VMware Site Recovery Manager and VMware vSphere Replication

**AT A GLANCE**
VMware Site Recovery Manager™, the industry-leading disaster recovery (DR) software, can be consumed as a perpetual license or as a service through VMware Site Recovery™ for VMware Cloud™ on AWS. Site Recovery Manager automates and orchestrates failover and failback, ensuring minimal downtime in case of a disaster. Built-in nondisruptive testing ensures your recovery time objectives (RTOs) are met. Site Recovery Manager integrates with a vast ecosystem of underlying replication technologies, providing maximum flexibility.

VMware vSphere® Replication™ provides VM-based replication, supporting a large variety of underlying storage solutions with recovery point objectives (RPOs) ranging from 5 minutes to 24 hours.

**KEY BENEFITS**
- Perform frequent, nondisruptive testing, even during business hours, to ensure predictable recovery objectives
- Reduce recovery time to minutes with reliability using automated orchestration workflows
- Achieve zero-downtime application mobility by orchestrating the live migration of VMs at scale across sites
- Return to regular operations with ease using the original recovery plan through automated failback
- Protect thousands of VMs with centralized recovery plans, and eliminate manual runbooks
- Protect investments and tailor RPOs using supported replication

Simplify DR management with the only VMware-integrated solution that runs on any storage platform
VMware Site Recovery Manager automation software integrates with an underlying replication technology to provide policy-based management, minimize downtime in case of disasters via automated orchestration of recovery plans, and conduct nondisruptive testing of your DR plans. It is designed for virtual machines (VMs) and scalable to manage all applications in a VMware vSphere environment. To deliver flexibility and choice, it integrates natively with VMware vSphere Replication and VMware vSphere Virtual Volumes™ integrated storage arrays, and also supports a broad range of array-based replication solutions available from all major VMware storage partners.

Site Recovery Manager natively leverages the benefits of vSphere and can also take advantage of VMware Cloud Foundation™, integrating with other VMware solutions such as VMware NSX® (network virtualization) and VMware vSAN™ (hyperconverged infrastructure).

By allowing users to test and automate the migration process of applications between sites at scale with minimal or no downtime, Site Recovery Manager fulfills the needs for a variety of use cases, such as disaster recovery, disaster avoidance, planned data center migrations, site-level load balancing and application maintenance testing. Site Recovery Manager ensures fast and highly predictable recovery times, simplifies management through automation and minimizes the total cost of ownership, making it the industry-leading solution to enable application availability and mobility across sites in private cloud environments.

**FIGURE 1:** Site Recovery Manager automates the failover and migration of VMs to a secondary site.

vSphere Replication provides hypervisor-based VM replication. It protects VMs from partial or complete site failures by replicating the VMs, regardless of the underlying storage array, from a primary site to a secondary site, between two clusters in a single site, and from multiple source sites to a single target site. vSphere Replication is
configured on a per-VM basis, allowing fine control over which VMs are replicated. After the initial replication, only changes to the VMs are replicated to minimize network bandwidth consumption.

Site Recovery Manager and vSphere Replication power VMware Site Recovery, a new DR-as-a-service (DRaaS) offering for VMware Cloud on AWS, that simplifies deployment, provides reliable DR capabilities and reduces overall costs.

**Site Recovery Manager key benefits and capabilities**

**Fast and reliable recovery**
Site Recovery Manager automates every aspect of executing a recovery plan to accelerate recovery and eliminate the risks involved with manual processes:

- **Automated orchestration workflows** – Perform a DR failover or a planned migration, and failback recovered VMs to the original site, all executing the same recovery plan with a single click.
- **Automated recovery of network and security settings** – Eliminate the need to re-configure IP addresses on recovered VMs via integration with NSX. Security policies are also preserved, further reducing configurations post-recovery.
- **Nondisruptive recovery testing** – Perform automated failover testing as frequently as needed in an isolated network to avoid impact to production applications, and ensure regulatory compliance through detailed reports.

**Zero-downtime application mobility**
Site Recovery Manager can enable live migration of applications at scale between two sites when using a certified stretched solution:

- **Orchestrated cross-vCenter vMotion** – Use recovery plans to orchestrate cross-vCenter® vMotion® operations at scale when using stretched storage. Perform zero-downtime disaster avoidance and data center migrations.
- **Stretched storage support** – Deliver benefits to users:
  - For Site Recovery Manager users, it improves recovery time and enables zero-downtime, zero-data-loss application mobility through orchestrated vMotion.
  - For stretched storage users, it adds the benefits of nondisruptive testing and orchestrated VM recovery.
- **Integration with a broad range of replication solutions** – Flexibly tailor your organization’s topologies and RPOs.

For more information, see the [VMware Compatibility Guide](#).

**Simplified DR management**
From initial setup to ongoing management, Site Recovery Manager delivers simple and policy-based operations thanks to automation and integration with VMware Cloud Foundation technology:

- **Centralized recovery plans** – Create and manage recovery plans for thousands of VMs directly from the intuitive vSphere Web Client powered by a new HTML5 user interface.
- **Policy-based management** – Utilize storage profile protection groups to identify protected datastores, automate the process of protecting and unprotecting VMs, and adding and removing datastores from protection groups.
- **Self-service provisioning** – Allow application tenants to provision DR protection using blueprints in VMware vRealize® Automation™.
vSphere Replication key benefits and capabilities

**Minimal disaster impact** – Get RPOs as low as five minutes.

**Maximum flexibility** – Gain compatibility with vSAN and a broad ecosystem of storage arrays.

**Simplified management** – Manage directly using vSphere Web Client or VMware vRealize Orchestrator™.

How to buy

Site Recovery Manager is available in two editions to help protect your environment according to your business needs. For more information, read the purchasing options.

Both editions of Site Recovery Manager are licensed per protected VM.

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<th>SITE RECOVERY MANAGER STANDARD</th>
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<td>Up to 75 protected VMs per site</td>
<td>No licensing limitation on the number of protected VMs</td>
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FIGURE 2: Site Recovery Manager editions.

For VMware Site Recovery for VMware Cloud on AWS purchase options, please visit the VMware Site Recovery product page.

vSphere Replication is included in vSphere Essentials Plus and higher.