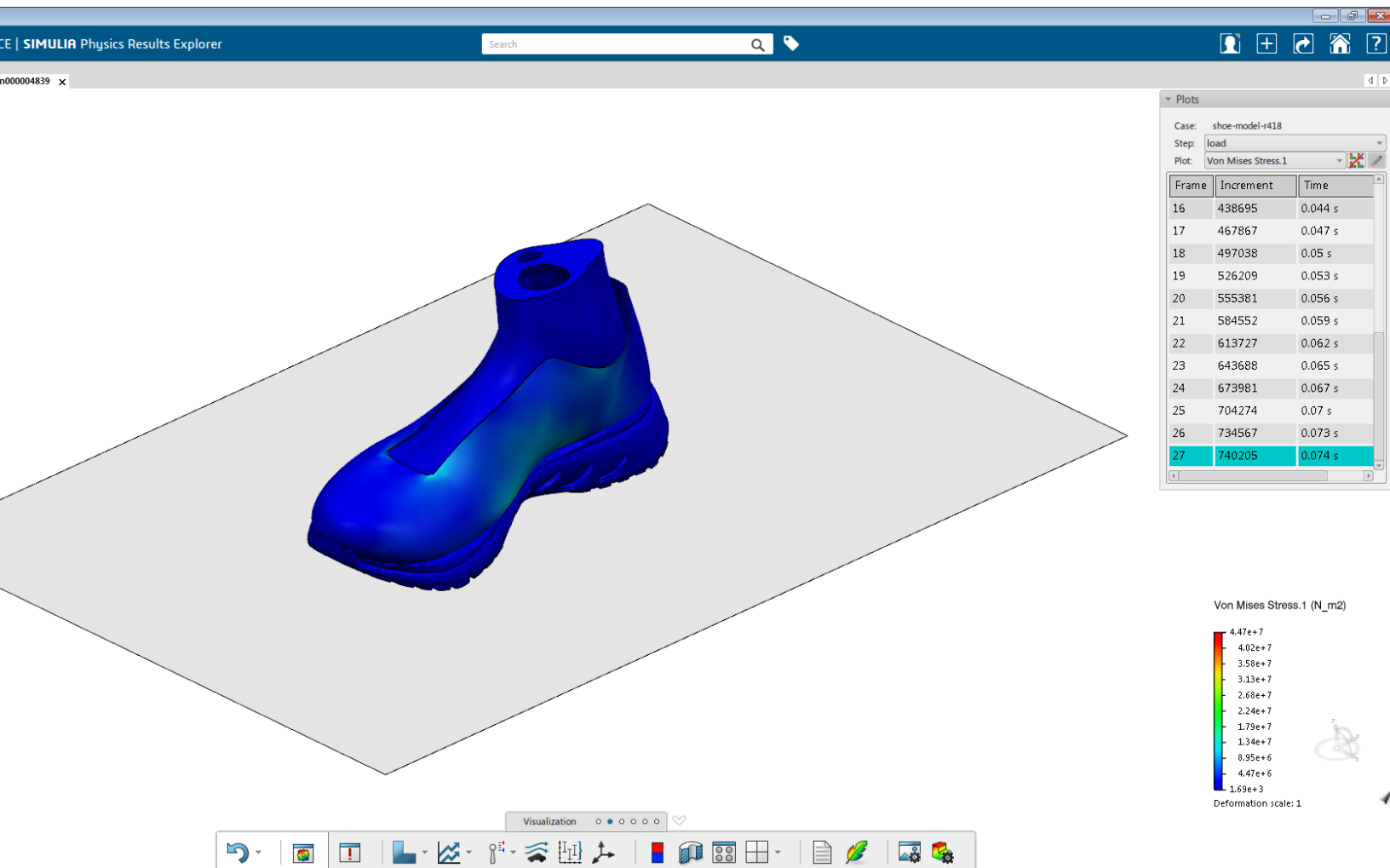# SIMULATION RESULTS ANALYST
3DEXPERIENCE USER ROLE

INTRODUCING A NEW PARADIGM IN RESULTS VISUALIZATION

A high-performance tool for efficient results visualization of very large data sets.

As simulation technology and implementation increases, the output datasets can grow exponentially, often reaching 100 million nodes or more. This causes challenges in displaying results quickly and efficiently. Simulation Results Analyst solves this problem by providing high performance capabilities for visualizing and exploring simulation results, particularly large datasets. Results files are not copied to the user workstation and visualization computations are performed within the distributed environment. The result is a state-of-the-art visualization capability enabling the processing of very large models with breathtaking performance.

Provides results visualization for all physics simulations within the **3D**EXPERIENCE Platform.Allows post-processing and visualization of very large models with best-in-class rendering performance
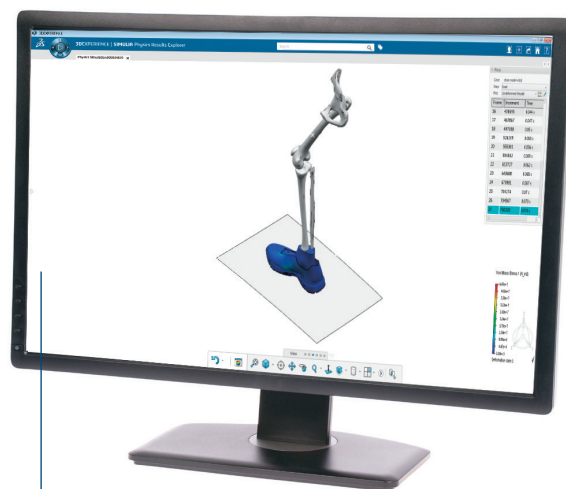
Support results visualization of imported simulations including Abaqus ODB and Nastran OP2 formats.

Utilizes High Performance Computing (HPC) resources to perform results visualization rather than only the user's workstation.
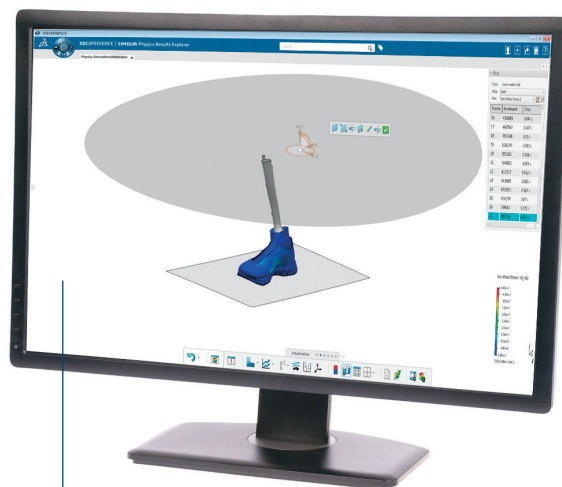
Enables the generation of lightweight simulation results content for rapid visualization using 3DPlay app using **3D**EXPERIENCE or tablet devices.

User Role Highlights

- Superior performance and speed for viewing large data sets
  - Direct client-server communication including optimized usage of CPU and memory with parallel execution
- State-of-the-art rendering capability
  - Including, for example, contours, iso-surfaces, symbol plots, cut sections, free-body display, color coding, and transparency option
- Extensive tools to for results display and controls
  - Visualize simulation within the context of a larger assembly for solids, shells, beams, composites and SPH elements.
  - Display group tool for limiting the display to a subset of the model and visualization of constraints
  - XY plotting capabilities with data import/export
  - Results animation and controls
  - Ply stack plot tool
  - Global,local and frequency Sensors
  - Multiple views
- Provides a flexible simulation report capability and enables the generation of lightweight data for visualization of simulation results using 3DPLAY application on tablet devices.
- Supports results visualization for Abaqus simulations authored within the **3D**EXPERIENCE apps and also analyses performed using other applications such as Abaqus/CAE and Nastran.

The Shoe simulation is imported into the **3D**EXPERIENCE Platform and a Von Mises contour plot is generated.

A Cutting plane is created to draw more focus to the shoe.

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 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

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