



March 22, 2023

BETA CAE Systems announces the release of the v23.1.1 of its software suite

About this release

The new version 23.1.1 of ANSA, EPILYSIS, META, KOMVOS and FATIQ is now officially available.

The first bug-fix release of 23.1.x series comes with a wide range of upgrades and performance enhancements, offering numerous new capabilities to accelerate your processes, and reduce modeling tasks complexity.

Follows a selection of the most important items:

[Known issues resolved in ANSA](#)

[Known issues resolved in EPILYSIS](#)

[Known issues resolved in META](#)

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Known issues resolved in ANSA

GUI

Real time performance upon mouse-hovering is now achieved. A representative example is the acceleration in the "Dynamic" selection mode of the Measure.

CAD Import/Export

Regarding Input model definition, the performance of parsing JT files has been accelerated to half the operating time.

Moreover, in case of consecutive runs of CAD to ANSA process, an erroneous indication for the currently alive runs might have led to partially incomplete translations.

Modular Run Management

The Lifecycle Graph for Simulation Runs would not be correctly drawn in cases of links based on the history links of the contained Simulation Model and Loadcase.

TOPO

The creation process of Curves could lead ANSA to freeze, when "Draw shell as solid" was activated.

Shell Mesh

Abrupt termination could occur when Quad element type (Pattern [4-Sided]) was applied on a macro area with neighboring unmeshed and frozen macro areas.

Regarding 4-Sided Patterns, significant improvement on preserving the initial curvature of FE surface mesh while remeshing, has taken place.

Volume Mesh

As for the Structured Mesh and, specifically, Extrude [Offset], the function would produce duplicate elements when the "Both sides" option was used for Direction.

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

DECKs

ANSA could cease to respond during input of LS-DYNA solver files that contained both ANSA and FATXML comments.

Focusing on Results Mapper, unexpected termination could occur during the mesh alignment when manual positioning, interactive manipulation, of source data for a USER format file.

Concerning Renumber [Edit], unexpected termination would occur in Abaqus and Pam-Crash solver interfaces.

ECAD Importer Plugin

The performance of trace mapping is now significantly improved. An overall acceleration of up to 5 times has been tracked for typical ECAD cases.

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 overall time was reduced from 2h:40m to 25m.

Calculation

EPILYSIS would stop operating in case of NSM on 2nd order shells with deleted nodes.

Furthermore, unexpected termination would occur in machines with very large memory, when "IN ANSA" option was used to run the solver.

SOL200

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

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

Known issues resolved in META

Read Results

"Time" abscissa for transient results in .h5 files would not be read correctly.

Geometry from .nas files could not be read on Windows OS, whereas strain scalar results from NX-Nastran were not read properly.

Unexpected termination could occur when reading ParaView VTK files.

More cases, focusing on LS-DYNA:

- Cross section planes would not be transformed properly, whereas vector tensor results for solids would not be read correctly.
- Results from binout files with double precision would not be read as expected.
- As for FEMZIP, META would cease to respond when switching to Results tab, in case of adaptive remeshing.

TAITherm

META would hang when reading geometry results from files located on network drive on Linux OS.

NVH Calculators

Focusing on FRF Assembly, in case the TPA input files for forces and transfer functions contained data at 0Hz with zero values, connection forces, transfer functions, and point mobilities were not displayed for any frequency.

Regarding Modal Response, Structural Modal Participation plot settings were wrongly taken from the corresponding fluid participation settings instead of the structural and Modal Response results in normal direction. Now they are correctly calculated in both 2D plot and 3D labels.

File Export

Saving curves in ISO TS13499 format was not operating properly in versions 23.0.x and 23.1.0.

Failed elements were not saved as expected, when exporting a .d3plot file.

Erroneous values for Rigid Elements were written during output of Stress results in .unv files.

Project Files & METADB

Calculation of Major Principal Strain result for solid elements was not correct when the primary Strain results were stored in a METADB file.

Data Management

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

User Toolbars

Toolbar packages generated from the BETA Packager Installer would not work properly, due to changes in how META executes Python scripts through the "read session" command. .

As for the 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 KOMVOS

Modular Run Management

During import of solver keyword files such as Subsystems or rich Library Items, the DM header section might erroneously fail to be added or updated.

SPDRM client

KOMVOS would fail to connect to an SPDRM server through HTTPS, in case SSL was enabled on the server.

Machine Learning

Mode Classification would not be possible for Simulation Runs of result files with different names.

Script Editor

Functions help was not available in a KOMVOS instance of a full BETA Suite installation.

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

Known issues resolved in FATIQ

Several critical issues resolved in FATIQ v23.1.1.

FATIQ is offered as part of the BETA CAE Systems suite. Download and try the new FATIQ. Request to have this license feature added to your BETA suite license key, of this has not been added already.

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 23.1.1 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_v23.1.1**", "**KOMVOS_v23.1.1**" and "**FATIQ_v23.1.1**", dated as of **March 22, 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.