

OpenSearch migration from AWS to Azure and deploy clusters on Kubernetes using Elastic Cloud on Kubernetes (ECK) for social media platform

17+ TB

Data Retention

15 Bn+

Documents

120+

Nodes

CLIENT

The client is Asia's leading short video sharing platform.

The client's platform powers 100 million+ active users to consume and share video content across Asia.

PROJECT CONTEXT

The client had setup 20+ critical clusters on AWS OpenSearch, with the largest cluster being 32 nodes with 6.4 TB of data.

These clusters had run into several performance and availability issues, and OpenSearch offered limited control over the tuning and optimisation of the instances.

The client decided to migrate from AWS OpenSearch to Azure and deploy clusters on Kubernetes using Elastic Cloud on Kubernetes.

TECHNOLOGY STACK



PROJECT REQUIREMENTS

- Migration of OpenSearch from AWS to Azure.
- The migration must be completed with zero downtime & zero data loss.
- Conduct capacity planning and performance improvement exercise to support be able to support 200 million+ users on the platform.

SOLUTION DELIVERY

- Expert consultation across AWS Cloud, Azure Cloud, Kubernetes and Elasticsearch to perform parallel migrations.
- The 20+ critical OpenSearch clusters were migrated from AWS to Azure with zero downtime and zero data loss by leveraging ECK.
- Created custom ES Rally scripts that generated 80,000 requests per second to performance test and certify clusters