use-case to test and dev in the cloud would be to use the same infrastructure as a disaster recovery solution since HPE Cloud Volumes are geographically separate from the on-premises source of the data.
- **Data sovereignty:** Many new regulations require that data be maintained in a known physical location or country. Using HPE Cloud Volumes ensures a business has direct control of where the data resides. Data-at-rest encryption provides additional security. By using Cloud Volumes, companies can pull data back to on premises at any time without incurring the expensive egress fees other cloud vendors charge. HPE InfoSight provides end-to-end visibility of where the data resides.

- Simple cloud portal and APIs:** HPE Cloud Volumes is provisioned through a cloud portal or APIs just like native cloud services. Businesses pay a subscription price for capacity and IOP performance very similar in cost to what public cloud vendors charge for a similar storage type. HPE Cloud Volumes uses iSCSI to attach to cloud computing resources, and because of the proximity, the latency is under one millisecond. Figure 7 shows just how easy it is to provision HPE Cloud Volumes. Pricing is transparent and publicly available before provisioning, and monthly costs are automatically calculated as you configure the storage parameters.

Figure 7: Screenshot of HPE Cloud Volumes Provisioning Wizard



SOURCE: HEWLETT PACKARD ENTERPRISE

- Cloud and data center visibility:** HPE InfoSight is the innovative HPE Nimble Storage analytics-based approach to the storage lifecycle. HPE InfoSight (included at no cost) monitors arrays, collectively and individually via the cloud, and uses AI to recommend and offer solutions that can benefit HPE storage customers. For example, Figure 8 below demonstrates how the HPE InfoSight recommendation engine can seamlessly size what it would take to replicate an active on-premises data volume to a new HPE Cloud Volume in the public cloud. In addition to the capacity size estimate, it produces an accurate estimate of the cost a customer would incur by using such a replication policy.

Figure 8: HPE InfoSight - Cloud Volumes Sizing Tool

Name	Pool	Application	Volume(s)	Replication Interval	Snapshots to Retain
New Schedule 1	lvs-nmbi-01 - default (AF-122240)	Other	Sharepoint, workday	12 hours	48
New Schedule 2	alpo : default (AA-100328)	File Server	Fileserver-02	12 hours	48

Required Size of the Replication Store		Capacity Breakdown		Estimated Cost of Replication Store	
Choose level of confidence to display: <input type="radio"/> Optimistic Estimate <input checked="" type="radio"/> Recommended <input type="radio"/> Conservative Estimate		Name	Logical TiB	Tier - General Purpose Flash	Tier - Premium Flash
14.83 TiB		New Schedule 1	7.63	\$17,550/yr	\$24,750/yr
		New Schedule 2	7.2		
		Total:	14.83		

SOURCE: HEWLETT PACKARD ENTERPRISE

HPE provides end-to-end provisioning and monitoring of all HPE hybrid cloud infrastructure through the complementary products HPE OneSphere and HPE OneView. HPE storage products, as well as HPE networking and server products, integrate into those two applications.

CONTRASTING HPE BUILT FOR CLOUD STORAGE TO ALTERNATIVE APPROACHES

Built for cloud, HPE storage uses an approach that is differentiated from the approaches employed by other storage and cloud vendors in the industry. HPE believes customers should be able to maintain their on-premises enterprise-grade storage capability while still integrating seamlessly with complementary public cloud resources. To achieve that goal, HPE has invested heavily to build native cloud integration into their flagship enterprise storage products, including HPE StoreOnce, HPE 3PAR Storage, and HPE Nimble Storage. Each has a unique way to integrate with the cloud that complements their enterprise capabilities on premises. The following table outlines how HPE storage is both different from and similar to general industry approaches we have found.

Comparing Different Cloud Storage Approaches	
Industry Approach	HPE Built for Cloud Approach
Virtual Cloud Appliance	HPE uses a virtual cloud appliance when it is appropriate. HPE StoreOnce VSA is used to access HPE Cloud Bank Storage directly in the cloud or for backups in remote small offices. HPE recommends a purpose-built HPE StoreOnce Appliance on-premises for enterprise-grade hybrid cloud backup with its native integration to HPE Cloud Bank Storage.
Cloud Gateway	HPE does not support cloud gateways since these dedicated appliances were first-generation cloud storage approaches engineered to mask inherent latency issues on premises and are not well suited for enterprise workloads.
Lift and Shift Data to Native Cloud Storage Services	HPE endorses a multicloud approach. Lift-and-shift approaches such as AWS Snowball result in cloud vendor lock-in and no way to move data back on premises. This approach is also not hybrid friendly. With multicloud storage service like HPE Cloud Volumes, data and enterprise applications can be “lifted and shifted” to the cloud without fear of lock-in and without the risk and complexity of re-factoring apps to be cloud-native.
Move to HCI in Cloud	Moving HCI to a public cloud generally would mean the HCI virtualization would have to be nested within the cloud’s native virtualization. HPE endorses approaches such as HPE ProLiant for Microsoft Azure Stack for those customers that would like the same HCI architecture both on-premises and in the cloud. Also, replacing enterprise-grade storage on premises with local HCI could bring risk to some mission-critical applications.
Outsource to MSP	Outsourcing to an MSP can mask hybrid cloud management complexities. However, HPE’s approach is to simplify management of hybrid cloud storage, so incremental management overhead is near zero. Also, outsourcing to an MSP often costs more than the approach of optimizing between on-premises and the public cloud through well-engineered hybrid storage.
Co-lo Storage at Public Cloud Provider’s Point of Presence	HPE Cloud Volumes uses a superior approach to this with the unique difference that the customer provisions HPE Cloud Volumes storage just like native public cloud storage service. Other vendors that co-locate storage close to a public cloud typically make you manage the storage as if it were standalone hardware, unlike a true cloud service. Many vendors make you commit to buying much more capacity than is needed with HPE Cloud Volumes, based on its fine grain provisioning.

TANEJA GROUP OPINION

Over the past few years, rapidly emerging hybrid and multicloud storage technologies have changed the way enterprises think about the cloud, opening up a whole set of new possibilities for how they can most effectively structure, deploy and manage cloud storage. As the market has matured, an overwhelming majority of both large and midsize organizations have decided to focus on hybrid and multicloud architectures for their storage needs going forward. They have elected not to abandon their proven and feature-rich data center storage, but rather to embrace and enhance it in the context of a new architectural paradigm.

Today nearly all companies start their journey to cloud storage from on-premises. They are looking to adopt both hybrid and multiclouds for a growing number of use cases, but are often unsure how best to get there. We believe a customer's cloud journey should be guided by a few key considerations, which will help them to get the most out of the cloud and quickly gain value while leveraging and protecting their on-premises investments. We favor approaches that enable freedom of choice, extend on-premises enterprise capabilities to the cloud, and provide an integrated framework for storage platform deployment and management between the data center and multiple clouds.

Based on our assessment, HPE storage checks off all these decision criteria. With a storage portfolio that's built for cloud, HPE offers a proven, well-blazed path to the cloud, extending all the features and capabilities of their innovative on-premises storage platforms into a hybrid and multicloud environment. HPE's integrated approach allows you to take full advantage of what cloud storage has to offer, without compromising the enterprise-grade storage strengths and benefits you've invested in on premises. As IT buyers evaluate offerings in the marketplace, we recommend they strongly consider HPE storage, including HPE Cloud Volumes enabled with HPE Nimble Storage and HPE Cloud Bank Storage enabled with HPE StoreOnce appliances, running on HPE flash and hybrid arrays.

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