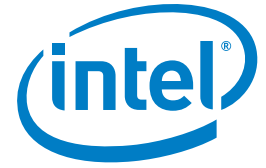


## CASE STUDY

Intel® Xeon® processor 5500 series  
Enterprise Server  
Performance: Data-Intensive Computing



# Keeping a competitive edge in online gaming

GameServers refreshes its data center with new Intel® Xeon® processors, increasing customer capacity by four times while reducing costs by up to 30 percent



**GAMESERVERS**  
FRAG NOT LAG

“The exceptional raw compute performance and increased memory bandwidth of the Intel® Xeon® processor 5500 series make this series the perfect fit for online gaming....Everything we purchase now has Intel Xeon processor 5500 series.”

– Dave Aninowsky  
CEO  
GameServers

To attract and retain customers in the highly competitive online gaming marketplace, hosting companies need to offer an outstanding gaming experience at the lowest possible price. GameServers, a leading hosting provider, decided to refresh its data centers, replacing older servers with new ones based on the Intel® Xeon® processor 5500 series to enhance performance while reducing infrastructure costs. As a result of the refresh, the company supports four times as many customers within its server infrastructure and has decreased the server footprint by two-thirds across its major data centers. GameServers can keep pricing low, accommodate continued growth, and deliver an exceptional playing experience to customers.

## CHALLENGES

- **Enhance performance.** Refresh servers across multiple data centers with processors that can deliver a superior, more responsive experience for online gamers with less lag.
- **Boost server density.** Build a dense infrastructure to accommodate more customers without increasing the data center footprint.
- **Reduce costs.** Minimize acquisition and ongoing operational costs, keeping pricing low to attract and retain customers.

## SOLUTION

- **New servers with Intel Xeon processors.** The GameServers team refreshed 14 worldwide data centers with Dell PowerEdge\* servers and Supermicro SuperServers\*, all equipped with the Intel Xeon processor 5500 series.

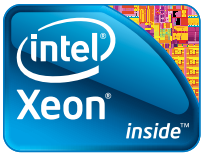
## IMPACT

- **Better performance.** The GameServers infrastructure handles even the most processor-intensive games and provides customers with an outstanding experience.
- **Improved density.** The company consolidated its servers by two-thirds while supporting four times as many players on its infrastructure as before.
- **Lower prices, more customers.** By cutting power, cooling, and real estate costs, the company keeps pricing low and continues to attract and retain gaming customers.

GameServers needed ways to accommodate customer growth of nearly 20 percent per year without having to lease more data center space. “We had nearly maxed out space in a few of our co-location facilities, and we were quickly approaching capacity in others,” says Dave Aninowsky, CEO of GameServers. “We wanted to refresh servers with a platform that could provide greater density so we could continue to grow without having to expand our data center footprint.”

Keeping costs under control was essential for remaining competitive. “Reducing monthly pricing even a little can help attract a large quantity of new customers,” says Aninowsky. “We needed a platform that would enable us to cut our ongoing operational costs so we could keep customer pricing low.”

At the same time, a new platform had to deliver exceptional performance to a demanding gaming audience. “Online gamers are very sensitive to game performance,” says Aninowsky. “We needed processors



## Intel® Xeon® Processors Help Increase Density and Reduce Costs

that could help minimize lag time for player actions so we could optimize the playing experience even for the most processor-intensive games.”

### GameServers refreshes data centers with Intel® Xeon® processors

Having used Intel processor-based servers for several years, GameServers had a strong relationship with Intel. When the GameServers managers learned about the Intel Xeon processor 5500 series through an Intel® technology road map briefing, they were eager to evaluate the new processors.

Testing with the Intel Xeon processor 5500 series demonstrated dramatic performance gains compared with the single-core Intel Xeon processors the company was currently using. “After conducting internal testing, we deployed the servers in our live player environment to measure the maximum number of players we could support before encountering performance issues,” says Aninowsky. “Compared with previous-generation processors, the Intel Xeon processor 5500 series could support nearly eight times as many players per server without performance degradation. It was clear that replacing some of our older servers with new ones based on these processors would enable us to support a much larger customer base.”

It was an easy decision to refresh the company’s infrastructure with the new Intel processors. GameServers purchased Dell PowerEdge\* R710 servers and Supermicro SuperServers\*, all equipped with the Intel Xeon processor 5500 series. The servers run either Linux\* or Microsoft Windows\* operating systems, depending

on the game. “The exceptional raw compute performance and increased memory bandwidth of the Intel Xeon processor 5500 series make this series the perfect fit for online gaming. Players experience better response from games, and we can support more concurrent users,” says Aninowsky. “Everything we purchase now has Intel Xeon processor 5500 series.”

### GameServers supports four times greater player capacity

The server refresh has helped the company increase the density of its infrastructure significantly. “By integrating new servers with the Intel Xeon processor 5500 series, we have quadrupled our player capacity across our infrastructure,” says Aninowsky. “Now we can continue to accommodate customer growth without expanding our infrastructure footprint.”

The recent refresh actually reduced that footprint across the enterprise, helping the company to lower its ongoing costs. “Across our data centers, we reduced our server footprint by two-thirds, and we cut our infrastructure costs by up to 30 percent,” says Aninowsky. “By reducing power, cooling, and real estate costs, we can keep customer pricing low and invest in new opportunities. At the same time, running fewer servers means that we can free up IT administrators to focus more on quality and to contribute to new, innovative projects.”

### New processors help attract gamers and instill confidence in publishers

The new processors have provided yet another reason for customers to choose GameServers over the competition. “Outstanding processing performance is a strong selling point,” says Aninowsky.

## SPOTLIGHT ON GAMESERVERS

By combining a wide selection of games with outstanding performance, competitive pricing, and robust technical support, GameServers has established itself as a premier game hosting company. The company has served more than 100,000 customers and is frequently the choice of major game studios when they need hosting services.

“By playing games on our new servers, our customers enjoy an excellent gaming experience with less lag and performance issues than they might find with other providers.”

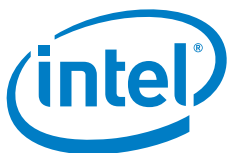
The refresh also helps solidify relationships with game publishers. “By moving to the Intel Xeon processor 5500 series, we give game publishers the confidence that our infrastructure can handle their latest, most processor-intensive games easily,” says Aninowsky. “Today we are hosting some of the most complex and exciting games available.”

### Intel processors help GameServers keep a competitive edge

Aninowsky anticipates integrating servers with the next iterations of Intel Xeon processors in the future. “In the gaming industry, you always have to have the latest and greatest processors,” says Aninowsky. “We will continue to incorporate new Intel processor-based servers as we retire older systems to enhance the player experience and drive down costs. The Intel processors will play a key role in helping us retain our competitive edge.”

**Performance: Data-Intensive Computing.** Support the most demanding business data processing, and computationally intense graphics.

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