Solution Brief:
Data Protection for Microsoft Azure VMware Solution

Business challenge
As enterprises accelerate the adoption of a hybrid-cloud strategy, ensuring the availability of data and applications across the cloud infrastructure is more important than ever. Whether your cloud journey includes addressing data center consolidation, managing planned or unplanned capacity demands, creating a secondary disaster recovery site, or simply moving away from hardware, the question remains the same — how can you achieve the right fit for your hybrid cloud without jeopardizing traditional data protection requirements? Simply put, you need a single platform that can unify data protection from on-premises to the cloud and back again.

Solution overview: Extending data protection to Azure VMware Solution
Microsoft’s Azure VMware Solution (AVS) provides an easy way to lift and shift VMware workloads over to the cloud. With AVS, virtual machines can easily be migrated between on-prem and cloud, simplifying the adoption of a hybrid cloud environment. Migrating your VMware workloads into the AVS cloud can modernize your infrastructure, enable portability and lower costs. But migration is only part of the equation — you must also ensure your data is protected within AVS.

As the global leader in backup, recovery and data management solutions, Veeam ensures your data is always protected, no matter where it resides. Veeam offers AVS customers the ability to protect workloads on-premises and in an Azure-based private cloud, while also allowing customers to leverage their existing investments in VMware Software-Defined Data Center (SDDC) technologies. Veeam's single platform approach enables organizations to mitigate risk, reduce complexity and ultimately increase return on investment.

Benefits
- **Extend VMware based workloads to Azure without refactoring**
  - Unified data management protects and manages your VMware workloads with the same tools and Veeam data protection solutions you use on premises today.
  - Leverage existing investments in VMware Software-Defined Data Center (SDDC) technologies, including VMware vSphere, vSAN, NSX-T and vCenter Server management.
- **Replicate VMware VMs from on-premises to Azure**
  - Built-in replication: Veeam replication functionality takes a source workload and generates a fully functioning copy at a remote location.
  - Accelerate adoption of the hybrid cloud with the ability to back up, replicate or migrate workloads to an Azure-based data center running VMware.
- **Backup VMware VMs in Azure**
  - Native integration with Azure Blob: Back up Azure VMware Solution VMs and leverage the cost-effectiveness, simplicity and elasticity of Azure Blob storage.
- **Ransomware Protection**
  - "Secure Restore from Veeam" ensures that if undetected malware is included in backups, the restore process leverages a wide range of anti-virus or anti-malware tools to scan for the malicious components with actual detection of patterns at time of restore.
  - Anomalistic data activity monitors if a backup size increases substantially, most likely due to encryption by malware. Veeam ONE™ monitoring captures this in real time on production VMs by scanning vCenter and sees the attack prior to creating the backup.

Figure 1: Using Veeam in AVS Backup
Use cases

Create operational consistency across all environments
Whether you are running VMware workloads on premises or in Azure, you need a simple, flexible, reliable, and powerful backup solution that can adapt to your business requirements. With Veeam Backup & Replication™ on Microsoft AVS, you can instantly extend your investment in VMware to the cloud — enabling data protection across both environments.

Fast, flexible recovery
Easily restore Azure VMware Solution VMs back into Azure-native VMs, and recover backups of on-premises workloads into an Azure VMware Solution. Veeam makes it easy to quickly recover your data when and where you need it — on premises or in the cloud.

Disaster recovery and workload migration
With Veeam, AVS customers can send their on-premises Veeam-powered replicas to and from AVS VMs, enabling customers to manage the movement of their Veeam-powered replicas for both DR and workload migration purposes.

Granular file-level recovery
Quickly retrieve data using Veeam's core features, including Veeam Explorers™, Windows file-level recovery, and enable fast and simple restores of the most widely used enterprise applications including Microsoft Exchange, Active Directory, SharePoint, SQL Server and Oracle.

Conclusion
Veeam accelerates hybrid cloud adoption by enabling portability of your VMware workloads between on-prem and AVS, all while protecting data across both environments. The Veeam Platform delivers a wide range of enterprise capabilities including the ability to backup workloads across your hybrid cloud infrastructure, easy replication of source workloads to and within AVS, the enablement of disaster recovery and workload migration, and data recovery when and where you need it. You can trust Veeam to provide the modern data protection needed to protect your VMware workloads running in Microsoft’s Azure VMware Solution.