

ANSYS - Creating Surfaces from Imported Geometries and Combining Geometries

Creating a Surface from an Imported Geometry

Created using ANSYS 16.1

Sometimes when importing a geometry (especially one that you did not create yourself) there are certain errors given by DesignModeler. In this tip, the specific error is when the geometry imported is incomplete or specifically, not a surface and is instead a series of edges.

1. After you have imported the geometry and you see that nothing has shown up but your file is not corrupted it is likely that you have instead imported a series of edges.
2. Go to Concept>Surfaces from Edges
3. Select the edges (these should be visible).
4. Hit Apply

Combining Geometries

At this point, you should have a surface from the edges you imported into Design Modeler. If you see that you have created several edges along one surface and want to have just one edge you can combine the edges in the Meshing step by using virtual surfaces.

1. Open the Mesher
2. Select Model in the Tree
3. Click Virtual Topology in the toolbar
4. Select all Edges that you want to be part of one edge
5. Right Click and Select Insert>Virtual Cell

Doing this should combine all of the edges you want under a virtual body. This will make it easy to complete the meshing and for future steps in your simulation.