

## Brief Summary

This case study showcases A Prominent Secure Ticket Transfer Platform's journey through a database migration process and the successful execution of a near real-time migration strategy. A prominent provider of secure ticket transfer services embarked on this migration to AWS with the help of Cloudaliv.

## About The Company

A Prominent Secure Ticket Transfer Platform is a trusted platform committed to providing secure ticket transfer services designed exclusively for fans. Our top priorities are user safety and convenient ticket transactions, delivering a seamless and trustworthy experience to all users. Join TicketRef to bid farewell to scalpers and excessive fees, and enjoy hassle-free ticket transfers at fair prices.

## The Challenge

A Prominent Secure Ticket Transfer Platform previously relied on Digital Ocean's cloud infrastructure, including a live Postgres database, to manage their ticketing operations. However, recognizing the need for enhanced scalability and additional services, the organization strategically opted to migrate to AWS. The primary challenge was executing a near real-time database migration with minimal disruption to ongoing transactions while ensuring the integrity and consistency of their data. This transition marked a pivotal moment in A Prominent Secure Ticket Transfer Platform's journey, as they aimed to leverage AWS's robust capabilities to further enhance their ticket transfer services, guaranteeing a secure and seamless experience for their users.

## The Solution

A Prominent Secure Ticket Transfer Platform partnered with Cloudaliv, who recommended harnessing the AWS Database Migration Service (DMS) for a seamless and efficient migration. AWS DMS simplifies the process of migrating data between various database platforms, whether cloud-hosted or on-premises, with minimal downtime and minimal impact on the source system. It facilitates real-time data replication, guaranteeing near real-time synchronization between the source and target databases.

Following a thorough analysis of usage patterns, data, and transactions on the primary database, the team selected a `dms.r5.large` replication instance type equipped with a 100GB disk. To ensure accessibility, they established a network connection between the source and instance and configured the instance to be publicly accessible with stringent firewall rules. Achieving near real-time data migration involved configuring DMS tasks that leveraged the "Change Data Capture" (CDC) technique, capturing changes in progress from the source database. This technique relies on reading the transaction logs and replicating them to the destination.

Amazon Aurora was chosen as the migration destination due to its high data availability, cost-effectiveness, and reliability. Source and destination endpoints were configured with the Digital Ocean DB endpoint and Amazon Aurora, respectively. As a preparatory step, a staging environment closely resembling the production system was set up. A trial migration was conducted, enabling the team to test the migration process, identify potential issues, and optimize performance before proceeding with the production database migration. A plan was also formulated to migrate components not supported by AWS DMS, such as scheduled jobs and users.

To ensure optimal performance, the team implemented performance tracking and vigilantly monitored potential impacts. Throttling techniques were applied to regulate the workload during the DMS replication task, mitigating strain on the production system and maintaining acceptable performance parameters.

## The Outcome

This achievement not only enhanced their operational efficiency but also strengthened their position as a reliable and secure ticket transfer platform. The seamless migration underscored their commitment to providing uninterrupted services to their users, ensuring that fans could continue to enjoy hassle-free ticket transactions with confidence. AWS DMS, coupled with the expertise of the Cloudaliv team, not only met but exceeded their expectations, setting a high standard for data migration and system optimization in the industry. As a result, A Prominent Secure Ticket Transfer Platform is now better equipped to adapt to evolving user needs and provide an even more secure and reliable ticketing experience.

