



Software-Defined Storage

With Supermicro® Storage Servers



Agenda

- Why Supermicro storage solutions
- Types of data and related storage needs
- Scale-up and scale-out options
- Best practices and deployment considerations
- Example configurations
- How to get started

Why Supermicro Storage Solutions

- Capability to store data and make it readily accessible
- Flexibility to build what you need at a cost you can afford
 - High-performance storage for active data
 - High-capacity storage at low cost for other data
 - Scale-up and scale-out options
- Partnership with leading software-defined storage software vendors
- Validated designs to help you get started and reduce risk

It is expensive to store all your data on the fastest storage available.

Software-Defined Storage with Supermicro



Deliver
capacity and
performance
to applications

Efficiently
manage data

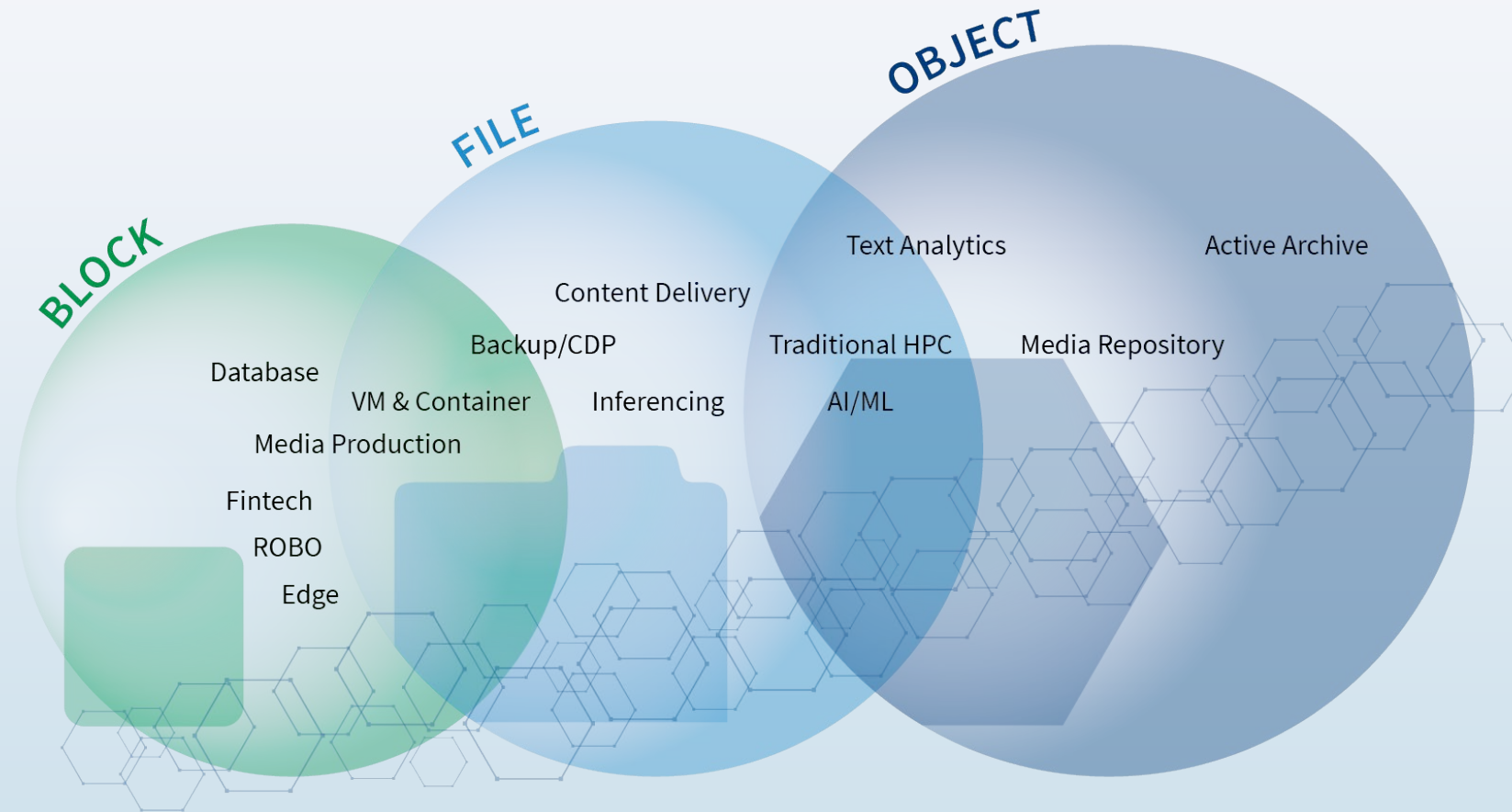
Scale up
or out

Eliminate
expensive,
proprietary
systems

Enhance data
availability and
disaster
recovery

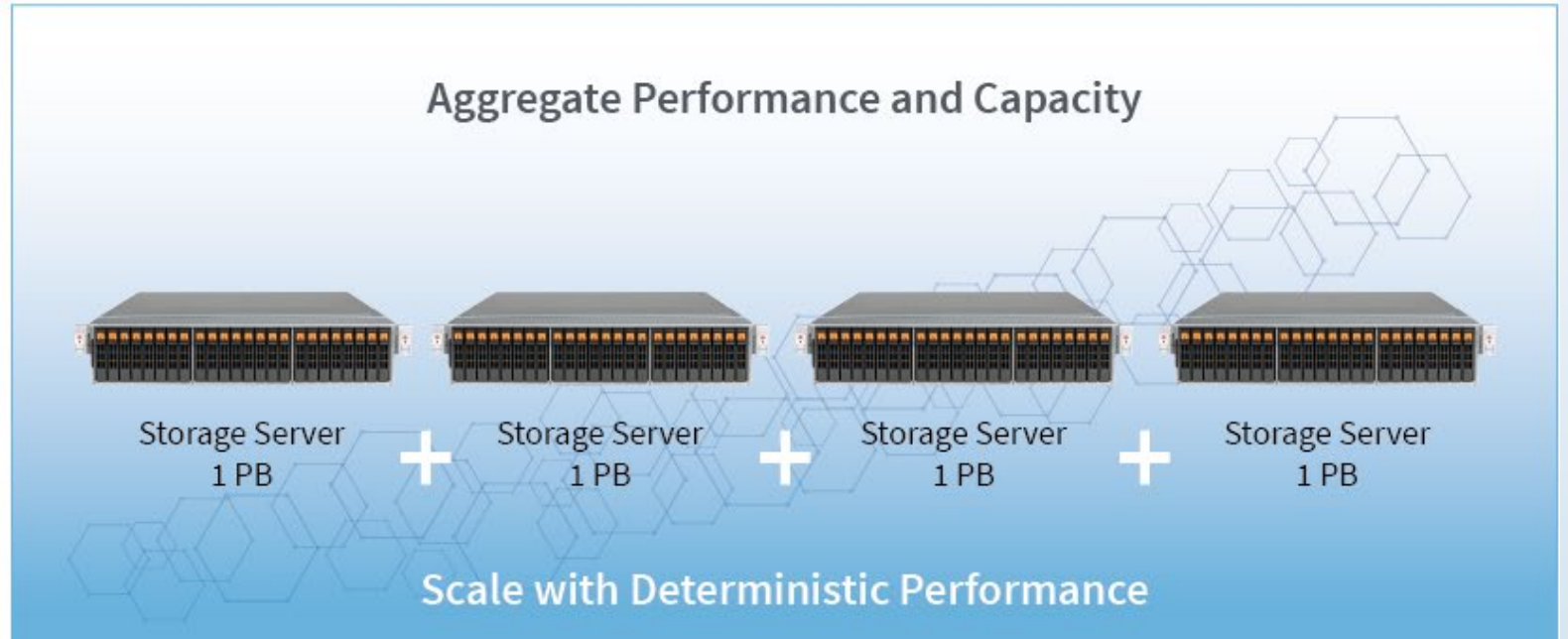
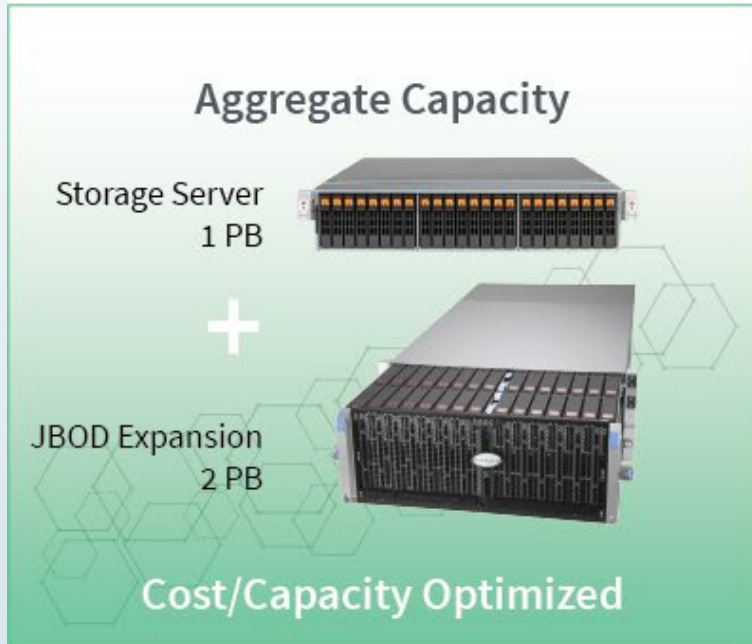
Tap into a transformative approach to data storage

Solutions for Every Kind of Deployment



A building-block approach that supports all types of data

Scale to Meet Demand



Scale up by adding more resources to storage systems

Scale out by deploying more storage servers

Adapt with solutions that scale up or out

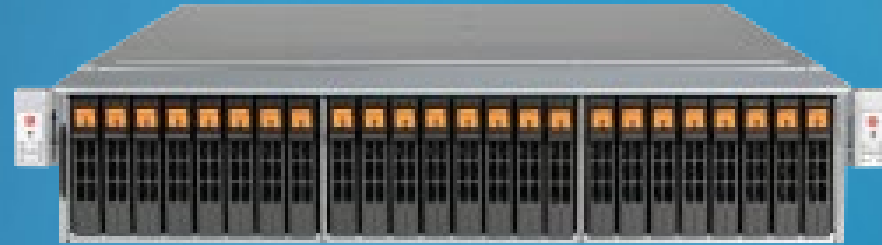
Best Practices and Considerations for Deployment

- 1 Choose server configurations based on workload requirements
- 2 Use an appropriate unit of scale
- 3 Think about reliability
- 4 Start with expert recommendations

Tap into a transformative approach to data storage

- High-capacity systems
 - Supermicro Storage Bay Bridge (SBB) architecture servers
 - Multi-node systems
 - High-speed networking
 - OSNexus QuantaStor platform
- Base configuration:
 - 1 system, 2 x 10-Gbps interfaces per node
- High-performance configuration:
 - 1 system, 2 x 400-Gbps interfaces per node

Scale-Up Configurations

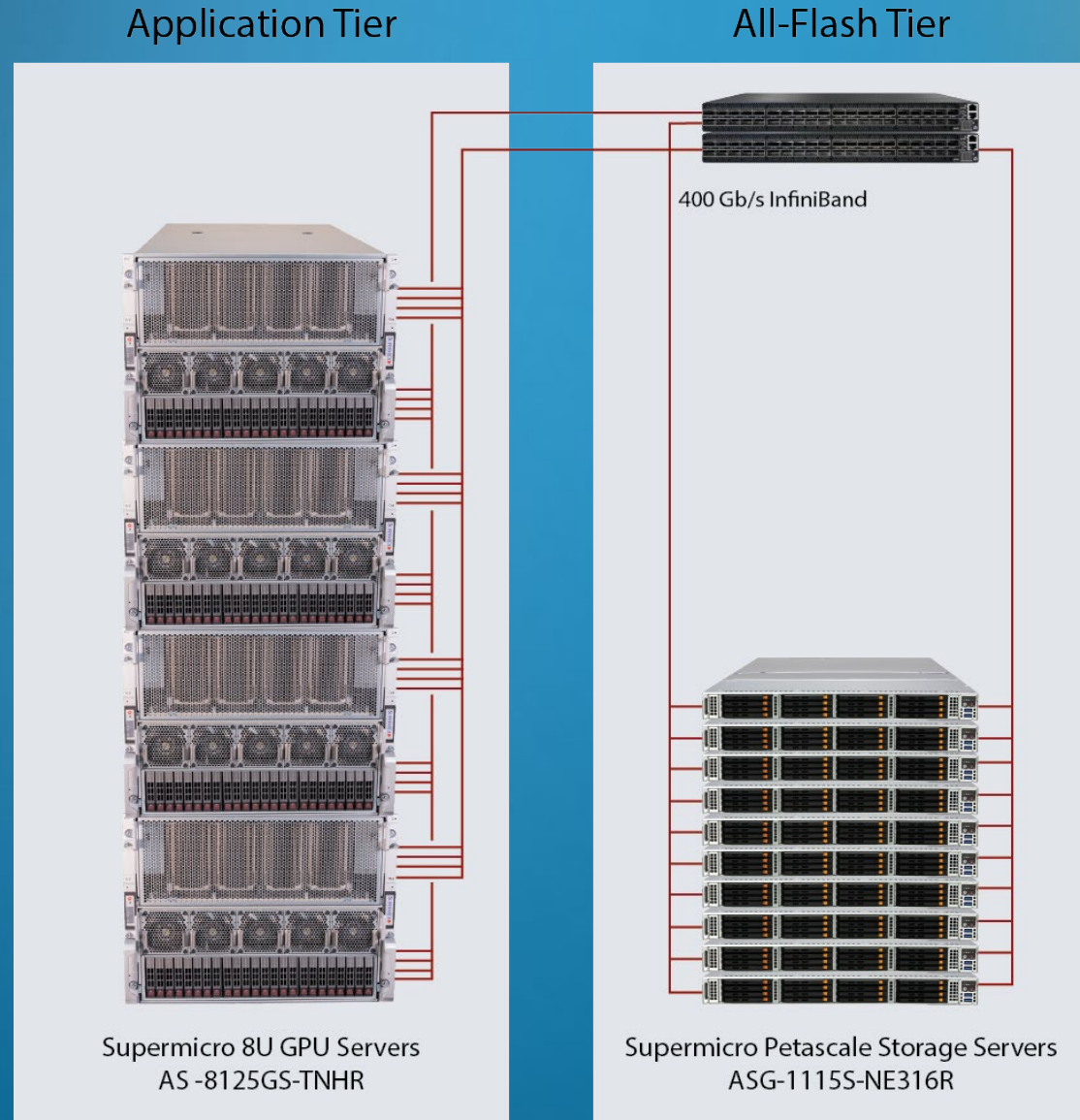


Supermicro Storage Bay Bridge Servers
24 bays

- Ideal for smaller-scale deployments with fewer users
- Easy to deploy
- Compact and storage-dense
- Cost effective

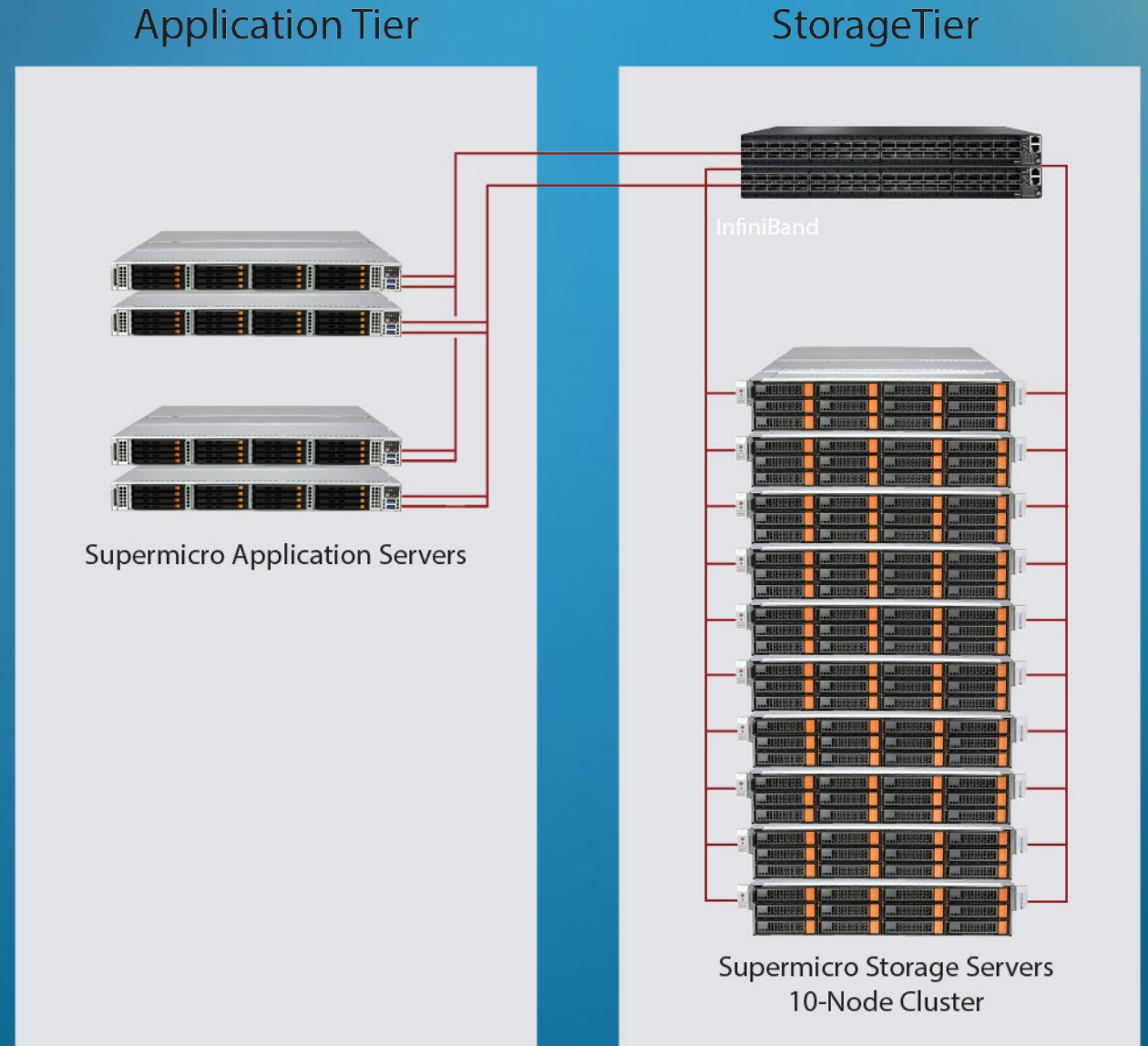
Petascale Configuration

- Scale-out cluster architecture
- Optimized for performance
- Can be comprised of:
 - 12-drive Hyper 1U servers
 - 2U, 32-drive Petascale servers
- Supports data lakes, active archives, media repositories, and long-term storage for HPC and AI/ML data



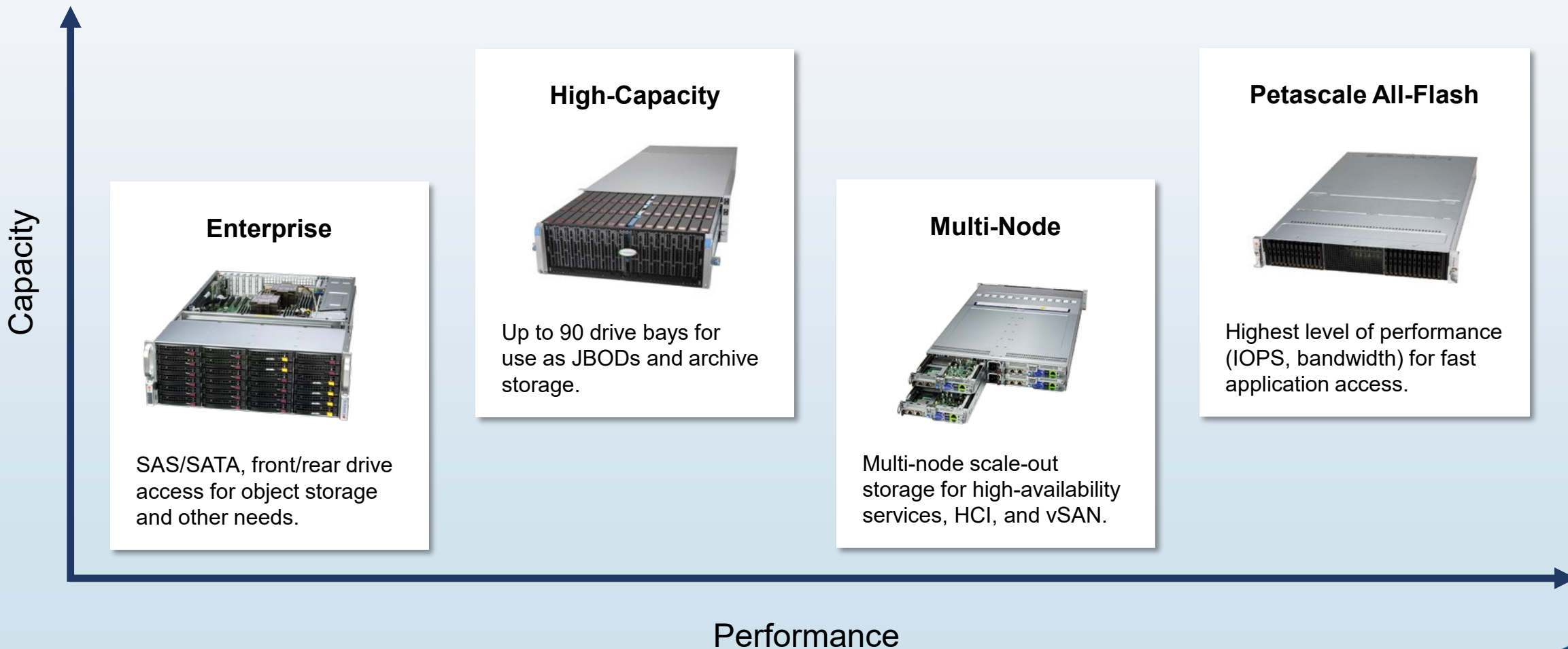
Object Storage Configuration

- Entry point configurations
- Multi-node clusters
- Single or dual nodes
- Multiple storage configurations
- 60 or 90 drive bay options



Supermicro Solutions for All Your Storage Needs

From High-Capacity 90-Drive Systems to High-Performance All-Flash NVMe Systems



Supermicro Simply Double Storage Server

- 12 x 3.5" front-panel drives
- 12 x 3.5" midplane-accessible drives
- Hot-swappable, large-form-factor drives
- 2U rackmount
- 2 AMD EPYC processors
- Up to 24 DIMM Slots
- 1600W Redundant Titanium Level PSU



Supermicro Top Loading Storage Servers

- 4U rackmount
- 45, 60, or 90 drives
- 6 NVMe drives (optional)
- Single- or dual-node single processor systems
- Up to 24 DIMM Slots
- Up to 2600W redundant Platinum Level PSU



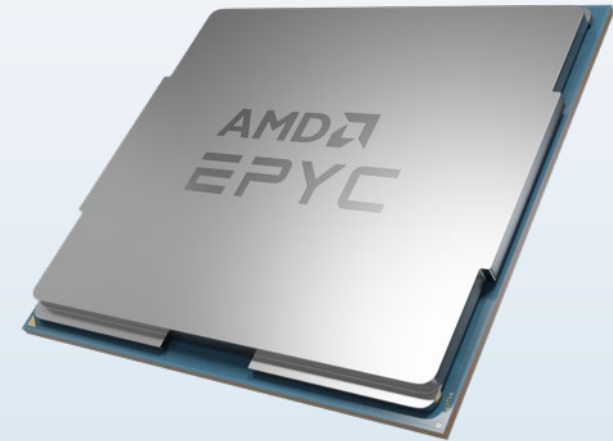
Supermicro Petascale All-Flash Servers

- Designed for performance-intensive storage applications
- Enhanced support for EDSFF E3.S form factor drives
- Up to 960 TB in 1U or 1.92 PB in 2U
- Reduced latency (symmetrical dual-processor architecture)
- Easy capacity expansion
- Large shared memory
- Support for the OCP Data Center Modular Hardware System (DC-MHS)



Powered by AMD EPYC Processors

- Engineered with industry-leading efficiency and performance
- High core counts
- High frequency processor options
- PCIe Gen 5 interfaces, up to 160 lanes
- Overall better performance per watt



Designed to keep your storage infrastructure operating at peak performance

Choose Storage Solutions from Supermicro

- Create flexible storage infrastructure for today and tomorrow
- Use a proven software-defined storage approach built on Supermicro storage servers
- Flex to change and scale the deployment as needs change
- Tap into an experienced team of storage specialists led by Supermicro
- Help your organization stay on the cutting edge



Questions?