

Excelero NVMe for Azure

Excelero frees AI, HPC and Data Analytics applications from storage constraints on public clouds

Storage is key for data-intensive workloads

Cloud migration is at the core of digital transformation. However, enterprises running data-intensive workloads, such as AI applications and fast data analytics, find themselves constrained by current public cloud storage offerings. To gain the benefits of the cloud like agility, they must find efficient means to run their demanding processes. Storage performance is key.

Azure storage offerings with data protection often lack sufficient performance, which forces enterprises to use excess compute. Even when significant excess capacity is allocated to provide more IOPS and storage bandwidth, the enterprises still suffer from latency and overall throughput limitations. Azure provides an option to use ephemeral NVMe drives for heavy workloads, but without data protection or sharing. Without these, local NVMe caters to a rather limited subset of the workloads.

Use cases benefit from NVMe:

Database – Consistently low latency, high transactions/sec

AI/ML/DL – Efficient access to millions of small files

Containerized workloads – Native OpenShift, K8s CSI plugin

Data Analytics – Scalable, high bandwidth, cost-efficient data protection

Commercial HPC – Data protection for high performance file systems

Excelero provides solutions for data-intensive workloads on public clouds

Local ephemeral NVMe drives are weaved together with Excelero's software to provide enterprise data protection and performance metrics to support the most data-intensive workloads. With Excelero, say goodbye to costly overprovisioning of storage, wasted compute cycles, excess software licenses and enjoy straightforward capacity-based pricing.

Standard HBv3 and Lsv2 virtual machines with local NVMe devices running NVMe are combined to protect data while scaling bandwidth and capacity for multiple clients. Excelero maximizes available networking, TCP or RDMA, to ensure minimal latency overheads regardless of where the data is accessed. Using standard instances within the customer's account simultaneously ensures data governance requirements are met and allows enterprises to benefit from financial arrangements with Microsoft and enables running applications on the compute cores of these instances for optimal total cost of ownership.

NVMe is deployed with a click through a fully automated portal. The instances will be launched within your public cloud account and will be marked as NVMe resources for easy identification. Storage connection instructions will then be provided based on the storage protocol solution chosen.

