

SIMULATION FOR DESIGNERS



OVERVIEW

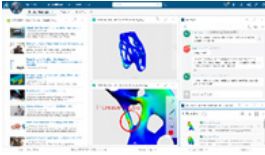
Simulation for Designers provides connected, powerful and collaborative simulation solutions on **3DEXPERIENCE®** platform, available on-premise and on-cloud. Performing simulation during the design phase empowers you to accelerate innovation by solving engineering challenges for your CATIA designs with full data associativity.

Based on proven Abaqus technology, Simulation for Designers allows you to perform any structural analysis tasks with confidence, from the simplest linear static analysis to the most complex nonlinear drop test and impact analyses.

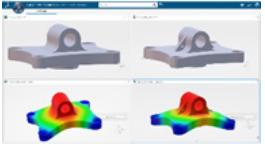
Because both SIMULIA and CATIA operate on the **3DEXPERIENCE** platform, they share a common user interface, which makes it easy for CATIA users to setup and run simulations, and share results with team members, from anywhere and at any time, using a web browser. The **3DEXPERIENCE** platform enables your teams to assign tasks and use a single-source of data to ensure all team members are leveraging the current design to evaluate and improve product performance and speed up project delivery.

SCALABLE SIMULATION SOLUTIONS

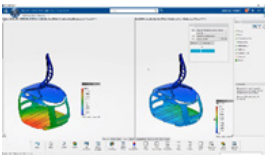
Simulation for Designers provides roles suited to the needs of specific user and project requirements:



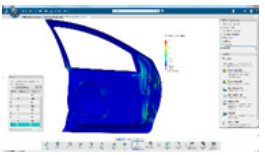
Simulation Collaborator: a role for any collaborator and manager who needs to review and compare simulations in real time from anywhere.



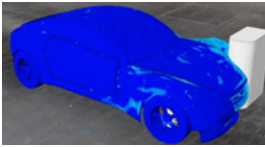
Structural Designer: an intuitive and guided simulation role for designers who need to assess product performance for linear static, thermal and frequency conditions.



Structural Engineer: for design engineers to assess product performance using linear static, thermal and frequency analysis solution with solid, shell and beam meshing.



Structural Performance Engineer: for design engineers and simulation experts to assess the product performance for linear and nonlinear static, thermal, frequency, thermal-stress, linear dynamic and quasi-static conditions.



Structural Mechanics Engineer: for design engineers and simulation experts to solve, in addition to what Structural Performance Engineer solves, nonlinear dynamic high-speed events, material calibration and geometry simplification.

TECHNICAL HIGHLIGHTS

Easy to access and easy to use

- Continuity, associativity and traceability for efficient what-if scenarios during the design process
- Guided simulation setup with a customizable User Assistant panel for fast adoption and reduced learning curve
- Flexible licensing options for on premise or on-cloud to meet your project needs

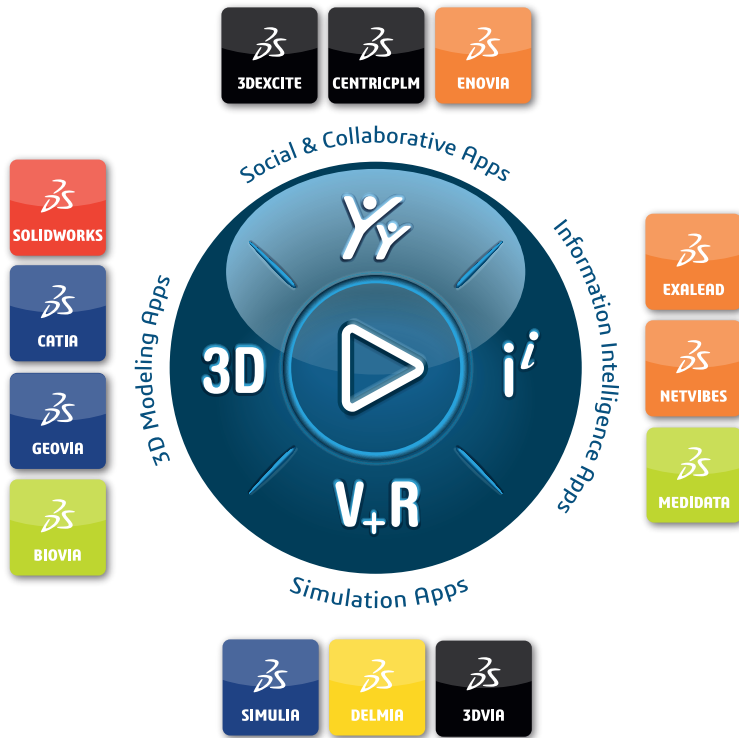
Powerful structural simulation technology

- Built-in, industry-leading Abaqus FEA technology for linear, nonlinear, static, quasi-static, dynamic, linear and non-linear materials, sliding contact interactions, large deformations, large strain validation
- Material calibration for accurate material behavior modeling
- Additional roles available for fluid simulation and plastic injection molding analysis

Collaborative, secure platform in the cloud

- Share simulation results and collaborate on your design projects from anywhere
- Single, centralized, secure location on the cloud for all your engineering data, enabling the right people to access the right information at the right time
- Cloud computing available for handling validation of larger models and other peak compute needs when on-site computing resources are not available





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

Dassault Systèmes, the 3DEXPERIENCE 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 3DEXPERIENCE 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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