



Disaster Recovery as-a-Service using VMware Site Recovery with VMware Cloud on Dell EMC

Many organizations realize the importance of implementing a robust disaster recovery (DR) solution for reasons including, but not limited to, business continuity, compliance with industry regulations, protection against disasters, ransomware and security breaches. Traditional DR solutions are complex and may not scale or provide the required levels of protection that organizations need.

VMware Site Recovery offers disaster recovery delivered as a fully managed service on VMware Cloud® on Dell EMC. It brings the powerful orchestration capabilities of VMware Site Recovery Manager™ (SRM) with built-in automation that reduces the amount of under-utilized hardware and maintenance tasks, simplifies the deployment in case of a DR event, and increases the reliability of the DR solution with non-disruptive testing. Organizations can now leverage an enterprise-ready cloud-delivered disaster recovery solution with VMware Cloud on Dell EMC as a source or target site.

Challenges of traditional disaster recovery solutions

Inefficient use of resources

Deploying a traditional disaster recovery target site requires significant investments. Organizations need to buy or lease hardware, purchase software licenses, invest in real-estate and more. However, a DR target needs to be at production scale only at the time of outage, when the production data center is down. In other words, organizations end up spending significant amounts of money on spare capacity for a potential outage and this capacity is unused most of the time.

Significant complexity and manual effort

Many organizations rely only on data replication or application-based protection to prepare workloads against disasters. However, minimizing data loss is just part of a DR solution. A comprehensive DR plan includes powering up VMs sequentially while taking into consideration dependencies between the different applications, running scripts, assigning IP addresses to VMs, and connecting VMs to storage pools. These tasks are complex and require significant manual effort. Organizations that implement only data replication or application-based protection therefore need to perform many DR tasks manually, exposing them to errors and to weeks, sometimes even months, of down time.

Why VMware Cloud on Dell EMC Site Recovery?

Increased reliability

- Built-in, non-disruptive testing to verify workload protection and desired RTO
- Native replication, independent of the underlying storage, delivering 5-minute RPOs
- Secure DR environment running on Dell enterprise-grade infrastructure

Simplified deployment

- Orderable via the VMware Cloud Console and is fully maintained and supported by VMware
- Consistent vSphere-based operational model both on-premises and off-premises
- Automate failover, failback, network re-mapping, and scripting using proven VMware SRM

Cost reduction

- Offload infrastructure maintenance tasks to a local, dedicated cloud environment managed and supported by VMware
- Streamline time-consuming DR audits with system-generated failover reporting
- Save costs — only get charged on the service based on subscription terms

Inefficient and disruptive testing

Effective DR plans need to keep up with application changes and upgrades. In order to ensure that a DR plan is up-to-date organizations need to perform frequent DR tests, with best practices suggesting performing a test at least once per quarter.

Without the right tools, these tests are either not possible or very disruptive to daily operations. Many organizations are required by law to perform DR tests and to present the results in an audit. In addition to the effort required to perform the tests, writing detailed reports is complicated and time-consuming.

Reliance on scarce personnel

Finding the right talent is time-consuming and expensive. This problem is exacerbated when organizations try to recruit IT employees who are in high demand. Even after IT employees are hired, they are often tasked with multiple responsibilities and are stretched thin. Furthermore, it is often the case that only a couple of key employees are responsible for DR, exposing organizations to risks in case of personnel changes.

Scaling to growing amounts of data

Even after deploying a DR solution, many organizations run into problems scaling it as the amount of their data, and the number of their applications increases. Scaling a DR target means more than simply buying more storage devices. Organizations need to spend a significant amount of time on planning, leasing additional real estate, negotiating with vendors, re-configuring the network, adjusting security policies, and more. As a result, organizations are not as agile as they could be, hampering their ability to meet their business goals.

The VMware Site Recovery solution

VMware Site Recovery is a cost-effective solution that helps organizations overcome the challenges of the high inefficiency costs associated with traditional DR.

When a failover is initiated, the DR target environment could be expanded easily to accommodate all the protected workloads. In addition, organizations can choose to protect their VMware Cloud on Dell EMC SDDCs operating in one region with a failover target in another region.

VMware Site Recovery enables organizations to create recovery plans that fully automate and orchestrate failovers, allowing IT teams to offload manual tasks during the recovery process. At the heart of our DR solution is Site Recovery Manager (SRM). This proven DR tool, which is included in the Site Recovery service, helps organizations reduce risks during critical times when their main data center is down.

VMware Site Recovery has extensive built-in testing capabilities. Site Recovery enables users to perform frequent non-disruptive DR tests that automatically generate detailed reports, reducing the exposure to disasters.

Use cases

Entirely new DR

Designed for organizations that have only backups or do not have any DR plan in place.

Expand existing DR plans

Organizations already have an on-premises DR solution, but they use it only to protect a few workloads. With DRaaS, they can protect the rest of their workloads, while keeping existing DR plans unchanged.

Replace existing DR

DRaaS is a natural fit for organizations intending to reduce their self-managed DR footprint and move to a fully managed DR solution.

DR between different regions

DRaaS customers can protect applications between different regions.

The VMware Site Recovery with VMware Cloud on Dell EMC is fully maintained and supported by VMware, relieving organizations of the need to set up a secure environment, maintain hardware, and manage the lifecycle of their infrastructure stack. VMware Cloud on Dell EMC is operated and supported by highly trained experts, allowing organizations' IT teams to focus on strategic initiatives and reducing the exposure should key employees leave.

Key capabilities



Streamlined DR orchestration and reporting

- Pre-configured runbooks with priority tiers and inter-VM dependencies: VMware Site Recovery brings proven automation and orchestration capabilities of Site Recovery Manager to the cloud, including the ability to pre-configure disaster recovery runbooks with virtual machine startup priorities and inter-VM dependencies.
- Pre-defined resource and network mappings: VMware Site Recovery allows users to map virtual machine resources on the protected site to resources on the recovery site. Users can configure site-wide mappings to map objects in the vCenter® Server inventory on the protected site to corresponding objects in the vCenter Server inventory on the recovery site.
- Non-disruptive test workflows: VMware Site Recovery enables users to be prepared for disaster scenarios by easily testing their disaster recovery configuration. The testing is designed to be non-disruptive to production workloads, so that users can test as frequently as needed.
- Detailed DR reporting: VMware Site Recovery provides detailed historical reports, which are useful as a proof of disaster recovery readiness and recovery times. These reports can also help diagnose issues with the disaster recovery plan.



Hypervisor-based VM replication

- Hypervisor-based VM replication: VMware Site Recovery uses vSphere Replication which offers VM-centric replication for fine-grained control independent of the underlying storage.
- RPOs as low as 5 minutes: Depending on user's RPO needs, VM-level protection for RPO between 5 minutes and 24 hours can be configured.
- Bi-directional protection: With VMware Site Recovery users can seamlessly switch the direction of protection between remote sites.

Resources

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Deep integration with VMware Cloud on Dell EMC

- Complete cloud lifecycle management: VMware Site Recovery manages the initial deployment as well as subsequent upgrades of the disaster recovery components on the VMware Cloud SDDC.
- Flexible billing: With VMware Site Recovery, users only get charged for the service based on subscription terms. Users can unlock significant discounts on service pricing by purchasing 1-year or 3-year term subscriptions.
- Integration into VMware Cloud console: VMware Site Recovery has tight integration with VMware Cloud. Users can activate the service, download on-prem components, create term subscriptions and add additional Site Recovery Manager instances right from VMware Cloud console.
- Inter-region protection: Users can also use VMware Site Recovery to protect production workloads running in VMware Cloud on Dell EMC to a different VMware Cloud region.

Prepare your environment for disaster avoidance, compliance audits and protect critical data and applications while taking advantage of cloud flexibility and economics. Leverage VMware Site Recovery and get started today.