

#1246: OptiStruct - Topology Advanced Restart

Product: OptiStruct

Product Version: OptiStruct 2017.1 and above

Topic Objective

Topology advanced restart in OptiStruct

Topic Details

There are some use-cases where the topology restart run needs to consider the change of mesh (finer or coarse) or the change of configuration (adding or removing some components)

- Remove a part of the design space and/or replace that part by an existing design, while preserving the overall topology layout
- Better understand the load-carrying capacity of structural members, by reanalyzing the design obtained after removing such members (similar to failsafe analysis)
- The change of manufacturing constraint at restart run is also supported.

In order to use advanced restart feature, DOPTPRM, TOPDV, ALT needs to be added in original topology run before the restart.

For restart run with different mesh or configuration, DOPTPRM, TOPRST, ADVNOM/ADVRESET needs to be added in restart input file.

- DOPTPRM, TOPRST, ADVNOM will allow the restart with different mesh/configuration, carrying over the penalty from the original job
- DOPTPRM, TOPRST, ADVRESET will allow the restart with different mesh/configuration, resetting the penalty from the original job

