Book up to 1.42x the Reservations at Once with AWS EC2 M6i Instances vs. AWS EC2 M5n Instances

MySQL

Process 1.33x the MySQL database TPM on small M6i instances with 3rd Gen Intel Xeon Scalable processors

vs. M5n instances

Process 1.26x the MySQL TPM on medium-sized M6i instances with 3rd Gen Intel Xeon Scalable processors

vs. M5n instances

Process 1.42x the MySQL TPM on large M6i instances with 3rd Gen Intel Xeon Scalable processors

vs. M5n instances

Get Better MySQL Transactional Database Performance with AWS M6i Instances Featuring 3rd Gen Intel® Xeon® Scalable Processors

Transactional databases, which power not only ecommerce sites but also back payroll, trades, hotel reservations, and other such workloads, can process more transactions with the latest processing technology. To get the most out of your cloud-based online transaction processing (OLTP) MySQL databases select AWS M6i Instances enabled by 3rd Gen Intel® Xeon® Scalable processors over M5n instances with older processors.

In tests using a TPROC-C workload from the HammerDB benchmark to assess MySQL database performance, AWS M6i instances featuring 3rd Gen Intel Xeon Scalable processors delivered consistently more transactions per minute (TPM) than M5n instances with previous-generation processors at multiple instance sizes.

When your organization selects instances that allow for more trades or hotel reservations at a time, you reduce monthly cloud operating expenses by doing the same amount of work with fewer instances.

Comparing MySQL Performance for Small Instances with 8 vCPUs

As Figure 1 shows, 8-vCPU M6i instances enabled by 3rd Gen Intel Xeon Scalable processors outperformed 8-vCPU M5n instances, processing 1.33x the MySQL workload TPM.

Normalized TPM for 8 vCPU instances

Transactions per minute | Higher is better

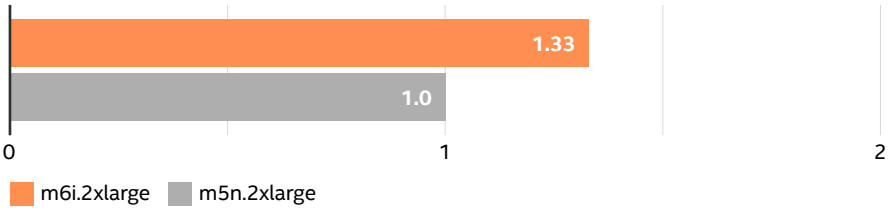

Figure 1. Relative results comparing the MySQL database transactions per minute of 8-vCPU M6i instances with 3rd Gen Intel Xeon Scalable processors vs. 8-vCPU M5n instances with older processors.

Comparing MySQL Performance for Medium-Sized Instances with 16 vCPUs

When doubling the vCPU count to 16, AWS M6i instances with 3rd Gen Intel® Xeon® Scalable processors once again improved performance. As Figure 2 shows, M6i instances with 3rd Gen Intel Xeon Scalable processors provided 1.26x the MySQL database performance than M5n instances.

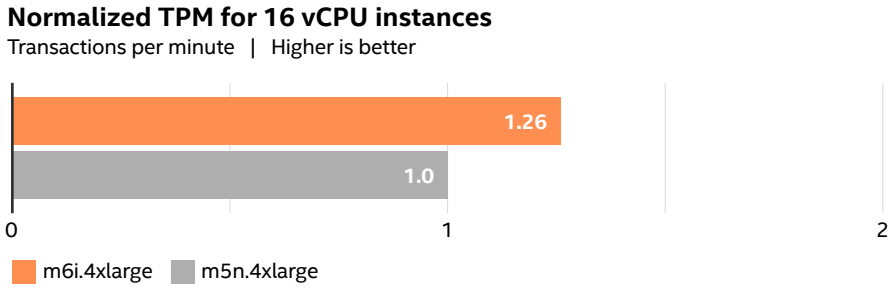

Figure 2. Relative results comparing the MySQL database transactions per minute of 16-vCPU M6i instances with 3rd Gen Intel Xeon Scalable processors vs. 16-vCPU M5n instances with older processors.

Comparing MySQL Performance for Large Instances with 64 vCPUs

For larger databases with 64 vCPUs, M6i instances with 3rd Gen Intel Xeon Scalable processors provided 1.42x the MySQL database performance than M5n instances (see Figure 3).

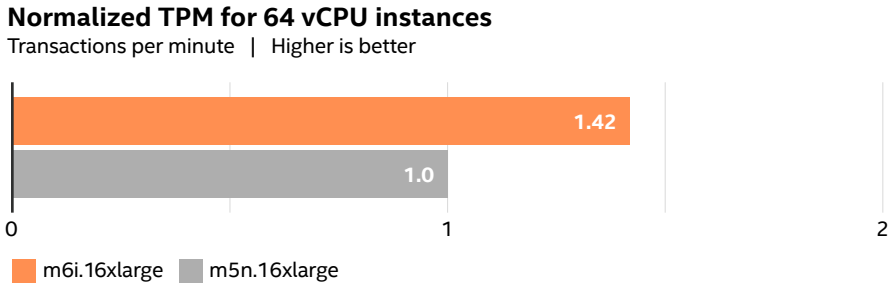

Figure 3. Relative results comparing the MySQL database transactions per minute of 64-vCPU M6i instances with 3rd Gen Intel Xeon Scalable processors vs. 64-vCPU M5n instances with older processors.

Across three different instance sizes, AWS M6i instances with 3rd Gen Intel Xeon Scalable processors offered significantly better transactional database performance than M5n instances with previous-generation processors. When your organization chooses the latest technology for cloud database hosting, you can expect to handle extra hotel reservations, finish payroll faster, or sign up more club members at a time.

Learn More

To begin running your MySQL database workloads on AWS M6i Instances with 3rd Gen Intel Xeon Scalable processors, visit http://intel.com/aws.

To learn more about the test results and configurations, visit http://facts.pt/AFo3h25.

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