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## [EVE Online Readies the Largest Supercomputer in the Gaming Industry](#)

### *Server upgrades announced at Austin Game Conference*

CCP Games announced this Friday, at Austin Game Conference, the largest supercomputer cluster in the history of the gaming industry to be supporting EVE Online. Based on a vast player-run economy, the science fiction MMORPG offers professions to choose ranging from commodities trader to mercenary, industrial entrepreneur, pirate, mining engineer or a mighty battle fleet commander. Being the largest online game to host a single persistent universe, hardware problems are bound to occur as no sharding (separate computers for different worlds) is used. To address a growing problem and prepare for future developments within the game, CCP has decided to further increase their server potency. Here are CEO Hilmar Veigar Pétursson's thoughts on the subject: "The sharp growth rate of EVE Online was pushing the limits of the technology we replaced. Our goal was to implement a scalable solution that could accommodate the influx of new subscribers and gracefully manage the steadily increasing demand put on our infrastructure. IBM provided us with optimized hardware that improved overall game performance and increased capacity, especially during peak server usage timeframes." The upgraded server cluster features dual-processor 64-bit AMD Opteron-based IBM BladeCenter LS20 blade servers, along with several enhancements to the cluster internet connectivity. Apparently, the EVE Online supercomputer can manage over 150 million database entries each day, thanks to the 64-bit hardware architecture from IBM. Being recognized as the fastest storage devices up to date, Solid State Disks (SSD) replace regular hard disks, performing over 400,000 random I/Os per second. Eve Online is steadily setting brand new records in terms of concurrent users on a single shard, the latest being acknowledged just one week ago with over 30,000 players online at the same time. Although Eve Online brings more powerful machines to the table, the unified server sustaining this unique game world still has issues, when players gather up in large numbers, at particular space choke points between Solar Systems. Regardless of server power, player disposition through Eve's universe will always be a problem, cause to what is known as "Sunday Lag", when entire areas become unplayable due to high latency. One can only hope the announced upgrade will solve current impediments, as the Kali expansion is expected to furthermore increase the strain on server capacities. As a testament to the cluster's capabilities, CCP is looking forward to support at least 50,000 concurrent users in the near future.