Handle up to 1.70x More ASP.NET Work with AWS EC2 M5 Instances vs. AWS EC2 M6g Instances

Get up to 1.36x More ASP.NET Performance Per Dollar with AWS M5 Instances Featuring 2nd Gen Intel Xeon Scalable Processors

Getting apps and websites built using the ASP.NET framework into production quickly fuels success, and getting strong performance while saving on IT costs is even more desirable. Companies looking to host web development applications in the cloud find that the general-purpose AWS M5 instance type enabled by 2nd Gen Intel® Xeon® Scalable processors can handle web app development needs while providing stronger value as well.

In ASP.NET tests comparing two larger sizes of AWS instances, M5 instances enabled by 2nd Gen Intel Xeon Scalable processors supported up to 1.70x more performance than M6g instances with Graviton2 processors as well as up to 1.36x more performance per dollar. To support more web application development work per cloud instance while making the most of your IT budget, choose an AWS M5 instance enabled by 2nd Gen Intel Xeon Scalable processors.

Measuring ASP.NET performance

ASP.NET testing used scenarios from the TechEmpower Web Framework Benchmarks, including tests related to Plaintext, JSON, Fortunes, HTTPS, Platform Plaintext, Platform JSON, Platform Fortunes. The reported results take the geomean RPS across ASP.NET KPIs to show expected ASP.Net performance capabilities. Figure 1 outlines the instance types under test. In both 48 vCPU and 64 vCPU tests, M5 and M6g instances had the same sizing specifications.

ASP.NET

Complete 1.70x more ASP.NET work on m5.12xlarge instances with 2nd Gen Intel Xeon Scalable processors

vs. m6g.12xlarge instances with Graviton2

Get 1.36x more ASP.NET performance per dollar on m5.12xlarge instances with 2nd Gen Intel Xeon Scalable processors

vs. m6g.12xlarge instances with Graviton2

Intel Workload Proof Series: ASP.NET on AWS M5 (48 and 64 vCPU)

Get Better Performance For Larger-Sized Instances

Figure 1 shows the relative ASP.NET performance of AWS M5 instances compared to AWS M6g instances. At both vCPU counts, the M5 instances enabled by 2nd Gen Intel® Xeon® Scalable processors outperformed M6g instances, achieving as much as 1.7x better performance on ASP.NET benchmarking tests.

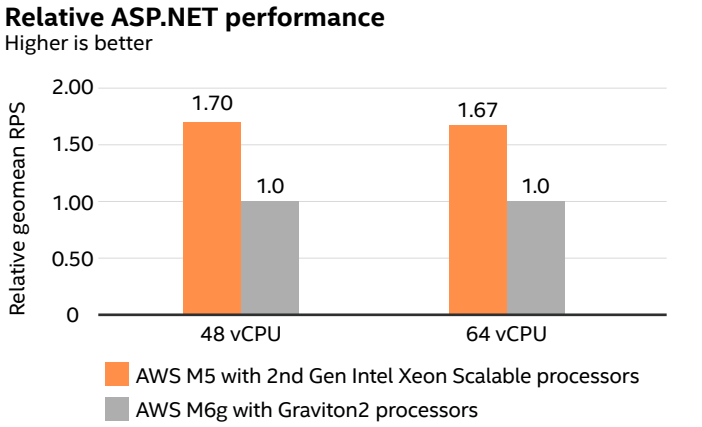

Figure 1. Relative test results comparing the geomean ASP.NET KPIs performance of M5 instances vs. M6g instances at 48 vCPU and 64 vCPU instance sizes.

Get Better Value with M5 Instances

Besides performance levels, it's crucial to consider cost per instance as well. As Figure 2 shows, at both 48 and 64 vCPU sizes, M5 instances with 2nd Gen Intel Xeon Scalable processors provided up to 1.36x better ASP.NET performance per dollar compared to M6g instances with Graviton2 processors.

These results show that organizations performing ASP.NET work in the cloud on large-size instances can do more development work to get apps into production faster and better meet IT budgeting constraints by selecting general-purpose AWS M5 instances enabled by 2nd Gen Intel Xeon Scalable processors over AWS M6g instances with Graviton2 processors.

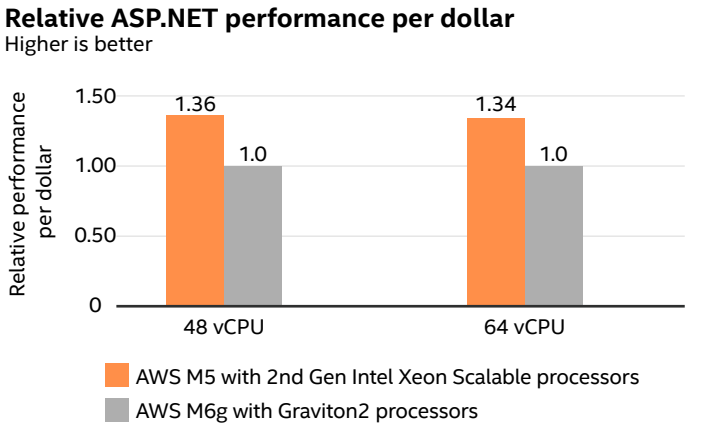

Figure 2. Relative test results comparing the geomean ASP.NET KPIs performance of M5 instances vs. M6g instances at 48 vCPU and 64 vCPU instance sizes.

Realize Additional Benefits with M5 Instances Enabled by 2nd Gen Intel Xeon Scalable Processors

In addition to performance and value, running databases and development platforms on familiar Intel Xeon architecture can save IT effort over choosing all-new Graviton2 architecture. Doing so allows you to rely on any baseline settings and best practices already in place. If you choose new processor architectures, admins may have to spend extra effort re-optimizing, testing, and validating your workload as well as ensuring they meet any SLA requirements.

Learn More

To begin running your ASP.NET workloads on AWS M5 Instances with 2nd Gen Intel Xeon Scalable processors, visit http://intel.com/aws.

Performance varies by use, configuration and other factors. Learn more at https://intel.com/benchmarks.
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