



March 16, 2021

## BETA CAE Systems announces the release of the v21.1.1 of its software suite

### About this release

BETA CAE Systems announces the first bug-fix release for ANSA/EPILYSIS/META and KOMVOS, hosting numerous fixes in recently detected issues.

Follows a selection of the most important items:

### Contents

- Known issues resolved in ANSA
- Known issues resolved in EPILYSIS
- Known issues resolved in META
- Known issues resolved in KOMVOS
- New Documentation in ANSA
- New Documentation in META
- Compatibility and Supported Platforms
- Download

### Known issues resolved in ANSA

#### General

In case the "Offsets and conflict resolution" policy for a category is set to "Offset", the resolution of conflicts between defined/undefined and undefined/undefined entities will now be effectively enabled, before offsets are applied. This is achieved thanks to the successful introduction of ANSA.defaults setting "Conflict resolution for offset mode", affecting the behavior of both File > Merge and File > Input, as well as all DM > Load functions.

#### Compare

ANSA could terminate unexpectedly, when the Compare Tool was executed on 2 models, in 2 windows, via script -in specific, via `base.CompareTool()` or `base.Compare()`.

## Data Management

Unexpected termination could occur under Compare Tool > Compare selected items function of DM Browser, when the option "Overwrite current model" was by default activated in the Input/Merge Parameters settings.

## Connections & Assembly

Unexpected termination might occur when selecting as connectivity of a GEB or Connector a Model Container with hundreds of thousands elements, having the "highlight " mode enabled.

## Shell Mesh

Unexpected termination could occur when the Collapse Small Heights function, under Mesh Generation menu, was used in large STL models.

## Volume Mesh

The generation of tetra Layers is now sped-up by approx. 80 %. On top of that, cases where Layers generation would create hanging edges with the side area have now been fixed.

Furthermore, under the broader area of Structured Mesh, the Map function now correctly creates solid elements in light volume representation and ANSA will not unexpectedly terminate during Volume Meshing on machines with many threads.

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

## Known issues resolved in EPILYSIS

### Elements

Differences in Eigenmodes would be produced due to the CQUAD8 bending curvature evaluation, whereas -focusing on SOL103- differences in Eigenmodes would be produced due to the CTRIA6 with deleted edge nodes.

### Contacts

Wrong displacements would be output for constrained nodes with enforced displacements for intermediate load steps with NLPARM >INTOUT = ALL/YES.

### Output Results

If elements of a fluid solid mesh consist of grids with the same coordinates, a fatal error would wrongly be issued and the elements would be listed in the .f06 file.

SPCFORCES and MPCFORCES resultants would be incorrect in case of a grid with CD.

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

## Known issues resolved in META

### General

Several Settings issues have been resolved, including:

Certain unit systems in FRF Assembly and in Modal/FRF Correlation were not stored in META.defaults correctly.

Unit settings from "Results" card and "Global Unit System " were not saved in META.defaults at all.

Modal Response unit systems and "Nodal Local System" setting, as well as CORD2R settings in "Modal Model Builder", would not be updated correctly from META.defaults.

Settings in Read results tab would reset to values different from the ones saved in META.defaults file via Ctrl+N.

In a similar manner, the "Ignore Failed Elements" option would not reset to the default value when Ctrl+N was pressed with the "Reset Settings" option enabled.

### Collaboration Tool

META would not allow full include sharing of Pam-Crash models, while in Collaboration.

## Graphics

Hardware acceleration is now functional, when launching ANSA/META via XRDP.

## Read Results

Template Manager would terminate unexpectedly, while loading Nodal Point Stress results from an ADAMS .res file.

## Math Operations on Field Data

Unexpected termination occurred when performing Linear combination > Fourier transformation on 3D results after Ctrl+N.

## Report

Focusing on Statistics, upon the creation of a report in PDF format, the .metadb would fail to be included as 3D model.

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

## Known issues resolved in KOMVOS

### Data Management

Under Product Tree Editor > Input model definition, users can now distinguish whether to keep the current ANSA units or the units of the input file, thanks to the new " Units " setting. As a consequence, the ANSA units and transformation matrices will be converted accordingly.

### Machine Learning

The speed of the feature extraction process for feature-based Machine Learning training has been accelerated. Specifically, time requirements have been reduced by 5-10", depending on the size of the models.

In addition, it is now possible to successfully see and save predicted results as Key/Value Reports in My Experiments list of the DV Based Prediction window.

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

## New Documentation in ANSA

### Plugins

- ECAD Importer

### Tutorials

CFD:

- Optimization with ANSA OpenFOAM

## New Documentation in META

### Toolbars

Crash and Safety:

- Human Body Models Post
- EU-NCAP Far Side

NVH:

- Bush Sensitivity
- RSS dB(A)

## 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.

META Project files saved from version 21.1.1 are compatible and can be opened by META version 16.0.0 or later. To be readable by META versions earlier than v16.0.0, they have to be saved selecting the option "Version 16.0.0" or "Version <16.0.0".

Support for Mac OS has been discontinued.

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

## Download

### Where to download from

Customers who are served directly by BETA CAE Systems, or its subsidiaries, may download the new software, examples and documentation from their account on our server. They can access their account through the "sign in" link at our [web site](#).

Contact us if you miss your account details. The Downloads menu items give you access to the public downloads.

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 folders named "**BETA\_CAE\_Systems\_v21.1.1**" and are dated as of **March 16, 2021**. 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, download from the respective folders, the .sh file for Linux or the .msi file for Windows.

In addition to the above, optionally, the META 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 "Previous\_Versions" or in a folder named after the product and version number.