February 28, 2023

BETA CAE Systems announces the release of the v23.0.3 of its software suite

About this release

In v23.0.x series we continue pursuing further improvements in the quality of our software products and maximizing the benefit from the integrated tools and processes.

The new release provides an upgrade of our suite and is a representative example of how you can leverage our software to further improve user experience in daily tasks.

Follows a selection of the most important items:

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

Known issues resolved in ANSA

CAD Import/Export

The META Viewer would only interact (e.g., Show, Hide, Show only) with the tab of the Product Tree Editor that was active when the viewer was launched.

CAD to ANSA Translators

In the case of consecutive runs of CAD to ANSA process, an erroneous indication regarding the currently active runs might have led to partially incomplete translation.

Modular Run Management

Focusing on performance, considerable speed-up of up to 3 times has been achieved upon opening the Renumber Tool in models that contain Subsystems with per-type numbering rules, as well as in functions that modify the contents of Subsystems by adding or removing entities. The latter improvement is particularly noticeable in the Copy functions of the Database Browser lists.

Connections & Assembly

Adhesive faces imported through .xml files would generate redundant property items.

FE Representations

Focusing on PENTA-CONTACT-ON-SOLIDS, when realizing the FE Representation, penetration values defined in the corresponding field would lead to unexpected termination of ANSA.

Shell Mesh

Abrupt termination might have occurred when quad element type (Pattern [4 Sided]) was applied on a macro with neighboring unmeshed and frozen macros.

Volume Mesh

As for the Structured Mesh and, specifically, for Layers, it would not be possible to assign different Growth Factors to different Properties.

As for the Volumes and specifically for Conv2Poly function, negative Volume elements would be generated at the interface between Unstructured and Structured Mesh.

Decks

Applying Renumber [Edit] function would lead to unexpected termination in Abaqus and Pam-Crash solver interfaces.

LS-DYNA

Several cases regarding the Input/Output process have been addressed, as follows:
- ANSA would cease to respond during the input of LS-DYNA solver files that contained both ANSA and FATXML comments.
- Reading files with *INCLUDE_TRANSFORM, carrying negative offset IDs, could lead to unexpected termination.
- Parameters with names from 9 to 19 characters would be rejected, despite having a valid LS-DYNA long format.

Regarding Isogeometric analysis, IGA shell element areas inside Ortho Morphing Boxes would not get affected upon the execution of the Morph Box Morphing [Move].

Task Manager

Running TOSCA Structure Task would not lead to correct identification of TOSCA Structure of version 2022 and onwards, affecting the application of the Task through ANSA.

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

Known issues resolved in EPILYSIS

Performance

A significant speed-up has been achieved in cases where multiple RESVECS were requested. In specific, requesting RVDOF in 900 DOFs, the time spent went from 2h:40m to 25m.

SOL200

Unexpected error would occur in the sensitivities calculation of an MFREQ subcase with zero load.

Furthermore, abrupt termination would take place when DRESP2 referenced more than 1 DREPSP2 responses with function MATCH and method BETA.

SOLUTION TYPES

EPILYSIS would stop operating when single node CBUSH1D elements existed in the database.

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

Known issues resolved in META

Handling Entities

META would unexpectedly terminate, when feature selection was used on tetra or penta elements, or when feature selection was used and a new model was read.

NVH Calculators

In some cases where the maximum frequency requested in FRF Assembly was the same as the maximum frequency in a UNV file with Transfer Functions of a component, META would not allow the FRF Assembly calculation to proceed, reporting erroneously that the frequency range of the respective UNV file is smaller than the frequency request.

Nastran

Fatigue results from .hdf files could not be interpreted at all and geometry from .nas files could not be successfully read on Windows OS.

Vectors for Aux Forces of BEAM elements, read from punch files, would not be drawn correctly.

Abaqus

META could not recognize Abaqus libraries in Linux local installation.

Vectors direction of uniformly distributed gravity loads would not be correct.

LS-DYNA

Cross section planes would not be transformed properly, whereas vector tensor results for solids would be read incorrectly.

FEMZIP: META would cease to respond when switching to Results tab, in case of adaptive remeshing.

Identification of Entities and Data

META would abruptly terminate when identifying distances between empty groups via iDist function.

Data Management

It was not possible to read geometry from a .metadb file.

META Viewer

Error messages and unexpected termination could take place when importing project .metadb files.

User Toolbars

As for the Squeak and Rattle Toolbar, unexpected termination could occur when selecting Contact Plane Force Component in Dynamic Squeak Mode.

Topology Optimization Toolbar: Geometry from .h3d files would not be successfully read.

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

Known issues resolved in META

SPDRM client

When an application, registered through the SPDRM Administrator Console, was configured to use a wrapper command with no arguments, KOMVOS could erroneously fail to launch this application on File Edit or through the Applications Launchpad.

Process Management

Name of input slot with space characters would be erroneously allowed within Process Design.

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

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 23.0.3 are compatible and can be opened by META version 16.0.0 or later.

Support for Mac OS has been discontinued.

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, 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 on our website.
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_v23.0.3"** and are dated as of **February 28, 2023.** 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.