

## Accelerate Innovation

Pangea sets the new standard for performance and scale with the Pangea Solutions. Customers benefit from reduced system complexity with RAID Inc. integrated solutions.

These zero-compromise appliances deliver ZFS data protection coupled with Lustre performance. Pangea solutions are packaged, tested, qualified, delivered and fully supported by RAID Inc.



## Faster, Better, Simpler

Pangea optimized Lustre file system appliances bring the ultimate advantage of a truly parallel file system with hardware that screams performance. RAID Inc.'s approach further delivers consistency of deployment, the data protection you need, and a future-proof solution for your scalable data. Plus, with parallel file system sophistication, customers can deploy quickly, use proven technologies and benchmarked systems while gaining the advantages of ZFS.

## Simple Integrated Management Tools

Pangea includes a set of facilities to aid the systems manager in day-to-day administration tasks. Fast, simple command line tools show your drive configurations for Pangea systems. Easily locate failed drives by LED status or command line tools, verify status of hot spares, monitor and manage your drive pools, enclosures and IO modules.

## Dense, Scalable

Pangea hardware provides dense, scalable Lustre solutions for HPC and AI workloads.

P8000 Controller:

- 4U enclosure with active-active OSS controllers
- 90 drive bays for up to 1.25 PB

D9000:

- 4U, 90 drive expansion enclosure
- Pangea full enclosure services management

## ZFS Lustre, Backed by Whamcloud

Customers benefit from high performance, strong scalability, data protection, more simplicity and deep support for software RAID, powered by ZFS:

- File system snapshotting
- Data compression
- Integrated file system health checks and repair
- End-to-end data checksums for protection
- Accelerated RAID rebuilds
- GUI-based system management using Integrated Manager for Lustre (IML)



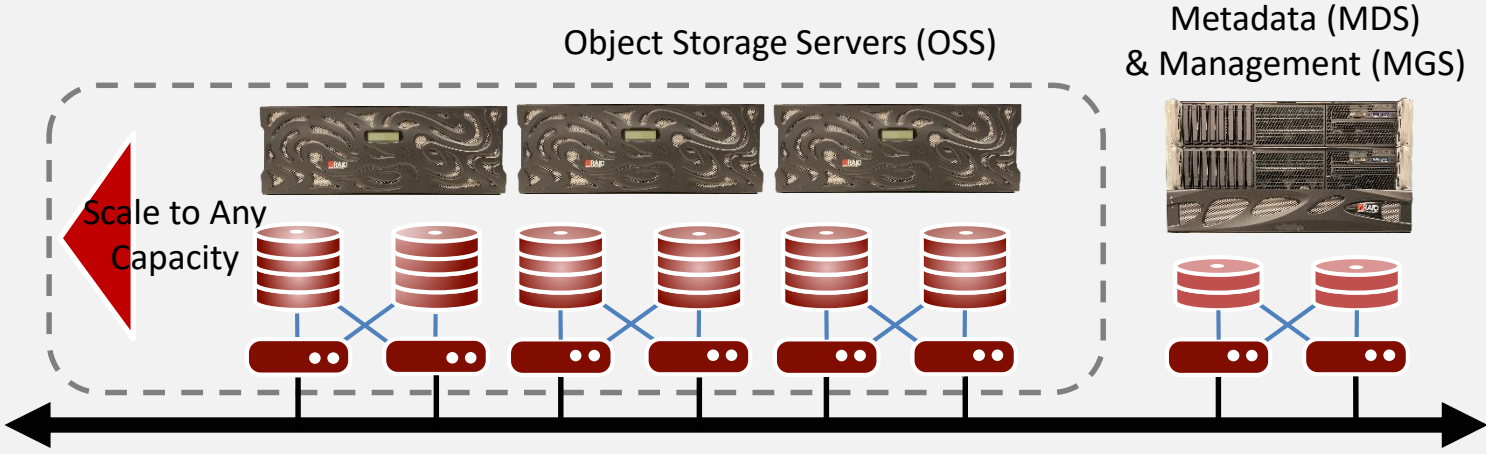
Whamcloud

## Benefits

- **Uptime and Availability.** Highly integrated Lustre solution with servers embedded within the Pangea platform. No single point of failure with dual active-active Lustre/ZFS controllers. Multiple, direct connections between Pangea controllers and P90A 90-bay enclosures.
- **Ready for Work.** Pangea solutions arrive ready and configured based on the demanding requirements of our customers. Pangea appliances bring simplicity to your deployments reducing time to production.
- **Scalability.** Pangea starts small from just a few 100s of TBs and grows to any-scale as requirements evolve. Scale capacity and performance linearly by adding Pangea appliances. Lustre was built for the most extreme data challenges and has been tried and tested in the largest file systems in the world and with many thousands of concurrent client connections.
- **Faster Rebuild Times.** Multiple levels of data protection using ZFS-based software RAID. The ZFS advanced pool-based storage approach enables faster rebuild times than traditional RAID in the event of a drive failure by spreading the rebuild process among many devices. Only data is rebuilt not the entire drive.
- **Compression.** ZFS software RAID allows for data compression that saves storage space and improves the I/O of the solution by reducing the size of data moving between the storage servers and hard drives.
- **Protected Data.** ZFS automated online data validation actively checks drive health of user data, verifies integrity, detects silent corruption and proactively corrects errors. All of this happens automatically - without any administrative intervention.

## Simple, Scalable Performance

- Simple, scalable units based on Pangea start small with a single unit and grow to any scale.
- Factory installation for quick time to production.
- The fastest networking with integrated support for Mellanox EDR networks.
- Single point of RAID Inc. support.



### Scalable Performance & Capacity



- Data Services
- Redundant, powerful, large capacity storage
  - Mellanox IB EDR 100Gb/sec connectivity
  - High density performance and capacity

### Powerful File System Control



- File System Services
- Redundant, powerful metadata servers
  - Mellanox IB EDR 100Gb/sec connectivity
  - 24-bay all-flash performance

## Software Stack

