



Next Generation Simulation (NGS)

DoD/SNL ModSim workshop
June 29, 2020



PRESENTED BY

The NGS Team

June 29, 2020

COMPSIM
TOOLKIT

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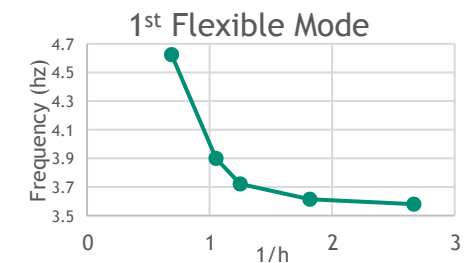
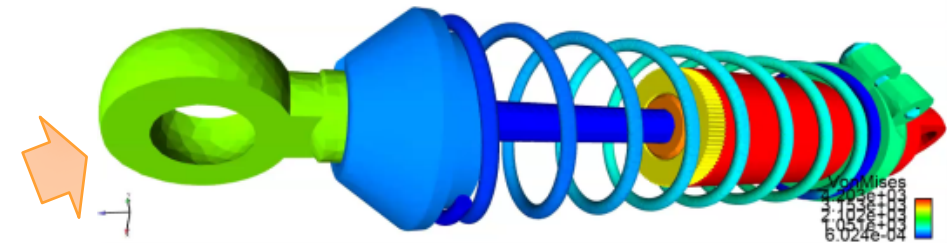
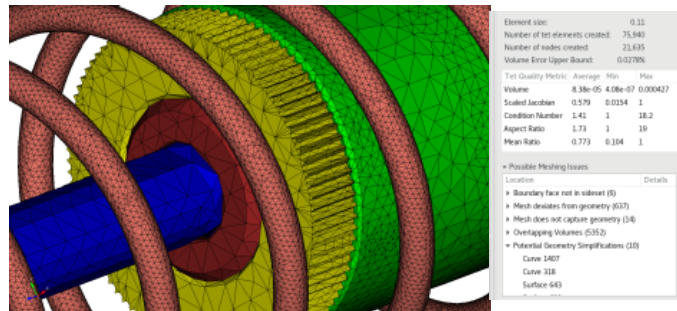
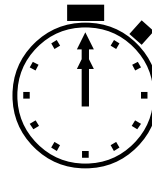
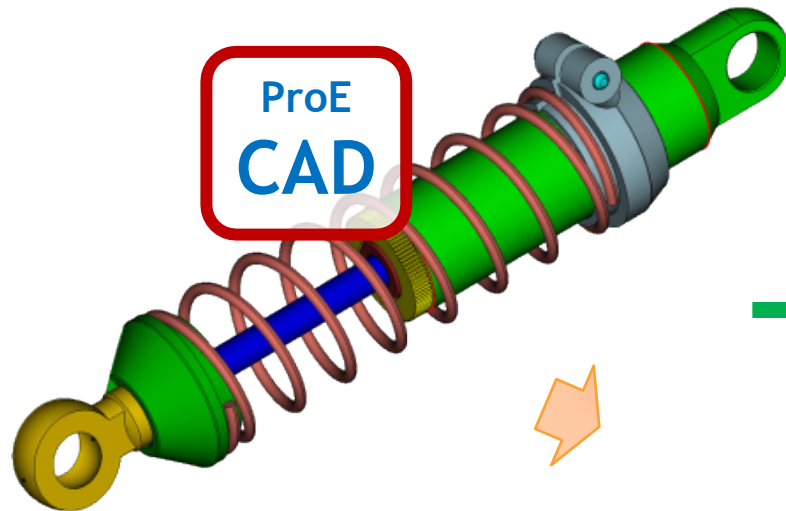
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Lab goal: reduce LEP cycle [10 → 3 years]



Key Strategy:

- User Interface Design
 - Separate User intent from tedious steps of executing it
- Fast Model Creation
 - Automated Geometry Defeating
 - Robust Automated Meshing
 - Material Application
 - And More
- Embedded V&V
 - for solution credibility



intuitive, insightful and accessible M&S capability, fast TAT

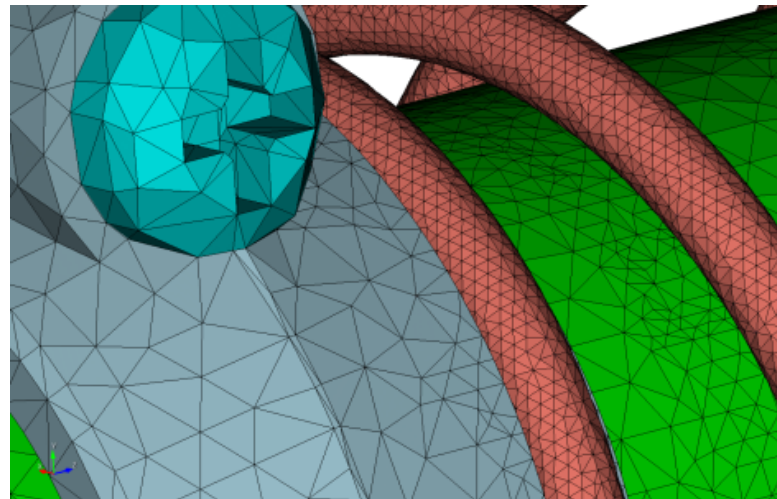
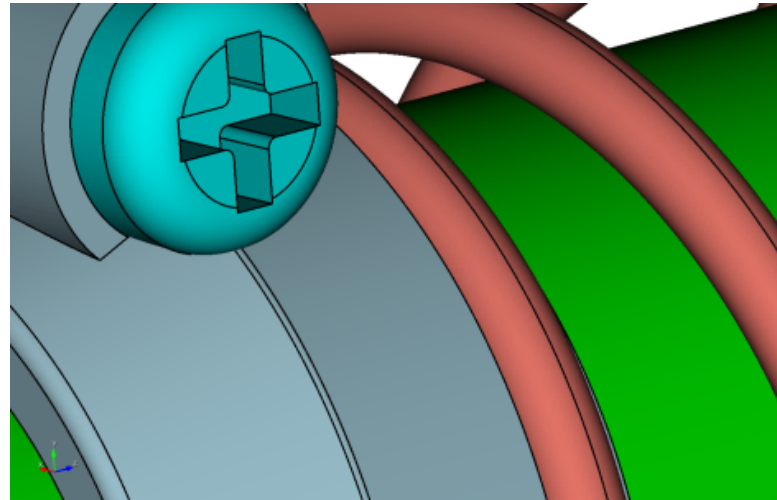


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New in FY20

- User Control Over Automatic Geometry Defeathering
- Mesh Adaptation to User Features of Interest
- Integration With the SGM Solid Modeling Engine



Planned for FY21

- Solution-Based Adaptivity
 - Underlying Mesh Support
 - UI/UX
- STL Model Support
 - Scanned Models to Mesh
- Continued UI/UX Development with Cubit as Underlying Engine
 - Geometry Overlay Detection & Resolution
 - Features of Interest

