

# NEXSAN DATABEAST

Full Service Storage for All Your Data

**DATABEAST COMBINES FULL SERVICE STORAGE WITH MISSION CRITICAL AVAILABILITY FOR TODAY'S DATA INTENSIVE ENVIRONMENTS.** DATABeast consolidates large amounts of data into a single, high density, easy to manage solution that can be economically expanded to meet the needs of any organization.

## DATABeast – Reduce Costs without Compromise

- Reduce the cost of storage by 50%
- Cut energy costs up to 60%
- Lower floor space needs by up to 50%
- Up to 10 x faster deployment than other solutions
- Increase administrative efficiency by up to 10 x

## DATABeast Lets You:

- Easily scale from terabytes to petabytes in a single system
- Provision and unprovision storage in seconds with no pre-planning
- Only purchase storage you need today
- Manage tiered storage automatically and non-disruptively
- Install and in production within hours
- Access data from both block and file services to address more applications
- Scale performance to address multiple high demand applications
- Eliminate the need for array-specific professional services



# DATABeast Unique Advantages

## Cost Correct

Some solutions restrict features, hide costs, limit scalability and become complex over time. Estimating the short and long term total cost of ownership for these types of solutions is designed to be challenging and sometimes impossible. DATABeast features are all included, there are no hidden costs, scalability is not restricted and it's simple to deploy, own and use. DATABeast is cost correct today and into the future.

## Equality

Some storage system treat different information types as second or third class data limiting features and functions, charging more to manage, scale or protect. With DATABeast, all your data can be managed with the latest features and functions providing enterprise storage services cost effectively across all your data regardless of volume, diversity or value. Full Service Storage for All Your Data.

## Freedom

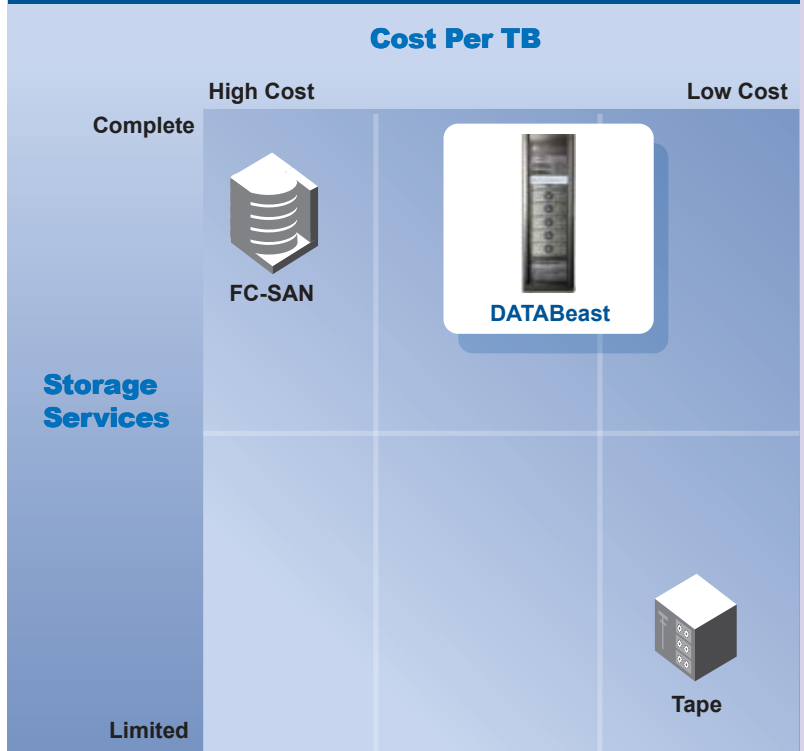
Every data storage environment is different because no two businesses are exactly alike. DATABeast gives you the freedom to grow "how" you need to grow – performance, capacity, or volumes -enabling you to precisely align your storage with your short and long term needs.

## Future Proof

The future is unpredictable. Data growth, service levels, new applications, data diversity, disaster recovery or data center capabilities will change, sometimes rapidly, leaving little time to react. With DATABeast, you don't need to react – you're ready.



## DATABeast - Enterprise Class Storage at a Cost Approaching Tape



# Better Economics

**DATA IS GROWING EXPONENTIALLY IN SIZE AND COMPLEXITY,** challenging organizations to improve how they store, manage and protect all their data without increasing budgets or staff. DATABeast overcomes these challenges by extending enterprise services to all your digital assets, while reducing storage and management costs as data grows.

## Reduce CAPEX by up to 50%

DATABeast is a complete system and includes all required storage services. Most storage systems require that you pay for “extras” to perform snapshot backup to disk, replication to another site or mirroring across multiple storage systems, with DATABeast everything is integrated and included with no additional costs, “one solution, one price”.

## Cut power and cooling costs by up to 60% without compromising application performance

DATABeast uses up to 60% less power. Standard array based storage, whether idle or serving data, require large amounts of power and cooling. Nexsan’s patented AutoMAID technology significantly reduces power and cooling usage without compromising application performance.

## Conserves data center space by 2.5 times

Over 2.5 times more capacity per rack than traditional 14 and 16 bay storage systems. With 42 drives in only 4U of rack space, Nexsan DATABeast is a leading storage consolidation solution for optimizing data center space.

## Cut the cost of adding capacity by up to 50%

Most traditional storage solutions force you to pay for performance and licenses when all you’re adding is capacity. DATABeast capacity scales independently, no need to re-invest in management software, capacity, server or application licenses or unnecessary performance if all you need is more capacity. Whether you add a few terabytes or petabytes, scale the DATABeast at the price of disk storage.

## Increase performance without unnecessary costs

Most appliance based storage solutions have you invest in both performance and capacity, even if you only need more performance. DATABeast performance scales independently, providing you the flexibility to invest in performance without investing in un-needed capacity. Moreover, if you need more capacity, simply add more DATABeast storage systems to your DATABeast solution.

## Deploy and use within hours

Building a SAN can take days or weeks: selecting and purchasing all the components, mounting the systems, formatting storage, zoning ports, loading software, configuring failover and cabling the racks take time and resources not to mention the time delays dealing with interoperability issues and multiple services departments. DATABeast eliminates all these issues and problems with a pre-mounted, cabled, configured, tested and proven SAN that is build to order. Roll it in, plug it in, and you’re ready to create and assign resources for production.



FULL SERVICE STORAGE

DATA BEAST

# Ready to Go

## INSTALLED AND IN PRODUCTION IN JUST A FEW HOURS

DATABeast provides all storage services, hardware, storage systems and infrastructure needed to centrally store, protect and manage large amounts of data. DATABeast is delivered pre-assembled and pre-configured with all components already installed and cabled within the DATABeast "Ready to Go" rack. Simply attach it to your network and you are ready to configure your storage resources and deliver them to your applications.

### DATABeast Includes:

- DATABeast Controllers with DATABeast Storage Services Software
- DATABeast Management Server(s)
- DATABeast FC Switches and IP Switches
- DATABeast Rack
- Multiple 42 drive / 4U DATABeast SATA Storage Systems
- Multiple 14 drive / 3U DATABeast SAS Storage Systems
- Complete cable harness for all components including all storage systems even if rack is not fully populated with all storage systems when ordered.

### DATABeast Pre-assembles and Configured Rack

**"Ready-to-Go" 42U Rack System**



**"Ready-to-Go" 25U Rack System**



### DATABeast Storage Systems

**DATABeast 14 drive 3U SAS Storage System**



**DATABeast 42 drive 4U SATA Storage System**



FULL SERVICE STORAGE

DATABEAST

# Complete with Enterprise Features

## ALL THE SERVICES YOU NEED TODAY AND INTO THE FUTURE

DATABeast includes all storage feature and services needed to consolidate storage resources into a single management pool. From one interface, administrators can create and administer a few to 1000's of volumes, perform data migration tasks, thin provision or unprovision volumes, recycle old volume space, expand to multiple petabytes and assign access while remaining in production. All storage services are embedded within the DATABeast, providing In-band control without use of agents.

### Key Operational Benefits

- Streamline saving by expanding capacity, number of volumes and performance independently
- Simplify administration by centrally managing the entire infrastructure
- Address the needs of different applications with combined SAN and NAS
- Ensure continuous access through redundant components and data paths
- Protect data and sites using snapshots, storage redundancy and remote replication
- Reduce short and long term costs with data center correct energy efficiently and storage density
- Reduce complexity and deployment time with a preconfigured, "Ready to Go" architecture

## Storage Services

### Storage Pooling

Combine the capacity of multiple storage systems into a single capacity pool that can grow to several petabytes. Manage the entire capacity pool thru a single interface to unify administration, backup and disaster recovery into one solution. Increase capacity without downtime. Provide equal, uninterrupted data access with redundant data paths and components to all storage resources.

### Storage Virtualization

Create custom volumes that precisely address the needs of individual applications, eliminating storage waste. Create large virtual volumes across multiple storage enclosures or thousands of small volumes from a single DATABeast storage resource.

### Thin Provisioning

Maximize storage efficiency and eliminate manual volume expansion and storage over provisioning. Virtually no capacity is allocated when you create a thin provisioned volume. As data is written, the thin provisioned volume will only use the exact physical capacity needed to store the data. Thin provisioned volumes look and behave just like any other volume.

### 64TB Maximum Volume Size

Build large 16TB and 64TB volumes across multiple storage resources. Keep pace with new operating systems that support larger volume sizes. Address multiple small volume administrative issues by using one large volume to centralize large amounts of data into a single location.

### Proxy Volumes

Incorporate legacy Nexsan storage systems and rapidly deploy active LUNs and volumes into the DATABeast solution without data migration. Migrate legacy data into new DATABeast volumes or use DATABeast storage services and data protection technologies to administer legacy Nexsan systems.

### Data Migration

Migrate data between storage resources within the pool without service disruption. Replace old storage systems with new storage systems while keeping volumes online. Migrate data from non- Nexsan storage systems into the DATABeast storage pool.

### Access Control

Enter DATABeast Management Server(s) using secure connections and password authentication. DATABeast managed volumes are only accessible through the DATABeast Controllers and are assigned to application servers using LUN masking and authentication techniques.

### NFS and CIFS

Provide file services to both Microsoft and Unix platforms from a single solution. Apply all services and benefits to NFS and CIFS volumes including snapshot, thin-provisioning, replication and scalability.

FULL SERVICE STORAGE

DATABEAST

# Comprehensive Protection

## ENSURE DATA PROTECTION AND BUSINESS CONTINUANCE

DATABeast data protection services create an environment where data and sites are protected against loss. DATABeast makes it fast and easy to restore information, recover a production site and migrate operations to another location.

### Data Protection

- **Local and Remote Snapshots**

Protect data using time based recovery points. Create multiple, persistent, incremental snapshots to recover deleted or inconsistent data to a previous point in time. Use read only or read/write snapshots for local or remote application testing or to validate local and remote disaster recovery processes and preparedness using "virtual real volumes".

- **VSS Support and CLI**

Take advantage of Microsoft VSS (Virtual Shadow Service) to make data consistent snapshots of Exchange, SQL and SharePoint on DATABeast. DATABeast hardware provider coordinates VSS data quiescing technology with DATABeast snapshot features. Use DATABeast CLI to coordinate DATABeast snapshots with Linux/ Unix data consistency backup and recovery tools.

- **Synchronous Mirroring**

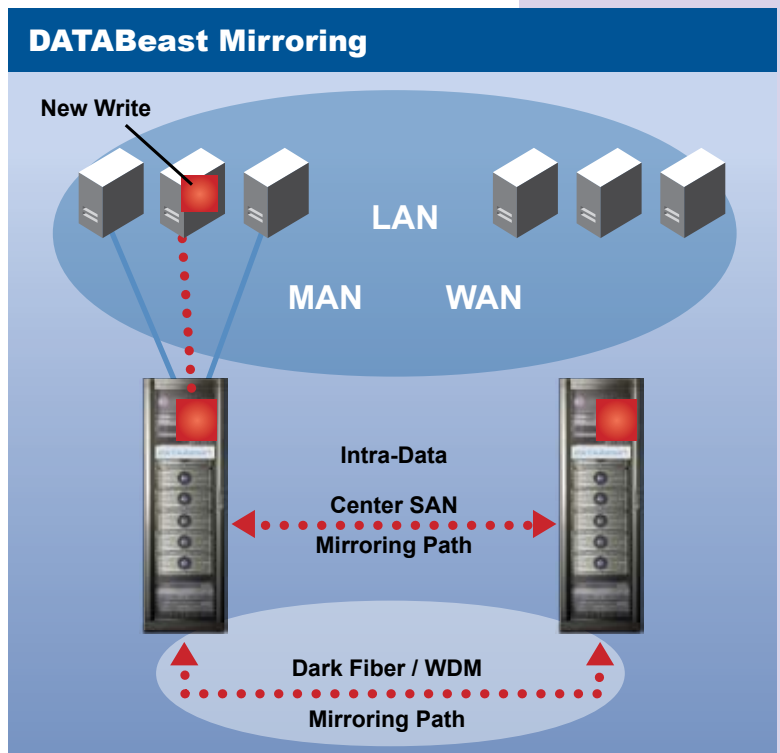
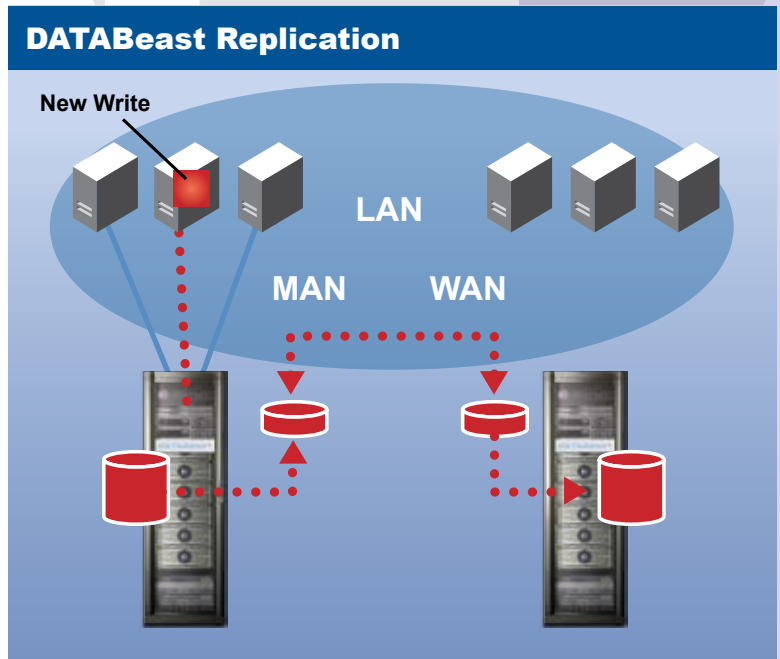
Maintain an exact real-time copy of production data and volumes locally or across a DWDM or dedicated fibre channel connection to a remote site. Provide for data protection in the event of physical system or site damage.

- **Asynchronous Replication**

Provide disaster recovery by replicating some or all data and volumes to another DATABeast located at a remote site across an IP LAN, MAN or WAN or use FC over FC compatible connections. Failover production services in the event of primary site outage to ensure business continuity and continuous data access.

- **Non-disruptive Backup**

Eliminate the backup window by using Snapshots instead of production volumes to backup to tape or disk. Stay in full production while performing full or differential backups to tape or VTLs.



# Resilient Architecture

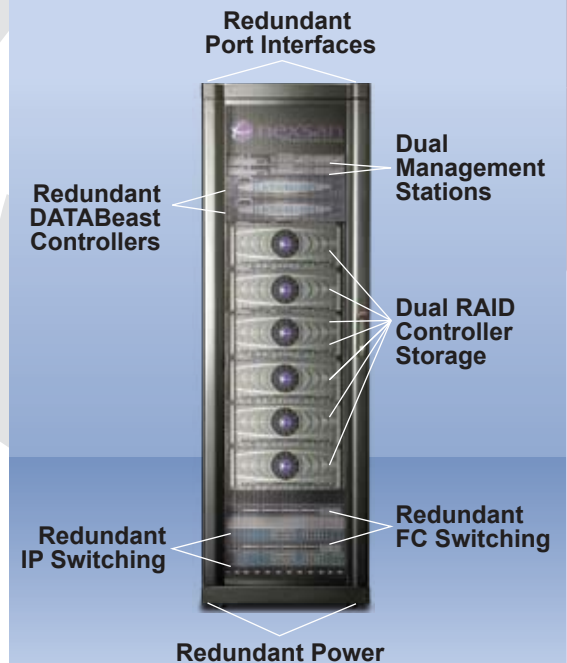
## CONTINUOUS ACCESS TO BUSINESS CRITICAL DATA

DATABeast is designed for mission critical applications and environments. DATABeast controllers form a redundant "Grid" where a node can take over production for another node. Everything within DATABeast is multi-connected thru independent fabrics. Data can be mirrored to and accessed from separate storage systems through separate nodes. Capacity or performance can be expanded while online to maintain QoS / SLA's. Data is backed up and protected automatically using snapshots

### DATABeast Redundancy

- Dual power circuits
- Redundant Multi-path 4GB FC ports for FC servers
- Redundant Multi-path 1GB IP ports for NAS clients
- Redundant DATABeast Controllers
- Dual management station
- Redundant IP and FC switches for HA
- Dual power supplies
- Dual controllers

## DATABeast Redundant Architecture

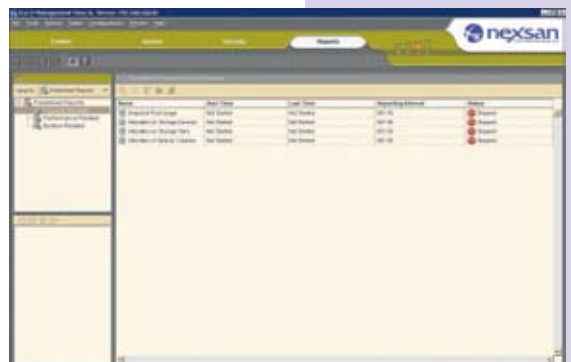


# Smart and Simple

## EASY TO UNDERSTAND AND USE – ADMINISTER AND MONITOR

all storage services for 1000's of volumes and petabytes of capacity from a single interface. Manage multiple DATABeast controller nodes, create volumes, snapshots, perform replication, view system reports and logs using DATABeast Management Server.

- Simple centralized management
- Intuitive unified GUI
- Standard SNMP alerts and MIB
- Helpful email alerts (User /Nexsan)
- Secure password protection
- Useful reporting tools (IOs, performance, capacity, error rates)



Single pane view of your data

DATABeast provides the answer by providing enterprise-class data and storage services equally across the entire storage pool. DATABeast insures business continuance with included data and site protection technology. DATABeast hardware and software come pre-installed, pre-configured and are fully redundant providing for simple installation and long-term reliability. DATABeast continues to remain cost correct as you expand the number of attached applications and amount of stored data.

# Expandable

## REMAIN COST-CORRECT AS YOU EXPAND BEYOND THE FIRST RACK

Every data storage environment is different because no two businesses are exactly the same. DATABeast addresses this diversity with a unique architecture that scales the attributes you need without forcing you to invest in others you don't need. DATABeast's AutoMAID (MAID 2.0 technology) reduces power and cooling, ensuring long term datacenter cost savings. With DATABeast, your capital expenditure and cost of ownership per terabyte decrease as your data storage environment expands to meet your business needs.

### Scale Capacity Independently

- No capacity keys
- Up to 4 petabytes per site
- Add more storage arrays and racks as needed
- Add more FC and IP Ports



**Scale to any size.** No storage capacity keys, no server nor application licenses - DATABeast can scale to perform 100,000 I/Os per second and support millions to billions of files all within the same solution. Scale performance by simply adding more nodes or increase capacity by adding more DATABeast storage systems

**DATABeast shown with 1.5 petabyte usable storage**

### Scale Performance Independently

- Add more SAN controller pairs to increase performance
- Increase IOPs and MBs
- Manage from a single GUI
- Upgradable to larger volume quantity packages
- Increase individual licenses for specific volume types—Snapshots, Thin Provisioned, Mirrors

## Scalability Cost Correct

### No Capacity Keys – No Sever Licenses

Grow DATABeast capacity freely to multiple petabytes without any key restrictions. DATABeast requires not special host agents or license keys, add servers and applications without ensuring additional cost.

### GREEN Storage

Reduce power consumption and cooling costs with DATABeast AutoMAID (MAID 2.0). DATABeast storage drives not often accessed will spin slower. Drives not accessed for a pre-configured time period will come to a full rest until data is requested.

### Scalable Performance

Increase DATABeast performance as you incorporate additional applications or use more storage services. Add additional DATABeast controller pairs to double performance and responsiveness.

### Cost-correct Storage Expansion

Expand capacity by adding more DATABeast Storage Systems to the preconfigured DATABeast racks. No cables, switches, mounting rails or capacity keys are needed, simply purchase another storage system and add it to the DATABeast storage pool.

### Upgrades and Added Services

Add more volume licenses for individual volume types, upgrade to Advanced or Enterprise volume packages, add NAS or 64TB volume support. Add only what you need without investing in items not required.. All upgrades and expansion is done without service disruption.

### High Density Storage

Optimize datacenter space while reducing power and cooling costs with DATABeast high density architecture. DATABeast provides up to 252TB RAW/ 210TB usable in the main rack and 336 TB RAW/ 280TB usable in the expansion racks.

