

JetStream DR

A Powerful and Flexible Solution for Service Providers

The Challenge

There is increasing pressure on enterprises and organizations to shift to the cloud and provide more comprehensive application and data protection, all while staying within budget. The ability of Service Providers to offer a flexible DR solution that matches customers' IT goals and budgets is critical. By itself, shifting to the cloud brings up a range of complicated decisions; public cloud, private cloud, and the Service Provider's cloud all have to be considered while determining the best option for each customer. Configuring a new solution to fit each potential customer's DR requirements and budget can create a significant burden on the service provider's resources, straining the ability to quickly bring in new sources of revenue and generate more revenue from existing customers.

The Solution

JetStream DR uniquely solves this challenge with cloud disaster recovery software that integrates a broad range of deployment use cases, including both on-premises, hybrid cloud, and public cloud options. This enables the Service Provider to deliver a DR solution that matches the needs of individual customers, all with the same easy installation and operation. JetStream DR hits budget targets by using cost-efficient cloud-native object storage solutions as the target for replication data, from Azure Blob Storage to S3-compatible solutions such as Cloudian and MinIO. Incorporating VMware's preferred replication architecture allows support for any customer hardware configuration, independent of the recovery side deployment.

"JetStream DR enables us to use our data center resources with greater efficiency and agility than any DR technology we've used in the past. Just as importantly, it gives us a significant new business opportunity to develop with technologies that we know and trust."

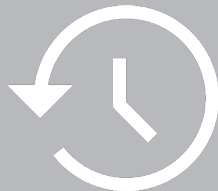
Paul Smitham, President
MSP Partner, Enterprise Networking Services, Inc

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



Extend the utilization of existing object storage beyond just Backup.

Cost Efficiency



Provide near-zero RPO to minimize the risk of data loss.

Data Safety



No snapshots or agents ensures optimal application performance and operation.

High Performance



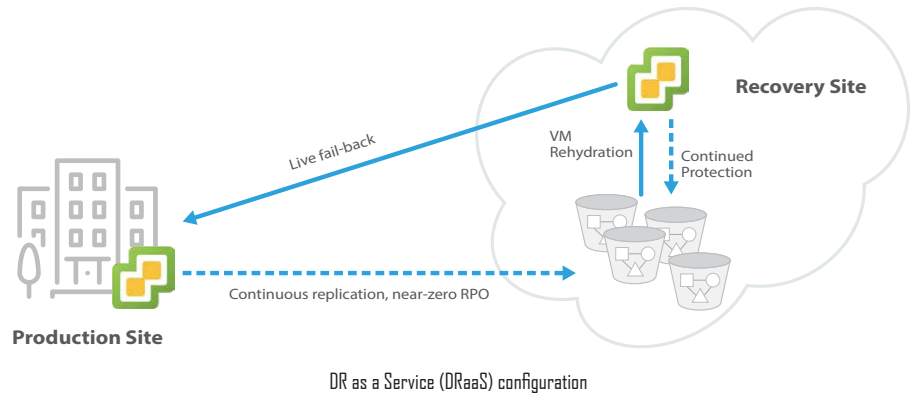
VMware Ready Certification creates customer confidence and peace of mind.

VMware Ready

Configuration for DRaaS

The most common configuration for JetStream DR is for service providers to offer DR as-a-service (DRaaS) to their end customers. The first step is to determine which VMs to protect and which VMs must be protected together. This requires a deeper analysis of the impact of applications across all organizations in the company. Once that decision has been made, JetStream DR can be deployed across multiple clusters for VM protection.

After downloading the software, there will be an OVA installation file for the Management Server (MS) and the .iso image for the DR Virtual Appliance (DRVA). Since JetStream DR is VMware Ready Certified, the software will install just like software from VMware, and it will indicate that it is supported by VMware. This will give the customer a strong level of confidence that VMware stands behind the JetStream DR software.

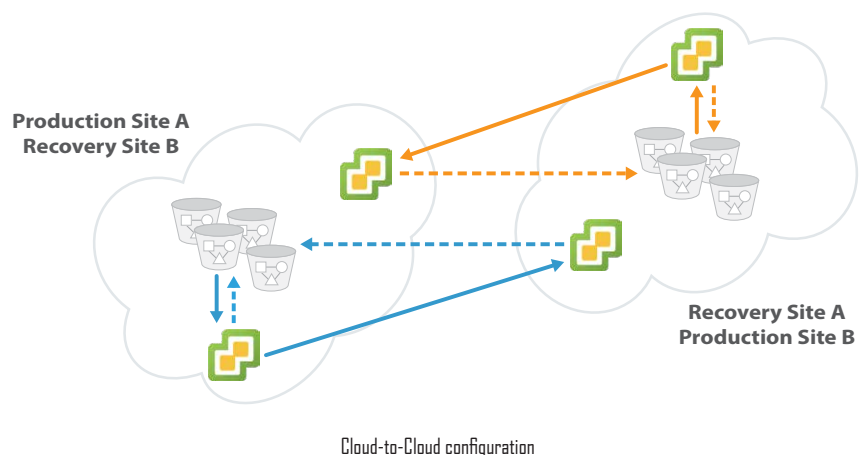


Data written by the on-premises VMs is replicated into object storage, either in the service provider’s cloud, in the public cloud, or even in a secondary data center site operated by the customer. No compute infrastructure is needed until the disaster occurs, so costs and overhead are kept at a minimum. JetStream’s proprietary garbage collection algorithm ensures that the footprint of the object store does not grow excessively. When a disaster event occurs, the application and configuration data stored in the object store are “rehydrated” into an active VMware environment, allowing the customer to return the application to the same operating condition as in the on-premises data center.

Configuration for Cloud-to-Cloud

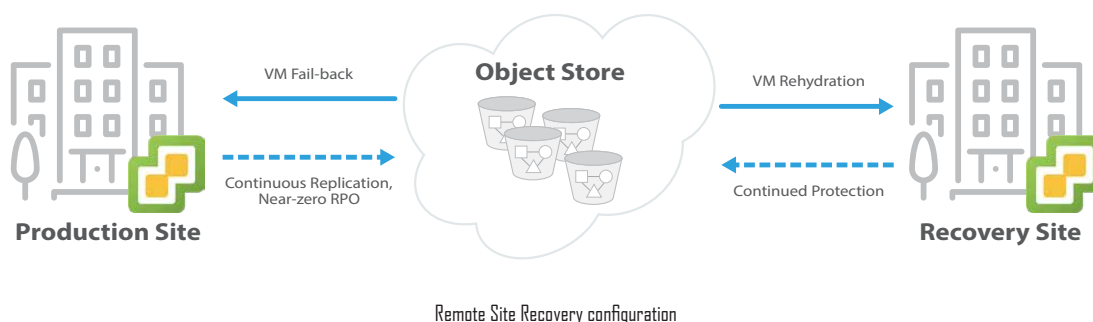
Once customers start their cloud journey with backup or even DRaaS, a natural next step is to permanently migrate some of their on-premises applications to the cloud. While some customers are starting to understand that running in the cloud does not automatically include DR, many customers are not aware that they need to set up a DR solution. The same JetStream DR software can be configured to protect applications in a cloud-to-cloud setup. JetStream also offers a separate solution, JetStream Migrate, to support live migration of those VMs from the customer data center directly into any VMware-based cloud.

The Cloud-to-Cloud use case operates very similarly to the DRaaS case, but the service provider now installs JetStream DR in their own cloud to protect the applications that they are running for the customer. The recovery site can be a separate cloud data center with object storage operated by the provider, or it could even replicate to the public cloud and be recovered there.



Configuration for Remote Site Recovery

Some customers may want to take advantage of low-cost object storage from the public cloud, but may want more control and services during a disaster. In this case, the service provider can offer a solution where application data is replicated into a public cloud object store, such as Azure Blob Storage or AWS S3. When a disaster event happens, the data and configuration can be rehydrated remotely to a VMware environment in a separate facility, in particular, the service provider's cloud. Nothing is different from the customer perspective on how the software is installed or operated. With this configuration, though, it is very important that a higher bandwidth interconnection is in place between the object storage location and the recovery site, as that will directly impact the length of time it takes to restart (RTO, or Recovery Time Objective).



Summary

With a projected increase in cloud DRaaS usage from 36% in 2019 to 59% within a year (Unitrends 2019 Survey), there is reason to believe that the shift to cloud-based DR will become even more aggressive. When developing a broad disaster recovery solution, each enterprise customer will have specific preferences about where and how recovery is managed, and how much the cloud is integrated into the final plan. JetStream DR, with its flexible deployment model and hardware independence, lets Service Providers walk into any customer and confidently explore a variety of deployment configurations, knowing that the installation and operation is going to be exactly the same whether they use their own facility, the Service Provider's cloud, or the public cloud. By using only object storage on the recovery site during normal operation, JetStream DR offers the most cost-efficient solution to safely protect application data with near-zero RPO.