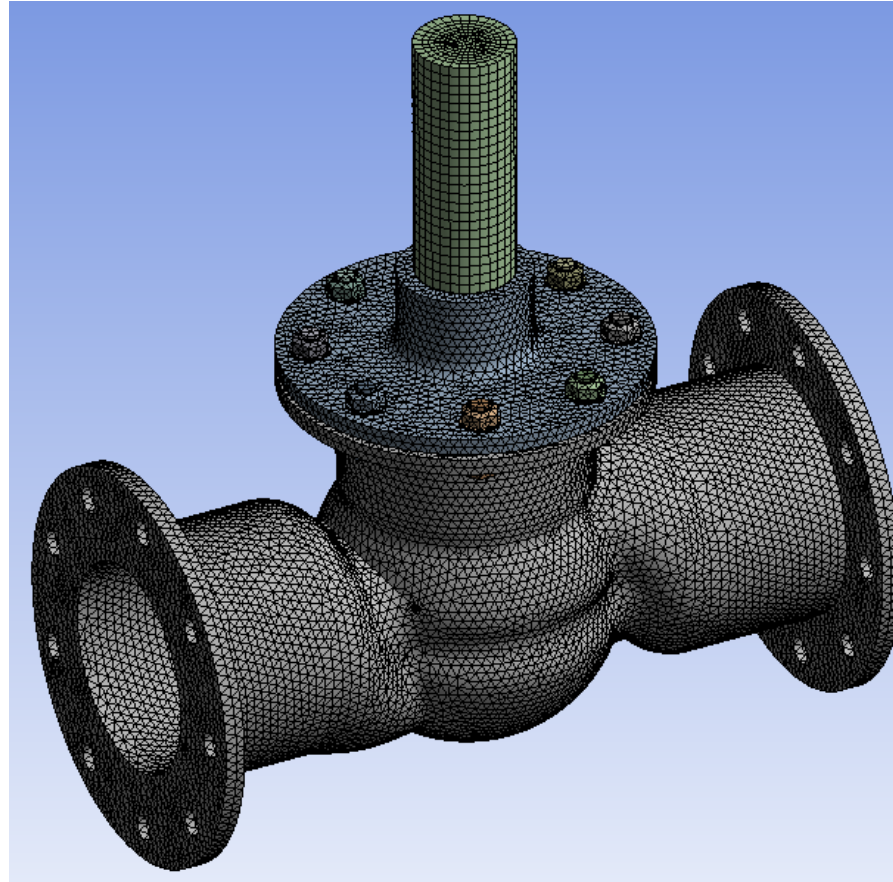# Module 06: Step-by-Step Guide:
Mesh

Release 2023 R1

Please note:
- These training materials were developed and tested in Ansys Release 2023 R1. Although they are expected to behave similarly in later releases, this has not been tested and is not guaranteed.
- The screen images included with these training materials may vary from the visual appearance of a local software session.
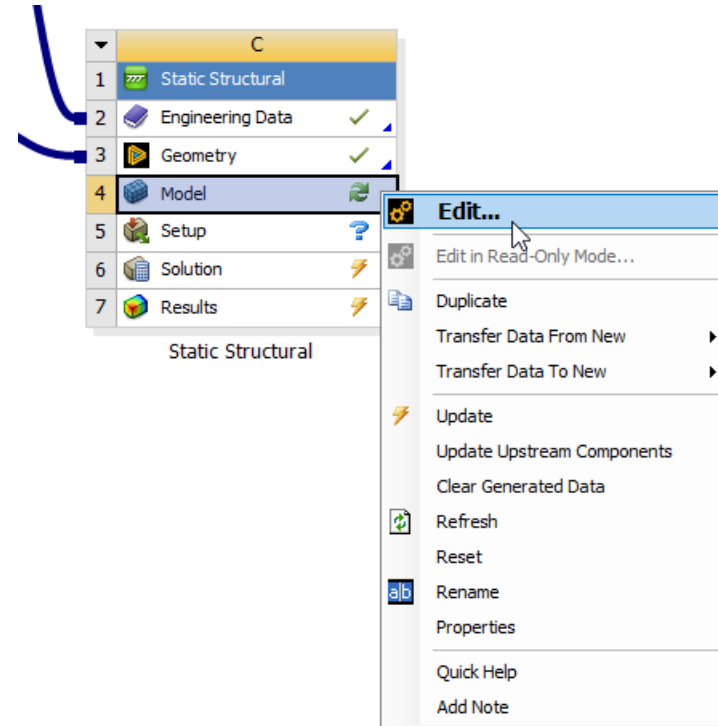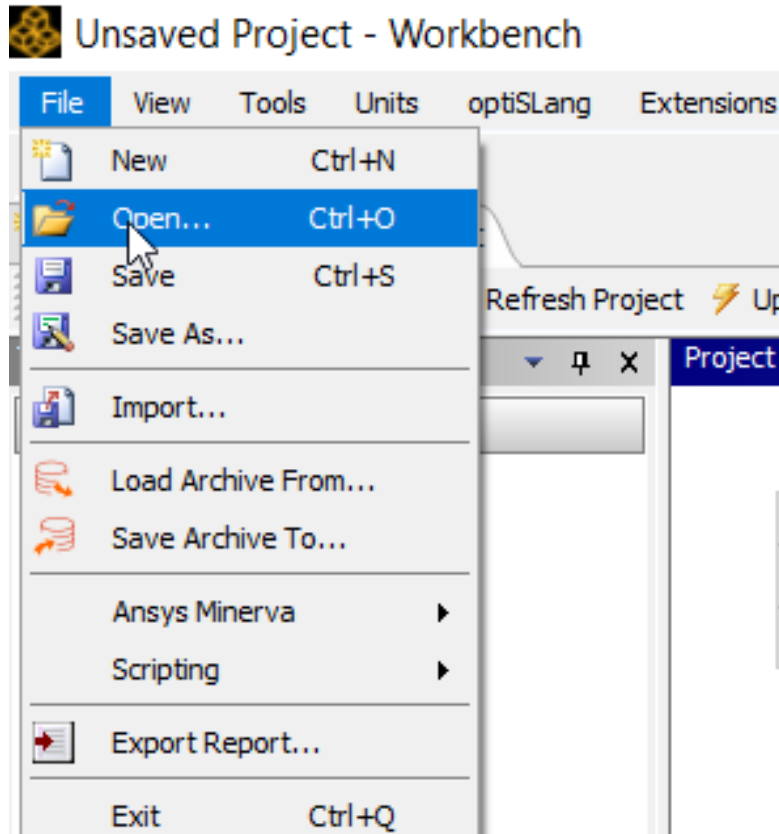
\\nsys

Step-by-Step Guide 06 - Meshing

Use this guide to repeat the steps the instructor demonstrated within this module.
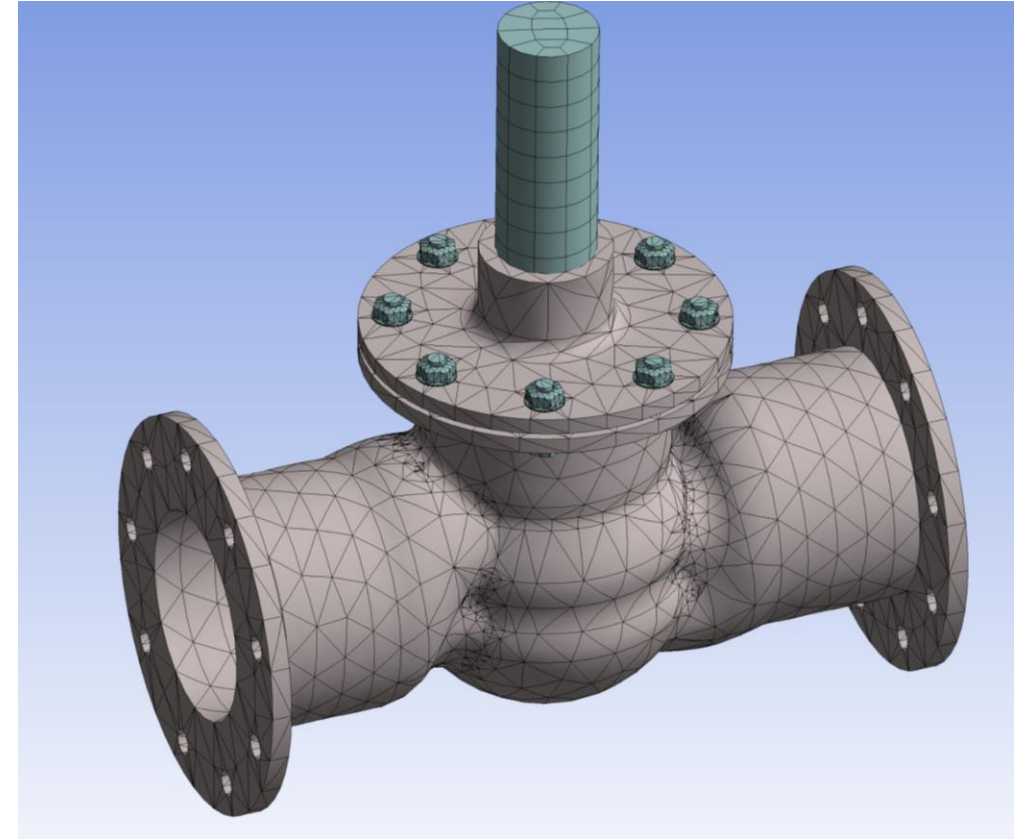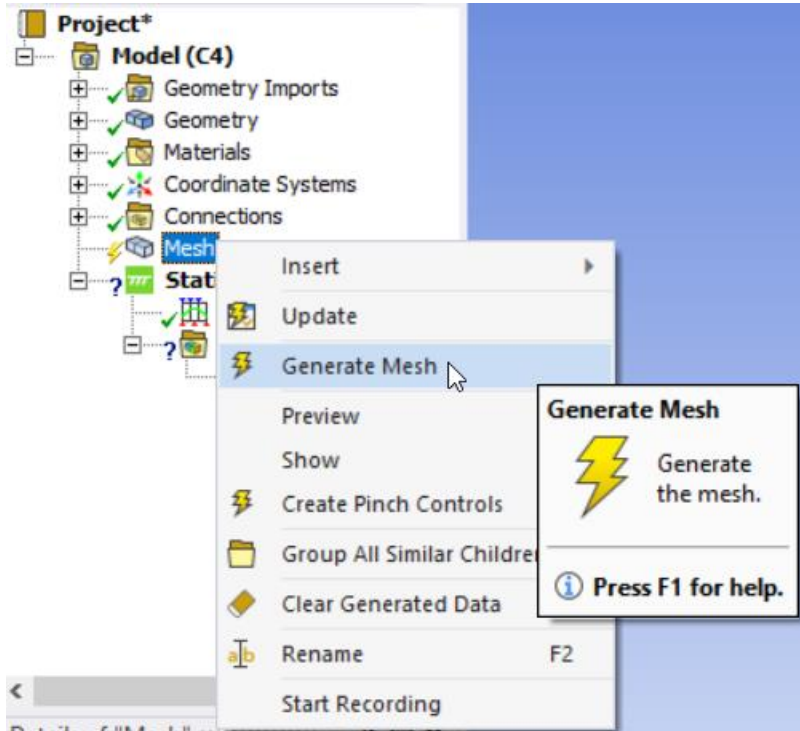
Step-by-Step Guide 06 - Meshing

- Open Archive "Globe_Valve_SS06_Start.wbpz"
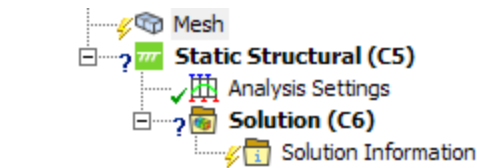
- Open Mechanical

Step-by-Step Guide 06 - Meshing

• Generate the default Mesh:
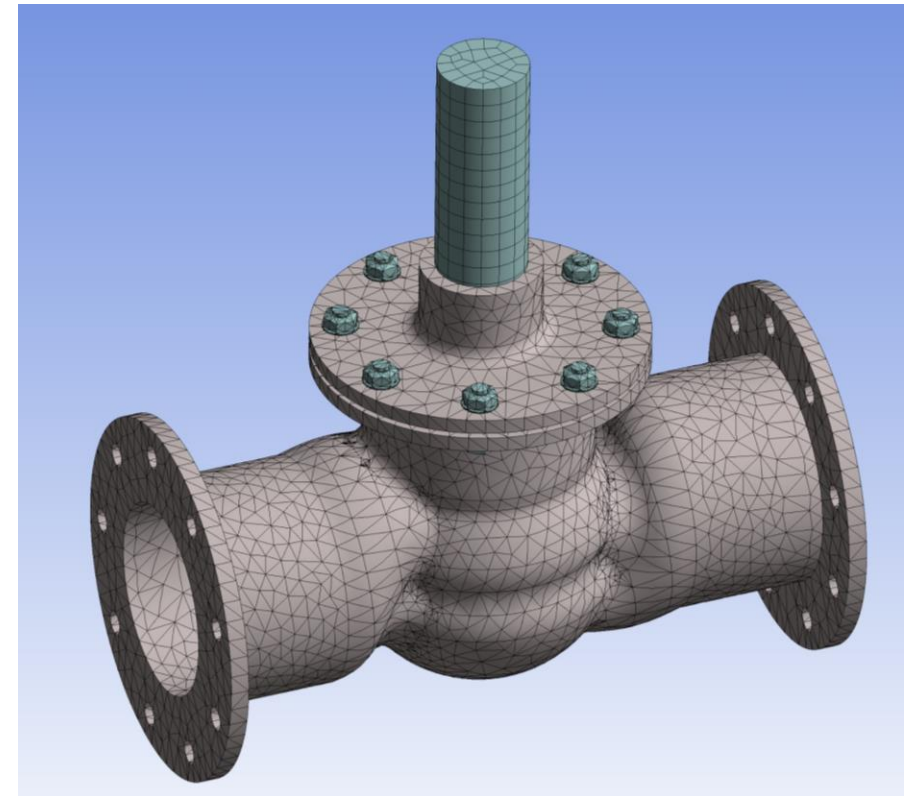
- RMB – Mesh → Generate Mesh

Step-by-Step Guide 06 - Meshing

- Specify Global Element Size of 6.35 mm along with Adaptive Size Function:

- Details of Mesh → **Sizing** → **Use Adaptive Sizing: No; Element Size** → **6.35 mm**
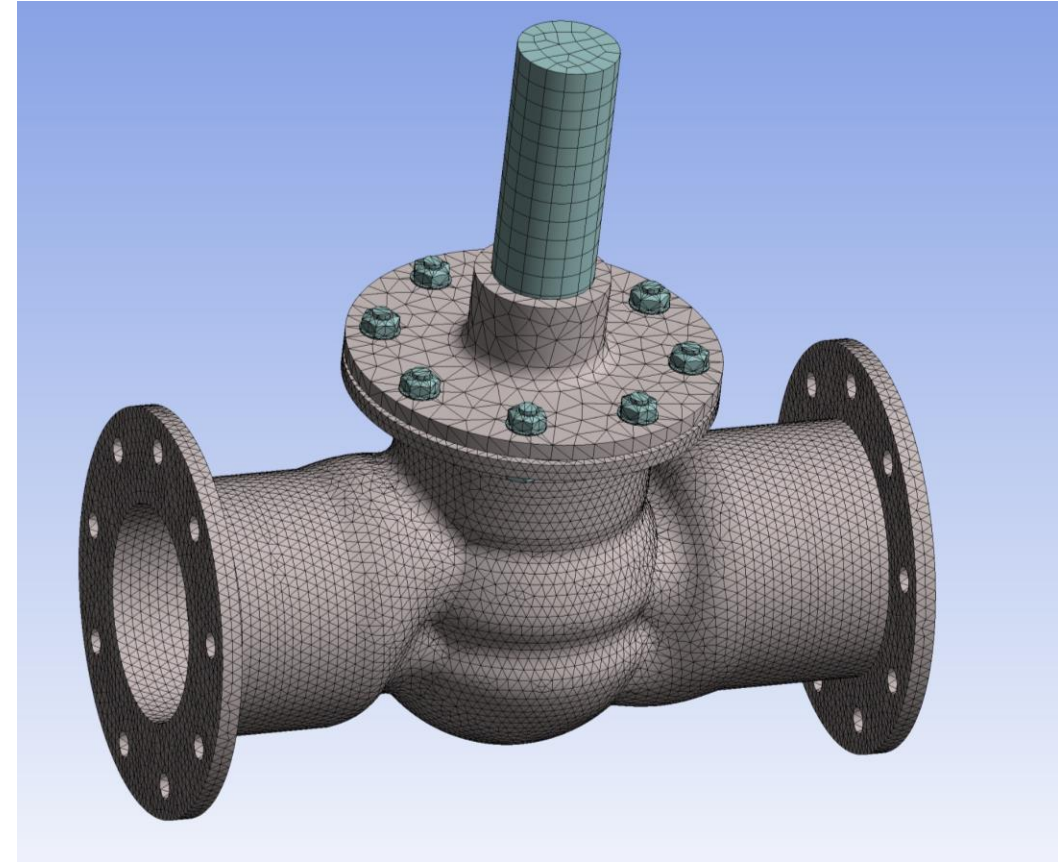
- Generate Mesh

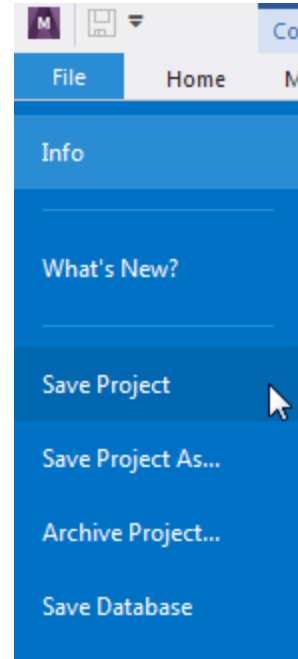| Details of "Mesh"	
Display	
Display Style	Use Geometry Setting
Defaults	
Physics Preference	Mechanical
Element Order	Program Controlled
☐ Element Size	6.35 mm
Sizing	
Use Adaptive Sizing	Yes
Resolution	2
Mesh Defeaturing	Yes

Step-by-Step Guide 06 - Meshing

- Insert Body Sizing

- Scope Body Sizing to Valve Body

- Change Element Size to 3.175 mm

- Generate Mesh

Details of "Body Sizing" - Sizing

Scope	
Scoping Method	Geometry Selection
Geometry	1 Body
Definition	
Suppressed	No
Type	Element Size
☐ Element Size	3.175 mm
Advanced	
☐ Defeature Size	Default
Behavior	Soft
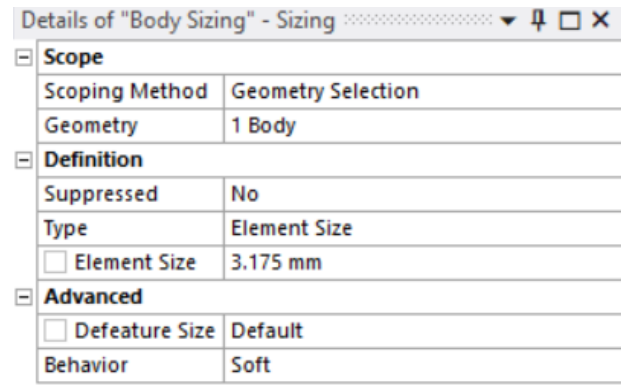
Step-by-Step Guide 06 - Meshing

- Save Project for use later if desired.

End of presentation