

CASE STUDY:

High-Performance On-Site Video Ingestion & Archival Platform

QUICK FACTS



International Media Production



On-Site / Mobile Filming Environment



High-Performance On-Site Video Ingestion & Archival Platform



Design and deployment of a high-throughput ingest, storage, and fibre-channel archival workflow

The Challenge

The legacy environment was constrained by limited throughput, inconsistent disk performance, and ingest bottlenecks that slowed daily workflows.

As production formats evolved and file sizes increased, the infrastructure struggled to sustain concurrent ingestion from multiple sources. Data queues and delayed transfers introduced workflow risk.

The tape-based backup system was similarly limited. The architecture could not generate redundant copies quickly enough to align with production schedules. Given the commercial value of the footage, insufficient redundancy posed unacceptable risk.

The production team required a high-performance platform capable of:

- Sustained multistream ingestion
- Centralised high-capacity storage
- Concurrent high-throughput tape backup
- Reliable redundancy without workflow interference

Client Overview

A large international media production team engaged Focus Group Technologies to redesign its on-site ingest and backup infrastructure for a high-profile production.

Daily filming generated substantial volumes of high-resolution footage across multi-camera setups, creating sustained data loads that required rapid transfer, verification, and archival to maintain strict production timelines.

The existing infrastructure could not support modern file sizes or multistream ingestion without performance degradation. A new architecture was required to ensure every frame of footage was ingested, backed up, and secured without operational delay.

The Solution

Focus Group Technologies deployed a purpose-built architecture centred on Lenovo P3 workstations serving as high-speed ingestion endpoints.

Equipped with 10GbE connectivity, the ingestion stations enabled rapid offload from camera media directly into the production workflow.

These endpoints fed into a 40GbE switching fabric connected to Lenovo SR630 servers configured with high-capacity disk arrays. The storage architecture was designed to deliver sustained high I/O performance suitable for multistream write operations.

To ensure data redundancy without affecting ingest throughput, a dedicated tape server was integrated and connected to a fibre-channel tape library. This configuration allowed concurrent ingest, verification, and tape archival operations.

The infrastructure was engineered for mobility, with all components designed for mounting within a flight case to support off-site deployment requirements.



Technology Deployed

- Lenovo P3 Workstations with 10GbE Networking
- Lenovo SR630 High-Capacity Storage & Tape Servers with 40GbE Networking
- Lenovo TS4300 Fibre-Channel Tape Library
- Six LTO-9 Tape Drives
- Fibre-Channel Switch Infrastructure
- Flight-Case Mounted Equipment Design

Each component was selected to ensure sustained throughput, operational reliability, and production-grade performance under continuous workload conditions.

About Focus Group Technologies

Focus Group Technologies is an Australian IT infrastructure provider specialising in high-performance compute, storage, and data centre environments across enterprise and production-driven industries.

Guided by our four core pillars — Procure, Perform, Protect, and Power — we design and deliver infrastructure solutions that align technology investment with operational outcomes. From AI-ready environments and high-throughput storage platforms to resilient power and cooling systems, our team works alongside organisations to simplify complexity and strengthen long-term performance.

We combine structured planning, vendor-aligned architecture, and disciplined implementation to ensure infrastructure performs reliably under real-world conditions, whether in data centres, distributed environments, or on-site production deployments.

The Outcome

The production team achieved significantly faster ingest times, enabling daily footage to be secured and made available for review much sooner.

Backup-to-tape throughput increased substantially, allowing multiple redundant copies to be created without impacting ingestion performance.

The redesigned workflow reduced operational risk, strengthened data integrity, and provided a scalable foundation for future productions.

With high-speed ingest, resilient storage, and reliable tape-based archival, the team now operates with performance and security aligned to modern, high-volume filming environments.



Contact Us

From infrastructure and AI-ready environments to resilient power and cooling solutions, our experts can help you plan and implement the right technology for your business.

+61 2 8985 9890

hello@fgtech.com.au