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Press Release: **MSC Nastran 2012 Takes Nonlinear to the Next Level**

SANTA ANA, CA--(Business Wire - August 2nd, 2012)

"MSC Software is delivering major breakthroughs in new physics and high performance computing in our latest solver technologies to accelerate simulations, reduce design cycle time, and increase productivity for our customers," said Ted Wertheimer, Director, Solver Product Management.

This new version of MSC Nastran gives engineers a highly functional, single solver to perform multidisciplinary analyses including linear statics, dynamics, and implicit and explicit nonlinear for simulation of everyday common to complex application use cases. High performance computing productivity and nonlinear robustness improvements were the focus of this latest release.

The Nastran 2012.2 release is available for immediate download at the MSC Software Solutions Download Center at <https://mscsoftware.subscribenet.com>.

Improve Fidelity of Nonlinear Simulations

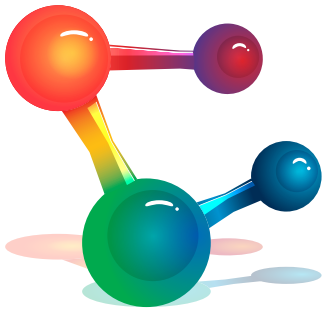
New methodology for contact detection through the new segment-to-segment approach improves the fidelity of contact analysis. Major enhancements also include implementation of non-symmetric stiffness matrix for sliding friction and finite sliding capability for deformable bodies. These significant improvements provide accuracy coupled with easy set up of contact analysis, helping users achieve higher productivity and accuracy.

Achieve Better Simulation Performance

Through collaboration with Intel, MSC Software enhanced MSC Nastran to take advantage of the Advanced Vector Extension (AVX) on Intel's Sandy Bridge processor on the Windows operating systems in addition to its support for Linux systems completed earlier in 2012. Users with this processor can automatically benefit with improved performance as the AVX is designed to help with numerically intensive applications such as MSC Nastran.

Accelerate Nonlinear Analysis

MSC Nastran's nonlinear analysis solution is capable of running analyses in both distributed and shared-memory parallel modes (DMP and SMP, respectively). This productivity enhancing capability is now available to execute nonlinear element stiffness, stress and force calculations, providing improved parallel scalability and applicability for a wider range of nonlinear applications. Improved I/O caching is also now implemented to reduce wall time for large engineering models.



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Enhancements to MSC Nastran's explicit solver's DMP technology also enable users to achieve significant performance gains for complex fluid structure interaction problems.

"Tire safety is of great importance and is a top design priority for Hankook Tire," says Mr. Joonyong Heo, Manager, Structure Analysis Research Team of Hankook Tire. "To predict the tire performance on wet surface conditions, a complex and CPU intensive fluid structure interaction application, we used MSC Nastran 2012.2 to run a tire model with approximately 2 million elements in a Distributed Memory Parallel (DMP) environment with multiple cores. The performance improvements of the explicit solver in MSC Nastran 2012.2 were impressive with more than 3X performance improvement."

For further details

visit <http://www.mscsoftware.com/Products/CAE-Tools/MSC-Nastran.aspx>.

About Compumod

First established in 1982, Compumod quickly became the name to trust for the supply and support of advanced computer aided engineering simulation tools throughout SE Asia. Relunched in 2010 Compumod is back, doing what it does best supporting the world's leading Engineering Analysis tools across Australia and New Zealand. Compumod's mission is to deliver state of the art Computer Aided Engineering tools and services to Australian and New Zealand businesses to help them achieve a competitive advantage and sustainable return on investment.

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