



TECHNOLOGIES INC

Nimble Storage vs Dell EMC: A Comparison Snapshot

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INTRODUCTION:

Founders incorporated Nimble Storage in 2008 with a mission to provide customers with exceptional enterprise application performance that would meet their increasing storage demands.

They believed flash, cloud and big data analytics were going to disrupt the storage market so they introduced several solutions over the years, including the integrated infrastructure solution, SmartStack, created with partner Cisco.

This versatile and predictive platform runs sustainably 24/7, allowing IT teams to free up important time and drive down OPEX without sacrificing performance.

You Will Discover a Side-by-side Comparison in the Following Areas:

- Performance & Capacity Efficiency
- Scalability & Integration
- Data Protection
- Solution Support & Simplicity
- Pricing
- Type of Business Solution is Best-Suited For



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INTRODUCTION CONT.:

A much older company, EMC was founded by Richard J. Egan and Roger Marino in Newton, Mass. in 1979. In the decades since, much of its growth has taken place through the acquisition of other companies. This means that EMC has a lot of partners in the IT marketplace, and many of its solutions reflect this.

The most recent merger with Dell occurred in 2016. Through moves like this, EMC feeds its growth and remains a top contender in IT solutions, specializing in areas like big data, cloud, software-defined, virtualization and more. Here, we focus on the Dell EMC VNX2 solution.



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Performance & Capacity Efficiency

How They Compare:

- **Nimble:**
 - Performance delivered by CPU or cache
 - Data reduction features
 - Nimble leverages disk-optimized data layout to deliver capacity density in addition to performance density, achieving sub-millisecond write latency.
 - 1/5 of the latency and up to 95% less footprint compared to VNX
 - Snapshots are efficient (compressed 4K) and offer a deep retention period (i.e. 90+ days).
 - Active/standby architecture guarantees consistent performance through failover.
 - Efficient use of flash
 - Nimble's flash space is used exclusively for active data.
- **Dell EMC VNX2:**
 - Unified File, Block and Object storage platform
 - Latency architectures still require disk to drive performance, especially for write-intensive applications, which results in a large footprint.
 - Multiple data reduction features
 - File-level & block-level de-dupe, compression and thin provisioning
 - EMC doesn't recommend compression on DB, server virtualization or other high transaction-oriented applications.
 - Inefficient use of flash
 - Significant RAID overhead on flash

Scalability & Integration

How They Compare:

- **Nimble:**
 - No forklift upgrade or PS engagement for scale-out capability
 - Automated load-balancing eliminates capacity silos and performance hotspots.
 - Simple, non-disruptive HW and SW upgrades
 - Scales performance and capacity independently and seamlessly to a cluster of up to 4 nodes
- **Dell EMC VNX2:**
 - Scalable from entry-level to higher-performance, petabyte capacity configurations
 - Inability to scale up, out and deep within same platform
 - Lengthy migration between various EMC product families (VNXe > VNX > VMAX)
 - Non-disruptive upgrades for VNX only
 - Forklift from VNXe to VNX to VMAX

Data Protection

How They Compare:

- **Nimble:**
 - Proven availability of 5x9s across entire base
 - Built-in snapshots/replication - no extra licensing needed
 - Replication leverages thin, space-efficient snapshots and offers different retention schedules on each side of a replication pair.
 - Advanced data protection with high performance & efficient triple parity RAID
 - Store 90+ days of storage snapshots.
 - Nearly a third of Nimble customers store 90 or more days of snaps on primary storage.
 - WAN-efficient replication
 - No re-hydration of replicated data
 - Only compressed, changed blocks are sent over the wire.
 - Protection highly space-efficient
- **Dell EMC VNX2:**
 - Proven availability of 5x9s across the entire base
 - WAN-efficient replication
 - No re-hydration of replicated data
 - Flash needs to be RAID protected, leading to more overhead costs.
 - Less-efficient snapshots (cannot store 90+ days, compared to Nimble)
 - No included, integrated data protection with solution

Solution Support & Simplicity

How They Compare:

- **Nimble:**
 - Offers include deep-data performance analytics with InfoSight.
 - Single platform to manage: The CS-Series.
 - Offers simple provisioning with global space allocation
 - No aggregates, LUNs, qtrees, reserves, etc.
 - All software is included.
- **Dell EMC VNX2:**
 - Protocol support: iSCSI, FC, NFS, CIF, FCo
 - Integration with ViPR for federated multi-cloud frameworks: REST, SOAP, XA
 - Lack of advanced performance analytics
 - Multiple platforms to manage
 - VNXe, VNX, VMAX, XtremIO, Data Domain, RecoverPoint
 - Complex, expensive software approach



Pricing

How They Compare:

- **Nimble:**
 - Everything's included in the upfront solution price package.
 - There are no expensive or complicated software licenses to buy.
- **Dell EMC VNX2:**
 - Disparate product lines, multiple platforms and forklift upgrades lead to increased CAPEX and OPEX.
 - Complex infrastructure with SW licensing and capacity-based pricing for OS and SW features.



BEST-SUITED FOR

Take company specifics into consideration.

Both Nimble Storage and Dell EMC offer solutions with pros and cons that will benefit different companies in different ways. Because your businesses' storage needs and future goals are unique, one solution will seem like a better choice than the other.

We believe Nimble Storage is best-suited for:

Companies interested in a dynamic hybrid flash solution that offers out-of-house management in the form of predictive analytics, easing workload while keeping system robust and running 24/7.

We believe Dell EMC is best-suited for:

Companies with multi-cloud framework that hold the ability to creatively configure a solution as a higher priority over budgetary, future performance and management concerns.

If you need help narrowing down your options, call and speak to one of our experienced sales associates today.



WE CAN HELP

CTC Technologies, Inc. Can Help With Your Next Steps To Implementing an Enterprise SAN Storage Solution.

Our team at CTC Technologies has implemented several SAN storage solutions for companies of all sizes in light of their growing storage demands and the increasing flash availability in today's market.

Whether you're looking for hybrid or all-flash storage, our sales team has the experience and the know-how to help you choose the right vendor, and our highly-skilled engineers can help implement whichever solution you choose.

Find the perfect solution with respect to your budget, expected growth, physical data center space, storage demand and more.

Tell us a little more about your project by [filling out our form](#) or giving us a call at 734.408.1993.

