# Top 5 Reasons to Deploy Intel® Optane™ Technology in the Data Center

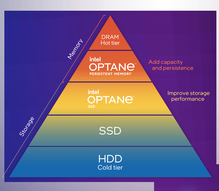
Intel Optane technology modernizes memory and storage infrastructure, unlocking new business value through more affordable, faster access to larger datasets. This game-changing approach to multi-tier memory and storage closes the capacity and performance gap between DRAM and NAND storage.

Here are **5** ways you can move your business ahead with Intel Optane technology:

## 1 Add new memory and storage tiers

Intel Optane technology bridges critical gaps in the memory and storage hierarchy to enable a smarter and more flexible architecture. This revolutionary technology is available as:

- Intel Optane persistent memory (PMem), which offers affordable higher memory capacity and data persistence compared to DRAM
- Intel Optane solid state drives (SSDs), which offer higher performance and lower latency compared to NAND SSDs[1]




## 2 Accelerate time to results and insights

Organizations can modernize their infrastructure and optimize system performance for workloads such as analytics, artificial intelligence (AI), content delivery, and real-time processing.

- Add Intel Optane PMem to DRAM to achieve data insights faster with larger memory pools.
- Add Intel Optane SSDs to traditional NAND storage to accelerate storage performance.

On average, the Intel Optane PMem 200 series provides **32 percent higher memory bandwidth** than the previous generation of Intel Optane PMem.[2]

The Intel Optane SSD P5800X **is the fastest** data center SSD in the world.[3]

## 3 Reduce memory and storage infrastructure costs

Increase infrastructure agility, optimize resource utilization, and consolidate servers to help reduce costs in the data center:

- Double your memory capacity per server and lower your costs per VM by up to 25% with Intel Optane PMem.[3]
- Use a few Intel Optane SSD P5800X drives for write-intensive operations to extend the lives of your NAND SSDs up to 20x.[4]

## 4 Innovate for modern workloads on a proven technology

Innovate for business-critical workloads by deploying optimized, reliable memory-storage tiers:

- Deploy services such as real-time analytics and AI workloads that require processing of large datasets and improve performance up to 2x with Intel Optane PMem.[5]
- Accelerate storage by caching hot data on fast Intel Optane SSDs with much more endurance than standard NAND SSDs—perfect for write-intensive applications.[6]

## 5 Rely on a trusted ecosystem

Embrace the future with a data center modernized on Intel Optane technology and supported by a broad range of partners:

- Intel Optane technology is already helping accelerate the pace of transformation across many industries, including finance, telco, retail, healthcare, transportation, and gaming.
- Intel's broad partner ecosystem, including Dell Technologies, Oracle, HPE, Cisco, VMware, Nutanix, helps optimize, validate, and deploy Intel Optane technology for customers modernizing their data centers.

**Learn more about modernizing your data center with Intel Optane technology:**
intel.com/optane

[1] Source: Claim 5 at Intel, "Intel® Optane™ SSD P5800X Series – Performance Index." https://edc.intel.com/content/www/us/en/products/performance/benchmarks/intel-optane-ssd-p5800x-series/.
[2] Source: Claim 1 at Intel, "Intel® Optane™ Persistent Memory 200 Series – Performance Index." https://edc.intel.com/content/www/us/en/products/performance/benchmarks/intel-optane-persistent-memory-200-series/.
[3] Intel® Optane™ Persistent Memory 200 Series – Performance Index." https://edc.intel.com/content/www/us/en/products/performance/benchmarks/intel-optane-persistent-memory-200-series/.
[4] Source: Claim 1 at Intel, "Intel® Optane™ SSD P5800X Series – Performance Index." https://edc.intel.com/content/www/us/en/products/performance/benchmarks/intel-optane-ssd-p5800x-series/.
[5] Source: Claim 4 at Intel, "Intel® Optane™ Persistent Memory 200 Series – Performance Index." https://edc.intel.com/content/www/us/en/products/performance/benchmarks/intel-optane-persistent-memory-200-series/.
[6] Based on product specification comparison.

Performance varies by use, configuration, and other factors. Learn more at www.Intel.com/PerformanceIndex.

Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. No product or component can be absolutely secure.

Your costs and results may vary.

Intel technologies may require enabled hardware, software, or service activation.



Printed in USA 0222/SM/PRW/PDF Please Recycle 350025-001US