ATOMBEAM

ALHAMRANI UNIVERSAL

Case Study

"The Atombeam Neurpac SaaS solution gives us scale, speed, and accuracy"
– Mario Rouhana, Chief Operating Officer, AU

Overview

Alhamrani Universal (AU) streamlined data transfer across its enterprise infrastructure by adopting the Atombeam Neurpac SaaS platform. This solution utilizes advanced data compaction and transmission technology to address critical business challenges namely, overcoming bandwidth limitations and enabling faster, fully secure daily batch transfers between locations.

Challenge

Alhamrani Universal (AU), a leader in the financial sector, facilitates millions of transactions daily across its network. Each transaction generates approximately 3KB of data, resulting in about 4GB of data per day.

A major challenge was the need to store and backup this data in geographically separate locations. For example, data from AU's head office in Jeddah had to be transferred regularly to a dedicated server in Riyadh to ensure business continuity and mitigate risk.
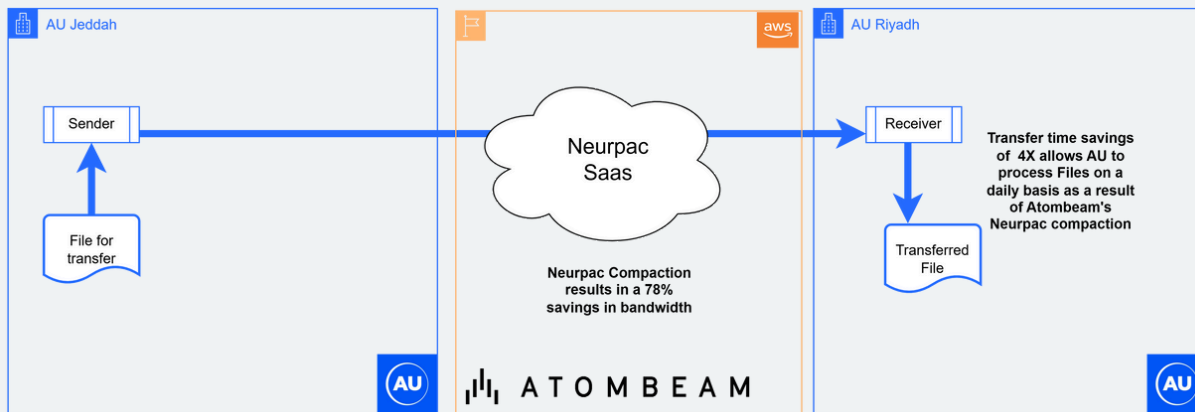
Although this process had been functioning, the team faced increasing constraints due to growing data volume and limited available bandwidth. The process was further complicated by the requirement to avoid disrupting any critical services during transfers. As a result , AU was eager to explore solutions that offered faster turnaround times, improved reliability, and reduced operational risk.

Solution

After thorough testing and validation, AU selected the Atombeam Neurpac SaaS platform. Leveraging its proprietary data compaction and transmission technology, AU addressed bandwidth limitations while accelerating daily data transfers.

Unlike conventional compression techniques, Atombeam's technology compacts data in real time, achieving superior data size reduction and transmission efficiency. The solution enables secure, bulk-compacted file transfers to AU's data center, significantly improving the speed and reliability of daily batch operations, despite ongoing bandwidth constraints. Most importantly, Atombeam offered a clear cost advantage over traditional alternatives, enhancing the solutions overall business value.

Results

Results - 4x Reduction in Data Transfer Time:
Daily batch transfers are now four times faster, reducing transfer time from 12 hours to just 3 hours.

Data Origination and Compaction
All data is initially received at AU's Jeddah site. A daily extract of the accumulated transaction file is automatically generated and transmitted to Riyadh. An Atombeam encoder installed in Jeddah interfaces with the Neurpac SaaS platform to compact the data.

Atombeam's compaction technology reduces data size by up to 78%, optimizing transaction data using advanced machine learning-based pattern recognition, specifically designed for secure data handling. This drastically reduces bandwidth consumption and accelerates transmission.

Compliant Data Residency and Backup
AU's business continuity policies required data to be stored redundantly across multiple locations (Jeddah and Riyadh). Neurpac SaaS supports this requirement by transmitting compacted data between sites with minimal bandwidth usage and faster turnaround.

This platform enforces compliance through end-to-end encryption and integrity verification. Compacted data is reliably stored in the secondary location, resulting in a more resilient architecture that's significantly less vulnerable to data loss or service interruptions.

Improved Daily Batch Transfer Efficiency

Atombeam's Neurpac platform delivers data transfers that are dramatically faster than legacy methods or traditional compression solutions. In AU's case, transfer times were reduced by **4X** easing network congestion, reducing latency and cutting bandwidth costs significantly.

Summary

Atombeam's Neurpac SaaS platform has transformed AU's daily batch data transfer operations. By leveraging advanced real-time compaction, AU now enjoys faster, more secure, and bandwidth efficient data movement between key operational hubs.

Outperforming conventional solutions but technically and financially, Atombeam enabled seamless integration into AU's existing infrastructure. The added flexibility and performance of Neurpac empowers AU to remain agile, scalable, and competitive in the evolving fintech landscape.

Products

Neurpac SaaS:
www.atombeamtech.com