

## Main Test

- load an aircraft
- select components

start a workflow involving aircraft components modifications



## Workflow

GeometricData  
OperatingConditions  
SimulationParameters

DataWriter



AircraftUtils.getFuselageCAD  
AircraftUtils.getLiftingSurfaceCAD



run a STARCCM+ simulation  
using a macro



## STAR Macro

- initialize the simulation
- import CAD parts
- create the fluid domain
- generate the mesh
- physics setup
- set the boundary conditions
- run the simulation
- save the simulation
- kill the simulation

### Working Folder

XML data file  
CAD files

- \_\_\_\_\_ Fuselage.step
- \_\_\_\_\_ Wing\_1.step
- \_\_\_\_\_ Wing\_2.step
- \_\_\_\_\_ HTail.step
- \_\_\_\_\_ VTail.step
- \_\_\_\_\_ ...

### Sim Folder

simulation files (.sim)  
simulation results

- \_\_\_\_\_ .xlsx
- \_\_\_\_\_ .csv
- \_\_\_\_\_ .png

