

Cisco UCS C220 M4 Rack Server: Best 2-Socket x86-Architecture SPECjbb2015 Benchmark Result



Versatile Performance with the Intel Xeon Processor E5-2600 v3 Family

Performance Brief
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Highlights

Best 2-Socket SPECjbb2015 max-jOPS Result

- A Cisco UCS® C220 M4 Rack Server powered by the Intel® Xeon® processor E5-2600 v3 family delivers the best 2-socket max-jOPS SPECjbb™2015 performance for an x86-architecture server in an environment with multiple Java virtual machines (JVMs).

Continued Benchmark Results

- Cisco® servers continue to demonstrate excellent performance—giving you confidence in the choice of Cisco servers for your business applications.

Optimized Resource Use

- The Cisco Unified Computing System™ (Cisco UCS) reduces the number of physical components needed to support demanding Java application workloads, allowing IT departments to make effective use of limited space, power, and cooling resources.

Capability to Do More with Less

- Cisco UCS helps IT departments simplify their enterprise application landscape and increase computing capacity with a smaller footprint.

Here's one more reason to choose Cisco Unified Computing System™ (Cisco UCS®): best 2-socket server performance on the SPECjbb®2015 MultiJVM benchmark for max-jOPS.



In generation after generation of server and Intel® Xeon® processor technologies, Cisco UCS servers have set world records on industry benchmarks. Today's performance record of 97,551 SPECjbb2015 MultiJVM max-jOPS is another example of Cisco's ability to deliver results (Table 1). Combined with integrated Cisco UCS management, these flexible and programmable systems can be provisioned in less time and without human intervention to deliver record-setting results.

Table 1 SPECjbb2015 Result for the Cisco UCS C220 M4 Rack Server

Server	Processors	World-Record SPECjbb2015 MultiJVM max-jOPS	SPECjbb2015 MultiJVM critical-jOPS	Disclosure Date and Disclosure Link
Cisco UCS C220 M4	2 Intel Xeon processor E5-2699 v3 CPUs at 2.3 GHz	97,551 max-jOPS	28,318 critical-jOPS	September 30, 2015

SPECjbb2015 Benchmark

The SPECjbb2015 benchmark has enhancements that align with the changes that you are experiencing in your IT organization. These changes, including physical and virtual performance measurements, give you a more accurate assessment than previous versions of the benchmark. Further reflecting real-world use, the benchmark allows multiple run configurations that include the capability to modify multiple elements of the system stack, including the hardware, operating system, Java virtual machine (JVM), and application layers.

Benchmark Configuration

The benchmark configuration consisted of the benchmark controller, back-end, and transaction injector functions, each running on its own JVM. The JVM instances ran on a Cisco UCS C220 M4 Rack Server powered by two 18-core Intel Xeon processor E5-2699 v3 CPUs running a single instance of Red Hat Enterprise Linux

(RHEL) Server 6.5 and 64-bit Oracle Java HotSpot Server Virtual Machine (VM) 1.8.0_60. The rack server was configured with 256 GB of RAM and accessed the network through a built-in dual Gigabit Ethernet network interface. The benchmark places the Cisco UCS C220 M4 at the top of max-jOPS scores for 2-socket x86-architecture servers running multiple JVMs.

Cisco UCS C220 M4 Rack Server

Cisco UCS C220 M4 servers are the most versatile, general-purpose enterprise infrastructure and application servers in the industry. These high-density 2-socket servers support up to eight Small Form-Factor (SFF) or four Large Form-Factor (LFF) drives, up to 1.5 terabytes (TB) of memory, a dedicated slot for a 12-Gbps serial-attached SCSI (SAS) module RAID controller, two additional PCI Express (PCIe) slots, one modular LAN-on-motherboard (mLOM) slot, and two LOM ports in a compact 1-rack-unit (1RU) design.

Powered by the Versatile Intel Xeon Processor E5 v3 Family

Cisco UCS C220 M4 servers harness the power of up to two of the latest Intel Xeon processor E5-2600 v3 family CPUs to deliver an outstanding combination of performance, built-in capabilities,

and cost effectiveness. Whether your business needs to address technical computing challenges, deliver cloud capabilities and intelligent storage, or power design automation and data analytics, Cisco and Intel technology is the smart choice for a software-defined environment in which performance and efficiency matter.

Business Advantages

Accelerate response time: Cisco tunes the chip sets and servers for specific workloads. With high-performance processors, large and fast memory configurations, and efficient use of Intel Turbo Boost Technology, the Cisco UCS C220 M4 delivers low latency and server optimization to JVMs.

Increase scalability: The benchmark results show that the Cisco UCS C220 M4 delivers excellent scalability to JVMs and applications.

Simplify data centers: Cisco UCS delivers the scalability needed for large Java application deployments. The dramatic reduction in the number of physical components results in a system that makes effective use of limited space, power, and cooling resources by deploying less infrastructure to perform the same, or even more, work.

Conclusion

With this benchmark result, Cisco demonstrates a continuing commitment to delivering excellent performance for real-world business environments such as those running Java applications. With Cisco UCS servers, you can get your business applications up and running quickly and deliver the performance that your users, workloads, and applications need to deliver results.

For More Information

For more information about Cisco UCS performance, visit <http://www.cisco.com/go/ucsatwork>.

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