CASE STUDY

SQUARESHIFT

ELASTIC CLOUD ENTERPRISE PLATFORM MODERNIZATION FOR A GLOBAL FINANCIAL SERVICES FIRM

Zero	8	20
DATA LOSS	PHASES SEQUENCED	HOSTS RE-PLATFORMED

CLIENT

A leading global financial services & banking group modernizing its Elastic Cloud Enterprise platform and underlying infrastructure across its production estate.

GEO: USA

Financial Industry

TECHNOLOGY STACK

elasticsearch

docker

Linux

podman

PROJECT CONTEXT

- Modernize the entire Elastic Cloud Enterprise estate while re-platforming the underlying infrastructure — with a **zero data-loss target** and no unplanned downtime.
- Re-platform 20 production hosts from **RHEL 7 / Docker to RHEL 8 / Podman** without service interruption.
- Advance the ECE control plane along a safe, staged path (3.1 → 3.3.0 → 3.8.2 →4.0.x) and upgrade every managed customer deployment from Stack 7.17.5 to 8.x.

PROJECT OBJECTIVES

- Upgrade the ECE control plane from 3.1 to 4.0.x through a validated, version-by-version staging path.
- Re-platform all 20 hosts to RHEL 8 / Podman role by role, keeping the platform continuously available.
- Upgrade 100% of managed deployments to Elastic Stack 8.x ahead of the ECE 4.0 hard gate.
- Retire all legacy RHEL 7 infrastructure and validate the modernized end state.

SOLUTION DELIVERY

- **DR-First Sequencing:** Each of the 8 phases opened with a platform secrets / config backup and verified system and customer snapshots before any change was made.
- **Rolling, Non-Disruptive Migration:** Hosts moved one at a time through ECE maintenance mode proxies, allocators, coordinators, and directors migrated role by role with health checks between each step.
- **Quorum & Gate Integrity:** Director migrations preserved ZooKeeper quorum throughout, and the program enforced full Stack 8.x coverage before triggering the ECE 4.0 upgrade.
- **Validate at Every Step:** Every phase closed with a Cloud UI health check before the next phase was allowed to begin.