Why Customers Choose to Directly Attach Dell PowerEdge Servers with Dell PowerVault MD Series Storage

Adding external storage to servers can create several tangible benefits for businesses. Separating servers from storage means you won’t be faced with server upgrades or server swaps due to lack of capacity. When directly attaching PowerVault MD Series to PowerEdge, server upgrades and maintenance can occur without data disruption as data remains in place. MD Series, validated with PowerEdge servers, give IT organizations a dynamic, high performance and scalable infrastructure combination for any size business – simply and economically.

1. Validated Configurations
   PowerEdge servers and PowerVault MD Series provide easier, faster, and lower-cost deployment to support high-value server workloads. Dell Technologies has validated server and storage configurations including host OS software, RAID hardware and network components—along with providing best practice guides that enable you to start small and scale with the business.

2. Scalable Server Capacity
   PowerVault MD Series simplifies challenges of server capacity expansion and ensures that business applications get high speed access to data. Choose from three JBOD models - MD2412, MD2424 and MD2460 - to directly attach to PowerEdge servers providing maximum capacities of up to 2.1PB, 4.2PB and 4.82PB respectively.

3. Data Protection
   PowerEdge servers provide data protection (RAID) flexibility with cost-effective options. You can choose either hardware RAID or software RAID, where no storage controller is required, to lower costs. PowerEdge server RAID options are important components of an organization’s data protection and DR strategies providing primary data protection support for applications, as well as files and databases.

4. Workload Flexibility
   MD Series delivers the density and scalability to support PowerEdge servers running several types of applications including databases, virtualization, business and web applications, test/dev, edge workloads, backup operations and more.
5. Connectivity
Computational workloads and storage traffic performance demands continue to increase affecting organizations across every industry (e.g., hyperscale data centers, banking, education, government, healthcare, manufacturing). PowerEdge and PowerVault directly attach using 24Gb SAS4 with 12Gb autosensing. On the backend it’s all connected with 12Gb SAS except for the MD2424, a model with a 24Gb internal bus architecture supporting 24Gb SSDs, thereby making the backend connectivity 24Gb as well.

6. All-around Simplicity
Separating the compute and storage systems not only allows you to upgrade PowerEdge servers (e.g., memory, CPU) or add additional capacity to PowerVault as application data increases, it also brings simplified management for both server and storage systems. Management for PowerEdge and PowerVault occurs from a single pane of glass with iDRAC or using SHMCLI to speed time to repair, simplify monitoring, accelerate new deployments and improve the end-user experience.

7. Business Value
When companies need to store, process and quickly access large amounts of data for reporting and analysis, they turn to PowerEdge servers connected to PowerVault storage. This combination helps businesses rapidly access business data as well as reduce capex/opex of compute and dense storage capacity with affordable price/performance points.

8. Better Together
Realize the immediate value and benefits of attaching PowerVault MD Series to PowerEdge servers
• Simplify the challenges of PowerEdge capacity expansion
• Business applications running on PowerEdge get high-speed access to data
• Cost-effective solutions enable you to start small and pay-as-you-grow
• Better together with Dell Services and Support