



DIGITAL INDUSTRIES SOFTWARE

NX X Essentials

Delivering essential CAD, CAM and CAE tools on any device

Benefits

- Open/modify your NX models and models from other CAD systems
- Leverage physical and virtual prototyping to validate design performance
- Access, edit and share data from anywhere at any time, even away from your desk
- Flexible web app, for instant access and a lower total cost of ownership
- Seamless scalability with proven Siemens technology

Summary

NX X Essentials is an affordable, web-based engineering platform that combines essential CAD, CAM and CAE tools into a modern solution that delivers value instantly. The browser-based experience of NX X Essentials gives users the freedom to create and edit NX designs from anywhere on any device -- enabling faster, more agile workflows. This solution is a part of the Siemens Xcelerator portfolio, the comprehensive and integrated portfolio of software and services from Siemens Digital Industries Software.

NX X Essentials enables you to accelerate design with Artificial Intelligence (AI)-based modeling and automated drawings; securely share for collaboration at anytime, anywhere, from any device; plan, execute and track projects and tasks; view, markup and edit CAD models; and validate design performance with integrated CAM and simulation tools for physical and virtual prototyping.

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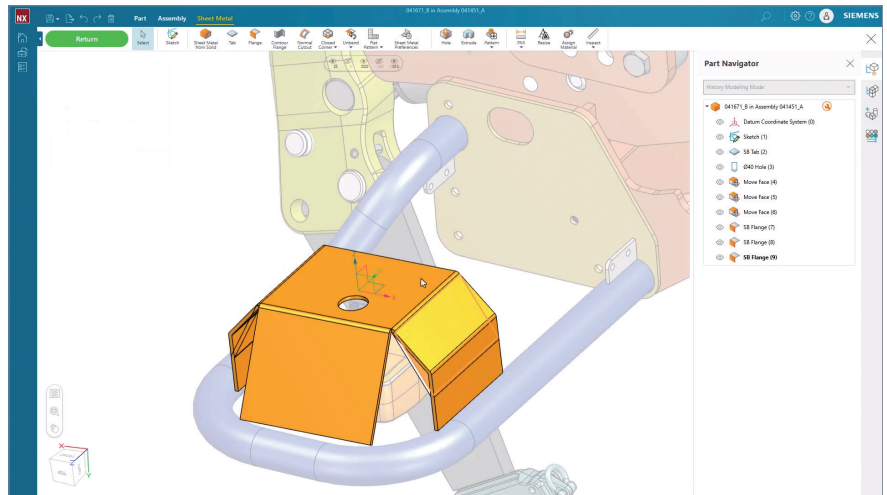
[siemens.com/nx](https://www.siemens.com/nx)

Features

- AI-based modeling and automated drawings
- Browser-based access on any device
- Secure cloud-based project sharing
- View, markup and edit CAD models
- Plan, execute and track projects and tasks
- Integrated CAM and simulation tools

Accelerate design with AI-based modeling and automated drawings

Streamline 3D CAD modeling with NX X Essentials' AI-predictive direct modeling and automated 2D drawing creation. AI-predictive modeling recognizes design intent on the fly, perfect for working with imported CAD data, or to rapidly create new concept designs and easily respond to change requests. The tooling capabilities simplify toolpath creation, allowing designers to generate optimized paths for CNC and other machines with ease, minimizing setup time and complexity.



NX X Essentials provides CAD tools for both full-time design engineers and CAD collaborators to quickly create designs, modify existing models and create drawings. Quickly open and modify models from other CAD systems including Solid Edge, SolidWorks, Inventor and Creo, or design your own parts and assembly models using shape and part libraries. Built on NX architecture, NX X Essentials boasts seamless data interoperability with other NX products, guaranteeing changes can be made across your desktop and browser, at your primary workstation or wherever your work takes you.

With industry-focused tools and leading Siemens sheet metal technology, create accurate sheet metal parts with automated flat patterns and DXF export, or structural frame assemblies with weld annotations and cut lengths. NX X Essentials data management tools ensure you stay organized with automatic part numbering, revisioning, lifecycle status and change impact assessment.

Share and collaborate from anywhere at any time, from any device

Unite your entire supply chain with secure cloud storage and data management from NX X Essentials. You can collaborate with team members, colleagues, partners and customers with permission-based sharing and unlimited guest access. The secure, online project storage includes multi-user overwrite

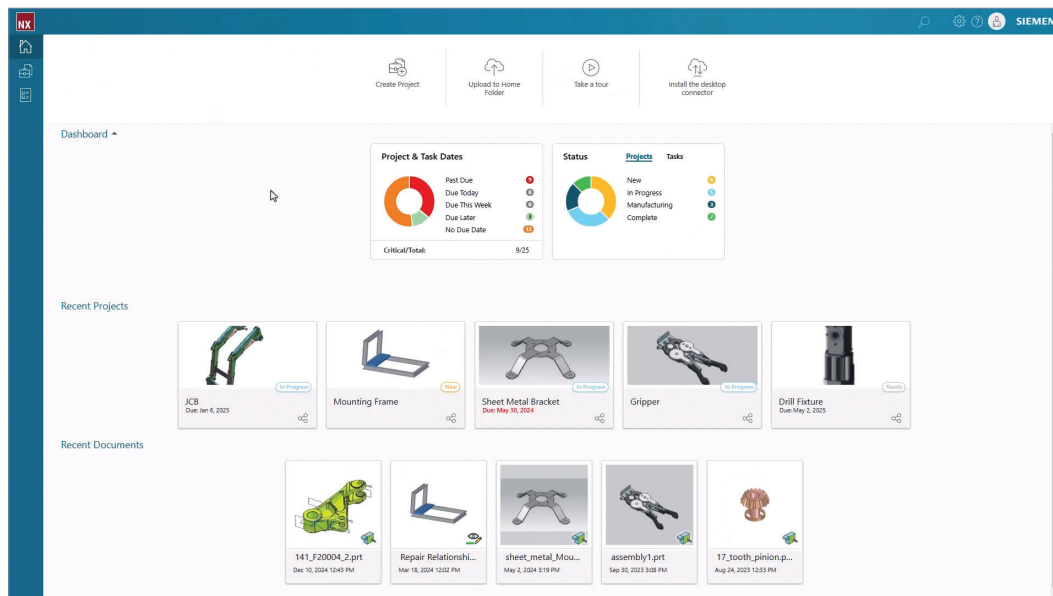
protection and 500 GB base plus optional additional storage, all working around a single source of truth. Changes are synched in the cloud, allowing live updates and immediate collaboration with your design team, no matter where they are.

CAD view and markup is available on any device, allowing you to view, measure and mark up models in a three-dimensional, engineering-centric space. You can add notes and comments, zoom in and out, rotate and inspect the model. All markups and comments are completely traceable and available within NX X Essentials, granting full visibility into a project's review process. Augmented reality (AR) allows you to view these designs in real-world environments using your smart device, before it is even built.

NX X Essentials enables seamless, real-time collaboration across suppliers, sales, research and development (R&D) and customers. With access from any device, you can quickly pull up and edit native NX files during customer

meetings, make instant design adjustments on the shop floor and mockup new concepts using existing content from your libraries.

With NX X Essentials' task management, you can set due dates, prioritization and reference project files to efficiently manage and track deliverables. The interactive project dashboards grant real-time monitoring and tracking of project and job statuses. Project and task Kanban boards allow easy management and tracking of who is doing what, by when and in what order; completed tasks are communicated immediately with notifications. Projects can be assigned to specific people, and notes can be added to make sure everyone is aligned and well-informed. Live manufacturing status can also be shared with customers. The interactive dashboard guarantees all the most pertinent information is available to you in a single, easy-to-find location. Projects and tasks can also be opened with Siemens Teamcenter Share for further collaboration and scalability.



Leverage physical prototyping to validate design performance

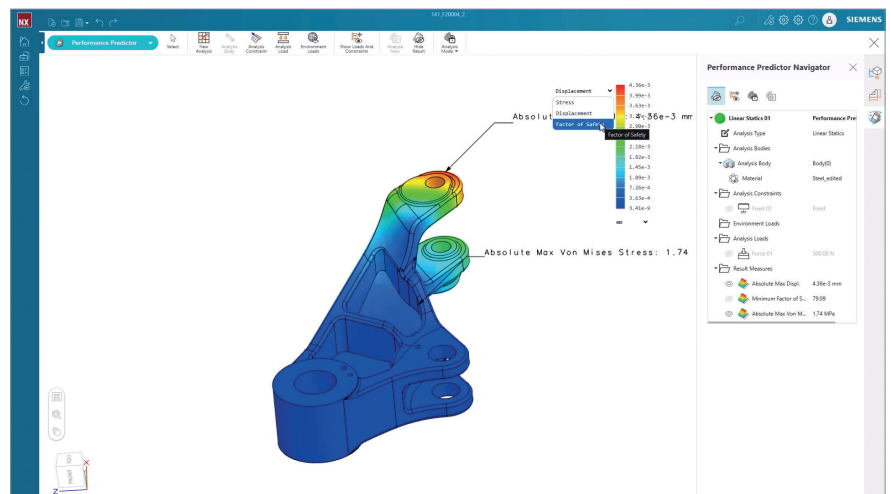
Simplified model-based programming makes CAM accessible for designers and engineering personnel on any device with NX X Essentials. You can free up existing licenses of other CAM tools by programming simpler, prismatic parts in NX X Essentials, while also enjoying seamless scalability to industry leading manufacturing solutions from Siemens, such as NX X Manufacturing. Prototyping can become more versatile and efficient, allowing your team to prototype with greater accuracy, make data-driven decisions and collaborate more effectively. NX X Essentials reduces time-to-market, lowers costs and improves product quality through a smoother, more iterative design and manufacturing workflow.

NX X Essentials manufacturing capabilities automate 2.5-axis CAM operations including facing, pocketing, contouring, slotting, drilling, tapping, chamfering and boring. The setup customization includes controller selection and custom tool creation, as well as toolpath simulation to meet exact specifications. 3D printing, or additive manufacturing, is made mode accessible with .3MF and .STL export available for your preferred printer. Browser-based access grants you the flexibility to adapt to machining and printing changes from anywhere, and you can also interrogate and validate critical dimensions with the mobile 3D model and drawing viewing.

Optimize designs with powerful Performance Predictor simulation on any device

With simulation tools specifically for designers, NX X Essentials helps you validate material choices and mechanical performance early in the design process. Rapid cloud-powered simulation of parts under various stresses automatically creates and updates the results displayed on the 3D model, enabling simulation-driven design.

Visualized results include stress, displacement, factor of safety, natural frequency and thermal characteristics. Library and user-defined loads, constraints and material types can be used for the linear static analysis. Utilizing the power of the cloud, NX X Essentials delivers powerful, reliable simulation results on any device, and the studies are scalable for use in NX X.



Extending value

Leverage Siemens' cross-domain expertise with the right-sized functionality of NX X Essentials. NX X Essentials is an affordable, web-based engineering platform that combines essential CAD, CAM and CAE tools into a modern solution that delivers value instantly.

Built on established Siemens Xcelerator platform technologies, NX X Essentials allows users to easily interact with other companies using Siemens software and provides seamless scalability beyond NX X Essentials. Users can maintain their NX design data and leverage it across the entirety of the portfolio, including Teamcenter, Solid Edge, Simcenter and more. Siemens provides one NX, with different

deployment options available to meet your business needs. These options offer competitively priced solutions tailored to specific product development roles, practices and processes.

NX X Essentials' browser-based interface allows distributed teams and supply chains to work together easily, anywhere, from any device. NX X Essentials runs instantly on your existing hardware -- PCs, Chromebooks, MacBooks, tablets, Androids, iPhones -- letting you get the job done from wherever your work takes you -- the office, shop floor, home or customer site. Updates are automatically delivered in real time without expensive, time-consuming upgrades or any additional IT costs.

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