

BETA CAE Systems S.A. announces the new v14.1.0 release
of the **ANSA & μETA** pre- & post-processing suite,
with new features and tools, enhancements and code corrections

BETA-CAE system S.A. announces the release of v14.1.0 of our ANSA & μETA pre- and -post processing suite. Additional new features and tools, and enhancements in the existing ones add up to our continuous effort to bring optimum solutions to CAE engineers' needs.

Enhancements and Known Issues Resolved in ANSA Pre-processing

Enhancements and Known Issues Resolved in μETA Post-processing

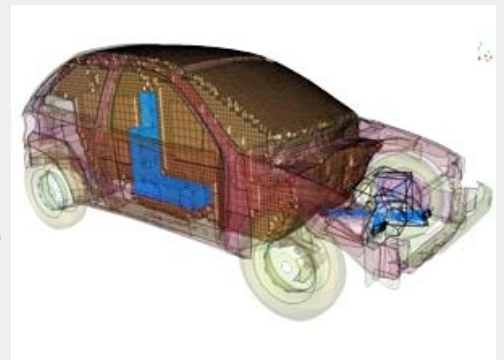
Compatibility

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Documentation

Enhancements and Known Issues Resolved in ANSA Pre-processing

- New function that enables the slide of a feature or a member with automated fit on the underlying surface
- *PARAMETER/ *PYVAR are now supported when importing LS-DYNA, Pam-Crash, and Abaqus FEA files. The parametric values can now be used instead of the absolute ones
- Tangential face extension and other significant enhancements allow for more accurate connectivity definition based on geometry and topology
- New CAVITY Mesh function for the creation of acoustic cavity mesh. Wizard interface, better recognition of structural surface features, and high quality tetrahedral or hexa-dominant volume mesh
- New function (SIMILAR GROUPS) enables the detection of group of faces/elements with independent connectivity and assigns groups with similar shape under one parent group enabling the fast and easy creation of Multi-Instances and Linked geometries
- New group of functions "Instances" is now supported and offer the options to select and highlight all parts of the same instance, to open parts of the same instance in a new window, and to convert the selected parts to Multi-Instances.
- Representation of faces' boundaries (CONS) in all drawing modes
- Automatic connectivity identification and definition for "self-welded" components and control of hole diameter per flange with a user script
- A new tool that creates transition zones between Hexa block boxes, using polyhedral elements, and a new function that splits Hexahedral boxes to pentahedral boxes
- FLUENT shell warping and solid orthogonality criteria are now supported
- New button for the "fringe plot" colour modes, for element thickness, load distribution, etc.
- Permas Sandwich materials are now supported
- NASTRAN MCOHE materials are now supported
- FEM Topology is now automatically performed between the chunks of the imported facets (strips) when translating JT files. No topology is applied between strips of different PID
- Enchantments in modifying DOFs/Weights and new option to redefine the Di and WTi of RBE3s
- Fringe mode for Abaqus *Film Boundary condition
- Results Map of multiple files in one mapper and ability to handle T junctions for composite parts
- GTK theme runs now on Ubuntu version 12.10 (or newer)
- Improved performance in CWELD CFAST drawing
- The *GENERATE option is now supported for sets containing ranges in Abaqus
- BC-GUI Designer is now supported for python scripting language
- The Laminate Tool's list loading time has been significantly decreased when reading laminates with many layers
- The Fluent based Sensitivity function has been added in Fluent Deck
- Support of Theseus AirZone and Volume under a new FLUIDs group (Fluid entities)
- Structural NSM can now be plotted with a fringe bar (for NASTRAN)
- Ability to Draw NSM per subcase (for NASTRAN)
- The Reference function for ANSA Parameters has been introduced
- Numerous new keywords for SESTR deck
- Ability to add Option AUXILIARY in Contact Card
- Contact entities can be defined as "Auxiliary" for better interpretation of deck files during Input/Output
- Contact simulations with FE, Geometry and standard shapes for the Kinetics MultiBody Dynamics Solver
- Addition of Animation controls, Consecutive time runs, and simulations history for the Kinetics Simulator
- Assistants for Joint, Forces guided creation for the Kinetics Module
- Handy tools in the Script Editor for indentation and searching



and more...

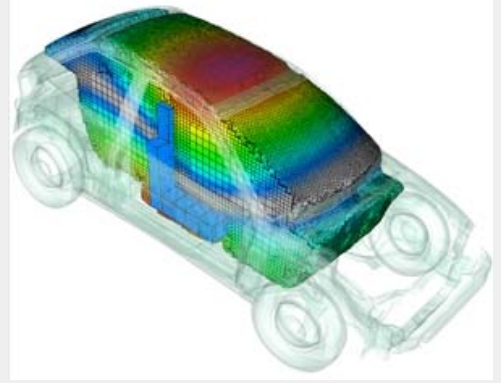
For more details about the new software features, enhancements and corrections please, refer to the [Release Notes](#) document.

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Enhancements and Known Issues Resolved in μETA Post-processing

New features & enhancements in μETA post-processing

- Significant improvements in graphics performance
- Periodic cyclic symmetry for CFD models
- LS-DYNA keyword *AIRBAG_PARTICLE for visibility and results is now supported
- LS-DYNA keywords *PART_COMPOSITE and *PART_TSHELL_COMPOSITE are now supported
- LS-DYNA composite results are now supported in the CompositePost toolbar



- NASTRAN axisymmetric elements CQUADX and CTRIAX are now supported
- NASTRAN SRS SOL103 results are now supported
- NASTRAN PFPANEL keyword is now supported for the response of structure DOFs
- NASTRAN ERP panel definition in bulk files is now supported
- SC/Tetra CFD code is now supported
- Horizontal fringe bars have been added
- Animated cut planes have been added
- Several enhancements of the 2D plot have been made
- Video and image distortion correction added
- Model hierarchy can be exported within 3dxml files
- Several enhancements in the user toolbars have also been made

and more...

Known problems resolved in META v1410

- Abaqus keyword *ORIENTATION for composite materials would not be read correctly
- Curves could not be created from ISO files
- Several fixes in the Spreadsheet Editor
- Several fixes in the user toolbars

For more details about the new software features, enhancements and corrections please, refer to the [Release Notes](#) document.

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Compatibility

ANSYS files saved with version 14.1.0 can be opened by v14.0.x but not earlier versions.

The .metadb files saved with μ ETA version 14.1.0 are compatible and can be opened by earlier versions of μ ETA

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Where to download from

Customers who are served directly by BETA CAE Systems S.A. 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 <http://www.beta-cae.gr>

Contact us if you miss your account details. The [Public] 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 for software distribution details.

What to download

All files required for the installation of this version reside in the folder named "**BETA_CAE_Systems_v14.1.0**" and are dated as of **April 9th, 2013**. 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 following files have to be downloaded:

- the .sh installer file residing in the folder with respective platform name, for Linux and MacOS, 32bit or 64bit or the respective .msi installer file for Windows, 32bit or 64bit, and
- the tutorial example files that reside at the top level of the folder of this distribution.
- In addition to the above, optionally, the μ ETA Viewer is available to be downloaded for each supported platform.

The Abaqus libraries required for the post-processing of Abaqus .odb files are included in the installation package and can be optionally unpacked.

Previous software releases can be found in the sub-directory called "old" or in a folder named after the product and version number.

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Documentation

Documentation is packed into the distribution package. After installation procedure, you will find html files that will guide you through the available PDF documents for ANSYS & μ ETA, including the Release Notes, the Users Guides, and tutorial instructions.

Updated documentation of ANSYS v14.1.0

Updated Users Guide and documentation

New Task Manager tutorial: Door Hinges stability ABAQUS Load cases

Updated documentation of μ ETA v14.1.0

Updated Users Guide and documentation

Updated CFD tutorial

Release Notes

Please refer to the Release Notes document for more details about the software corrections and the new features.

A detailed Release Notes documents are available in PDF in the download directory and also in the /docs sub-directory within the installation directory.

Tutorial files' availability

The demo files necessary to cover the tutorials' documentation for both ANSYS and μ ETA are available to be downloaded from the top level of this version distribution in the [Public] area.

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