SOLUTION BRIEF

Commvault

Cloud Rewind™
Formerly Appranix

Microsoft Azure Cloud Application Resilience

OVERVIEW

Cloud Rewind is a fully integrated service within Azure and available in Azure Marketplace. Go beyond traditional backup and recovery of simple compute instances, filesystems, and databases to offer end-to-end protection of composable, cloud-native applications. Cloud Rewind enables automated, point-in-time rebuild capabilities of full application environments, including data and their dependencies establishing cyber resiliency for your operations. This provides true cloud-native cyber resilience, minimizing downtime and MTTR, and accelerating the restoration of business operations.

CURRENT CHALLENGES

Microsoft Azure offers numerous advantages for securely storing cloud data and infrastructure, including scalability, cyber recovery, and robust monitoring tools. In the event of a cyber incident, what measures will you take to rebuild your environment to avoid downtime? Application resilience is critical to address the threats posed by cyber criminals and to overcome operational challenges. (like software patching, accidental deletions, errors pushing new code, and application change management). Additionally, many new regulations require proven application resilience for compliance. Cloud Rewind automates all of this for simple management, fast recovery, and robust testing with auditable recovery reporting.

Even with Terraform and Azure services like Azure Resource Manager (ARM) templates, Azure DevOps Pipelines, and Azure Functions, testing is complex and often not done frequently. Change management through manually managed Terraform and similar services can leave your application less resilient. To maintain cyber resiliency, we need to first recognize some of the key challenges for protecting modern cloud native applications such as:

Complexity of rebuilding cloud apps

Operational Downtime

Lack of Visibility

Recovery Process

INTRODUCING CLOUD REWIND FOR AZURE

Cloud Rewind lends applications in your Azure environment flexibility and resilience, a nimbleness allowing you to control and restore your infrastructure to wherever you prefer on Azure. It enables you to rewind and rebuild your infrastructure to a healthy state in minutes, rather than days or weeks. This means that your environment is always synchronized and ready to handle any situation with confidence.

- Automate recovery testing reduces the manual effort and time required thus allowing for more frequent testing and improved cyber resiliency.
- Protect and recover entire application environments, including containers, VMs, database, cloud network configuration, firewalls, etc., for true cloud application resiliency.

- Reduce compliance risk with entire app environment testing for various disruptions, disaster recovery, system patching, and cyber security scanning with a copy of your production environment.
- Instantly rollback application environments to known good state from bad system deployments.
- Release high quality software by creating test environments with real world data.

HashiCorp Terraform	Cloud Rewind™ Formerly Appranix — Manage drift + Disaster recovery and Cyber recovery
Not designed for Disaster Recovery	Purpose-Built for Disaster Recovery
Manual execution or automated pipelines	Automated Recovery Workflows
No inherent knowledge of app dependencies	Application-Aware Protection
Cross region replication requires complex scripting	Cross-Region Replication
No RPO or RTO management	RPO and RTO Optimization
Significant maintenance	Ease of Use and Maintenance
	One click multi-stack entire environment rebuild with dependencies and application data at a point-in-time in any region

> **Commvault Cloud Rewind eliminated four different products with a simple integrated Cloud Application Resilience service. It's truly a game-changer. We can now easily satisfy data sovereignty, our strict customer RPO, and RTO requirements.**
>
> CTO Global Cloud Solutions Provider

HOW IT WORKS

Cloud Rewind orchestrates native snapshots of application data and integrates them with configuration data from related services, including cloud metadata, all configuration items (CIs), and their dependencies.

For example, if APIs, ARM (Azure Resource Manager) templates, Terraform, the Azure Portal, or Azure Cloud Shell are used to create resources like Virtual Machines, Virtual Networks, and, more importantly, connections between these services, they are described in JSON-like format. Cloud Rewind discovers these resources, protecting them in a manner similar to data backup copies. It does this as an Assembly, ensuring everything is a single unit.

During recovery, Cloud Rewind automatically generates the multi-nested ARM (Azure Resource Manager) templates on the fly to swiftly rebuild the environment. This app-centric approach means that all relevant data is extracted, backed up as code, and securely stored. This enables recovery of the complete application stack, including all associated services, to a specific point in time.

1. Cloud Rewind adapts to your continuously changing Azure application environment, including auto-scaled cloud resources.
2. Cloud Rewind automatically creates an Application Environment Time Machine to help you recover from any application downtime instantly!
3. No agents, nothing to install. With Cloud Rewind, you can discover, protect and recover entire application environments quickly—maintaining cyber resilience

KEY BENEFITS

- Significantly increase application reliability with complete cloud app environment protection.
- Perform system patch testing with a copy of application production environments in minutes.
- Rebuilds cloud environments from unexpected downtime with a few clicks.
- Scale with your Azure environment to establish managing large and complex infrastructures.
- Take regular snapshots of your Azure resources including VMs, databases and storage accounts to be used to restore your environment to a specific point in time.

KEY FEATURES

- Automated discovery of applications cloud infrastructure services.
- Automated discovery of applications data infrastructure without affecting production.
- Automated VPC, network, security, load balancer, and gateway discovery.
- Flexible automated cloud assembly creation with infrastructure-as-Code (IaC)
- Automated cloud-native infrastructure-as-Code (IaC) based app environment recovery.
- Application post-recovery verification with health checks.

> **Commvault Cloud allowed us to successfully recovery our entire Azure account with 18 subscriptions and multiple applications in under 36 minutes**
>
> eDiscovery Leader

To learn more, visit **commvault.com**