

By [Arbogast Botezatu](#), Hardware Editor

[IBM Unleashes 5GHz Power6 Processor Server Line-Up](#)

The Power 595 systems are the fastest UNIX servers on Earth

IBM has unveiled a new Power6-based version of its highest-end Unix server in the Power 595 family. The new systems feature no less than 32 dual-core 5GHz Power6 chips and are cooled with a water-based solution. The server line was unveiled during the company's customer event in San Francisco and promises to deliver 40 percent increased performance at lower costs of ownership. The servers' energy efficiency is impressive, given the fact that increased performance is usually achieved by higher power requirements, but according to the company, a key factor in the performance per efficiency ratio is [the innovative liquid cooling system](#). The new 64-core, 128-thread Power 595 offerings are world's fastest Unix-based servers on Earth. IBM built the computers using its custom 5.0 GHz POWER6 processor chips that integrate dual memory controllers as well as the new symmetric multi-processor (SMP) point-to-point interconnect for data exchange between cores. According to the company, the Power 595 SMP point-to-point interconnect starts with 8-core nodes built using four dual-core POWER6 chips packed into a single module featuring direct interconnects between all four chips in the node. "The world's most powerful enterprise UNIX server with superior virtualization for workload balancing across UNIX, Linux applications and the water-cooled supercomputer represent major breakthroughs in innovation and energy efficiency for IBM clients and make the new enterprise data center a reality," said Ross Mauri, general manager, IBM Power Systems. "Sun and HP UNIX customers just might discover the new Power Rewards program is the impetus to make the switch to the Power roadmap," he continued. The Power 595 systems can support up to 4 TB of system memory per server, with four memory operations per cycle and an impressive data bandwidth of more than 1.3 TB/s.