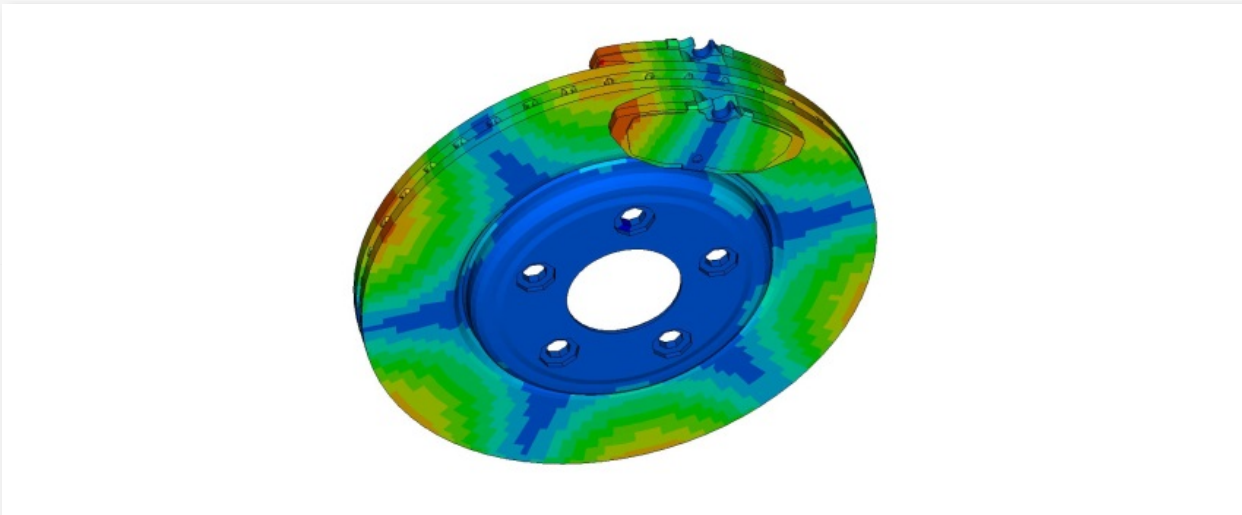


October 1, 2019

BETA CAE Systems announces the release of the v20.0.1 of its software suite



About this release

BETA CAE Systems announces the release of the ANSA/EPILYSIS/META v20.0.1 series.

Apart from fixes for detected issues, this version also hosts noteworthy enhancements and implementations.

The most important enhancements and fixes are listed below:

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Enhancements and known issues resolved in ANSA

Enhancements in ANSA

Model Browser

It is now possible to open, merge or replace Parts and Subsystems between different ANSA models using drag and drop operations from the Model Browser of the source model, to the drawing area of the target model.

New functionality has been implemented to facilitate the handling of Subsystem instances in the Model Browser. Two Subsystems are considered as instances when they have the same Module Id. With the new Actions of the context menu, it is possible to:

- Identify instances: All instances of the selected Subsystems will be selected.
- Connect instances: Selected Subsystems will be connected as instances, with the Module Id of one being assigned to all.
- Break instances: The Module Ids of Selected Subsystems that belong to the same chain of instances will change, so that the chain is broken.

Topo

It is now possible to form a fillet between two CONS or Curves, providing the radius (R) as input.

Volume Mesh

The robustness of Layers auto-connection to side quads has been improved, whereas polyhedral conversion upon execution of Conv2Poly function now requires less memory.

An improved algorithm, removes now unnecessary element splitting and refinement along PID boundaries, different element type boundaries, and feature lines, when prism layers exist. This algorithm results in significant cell count reduction of the final polyhedral mesh.

Known issues resolved in ANSA

Shell Mesh

Upon the execution of mesh functions, such as Improve [Reshape] / [Reconstruct], [Instances > Break] or Batch [Re-Generate], Holes zone treatment would occasionally fail.

Batch Meshing

Holes zone would not be created on oval holes, whereas Defeaturing would not work in cases where Stamps' treatment was active, under Mesh Parameters > Features.

Laminates

Upon the execution of Laminate Tool > Generate Report, images of layers of solid laminates in volumes would not be displayed correctly, when the Create PNG flag was activated.

Material DB

Reading of material databases through the Read DB > All Files From Directory option could lead to unexpected termination.

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

Enhancements and known issues resolved in EPILYSIS

Enhancements in EPILYSIS

SuperElements

K42GG case control command is now supported.

Known issues resolved in EPILYSIS

Output

The Modal coupling matrix for FSI requested by PARAM,POSTEXT,YES would not be printed, in case there was no viscous damping in the model.

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

Enhancements and known issues resolved in META

Read Results

Diadem i16 format is now supported for Curves.

ERF

It is now possible to read every custom FPM result from an ERF file.

Modal Model System Energy Participation Factors per system mode results, calculated by EPILYSIS, are now read in 2D curves while the corresponding participation graphs are created. EPILYSIS can also calculate these results, by adding the respective keyword in Header. The EPILYSIS result output are the modes of the system, as well as the Modal Model System Energy Participation Factors per system mode.

Pedestrian User Toolbar

A new setting named "Session when searching for results" has been added under the Settings tab. This session script can use the information from the automatically set variables NO_OVERLAY_pedestrian_targetpoint_name, NO_OVERLAY_pedestrian_fullname, search any extra information in the results files (e.g. info in d3hsp, message files) and store it in variables with names NO_OVERLAY_pedestrian_search_extra_XXX.

Known issues resolved in META

Modal / FRF Correlation

MAC calculations might be incorrect when reading ANSYS complex modes results.

Modal Response and FRF Assembly

Unexpected termination would occur when requesting multiple 3D animation results from the FRF Assembly tool.

Unexpected termination could also occur in the Modal Response tool, when requesting response on a non-existing set.

Decks

Unexpected termination could occur when reading an ANSA Include with more than 200 characters length for the Radioss solver.

Unexpected termination could occur when attempting to read specific PIDs of a STARCCM+ file

Project Files & METADB

Unexpected termination could occur when loading METADB with lossy compression.

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 20.0.1 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".

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

New documentation

Tutorials:

Decks:

- Skin creation

NVH Console:

- Create Components and Reduced Modeling
- Create Connectors
- Loadcase Manager
- Post-Processing
- Additional Features

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 "user login" 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 folder named "**BETA_CAE_Systems_v20.0.1**" and are dated as of **October 1, 2019**. 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 "old" or in a folder named after the product and version number.