Data protection for Microsoft Azure Stack

Commvault Complete Backup and Recovery for HPE ProLiant for Microsoft Azure Stack

Protecting infrastructure and tenant data resources on Microsoft® Azure® Stack and beyond

Why Commvault Complete for HPE ProLiant for Microsoft Azure Stack?
• Fully protects all data including VMs and BLOBs, and applications across Microsoft Azure Stack, Azure, and all other environments in a single solution
• Simplifies migration of a full VM from an outside hypervisor or cloud providers to Azure Stack
• Enables DR for an Azure Stack VM between Azure Stack scale units

Microsoft Azure in the data center
HPE ProLiant for Microsoft Azure Stack enables an on-premises deployment of Microsoft Azure Stack that mirrors the functionality of Microsoft Azure cloud. Co-engineered by Hewlett Packard Enterprise and Microsoft, it incorporates compute, storage, and networking in an Azure on-premises instance. The advantage of this approach is to deliver the speed, agility, and simplicity of a public cloud but with the characteristics of an on-premises cloud.

Data protection challenges on Microsoft Azure Stack
The success of HPE ProLiant for Microsoft Azure Stack has led users to embrace the solution for their most ambitious and business-critical workloads. At the same time, human beings—and the world at large—can throw some pretty serious challenges at even the most stable infrastructure. Data protection has thus become an essential requirement for users of Microsoft Azure Stack. Commvault addresses this need by offering protection against human errors, programmatic errors, and malicious insiders. It mitigates data risks threatened by hackers and malware, as well as natural disasters and power outages.
Natively, Microsoft Azure Stack protects the core platform software and infrastructure resources. This is the data that keeps Azure Stack itself functioning. It includes services and microservices such as Azure Resource Manager (ARM), the KeyVault store of cryptographic keys and other secrets, Compute Resource Provider (CRP), Network Resource Provider (NRP), Storage Resource Provider (SRP), and so forth. The Azure Stack admin portal provides built-in capabilities that protect this data restore in the event of an outage.

The tenant, however, is responsible for all other data protection, an approach which aligns with the standard two-tier security model of the cloud. Tenant resources data is everything that runs on Azure Stack. It might be infrastructure-as-a-service (IaaS) data, platform-as-a-service (PaaS) configurations, virtual machines (VMs), databases, user data, binary large objects (BLOBs), etc. Essentially, Azure Stack is a self-protecting infrastructure. Data protection requires separate services, and the better integrated those services are with the core platform, the easier and more complete the protection process is.

The Commvault Complete solution for HPE ProLiant for Microsoft Azure Stack

Commvault Complete for HPE ProLiant for Microsoft Azure Stack provides comprehensive data protection. It is the same solution used internally by Microsoft for Office® products, Xbox®/Xbox Live®, and Microsoft Azure Business Units. Through the use of agents and Commvault HyperScale technology, Commvault Complete protects VMs. It enables backup and recovery of BLOB storage. Agents are available for all major operating systems, applications, and databases. Backups from Azure Stack can be stored on any target supported by Commvault, including disk, tape, or dozens of cloud providers.

Backup and disaster recovery

Commvault Complete offers sophisticated backup and disaster recovery (DR) capabilities for HPE ProLiant for Microsoft Azure Stack. The Commvault approach is comprehensive. It covers DR for VMs on one Azure Stack scale unit to another Azure Stack scale unit using Live Sync. The solution can also provide DR between multiple Azure Stack subscriptions. It enables recovery of BLOB storage data as well as guest files and granular restore at the file and folder level.

The Commvault solution makes it possible to replicate data and VMs across Azure Stack instances in multiple geographies. For example, if you are running Azure Stack in California, you could replicate it to a backup instance in New Mexico. The solution is able to support your recovery point objectives (RPOs) and recovery time objectives (RTOs). With these capabilities, it has to the potential to align well with business continuity plans.

Full VM and data migration

Data management processes sometimes require the migration of VMs from one Azure Stack instance to another. To do this in a way that keeps uptime and availability to a maximum, Commvault Complete enables you to migrate VMs in their entirety, with all of their underlying configuration information. With such a capability provided by Commvault’s agentless Virtual Server Agent (VSA), you can migrate VMware® and Azure VMs to Azure Stack VMs. This solution can also enable migration of databases such as Microsoft SQL Server® that are running on HPE ProLiant for Microsoft Azure Stack.

Integrating Commvault Complete for Azure Stack across the enterprise

HPE ProLiant for Microsoft Azure Stack invariably runs in parallel with a wide assortment of other enterprise technologies. To keep IT operations operating efficiently, Commvault Complete supports multiple types of software and infrastructure in addition to those running on Azure Stack. It supports Azure Active Directory (AAD) and Active Directory Federation Service (ADFS) Azure Stack configurations in a connected or non-connected environment. Commvault Complete can protect data across all bare metal instances, hypervisors, and so forth through a single point of control.

Why you need Commvault Complete for HPE ProLiant for Microsoft Azure Stack?

Deploying Commvault Complete for HPE ProLiant for Microsoft Azure Stack delivers a number of benefits to the enterprise. These include:

• Providing protection of data and software on HPE ProLiant for Microsoft Azure Stack beyond its built-in capabilities.
• Extending data protection across the entire enterprise, including Azure Stack.
• Making data protection more administratively efficient, with full VM migration and a single solution protecting data on Azure Stack and Azure cloud subscriptions, as well on a wide range of other on-premises infrastructure elements.
• Providing full native integration with HPE StoreOnce Catalyst including Cloud Bank Storage, therefore extending the protection capabilities across the data center and supporting your hybrid cloud program goals and initiatives.
• Offering hyperscale reference design. Commvault and HPE have collaborated to offer a highly scalable hyperconverged data-protection solution built on Apollo and ProLiant server platforms. This solution is supported by a reference design program built on tested, validated, and documented architectures.

Learn more at hpe.com/cloud/azure-stack