



Summary

NetApp Solutions

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Several emerging application scenarios, such as advanced driver-assistance systems (ADAS), Industry 4.0, smart cities, and Internet of Things (IoT), require the processing of continuous data streams under a near-zero latency. This document describes a compute and storage architecture to deploy GPU-based artificial intelligence (AI) inferencing on NetApp storage controllers and Lenovo ThinkSystem servers in an edge environment that meets these requirements. This document also provides performance data for the industry standard MLPerf Inference benchmark, evaluating various inference tasks on edge servers equipped with NVIDIA T4 GPUs. We investigate the performance of offline, single stream, and multistream inference scenarios and show that the architecture with a cost-effective shared networked storage system is highly performant and provides a central point for data and model management for multiple edge servers.

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