VENSYSCO TECHNOLOGIES LIMITED

CASE STUDY

CCTV Archive Migration on Oracle Cloud Infrastructure

How Vensysco Technologies designed a secure, tiered, and compliance-ready cloud archival solution for Innovatiview's surveillance footage on Oracle Cloud Infrastructure.

CLIENT
Innovatiview

INDUSTRY
Security & Surveillance

PLATFORM
Oracle Cloud Infrastructure

USE CASE

CCTV Archive Migration on Oracle Cloud Infrastructure

OVERVIEW

Vensysco Technologies designed and implemented a comprehensive CCTV archival and cloud migration solution for Innovatiview on Oracle Cloud Infrastructure (OCI), moving a large volume of CCTV surveillance footage from on-premises storage into a secure, scalable cloud archival system - while preserving a compliant, physical on-premises copy.

1 What We Have Done

Vensysco Technologies designed and implemented a comprehensive CCTV archival and cloud migration solution for Innovative View on Oracle Cloud Infrastructure (OCI), moving a large volume of CCTV surveillance footage from on-premises storage into a secure, scalable cloud archival system. We established secure connectivity between compute and cloud storage, structured storage into tiers for controlled short-term access and long-term retention, and built a reliable retrieval pathway enabling Innovatiview to access its footage from the cloud and retain a physical copy on its own infrastructure.

2 Challenges We Faced and Overcame

We navigated challenges including consolidating continuous CCTV footage from Innovatiview's multiple locations into a single reliable cloud landing point, moving a large volume of surveillance data without service interruption or manual transfer bottlenecks, and meeting a compliance requirement that mandated Innovatiview retain its own local copy on client-owned hardware in addition to the cloud copy. We overcame these challenges through secure, credential-free authentication between compute and storage layers, validated and repeatable transfer processes, and automatic recovery mechanisms ensuring any interrupted transfer resumes without data loss.

3 New Implementations That Enhanced Solution Effectiveness

We introduced secure, credential-free authentication between the compute and storage layers, established a validation - first approach for every data transfer to minimize risk, and structured cloud storage to preserve Innovatiview's existing folder organization. We also built in automatic recovery for interrupted transfers and documented the complete workflow as a standardized, repeatable process for Innovatiview's ongoing archival needs, with data integrity verified at every stage.

4 Cost Optimization Through Pattern Analysis

Through analysis of InnovativeView's access pattern — short-term high-access retrieval followed by long-term compliance retention, we designed a tiered storage strategy that keeps costs aligned with actual usage. Footage remains on a high - availability tier for the active access period before automatically transitioning to a lower-cost archival tier for extended retention, substantially reducing long-term storage costs while preserving retrieval capability. We also tuned data transfer performance to the available infrastructure to minimize transfer time for the large dataset without over-provisioning resources, and structured storage to avoid redundant copies across stages of the workflow.

5 Service Alignment and Effective Orchestration

We orchestrated a clear, sequential flow across footage capture at Innovatiview's locations, cloud staging, cloud storage upload, client-side download, and physical media handover, with an automated transition to archival storage as the final step. Secure access controls ensured the compute layer had exactly the access required to interact with cloud storage, while network safeguards kept the environment secure without disrupting service access. Validation checkpoints at each stage ensured a smooth handoff between every part of the workflow, resulting in a multi-layered backup strategy spanning the cloud copy, Innovatiview's on-premises copy, and the physical media handover.

6 Infrastructure & Management Architecture

The solution operates on Oracle Cloud Infrastructure within an India-based OCI region, combining secure compute, staging storage, and cloud object storage within a dedicated environment for Innovatiview. Our certified team manages environment setup, access configuration, storage tier selection, and end-to-end validation, alongside operational safeguards including lifecycle automation for archival transitions, least-privilege access reviews, secure network configuration, encryption at rest and in transit, and expanded logging for operational visibility and audit trail. This approach combines hands-on technical execution with a hardened, reliable infrastructure setup that supports Innovatiview's ongoing compliance requirements.

CONCLUSION

Vensysco Technologies successfully designed, deployed, and manages an end-to-end CCTV archival workflow on Oracle Cloud Infrastructure for Innovatiview, migrating a large volume of surveillance footage with complete data integrity and establishing OCI as a reliable cloud landing, storage, and archival layer while still supporting a physical media handover for compliance. Through secure authentication, a resilient transfer pipeline, and a tiered storage and lifecycle strategy that substantially reduces long-term storage costs, we enabled a repeatable, standardized pattern for centralizing Innovatiview's surveillance footage. The solution provides a strong foundation for continued reliability, with lifecycle automation, security hardening, and operational monitoring supporting future scale.

Vensysco Technologies