

# ACCELERATE INSIGHT AND BUSINESS INTELLIGENCE WITH INTEL® OPTANE™ DC PERSISTENT MEMORY



Fuel your highest-value workloads with a breakthrough combination of data persistence, performance, capacity, and affordability.



## THE IMPERATIVE

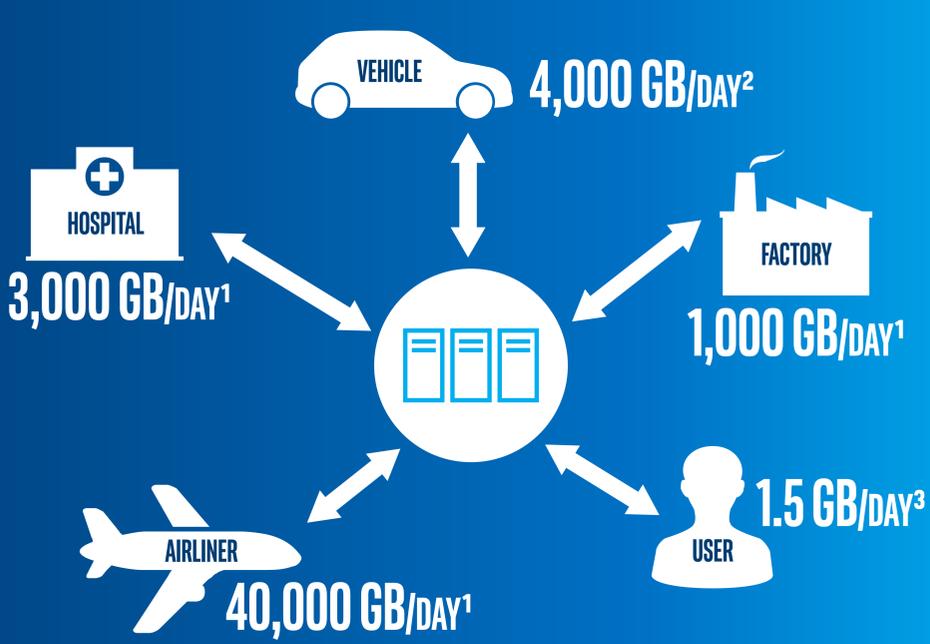
Speed time to value and insight for the data-intensive workloads that are disrupting every industry.



## THE CHALLENGE

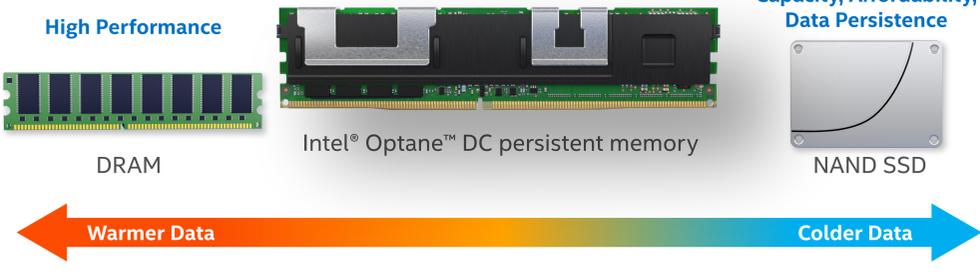
Data growth is exploding, and today's memory and storage technologies force tradeoffs when implementing solutions for actionable analysis.

By 2020, these entities will generate:



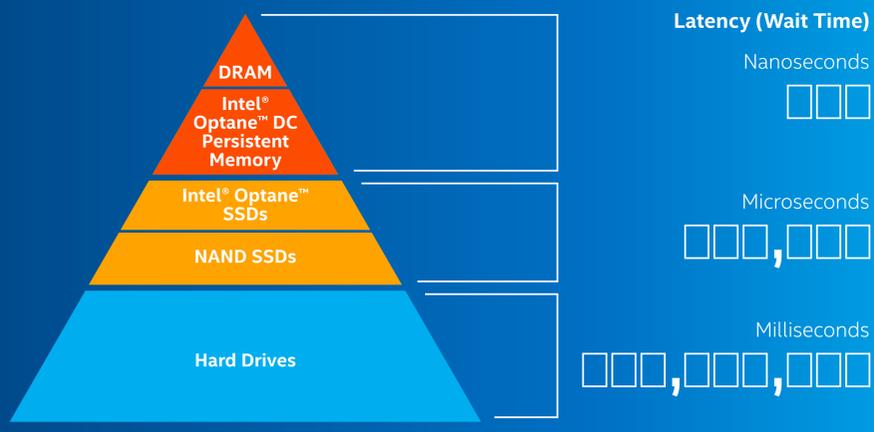
Intel is about to add new flexibility to the memory/storage hierarchy

### Data Persistence with Strong Performance and Affordable Capacity



## ACTIVATE YOUR DATA

Intel® Optane™ DC persistent memory is a new, flexible tier of memory, filling a significant gap in the memory/storage pyramid while enabling new levels of performance and in-memory analytics capabilities.



## INTEL® OPTANE™ DC PERSISTENT MEMORY

Extends system memory capacity cost-effectively

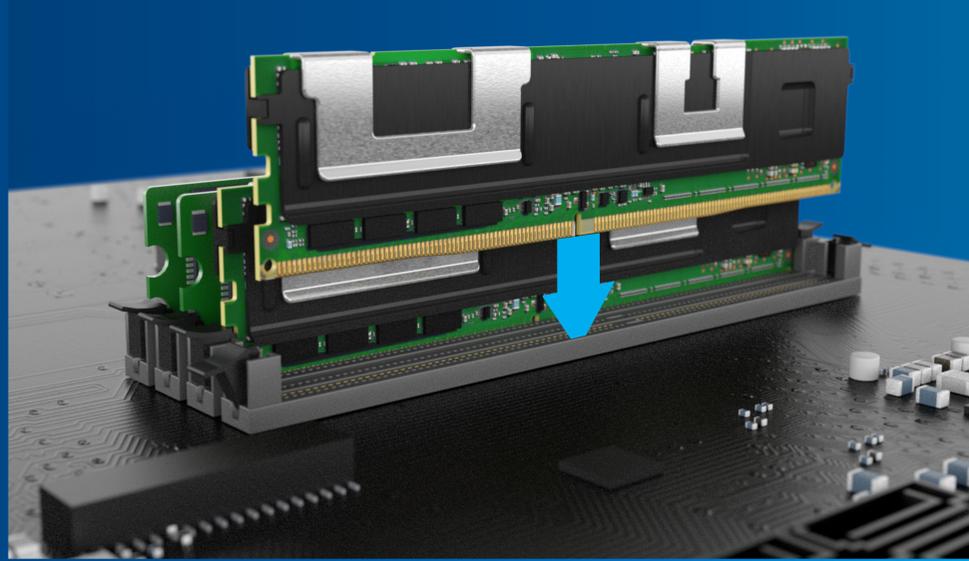
Maintains data integrity with persistency, even when power is lost



Helps protect data with AES 256 encryption

Built-in data correction ensures business continuity and system availability

Plugs seamlessly into DDR4 memory slots



Intel® Optane™ DC persistent memory is supported by future Intel® Xeon® Scalable processors, maximizing performance for your most compute- and data-intensive workloads.



**SYSTEM/SERVICE RESTART TIME** <sup>4</sup>  
Minutes → Seconds

**MORE SERVER INSTANCES** <sup>4</sup>

**9x DATABASE OPS/SEC INCREASE** <sup>4</sup>

**11x MORE USERS** <sup>4</sup>

Prepare your systems now: <https://software.intel.com/pmcm>

1 [http://www.cisco.com/c/en/us/solutions/collateral/service-provider/global-cloud-index-gci/Cloud\\_Index\\_White\\_Paper.html](http://www.cisco.com/c/en/us/solutions/collateral/service-provider/global-cloud-index-gci/Cloud_Index_White_Paper.html)  
 2 <https://datafloq.com/read/self-driving-cars-create-2-petabytes-data-annually/172>  
 3 <http://www.cisco.com/c/en/us/solutions/service-provider/vni-network-traffic-forecast/infographic.html>  
 4 Performance results are based on Intel internal testing. System/service restart time decreased from minutes to seconds (5/30/2018), more server instances (7/31/2018), 9x database ops/sec increase and 11x more users (5/29/2018) and may not reflect all publicly available security updates. See configuration disclosure for details. No product can be absolutely secure.  
 Configurations: Results have been estimated based on tests conducted on pre-production systems, and provided to you for informational purposes. Any differences in your system hardware, software or configuration may affect your actual performance.  
 Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. For more information go to [www.intel.com/benchmarks](http://www.intel.com/benchmarks).  
 All information provided here is subject to change without notice. Contact your Intel representative to obtain the latest Intel product specifications and roadmaps. Intel processors of the same SKU may vary in frequency or power as a result of natural variability in the production process.  
 Optimization Notice: Intel's compilers may or may not optimize to the same degree for non-Intel microprocessors for optimizations that are not unique to Intel microprocessors. These optimizations include SSE2, SSE3, and SSSE3 instruction sets and other optimizations. Intel does not guarantee the availability, functionality, or effectiveness of any optimization on microprocessors not manufactured by Intel. Microprocessor-dependent optimizations in this product are intended for use with Intel microprocessors. Certain optimizations not specific to Intel microarchitecture are reserved for Intel microprocessors. Please refer to the applicable product User and Reference Guides for more information regarding the specific instruction sets covered by this notice. Notice Revision #20110804.  
 Intel, the Intel logo, Xeon and Xeon logos, Optane and Optane logos are trademarks of Intel Corporation in the U.S. and/or other countries.  
 ©Intel Corporation