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# New software version release announcement Additional information for the CFD community

December 9, 2010

The new ANSA v13.1.1 has been released with several new powerful features and important code corrections for the CFD community users.

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# ANSA v13.1.1 for CFD

The official software release is comprised by the latest ansa\_v13.1.1 that resides in the server at the time of this announcement.

These replace any pre-releases and files downloaded prior to this date (i.e. December 9th, 2010).

### Starting ANSA for CFD:

To get optimum functionality for CFD pre-processsing start ANSA in the recommended CFD-tuned mode either by:

```
<installation path>/ansa v13.1.1/ansa64.sh
```

which opens the ANSA Launcher window where you can select the CFD mode, or directly (if the launcher does not appear due to installation issues) by using the extra argument - qui CFD:

<installation path>/ansa v13.1.1/ansa64.sh -gui CFD

## Main new features introduced

# General

Improved lighting and contrast of graphics

# Meshing

- Surface Wrapping Self proximity refinement with the specification of Contact Group ID=0 for a PID
- Layers Proximity control with adjacent shell mesh that does not participate in layers generation
- Layers improved the adjustment of Layers along corners
- Layers when there are excluded or collapsed areas they are placed in a SET so that they can be traced by the user
- Batch Mesh added Hexapoly algorithm in Volume scenarios
- Significantly accelerated CHECKs>Penetration>Element Length for proximity refinement
- Acceleration and memory reduction of function VOLUMEs>FIX QUAL for quality fix of volume elements
- Several improvements in HEXABLOCK more accurate projections on geometry and improved selections
- Accelerated D.INFO for quality statistics
- New CHECK for Fluent 2D Deck CONS without BCs, identifying CONS that have no boundary condition type specified
- Improvements in the calculation of Fluent quality criteria
- Improvements in the behaviour of the windows of the Part Manager

For more details about the new software features, enhancements and corrections please, refer to the Release Notes document.



### Known issues resolved

- Fix in FEMTOPO [Select]
- Fix MESH GEN>BEST
- Fix in VOLUMEs>DEFINE [Auto Detect] leading to failure in volume detection in certain cases
- Fix in Cylindrical Size Boxes and Hexa volume algorithms which did not consider them
- Fix in VOLUMEs>CONV2POLY leaving open cells
- Fix in VOLUMEs>MAP
- Fix in VOLUMEs>VOLUMIZE leading to crashes
- Fix in LAYERS
- Fix in the legend displaying wrong number of violating elements
- Fixes in I/O of Fluent, StarCCM and OpenFOAM

For more details about the new software features, enhancements and corrections please, refer to the Release Notes document.

# Compatibility

ANSA files saved by version 13.1.1 can be opened by version 13.1.0 but not by earlier versions.

# **Documentation**

# **Updated documentation**

- Updated ANSA v13.1.1 User's Guide
- A presentation with a short description of the new features can be found from Help>What's New>CFD category
- Updated CFD Project Practices document
- Updated Batch mesh for CFD Tutorial
- Two New CFD tutorials for Surface Wrapping and Morphing with 2D Boxes

# **Download**

#### Where to download from

Customers who are served directly by BETA CAE Systems S.A. may download the new software, examples and documentation from their account in our server. They can access their account through the user login link at our web site <a href="http://www.beta-cae.gr">http://www.beta-cae.gr</a>. Contact us if you miss your account details. The [ Public ] link will give you access to the public downloads area.

Customers who are served by a local business agent should contact the local support channel for software distribution details.

Those who receive the software from our server may follow the instructions bellow:

#### What to download

For the installation of the software on each platform type the following are needed:

- the tar file with the respective platform name (e.g. Linux, IBM-AIX etc.), or the respective zip file for Windows and
- 2. the "common" .tar or .zip file
- 3. the "tutorials and examples" .tar or .zip file

Previous software releases can be found in the sub-directory called "old".

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For more details contact:

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