Safeguarding hyper-converged infrastructure workloads on-premises and in the cloud with Dell EMC data protection

**The Challenge: Leveraging simple, trusted data protection for VxRail Appliance**

As a comprehensive solution, Dell EMC VxRail™ Appliances must include data protection as a critical element to support your key applications and data wherever they reside.

Streamlining your IT infrastructure and lifecycle with a dynamic, modular, pay-as-you-grow approach with VxRail Appliances provides natively integrated compute, storage and virtualization that radically simplifies your IT infrastructure. As the only turnkey Hyper-converged Infrastructure (HCI) appliance fully integrated and tested with VMware vSphere and Virtual SAN software, VxRail provides a well-known and proven foundation for the Software Defined Data Center, delivering certainty in your IT operations and end user experiences. As HCI expands to more use cases, and as workloads increasingly shift to the cloud, customers look for increased capabilities and more cost-effective scaling.

**The Solution: Optimized data protection for VxRail Appliance**

Using Dell EMC Data Protection with your VxRail provides simple, fast and efficient protection of data and applications at the right service level based on business value. Dell EMC Data Protection solutions for VxRail include software-only and converged data protection appliances, offering centralized backup and recovery, continuous data protection, protection storage and deduplication – plus, cloud readiness with disaster recovery and long-term retention to the cloud.

And, customizable, intuitive dashboards simplify monitoring critical activities, active management, and search with integrated recovery - all from a single pane of glass - ensure proper protection of critical applications.

**Why Dell EMC Data Protection for VxRail**

Does your data protection solution simplify and scale for your VMware environments?

It should.

Comprehensive data protection for VxRail Appliance is more than just backup and recovery, meeting the requirements of your virtualized workloads. Business-critical data and applications require continuous data protection for any-point in time recovery, as well as proactive monitoring to ensure service level objectives are met.
Using metadata and full content index-based search, you can easily find and quickly restore filesystem backup data; filtering the search provides an even more accurate set of results.

Alternatively, Dell EMC'S converged data protection appliance combines backup, recovery, search, analytics and cloud extensibility, to deliver enterprise-level protection in a simple to deploy and manage appliance.

When you need fast backup and recovery
Source-side deduplication can shorten backup windows by up to 2x¹. Recovery is simple, while providing fast access to backup data. Instant access to a VM image enables rapid deployment of production images into test and development environments, as well as full image recovery for disaster recovery.

When you need VMware seamless data protection
Dell EMC Data Protection is the only data protection solution with integration into all VMware interfaces. Backup and VMware Administrators manage data protection through the VMware interfaces they already know. And, automated replication of backup data ensures that you have reliable off-site recovery, including long term retention.

When you need efficient backup and recovery on-premises or in the cloud
Data recovery data is the goal of all data protection solutions, but Dell EMC delivers reliability and consistency. Application consistent backups ensure you can restore your mission-critical applications. And, fast file-level restore ensures business continuity with minimal latency. With our converged data protection solution, you will benefit from an average of 55:1 data deduplication rate² and up to 98% reduction in network usage³.

Automated and efficient data movement enables you to leverage public, private or hybrid clouds for long-term retention, without cloud gateways for cloud disaster recovery. With Dell EMC’s native Cloud Disaster Recovery, you can copy VM images to object storage within the Amazon Web Services (AWS) S3 public cloud for minimal cost and cloud footprint. This capability allows for orchestrated DR
testing, failovers in 3 clicks, and failbacks in 2 clicks from AWS to a new on-premises VM. For selected VMs, you can enable Rapid Recovery to reduce RTO to just a few minutes when recovering to the cloud. No data protection infrastructure is needed for the failover/recovery within AWS, and no compute resources are needed until a failover occurs, which greatly reduces costs and enables greater operational efficiency and resiliency.

Extension of existing data protection from on-premises to the cloud provides a familiar user experience with minimal education and training. Additionally, Cloud Disaster Recovery needs a minimal cloud footprint, reducing overall business disaster recovery costs.

When you need any point-in-time recovery

Protect virtual machines with automated provisioning and orchestration capabilities for disaster and operational recovery with VM-level granularity. VMware Administrators can easily protect and replicate VMs with continuous replication for any point in time recovery – enabling interdependent application consistency.

Dell EMC’s solution is 100% software and is hypervisor-based – and includes automated disaster recovery integrated into VMware vCenter. It also provides local and remote replication over any distance with synchronous or asynchronous replication.

When you need unified analytics and insight

You need monitoring, reporting and real-time analytics to provide your organization with unified visibility into the utilization, effectiveness and compliance of your data protection solution. By collecting and analyzing information across the entire infrastructure, Dell EMC gives you the ability to automate manual tasks to enable faster problem solving while simplifying management.

Centralized data collection of the data provides a single, comprehensive view of your data protection environment and activities. You can perform monitoring and reporting on the configuration, status and performance of your replication and be notified of unprotected VMs.
Dell EMC Data Protection for VxRail offers management and monitoring capabilities that significantly reduce time spent on audits, compliance and other reporting requirements.

**When you need the most trusted software-defined protection storage solution**

Leverage the benefits of the world’s most trusted protection storage and the agility, flexibility and efficiency of a software-defined solution. Simple to deploy, protection storage can be up and running in just a matter of minutes. It scales up to 96 TB per instance on-premises and in-cloud. You can pay as you grow in as little as 1 TB increments, and distribute this capacity in multiple instances as needed across your environment. These capabilities can run on standard hardware, so you can divert existing infrastructure to deploy protection storage.

Dell EMC protection storage provides high-speed, variable length deduplication and unparalleled data integrity to ensure reliable recovery. It supports a broad ecosystem of backup, archive, and enterprise applications. Using this solution, you can natively tier deduplicated data to the cloud for cost-effective long-term retention in the public, private or hybrid cloud. In addition, multi-tenancy enables protection storage as a service for a service provider or private cloud environment.

**Dell EMC Data Protection options for Converged and Hyper-Converged Infrastructure solutions**

Dell EMC’s data protection portfolio for Dell EMC Converged and Hyper-converged Infrastructure solutions is ideal for any organization - ranging from an enterprise that is simply looking for efficient and cost-effective backup and recovery in the event of physical or logical system failures, to a financial services provider whose business relies on always-available customer or transaction information.