CyberArk uses Amazon Aurora to help customers securely scale in minutes

Case Study

Executive Summary

Building the CyberArk Privilege Cloud on Amazon Aurora MySQL provides customers with improved security, reliability, and scalability while increasing internal efficiencies for the CyberArk development team.

The Challenge

CyberArk created its privileged access management (PAM) solution to help customers manage and protect their credentials, identities, and secrets for both human as well as application and machine users. The solution also isolates, records, and audits privileged sessions. However, the on-premises deployment requires customers to manage and update the software and their databases within their own local environments. In today's global, fast-paced world, some organizations do not have the resources allocated to administer security and PAM for hundreds of thousands of users which may introduce security blind spots at the infrastructure level. Additionally, with the growing trend of moving applications and workloads to the cloud, customers are looking for a solution that works there.

The Solution

CyberArk built CyberArk Privilege Cloud as a SaaS-based PAM solution on Amazon Aurora to help organizations quickly achieve their security goals without the need to deploy, manage, or update the core infrastructure themselves. They also chose Amazon Aurora because it provides an additional layer of security, including network isolation, encryption of data at rest and in transit, and the improved capabilities to achieve higher availability and durability.

About CyberArk

CyberArk is the #1 leader in privileged access management, a critical layer of IT security for protecting data, infrastructure and assets across the enterprise, in the cloud, and throughout the DevOps pipeline. CyberArk is trusted by the world's leading organizations, including more than 50 percent of the Fortune 500, to reduce the risk created by privileged credentials and secrets, and protect against external attackers and malicious insiders.

" If we hadn't migrated to Amazon Aurora, our team would have had to grow 5-10x bigger than it is today for us to provide the same level of service in the same time frame."

— Bar Lavie, Product Manager for CyberArk Privilege Cloud

Results and Benefits

CyberArk chose to build its solution on Amazon Aurora to avoid the time-consuming and undifferentiated heavy lifting of on-premise database administration, and to leverage the security, availability, and reliability of commercial databases. By migrating this application to the cloud, CyberArk added a new business model that improves internal efficiencies and increases the value to customers. Aurora provides 5x better performance than competing solutions at half of the cost.

Integrate industry-leading security services and features

Security and availability are the top priorities for CyberArk. They designed CyberArk Privilege Cloud using sophisticated layers of keys and encryption to create the most secure privileged access security management solution available today. By starting with Amazon Aurora instead of a generic MySQL database, CyberArk was able to quickly incorporate built-in security features from AWS which, "freed up CyberArk's team to focus on providing more capabilities and value for our customers," explained Bar Lavie, Product Manager for CyberArk. "Any security features we need to build and manage ourselves takes away from developing new functionality customers can use to secure their environment. Using Amazon Aurora assures us that we can focus on innovating within our area of expertise."

Increase uptime with built-in high availability and redundancy

Since deploying on Amazon Aurora, CyberArk has been able to increase the uptime SLA for their Privilege Cloud solution. "We found that Amazon Aurora can better help us achieve the SLA level of 99.5% we have today and increase it in the future. Aurora has better load distribution, automated failover and automated availability zone and cross region deployment in comparison to other solutions—all this in addition to being a fully managed solution," said Bar. "Amazon Aurora plays a crucial role in our SLA because it allows us to recover from a failure in a matter of minutes." Its automatic failovers and quick recovery times are made possible by the high availability, multi-region replicas, and redundancy built into Amazon Aurora.

Free teams to innovate faster with managed database services

Until Privilege Cloud, CyberArk only offered their PAM solution through on-premises deployments that required customers to manage backups, updates, patching, security, and high availability of the hardware and software. By using CyberArk Privilege Cloud on Amazon Aurora, customers get the benefits of a fully managed, cloud service so they can focus on security. "Running on Amazon Aurora means we can manage each and every schema and database cluster for all of our customers from one place as an on-going service. For our customers this is hugely beneficial as they're able to focus on adopting and implementing their PAM projects instead of architecting the solution and maintaining the infrastructure," explained Bar.

Learn more

Amazon Aurora is a MySQL and PostgreSQL-compatible relational database built for the cloud, that combines the performance and availability of traditional enterprise databases with the simplicity and cost-effectiveness of open source databases. Amazon Aurora is up to five times faster than standard MySQL databases and three times faster than standard PostgreSQL databases. It provides the security, availability, and reliability of commercial databases at 1/10th the cost.