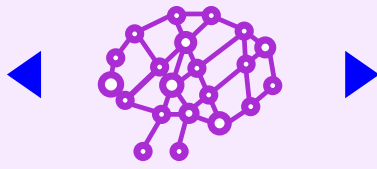


DATA CONVERGENCE

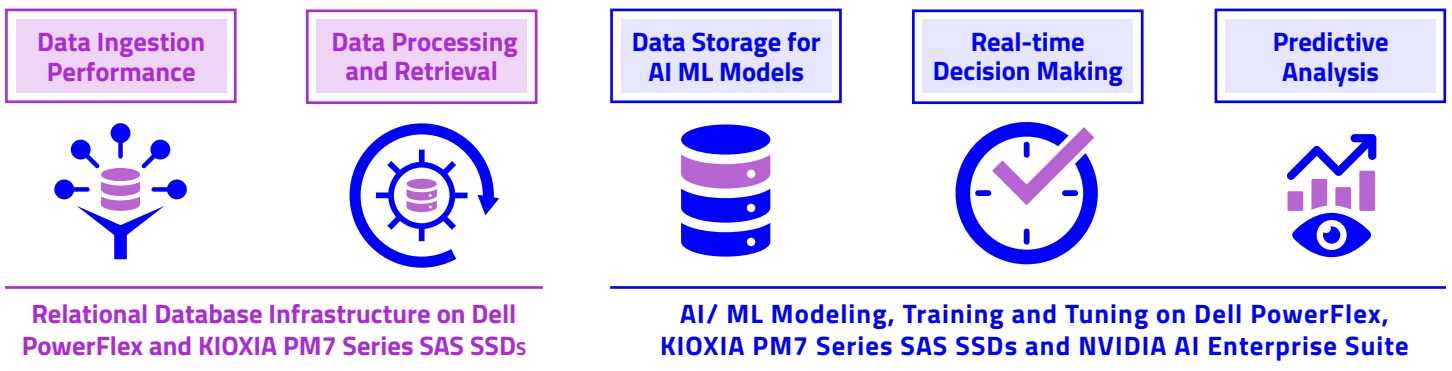
Enable
Data Analytics



Enhance AI/ML
Training & Inference

with Dell PowerFlex using KIOXIA PM7 Series SAS SSDs and NVIDIA AI Enterprise Suite

Designed to Address Challenges in Machine Learning Pipelines Integrated with Traditional Database Workloads

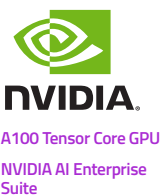


CONVERGED SOLUTION

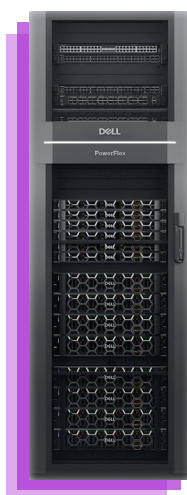


Dell PowerFlex with KIOXIA PM7 Series SAS SSDs delivers superior performance for traditional database transactions while accelerating real-time analytics for accurate prediction.

24G SAS SSDs
22.5 Gb/s Transfer Rate



Using MIG (Multi-Instance GPU) and vGPU (Virtual GPU) together in ESXi environment offers resource optimization, scalability, isolation and high performance



PERFORMANCE RESULTS

OLTP WORKLOADS*

1M TPM
288K IOPS

LATENCY*

0.32 ms Read
0.62 ms Write

ML INFERENCE**

6620 Images/sec

Using RESNET50 v1.5 model with TensorFlow NGC Container on a single ESXi host (with three vGPU profiles)

* Tested in our lab environment on a compact 4RU storage node
** Machine Learning

The integration of AI and ML workloads with conventional database operations within the Dell PowerFlex platform has opened up a plethora of possibilities for executing data-driven decisions, automating tasks, and uncovering deep insights from the vast data repositories that enterprises gather. This convergence enables more astute, efficient, and well-informed decision-making processes that span a wide range of industries and application scenarios.