

Siemens and NVIDIA expand collaboration on generative AI for immersive real-time visualization

- **New product connects Siemens Xcelerator with NVIDIA Omniverse Cloud APIs to build collaborative, real-time, physically based visualization driven by generative AI**
- **At NVIDIA GTC, Siemens and NVIDIA will join with HD Hyundai to highlight how integrated visualization helps offer greater understanding and insights**

Siemens announced today that it will deepen its [collaboration](#) with NVIDIA to help build the industrial metaverse. Siemens is bringing immersive visualization powered by new [NVIDIA Omniverse Cloud](#) APIs to the Siemens Xcelerator platform, driving increased use of AI-driven digital twin technology. At the NVIDIA GTC, Siemens and NVIDIA demonstrated how generative AI can revolutionize the visualization of complex data, making photorealism possible, and showcased how sustainable shipbuilder HD Hyundai can use it to develop new products.

“We will revolutionize how products and experiences are designed, manufactured and serviced. On the path to the industrial metaverse, this next generation of industrial software enables customers to experience products as they would in the real world: in context, in stunning realism and – in the future – interact with them through natural language input,” said Roland Busch, President and CEO of Siemens AG. “In collaboration with NVIDIA, we will bring accelerated computing, generative AI, and Omniverse integration across the Siemens Xcelerator portfolio.”

“Omniverse and generative AI are driving massive transformation for industrial enterprises,” said Jensen Huang, founder and CEO of NVIDIA. “Siemens is bringing

NVIDIA platforms to their customers and opening new opportunities for industry leaders to build the next wave of AI-enabled digital twins at every scale.”

In the next phase of this collaboration, Siemens will release a new product later this year for [Teamcenter® X](#), Siemens’ industry-leading cloud-based Product Lifecycle Management (PLM) software, part of the Siemens Xcelerator platform. Powered by NVIDIA Omniverse technologies, it will provide engineering teams with the ability to create an ultra-intuitive, photorealistic, real-time, and physics-based digital twin that eliminates workflow waste and errors.

Setting up and adjusting details in photorealistic renderings – such as material definitions and lighting environments, along with other supporting scenery assets – will be accelerated dramatically using generative AI. Tasks that previously took days can be completed in hours, with engineering data contextualized as it would appear in the real world. In addition to engineering, other stakeholders – from sales and marketing teams to decision-makers and customers – will benefit from the deeper insight and understanding of real-world product appearance, enabling more informed and quicker decision-making.

In collaboration with NVIDIA, Siemens demonstrated the creation of real-time, photorealistic visualization for HD Hyundai, a market leader in sustainable ship manufacturing. HD Hyundai has been developing ammonia- and hydrogen-powered ships, a complex process requiring oversight of ships that can contain over seven million discrete parts. HD Hyundai can use the new product to unify and visualize these massive engineering datasets interactively.

“We have long trusted Siemens Teamcenter for product lifecycle management. Based on this trust and through this new collaboration, we will be able to visualize and interact with the digital twin of ships while utilizing generative AI to create objects and HDR backgrounds for better understanding of projects in context. This will be beneficial in many ways, as it will reduce errors, improve customer experience, and also save time and cost,” said Taejin Lee, Chief Information Officer & Chief Digital Officer, HD Hyundai.

At NVIDIA GTC, Roland Busch, President and CEO of Siemens AG, showed how the new product will enable you to build collaborative, real-time, physically based visualization driven by generative AI:

<https://www.youtube.com/watch?v=LGgccYDyGFk>

This press release as well as press pictures are available at <https://sie.ag/2qTzxK>

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