SIMULIA WORKS

3DEXPERIENCE®

STRUCTURAL DESIGNER 3DEXPERIENCE USER ROLE



EASILY ASSESS PRODUCT PERFORMANCE DURING DESIGN WITH THE PROVEN ABAQUS SOLVER TECHNOLOGY

Run linear static, natural frequency, buckling and steady-state thermal analyses intuitively during the product design process and get the technical insights you need for fast, accurate design decisions.

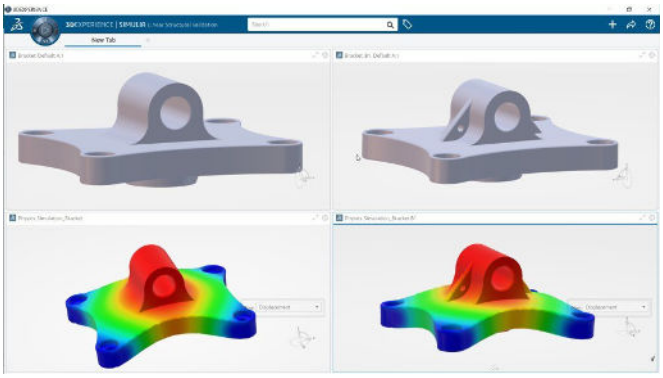
DASSAULT SYSTEMES

OVERVIEW

As part of the scalable and powerful **3D**EXPERIENCE® WORKS simulation portfolio, Structural Designer on the cloud-based **3D**EXPERIENCE platform enables your designers to efficiently compare the performance of different design options to find the best one quicker, reducing the time and cost of product development.

Its strong associativity with SOLIDWORKS® makes it easy to assess the impact of any design changes* on product behavior without needing to redefine the simulation setup, speeding up "what if" scenario analyses.

On the platform, your organization can efficiently manage all facets of your product development process while reducing infrastructure costs, IT overhead, software maintenance and complexity.



Easily compare the results of linear structural simulation during the design process.

Key Capabilities

- Perform the most common validation studies on solid parts and solid assemblies as you design.
- Maximize strength and stiffness with linear static analysis. Avoid resonance modes with frequency analysis, overheating with steady-state thermal analysis and failure modes with buckling analysis.
- Ensure accurate results and strong product performance with the industry-leading Abaqus simulation technology.
- Boost use of simulation with guided workflows for all simulation types at each step of the simulation process.
- Ensure high-quality results for each simulation with automatic mesh generation based on geometry and local mesh control to precisely refine your geometry.
- Accurately represent the most common assembly connection types such as pin, spring, rigid and bonded.
- Set up simulation studies accurately and quickly using automatic contact detection including deformable and intermittent contact between parts.
- Easily compare "what if" scenarios on your SOLIDWORKS designs with full CAD associativity.*
- Run simulations locally or in the cloud, eliminating the need for costly hardware and freeing up your local machines for other work during calculations.
- Easily upgrade your simulation capabilities with other roles, such as nonlinear static and dynamic simulations, to solve a wider range of problems while leveraging the same environment and workflow.
- Securely view, share, annotate, discuss and manage design and simulation data from anywhere, at any time and on any device with a web browser for closer engineering collaboration.
- Collaborate with all team members in your entire business ecosystem through configurable dashboards, messaging, activity streams, social communities and drag-and-drop task management.

* An additional role is required.

Our **3D**EXPERIENCE® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our **3D**EXPERIENCE platform and applications, our customers push the boundaries of innovation, learning and production.

Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit **www.3ds.com**.

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