



# FUEL IT TRANSFORMATION IN A FLASH



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New Possibilities Outside.

Dell EMC All-Flash solutions are powered by Intel® Xeon® processors.  
Learn more at [DellEMC.com/All-Flash](http://DellEMC.com/All-Flash)



# MODERNIZE WITHOUT COMPROMISE

In today's lightning-fast digital world, your IT Transformation wouldn't be complete without modernizing your infrastructure with All-Flash storage.

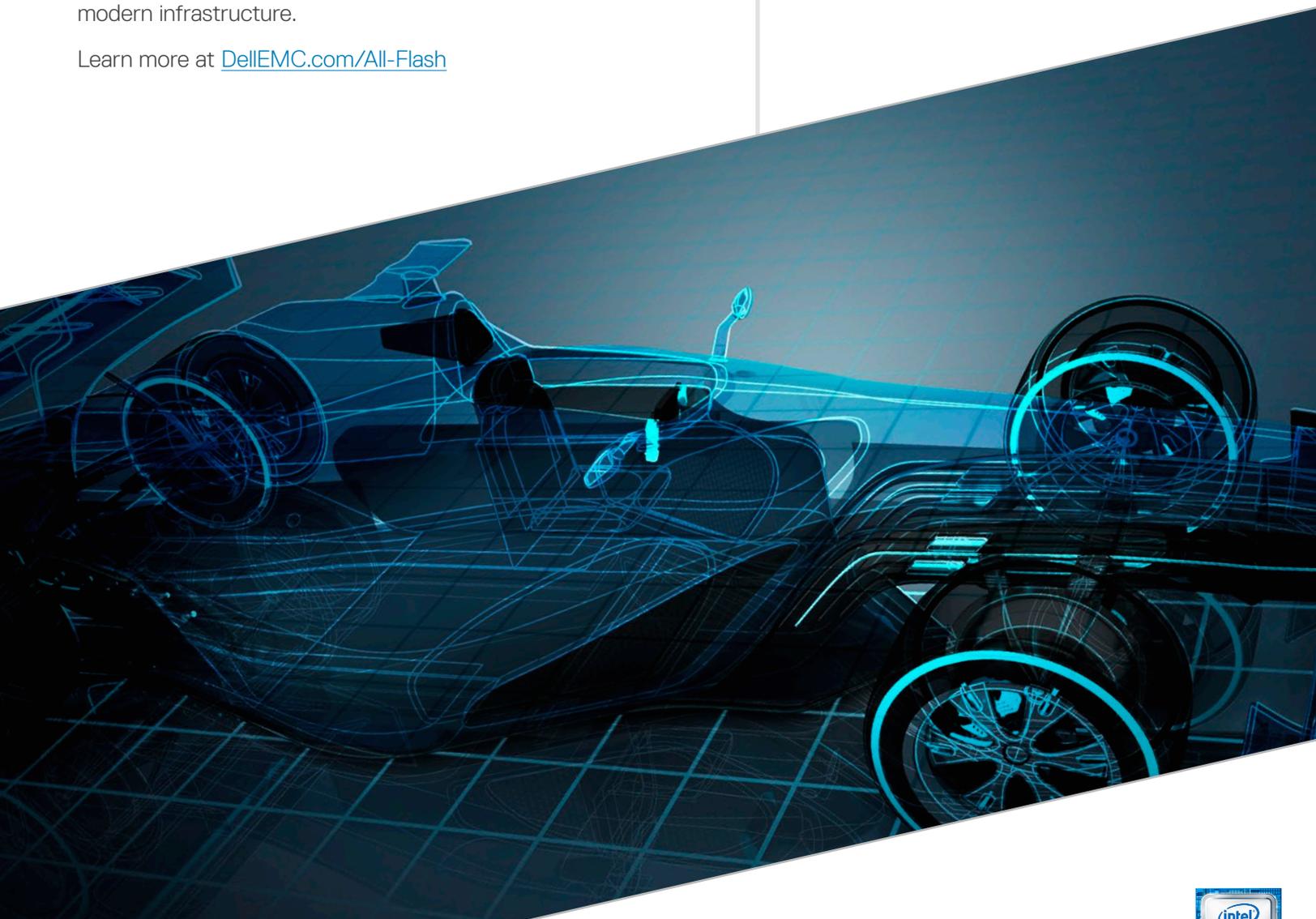
Flash is now the new storage normal thanks to its affordability, agility, efficiency and speed. And thanks to Dell EMC, organizations that adopt All-Flash can accelerate their IT Transformation.

What does that mean for your business? You gain a competitive edge in the digital economy with consistent, predictable low-latency performance while dramatically reducing costs and complexity. Let Dell EMC show you how All-Flash, powered by Intel® Xeon® processors, can be a significant part of your modern infrastructure.

Learn more at [DellEMC.com/All-Flash](http://DellEMC.com/All-Flash)

“Dell EMC makes a promise we never fail to keep: a 100% focus on your success. We give you the best technology, literally tens of thousands of service professionals, and a level of confidence nobody else can deliver.”

—David Goulden, CEO,  
Dell EMC Information Infrastructure



# FLASH OF BRILLIANCE

As you modernize your infrastructure, flash will be the underlying storage media that delivers the efficiencies and cost savings to help you drive digital business results. But it is Dell EMC's architectures and software that distinguish us from the others to help you achieve new levels of success with the broadest All-Flash portfolio on the market, supported by Intel® Xeon® processors. No other storage company offers the range of products and solutions designed to transform your business like Dell EMC. Our entire storage portfolio combines maximum efficiency with investment value.

## Performance:

- 3x faster,<sup>1</sup> ultra-low latency, and sub-millisecond response times<sup>2</sup> ensure mission-critical applications are always available and responsive with consistent and predictable performance. Drive workload consolidation and eliminate single workload silos.

## Availability:

- Always on with up to 99.9999% availability.<sup>3</sup> World-class solutions combine disaster recovery with business continuity and data protection.

## Scale:

- Entry level to enterprise solutions, so you can start small and grow big without losing performance. Scale to 92.4 PB of capacity in a single cluster.

## Low TCO and fast ROI:

- Reduce costs by up to 80% over three years,<sup>4</sup> including 5.8x lower storage admin costs<sup>5</sup> with simple deployment, inline data compression, reduced management complexity, and less power, space, and cooling requirements. Store 6x more data than traditional disk-based storage systems.<sup>6</sup>

## Converged Infrastructure:

- Deploy fully optimized, ready-to-go All-Flash platforms to run your core business applications and services.



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# MORE THAN MEETS THE DRIVE



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Flash technology is more than just fast storage. It's a powerful tool that delivers unparalleled performance never before possible. Only All-Flash solutions powered by Intel® Xeon® processors allow you to keep costs under control, while reacting to changing markets and customer demands almost instantly.

- **Flash storage options:** Get a wide variety of data services, including data reduction through compression, thin provisioning, advanced encryption, industry-leading security features and more.
- **Integrated Copy Data Management (iCDM):** Instant copies enable large-scale, high-performance development and test environments to be created and updated instantly. Near real-time analytic copies can be created and refreshed on demand.
- **Application integration and automation:** Dell EMC All-Flash arrays work in conjunction with orchestration software, like AppSync, to automate the process of managing copies—connecting them to hosts, refreshing them, and deleting them.
- **Integration into the Dell EMC portfolio of products:** Get distinct advantages over products from other vendors that address only one need. Use Isilon for scale-out NAS and unstructured data, Data Protection Suite and Data Domain for backup, archive, and disaster recovery, ProtectPoint for direct backup, RSA for security, and vSphere for integration.

## Infrastructure

- Leverage industry-leading scale-out and scale-up performance—always consistent, sub-millisecond<sup>7</sup>
- Pooled storage with on-demand expansion
- Consolidate mixed workloads across production, non-production, and workflow applications
- Simplify operations with easy-to-use design

## Business

- Drive business innovation through the data center
- Up to 50% lower OPEX and CAPEX over five years<sup>8</sup>
- See 2x longer storage product lifecycles

## Applications

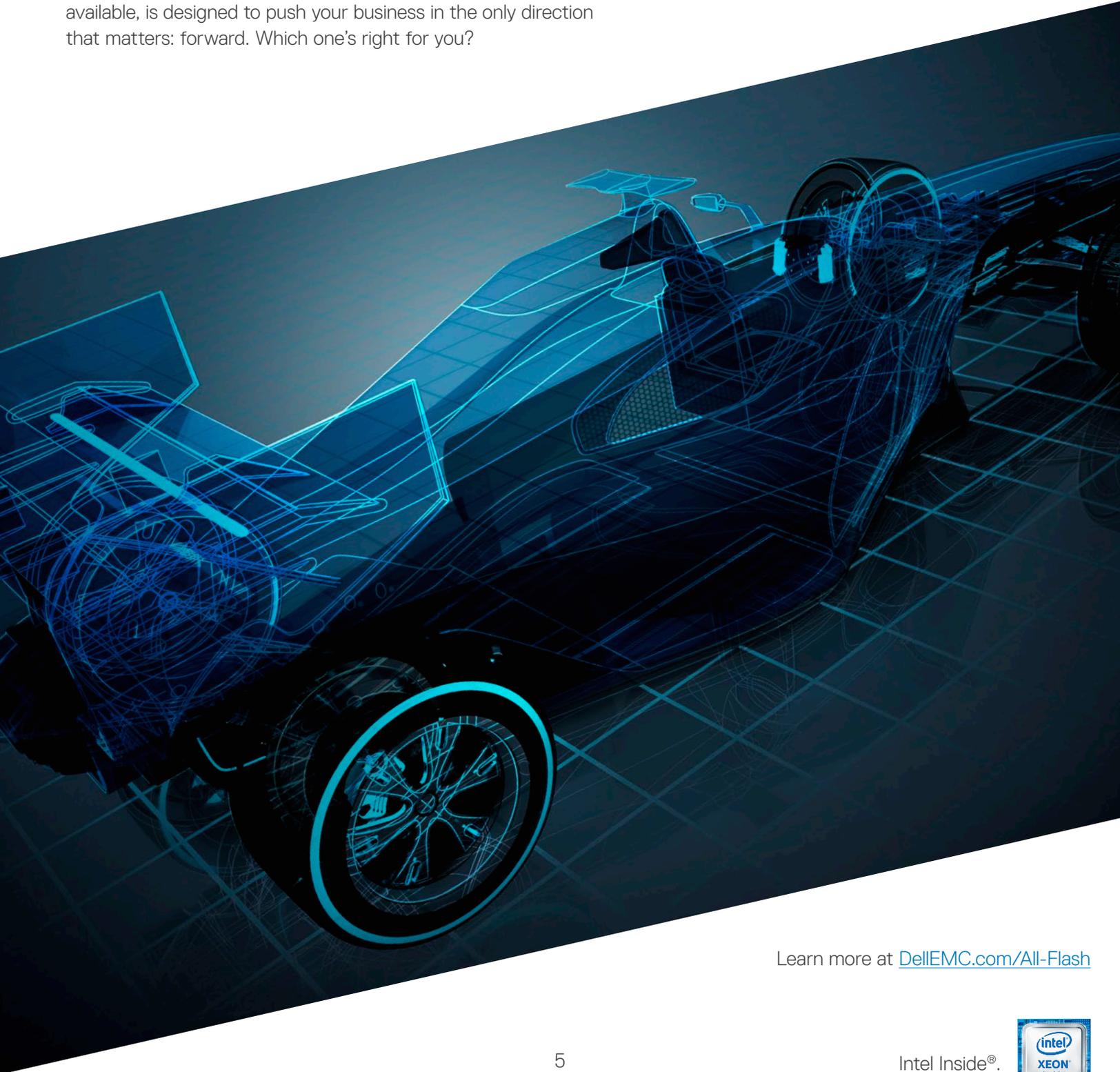
- Exceed the toughest SLAs for consolidating and growing workloads
- Enable real-time analytics, and agile development or testing
- Access self-service operations for infrastructure and application teams
- Achieve unparalleled array-based iCDM

## Data protection everywhere

- Back up 50% faster<sup>9</sup>
- Reduce protection storage requirements from 10x to 30x<sup>10</sup>
- Gain 30x faster VMware recovery<sup>11</sup>

# OUR FAMILY OF FLASH

Dell EMC's family of industry-leading flash products, powered by Intel® Xeon® processors, purpose-built with the most advanced features available, is designed to push your business in the only direction that matters: forward. Which one's right for you?



Learn more at [DellEMC.com/All-Flash](https://DellEMC.com/All-Flash)





# XTREMIO X2

This purpose-built All-Flash array offers breakthrough shared-storage benefits with unified, multi-dimensional scaling architecture, inline, always-on data services and support from Intel® Xeon® processors.

- Delivers up to 138 TB raw capacity per X-Brick<sup>12</sup>
- Achieves online scale-out up to 8 X-bricks for up to 5.5PB effective capacity<sup>13</sup>
- Offers 80% better response times for VDI<sup>14</sup>
- Offers 25% better data reduction on average<sup>15</sup>
- Simplifies management via an easy-to-use Web UI
- Provides writeable snapshots with space efficiency and zero performance impact
- Enables operational and disaster recovery with Dell EMC RecoverPoint

[DISCOVER XTREMIO X2](#)



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# VMAX ALL FLASH

Re-architected from the ground up to combine the speed and efficiency of flash with the gold standard of reliability and availability demanded by today's mission-critical data centers.

- Accelerate performance with Intel® Xeon® processor technology
- Scale out or scale up to 4 PB with under 350 microseconds<sup>16</sup> response times
- Consolidate open systems, block and file, IBM i or mainframe data
- 99.9999% availability<sup>17</sup>
- Simplify planning and deployment with a modern licensing, packaging and deployment model
- Flash where you need it, cloud where you don't—automatically move cold data to the public cloud

[EXPLORE VMAX ALL FLASH](#)



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# DELL EMC UNITY ALL-FLASH

Designed to deliver simplicity and flexibility in midrange storage, Dell EMC Unity All-Flash™, powered by Intel® Xeon® processors, is purpose-built to speed deployment, streamline management and reduce cost and footprint.

- ♦ **Simple:** Slick HTML5 user interface streamlines operations. Sets up in just 15 minutes.
- ♦ **Modern:** Linux-based architecture designed for flash with blazing speed and density. Packed with features including iCDM, built-in encryption and synchronous replication. Deep ecosystem integration with VMware, Microsoft, OpenStack and more.
- ♦ **Affordable:** Optimized for the best combination of performance, density and cost with all-inclusive software and software-defined options.
- ♦ **Flexible:** Meet any storage deployment requirement—from virtual to purpose-built to converged infrastructure.

**CHOOSE DELL EMC UNITY ALL-FLASH**



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# ISILON ALL-FLASH

Isilon All-Flash, powered by Intel® Xeon® processor Isilon OneFS operating system, delivers the proven efficiency, flexibility and resiliency of the #1 scale-out NAS platform.<sup>18</sup>

- Store, manage, support and analyze unstructured data with a platform that stays simple, no matter how large your data environment grows
- Start with a single 4U chassis and expand up to 33 PB of capacity in a single cluster
- Scale performance to 9M IOPS and 540 GB/s aggregate throughput<sup>19</sup>
- Gain full, multi-protocol capabilities to support a wide range of applications and workloads on a single platform

[DISCOVER ISILON ALL-FLASH](#)



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# SC SERIES

Dell EMC SC Series offers a value-optimized, proven storage solution for small-to-medium businesses that leverages Dell EMC PowerEdge server designs, with Intel® Xeon® processors, to enable the lowest \$/GB for All-Flash configurations.<sup>20</sup>

- ◆ **Easy:** Auto-tiering, auto-RAID configuration, built-in business continuity
- ◆ **Efficient:** Intelligent dedupe/compression, thin provisioning/replication/snapshots
- ◆ **Expandable:** Modular design, multi-protocol networks, multi-array federation

[EXPLORE SC SERIES](#)



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# SCALEIO READY NODE

ScaleIO Software-Defined Storage, powered by Intel® Xeon® processors, helps you build the simplest and most efficient data center possible. It enables you to consolidate the capacity and workloads of multiple physical arrays into a single, easy-to-use, automated service where All-Flash ScaleIO Ready Nodes can be incrementally added, removed or upgraded without application disruption, downtime or data migrations.

- Simplify the data center by utilizing standard Dell PowerEdge servers, Ethernet-based networking and SSDs/PCIe cards
- Grow flash storage and compute incrementally and non-disruptively to meet application and user demands
- Eliminate complex, expensive, time-consuming and risky data migrations
- Move to a perpetual lifecycle where All-Flash server hardware can be refreshed as needed with zero impact to applications
- Drive the highest levels of data center automation to deliver a superior Total Cost of Ownership

[GET TO KNOW SCALEIO READY NODE](#)

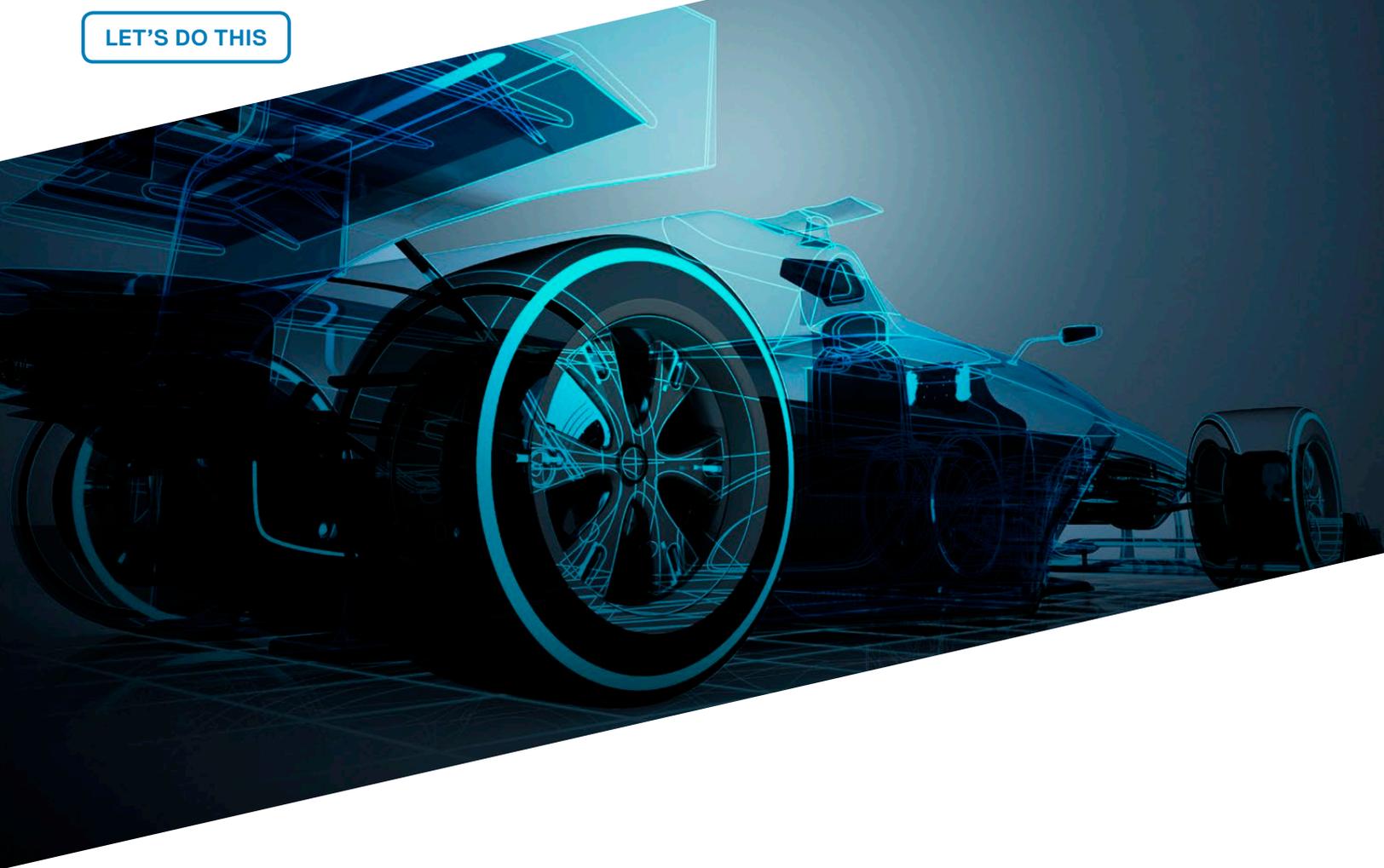


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# MODERNIZE YOUR INFRASTRUCTURE

Prepare to experience reduced costs and complexity with consistent, predictable, low-latency performance across your infrastructure. Discover how our All-Flash solutions, powered by Intel® Xeon® processors, play a key role in modernizing your infrastructure as part of your IT Transformation.

LET'S DO THIS



1 ESG Lab Review – EMC XtremIO: Lower TCO Through Consolidation, July 2015 <https://www.emc.com/collateral/analyst-reports/esg-lab-emc-xtremio-tco-analysis.pdf>

2, 7 EMC Solution Overview – XtremIO: High-Performance Database Storage, January 2013 <https://www.emc.com/collateral/solution-overview/emc-xtremio-database-so.pdf>

3, 16, 17 Based on internal testing, May 2016.

4, 5, 6, 8 ESG Lab Review – EMC XtremIO: Lower TCO Through Consolidation, July 2015 <https://www.emc.com/collateral/analyst-reports/esg-lab-emc-xtremio-tco-analysis.pdf>

9 Based on internal testing compared to traditional backup, September 2016.

10, 11 Based on internal testing compared to non-deduplicating traditional backup, September 2016.

12, 13 Source: Data Reduction Improvement: Based on Dell EMC internal analysis January 2017.

14 Source: Based on Dell/EMC internal testing using the SLOB utility to test the database performance of the current generation XtremIO hardware and software platform vs. the X2 + XiOS 6.0. Actual performance will vary.

15 Source: Based on Dell internal analysis, January 2017.

18 Source: IDC Worldwide Quarterly Enterprise Storage Systems Tracker, March 3, 2017.

19 Source: Based on Dell EMC internal testing in February 2017, using the SPECsfs2008 benchmark test. Actual performance will vary based on usage, configuration, and manufacturing variability.

20 Based on Dell internal analysis, July 2015. Pricing is based on a variety of sources including analyst data, price sheets when available and public information. An individual customer's price may vary based on a variety of circumstances and data should be used for comparison purposes and to drive conversations with your sales representatives.

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