

Refresh servers, consolidate workloads, and cut data center costs

HPE ProLiant DL380 Gen10 Servers with enterprise 12 Gbps SAS SSDs





Do more, get more

With HPE ProLiant DL380 Gen10 Servers and enterprise SAS 12 Gbps SSDs, you can:

- **Handle more user requests**—fulfill 65% more orders per minute¹
- **Run more workloads on each server**—support 60% more VMs²

Handle 65% more orders per minute with SAS SSDs in an HPE ProLiant DL380 Gen10 server versus SATA SSDs in a DL380 Gen9 server.



Modernize your servers and do more

Gen10 technology can handle significantly more database work—enabling you to fulfill more orders and consolidate workloads by supporting more virtual machines.

Planning ahead makes good business sense

Let's suppose you drive a taxi cab for a living. The vehicle has served you well for years, but the miles have taken their toll in terms of reliability and performance. Rather than wait until the vehicle breaks down entirely—which would force you to stop working—a better plan is to purchase a new cab now. This way, you not only avoid unplanned business downtime, but a new vehicle would also provide:

- Greater efficiency
- Improved safety features
- Enhanced reliability
- Peace of mind

Now let's consider the aging servers running in your data center. As you might have guessed, the taxi cab analogy applies in every instance, illustrating the importance of planning ahead for data center hardware modernization. In addition to the benefits listed above, refreshing your data center servers also:

- Lowers maintenance time and cost
- Enhances performance
- Improves security, guarding against malicious attacks and viruses

^{1,2} Compared to an HPE ProLiant DL380 Gen9 with SATA SSDs running virtualized database workloads.



About the benchmark

DVD Store 2 (DS2) models an online DVD store, where customers log in, search for movies, and make purchases. DS2 reports these actions in operations per minute that the system could handle, illustrating the level of performance customers can expect. The DS2 workload also performs other actions—such as adding new customers—to exercise the wide range of database functions required to run an ecommerce environment.

Delivering greater value

Servers that handle larger customer loads enable enterprises to do more work with each server. Moving to servers that can also handle more virtual machines enables enterprises to consolidate virtualized database workloads onto fewer physical servers. The move toward higher density and consolidation can free up physical data center space; reduce operating costs including port costs, heating, and cooling; and lower maintenance expenses.

Passing the server refresh test

To demonstrate the benefits of refreshing the servers in your data center, two systems were compared against each other by Principled Technologies, a trusted third-party testing evaluator, in their data center:

- The latest HPE ProLiant DL380 Gen10 Server with enterprise SAS 12 Gbps SSDs
- HPE ProLiant DL380 Gen9 Server with SATA SSDs

The competing systems were set up in the same data center. Each database test was run three times on each system, and the median run for each system was reported. Both systems used the **VMware vSphere® hypervisor** to support their virtual machines (VMs). The HPE ProLiant DL380 Gen10 Server used 8 enterprise SAS SSDs and 128 GB of RAM. The Gen9 server used 8 legacy SATA SSDs and 64 GB of RAM. The DVD Store 2 benchmark was used to complete the tests.

Despite being only one generation apart, the **HPE ProLiant DL380 Gen10 Server** with enterprise SAS 12 Gbps SSDs handled significantly more database work than the older solution—increasing transactional database performance by 65% and dispersing a greater number of orders across 60% more VMs. The tests revealed that the advancements in HPE ProLiant DL380 Gen10 Servers enable you to:

- Complete more work with fewer servers
- Reduce the data center footprint
- Slash operating costs for storing, powering, and maintaining servers
- Focus more on growing your customer base

Table 1. Comparison of orders per minute on Gen10 versus Gen9 systems

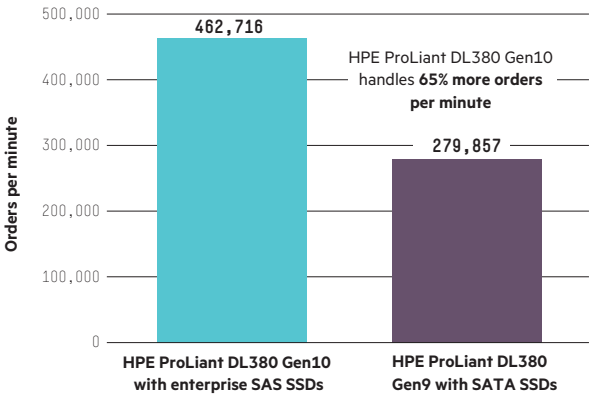
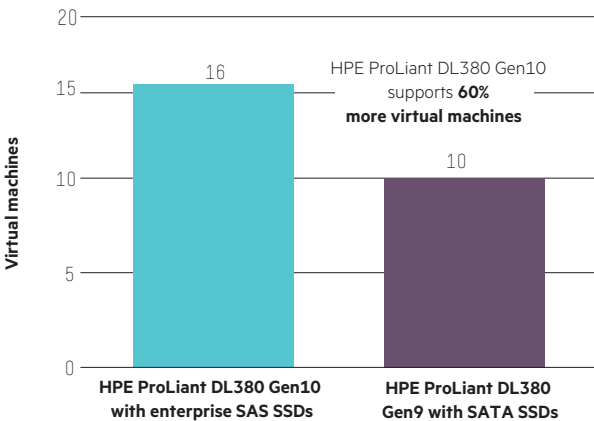


Table 2. Comparison of VM support on Gen10 versus Gen9 systems



The world's most secure industry standard servers³

HPE ProLiant DL380 Gen10 Servers are the ideal choice for any server use case, delivering the latest performance and expandability, reliability, security, serviceability, and near-continuous availability.

The HPE ProLiant DL380 Gen10 Server includes:

- An adaptable chassis with new modular drive bay configuration options
- Silicon root of trust, which anchors major firmware into the silicon
- Intelligent System Tuning, designed to optimize workload performance using customized profiles to tune internal resources⁴

Enterprise-level SSDs

Available in a variety of storage capacities, enterprise 12 Gbps SAS SSDs are the perfect choice for supporting read-intensive and mixed-use applications, including web servers, data warehouses, social media, boot, and read caching.⁵

Look to the future

Successful businesses keep their eyes on the future, assessing which investments can help expand the customer base and better support the business overall. Refreshing the data center hardware is one area where investing makes excellent sense—ensuring the business never stops, costs are controlled, and profitability keeps rising.

When the time is right for your organization to modernize its database servers, trust **HPE ProLiant DL380 Gen10 Servers**—the most secure industry standard servers in the world—with enterprise SAS SSDs to:

- Process dramatically more customer requests
- Create a better customer experience
- Shrink the server footprint
- Lower operating costs
- Improve your bottom line and total cost of ownership (TCO)

³ Based on external firm conducting cyber security penetration testing of a range of server products from a range of manufacturers, May 2017.

⁴ **HPE ProLiant DL380 Gen10 Server**

⁵ **HPE SSD QuickSpecs**

Learn more at

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