Tech Tips: How to Get Started with VMware vCloud Air Disaster Recovery

Few companies can afford operational disruption, yet IT budgets remain flat and can't encompass the growing need for additional resiliency measures to protect critical-business applications. The recovery-as-a-service offering from VMware, VMware vCloud® Air™ Disaster Recovery, helps you fulfill the need to implement or supplement your organization's continuity plans while addressing budget, time, and resources constraints. It provides simplified replication and recovery based on the VMware vSphere® platform. For a successful setup of your disaster recovery service, keep in mind the following tips when getting started.

1. Understand the Service Offering

vCloud Air Disaster Recovery is a recovery-as-a-service offering owned and operated by VMware. The service introduces cloud-based disaster recovery capabilities for vSphere virtual environments. It leverages vSphere Replication to provide robust, asynchronous replication capabilities at the hypervisor layer. This approach to replication enables virtual machines in vSphere to be easily configured for disaster recovery without the traditional dependencies on underlying infrastructure hardware or data center mirroring. It replicates onsite workloads to vCloud Air and enables self-directed failover and recovery in the cloud if a disaster or disruptive event occurs.

2. Select the Right Size and Term Options

vCloud Air Disaster Recovery is a standalone service subscription with flexible term-based subscription options and convenient feature add-ons that are expandable to meet your recovery needs as they change over time. The service is available in subscription term lengths of 1, 12, 24, and 36 months. Capacity elections for compute and storage are reserved to guarantee resource availability at all times. When determining the size and term of your recovery options, assess your onsite vSphere environment by identifying the number of virtual machines you have running and their compute (RAM) and storage capacities. From the assessment, you can prioritize your virtual machines to protect—or choose to protect your entire environment—and then determine your subscription term and the capacity requirements for your plan.

3. Define Your Disaster Recovery Policy Settings

With your protection plan defined, you can determine your recovery-point objective (RPOs)—the amounts of time in which you must recover data after an outage or disaster. vCloud Air Disaster Recovery supports the full range of RPOs allowed in vSphere Replication—from 15 minutes to 24 hours. You can set a unique RPO value per virtual machine for fine-grained control over replication frequency, based on the priority of your business applications.

4. Prepare for Purchase and Deployment

After you establish the protection plan for your vSphere environment, you are ready to make your subscription purchase and check your prerequisites to prepare for deployment. Prerequisites for vCloud Air Disaster Recovery include VMware vSphere 5.1 or higher, VMware vCenter™ 5.1 or higher, vSphere Replication 5.6 (specific version for vCloud Air Disaster Recovery that does not require any special licensing), and public Internet connectivity.

5. Deploy Your Disaster Recovery Environment in vCloud Air

To get started, you configure your Disaster Recovery environment hosted on vCloud Air. After you download the vSphere Replication virtual appliance to your onsite environment, you can begin replicating the virtual machines that you plan to protect from your source site to vCloud Air (see Figure 1). The replication process configures and synchronizes your virtual machines to vCloud Air.
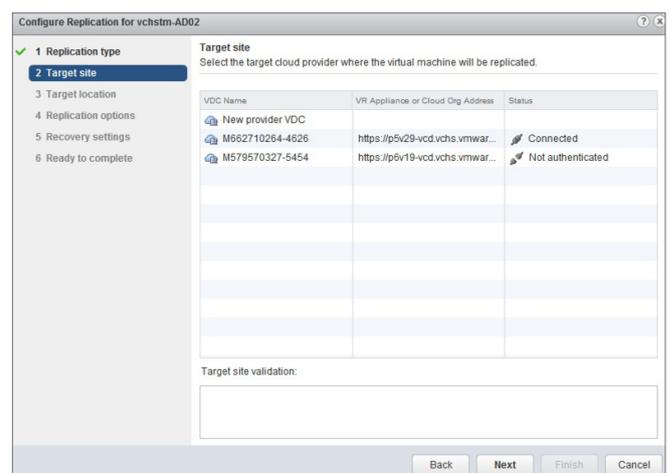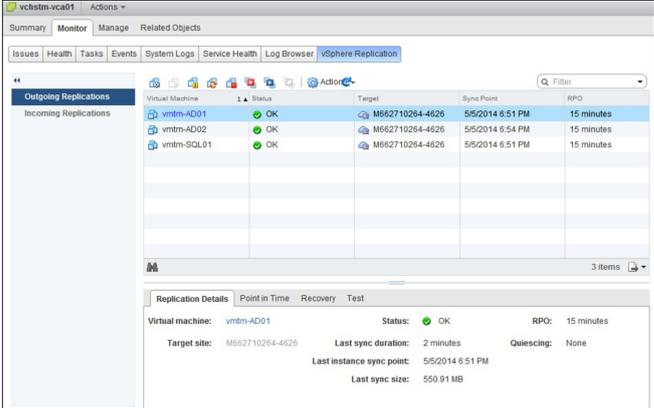

Figure 1. Replicating Virtual Machines to vCloud Air

6. Initiate a Test Failover and Run a Test Cleanup

After replicating your virtual machines to the cloud, you can log into vCloud Air to view your virtual data center enabled for disaster recovery and run a test recovery operation to verify that everything is operating as planned—including ensuring that networks are properly configured. After you verify connectivity, power on your virtual machines and ensure that users can properly access their applications that are running in the disaster recovery environment. During a test run, your replication cycles are still running on the back end so that there is no interruption of protection. After performing the test failover, run a test cleanup. This releases resources consumed by the test and prepares for the next test, planned migration, or disaster recovery.

7. Understand Options for Managing Your Disaster Recovery Environment

When you subscribe to vCloud Air Disaster Recovery, all tasks—ranging from configuration of replication to restoration of a virtual machine—can be performed through one common interface (see Figure 2). vCloud Air Disaster Recovery is completely integrated with the vSphere environment and can be managed entirely through vSphere Web Client. You can also use the vCloud Air console, vCloud Air APIs, or vCloud Air Disaster Recovery API extensions. These options provide flexibility for you to use the tools you are most familiar with to perform tests, failovers, and queries without needing to learn any new management tools.

Figure 2. Monitoring Disaster Recovery Replication

Resources

vCloud Air Disaster Recovery provides simple, affordable protection in the cloud for your vSphere environment. Take the next step and learn more.

Visit http://www.vmware.com/go/protectyourapps.

Watch a tutorial overview demonstration:
http://www.vmware.com/go/droverviewdemo.

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