Recent Happenings at VR&D

Nov. 2015

Recent Events

CAE 2015 Conference

The most recent event was the CAE Conference, sponsored by Eigensoft, in Verona, Italy. This event has over 1,000 attendees and over 160 presentations during the two days.

Dr. Garret (Gary) Vanderplaats gave a presentation on structural optimization. The title of his talk was: "Five Decades of Structural Synthesis: Some Reflections from a Disciple of Schmit." This paper is available for download on our website.

Vanderplaats R&D also attended:

ANSYS Convergence Regional Conference in Chicago, Illinois in May. VR&D was well represented, and had some great conversations.

In June, VR&D was pleased to attend and speak at ANSYS 2015 Automotive Simulation World Congress in Southfield, Michigan. At this event, Dr. Hong Dong gave a presentation titled "GENESIS Topology Optimization for ANSYS Mechanical."

Also in June, VR&D attended 2015 PME Technology Forum in Michigan. Mr. Juan Pablo Leiva gave a talk on VR&D's software offerings and uses. It was a very well attended event.

This September was the DEP 2015 Conclave in Southfield, Michigan. Dr. Phani Aduri and other staff members attended.

Upcoming Events

Large Scale Structural Optimization within ANSYS Workbench by Mr. Juan Pablo Leiva

The hour long webinar introduces VR&D's newest offering **GENESIS Structural optimization for ANSYS Mechanical (GSAM)**. GSAM is an integrated extension within ANSYS workbench that adds several large-scale optimization capabilities (like topology, topometry. topography, freeform) to the ANSYS Environment. With the extension, users can setup the optimization problem, optimize, post-processing, export optimized geometry all within ANSYS environment. GSAM uses the capability of GENESIS, a structural optimization program with a proven track record for solving large scale optimization problems efficiently. The webinar will offer a brief overview of GENESIS, the different types of optimizations available and will describe, the setup and solving of an optimization problem. GSAM is a superset of GTAM which is also an integrated extension to ANSYS dedicated to topology optimization.

*Advance registration is highly encouraged

Thursday December 10, 2015

11:00AM **New York** (GMT-0500)

04:00PM **London** (GMT)

05:00PM **Paris** (GMT+0100)

Click here to register

New Software Releases

GTAM Second Generation (Released Aug 2015)

The GTAM extension is available as part of a package that includes a license for the *GENESIS* topology optimization module. In addition, the extension is also available as a no-cost add-on for existing *GENESIS* licensees. This new release can fully utilize the power of the ANSYS solver for analyzing non-linear and transient problems.

"As companies look for new ways to create improved designs and to gain competitive advantage, optimization is playing an increasingly
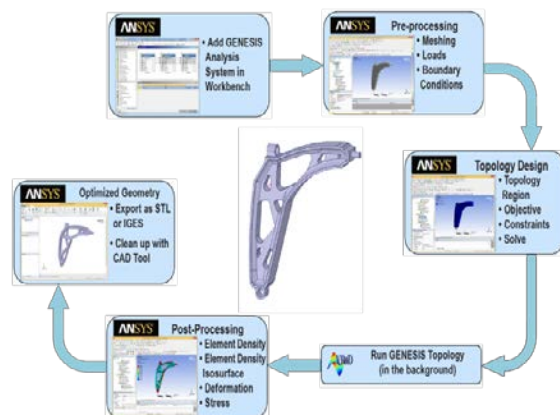
important role," said Dr. Garret Vanderplaats, founder and CEO of VR&D. "This software release - built upon our first generation GTAM and our best-in-class *GENESIS* structural optimization software represents a new and vital step forward in ease-of-use and functionality."

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New Features Available

* Use the of ANSYS solver for contact, non-linear and transient analysis
* Quick analysis results of interpreted topology results
* New fabrication constraints
* New objective and constraint options

Request your free evaluation of GTAM today!

GSAM (Released Nov. 2015)

GENESIS Structural Optimization for ANSYS® Mechanical (GSAM) is an integrated extension that adds structural optimization to the ANSYS environment. The extension provides an easy-to-use interface which allows the user to setup Structural optimization problems, post-process them and export the data within the ANSYS environment.

GSAM is a super set of GTAM (*GENESIS* Topology Optimization for ANSYS® Mechanical). GSAM can perform any function that GTAM does. The extra functionality is to perform topography, freeform, sizing and topometry design.
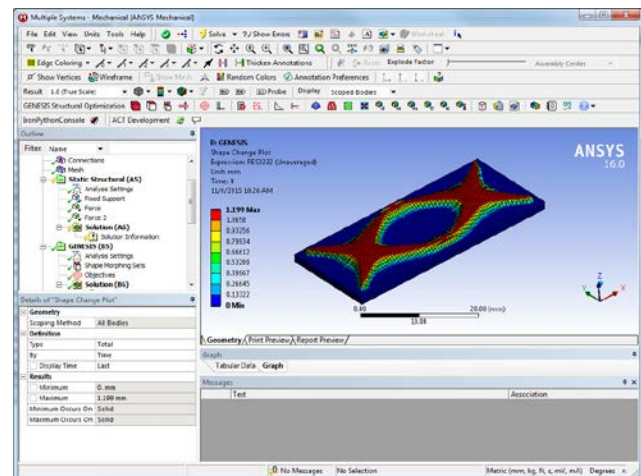
The main capabilities of GSAM are:

* Generate and edit design data for topology, topography, freeform, sizing and topometry optimization

* Solve topology, topography, freeform, sizing and topometry optimization with *GENESIS* running in the background

* Support multiple analysis systems including static structural, modal, linear buckling, harmonic, random vibration, thermal, and transient structural

* Use ANSYS solver for static (linear/nonlinear), transient, and thermal-static analysis. *GENESIS* is used as the optimization engine in this case.

* Monitor the optimization process

* Postprocess analysis and optimization results

* Export topology, topography, freeform, sizing and topometry optimization result as STL or IGES file

Request your free evaluation of GSAM today!

Recent Webinars

Did you know recordings of VR&D webinar's are available for on-line viewing?

- GENESIS Topology for ANSYS Mechanical: New Features - 15 Oct 2015 - Dr. Hong Dong
- Introduction to GENESIS Topology for ANSYS Mechanical - 25 Jun 2015 - Mr. Juan Pablo Leiva
- GENESIS v14.0: Current Capabilities and New Features - 26 Mar 2015 - Mr. Juan Pablo Leiva

For a complete listing of VR&D past webinars & access the recordings:

1. Go to http://vrand.webex.com

2. Click on the View Event Recordings link in the top right hand side of the page

3. Click on the Recording to view and follow the instructions for playback.

Happy Holidays!

From all of us at VR&D we'd like to take a minute to thank you for your support this year, and wish you a wonderful holiday season! We are grateful to all our clients, distributors and employees who make our company the best.

If you have any questions, or would like to get in contact, feel free to send us an email! We'd love to hear your feedback!