Ansys Mechanical Beyond the Basics

Module 02 Student Reference Guide: Further Geometry Considerations

Release 2021 R2

Module 02: Learning Objectives

In this module, you'll learn how the geometry can be modified to add efficiency to the Mechanical solution.

The following topics will be covered:

- Introduction to SpaceClaim
- Cut planes and symmetry
- Body activation/deactivation for physics
- Shared topology
- Beam extraction

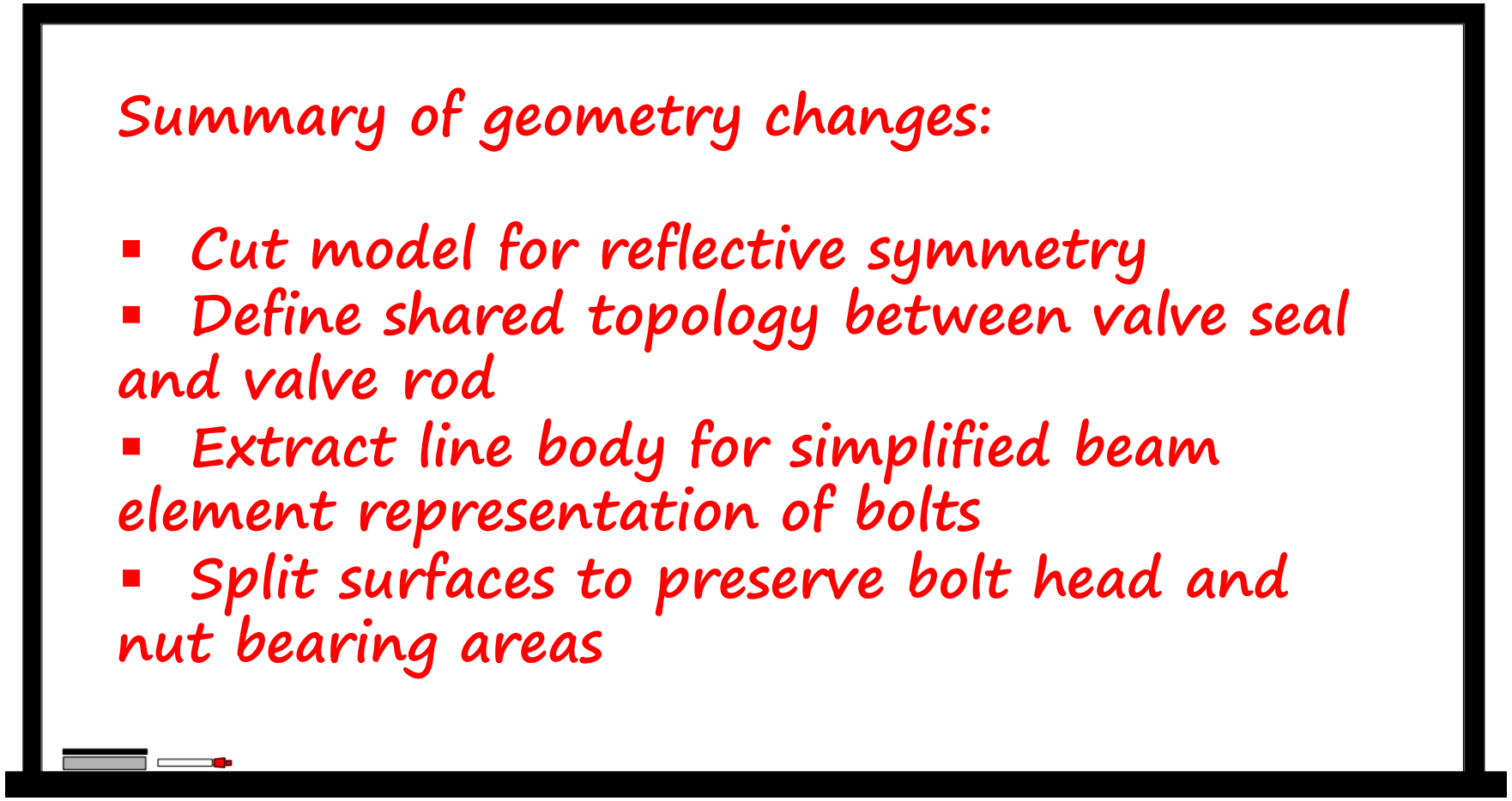
Module 02: Agenda

- Brief introduction to SpaceClaim
  - Purpose and application
  - Options for launch
  - GUI
  - View control and the global triad
  - Selection and Smart Filters
  - Hiding/showing bodies
  - Suppress for Physics
  - Tabs, ribbons, and tools
    - Design Tab → Pull
    - Repair Tab
    - Prepare Tab → Midsurface
    - Prepare Tab → Beam Extract

Module 02: Agenda (Continued)

- Cut assembly along symmetry plane
- Share topology between valve rod and seal
- Imprint nuts and bolts on flanges
- Suppress two bolts in preparation for body-body beam creation
- Extract beam for one bolt
- Update geometry in Mechanical
- Define the symmetry condition

Module 02: Reference Material

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