

ANSA & µETA v15.2.1 release announcement December 23rd, 2014



BETA CAE Systems S.A. announces the release of ANSA & µETA v15.2.1



About this release

BETA CAE System S.A. announces the release of v15.2.1 of ANSA / μ ETA pre- and post- processing suite. This maintenance release focuses on the correction of identified issues but important enhancements were also incorporated into it. The most noticeable issues resolved are listed by category below.

Contents

Understanding the Software Release Schedule Enhancements and known issues resolved in ANSA Enhancements and known issues resolved in µETA Compatibility and Supported Platforms Download Documentation

Understanding the Software Release Schedule

The plan

We are committed in delivering improved and enhanced software releases, the soonest possible, in order to meet the requirement of our customers for the continuous improvement of their experience and work. Therefore, we are working in releasing new software versions with code corrections, new software features and enhancements, in regular, frequent intervals.

- A major software version is released every year.

- First point releases, such as v15.1.0, v15.2.0 and so on, with code corrections but also with additional software features and enhancements are released every three months.

- Second point releases, such as v15.2.1, v15.2.2, v15.2.3 mainly with code corrections only upon their parent first point release, are scheduled on a monthly basis.

Each software release is accompanied by a detailed description of the introduced corrections and/or additions so that our customers can decide whether it is critical to implement this release in their environment.

This release

This release of v15.2.1 implements enhancements and code corrections on v15.2.0.

Enhancements in ANSA

CAD Translators

Creo 2.0 M120 files, are now supported, according to the updated CT_204_SP3 library which is included in version 15.2.1.

Known issues resolved in ANSA

General

When using "Save visible as", invisible properties, materials, and nodes would be also saved.

GUI

Issues with shortcuts have now been fixed.

Compare

When Applying Similarities/Differences, unexpected termination could occur when frozen faces were involved.

Mesh

Compatible: Selecting two or more unconnected areas as target area could result in unexpected termination. Reconstruct: Frozen hole zones would not be respected and flanges would not be identified by proximity.

In certain cases, after applying Reconstruct, Nodal thickness was assigned erroneously. Reconstruct would not be applied at once to more than one closed areas.

Reconstruct/Smooth: Canceling the procedure when in preview, resulted in erroneously altered Rigid Body entities when the "Freeze Line elements" option in the Mesh parameters was inactive.

Batch Meshing

In certain cases, when linked faces exist, applying Batch mesh could result in unexpected termination.

DECKs

Output: When exporting TAU files, there was no warning for over-writing an already existing file. Outputting entities from lists did not include essential references for their definition.

PAM-CRASH

Input: A CNODE could not be created or changed from an existing NODE. Thus, during input, CNODEs were changed to NODEs. Output: The start and end Part-ids was not correct within a GROUP defined as a range of Part Ids.

RADIOSS

Auxiliaries: Subsets could not be added as contents of includes.

ANSYS

Load Step Manager: For each Load step only the LOADs and CONSTRAINTs defined on the step could be illustrated.

OpenFOAM

The Determinant Mesh check could return erroneous results.

RadTherm

The Modify function was not applied correctly resulting in outputting erroneous Temperature properties.

Optimization

The "VALIDATION_RUN" task item update failed to correctly call ANSYS in batch mode.

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

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Enhancements and known issues resolved in µETA

Enhancements in µETA

Supported interfaces

FEMZIP: Support of FEMZIP-Nastran version 1.4.12.

Pam-Crash: Support of Pamcrash 2014 element types HEXA20 and PENTA15.

THESEUS-FE: Support of the keywords EBC_R, EBC_J, EBCUO, EBC_U, THICK and GAPFC of the E-Coating simulation module.

Toolbars

Occupant Injury Criteria: Support of BioRID-II dummy for Rear Impact and of WS-50 Version 3.x dummy.

Known issues resolved in µETA

Supported Interfaces

ABAQUS: Input files with the DSLOAD keyword could not be loaded.

Animator: Unexpected termination might occur when loading an .a4 Database containing groups from nodes.

ANSYS: Nodal non-linear results would not be calculated for middle nodes.

OpenFOAM: Unexpected termination might occur when reading FEMZIP-compressed files.

Pamcrash: Acoustic Nodes of ERF files, and consequently the elements that referred to them, were not displayed. Permas: Property ids would differ to those of ANSA so, as a result, the model hierarchy would be read incorrectly. SC/Tetra:Unexpected termination could occur when reading vector results. Universal files: Scalar results of BEAM elements could not be read.

NVH Calculators

Zero responses generated by the Modal Response tool. The connection Forces in TPA DNA plots were not calculated by the FRF Assembly tool.

Parametric Point Paths

No-value elements would, incorrectly, contribute to the stress linearization calculation.

Automation

Unexpected termination when running script lines directly in a User Toolbar button.

File Export

Vector components were not exported in .csv files.

Project

Project files were unreadable if window names contained utf8 characters.

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

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Compatibility and Supported Platforms

ANSA files saved by all the first and second point releases of a major version are compatible to each other. New major versions can read files saved by previous ones but not vice versa.

The .metadb files saved with μ ETA version 15.2.1 are compatible and can be opened by earlier versions of μ ETA.

Support for 32-bit platforms has been discontinued for all operating systems.



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 on our server. They can access their account through the "user login" link at our web site http://www.beta-cae.gr 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.

What to download

All files required for the installation of this version reside in the folder named "BETA_CAE_Systems_v15.2.1" and are dated as of **December 23**, 2014. These files should replace any pre-releases or other files downloaded prior to that date.

The distribution of this version of our pre- and post-processing suite is packaged in one, single, unified installation file, that invokes the respective installer and guides the procedure for the installation of the required components.

For the installation of the software on each platform type, the.sh installer file residing in the folder with respective platform name, for Linux and MacOS or the respective .msi installer file for Windows, 64bit, have to be downloaded.

In addition to the above, optionally, the µETA Viewer is available to be downloaded for each supported platform.

The tutorials and the example files reside in the folder named "TUTORIALS". This folder includes the complete package of the tutorials and example files, and a package with only the updated ones.

The Abaqus libraries required for the post-processing of Abaqus .odb files are included in the installation package and can be optionally unpacked.

Earlier software releases are also available in the sub-directory called "old" or in a folder named after the product and version number.



Documentation

Updated ANSA tutorials

- Basic ANSA
- Solid mesh assembly
- Middle surface extraction
- Batch Mesh
- Batch Mesh for Solid
- Hexa solid meshing

Videos

A new folder with videos has been made available on our server for download. The videos are also available on our Youtube channel.

New material for Optimizations by employing the TOSCA-ANSA Environment

A new package has been uploaded on our server including:

- Guides on Optimization in ANSA-TOSCA Environment (TAE) and on hot to define TOSCA keywords.
- A video demonstration of the TOSCA-ANSA environment.
- A white paper on a "Topology and Shape optimization within the TAE" case.
- Tutorials and the files for Bead, Shape, and Topo optimization.

