

# Topology optimization

Abaqus has developed a new topology/shape optimization module. Without going into too much details, structural optimization can be classified into three categories: sizing, shape, and topology, as briefly described hereafter:

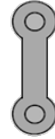
- Sizing

- Dimensions, thickness etc. may change
- Connectivity of the design domain remains intact



- Shape

- Only the boundary changes



- Topology

- Connectivity of the design domain changes
- Boundary of the design domain may also change



The approach was successfully applied on a 3D part (see [document](#)).