Cost-Effective Disaster Recovery

The Challenge

The challenge for today's IT decision-maker is finding a cloud-based DR approach that delivers a higher degree of data protection and recoverability, while controlling operational costs.

There is increasing demand for organizations to shift IT functions to the cloud and provide more comprehensive application and data protection, all while staying within budget. With a broad spectrum of cloud-based Disaster Recovery (DR) solution, it can be confusing to the best end-to-end DR solution that achieves critical IT goals and also meets budget requirements. Simply choosing to shift DR to the cloud introduces many complex decisions; public cloud platforms, private cloud solutions, and hybrid cloud options each have unique advantages and challenges.

The Solution

JetStream DR for AVS addresses this challenge with cloud-native disaster recovery software for VMware environments, with virtual machine recovery into Azure VMware Solution (AVS). JetStream DR for AVS delivers a "no-snapshot" means of continuous data protection, replicating data to Azure at the moment it's written locally to minimize data loss, while taking advantage of cost-efficient Azure Blob Storage as the target for replication data. This approach provides a near-zero Recovery Point Objective (RPO) and also a fast Recovery Time Objective (RTO), at Blob Storage costs. Incorporating VMware's preferred replication architecture allows support for any customer server and storage configuration while maintaining on-premises application performance.

JetStream DR Configuration for AVS Cloud

The most common configuration for JetStream DR for AVS is to utilize AVS as a cloud recovery site for VMs that are running in your on-premises data center.

The first step is to to identify VMs requiring protection and application interdependencies that may require groups of VMs to be protected together. This requires a thorough analysis of business operations and applications across all organizations in the company. Once VM protection requirements have been defined, JetStream DR can be deployed across multiple clusters for full VM protection. The software is downloaded in a standard OVA file containing all software components, including the Management Server (MS) virtual appliance and the DR Virtual Appliance (DRVA). JetStream DR is certified VMware Ready, so the vSphere host components are deployed from a VMware-signed VIB. This supports secure boot hosts and assures full support from VMware for your environment as it's protected by JetStream DR.

Key Features

JetStream DR addresses the key features that customers are looking for in a DR solution:

- **Cost Efficiency:** Use of cost-efficient Azure Blob Storage to maintain copies of VMs and their data. Rehydrate runtime instances in AVS when needed.

- **Data Safety:** Provide near-zero RPO to minimize data loss in the event of a disaster.

- **High Performance:** Capturing data without snapshots or VM agents ensures optimal application performance and operation.

- **VMware Ready:** VMware Ready Certification for added confidence in JetStream DR for AVS.

Why AVS?

Microsoft's Azure VMware Solution (AVS) enables you to rely on the reliable, highly available infrastructure of Azure to run VMware vSphere, vSAN, and NSX-T natively and at scale. You can entrust Microsoft Azure to manage the data center resources and run your VMware workloads on a fully managed, single tenant, bare-metal Azure infrastructure. There are a variety of connectivity options, including Azure ExpressRoute, and your data can be encrypted at rest and in transit with protected, high-speed, low-latency connectivity. AVS is an ideal solution for protecting VMs in their native VMware environment in the cloud.

DR Operation

Data written by VMs on-premises is replicated directly into Azure Blog Storage in the Azure cloud. Recovery infrastructure resources are not needed for DR until a disaster (or test) occurs, so costs and overhead minimized, resulting in infrastructure cost reductions of 40% to 60% versus alternative DR solutions. JetStream DR's patented garbage collection method ensures that the data footprint of the Blob Store does not grow excessively large. When a disaster event occurs, the application and configuration data stored in the Blob Store are quickly "rehydrated" into an activated vSphere cluster in AVS, enabling applications to resume operation in AVS just as they had in the protected on-premises data center.
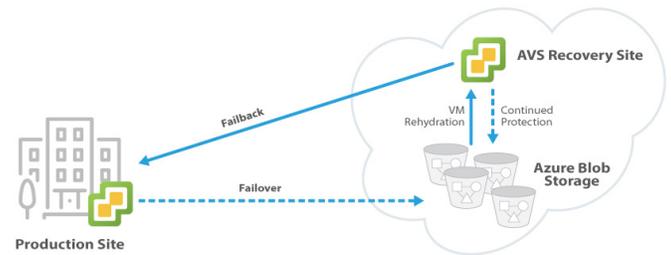
Option for Cloud-to-Cloud

Once an enterprise starts their cloud journey with JetStream DR using AVS, a natural next step is to permanently migrate some on-premises applications to the AVS cloud. The same JetStream DR software can be configured to protect applications in AVS with a cloud-to-cloud setup, so the DR protection remains consistent, even as you run your primary VMs in AVS.

The Cloud-to-Cloud use case operates very similarly to the DRaaS case, but JetStream DR is now installed in the AVS cloud to protect the applications running there. The recovery site can be a different AVS cloud data center location, still using Azure Blob Storage for data replication.
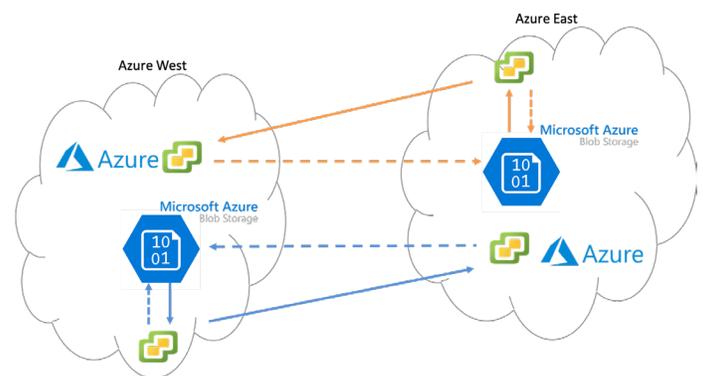
Summary

When developing a broad disaster recovery solution, each enterprise will have unique requirements and preferences about and where and how recovery is managed. The flexible deployment model of JetStream DR for AVS allows organizations with stringent protection requirements to achieve their DR goals while staying within budget.

Available through the Azure Marketplace

Manage your JetStream DR subscription license through the Azure Marketplace. Purchase and pay through the Azure Marketplace, together with your Azure Blob Storage account, and your Azure VMware Solution subscription, along with all other Azure enterprise services.

JetStream Software provides modern, cloud-native solutions for cloud disaster recovery, business continuity and workload migration. Products are strategically designed with ultimate simplicity, game-changing cost-efficiency, breakthrough performance, and next-level protection.

For more information on disaster recovery for AVS with JetStream DR:

- Visit the JetStream Software website at:
  https://www.jetstreamsoft.com/solutions/disaster-recovery-for-azure-vmware-solution/
- Contact JetStream Sales at: azure_info@jetstreamsoft.com

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