

Interface *LIMIT* – CATIA

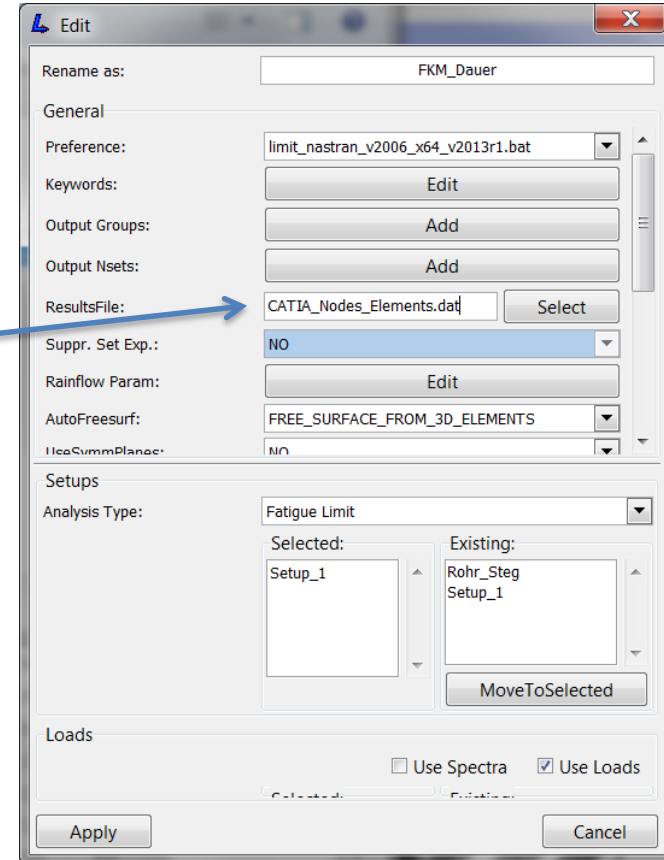
✨ **Import of geometry**

- Import of geometry via text files in Nastran style:

***CATIA_FILE**

CATIA_Nodes_Elements.dat

- Using LIMIT-GUI / JobManager



✦ Import of stress data

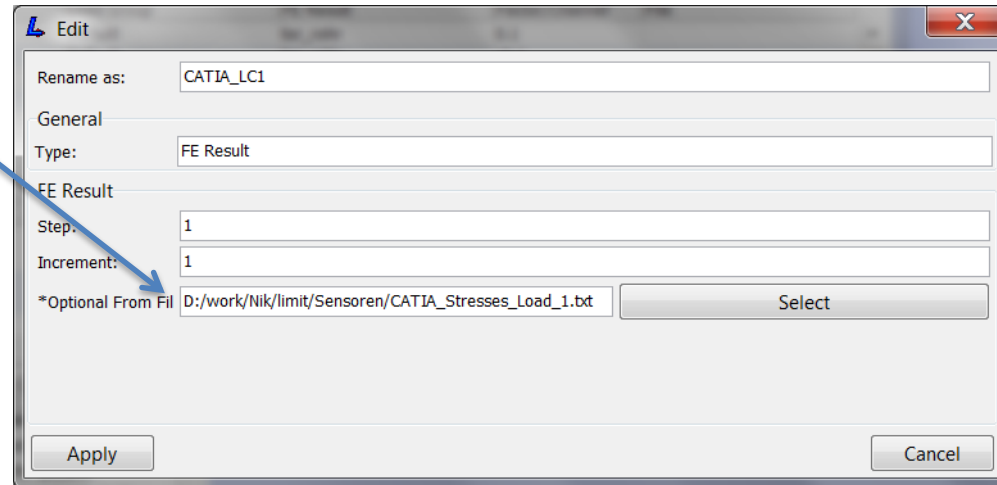
- Import stresses using:

```
*FE_RESULTS, OUTPUT=NO, LOAD_GROUP=Default, FILE=CATIA_Stresses_Load_1.TXT  
Load_1      ,1,
```

- Using LIMIT-GUI / LoadManager/ Create / FE Result:

One file per load case!

Step and Increment = 1



✨ **Stresses are exported from CATIA as principal stresses:**

- File header must look like this:

```
Locations Axis Global  
Values axis Local  
x (mm) y (mm) z (mm) C11 (MPa) C22 (MPa) C33 (MPa) ux uy uz vx vy vz
```

Specification of the interface

- ✨ **Maximum nodenumber respectively elementnumber :**
 - Windows 64 bit (x64): 50000000
- ✨ **Maximum number of nodes :**
 - Windows 64 bit (x64): 6000000
- ✨ **Maximum number of elements :**
 - Windows 64 bit (x64): 6000000
- ✨ **These LIMITS can be changed by the user. See document LIMIT_2019, section: *Redimensioning of Arrays***

Following elements can be analyzed:

- ✨ **Solids (stress gradients are only calculated for C3D):**
 - Tetrahedron with 20 Nodes

Last Slide