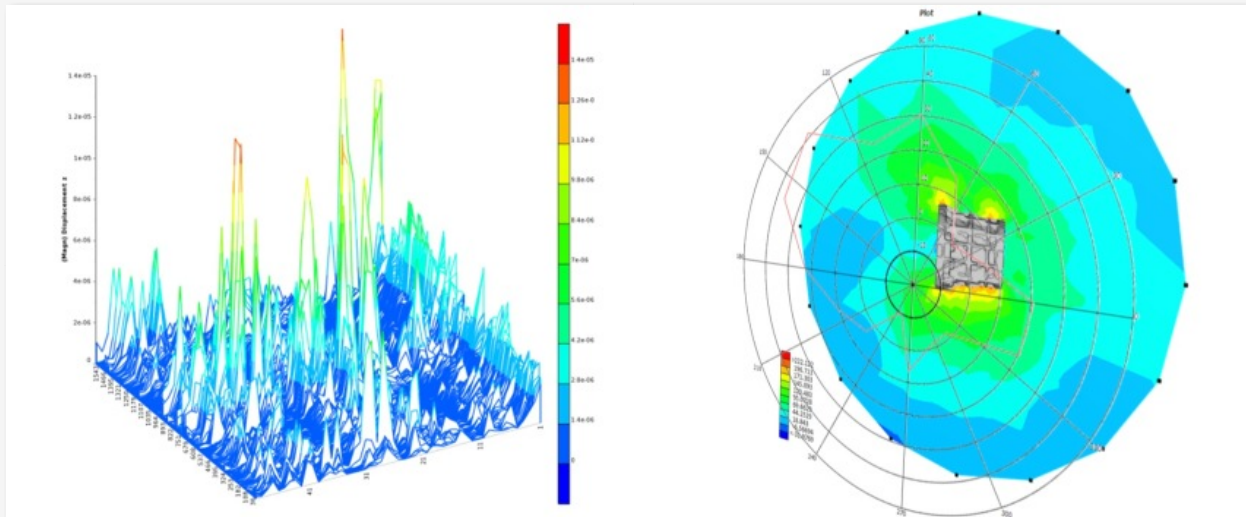


July 18, 2016

BETA CAE Systems announces the release of the v17.0.0 of its software suite



About this release

BETA CAE Systems announces the release of the new ANSA / EPILYSIS / META v17.0.0 suite. Loyal to our commitment to deliver best-in-class software, we achieve our goal by providing complete solutions in the CAE field, as an on-going effort to significantly facilitate and accelerate the CAE modeling process.

As with every major release, a broad range of new features and enhancements to existing ones add value to our solutions, reinforce overall process consistency, accelerate user performance, and provide a considerable boost on productivity.

The highlights of our new software solutions are listed below.

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Enhancements in ANSA

Data Management

New data types in the Model Browser have been added. With the new entities, **Simulation Model**, **Load-case**, and **Simulation Run**, the set-up of solver runs (main files) is further facilitated.

Connections and assembly

Several new FE representations for spot-welds and seamlines, as well as for bolt models, such as the **SOLID-WELD**, **SPR-RIVET**, and **PRESTRESSED ABAQUS BOLT**, significantly accelerate the model build up phase and reduce the human error factor to the minimum.

Solutions for Durability Analysis

A new Plugin item, named **Test Impactor Positioner**, has been added to simulate the positioning of a test device onto defined target points. This offers significant Output options related to target points, a defined SET item or even transformation cards (NMAP etc).

Laminates

A brand new algorithm, **Laminate Convert**, converts shell single elements to multiple shell/solid/tshell elements with various connection types. This tool comes as an addition to the already existing one, Volumize Composites, to offer a complete and automated solution to the laminates conversion process.

Morphing

Morphing capabilities are expanded with the addition of new tool called **Parametric Design Change** tool. With two main options, the **Cross Section** and the **Position**, constraints and flanges are automatically detected and modified accordingly, while smooth transition zones accelerate the mesh refinement process even more.

Kinetics

Significant boost in **Flex Body Simulation**, as deformable bodies are now included in simulations. Through wizards, the user can create new or convert existing bodies to flex.

Furthermore, the **Flex Tools Interface** allows the display, transformation, comparison or conversion of existing flex bodies or modal reduced bodies.

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

Enhancements in EPILYSIS

This version features a radical improvement in the stability and quality of Contact Capability, solved in SOL 400, NL-Static, as a small displacement formulation. There is a speed gain whenever Grid-Point Forces, Displacements and Element Strain Energy Data recovery is requested, throughout the available solutions.

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Enhancements in META

Assembly-Loadcase Points (A/LC Points)

A new tool handles and visualizes important nodes for assemblies and loadcasing. The tool also supports the automatic creation and listing of Groups of nodes based on their names read from ANSA comments or from NASTRAN Field 10.

Display Mesh

A new tool has been introduced for the creation or modification of 1D-element display models. The reduced model can be exported as a PLOTTEL model in NASTRAN or UNV82 format.

NVH Calculators & tools

The Modal Response and the FRF Assembly tools now support AVL Excite results in NASTRAN format and reading rpm information, order and excitation data when plotting curves.

The Modal Response and the Modal/FRF Correlations tools can now exclude residual modes from calculations, while the FRF Assembly tool can now perform load or sub-load participation analyses.

A new user-toolbar, named Directivity Plot, has been introduced to create directivity and intensity plots.

Managing Curve Data

3D (three-axis) Plot types are now available. The new plot types are Waterfall, Colormap and MAC 3D. Additionally, for 2D Plots a new plot type named Nyquist is available for plotting Real value X-axis vs Imaginary value Y-axis.

Project Files

META Projects now support saving the per-solver type module structure, e.g. PamCrash MODULE, Abaqus INSTANCE, RADIOSS ID POOL, etc.

Optimization

Three new User Toolbars are now available:

The Panel Thickness optimization, for processing NASTRAN SOL200 property thickness changes from .pch files. The Check Termination, for checking the termination status from Nastran SOL200 .f06 files. And SOL200 Plot, for creating design response, design variable, sensitivity, saturation index, design objective and max. design constraint curves from Nastran SOL200 optimization results from the .f06 or .csv file produced by the PARAM XYUNIT parameter.

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 17.0.0 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 & updated documents

New tutorial: ANSA / META for OptiStruct

New EPILYSIS Reference Guide

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 [PublicDir] 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](#) 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_v17.0.0**" and are dated as of **July 18, 2016**. 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 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.