

## Overview

Different parts of the geometry were meshed independently using different types of volume meshers. The resulting volume mesh was interfaced with each other using in-place interface in STAR-CCM+ to be conformal on the solver side.

## Geometry Prep

STEP file was imported in STAR-CCM+ 3D-CAD and then altered to split out different parts of the model that can be used as an input to the different meshers. The split out parts were imprinted to each other using STAR-CCM+ imprinter

## Surface Mesh

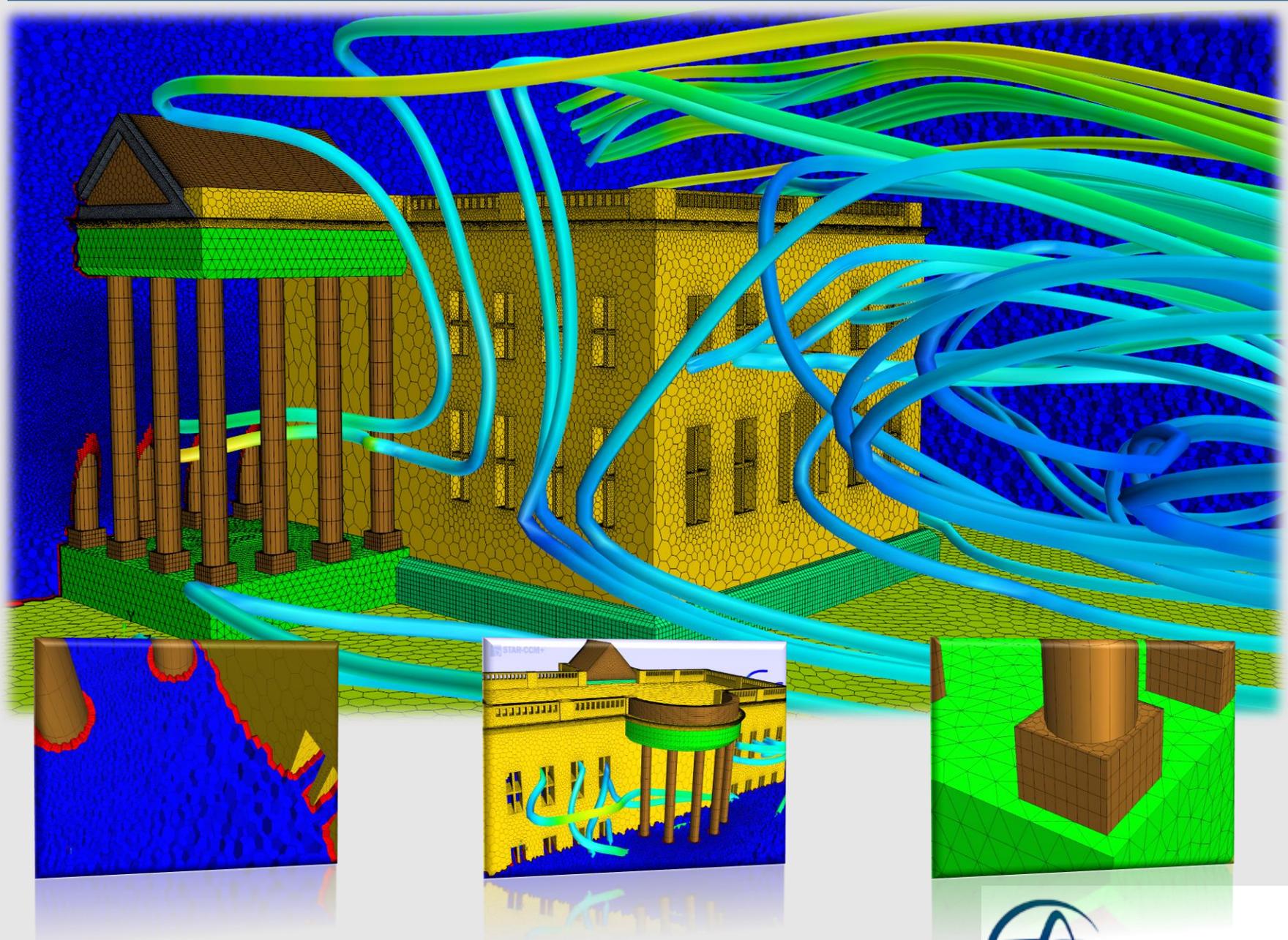
Surface was remeshed to improve the overall quality of the existing surface and optimize it for the volume mesh models

## Volume Mesh

Following meshers in STAR-CCM+ were used:

- Trimmed Mesher (Hexahedral Elements)
- Polyhedral Mesher
- Prism Layer Mesher
- Directed Mesher (Sweep)
- Tetrahedral Mesher

Generated mesh has about 3.7 million cells including all types of elements.



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