

Siemens adds intelligence-based design to Xcelerator portfolio with latest release of NX

- **Comprehensive optimization using machine learning and advanced simulation to speed achieving design and engineering goals.**
- **Delivers over 1,200 customer enhancement requests putting breakthrough technologies into the hands of engineers and designers, enabling innovation at greater speed.**

Siemens Digital Industries Software today launches the latest release of its industry leading NX™ software, part of the Xcelerator portfolio of software and services. The latest release of NX software leverages advanced technologies, such as artificial intelligence (AI) and advanced simulation capabilities, while continuing to invest in significant productivity and capability enhancements to enable its community of designers, engineers and manufacturers to innovate more quickly.

“In the latest revision of NX, Siemens Digital Industries Software has smoothly woven topology optimization design from requirements, through to component generation, additive manufacturing, and final machining by leveraging their convergent modeling and automated model-based definition authoring for PMI generation together with task-based collaboration.” said Dr. Ken Versprille, Executive Consultant, CIMdata. “Users will welcome the effortless user interface that guides stakeholders through each step of the process.”

Highlights of the new release of NX software include:

- The new **NX Topology Optimizer** helps to create parts based purely on functional and design space requirements, resulting in fully editable convergent bodies that would be almost impossible to design and engineer manually. Inevitable design changes can be quickly made, optimizations and

any downstream features updated automatically – saving time, effort and maximizing reuse of intelligence design and engineering data.

- The **Design Space Explorer** combines design space exploration with generative engineering to help designers automatically optimize a design against multiple objectives. Design engineers define the optimization problem with all parameters, constraints, and objectives in place and NX uses Simcenter™ HEEDS™ software to conduct multi-objective parameter optimization, providing the designer immediate set of viable design alternatives to consider that would have otherwise required a simulation specialist.
- Increased **Artificial intelligence (AI) & machine learning (ML)** in the **Selection Prediction and Select Similar** commands uses shape recognition to quickly identify geometrically similar components, while the NX Voice Command Assist allows the user to invoke commands, navigate multi-level menus and operations as well as teach the system words or phrases to carry out common tasks. Ask NX “Have we done something like this before?” and it will carry out a Shape Search using Siemens’ Geolus® technology.
- **Lattice structures** within NX can now be optimized using Siemens’ Simcenter 3D simulation to derive the optimal lattice structure in a singular environment - eliminating the multiple design analysis steps required traditionally. Elsewhere, Part Orientation Optimization brings nesting of parts (and their associated supports) within a machine build area along with integrated cloud-based orientation optimization processes to find the optimal build orientation for reduced thermal distortion. Siemens continues to deliver advanced capabilities in additive manufacturing that are designed to help our customers optimize their overall design and manufacturing processes.

“With each new release of NX, Siemens is pushing the barriers of what product development systems are capable of,” said Bob Haubrock, Senior Vice President Product Engineering Software, Siemens Digital Industries Software. “Our shift to continuous releases of NX is proving incredibly popular with our community – enabling us to deliver industry leading capabilities more quickly than before. This means providing access to new tools and technologies so they can be applied to our customers’ design, engineering and manufacturing challenges to help them overcome them more quickly. We continue to improve the core tools our customers

rely on every day, with over 1,200 customer enhancement requests delivered in this release.”

For additional information about the latest release of Siemens' NX, watch the [Youtube Premiere event](#) on February 10, 2022 from 11:00 am Eastern Standard Time – it will also remain available to view at any time and can be embedded where required.

Siemens Digital Industries Software is driving transformation to enable a digital enterprise where engineering, manufacturing and electronics design meet tomorrow. The [Xcelerator portfolio](#) helps companies of all sizes create and leverage digital twins that provide organizations with new insights, opportunities and levels of automation to drive innovation. For more information on Siemens Digital Industries Software products and services, visit [siemens.com/software](https://www.siemens.com/software) or follow us on [LinkedIn](#), [Twitter](#), [Facebook](#) and [Instagram](#). Siemens Digital Industries Software – Where today meets tomorrow.

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Siemens Digital Industries (DI) is an innovation leader in automation and digitalization. Closely collaborating with partners and customers, DI drives the digital transformation in the process and discrete industries. With its Digital Enterprise portfolio, DI provides companies of all sizes with an end-to-end set of products, solutions and services to integrate and digitalize the entire value chain. Optimized for the specific needs of each industry, DI's unique portfolio supports customers to achieve greater productivity and flexibility. DI is constantly adding innovations to its portfolio to integrate cutting-edge future technologies. Siemens Digital Industries has its global headquarters in Nuremberg, Germany, and has around 76,000 employees internationally.

Siemens AG (Berlin and Munich) is a technology company focused on industry, infrastructure, transport, and healthcare. From more resource-efficient factories, resilient supply chains, and smarter buildings and grids, to cleaner and more comfortable transportation as well as advanced healthcare, the company creates technology with purpose adding real value for customers. By combining the real and the digital worlds, Siemens empowers its customers to transform their industries and markets, helping them to transform the everyday for billions of people. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a globally leading medical technology provider shaping the future of healthcare. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power.

In fiscal 2021, which ended on September 30, 2021, the Siemens Group generated revenue of €62.3 billion and net income of €6.7 billion. As of September 30, 2021, the company had around 303,000 employees worldwide. Further information is available on the Internet at www.siemens.com.

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