DELL Technologies

Solution Brief

Dell EMC Data Protection Solutions for AWS

Dell Technologies gives organizations the ability to protect their data hosted in AWS with confidence

Cloud Data Protection

Trusted Data Protection Partner

1. Proven solutions delivered as AMI and Cloud Foundation via AWS Marketplace
2. Extend your on-premises data protection to AWS for a low TCO and higher ROI
3. Provide data protection for next-generation AWS IaaS/PaaS workloads

Simple, Easy and Efficient

4. Efficient replication to, from and between AWS regions for maximum data agility across edge, core and cloud
5. Dell is an AWS Certified Partner – Advanced Level, with multiple products available in AWS Marketplace for both AWS and AWS GovCloud (US) regions
6. Automation available via REST API proving flexible management frameworks

Why Dell

7. Dell EMC Data Protection solutions take advantage of lower-cost and highly durable Amazon S3 object storage.
8. Leverage industry-leading deduplication for low cost-to-protect and TCO
9. Provides consistent proven data protection for both on-premises and within the AWS cloud

Many organizations are moving, or have plans to move, applications to a public cloud such as Amazon Web Services (AWS) to utilize the cloud's agility, scalability and cost-efficiency. However, just because an application has been moved to the cloud doesn't mean that data protection is any less important. Most cloud providers leave the responsibility of data protection up to you, the customer. Protecting data in the public cloud shouldn't be complex or difficult, which is where Dell Technologies comes in. With its integration and partnerships with Amazon, Dell is a trusted partner in data protection whether your workloads are running on-premises or in the cloud.

The proven and modern cloud data protection solutions from Dell transform your data centers for greater operational efficiency, resiliency and scalability throughout your cloud journey. Dell also offers AWS GovCloud (US) customers and their partners flexible and secure cloud solutions that meet compliance mandates and protect sensitive, classified data files. Dell offers complete flexibility and choice in how you deploy or consume our solutions, with a robust portfolio of hardware, software, solutions and services for protecting our customers' data. Dell can help you transform your environment, laying the technical foundation for the data center, while modernizing your cloud data protection right along with it.

In-Cloud Protection

Dell Technologies is an industry leader in protecting cloud workloads, with solutions that provide the same broad portfolio of protection capabilities in the cloud as they do on-premises. You can deploy Dell EMC Data Protection solutions to begin protecting your data using an extensive set of application agents, while managing backup policies through a single pane of glass. If you prefer to protect your data with application-native tools, you can leverage Dell EMC PowerProtect Data Manager or Dell EMC Data Protection Suite to ensure efficient protection without changing your processes. These cloud-ready solutions write to Dell EMC PowerProtect DD Virtual Edition (DDVE) as their target, for the reliability, performance and storage efficiencies of a Dell EMC PowerProtect DD appliance in the cloud.

Dell also allows customers to protect business-critical workloads in AWS by running PowerProtect Data Manager as an Amazon Machine Image (AMI) in AWS. Data Manager protects Oracle, SQL, SAP HANA, File System workloads running on Amazon Elastic Cloud Compute (Amazon EC2), Kubernetes (k8s) or VMs running in VMware Cloud on AWS.

Dell EMC data protection solutions also leverage industry-leading deduplication to lower TCO, as well as minimize your AWS footprint and compute cycles. In fact, Dell EMC data protection reduces cloud resources and services costs by up to 84%[1]. Our architecture also enables organizations to take advantage of lower-cost and highly durable Amazon S3 object storage as the protection target for storage efficiency and cost reductions.

[1]Based on ESG review commissioned by Dell, "Analyzing the Economic and Operational Benefits of the Dell EMC PowerProtect Data Protection Portfolio", September 2020, evaluating the economic value of the Dell EMC data protection portfolio. Actual results will vary

Modern Workload Protection

Cloud native technologies empower organizations to build and run scalable applications in modern, dynamic environments such as public, private, and hybrid clouds. However, these containerized workloads must be protected and secure. With Dell EMC PowerProtect Data Manager, cloud native workloads are protected and managed with the same performance, security, and efficiency as other workloads, meaning your data is protected before, during, and after your transformation to next generation technologies. PowerProtect Data Manager gives developers and administrators the ability to automatically deploy the Kubernetes pods onto clusters in AWS and as well as store in-cloud for burst developments, QA/Test in "production", as well as employing self-service backup and restores. PowerProtect Data Manager protects these Kubernetes clusters running on Amazon EC2 instances with PowerProtect DDVE as the target.

Dell Technologies also protects cloud container workloads using Kubernetes services such as Amazon Elastic Kubernetes Service (EKS). PowerProtect Data Manager protects Kubernetes clusters hosted on EKS, using PowerProtect DDVE as a backup target, providing administrators with the flexibility to protect clusters from an on-premises storage disk, hosted on the EKS instance in the public cloud. In addition to the rich service features that are provided by the end platforms, enterprise-features are additionally accessible via Data Manager. These extra features include policy creation, application consistency, cluster restores between clusters, and self-service.

Cloud Disaster Recovery

For AWS as a disaster recovery option, Dell EMC Cloud Disaster Recovery (Cloud DR) enables the copying of backed-up VMs from on-premises Dell EMC Data Protection environments to AWS or AWS GovCloud for DR testing, failover and failback of AWS workloads in a disaster scenario. Cloud DR offers true, automated and orchestrated disaster recovery from within a centralized management console. For Cloud DR; additional backup and recovery infrastructure is not required in AWS – and is simply managed as an extension to your existing on-premise protection environment. Cloud DR takes advantage of the agility and cost-effectiveness of Amazon S3 storage and requires a minimal AWS footprint, for a highly efficient disaster recovery solution. In fact, Dell EMC data protection reduces time to recover in the event of a disaster by up to 85%[1].

Cloud DR also allows you to efficiently extend your on-premises data protection to VMware Cloud on AWS by directly recovering selected VM images stored on Amazon S3 to new virtual machines over the VMware Cloud Software Defined Data Center (SDDC), providing a flexible recovery target. The VMware Cloud SDDC environment is not required during on-going protection and can be obtained on demand when recovery is needed.

Long-Term Retention

Cloud Tier functionality allows you to extend your organization's data center to AWS for long-term retention, as well as managing governance and compliance policies. Dell EMC's Data Protection portfolio supports Cloud Tier to AWS, which enables automated, native tiering of deduplicated data to the cloud. Cloud Tier also allows tiering to AWS GovCloud, allowing government agencies to move sensitive workloads to the cloud for long-term retention, while complying with security and compliance requirements. This cost-effective solution allows you to gain the advantages of AWS and AWS GovCloud while lowering your overall TCO by sending only unique data to AWS, reducing your transactional overhead as well as reducing storage footprint and network bandwidth.

Data Protection Management for Native AWS Workloads

Dell EMC PowerProtect Cloud Snapshot Manager (CSM) provides AWS customers with a SaaS solution that automates the protection native workloads in AWS. CSM allows AWS customers to discover, orchestrate and automate native snapshots across multiple cloud accounts and regions based on policies for seamless backup and disaster recovery; without any need to deploy infrastructure. This solution provides the ability to copy snapshots across AWS accounts for additional security and DR, which is needed as cyber attackers become more prominent. CSM also reduces costs by automatically deleting unnecessary snapshots. Designed for any size cloud infrastructure, CSM scales as your organization and data grow by providing audit, reports, RBAC and multi-tenancy so that as your company grows, your protection scales with you. Additionally, Cloud Snapshot Manager is integrated with PowerProtect DDVE, which allows you to take advantage of industry-leading deduplication and low-cost cloud object storage, so you can retain data longer while reducing costs.

[1]Based on ESG review commissioned by Dell, "Analyzing the Economic and Operational Benefits of the Dell EMC PowerProtect Data Protection Portfolio", September 2020, evaluating the economic value of the Dell EMC data protection portfolio. Actual results will vary

Protection for VMware Cloud on AWS

Dell offers proven enterprise data protection and increased resiliency for workloads running on VMware Cloud on AWS. The cloud-enabled Dell EMC Data Protection software offers secure image and guest level backup and recovery of workloads across your entire VMware Cloud on AWS environment as well as protection for remote locations and VDI environments. Dell also offers seamless integration with your on-premises data protection solutions, and native integration into VMware tools, automating your operations and simplifying administration. Dell and VMware work together to ensure that your virtualized workloads are protected in the cloud as easily as they are on-premises, while simplifying administration and lowering TCO.

SaaS Protection for AWS Workloads

Organizations need choice when it comes to data protection so they don't have to make compromises, and Dell Technologies delivers just that with a variety of cloud data protection capabilities that provide enterprise-grade protection with zero infrastructure requirements, simple management and massive scale. Dell EMC PowerProtect Backup Service delivers high-performance and secure backup, disaster recovery, long-term retention and automated compliance. Through a single console, customers have unified visibility and a consistent management experience across SaaS apps, endpoints and hybrid workloads. PowerProtect Backup Service offers infinite, on-demand scalability and ensures predictable and controllable costs. SaaS-based data protection from Dell Technologies further empowers you to embrace the cloud services you need without having to be concerned for the safety of your data, while delivering a flexible consumption model that aligns with your cloud-based requirements.

Dell Technologies Data Protection Solutions – Paving Your Way to the Cloud

As you move to the cloud, flexible, simple backups and restores of your data hosted in AWS will be critical. Dell EMC data protection is designed specifically for cloud architectures, with the goal of helping you overcome challenges and accelerate your digital and IT transformations. Dell integrates with AWS, providing multiple methods to utilize cloud services as part of your data protection strategy as well as easing the operational challenges teams face when transitioning to modern cloud workloads. Dell's proven and modern cloud protection solutions let you protect data hosted in AWS with confidence and at a low cost-to-protect. As you accelerate your digital transformation and cloud adoption, you don't have to choose between either implementing your strategy or keeping your data safe. You don't have to compromise; Dell EMC data protection has you covered and empowers you embrace the cloud.

Learn more about Dell EMC Data Protection solutions for AWS

Contact a Dell Technologies Expert

Visit AWS Marketplace