

Media, Sports and Entertainment | United States

Entertainment like never before

How Lenovo helps Sphere deliver
thrilling immersive experiences

Lenovo and its partner ecosystem power multi-sensory
immersive experiences at Sphere—the \$2.3 billion
venue changing the face of live entertainment.



Lenovo

1

The background

For the first time ever, Lenovo's annual [global innovation event, Tech World](#), will take center stage at Sphere in Las Vegas on the opening day of CES® 2026.

Lenovo is not simply presenting its technology and vision at the keynote at Sphere, but as An Official Technology Partner of Sphere Studios, it is Lenovo's own technology helping power the creation of the content and the production itself.

Lenovo's high-performance workstations and infrastructure platforms are integrated into Sphere Studios' production workflows and operations, supporting Sphere's immersive content creation and showcasing Lenovo's end-to-end capabilities.

1

The
background

Out-of-this-world experiences

Sphere is a truly unique entertainment venue. Standing 366 feet high and 516 feet wide to the east of the Las Vegas Strip, it's the largest spherical structure on Earth. In fact, Sphere—and the 1.2 million LED tiles that light up its exterior—can be seen from space.



1

The background

Both the exterior LEDs and the floor-to-ceiling, 16K resolution wraparound screens inside are fully programmable. Known as “the Exosphere,” the 360-degree digital display—along with an immersive sound system, 4D wind, temperature and scent effects, and haptic vibrating seats—offers audiences an immersive experience like no other.

Sphere (NYSE: SPHR) is a leader in live entertainment that showcases a broad array of sporting events, concerts, family shows, and more for millions of guests annually.

2 The solution

Much-needed processing power

Lenovo was chosen as the infrastructure provider to support content creation for Sphere and drive the custom image processing software.

Hundreds of Lenovo ThinkSystem SR655 V3 servers, powered by [AMD EPYC™ processors](#) and [NVIDIA A40 GPUs](#), are used to develop and test original content and immersive experiences.

AMD EPYC processors offer up to 128 PCIe 4.0 or 5.0 lanes, which is crucial for multi-GPU systems. Each GPU requires significant bandwidth, and the more GPUs connected, the more PCIe lanes are required. AMD EPYC processors ensure that even in systems with many GPUs, there is enough PCIe bandwidth to avoid bottlenecks—making the Lenovo ThinkSystem servers the ideal blend of performance and efficiency to render cutting-edge visuals for Sphere.¹

¹ [The SR655 supports up to 6 single-wide GPUs, making it ideal for AI inference, virtualized desktop infrastructure \(VDI\), and other GPU-intensive applications.](#)

2 The solution

Choosing the right technologies

Lenovo's strong technology partnerships with AMD and NVIDIA were an important selling point for Sphere. The combination of AMD EPYC processors and NVIDIA accelerated computing makes the Lenovo ThinkSystem SR655 a powerful and versatile server.

To enable robust networking connectivity for media streaming, [NVIDIA BlueField DPUs](#) and [NVIDIA ConnectX-6 Dx NICs](#)—along with the [NVIDIA DOCA Firefly Service](#) and [NVIDIA Rivermax software](#)—were used, ensuring that all the display panels act as one synchronized canvas.

Lenovo, AMD, and NVIDIA collaborated closely to strategize on the best combination of products for Sphere Studios' use case, which ultimately delivered the optimal combination of price and performance.



In order to keep the project on schedule, the Lenovo team needed to meet very aggressive delivery timelines for the Lenovo ThinkSystem SR655 servers, including a two-day deadline for an initial test system.

Lenovo coordinated with AMD and NVIDIA to ensure all the components were on site and assembled, ready for the Sphere team to test the server on schedule, demonstrating the company's commitment to the project's success while providing outstanding service and product performance.

3

The
solution

Putting the plan into action

Sphere Studios in Burbank uses 420 ThinkSystem SR655 and SR665 V3 servers.

Thanks to its globally engineered supply chain, [ranked 8th in the world by Gartner](#), Lenovo was able to deliver 50 servers per week to Sphere Studios for six weeks straight to fulfill the initial order of 300 servers in 2022. Lenovo's technical team helped Sphere Studios to set up a remote management environment utilizing [Lenovo XClarity One software](#).²

Additional server orders to further grow the environment came in subsequent years.

² [Lenovo XClarity Administrator provides robust system management capabilities, allowing for efficient monitoring and handling of hardware alerts and events.](#)

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The
results

Wowing audiences

Today, the Lenovo ThinkSystem SR655 V3 servers help Sphere Studios to render extremely high-resolution video content rapidly—from the immersive concert film for the *U2:UV Achtung Baby Live* at Sphere residency to the awe-inspiring visuals for Darren Aronofsky's multi-sensory cinematic experience, *Postcard From Earth*.

Lenovo, AMD, and NVIDIA technology also enable Sphere Studios to create thematic content and immersive experiences for sporting events. Sphere hosted the *Riyadh Season Noche UFC* fight and the 2024 Upper Deck NHL Draft™. Other entertainment at Sphere includes concerts such as Back Street Boys, Eagles, Kenny Chesney, and a re-imagining of *The Wizard of Oz*. Sports and entertainment will never be the same again.

Click [here](#) to see the upcoming shows and events at Sphere.

How does Sphere deliver breathtaking visuals?

Lenovo, AMD, and NVIDIA technology powers awe-inspiring immersive experiences at Sphere.

[Learn more about Lenovo's partnership with the MSG Family of Companies](#)