Make Your Data-Driven Aspirations a Reality with InfiniBox® Enterprise Storage Solutions
Introduction

Data storage infrastructure owners face an important set of challenges. With data footprints growing at 30% or more each year, our industry has reached a critical inflection point. How can we remove barriers to digital transformation? How can we identify, enable, and capitalize on the value of data that is redefining competitive advantage?

This report presents an overview of six critical advantages offered by Infinidat that enable storage infrastructure owners to achieve competitive advantage at multi-petabyte scale.

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The InfiniBox® enterprise storage system delivers groundbreaking performance, multi-petabyte scalability, and bulletproof reliability, built for a broad range of mixed application workloads in enterprise data centers. InfiniBox SSA takes that performance to the next level with consistent, ultra-high performance and microsecond level latency for the most demanding application workloads. Both systems offer zero-impact snapshots, dependable active:active, synchronous & asynchronous replication, and flexible, software-defined quality of service come standard, with guaranteed reliability and data security.

With InfiniBox and InfiniBox SSA, enterprise IT organizations and managed service providers are able to exceed their service level objectives while radically lowering the cost and complexity of their storage operations.
Groundbreaking Performance

Microsecond access across multi-petabyte data sets enables competitive advantage in every industry, from retail and financial services to healthcare, manufacturing, and managed services.

The heart of every InfiniBox is Neural Cache, a machine learning algorithm that maintains a connected history of every data section the system has received since its inception. By observing all network traffic to the storage system, Neural Cache uses the I/O history to recognize correlations in data access patterns and immediately begin predicting future I/O requests, which are preemptively staged in cache. Because most I/O requests are served directly from DRAM (which is more than 100x lower latency than flash), InfiniBox customers can expect higher application performance from virtually any enterprise workload versus what most competing all-flash arrays can deliver. For example, InfiniBox SSA delivers the industry’s lowest latency at 35μs. *

Neural Cache in Action: An industry-leading, publicly traded US retailer relies on InfiniBox for all of its major workloads, including ERP, accounting, finance, online sales, and website. Shown here are results from a 7-day snapshot of the read cache performance during Black Friday/Cyber Monday, the busiest shopping days of the year in the US.

* Internal latency as low as 35 microseconds based on customer production telemetry data, read I/O hits (DRAM cache) actual results may vary. March 2022.
Always-On Availability

For data-driven businesses, downtime is measured in financial loss, reputational damage, customer dissatisfaction, and more. According to IDC, infrastructure failure costs large businesses $100,000 per hour on average, while critical application failures exact a far steeper toll, ranging from $500,000 to $1 million per hour.

InfiniBox is designed for 100% availability over the course of its entire lifecycle, with an architecture supporting the equivalent of approximately three seconds of downtime per year. In addition, the active:active:active nature of InfiniBox eliminates traditional performance impacts of component failures.

Our customers report no loss of data, even upon multiple disk failures. InfiniBox offers end-to-end business continuity features, including synchronous replication, asynchronous remote mirroring and snapshots. Using snapshots, recovery of a database can be reduced to the amount of time it takes to map the volumes to hosts—minutes instead of hours—using a more traditional backup and recovery process.

EXCERPT FROM IDC MARKET NOTE: Enterprise Storage Provider Infinidat Readies the Company for the Next Phase of Revenue Growth

“The InfiniBox’s redundant design and active:active controller architecture, coupled with the right software functionality for transparent and rapid recoveries across a wide variety of failure scenarios, resulted in a system that is guaranteed by the vendor to deliver 100% data availability. This guarantee comes with all InfiniBox systems and does not require stretch clusters to apply (although those are supported). With more densely consolidated storage workloads, any single outage (regardless of the cause) can have a much larger impact. Host multipathing, RAID, snapshots, replication, hot pluggable components, nondisruptive upgrades and data migration, and artificial intelligence–driven systems self management all contribute to InfiniBox’s 100% data availability.”

Dan Hamilton, VP of Technology
Whipcord
Ease of Management

Your IT staff can focus on their day-to-day responsibilities because Infinidat monitors your systems to maintain optimal storage performance and availability. If an event occurs that requires additional support, Infinidat’s proven support process ensures rapid resolution with minimal hands-on intervention.

**RESILIENCE**
- Designed for zero downtime over the course of its entire lifecycle with 100% availability guaranteed
- Heartbeat monitoring and predictive health analysis eliminates potential issues before they occur
- Triple-redundancy of all major hardware components keeps the system fully operational if a failure occurs

**SIMPlicity**
- Secure Remote Support allows for fast and easy issue resolution anywhere in the world
- Heartbeat monitoring with proactive Call Home diagnostics and resolution for any issue
- Low-risk updates and capacity expansion with limited hardware touches

**SUPPORT**
- Every Infinidat solution includes the services of a dedicated Technical Advisor at no additional cost
- Your Infinidat Technical Advisor ensures that you get the best support and service, from installation to configuration and operation, including all updates and upgrades

98% of worldwide service calls over the past 12 months were proactively initiated by Infinidat

1.07 average annual field engineer visits per system, representing a 6-EB global footprint

98% of clients would recommend Infinidat according to Gartner Peer Insights™ reviews

“Infinidat helps our entire team sleep better at night by proactively identifying and resolving technical issues, often before we’re even aware of them.”

Marc Creviere,
Principal Systems Engineer
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Lower TCO + Higher ROI

There’s a reason CIOs and Procurement Officers love Infinidat. Our customers experience a step function reduction in both CapEx and OpEx when they migrate from legacy systems to InfiniBox, while simultaneously improving application performance and reliability.

To help organizations better understand the benefits and costs associated with InfiniBox, Infinidat commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study. Forrester interviewed current InfiniBox customers across several industries and geographies.

With the information gathered, Forrester uncovered some remarkable results based on a composite organization. The study revealed the following business benefits:

- 125% Return on Investment (ROI)
- A total benefit of $18.4 million over three years
- An investment with a very positive Net Present Value (NPV) of $10.3M
- Downtime cost savings of $1.2 million
- Payback in less than six months

“Infinidat’s solutions averaged 50% less expensive on a usable TB basis than previous storage.”

Forrester Total Economic Impact Report
Flexible Consumption Models

Infinidat offers flexible CapEx and OpEx procurement models to meet your evolving business needs. For example, you can purchase a system, but if you don’t need the entire capacity up front, our Elastic Pricing model enables you to access additional capacity as you need it, with the entire capacity pre-installed on either a short-term OpEx “rental” basis, or you can acquire it in 10 TB increments at a predetermined price.

Our OpEx models include InfiniBox FLX for on-premises storage, where you pay for initial capacity and additional increments on a per TB per month basis as you grow or shrink.

Each of these models can also be combined to address swing workloads and temporary needs. Your Infinidat representative can provide additional details and design a strategy to meet your needs.

“Infinidat’s solutions averaged 50% less expensive on a usable TB basis than previous storage.”

Forrester Total Economic Impact Report
Resilience and Operational Efficiency

InfiniSafe® Reference Architecture

Cyber resilience is a top concern for IT professionals. The InfiniSafe Reference Architecture extends cyber resilience capabilities to primary storage, the InfiniBox family of products. The InfiniSafe Reference Architecture delivers four fundamental capabilities that are critical to developing a cyber resilience strategy:

1. Immutable Snapshots - create a point-in-time safety net that is immune to alteration.

2. Logical Air Gaps - provide separation of storage infrastructure for deeper protection.

3. Fenced Forensic Environment - isolates critical data and secured compute resources.

4. Near Instantaneous Recovery - expedites bringing ‘clean’ resources back to production.

InfiniOps™ Technologies

The InfiniOps framework is a collection of software capabilities that exploit world-class AIOps functionality and expedite DevOps activities. By harnessing the unique operational awareness of InfiniVerse and proven internal capabilities, IT teams have streamlined storage oversight as well as IT process integration. This framework enables you to:

- Exploit infrastructure intelligence of the AI foundation of Neural Cache.
- Extend AIOps through InfiniVerse, a secure, cloud-based service delivering deep insights and predictive analytics.
- Streamline DevOps with over a dozen Infinidat proven solutions to incorporate unique capabilities along with wide-spread integration with third-party applications.

“Having AI and Neural Cache in InfiniBox enhances the ability to simplify operations and create the set-it-and-forget-it experience that Infinidat is known for. Infinidat has advanced expertise in AIOps that we believe is critical for us in building differentiated services for our customers, delivering on SLAs like performance and reliability, while minimizing cost.”

Amanda Regnerus, EVP Business Development at US Signal

“Enterprises are relentlessly challenged with the threat of cyberattacks. With Infinidat’s InfiniSafe technology extended to Infinidat’s family of innovative InfiniBox storage solutions, endusers can develop robust cyber resilience strategies for their primary storage estate.”

Stuart McMinn
CTO
Bell Integration
About Infinidat

Infinidat is the most innovative enterprise storage company at scale today delivering a fully automated and autonomous set-it-and-forget-it approach with unprecedented 100% availability, unmatched real-world application performance, and a substantially lower total cost of ownership with significant savings in CAPEX and OPEX. The company’s software-defined, storage-based portfolio provides enterprises and service providers with best-in-class solutions for primary storage, modern data protection, disaster recovery and business continuity, and cyber resilience.

To learn more about how Infinidat can help your organization, visit Infinidat.com or call +1.855.900.4634