#1316: HyperMesh – Fuse

Product: HyperMesh
Product Version: HyperMesh 2017.2.3 or above

Topic Objective

Fuse option in HyperMesh.

Topic Details

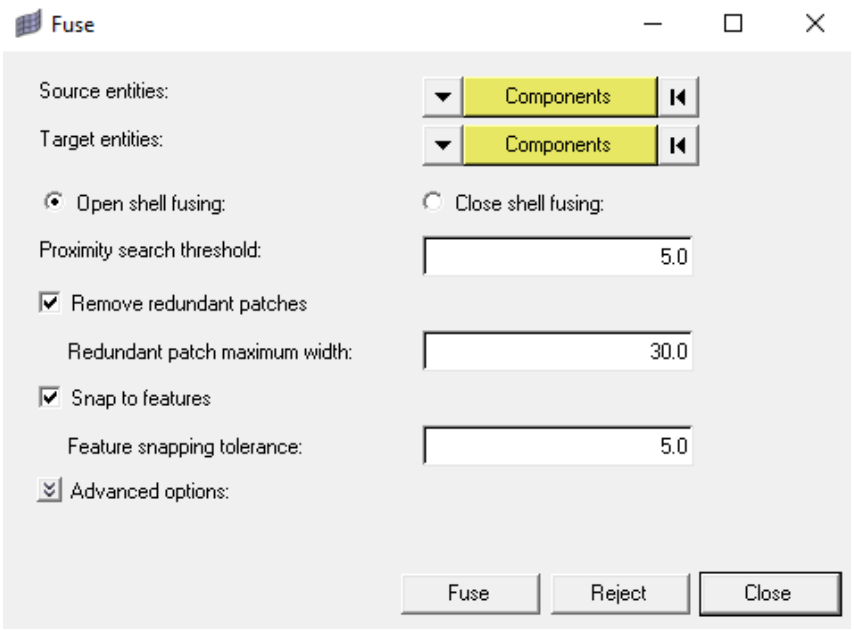
Fuse Concept and Benefits

- Input assemblies may have: Intersecting / partial intersecting parts, Overlapping parts and Close proximity parts
- Manual connections are difficult and time consuming
- Fuse is an automated tool to connect close proximity/overlapping/intersecting shell parts
- Fuse can be utilized for many applications where nodal connections are required

Fuse Overview

- Utility to connect meshed parts
- Works for both closed shells and open shells
- Option to remesh connection area
- Option to keep the interface between parts
- Non-manifolds part input is supported
- No need to have properly oriented normal

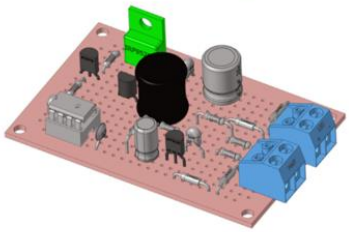
Location: Mesh pulldown: Fuse



Fuse Applications

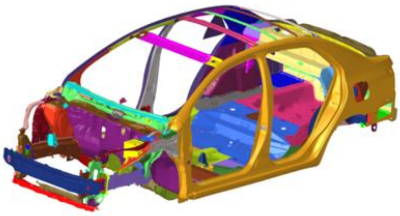
CFD analysis model preparation:
Connect shell/solid parts to create water tight shells
Application Domains:

- External flow analysis
- Internal flow analysis



Thermal analysis model preparation:
Connect solid part to define mesh connections
Application Domains:

- Electronics cooling
- Underhood thermal management



Electromagnetic analysis model preparation:
Connect shell parts to define mesh contacts
Application domains:

- BIW EM simulations