

Spacecraft Assembly - Mesh

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Mesh

In the first video, we generate a tetrahedral mesh. The number of nodes is over the [ANSYS student product](#) limit, so this mesh won't solve.

In the second video, we generate a "Hex Dominant" mesh which gives us predominantly hexahedral elements. The number of nodes is below the ANSYS student product limit.

The resulting mesh has 26,934 nodes. There are 3 degrees of freedom per node (displacements in x, y and z directions). So the ANSYS solver will generate $26,934 \times 3 \sim 80k$ algebraic equations to solve our four coupled boundary values problems approximately.

To download a file with Geometry and Contact already included, please click [here](#)

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