

## snappyHexMesh support in CastNet

Additionally to the hybrid meshing approach, CastNet supports snappyHexMesh, the script based meshing system in OpenFOAM®. The meshing setup for snappyHexMesh is strongly simplified compared to editing text files manually. CastNet directly exports the snappyHexMesh dictionary, based on the GUI settings and CAD model selections. The meshing process is incorporated into the automated case setup of the complete OpenFOAM® case. The entire meshing and case setup is performed in the background. The following features are supported:

- Region support (e.g. porous or MRF) based on CAD geometry
- AMI support for sliding meshes (e.g. for mixer or turbo machinery)
- Feature edges with automated feature extraction
- Face and region refinement
- Boundary layer meshing
- CFD domain generation based on solid region input

