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New software version release announcement
Additional information for the CFD community
October 1, 2009

The new ANSA v13.0.2 has been released, encapsulating many features useful to the CFD community users

Important notice: For optimum functionality, ensure to start ANSA with the default CFD layout using the respective gui option, e.g. ansa64.sh -gui cfd .

ANSA v13.0.2 - What's new for CFD

General
- Added support of UG NX6 translation
- ISOLATE [BOUNDS] function that can isolate red or cyan bounds now also works for meshed Macros (not just FE-mod mesh)
- ISOLATE>LOGOS New function to isolate emboss logos on Faces - useful for defeaturing

TOPO
- New interface of FACEs>RM.LOGOS for automatic removal of LOGOS

MESH
Surface Mesh
- Function MACROs>CREATE [AUTO] for automatic Perimeter Joining available again
- Improved the speed of PERIMETERs>A.SPACING [CFD]
- PERIMETERs>A.SPACING [CFD] and MESH GEN.>CFD mesh now accept a minimum feature angle of 1 deg (instead of 10 in the past). This allows further mesh refinement of curvatures.
- Removed the field Accelerated Box from Size Boxes. Now ANSA identifies automatically if a Box is accelerated or not (depending on its shape)
- SHELL MESH>FIX QUAL and RECONS also fix Maximum length (in F11) violations
- Improved quality of reconstructed mesh when layers auto-connect
- SHELL MESH>FILL GAP [COONS] for FE-mod mesh, new interface and possible manual modification of corner points

Surface Wrapping
- Size Boxes are also taken into account by WRAP [Variable Length] for mesh size control
- Wrap [variable Length] and Contact Groups refine only down to the specified minimum length of the respective property

Volume Mesh
- New option of VOLUMEs>MAP [Thin Parts] specifically for thin solid geometries – It is faster and generates more orthogonal elements than plain MAP in these cases
- VOLUMEs>MESHV can now mesh Volumes with more than 1000 sub-volumes

MORPH
- MORPH>LOAD [Visible] now has widget what to load (Elements, Curves, Faces). Useful in order to load only the elements and not morph the underlying geometry, without having to RELEASE the elements from the Macros.

CFD_DECKS
- StarCCM output baffles are output uniformly oriented
- DECK STAR- Added AUXILIARIES>SOLVER INFO button where the user can specify which solver to work with StarCD or StarCCM, so that only the respective Property BC types are made available
- Tuned IDEAS *.unv file output for PolyFlow solver

Known issues resolved

General
- Fixed crash of ISOLATE>BAFFLES on WinXP

MESH
- Fixed problem with cases where layers could not auto-connect to the side mesh
- Fixed problems in WRAP [Variable Length] list window
- Fixed crashes in certain specific cases of A.SPACING [CFD]
- Fixed block situations of VOLUMEs>MAP

MORPH
- Morph Deformation parameter was not saved from Part manager Save of the Part that contained the associated Morph Boxes

CFD DECKS
- Fixed Fluent output problem of unexpected duplicate elements of shell meshes of more than 6 million shell elements
- Fixed UH-3D Input-Output
- Fixed Fluent .cas file input of double precisions files

ADDITIONAL
- Updated Documents : CFD Project Practices and Tutorials
- New Tutorial for OpenFOAM case setup: pipe bend
- New User Defined Functions:
    o Orient surface mesh of specific Volumes inwards for Layers preparation
    o Renumber Model – accelerated function with added option to start ID renumbering from a user specified value
- New option to start ANSA for RADTHERM using ansa64.sh -gui radtherm

For more details...
For details about the new software features, enhancements and resolved issues, please, refer to the "**ANSA v13.0.2 Release Notes**" pdf document, that can be downloaded separately and that is also accessible through the *Help>ANSA documentation index* menu bar option within ANSA.

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