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**Comet Solutions Inc. Announces the Availability of the
Comet Performance Engineering Workspace v2010**

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Comet Solutions, Inc. announces today the immediate availability of Comet™ v2010 with new integrated modeling and process automation capabilities to enable customers to take advantage of product performance simulation results much earlier in the product design process starting with concept/proposal development and conceptual engineering trade studies.

“This release is a major leap forward in terms of providing a more mature, proven and broader offering to our customers and prospects,” states Mr. Malcolm Panthaki, Founder and CTO of Comet Solutions, Inc.

Major enhancements to Comet v2010 include:

- An enhanced graphical user interface which provides greater flexibility and transparency in defining complex, multi-disciplinary design analysis process templates within the Comet Workspace. In addition to an improved look and feel, the Process Schematic introduces enhanced data access capabilities, which allow users to pre-define a much larger list of specific result types expected from analysis applications.
- Full bi-directional support for SolidWorks® 2009 CAD geometry utilizing the Comet ActiveTag plug-in application which enables users to quickly and easily apply and manage functional “tags” to their design geometry for use in downstream design simulation processes. Comet also continues to support Pro/Engineer Wildfire® in this same manner.
- The ability to import native design geometry from CATIA® v4, CATIA v5, NX™/Unigraphics®, Autodesk Inventor® as well as in CAD-neutral formats of IGES and STEP.

- Copy and Paste within the Comet project - The ability to move data from one project or stage to another by copying an existing abstract model and templates and easily reusing this generic functional model in totally new projects or new stages within an existing project. Teams can quickly recreate and re-use their models in another Comet project by exporting it from one and importing it into another. This saves manual re-work and enables rapid use of engineering best practices across product teams as well as within integrated project team environments.
- The formal introduction of Abstract Constructors - Comet's Abstract Constructors support many types of standard modeling entities. An abstract constructor is a modeling tool used to automatically create new objects in Comet, based on functional "tags" attached to the CAD model. The Comet Abstract Engineering Model™ (AEM) finds them and automatically constructs these generic "building block" objects including assignment of any pre-defined properties. The type of objects that can be automatically created include meshing rules (for points and spider meshing), mechanical contact interactions (tied contact and regular contact, thermal contactors) and low fidelity objects such as joints, springs, bushings. Comet's automatic labeling feature greatly improves modeling efficiency and makes the abstract modeling capability much easier to use.
- Comet can run in 64-bit emulation mode interacting with codes such as Pro/ENGINEER®, Thermal Desktop®, MSC.ADAMS®, MATLAB® and FEA codes such as ABAQUS™, ANSYS® and NASTRAN® running in native 64-bit mode.
- Expanded integration with Thermal Desktop enables users to work simultaneously within both environments to leverage the Comet abstract modeling capabilities in the up-front thermal model definition and execution of complex thermal analysis processes. V2010 has more robust bi-directional adaptors with SigFit and CodeV® - analysis tools used in the design of advanced electro-optical instruments.
- FEA meshing enhancements based on the Simmetrix v7 toolkit such as:
 - Users can specify contact interactions such as tied contact/mesh meshing directly via the GUI. This local mesh control allows the specification of faces of separate parts to be meshed with nodes that are in the same spatial location for more accurate analysis results.
 - Improved mesh propagation control of the gradation of the mesh as it propagates from dense areas (small elements) to coarse areas (large elements).
 - Rigid body equivalent "spider mesh" capabilities now enable automatic loads transfer from an ADAMS Multi-Body Dynamics analysis directly into an FEA code for structural analysis.
 - Ability to perform mesh generation in parallel, using all the cores available on single and multi-CPU machines.

- Mesh quality-driven meshing allows users to specify the desired lower bounds on various mesh quality metrics, to automatically achieve the required balance between quality and number of elements.
- Improved quad meshing algorithm.
- Significant improvements in the reporting and handling of bad geometry.
- Fully integrated and automated, static and dynamic structural analysis process going from CAD to Multi-Body Dynamics (MBD) to FEA. The MBD model (with joints, low fidelity parts such as springs and bushings, and mass/inertia properties) is *automatically* generated from the tagged CAD model and supports both rigid and flexible-body analysis. Any subset of the overall model can be specified for static or dynamic structural analysis using an FEA code - all joint loads are *automatically* extracted from the MBD results and used in the FEA analysis. Comet's AEM takes care of all unit and coordinate system transformations that are required.

"Comet's Abstract Modeling allows the user to make radical changes to the geometry and configuration of the model and to re-analyze the changed model automatically. Customers have begun to measure significant productivity gains and reduced manual errors," says Mr. Malcolm Panthaki.

About Comet Solutions, Inc.

Comet Solutions, Inc. enables manufacturers to achieve a simulation-driven product development process guided by engineering intent--improving R&D productivity and reducing total costs. Comet software is an integrated conceptual modeling and collaborative process automation workspace in which engineering project teams evaluate design concepts vs. engineering requirements starting in the early stages of product definition and feasibility trade studies. Performing analyses rapidly through reusable, tool-neutral simulation templates powered by Comet's unique abstract modeling capabilities, engineers and designers gain insight into product performance much earlier in the product design process and make better informed decisions. With Comet software, companies exploit the full potential of their existing CAD/CAE/PLM tools and explore more design alternatives, enabling the rapid development and delivery of more innovative, higher quality, and cost-effective products.