Case: test_4

Initial stage: make a working directory, for example `/tmp/test_4`
Note: when no precision is given, let the default values.

1 Creation of the initial mesh

Module GEOM: create a box with size (600, 400, 200)

Module SMESH :
- Create an hexahedral (i,j,k) mesh onto the box
- Hypothesis for the face : « quadrangle mapping » standard
- Hypothesis for the edges: « Wire Discretisation » with « Local Length » = 40
- Export teh mesh under the MED format

2 Creation of the case

HOMARD menu, tab « `New case` »

In this new window:
- Directory: select the working directory created above
- Mesh: select the file that was created before

Validate the creation of the case by the button « `OK` ».
The case `Case_1` and the initial iteration `MESH` are included in the object browser.

3 The first iteration

Creation of a new iteration

Select with the mouse (left) the initial iteration `MESH`, then (right) select the tab « `Next iteration` »

In this new window:
- `Mesh n+1`: modify the default value by giving `M_1`
- Click « `Hypothesis / New` »

Creation of the first hypothesis

In this new window:
- Hypothesis Name: modify the default value by giving `Zone_1`
- Type of adaptation: select the button « `With geometrical zones` »

The list « `Zone Management` » is shown and is empty. Click `New`.

In this new window:
- X mini: modify the default value by giving `-2.`
- X maxi: modify the default value by giving `202.`
- Y mini: modify the default value by giving `98.`
- Y maxi: modify the default value by giving `302`
- Z mini: modify the default value by giving `158.`
- Z maxi: modify the default value by giving `202.`

Validate the creation of the zone by the button « `OK` ». Back to the creation of an hypothesis. The zone `Zone_1` is added to the list. Check the column for the refinement.

Validate the creation of the hypothesis by the button « `OK` ». The window of the creation of a new iteration is back. The hypothesis `Hypo_1` is included in the list of hypotheses

Validation of the iteration

Validate the creation of the iteration by the button « `OK` ». Under the case `Case_1`, the iteration `Iter_1` is added to the object browser with an icon meaning that the iteration is not computed. The hypothesis `Hypo_1` is added under the tab Hypotheses in the object browser.

Compute the iteration

With the mouse, select the iteration `Iter_1`, then select the tab « `Compute and publish` ».
The icon of the iteration `Iter_1` means that the iteration is computed. Under the iteration, the object browser grew rich of three files: both first ones are files text, being able to be displayed by the choice « `Show file` »; the third is the file med, containing the produced mesh, for information.
In the module SMESH, the mesh `M_1` appears with the icon of a produced mesh.

4 The second iteration

Creation of a new iteration

Select with the mouse the iteration `Iter_1`, then select the tab « `Next iteration` »

In this new window:
- `Mesh` n+1: modify the default value by giving `M_2`
- Click « `Hypothesis / New` »

Creation of a new hypothesis

In this new window:
- Hypothesis Name: modify the default value by giving `Zones_1_et_2`
- Type of adaptation: select the button « `With geometrical zones` »

The list « `Zone Management` » is shown with the previous zone Zone_1. Click `New`.

In this new window:
- Selectionner the button « sphere »
- X centre: modify the default value by giving `200.`
- Y centre: modify the default value by giving `120.`
- Z centre: modify the default value by giving `120.`
- Radius: modify the default value by giving `50.`

Validate the creation of the zone by the button « `OK` ». Back to the creation of an hypothesis. The zone `Zone_2` is added to the list. Check the column « `Refinement` » for this zone. Unchek all the columns for the zone Zone_1.

Validate the creation of the hypothesis by the button « `OK` ». The window of the creation of a new iteration is back. The hypothesis `Hypo_2` is included in the list of hypotheses

Validation of the iteration

Validate the creation of the iteration by the button « `OK` ». Under the case `Case_1`, the iteration `Iter_2` is added to the object browser with an icon meaning that the iteration is not computed. The hypothesis `Hypo_2` is added under the tab Hypotheses in the object browser.

Compute the iteration

With the mouse, select the iteration `Iter_2`, then select the tab « `Compute and publish` ». The same comments as for `Iter1`.

5 Controls

Set apart date, the file that is produced in the working directory `I03/apad.03.bilan` must be identical to the file `test_4.apad.03.bilan` which is in the reference directory of the cases-tests.

If a dump python is made, the produced file must be similar to the file `test_4.py` which is in the reference directory of the cases-tests.