

ESG SHOWCASE

Delivering on Stringent SLAs with IBM Cloud and Zerto

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ABSTRACT: Data and applications run the business, but not every application is born equal. With little room for error when recovery is needed, modern organizations should consider leveraging advanced disaster recovery solutions that possess a strong cloud component. That capability is what makes the IBM Cloud and Zerto partnership particularly relevant for today's stringent recovery-related environments.

Market Landscape

Recent ESG research shows that only one in five organizations always meet IT business continuity and disaster recovery (BC/DR) service level agreements (SLAs), which means there is much room left for improvement in this space. Not meeting these SLAs comes at the cost of significant impacts.

Downtime is more than a technology problem because it has economic, legal, and operational implications. To provide adequate support to business systems, organizations need to avoid situations where mission-critical systems or data are unavailable. ESG research also highlights that the critical timeframe in which to resume business operations fits in a one-hour window for the majority of organizations (see Figure 1).¹

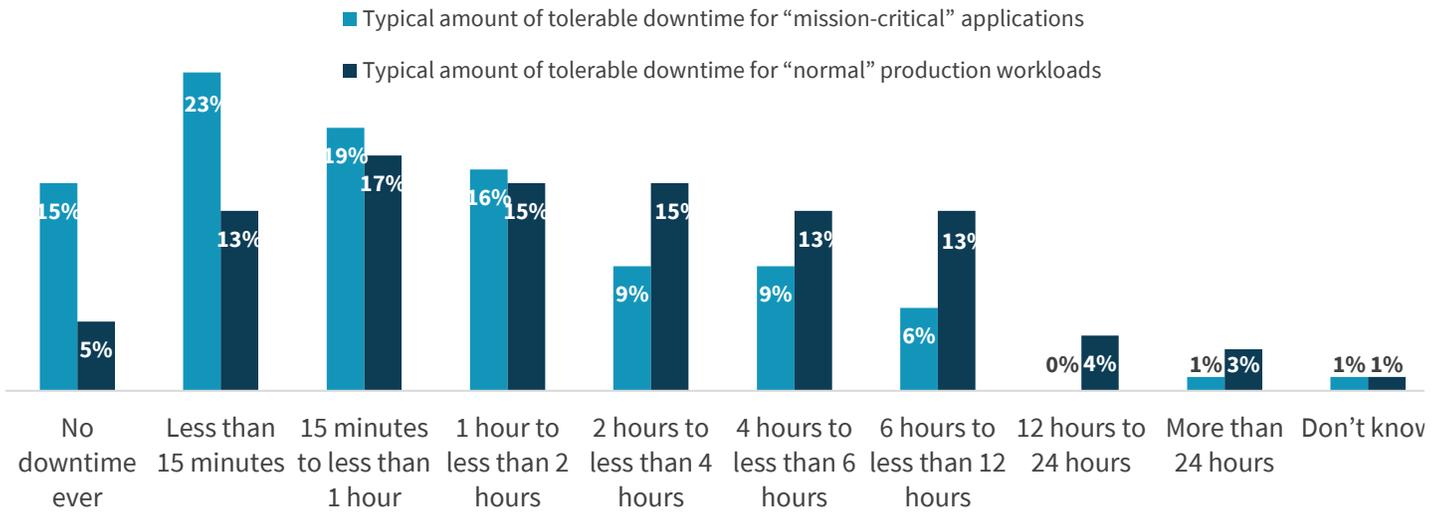
Mission-critical data loss tolerance is (not surprisingly) low: 57% of organizations report only being able to tolerate up to one hour of data loss (see Figure 1), which can be considerable in larger environments. Fifteen percent of organizations report objectives of no data loss at all. They are implementing solutions to support that objective involving availability technologies such as continuous data protection and highly redundant infrastructure. Time is truly of the essence with a mean RPO of 22 minutes for surveyed organizations.

Also, ESG notes that cloud is now by far the most widely used BC/DR method for providing resiliency through secondary sites, with four in ten organizations actually leveraging cloud as their most widely used method. One in four organizations will rely on a third-party service provider.

¹ Source: ESG Master Survey Results, *Real-world SLAs and Availability Requirements*, to be published. All ESG research references and charts in this showcase have been taken from this master survey results set.

Figure 1. One Hour Can Be a Long Time for Recovery

What is the amount of downtime your organization can tolerate from servers running “mission-critical” applications/workloads before making the decision to “failover/recover” to a BC/DR secondary site or service provider? What is the amount of downtime your organization can tolerate from servers running “normal” applications/workloads before making the decision to “failover/recover” to a BC/DR secondary site or service provider? (Respondents: N=378)



Source: Enterprise Strategy Group

Top Ten Keys to DR Success with Cloud

A successful, modern DR solution that leverages advanced cloud capabilities is critical to the success of a BC/DR initiative. The “marriage” of the recovery solution and the cloud IT technology must support the stringent requirements of a modern business and the needs of IT teams in a variety of ways, as summarized in Table 1.

Table 1. Capabilities of a Successful, Modern DR Solution

Key Capability	Description
Low RPO and RTO	Advanced data protection mechanisms, application consistency, feature breadth and depth of the DR solution.
Cyber Resiliency	Cyber-attacks are a logical data disaster for which DR can provide remediation. Allow for rollback, sandboxing.
Enterprise-grade Scalability and Networking	Ability to store and easily adjust capacity to support vast amounts of data while providing a secure and high-performance backbone.
Redundancy and Global Footprint	Leveraging a cloud destination that offers presence across the globe for compliance and redundancy purposes.
Multi-cloud Support	Support to the cloud and in the cloud.
Security	Multiple layers of security to secure the data and its access.
Hypervisor-centric	Full integration into common hypervisor platforms, including bare metal access, support for 100s of VMware SDDC configurations.
Ease of Deployment and Use	Deployment in a few clicks, easy provisioning of cloud destination, reporting.
Automation	Failover, failback, runbooks (sequencing applications), human error limitation, operational efficiency.
Cost and Efficiency	Agreement term, transfer costs

Source: Enterprise Strategy Group

Customers must consider many potential challenges when implementing a BC/DR solution in the cloud. They need to look to adopt metrics primarily based on the mission criticality of the application, reflecting sensitivity to outages and data loss. This is why focusing on RPOs and RTOs should always be one of the primary sets of metrics. Time to deployment, ease of use and configuration, and quality of support are also going to be critical.

IBM Cloud and Zerto

Zerto provides a solution called IT Resilience Platform, which is an all-in-one converged disaster recovery and backup platform to support digital transformation, reduce downtime and data loss, and help businesses move workloads seamlessly across clouds or data centers.

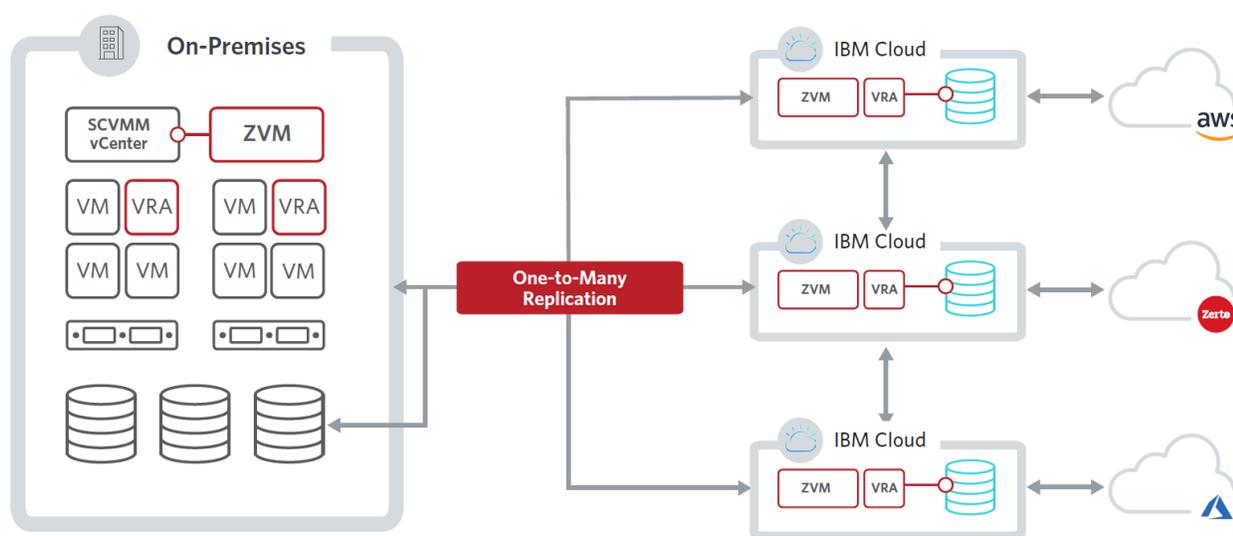
IBM Cloud brings together market-leading security, enterprise scalability, and open innovation of its cloud platform to provide agility and continuity for its customers. In the case of the Zerto hypervisor-based solutions, IBM Cloud provides bare metal and hypervisor access, making it a perfect fit. IBM Cloud key differentiators include:

- Elimination of application rewriting and refactoring through options to run SAP, VMware, and mission-critical environments.
- Reduction of IT costs with no charge network backbone to replicate between IBM Cloud data centers.
- Deployment with automation and integration (with industry-leading solutions like Zerto).
- Provisions for customers to “bring their own” licenses, a flexible approach that simplifies deployments.
- IBM’s 50+ years of expertise in business continuity represented in IBM Resiliency Services, a fully managed service.

Leveraging Zerto, organizations can optimize their RPOs and RTOs through Zerto’s continuous data protection capabilities—the result is more granularity and better service levels than by leveraging snapshots. Zerto works with VMware solutions and IBM Cloud Bare Metal, which includes advanced automation for creating the VMware Software-Defined Data Center (SDDC) and provisioning the infrastructure.

Running Zerto’s continuous data protection (CDP) on IBM Cloud provides the very low RPOs and RTOs. And because the solution is easy to deploy and manage, the end-user doesn’t need a PhD in disaster recovery. End-users can benefit from very granular recovery capabilities that can prove useful in the context of remediation of cyber-resiliency events. In combination with IBM Cloud, the solution can deliver advanced recovery automation and leverage a global private network backbone for multi-site or multi-region deployments and strategies.

Figure 2. IBM And Zerto Topology



Source: Zerto

Components of the joint solution include:

- The Zerto Virtual Manager (ZVM), which provides for the central management of the replication and recovery orchestration capabilities.
- The Virtual Replication Appliance for scale-out continuous VM block-level replication with no snapshot.
- IBM Cloud connectivity to enable secure replication between on-premises virtual environments and IBM Cloud.
- IBM Cloud Storage.

This solution allows for one-to-many replication—including to multiple IBM Cloud regions and other multi-cloud destinations such as Azure or AWS. Consistency grouping and orchestration are key for recovering real-world enterprise environments where many applications may be intertwined and require consistent and/or sequenced restart times and interactions. This can be achieved through the Virtual Protection Groups, which can be preconfigured with IBM Cloud resources (VPC network, subnets) to enable fully automated recovery to IBM Cloud.

The Bigger Truth

Supporting mission-critical applications with the right backup and recovery solution is an imperative that, if not executed upon properly, can have dire business consequences. That's why organizations are looking to implement solutions that not only refine their recoverability metrics but are also flexible. These solutions have to include strong cloud components to meet modern data protection demands.

Cutting-edge technologies of Zerto and IBM Cloud make a lot of sense in combination. The solution's continuous data protection, ease of use, and deployability with advanced recovery automation, while securely leveraging a global private network backbone for multi-site or multi-region deployments and strategies, provide a very robust foundation to meet stringent service levels.

As our research and this solution shows, there is truly no more time for downtime. Many joint customers of Zerto and IBM Cloud would agree. ESG looks forward to seeing further advances in this solution as both partners further optimize their capabilities to constantly improve on recovery metrics and flexibility.

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