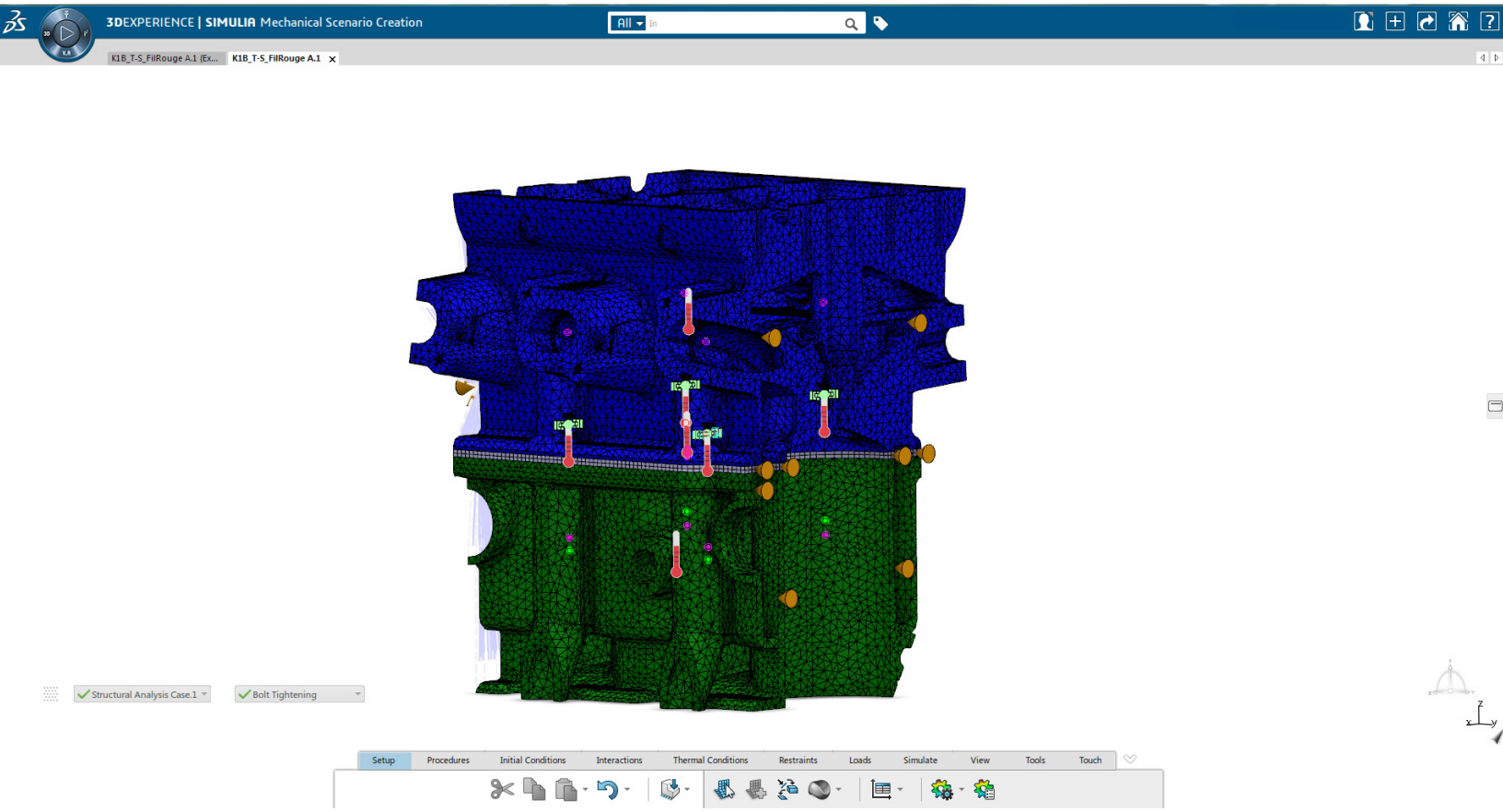
DASSAULT SYSTEMES

SIMULIA

3DEXPERIENCE®

MECHANICAL ANALYST
3DEXPERIENCE USER ROLE



DELIVERS PROVEN WORLD-CLASS ABAQUS REALISTIC SIMULATION TECHNOLOGY IN A SEAMLESS, INTUITIVE EXPERIENCE

Leverage the value of simulation throughout the enterprise

The Mechanical Analyst uses advanced finite element simulation techniques to understand and validate complex engineering problems. With an extensive toolset to enhance productivity and efficiency, the Mechanical Analyst is equipped to conduct structural static, dynamic, and thermal simulation of product designs and assemblies within the **3DEXPERIENCE®** platform. Fully integrated with both the environment and with the geometry, Mechanical Analyst provides a unique platform to collaborate, simulate, and impact design processes throughout the extended enterprise using state-of-the-art Abaqus simulation technology.

Less time spent looking for geometry, part assembly information, fastener data, etc. thanks to the collaborative nature of 3DEXPERIENCE

Simulation is managed as a core value of the **3D**EXPERIENCE Platform allowing simulation IP to become a true corporate asset, unlike existing standalone Specialist tools

Fully dynamic transient time simulation within the 3DEXPERIENCE platform

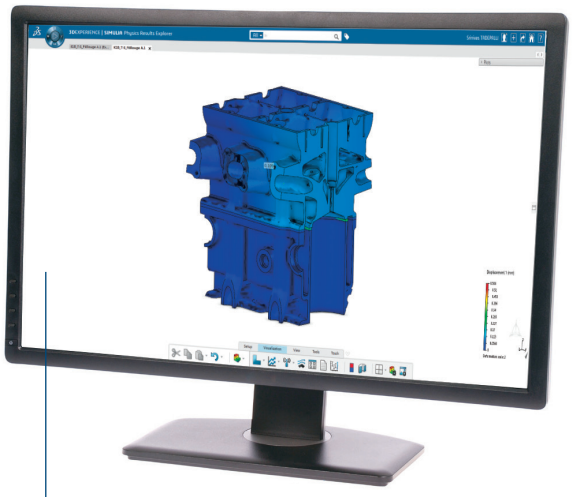
Workflows such a Drop, Crush, Forming, Shake, and Impact in all industries can be simulated

High performance results visualization, particularly for very large models

Enables interrogation of realistic simulation results with speed, clarity, and control on the desktop for enhanced decision making. High performance visualization tools enable efficient post-processing of large-scale simulation data including an option to use remote machines for rendering and visualization computation.

User Role Highlights

- Integrated **3D**EXPERIENCE provides the ability for design, engineering, and testing to collaborate effectively and efficiently including for transient time dynamic simulations.
  - Brings simulation out of the expert niche and into the core of the enterprise-wide processes to build better, less expensive, and more desirable products based on simulation-enabled design
- Modern platform with clean, easier to learn, user interface.
  - Minimizes cost of training and shortens the learning curve of new software by providing a consistent look-and-feel and ease-of-functionality with other capabilities of the 3DEXPERIENCE Platform
- Scalability to larger data sets, enabling greater fidelity.
  - Built to handle the largest possible models and model sizes, including model building, model solution, and result post-processing
- Built-in advanced model management w/ multiple representation support
  - Allows efficient and easy switch between various simulation representations without reworking the entire model
- Automatic creation of simulation parameters (for use in Design of Experiments)
  - Integrated with the Process management packages within the **3D**EXPERIENCE platform
- Advanced, feature based, definition of loads and constraints
  - Loads and constraints are described on the design geometry directly
- Industry leading high-performance solution and visualization of very large results data sets
  - Built to post-process even the largest models efficiently providing state-of-the-art performance



Loads, Boundary Conditions on Mesh

Our **3D**EXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 210,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

3DEXPERIENCE®

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