

PRESS RELEASE Noesis Solutions Divis Intelligent Solutions Partnership

## New Divis partnership brings exclusive integration of ClearVu technology into Optimus

## ClearVu Analytics Modeler and Global Optimizer plug-ins further enhance Optimus' capabilities, performance and ease of use

Leuven (Belgium), January 31 - 2012 – Noesis Solutions and Divis Intelligent Solutions GmbH announce the integration of ClearVu Analytics Modeler and ClearVu Global Optimizer into Optimus. Exclusive access to both modules allows Optimus users to obtain highest response surface quality for any given application and tackle high-dimensional, non-linear global design optimization challenges quickly and reliably. The integration of Divis' industrial-proven methods into the Optimus platform for process integration & design optimization, allows manufacturers to design benchmark products faster, delivering higher margins, profits and market share.

Noesis Solutions' Optimus platform enables manufacturers to identify superior product designs, by managing a parametric simulation campaign using their existing simulation tools. Optimus users typically use Design of Experiments (DOE) to define a virtual experiment plan that acquires the most relevant design information possible with minimum simulation effort. They then use this information set to explore the design improvement potential using Response Surface Modeling (RSM) methods, and to identify an optimized product design considering multiple objectives and constraints.

The ClearVu Analytics Modeler for Optimus dismisses engineers from the complicated and lengthy task of manually identifying the best response surface for a given set of virtual experiments. The ClearVu Analytics Modeler continuously optimizes the learning parameters for all available RSM methods, avoiding the widespread phenomenon of overfitting models to the data. ClearVu Analytics Modeling delivers the best response surface, which can be used to investigate the design optimization potential in great detail.

The second ClearVu module that is exclusively available in Optimus is the ClearVu Global Optimizer. It is a powerful algorithm developed for non-linear design optimization, potentially covering multiple disciplines and objectives. This new optimizer integrated into Optimus resolves even the most complex design optimization tasks, including problems with high-dimensional, mixed-integer objective functions.

As the ClearVu Global Optimizer applies dedicated evolutionary optimization strategies and automatically adapts strategy parameterization, it remains easy to use. Optimus users can achieve considerable time gains, as the ClearVu Global Optimizer requires only a small population size and a limited number of objective function evaluations.

Prof. Dr. Thomas Bäck, CEO and Chief Scientist of Divis Intelligent Solutions GmbH: "Divis' specialists developed the ClearVu Analytics Modeler and Global Optimizer to maximize the speed and performance of dealing with new, complex product designs. We are glad that Optimus users worldwide can now benefit from these enabling modules. We maintain a close relationship with Noesis Solutions as we previously collaborated successfully in international industry projects."

Hans Wynendaele, Noesis Solutions CEO: "Optimus is renowned for capturing and automating the most complex simulation process workflows without any programming skills. Through Divis, we are able to make the leading-edge ClearVu technology available in the Optimus software suite. It illustrates that our design optimization and process integration platform pushes innovation forward. The exclusive partnership with Divis offers the Optimus global user community the extra capabilities to get even better products on the market faster."

## **About Noesis Solutions**

Noesis Solutions is an engineering innovation partner to manufacturers in automotive, aerospace, and other advanced engineering industries. Specialized in simulation process integration and numerical optimization, the company's flagship product Optimus focuses on resolving customers' toughest multi-disciplinary engineering challenges. Optimus identifies the best candidates by managing a parametric simulation campaign that orchestrates the software tools customers already use. After evaluating the proposed design alternatives, customers pick the most optimal and robust design option to verify in detail and take into production. Noesis Solutions operates through a network of subsidiaries and representatives in key locations around the world. For more information, please visit <a href="https://www.noesissolutions.com">www.noesissolutions.com</a>.

## **About Divis Intelligent Solutions**

Divis Intelligent Solutions is a leading company in data mining and non-linear global optimization for complex applications in the manufacturing industry. These mathematical and statistical technologies are applied as standardized software products as well as client specific solutions. The frameworks ClearVu Analytics and ClearVu Global Optimizer are products of Divis. They can be successfully applied in any area where data is collected and analyzed and complex products and processes are to be optimized. Main application areas are: formulation and product development, process optimization and structure optimization. For more information, please visit www.divis-gmbh.de.

Noesis Solutions Press Contact: Kirsten Cabergs Phone +32 16 31 70 40 kirsten.cabergs@noesissolutions.com

Noesis Solutions NV Gaston Geenslaan 11, B4 3001 Leuven - Belgium Phone +32 16 31 70 40 - Fax +32 16 31 70 48 www.noesissolutions.com