infinite io

www.infinite.io • @infiniteio

Make your existing storage
Outperform an all-flash NAS system

infinite io
The world's first network-based metadata accelerator processes metadata requests directly in the network, off-loading storage systems

As data growth rates have exploded, storage systems have struggled to maintain consistent performance and have often lagged behind the performance gains made in servers and other systems. The traditional approach to increasing storage performance has been to do a fork-lift upgrade to a faster and typically more expensive system. infinite io has developed a game-changing new solution that offers an alternative to that fork-lift upgrade. In most cases, with metadata processing off-loaded, existing systems can be augmented with infinite io to outperform even the fastest all-flash NAS systems, at a fraction of the cost.

The key to unlocking storage performance lies in metadata.

Metadata requests often make up as much as ninety percent of all transactions processed by storage systems. By design, storage systems are optimized to move data in and out, not to respond to queries about the state of data. As metadata activity increases, storage performance plummets.
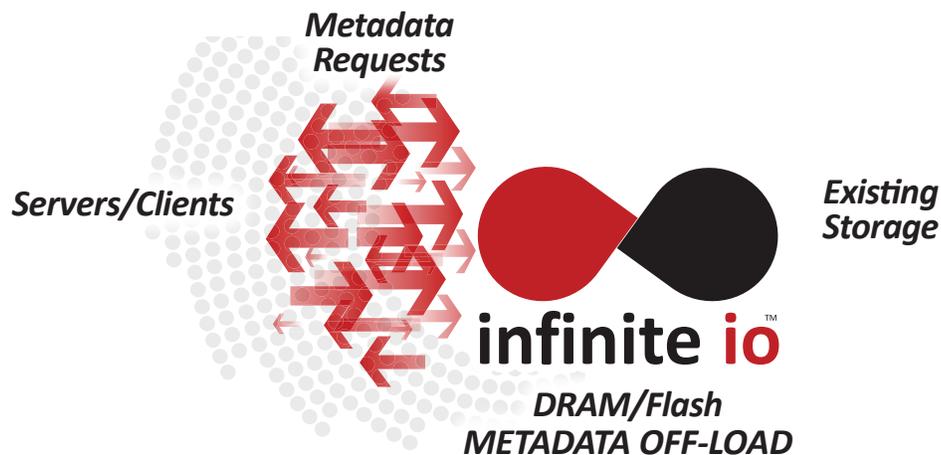
infinite io takes a networking approach to solving the storage performance problem by serving metadata directly out of memory on the network at microsecond response rates. Storage systems simply cannot match these rates due to their underlying file systems. Overall performance is typically increased by a factor of 5-100x depending on the workflow and installed NAS systems.

Installing like a network switch in front of existing storage systems, the unique architecture uses deep-packet inspection to synchronize in-memory copies of metadata. This approach is totally transparent to all installed systems and requires no changes to applications, servers, or installed storage systems.

infinite io can help if:
- You need maximum performance – exceeding an all-flash NAS system
- Cost constraints limit your ability to upgrade to all-flash NAS systems
- You want to avoid the significant downtime associated with a fork-lift upgrade
- You would like to extend the life of existing NAS systems

As data growth rates have exploded, metadata requests have skyrocketed. Processing metadata requests significantly degrades storage system performance.

infinite io moves metadata processing into the network where it can be processed at rates even the fastest all-flash NAS systems cannot achieve.

With infinite io, storage performance is increased, often making exsiting storage faster than an all-flash NAS system, at a fraction of the cost.

Metadata Requests

Servers/Clients

Existing Storage

infinite io™

DRAM/Flash METADATA OFF-LOAD

> *With infinite io installed, we saw a significant reduction in workflow processing times.*
>
> Rhian Resnick
> *Director of Middleware and HPC, Florida Atlantic University*
>
> *After the installation of infinite io, our users experienced a significant improvement in application performance.*
>
> Brett Morrow
> *Senior Systems and Storage Analyst for AceInfo at the National Severe Storms Lab*

Extreme Performance

infinite io's unique approach seamlessly integrates into existing environments and turbocharges storage to performance levels that rival the fastest all-flash NAS systems

Benefits:

- Get all-flash performance from your existing NAS systems
- Install with ZERO workflow changes
- Avoid fork-lift upgrades and the associated downtime
- Keep existing storage tools and processes intact
- Get a view into traffic patterns with metadata analytics

Features:

- Ultra-high metadata performance: 1,500,000 metadata requests per second in a single node with an average latency < 40 microseconds; 3,000,000 metadata requests per second in a 3-node cluster with an average latency <60 microseconds
- Installs like a network switch and is totally transparent
- Unlike a cache, all metadata remains hot
- Single nodes fail-to-a-wire, and clustered nodes provide availability that matches or exceeds NAS systems
- Software upgradeable to a Network-based Storage Controller that provides the ability to transparently migrate inactive data off NAS systems to a low-cost cloud while preserving their always-on and available NAS functionality

ABOUT US

Our mission at infinite io is to provide our customers with the best possible product experience. Our experienced technology teams have a track record of developing market-defining solutions in security and packet inspection, storage networking, network routing and storage systems. Designed to be remotely managed and easily upgradeable, our products proactively self-monitor to make initial configuration and ongoing support a straight-forward and hassle-free experience.

infinite io has been cited by CRN, Network World, Information Week and Tech Target as a game-changing company engineered to disrupt the world of data storage forever.

8601 Ranch Road 2222, Building I, Suite 250, Austin TX 78730
512.375.4171 • info@infinite.io • www.infinite.io • @infiniteio

infinite io™