Disaster Recovery as a Service with VMware Cloud on AWS

Addressing Top Five Challenges of Deploying a Comprehensive Disaster Recovery Solution

START

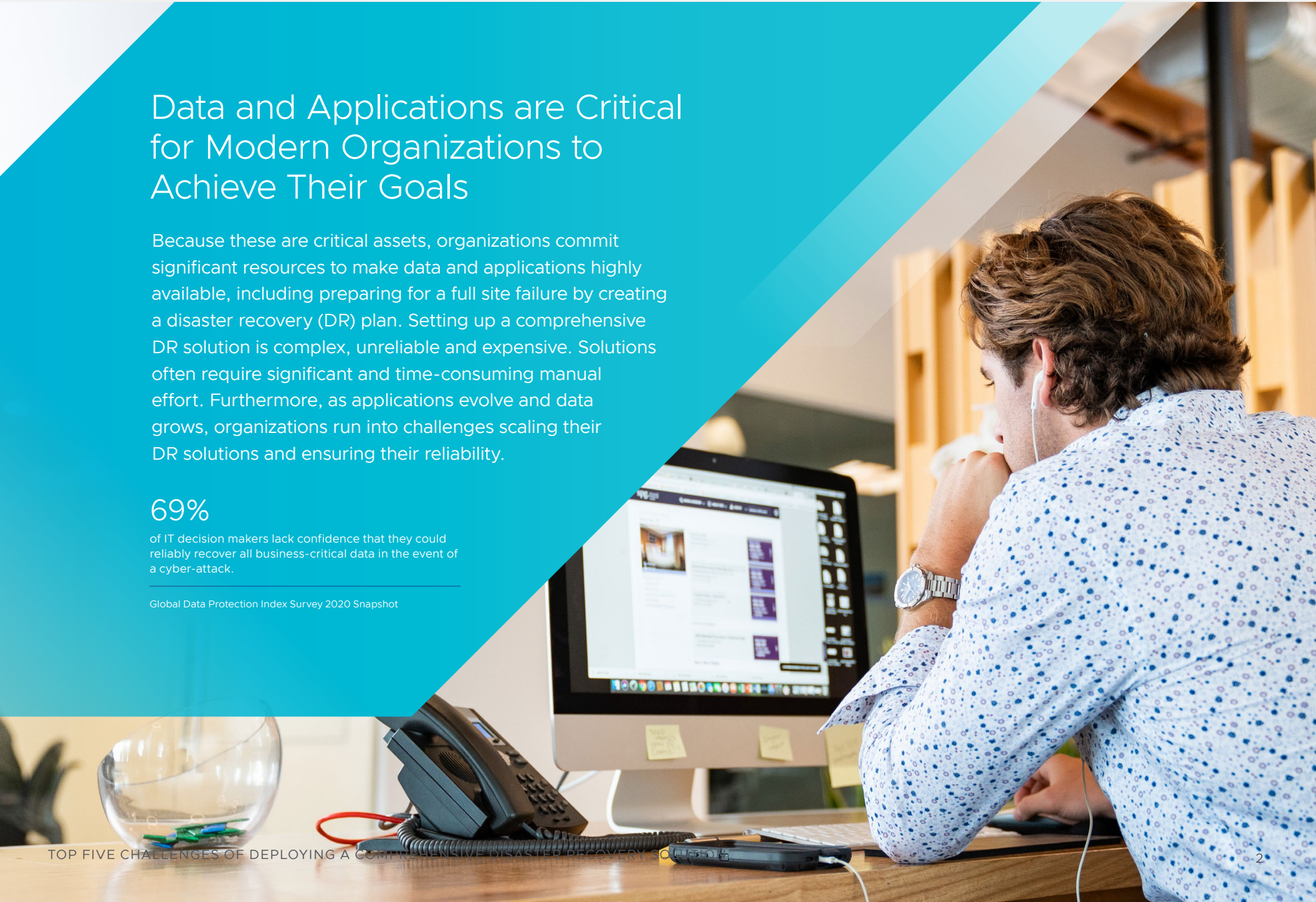
Data and Applications are Critical for Modern Organizations to Achieve Their Goals

Because these are critical assets, organizations commit significant resources to make data and applications highly available, including preparing for a full site failure by creating a disaster recovery (DR) plan. Setting up a comprehensive DR solution is complex, unreliable and expensive. Solutions often require significant and time-consuming manual effort. Furthermore, as applications evolve and data grows, organizations run into challenges scaling their DR solutions and ensuring their reliability.

69%

of IT decision makers lack confidence that they could reliably recover all business-critical data in the event of a cyber-attack.

Global Data Protection Index Survey 2020 Snapshot



The Solution: Disaster Recovery as a Service with VMware Cloud on AWS

VMware offers two in-house DRaaS solutions supported on VMware Cloud™ on AWS:

1. **VMware Cloud Disaster Recovery offers on-demand disaster recovery, delivered as an easy-to-use SaaS solution, with cloud economics.** It combines cost-efficient cloud storage with simple SaaS-based management for IT resiliency at scale. Customers benefit from consistent VMware operations across production and DR sites and a 'pay when you need' failover capacity model for disaster recovery (DR) resources. VMware Cloud Disaster Recovery can protect a very broad set of IT services in a cost-efficient manner, with fast recovery capabilities (On-demand DRaaS).
2. **VMware Site Recovery simplifies traditional traditional disaster recovery and provides reliable and cost-effective service.** Built on top of enterprise-grade DR tools (VMware Site Recovery Manager™ and VMware vSphere® Replication™) and global mega-scale cloud infrastructure, the service provides an end-to-end disaster recovery solution that is quick to deploy and leverages existing know-how. VMware Site Recovery can protect mission critical IT services that require very low RPO and RTO (Hot DRaaS).

The two DRaaS solutions can be used concurrently in a customer's environment to protect different IT services.

Explore how DRaaS solutions for VMware Cloud on AWS helps to address common disaster recovery challenges

Challenge 1: High Costs and Inefficient Use of Resources

Owning and maintaining a traditional disaster recovery (DR) target site requires significant investments, since it often means building an entirely new data center. Organizations need to buy or lease hardware, purchase software licenses, invest in real-estate and dedicated IT assets, and more.

However, a DR target is used only in emergencies, when the main data center is down, so organizations end up spending significant amounts of money on something that goes unused most of the time. High upfront investments in assets that are mostly idle tend to deter organizations from deploying a DR solution or force them to compromise on the level of DR protection applications receive.

The solution: DRaaS with VMware Cloud on AWS

With VMware Cloud Disaster Recovery and VMware Site Recovery, customers can choose VMware Cloud on AWS as their DR target.

VMware Cloud Disaster Recovery spins up VMware Cloud on AWS infrastructure only during a DR testing or failover event. It utilizes a highly efficient cloud storage layer for storing backups, lowering DR costs. Failbacks result in minimal AWS egress charges because only data deltas/changes are transferred.

With VMware Site Recovery, you need hosts sized to only store the replicated data during steady state operations.

Challenge 2: Significant Complexity and Manual Effort

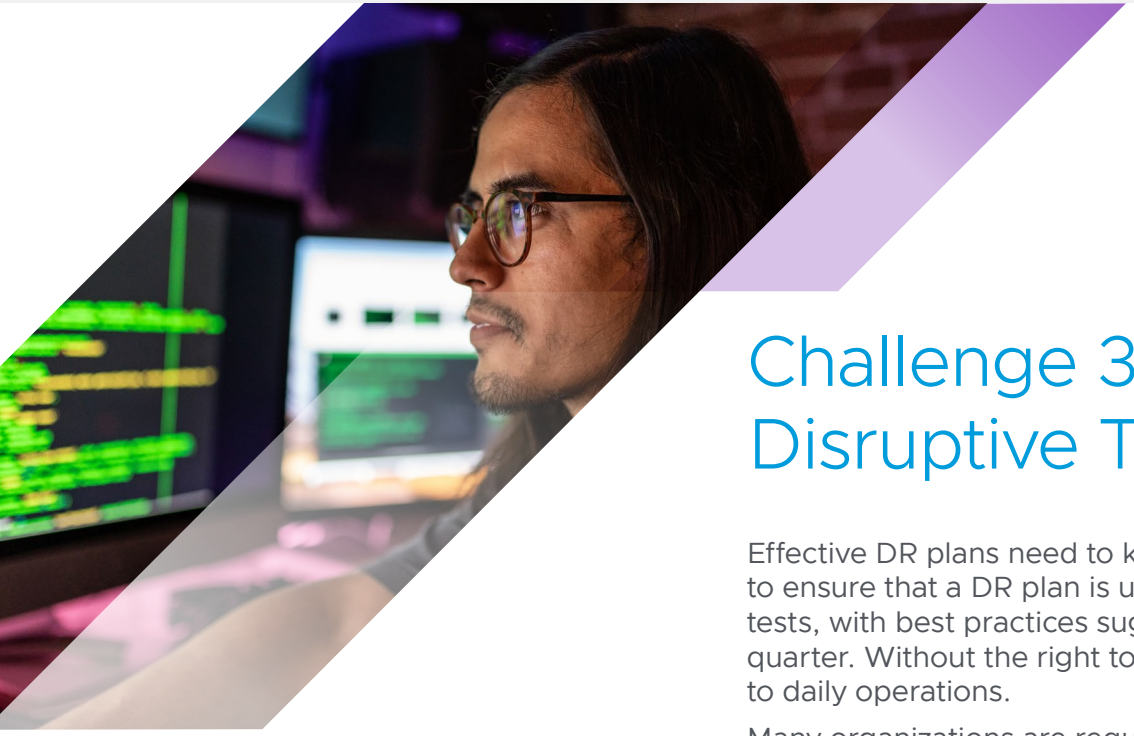
Many organizations rely only on data replication or application-based protection to prepare workloads against disasters. But minimizing data loss is just part of a DR solution. A comprehensive DR plan includes powering up Virtual Machines (VMs) sequentially while taking into consideration dependencies 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 themselves to errors and weeks, or even months, of down time. Also, customers need to convert VM formats during recovery and that eventually increases recovery time of applications.With IT environments constantly in a state of change, DR sites represent a challenge to deploy and maintain at the speed and demands of business.

The solution: DRaaS with VMware Cloud on AWS

With VMware Cloud Disaster Recovery and VMware Site Recovery, customers can use the same tools and processes that they have been using in their on-premises environment. VMware Cloud Disaster Recovery maintains VMs in their native vSphere format and eliminates the need for brittle and time-consuming VM disk format conversions. It dramatically increases recovery success rates and greatly simplifies failback and “return to normal” operations. It provides efficient, orchestrated built-in failback from VMware Cloud on AWS to on-premises data centers and takes off that burden from customers.

At the heart of VMware Site Recovery is Site Recovery Manager (SRM). This proven DR tool, which is included in the Site Recovery service, helps organizations reduce risks and shorten recovery times when their main data center is down.



Challenge 3: 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 that tests are performed 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 time and effort of performing the tests, writing and compiling detailed reports is complicated and time-consuming.

The solution: DRaaS with VMware Cloud on AWS

During transient events such as DR testing or failover, customers don't need to learn new operational processes and tools of cloud infrastructure. VMware Site Recovery has extensive built-in testing capabilities. Site Recovery enables you to perform frequent non-disruptive DR tests that automatically generate detailed reports, thereby reducing your exposure to disasters.

VMware Cloud Disaster Recovery provides built-in, automated audit reports that help customers meet their compliance objectives. Also it provides automatic health checks of the DR plan every 30 minutes, thereby increasing the confidence that the DR plan will work when needed.

Challenge 4: Reliance on Scarce Personnel

Finding the right talent is time-consuming and expensive. This problem is exacerbated when organizations need to recruit IT employees with in-demand skillsets. Even after IT employees are hired, they are often tasked with multiple responsibilities and are stretched thin. In many cases, only a few key employees are responsible for DR, exposing organizations to additional risks in case of personnel changes or turnover.

The solution: DRaaS with VMware Cloud on AWS

The VMware Site Recovery and VMware Cloud Disaster Recovery DR target on VMware Cloud on AWS is fully maintained and supported by VMware, relieving your organization from the need to setup a secure environment, maintain hardware, and manage the lifecycle of your infrastructure stack.

VMware Cloud on AWS is operated and supported by highly trained experts, allowing your IT teams to focus on strategic initiatives, and reducing your exposure if key employees leave.

Challenge 5: Scaling to Growing Amounts of Data

Even after deploying a DR solution, many organizations run into scaling challenges as the amount of their data, and the number of their applications, increase.

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 business goals.

The solution: DRaaS with VMware Cloud on AWS

VMware Site Recovery and VMware Cloud Disaster Recovery are built on the global elastic cloud environment of VMware Cloud on AWS, so scaling your DR target can be done in as little as a few minutes with just a few clicks.

When a failover is initiated, the DR target environment expands automatically to accommodate all the protected workloads.

Further Resources

Existing alternate disaster recovery solutions are expensive, make inefficient use of resources, involve significant manual effort, and are difficult to scale. In addition, they expose organizations to additional risks due to the difficulty of performing DR testing and a reliance on scarce personnel.

VMware Cloud Disaster Recovery and VMware Site Recovery for VMware Cloud on AWS simplify traditional disaster recovery and provides reliable, cost-effective service that allows organizations to protect more workloads and reduce risks.

LEARN MORE ABOUT DISASTER RECOVERY WITH VMWARE CLOUD ON AWS

- Learn more on the *VMware Cloud Disaster Recovery website*
- Learn more on the *VMware Site Recovery website*
- Try the *VMware Site Recovery Hands-On Lab* for a first-hand immersive experience
- Try *VMware Cloud Disaster Recovery Hands-on Lab*

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