
Solution brief

# Enhance your Azure Stack HCI deployment with intelligent data management

# Protecting your Azure Stack HCI deployment with Commvault Backup & Recovery provides data management that's easy to use, cost-effective, scalable, and proven.

Microsoft Azure Stack HCI extends your datacenter into the cloud, allowing you to manage your on-premises workloads through Azure with a service available as an Azure subscription. Backup and recovery are essential to protect the data on your hybrid-infrastructure investment, but such solutions can add complexity that sometimes makes IT admins cut corners. With Commvault, you can extend that simplicity to your data management with a robust, natively integrated Azure Stack HCI backup and recovery solution.

Commvault simplifies importing workloads from VMware solutions to Azure Stack HCI with auto-conversion of virtual machines (VMs) on the fly. For data running on Azure Stack HCI, Commvault simplifies data management, enabling granular data restoration spanning from storage disks to VMs to individual files on VMs. Commvault also protects the hypervisor, storage virtualization, and Kubernetes service on Azure Stack HCI.

## Azure Stack HCI

Perhaps your organization wants the power of cloud-based management, yet must also retain some workloads on premises for performance or regulatory reasons. Or perhaps your organization sees a hybrid-cloud solution as a stepping stone on the transformational path from on-premises legacy applications to moving fully to the cloud.

Regardless of your strategic IT destination, Azure Stack HCI can help get you there. Azure Stack HCI makes powerful Azure management services available for your on-premises workloads, together with the familiar tools and operations in Windows Server. Azure Stack HCI provides a world-class hyperconverged infrastructure (HCI) stack for more secure, efficient virtualization of Windows and Linux guests. Because Azure Stack HCI is delivered as an Azure subscription, it has built-in hybrid capabilities with Azure, and it provides up-to-date software and support. You can extend your datacenter to the cloud and manage Azure Stack HCI hosts, VMs, and Azure resources side by side in the Azure portal.

Azure Stack HCI also enables you to save money and increase efficiency. With it, you can modernize your infrastructure of aging servers and storage, consolidate virtualized workloads,

and gain cloud efficiencies on premises. Best of all, you can build your HCI using IT skills that your organization has already invested in. These skills include working with Microsoft Hyper-V and Windows Server, but they also extend to a number of third-party software solutions, including Commvault.

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solution to back up and recover your data and applications from anywhere to anywhere, quickly and efficiently.

## Protect, migrate, and manage data in a hybrid-infrastructure deployment with Commvault

Commvault enables you to recover all workloads—physical, virtual, application-based, cloud, or hybrid—using a single, uniform platform. Wherever your workloads run, the threats and risks to them are only growing. Commvault provides a simple, powerful solution to back up and recover your data and applications from anywhere to anywhere, quickly and efficiently. Commvault's ability to restore data anywhere (to Azure Stack HCI or the Azure public cloud) also makes it a simple way to move workloads off of VMware ESXi, Nutanix AHV, or Windows Server and onto Hyper-V. Finally, Commvault integrates with Azure services to bolster your workload security on premises or in the cloud.

### Simplified protection

Whether from disasters, malware attacks, or ransomware infiltration, your data—on premises, in the cloud, or on both—needs protection. For example, consider critical business applications in a hybrid environment. Those applications can run in containers or on VMs. Being able to back up and restore the containers and VMs hosting your applications is important but insufficient alone; when restored, the applications running on the backed-up images will be in a crash-consistent state and could take too long to get back up and running.

Commvault provides application-aware protection for image-level backups of VMs and containers. It quiesces backed-up applications to speed recovery. And built-in deduplication in Commvault compresses backed-up data, which reduces the time and overhead needed for backups. Finally, change-block tracking in Commvault provides for incremental snapshots to reduce backup time and enable granular data recovery.

The fast, lightweight data replication in Commvault makes it possible for you to back up your disaster-recovery images to Azure and restore them in the cloud or on premises. You also don't have to restore entire images to recover the data that you need: rich metadata-search capabilities in Commvault mean that you can search for specific backed-up files, folders, or VMs to recover what you need.

Commvault enables you to restore backed up data and images anywhere.

### Simplified migration

Commvault enables you to restore backed up data and images anywhere. This simplifies data migration.

Migrating VMs off VMware ESXi or Nutanix AHV, or moving virtualized or bare-metal workloads off an older version of Windows Server? Simply back up your workloads to Azure and then restore them to Azure or Azure Stack HCI. Commvault can automatically convert VMware VM disk (VMDK) and AHV raw virtual disk images to virtual hard drives (VHDs) at the time of restoration. Out-of-place VM restoration and on-the-fly VM conversion speeds up migration and can increase flexibility wherever you run your applications.

### Simplified management and operations

The same Commvault user interface (UI) works with Azure Stack HCI, so administrators don't have to shift context or solutions to managed workloads and data on premises or in Azure. And because Commvault has no agent to install or push to Azure Stack HCI nodes, you don't have to make any changes to your Azure Stack HCI deployment to start using Commvault on it.

Many organizations are already familiar with Commvault for managing data on premises, so using Commvault to manage data on Azure Stack HCI provides admins with familiar tools. However, Commvault can simplify data management with its Metallic backup-as-a-service (BaaS) solution. Built on Commvault and Azure, Metallic provides a fully managed service to meet your data-management needs. With no infrastructure to configure, Metallic makes data management with Commvault even simpler. Metallic scales to the environment, provides security capabilities, and is cost-effective and easy to manage.

### Simplified security

As with any on-premises or cloud deployment, Commvault's base security feature set is available on Azure Stack HCI. This includes ransomware protection for backups and encryption for data in motion and at rest. Commvault integrates with Azure Key Vault and Microsoft Active Directory to help secure encryption keys on premises and in the cloud.

# Use case

**Backup and disaster recovery**

For true preparedness, you should be able to see that your backup infrastructure for Azure Stack HCI has security enabled. The simple, comprehensive Commvault disaster-recovery-readiness dashboard shows you where things are going well, and where you might need more work. This capability makes it easy to quickly address issues affecting recoverability:

- Support multiple data types and applications
- Support multiple recovery-point objectives (RPOs) to meet service-level agreements (SLAs)
- Deploy disaster-recovery (DR) solutions to and from Azure Stack HCI on premises and across the Azure cloud
- Create SLA-based protection plans for backup and DR together
- Coordinate DR functions: failover, failback, testing, and reverse protection
- Reduce threat exposure through system control, site, storage layer, and network strengthening

Commvault enhances your investment in Azure Stack HCI with backup/disaster recovery and cloud data-management capabilities designed for the hybrid cloud.


**Cloud data management**

From a single Commvault dashboard, you can understand the current state of data across Azure Stack HCI and the Azure public cloud. Commvault complements Azure Stack HCI and the Azure cloud with automated and proven tools designed to meet the data-recovery SLAs of even the most complex organizations.

With Commvault, backing up to one cloud or across multiple Azure Stack HCI deployments has never been easier or more streamlined. Complete hybrid-cloud data management can be controlled from just a single interface.

# Easily protect and manage your VMs, applications, containers, and storage

Azure Stack HCI simplifies your operations by using an easy-to-manage solution that integrates with your environment and with popular third-party solutions like Commvault. Licensing is also simple with Commvault and Azure Stack HCI: the same Commvault licensing structure applies to Azure Stack HCI as to on-premises deployments. In fact, you can use your existing Commvault licenses with Azure Stack HCI.

Commvault supports the entire Azure Stack family, with Azure Stack HCI being a logical extension of this commitment. Commvault enables you to simplify all aspects of protecting and managing your Azure Stack HCI deployment so that you can get the most out of your hybrid cloud, native to Azure. Commvault has also been validated as part of the independent software vendor (ISV) program for Azure Stack HCI. The ISV program spotlights those partners with supported applications that host, manage, and service validly licensed VMs running directly on the Azure Stack HCI operating system.

Commvault is continuously developing new features for the entire Azure Stack family. To find out more about Commvault for Azure Stack HCI, and to see the latest developments for data management and protection in Azure Stack with Commvault, visit: **www.commvault.com/blogs/commvault-backup-and-recovery-now-supports-microsoft-azure-stack-hci**. And for more information on Azure Stack HCI, visit: **https://azure.microsoft.com/en-us/products/azure-stack/hci/**.

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