

What's New in Simcenter 3D 2019.2

Durability

Gaining insight – where –when - why

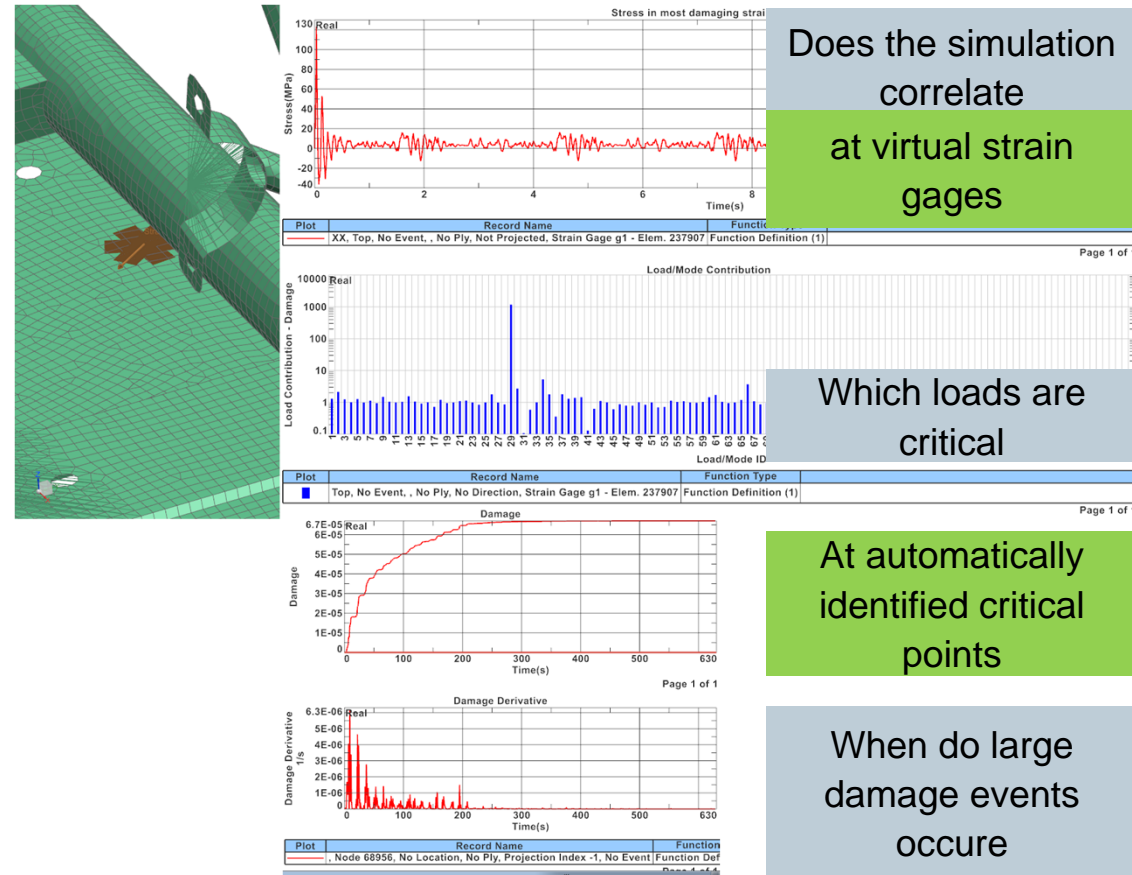
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Challenge: Interpreting fatigue results to gain the right answers not only to **If** and **where** there are durability problems, but also the **when** and **why**.

Understand the tests mean
Better, Faster and Cheaper Testing

Solution: Intelligent local analysis
Understand which events are damaging
Understand which loads are damaging

Understand the reasons mean
Better Component design



Hot Spot Recipes

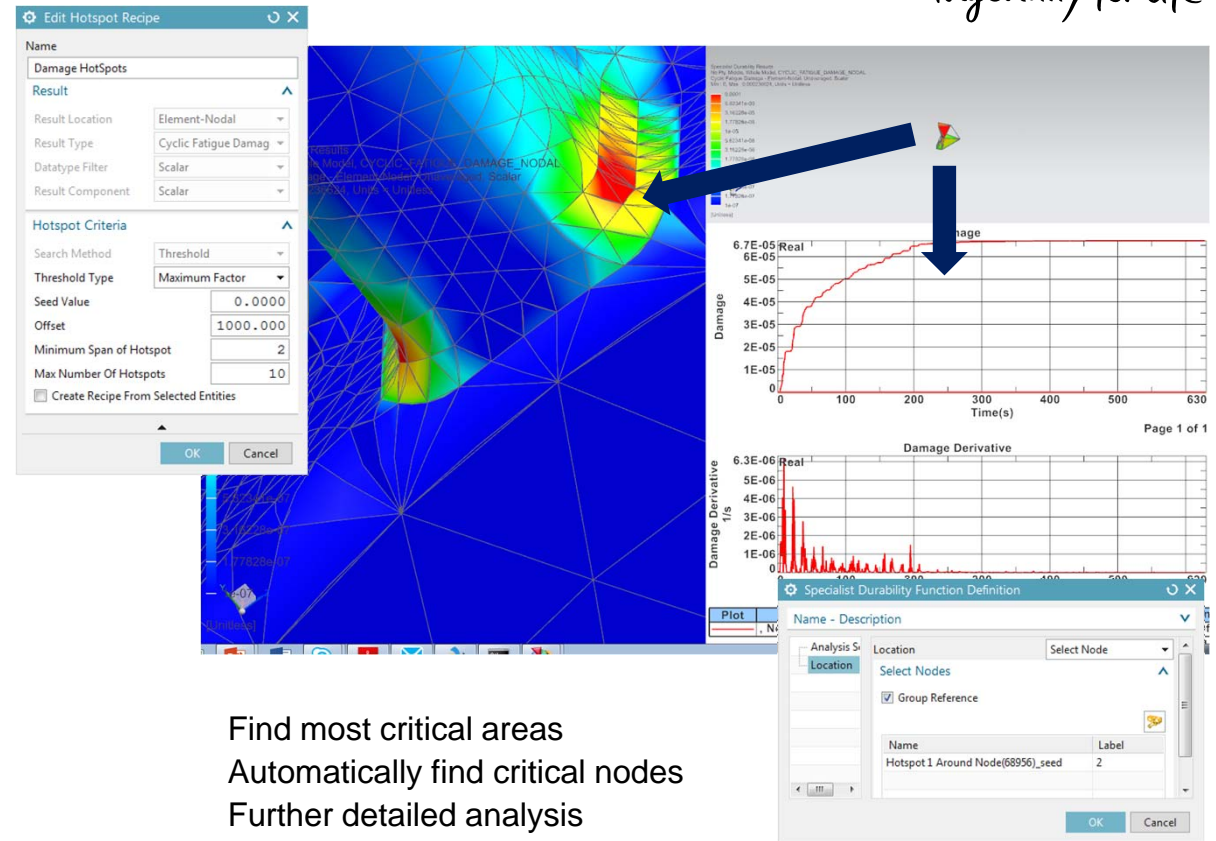
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Challenge:

Analyzing larger structures you often find different critical areas, For each critical area you want to do further detailed analysis

Solution:

- Hot Spots are areas of locally bad (or good) performing result values.
- Hot Spot Recipes is a powerful post-processing feature.
- Can be used for display restriction, but also creates groups in SIM for further analysis



Efficient Analysis

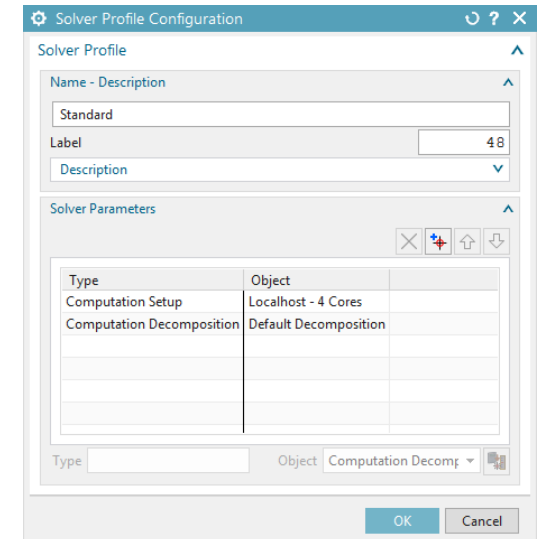


The Simcenter 3D Specialist Durability solver is designed for analyzing industry sized problems

- Several to hundreds of events
- Many (hundreds) load cases or modes
- Combined with long time histories

It uses a unique reduction technique to handle problems of this size in hours instead of days.

In Simcenter3D 2019.2 this is combined with automatic parallelization of the process.

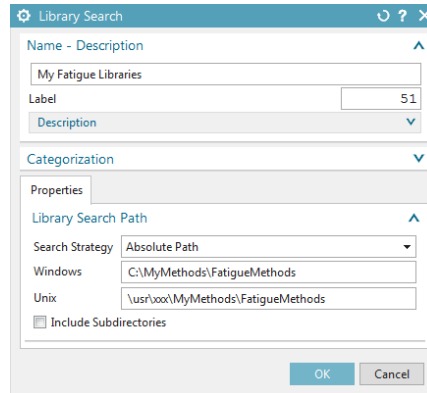


Include your own methods via library support

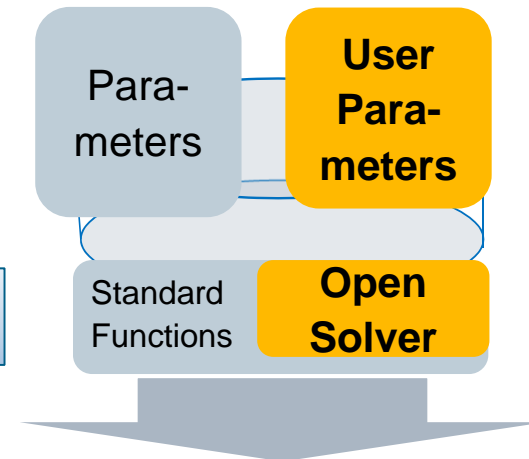
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Open Solver

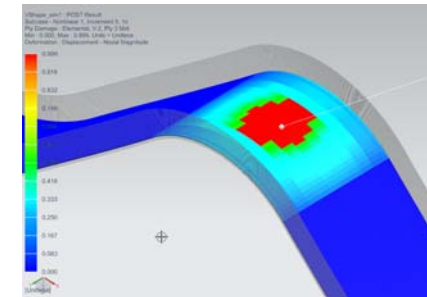
- One GUI
- One Pre and Post
- All interfaces to load and FE
- User defined methods
- User defined parameters



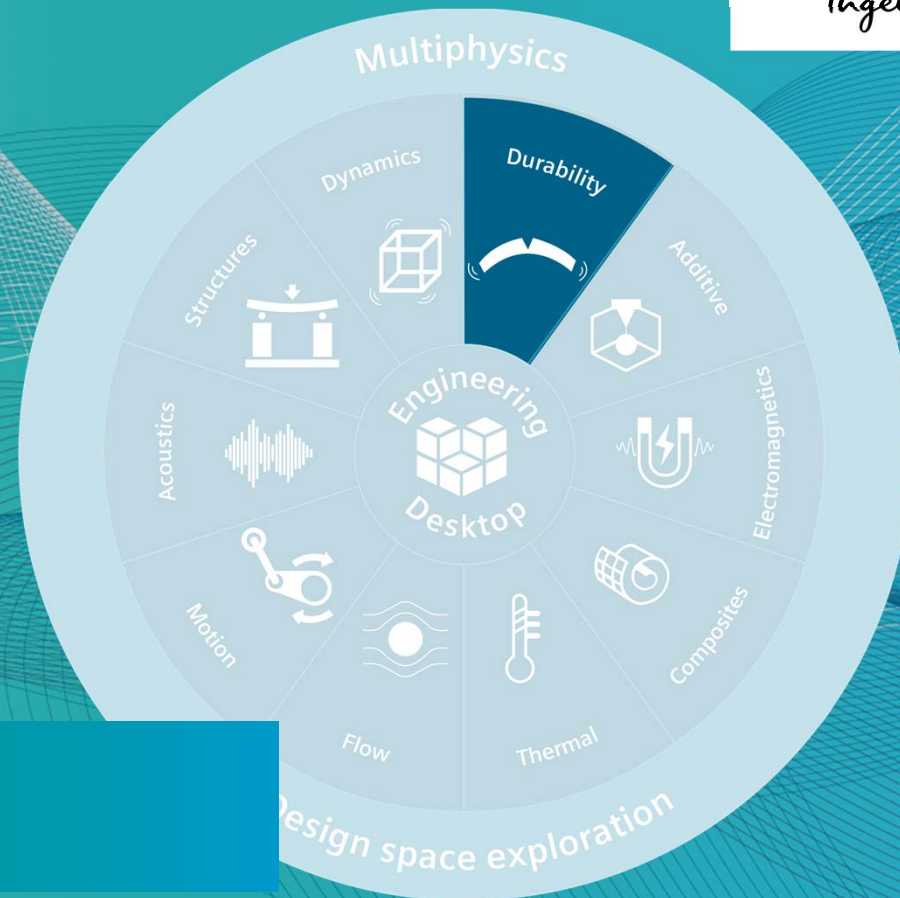
Single GUI



Fatigue Results



In 2019.2 you can load those open solver methods directly using solver objects



Thank You!