

## i3D.net offers exceptional performance with AMD EPYC™ CPUs

Dell EMC PowerEdge servers powered by 2nd Gen AMD EPYC processors deliver optimal gaming and digital communication reliability.



### CUSTOMER



### INDUSTRY

Data center infrastructure

### CHALLENGES

Providing low latency infrastructure optimized for gaming and digital solutions

### SOLUTION

Deploy Dell EMC PowerEdge servers powered by 2<sup>nd</sup> Gen AMD EPYC™ processors

### RESULTS

A stable, fast, and scalable IT infrastructure delivering high availability and security for gaming and digital communication applications

### AMD TECHNOLOGY AT A GLANCE

2nd Gen AMD EPYC processors  
Dell EMC PowerEdge servers

### TECHNOLOGY PARTNER



**Over the last couple of decades, gaming has become a fundamentally networked experience. But to be fully immersive, online games need hosting with extreme performance and low latency.** This is what i3D.net has made its mission to deliver since 2002. By 2019, the company's achievements led to its acquisition by global gaming brand Ubisoft.

However, the speedy expansion experienced by i3D.net has posed challenges for its data centers. "Due to the rapid, global growth of our hosting business, we have quickly and immensely scaled up and optimized our server farm," says Rick Sloat, COO at i3D.net. "We grew so fast that data centers at the time could no longer keep up with our growth."

This led i3D.net to AMD EPYC™ processors supplied by its hardware partner Dell Technologies. Dell EMC PowerEdge servers powered by AMD EPYC CPUs promised to deliver the low latency, optimal performance, and reliability i3D.net needed to provide the seamless experience it demanded for its users, as well as global scalability.

#### Satisfying two types of users

"Initially we built our own servers, but since 2006 we have been using Dell Technologies' servers for our standard configuration," explains Sloat. "The basis of the configuration has always remained the same across the many Dell PowerEdge generations." In 2013, i3D.net's solid technological foundation enabled it to expand its business beyond gaming to digital communications solutions, adding complexity to the company's data center requirements.

"Our servers have to meet several high criteria. Of course, they have to be fast, powerful and stable. At the same time, gaming has slightly different requirements than digital communication solutions. For the former, higher clock speeds are important, whereas for real-time communication, bandwidth is more important."

In 2009, i3D.net had started building its own Smartdc data center, offering the opportunity to consolidate all its technological requirements into one place under its own control. "In our own data center we have control over every aspect of our infrastructure, from the network to cooling," says Sloat. "We literally have everything in our own hands based on our own knowledge and expertise. We have used these to expand globally. In doing so, we work exclusively with the best data centers."

*"We now only need a rack of 38 servers to regularly achieve better performance than we previously did with 150 servers in four racks."*

*Rick Sloat, COO, i3D.net*

What i3D.net really needed was a server platform that could meet all its data center needs at once. Hardware partner Dell Technologies helped ensure i3D.net had the right hardware to achieve this goal. "By critically examining the characteristic workload and setup of the servers, we concluded that we could challenge i3D.net with a specific AMD EPYC processor," says Erwin Bleeker, Senior Solutions Consultant at Dell Technologies. "With the Dell Technologies Try & Buy program and servers from the Dell Technologies Loan Depot, extensive testing was carried out to arrive at an optimum configuration." The results of the tests were excellent, leading to i3D.net rolling out 2nd Gen AMD EPYC processor-powered Dell PowerEdge servers in its data centers.

## Savings on every level

The benefits to i3D.net's customers were clear, providing a consistent experience for gaming users from stable, fast, and scalable infrastructure, as well as high availability and powerful security features for both gaming and enterprise users. "With Dell EMC PowerEdge servers powered by 2nd Gen AMD EPYC processors as a basis, we meet our own tough quality requirements and those of our gaming and non-gaming customers," says Sloot.

"We have been very positive about the Dell EMC PowerEdge servers with 2nd Gen AMD EPYC processors ever since we first encountered them," he continues. "Because they are built with high-quality components and have been thoroughly tested, they are super stable. As a result, they fit in well with our perception of quality." The servers chosen were specified to meet i3D.net's needs for its 2021 rollout. "In close consultation with Dell Technologies on the specific set-up and requirements of processor and memory, among other things, Dell EMC PowerEdge servers powered by 2nd Gen AMD EPYC processors emerged as the best option."

Savings were realized on many levels. "With the new configuration, i3D.net saved on rack space, cabling, power consumption and – not insignificantly – the number of servers that had to be transported, unpacked, and placed in the data center," says Bleeker. "By choosing Dell EMC PowerEdge servers based on AMD EPYC processors, the company can reduce its man-hours by 80 percent."

*"The goal is to support one billion users by 2025. With the choice of Dell EMC PowerEdge servers powered by 2nd Gen AMD EPYC processors as the foundation for our infrastructure, we can actually realize these ambitions."*

*Rick Sloot, COO, i3D.net*

"We now only need a rack of 38 servers to regularly achieve better performance than we previously did with 150 servers in four racks," adds Sloot. "This makes the performance to cost ratio very favorable. Moreover, the workload is considerably less because we only have to set up one rack. By extension, the management burden is also lower.

We do, however, implement redundancy to manage the risk of failure. All these plus points made the choice of Dell EMC PowerEdge servers with AMD EPYC processors a no-brainer."

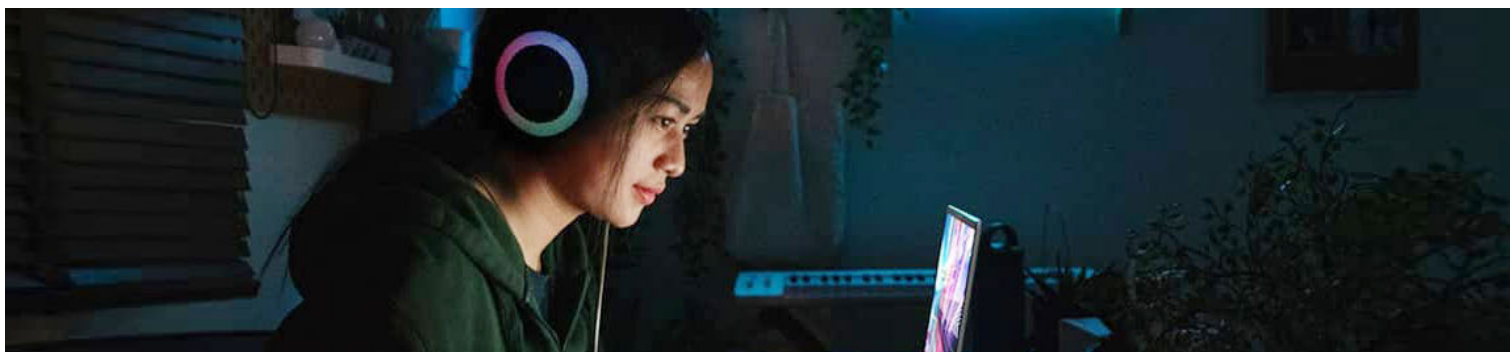
## Serving one billion users by 2025

Standardizing on AMD EPYC CPU-powered Dell EMC servers in the data center has allowed i3D.net to guarantee the quality of its low-latency infrastructure. "Standardization makes us strong on several fronts," says Sloot. "With the combination of extremely high quality and international presence, we offer customers concrete added value. Intensive contacts with other data centers, cloud suppliers and carriers around the world enable us to maximize the scale of our hardware and network, even in regions such as Brazil or the Middle East. We provide low-latency and maximum availability anywhere, anytime, and ensure that games and other applications perform optimally. This sets us apart from other international hosting providers."

Thanks to the new server rollout, i3D.net can get closer to one of its main corporate objectives. "The goal is to support one billion users by 2025," explains Sloot. "This can only be achieved if we continue to tighten and guarantee the high requirements for the availability, latency, scalability and security of our infrastructure. That way, we can offer gamers a consistent experience worldwide. We incorporate that expertise and knowledge into the services we provide to our digital communication and enterprise customers. With the choice of Dell EMC PowerEdge servers powered by 2nd Gen AMD EPYC processors as the foundation for our infrastructure, we can actually realize these ambitions."

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## About i3D

i3D.net is one of the leading providers of high-performance hosting and global infrastructure services. The company operates a low-latency network, with thousands of servers spread over 40+ points of presence on 6 continents including their own Smartdc data centers. i3D.net excels in the gaming market and hosts a variety of AAA games, which led to its acquisition by Ubisoft in 2019. They continue to help various large-scale gaming and enterprise customers deploy, scale, and manage their applications to over 300 million users globally. i3D.net's goal is to reach one billion users on its platform by 2025. For more information visit [i3d.net](https://i3d.net).

## About Dell Technologies

[Dell Technologies](https://www.dell.com) (NYSE:DELL) helps organizations and individuals build their digital future and transform how they work, live, and play. The company provides customers with the industry's broadest and most innovative technology and services portfolio for the data era.

## About AMD

For over 50 years AMD has driven innovation in high-performance computing, graphics, and visualization technologies—the building blocks for gaming, immersive platforms, and the data center. Hundreds of millions of consumers, leading Fortune 500 businesses, and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work, and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit [amd.com/EPYC](https://amd.com/EPYC).

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