
What is the difference between a non-model object and Unassigned sheet/object

Problem: How HFSS treats a non-model and Unassigned sheet/object and which one to use.

Solution:

Unassigned sheet: The unassigned sheet is treated as if something exists in the that region (even though it does not change the result). This is often desired to plot E/H fields in the near fields of a geometry in free space. The field plots will be different in this area a bit since there is an object. The mesh might not be refined. With proper mesh operations, the field plots can be enhanced.

Non-model Sheet: The non-model sheet is treated as if it does not exist in the design. The field plots you see on it are just the plots that exist without it. Its as if plotting in free-space.

The best approach is to use **unassigned sheet** and then refine the mesh using the mesh operations, so that the field is uniform and has enough sampled mesh. Below a simple example of refining the mesh on the un-assigned sheet is shown.

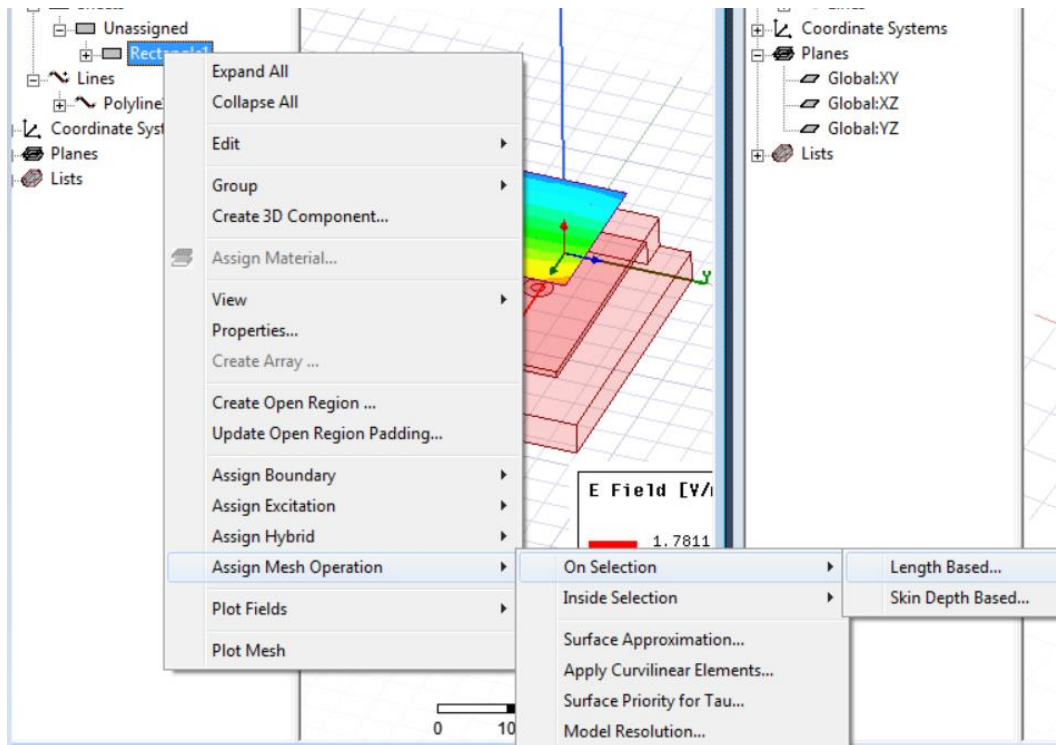


Fig. 1(a): Assigning mesh operations on the Unassigned Sheet

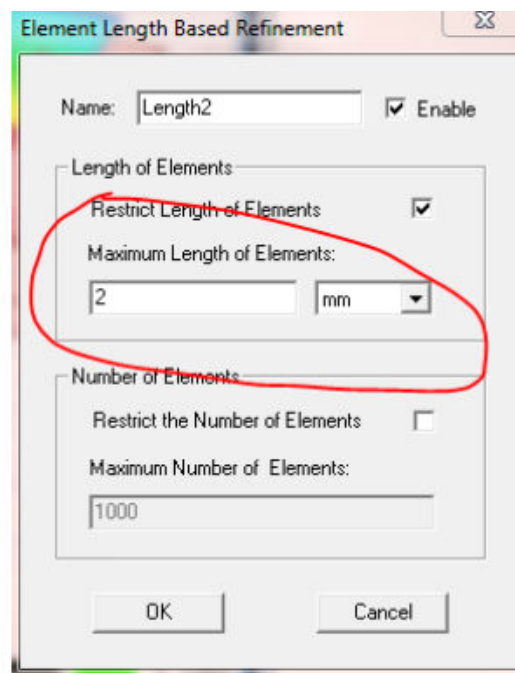


Fig. 1(b): Assigning mesh operations on the Unassigned Sheet