## Value of Dell EMC Cloud Disaster Recovery

### Cost-Effective DR
- No additional infrastructure needed
- Minimal compute expense running 24/7, spinning up resources only for a DR event
- Direct protection from PowerProtect DD on-prem into AWS and AWS GovCloud

### Simple Deployment and Management
- Leverage what you know and own – Dell EMC, VMware, AWS, AWS GovCloud
- Existing data protection infrastructure: no new configuration
- Simple operation from your familiar Dell EMC GUI

### Simplified, Fully Orchestrated DR
- DR testing ensures that a VM can be recovered before performing a failover or recovering specific data
- Orchestrated failover of workloads to AWS and AWS GovCloud in case of disaster
- Recover to VMware Cloud
- 3 click failover, 2 click failback

## Deploying Disaster Recovery to the Public Cloud

With the growing transition to cloud computing, many organizations are looking to leverage the value of cloud to enhance their disaster recovery (DR) plan. In the past, organizations found DR to be expensive and difficult to manage (servers, backup and systems), but the options to reduce the costs and complexity were limited. In fact, DR testing and recoverability were often manual and did not include a routine checklist with pre-planned activity. Most organizations are not confident of recovering in a timely manner when disaster strikes.

For organizations looking to leverage the cloud as a disaster recovery option, Dell EMC Cloud Disaster Recovery (Cloud DR) allows enterprises to copy backed-up VMs from their on-premises PowerProtect DD using Data Protection Suite or PowerProtect Data Manager environments to AWS and AWS GovCloud to orchestrate DR testing, failover and failback of cloud workloads in a disaster scenario. These workloads can be run directly in the AWS – no backup and recovery infrastructure is needed in the public cloud for the recovery. These resources within AWS are only spun up if the primary data center is not available and decommissioned when no longer needed, which is more cost-effective than having those continuously up and running within the public cloud. Extension of the customer's existing on-premises data protection to the cloud provides a familiar user experience, thus requiring minimal education and training, and it allows the customer direct in-cloud access, monitoring and reporting. Cloud DR takes advantage of the agility and cost-effectiveness of Amazon S3 object storage, requires minimal footprint in AWS, as well as minimal compute cycles, enabling a disaster recovery solution at a minimal cost.
Cloud DR offers efficient cloud resource consumption by efficiently extending customers on-premises data protection to VMware Cloud on AWS by directly recovering the VM images stored on Amazon S3 to new virtual machines over the VMware Cloud Software Defined Data Center (SDDC). The VMware Cloud SDDC environment is not required during on-going protection and can be obtained on-demand when recovery is needed. Cloud DR also provides the capability to test recovery and failover from the same Amazon S3 copies into Amazon EC2 instances, automating the recovery flow, converting the VMware VMs into Amazon EC2 instances and enabling DR plans configuration for recovering multiple VMs.

Cloud DR Orchestration

Cloud DR orchestration features include the support of recovery run books, which enable administrators to create one or more DR plans to recover multiple VMs and preconfigured boot order and recovery orchestration. There is no conversion required and simple recovery workflow, only requiring the user to select the desired copy, then Cloud DR will automatically orchestrate all operations needed until the requested point in time is restored. Additionally, customers can manage, recover, fail back and test DR plans through the Cloud DR Server (CDRS) UI. The CDRS UI accelerates the recovery process and shortens the RTO to just a few minutes by using Rapid Recovery for selected VMs. Creating a rapid recovery copy starts a rehydration process and converts the VMDK files to the required format depending on the cloud provider environment. The recovery process then only needs to launch the recovered instance.

Summary

Cloud DR offers simplicity, faster recovery and lower costs, both in terms of infrastructure and administrative overhead. Leveraging AWS as a deployment choice can provide a better value than traditional methods and provides a simplified, fully orchestrated DR solution for organizations of all sizes. With Dell EMC, you can transform your data center to enable greater operational efficiency, resiliency and scalability. Whether you want to leverage cloud computing now or in the near future, Dell EMC can help you transform your environment for the future, laying the technical foundation for the data center while modernizing your data protection for the cloud right along with it.