Credit unions turn to the AWS Cloud for backup and disaster recovery
As cyberattacks rise, need for an immediate solution swells.

Today, credit unions are at an increased risk of cyberattacks that threaten their data, their customers' data, their reputation, and their bottom line. A look at recent cybercrime trends and the challenges credit unions face responding to these threats explains why many are turning to the cloud to safeguard critical systems.

The National Credit Union Administration warned in April 2021 that the pandemic has increased cyber-security vulnerabilities for credit unions. Top threats include ransomware, malware, phishing, denial of service attacks, and supply chain attacks.

An analysis by the Financial Crimes Enforcement Network (FinCEN), a bureau of the US Department of the Treasury, also found that ransomware is a rising threat to the US financial sector. According to the report, financial institutions filed 635 suspicious activity reports (SARs) in the first half of 2021 related to suspected ransomware, a 30 percent increase over the entire 2020 calendar year. The institutions reported $590 million in suspicious activity between January and June 2021.

A compilation of significant cyberattacks maintained by the Center for Strategic and International Studies (CSIS) also shows the prevalence of these crimes worldwide.

Credit unions recognize they have a lot to lose. Aiming to protect their members and keep their organizations secure and out of the headlines, many are exploring how to improve their data backup systems and better prepare for disaster recovery.
Lack of IT resources and on-premises infrastructure costs hinder efforts to upgrade

Despite a sense of urgency to modernize, many credit unions have delayed upgrading their backup and disaster recovery plans due to difficulties hiring qualified IT staff. A recent Gartner survey found that IT executives cite the talent shortage as a leading factor inhibiting adoption of technologies in six categories: compute infrastructure and platform services, network, security, digital workplace, IT automation, and storage and database. And without guidance on how to conduct a backup and disaster recovery plan, credit unions may not even know where to start.

Many also worry that it's cost prohibitive to upgrade, having yet to explore the cloud as an alternative to expensive on-premises infrastructure. Believing they need to justify prior investments in physical hardware and being unable to afford the resources to build out a new data center to store additional servers can make the projects seem out of reach. Amidst a global infrastructure shortage, just obtaining required hardware can be a challenge.

Meanwhile, their backup systems are at risk of failing either a mock incident or an actual event requiring a system restore. All this overlaps with increased pressure to adopt new technologies, such as digital lending and other banking services, in response to shifts in consumer behavior towards ecommerce and to attract younger generations of members.

Leveraging the cloud provides advantages

Credit unions are increasingly turning to Amazon Web Services (AWS) as a secure, cost-effective alternative to on-premises backup and disaster recovery. The AWS Cloud offers advantages that give credit unions the ability to meet industry standards and remain competitive. Instead of credit unions building out and managing huge amounts of infrastructure, AWS handles the undifferentiated heavy lifting for them. AWS solutions architects work with credit unions to implement flexible solutions that scale. In addition, vendors or consultants can use AWS to assist credit unions in building out solutions. This frees up IT resources to focus on other business priorities, such as delivering services that help expand the credit union's member base.

With AWS, IT teams can automate and monitor processes instead of setting up racks of servers and other hardware. Backing up to AWS gives teams access to services for artificial intelligence (AI), machine learning (ML), advanced analytics, and business intelligence. After setting up automated controls, IT teams receive reports with insights that allow them to quickly detect threats instead of spending hours poring over data sets to check for anomalies. Once a threat is recognized, teams can use point-in-time snapshots, or incremental backups, to roll back their data to before the threat existed.
Relying on cloud for business continuity

Credit unions that rely on AWS for disaster recovery can leverage the cloud for one-click business continuity. They’re able to minimize time-intensive and risky manual business continuity processes with automated failover and failback to protect against data loss caused by data center failures, server corruption, or cyberattacks. In addition, they can quickly and easily test and validate business continuity processes with just the necessary infrastructure, then decommission those resources. Ultimately, they’re able to leverage disaster recovery to move toward no downtime.

AWS meets credit unions where they are with the ability to integrate with their current backup and disaster recovery solutions. This allows credit unions to achieve their goals pertaining to automation; recovery time objective (the amount of time after a disaster in which business operations resume); recovery point objective (the amount of acceptable data loss if a recovery needs to be done); and service-level agreement (SLA) requirements.

The cloud also provides opportunities for quality assurance and a low-cost applications development environment. With AWS, credit unions can consolidate cost centers so backup and disaster recovery expenses are defrayed by maximizing these additional benefits along with user acceptance testing, canary deployments (rolling out releases to a subset of users or servers), and multiregional deployments.

Shared responsibility for security and compliance

AWS and credit unions share the responsibility for security and compliance. Even though credit unions must deploy patches, encrypt data, and configure the AWS-provided security group firewall, AWS protects the infrastructure that runs all of the services offered in the AWS Cloud. AWS can also manage IT controls associated with the physical infrastructure deployed in the AWS environment that were previously managed by the credit union. This shared model can relieve a credit union’s operational burden.

As they discover the advantages of the cloud, many credit unions are expanding their services with AWS. Choosing AWS as their primary data center and cloud provider opens further possibilities and gives them the option to use their on-premises infrastructure for other purposes, including for backup, quality assurance, or business continuity.

For credit unions that are interested in learning more, AWS can provide an architecture success session and builder event that culminates in a backup and disaster recovery mock event test.