

Imperva implements compliance monitoring 100x faster with Amazon Aurora

Case Study

Executive Summary

Imperva chose Amazon Aurora for Cloud Data Security (CDS), a data-monitoring-as-a-service platform, to help customers implement database compliance monitoring for Amazon RDS.

The Challenge

Imperva has been providing robust data security products for more than 17 years. Their flagship security offering is deployed as hardware or software in a customer's datacenter. Although self-managed virtual appliances support customers' public cloud environments, Imperva realized that a cloud native approach would speed innovation and reduce adoption friction, while at the same time accelerate their customers' security and compliance needs better. With this in mind, Imperva embarked on a faster way for their customers to deploy, support, and consume their security products and services.

The Solution

Imperva re-architected its application using Amazon Aurora MySQL to offer customers a cloud native software-as-a-service (SaaS) option. With the move to AWS, the company also adopted a microservices approach to development, breaking down their application into sets of many smaller instances that simplified and accelerated value creation and resilience.

" Today a self-managed on-premises deployment can take a few months from start to production. With CDS delivered as software as service (SaaS) using Amazon Aurora, we're able to have customers fully operational in less than an hour, which is a 100x improvement in their time-to-value. **"**

— Yaniv Azaria, VP of Product Management for Data Security at Imperva



About Imperva

Imperva is an analyst-recognized, cybersecurity leader, championing the fight to secure applications and data wherever they reside. Once connected, CDS proactively identifies, evaluates, and eliminates current and emerging threats. Service deployment takes minutes for AWS tenants, and CDS is DevOps ready, so customers don't have to choose between the pace of innovation and security. CDS protects applications and data against attacks and data breaches and helps customers meet compliance regulations such as PCI, Sox, HIPAA, GDPR, CCPA, MAS, and others.

" We had an immediate need for auditing in AWS and liked how simple CDS was to deploy and use, and that it basically was turn-key—no config needed once the account was linked. **"**
— Imperva Cloud Data Security Beta Customer

“The solution is very easy to use. In 40 minutes, we deployed the service, discovered our AWS data repositories, and got visibility into who is accessing what data. And the best part? It doesn’t require a lot of configuration or on-going management.”

– Imperva Cloud Data Security Design Partner

Results and Benefits

Over 60% of Imperva’s top customers were asking for a cybersecurity offering to protect their PaaS databases. To meet this request, Imperva built Cloud Data Security (a cloud-ready solution) on Amazon Aurora, which also provides elasticity, fully managed services, and data science support.

Optimize costs and timeline to value

Rearchitecting the solution as a SaaS offering with Amazon Aurora has wide sweeping business benefits for Imperva and its customers. “Unlike traditional relational database OEM agreements, where we had to pay for every appliance we shipped,” explained Yaniv Azaria, VP of Product Management at Imperva, “with Amazon Aurora, we pay for a single deployment and can take advantage of multi-tenancy to further optimize our costs.”

As Imperva customers running on AWS add new databases, CDS will expand Amazon Aurora resources automatically. “They won’t need to buy new appliances for expanded monitoring,” said Yaniv. “And whereas on-premises appliances can take a few months from start to production, with CDS on Amazon Aurora, we’re able to have customers fully operational in less than an hour—that’s a 100x improvement in time to value.”

Reallocate IT’s time and talent

Appliances employing traditional self-managed databases require engineers to ensure the software and systems are up to date. By moving to the fully managed services of Amazon Aurora, AWS handles these activities for customers. “We’re not responsible for upgrading and making sure it’s fully patched. Now that we use Amazon Aurora, AWS takes care of all the provisioning and availability of the service for our customers to make sure the system is always patched and up to date,” explained Yaniv.

Boost security with better data science

According to Kedar Dhuru, Principal Product Manager at Imperva, “the opportunity for innovation on Amazon Aurora has been one of the most exciting benefits of this journey.” For example, CDS uses analytics and data science to help Imperva identify potential threats. The cloud deployment method improves the company’s ability to access, test, and explore relevant data. More relevant data available to test and explore translates to more sophisticated and intelligent models. “Originally our data science platform was limited by a monolithic database. Analyses of large pools of security, threat, and incident data was difficult to achieve,” explained Dhuru.

“In the SaaS version, we can anonymize and de-risk large data sets and use it to develop new rules that provide better value to our customers. Over time we can grow our data science environment and our platform.” This applies to potential innovations for the all product line, as well as meeting one-off requests. “In some cases, we’ve been able to look at the data and create rules to provide individual customers with new reports to meet their compliance needs.”

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.