CandyStore - Auto Extending Nodesets

P.Prokopczuk - 11.3.2011

With the extn command you have a tool to select all nodes of a region bounded by feature edges.

extn [set] [feature angle]

The following example shows you the command in detail:

The task we want to complete is selecting all nodes in the cavity under the inner shroud of the blade shown in Fig. 1

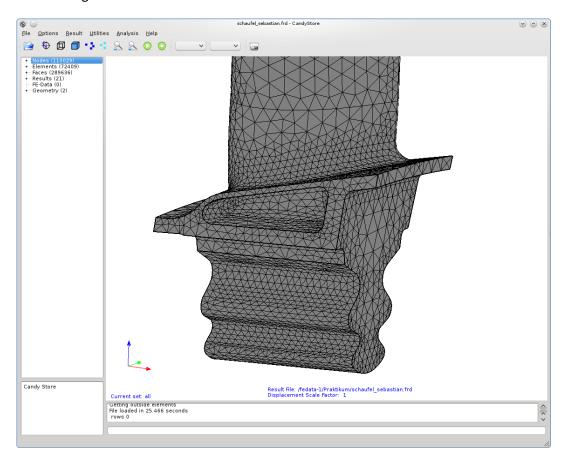


Fig. 1: Mesh of a blade

First you have to create a new set, that contains exactly one node of the surface region that you want to select. Toggle all nodes on with the "Toggle Nodes" Button and create a set with the qadd command. In Fig.2 you see the set "inner" with one selected node in the cavity region.

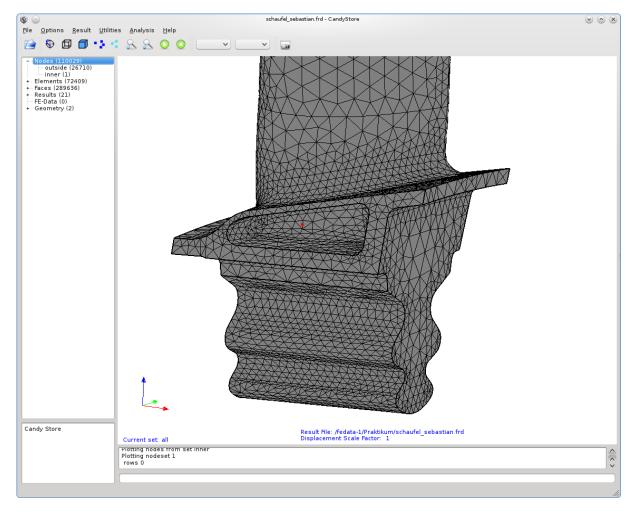


Fig. 2: Set "inner" before auto extension

To add all nodes of the cavity region simply enter

extn inner 45

This command will extend the set with all surface nodes in the region until the angle between two neighbouring faces is greater than 45 degrees. The result can be seen in Fig.3

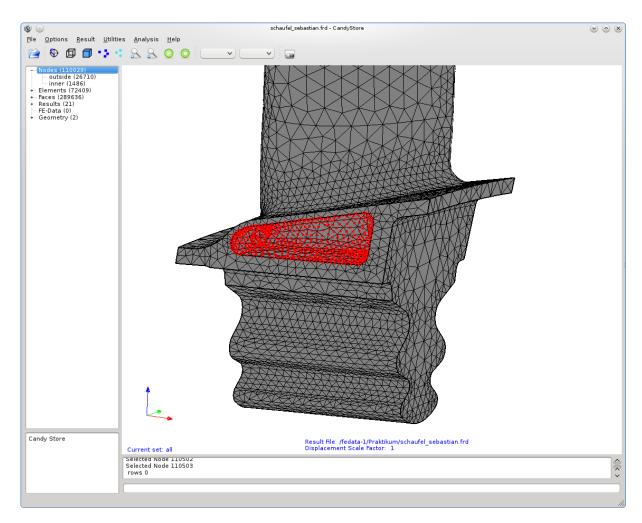


Fig. 3: Set "inner" after auto extension