



Applications *Run Faster &
Perform More Consistently*
on our Storage!

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WHY We Exist - Applications Run Faster on Pavilion...

Databases (SQL or NoSQL)



External Scale-Out File Systems



Virtualized Infrastructure



AI & Machine Learning

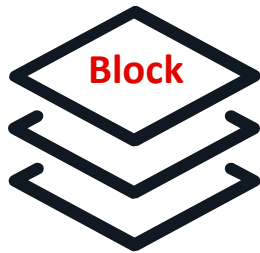


GPUDirect Storage
Block and File

What We Deliver – Predictable and Consistent Performance and Scale

Single Storage Platform Unit = 4 RU up to 2.2PB

Flexibility to support multiple STORAGE types on a single platform



20M IOPS Read

5M IOPS Write

100 μ s Read Latency

25 μ s Write Latency

120 GB/s Read

90 GB/s Write



Shared Global Namespace

78 GB/s Read

56 GB/s Write

52 GB/s Read

28 GB/s Write

File and Object *Shared Global Namespace* can be clustered with multiple systems to linearly scale performance and capacity

Not just high performance READ but also high performance WRITE!

WOW the Results



2x+ the Queries per Second (QPS) and
7x+ the Transactions per Second (TPS) at
<50% the Latency

1.8x the Queries per Second (QPS) and
6x the Transactions per Second (TPS) at
<60% the Latency



1.5x the Queries per Second (QPS) and
67% the Latency

1.13x the Queries per Second (QPS) and
89% the Latency



2.3x the Transaction per Minute (TPM) and
2.3x the Operations per Minute (NOPM)

2x the Transaction per Minute (TPM) and
1.3x the Operations per Minute (NOPM)



elasticsearch

1.10x the Documents / Second
1.47x the Operations / Second

1x the Documents / Second
.47x Operations / Second



1.14x the Operations / Second
77% the Read Latency
76% the Update Latency

1.06x the Operations / Second
94% the Read Latency
101% the Update Latency



< 200 μ sec Latency for
Reads & Write

Similar or Same
Performance as Bare Metal

How do we do it?

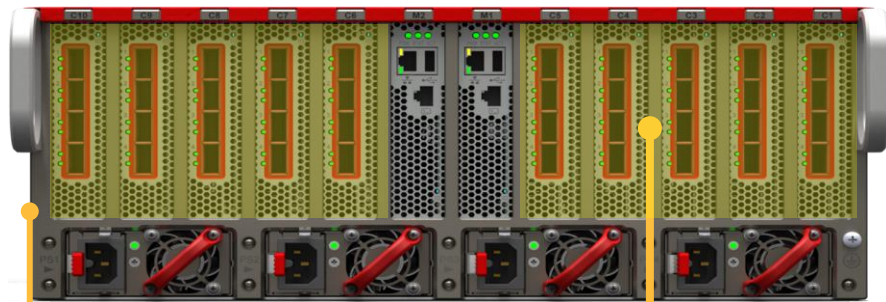
Thank you!

Not **2** controllers – **20** controllers

Not **4** 32Gb FC or 50GbE – **40** x 100 GbE/EDR

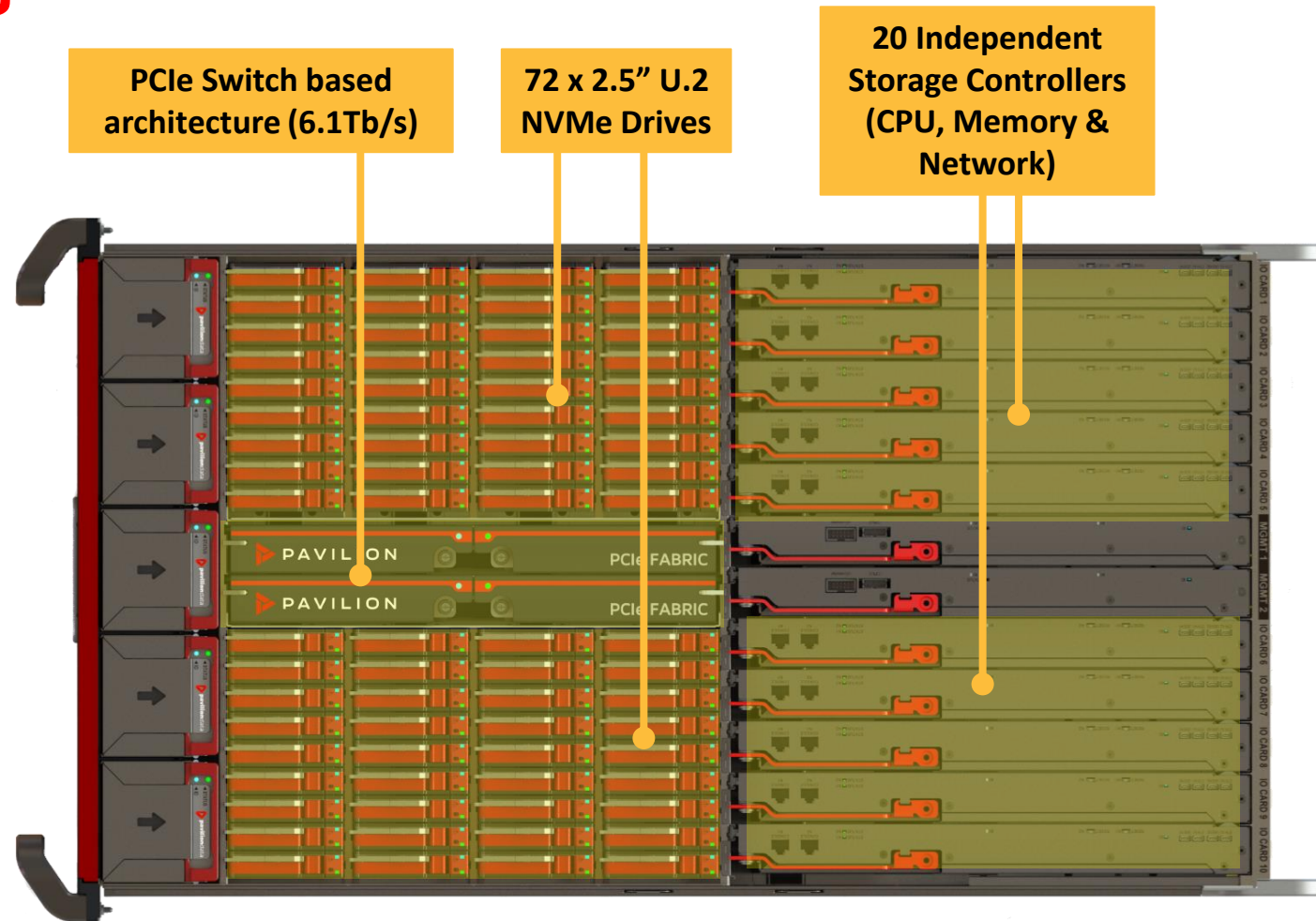
Not just **BLOCK** but also **FILE** & **OBJECT**

Not **RACKS** of equipment but **4 Rack Units**



4RU Chassis

40 x 100 GbE/EDR or
10 x 200 HDR
InfiniBand ports



Unrivalled Performance Density



Thank You!