

# 3DEXPERIENCE STRUCTURAL 2023

## FEATURE MATRIX

	STRUCTURAL DESIGNER	STRUCTURAL ENGINEER	STRUCTURAL PERFORMANCE ENGINEER	STRUCTURAL MECHANICS ENGINEER	STRUCTURAL ANALYSIS ENGINEER
<b>DESIGN-ANALYSIS WORKFLOW</b>					
Major 3D CAD Import	✓	✓	✓	✓	✓
Full Native CAD Associativity	ADD-ON	ADD-ON	ADD-ON	ADD-ON	ADD-ON
Nastran Import/Export					✓
Abaqus Import/Export					✓
CATIA Design Essentials					✓
Computational Generative Design Tools					✓
Parametric Design Study			LIMITED	✓	✓
Functional Generative Design					ADD-ON
<b>USER INTERFACE</b>					
User Assistant	✓	✓	✓	✓	✓
Physics Method Reuse			✓	✓	✓
<b>PLATFORM</b>					
Data Access & Management	✓	✓	✓	✓	✓
Engineering Collaboration	✓	✓	✓	✓	✓
Lightweight Results Review	✓	✓	✓	✓	✓
<b>SOLVING TECHNIQUES</b>					
Abaqus Implicit Static Analysis	✓	✓	✓	✓	✓
Abaqus Implicit Dynamic Analysis			✓	✓	✓
Abaqus Explicit Dynamic Analysis				✓	✓
fe-safe Durability Analysis			ADD-ON	ADD-ON	✓
<b>SCENARIO</b>					
Linear Analysis	✓	✓	✓	✓	✓
Advanced Linear Analysis		✓	✓	✓	✓
Nonlinear Analysis			✓	✓	✓
Advanced Nonlinear & Multiphysics Analysis				✓	✓
Sequential Multi-Step Simulations		LIMITED	✓	✓	✓
Step Restart				✓	✓

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<b>SCENARIO (cont.)</b>					
Abaqus General Contact	LIMITED	✓	✓	✓	✓
Small & Finite Sliding Contact	✓	✓	✓	✓	✓
Durability Analysis			ADD-ON	ADD-ON	✓
Additive Manufacturing Analysis				ADD-ON	
User Subroutines				LIMITED	LIMITED
<b>MODEL</b>					
Connections	LIMITED	✓	✓	✓	✓
Comprehensive Meshing Capabilities	LIMITED	✓	✓	✓	✓
Rule-Based Meshing		✓	✓	✓	✓
Model Assembly Design			✓	✓	✓
Geometry Preparation & Simplification				✓	✓
Substructures & Submodels				✓	✓
Keyword Editing				✓	✓
<b>MATERIALS</b>					
Nonlinear Materials			✓	✓	✓
Advanced Material Properties			✓	✓	✓
Fatigue Materials			ADD-ON	ADD-ON	✓
Material Calibration				✓	✓
Composite Materials			ADD-ON		ADD-ON
<b>RESULTS</b>					
Basic Post-Processing Tools	✓	✓	✓	✓	✓
Advanced Post-Processing Tools		✓	✓	✓	✓
Material Rendering		✓	✓	✓	✓
High-Performance Visualization		✓	✓	✓	✓
Remote Web Visualization		✓	✓	✓	✓
Animation Export	✓	✓	✓	✓	✓
Side-by-Side Comparison		✓	✓	✓	✓
Report Generator		✓	✓	✓	✓
<b>COMPUTATION</b>					
Local and Cloud Computing	✓	✓	✓	✓	✓
High Performance Computing (HPC)	✓	✓	✓	✓	✓
Embedded Compute Cores	4	4	8	8	0
Additional Compute Tokens	ADD-ON	ADD-ON	ADD-ON	ADD-ON	ADD-ON
Additional Compute Credits	ADD-ON	ADD-ON	ADD-ON	ADD-ON	ADD-ON

