

Zerto In-Cloud for AWS

Disaster Recovery at Scale for Amazon Elastic Compute Cloud (EC2) Instances

The Need for Disaster Recovery in the Cloud

If your organization has chosen the cloud for reliable, scalable, on-demand, mission-critical infrastructure, you may find yourself asking, “How protected is my data in the cloud? And how do I safeguard from regional or local outages?” Rest assured that these are the right questions. As more data and applications move to or are born in the cloud, the sheer volume of data and applications increases, introducing additional critical gaps in data protection.

Your cloud-based data and applications are the responsibility of your organization, and the success of your business most likely depends on the availability of its applications and data. Loss of these assets for any period of time—or, worse yet, permanent loss—can be devastating or even lethal to your operations, regardless of whether a cloud provider is ultimately found responsible. No cloud provider, even the largest, is immune to outages.

Disaster recovery (DR) planning, a key component of data centers for decades, is often overlooked when considering cloud deployments. There is a common misconception that the cloud is natively resilient enough to forego a separate DR plan or solution. Yet many recent cloud outages prove that DR solutions for cloud data and applications are absolutely required to avoid costly business disruption.

Your organization may have chosen to run workloads in AWS because of its high availability. But AWS, like all cloud platforms, experiences localized and regional outages. This makes workloads vulnerable to security breaches, user mistakes, and other disruptions.

How can you ensure you are protected if your AWS Region goes down? To safeguard from a regional or local outage, Amazon EC2 instances need to be replicated from one region to another, and those workloads need to be protected with a DR solution. At the same time, DR can be challenging in AWS as you manage legacy technologies with agents or manual configurations that add complexity.

So, how can you add protection to your existing cloud management strategy and recover quickly across your environment at scale? Most available solutions, including native AWS protection, are either agent-based, require heavy manual configuration and management, or do not easily integrate with automation tools such as Ansible, Jenkins, or Terraform. As such, these solutions do not allow for protection and recovery at scale or at speed. For scale and speed in protection and recovery, you don't need to look further than Zerto, the industry leader in DR, ransomware resilience, and multi-cloud mobility.

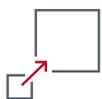
Zerto In-Cloud: Disaster Recovery at Scale

Since 2015, Zerto, a Hewlett Packard Enterprise company, has led the industry with numerous solutions for AWS, including migration to AWS, DR and backup to AWS, and protection of Amazon EC2 workloads to on-premises or other clouds. Built for scale and speed of recovery, Zerto In-Cloud for AWS complements the existing Zerto solution by introducing a resilient, cloud-native architecture for protecting Amazon EC2 instances.

With no agents to manage, Zerto In-Cloud eliminates unnecessary complexity and delivers greatly simplified data protection between AWS regions, zones, and accounts. Zerto In-Cloud technology leverages built-in AWS services to deliver efficient replication, failover, testing, and recovery. API-centric management allows Zerto In-Cloud to be easily integrated with the automation tool of your choice, to make DR part of your automated management strategy.

Features and Benefits of Zerto In-Cloud for AWS

Zerto In-Cloud is designed to make cloud DR simple and scalable so that your cloud data and applications are always protected. The following design features and benefits are part of our award-winning Zerto solution.



Effortless Scalability

The Zerto In-Cloud agentless, native integration approach enables easy scaling to protect 1000+ workloads, promoting resilience for enterprises of all sizes in Amazon EC2. The Zerto In-Cloud Manager appliance protects thousands of instances without requiring additional appliances. Whether you have one AWS account or hundreds, you can easily orchestrate protection across your organization.



Orchestration

Zerto In-Cloud automates protection of EC2 instances, eliminating the need for excessive manual and error-prone steps to execute recovery plans. Eliminating manual steps through automation reduces complexity that limits scaling and reduces manual errors that increase management time and costs.



Speed of Recovery

Using the native protection and replication capabilities in AWS with Zerto automation and orchestration, Zerto In-Cloud protects thousands of Amazon EC2 instances for recovery within minutes across AWS Regions or Availability Zones.



Simplicity

Using native, agentless AWS integration, rather than creating another layer of software across AWS, Zerto In-Cloud takes advantage of Amazon Elastic Block Store (EBS) snapshots and native AWS replication for efficiency and scaling. Analytics provide you insights and reports on RTO and RPO.



API-First Management

A complete REST API is at the forefront of Zerto In-Cloud management so that it easily integrates with other management systems and combines with other automation and integration solutions, such as Ansible, Jenkins, and Terraform.



Stateless Management

The Zerto In-Cloud Manager appliance runs from any AWS Region and can be quickly redeployed to another region in the event of an outage to recover and manage workloads.



Automated Failover Testing

Zerto In-Cloud automation and orchestration allows for nondisruptive failover testing of all instances in an AWS Region or Availability Zone to validate recovery plans and ensure you are ready when an outage or disaster strikes.



Application Groups

Zerto In-Cloud orchestration enables application-centric virtual protection groups (VPGs) to recover applications as a single entity to another AWS Region or Availability Zone. This allows you to protect and recover large complex applications like SAP.



A Single Solution

Zerto In-Cloud for AWS is part of the Zerto cloud data management and protection solution that converges ransomware resilience, DR, and data mobility across on-premises, hybrid, and multi-cloud environments. Zerto empowers customers to run an always-on business by simplifying the protection, recovery, and mobility of on-premises and cloud applications.

Zerto In-Cloud Architecture

The Zerto In-Cloud Manager is a Linux-based, virtual appliance that works with the Amazon DynamoDB and Amazon EBS to automate snapshots and replication for Amazon EC2 instances across Regions. The Zerto In-Cloud Manager is stateless, can reside in any AWS Region, and can be quickly redeployed into another zone or region if needed. Only a single Zerto In-Cloud Manager appliance is needed regardless of how many Amazon EC2 instances are being protected.

Applications and the instances they run on in Amazon EC2 are protected in VPGs that coordinate replication and recovery across the entire group for an application-centric approach to protection. Zerto Analytics, included at no additional cost, provides insights and reports on recovery time objectives (RTOs) and recovery point objectives (RPOs) for your VPGs.

Zerto In-Cloud coordinates Amazon EBS snapshots and replication to protect instances across regions, so that in the event of a regional outage or other type of disaster, those assets are protected to a separate region or zone and can be brought online again quickly.

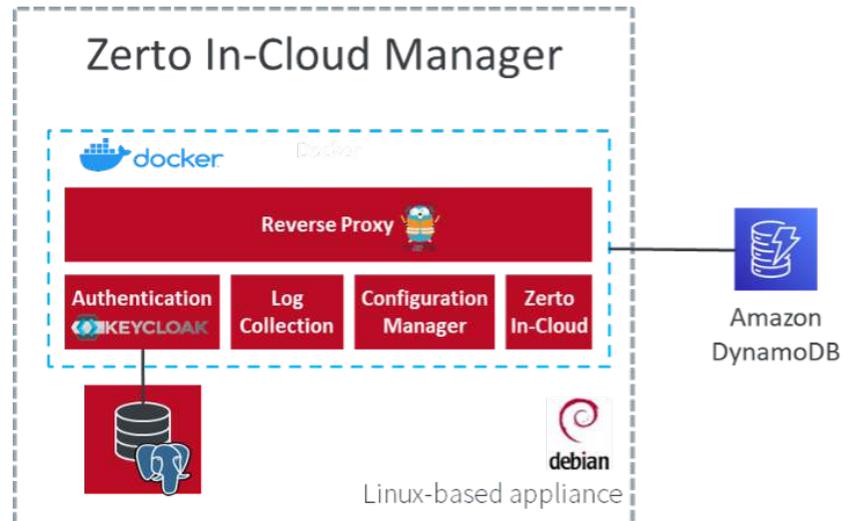


Fig 1. The Zerto In-Cloud Manager is a Linux-based, virtual cloud appliance that provides management, orchestration, and automation for protection of EC2 instances across AWS Regions and Availability Zones.

Learn More and Get Started

Zerto In-Cloud for AWS, the latest addition to Zerto’s powerful cloud data management and protection platform, delivers scalable DR to protect 1,000+ Amazon EC2 instances across AWS Regions and Availability Zones. Zerto delivers reliability and speed to the protection and recovery of enterprise AWS applications with simple workflows for failover, recovery, and testing.

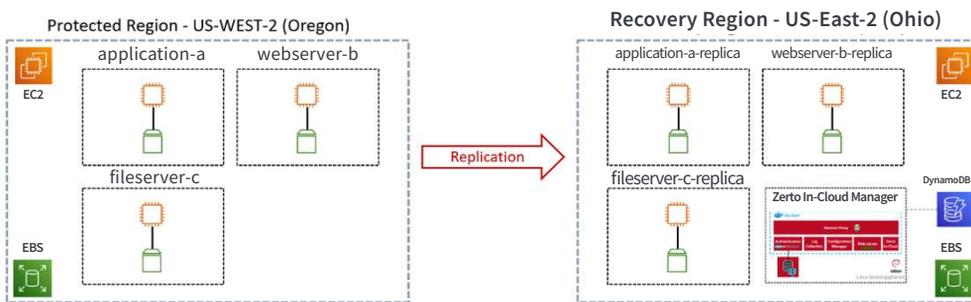


Fig 2. Using EBS snapshots and native AWS replication, Zerto In-Cloud protects Amazon EC2 instances from regional outages and other potential disasters.

Ready to get started?
Subscribe to Zerto In-Cloud
on the AWS Marketplace

About Zerto

Zerto, a Hewlett Packard Enterprise company, empowers customers to run an always-on business by simplifying the protection, recovery, and mobility of on-premises and cloud applications. Zerto eliminates the risk and complexity of modernization and cloud adoption across private, public, and hybrid deployments. The simple, software-only solution uses continuous data protection at scale to solve for ransomware resilience, disaster recovery, and multi-cloud mobility. Zerto is trusted by over 9,500 customers globally. www.zerto.com.