

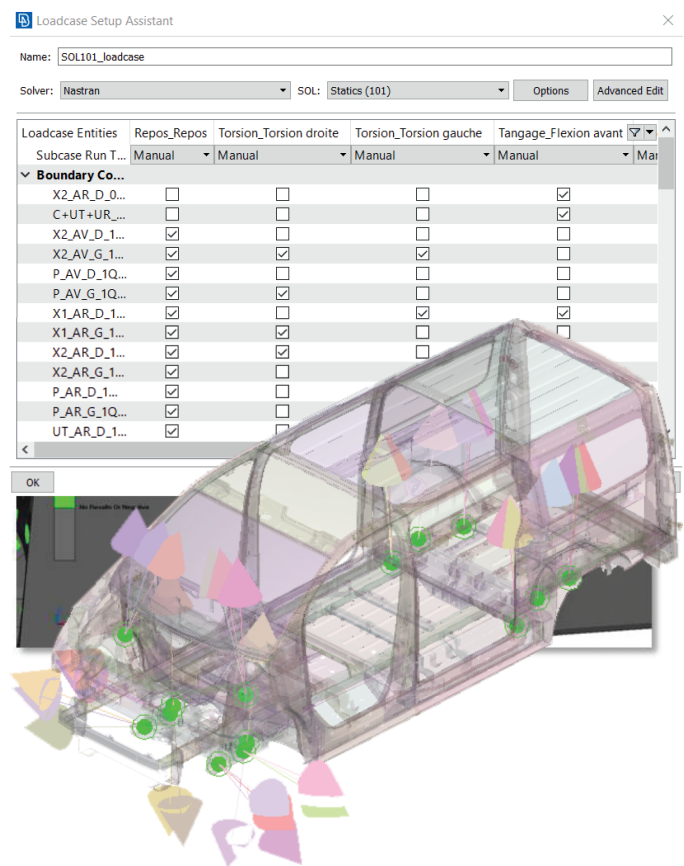
# Groupe PSA : ANSA Toolkit for Body-In-White Durability Load Cases set-up

## Challenge

- Interpret Nastran SOL101 load cases and masses from excel files into ANSA
- Facilitate the positioning of the load application points.

## Approach

- Develop tools in ANSA with the aid of python scripting language which:
- Read load cases/masses through excel file
- Configure Nastran Loadcase Assistant through a user defined scenario (using new ANSA functionalities for Loadcase Manager & Reference Library for templates)
- Generate and position LC points to mark load application points.



## Results

- Automated interpretation of load cases/masses
- Speed-up user defined scenarios for the load cases
- Ensure the integrity of the model by preventing user errors
- Store load cases/masses templates for reuse

*"ANSA is a wonderful tool, deployed this year in Groupe PSA, for pre-processing calculation on structure/durability discipline. With new native functionalities and python developments (for PSA specifications), ANSA contributes to the significant reduction of the overall CAE turnaround time."*

*Aurélien PAVIN de LAFARGE,  
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