

PROJECT BRIEF

Infrastructure Rebuild: Servers and NAS/SAN Modernization

Generated 2026-03-11

Project: cathedral-infrastructure-modernization | Role: IT

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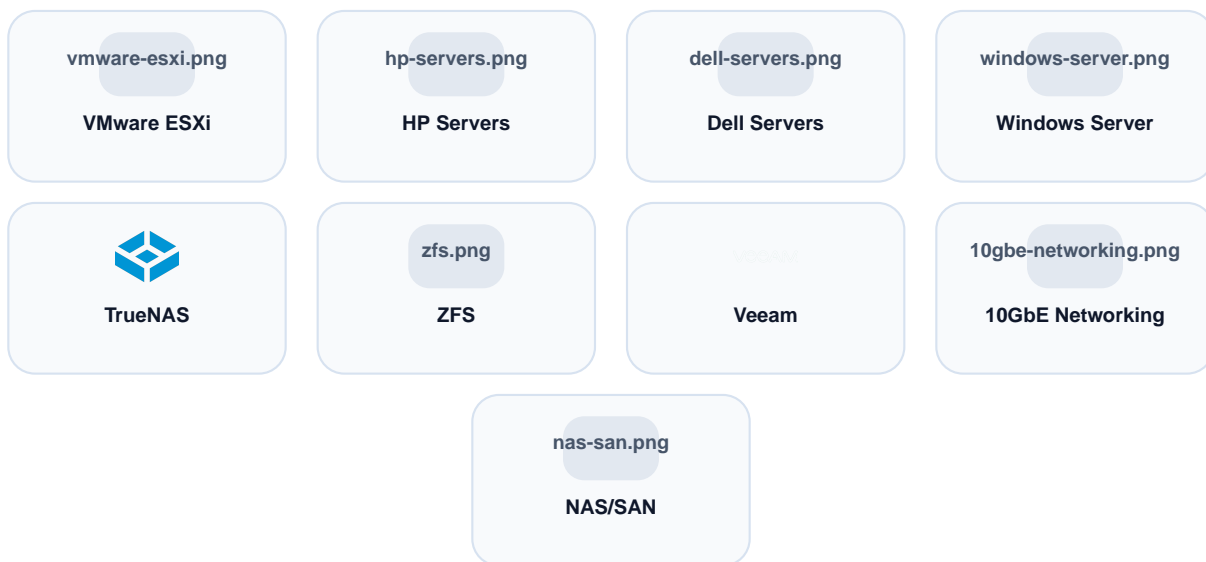
EXECUTIVE SUMMARY

Led an enterprise infrastructure modernization across virtualization, storage, and backup by rebuilding VMware ESXi and Windows Server environments, engineering a custom TrueNAS-based 100TB NAS/SAN platform, and implementing a formal 3-2-1 backup strategy. The program improved high availability, disaster recovery readiness, and long-term operational reliability while delivering significant in-house cost avoidance.

KEY OUTCOMES

- Designed and built a custom 100TB TrueNAS platform with ZFS, bifurcation-aware failover support, redundant power, and hot/cold spare strategy for storage resilience.
- Migrated and upgraded Windows Server service workloads and VMware ESXi hosts to modernized infrastructure with minimal service disruption.
- Introduced Veeam and implemented a 3-2-1 backup and recovery model that closed critical disaster recovery gaps.
- Upgraded infrastructure networking to 10GbE NICs to improve failover performance and reduce recovery bottlenecks.
- Delivered approximately \$100,000 in cost avoidance through in-house architecture and implementation.

TECHNOLOGY STACK



PROJECT TAGS

#infrastructure

#it-operations

#security

#automation