VMWARE SITE RECOVERY MANAGER 6.1
Automated Application Availability and Mobility for Private Cloud Environments

AT A GLANCE
VMware Site Recovery Manager™ is the industry-leading solution to enable application availability and mobility across sites in private cloud environments. Site Recovery Manager is an automation software that integrates with an underlying replication technology to provide policy-based management, non-disruptive testing and automated orchestration of recovery plans. This provides simple and reliable recovery and mobility of virtual machines between sites with minimal or no downtime.

KEY BENEFITS
- Use for multiple use cases, such as disaster recovery, disaster avoidance, data center migration and other
- Perform frequent non-disruptive 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 orchestrating live migration of virtual machines at scale across sites
- Return to regular operations with ease using the original recovery plan through automated failback
- Protect thousands of virtual machines using centralized recovery plans and eliminate manual runbooks
- Protect investments and tailor RPOs using supported replication solutions available from major storage vendors
- Lower the total cost of ownership for DR by up to 50%
- Further reduce OpEx and CapEx using complementary Software-Defined Data Center technologies, such as VMware NSX® and VMware Virtual SAN™

Figure 1: Site Recovery Manager automates the failover and migration of virtual machines to a secondary site. Site Recovery Manager relies on either vSphere Replication or a broad range of storage-based replication products to replicate virtual machines to the recovery site.

What Is Site Recovery Manager?
VMware Site Recovery Manager is an automation software that integrates with an underlying replication technology to provide policy-based management, non-disruptive testing and automated orchestration of recovery plans. It is designed for virtual machines and scalable to manage all applications in a VMware vSphere® environment. To deliver flexibility and choice, it integrates natively with vSphere Replication™ 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 VMware vSphere and can also take advantage of the Software-Defined Data Center (SDDC) architecture, integrating with other VMware solutions, such as VMware NSX (network virtualization) and VMware Virtual SAN (hyper-converged software-defined storage).

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 or even 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.
What Else Do You Need?
Site Recovery Manager requires an underlying replication technology to orchestrate recovery operations of protected virtual machines.

• VMware vSphere® Replication™. Hypervisor-based, VM-centric replication with customizable recovery point objective and multiple point-in-time recovery. Natively integrated with Site Recovery Manager and included with most vSphere editions. Learn more.

• Third-party solutions. Site Recovery Manager uses Storage Replication Adapters (compatibility guide) developed by storage partners to integrate with third party systems, including:
  – Array-based replication. Third-party storage systems with built-in replication capabilities.
  – Stretched storage. Solutions that combine synchronous replication with array-based clustering between sites in metropolitan distances (10 milliseconds round-trip time).

Key Features and Capabilities
Traditional DR solutions that rely on manual processes often fail to meet business requirements because they are too expensive, complex and unreliable. Organizations using Site Recovery Manager obtain the following features and benefits.

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

• Non-disruptive 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.

• Automated orchestration workflows – perform a DR failover or a planned migration, and failback recovered virtual machines to the original site, all executing the same recovery plan with a single click.

• Automated recovery of network and security settings – Site Recovery Manager integrates with VMware NSX, eliminating the need to re-configure IP addresses on recovered virtual machines. Security policies are also preserved, further reducing configurations post-recovery.

• Extensibility for custom automation – use the VMware vRealize® Orchestrator™ plug-in for Site Recovery Manager to build custom automation workflows. Pre-built workflows simplify the process to get you started with custom workflow creation.

Zero-downtime application mobility
Site Recovery Manager can enable live migration of applications at scale between two sites when using a certified stretched solution. See the compatibility guide.

• 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** - delivers benefits to both Site Recovery Manager and stretched storage 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 non-disruptive testing and orchestrated virtual machine recovery

Site Recovery Manager also integrates with a broad range of replication solutions, allowing organizations to flexibly tailor topologies and recovery point objectives (RPO).

• **vSphere Replication** - virtual machine replication that enables heterogenous storage topologies, with flexible recovery point objective. Replication engine for Virtual SAN.

• **Array-based replication support** - allows customers to use current storage investments and offers options for zero data loss through synchronous replication. See compatibility guide.

**Simple and policy-based management**

From the initial setup to the on-going management, Site Recovery Manager delivers simple and policy-based operations thanks to automation and integration with SDDC technology.

• **Centralized recovery plans** - create and manage recovery plans for thousands of virtual machines directly from the vSphere Web Client.

• **Policy-based management** - “storage-profile” protection groups identify protected datastores and automate the process of protecting and unprotecting virtual machines and adding and removing datastores from protection groups.

• **Automated network mappings** - use VMware NSX logical switches to automatically map network settings across the two sites when creating a recovery plan.

• **Self-service provisioning** - allow application tenants to provision disaster recovery protection using blueprints in VMware vRealize Automation™.

**Up to 50% lower TCO**

Site Recovery Manager can dramatically lower the total cost of ownership (TCO) through management and testing automation that eliminates the complexity of manual processes, while enabling the use of technology that lower capital expense for recovery infrastructure.

Site Recovery Manager can reduce total cost by up to 30% by replacing complex manual runbooks with simple, automated recovery plans that can be tested with ease and without disruption. For organizations with an RPO of 15 minutes or higher, vSphere Replication can eliminate another 20% in total cost by replacing licensing costs for array-based replication. The combined solution can save over USD $1,100 per protected virtual machine per year. These calculations were validated by a third-party global research firm. Read the complete study.
LEARN MORE
For more information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit http://www.vmware.com/products, or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the vSphere documentation.

How to Buy
Site Recovery Manager is available in two editions to help you protect your environment according to business needs. Learn more.

Both editions of Site Recovery Manager are licensed “per protected virtual machine”.

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