

ICIDO, mainworks and mental images partner for Immersive, interactive, photorealistic virtual products

Photorealism – immersive, interactive and in real-time



Stuttgart, Frankfurt, Berlin 10.11.2009: No manufacturing company can live without it: Images of products that do not yet exist in reality. The technologies behind this capability are programs like mental mill of mental images® and agencies, which prepare such images with mental mill. ICIDO in partnership with mainworks and mental images go one step further: with the use of next generation GPU rendered shaders in the industry leading virtual reality applications of ICIDO, 3D-data is visualized in previously unprecedented quality including 1:1 real-time interaction.

In many companies, there are two groups of 3D data users: the marketing and engineering departments. Often these departments do not work together but generate new data from scratch, even when the data already exists. The reason for that is simple: All departments use separate software products for the visualization and data processing. ICIDO's current release of the Visual Decision Platform changes all of this because of the newly integrated shaders (authored in mental mill) and environments created by the Frankfurt based postproduction studio mainworks.

With this cooperation of shader and environment the complete process of high-end 3D data visualization can be based on one software platform – The Visual Decision Platform (VDP) of the Stuttgart based Virtual Reality Leader and pioneer ICIDO. All VDP users can apply high-quality surfaces and environments to their existing engineering data in an immersive and more importantly interactive work-flow, to achieve near photo-realistic representations.

The process of real-time shader creation was a joint work of ICIDO and mainworks GmbH. Whereby ICIDO provided the immersive and interactive knowledge and mainworks provided their comprehensive artistic and material knowledge to create an extensive shader-library built with mental mill. A collection of seamless, tileable textures (vehicle interiors, stone, paints etc) were photographically reproduced and elaborately prepared.

Furthermore mainworks produced high quality spherical HDR environments (+100 megapixel!), that are now bundled with the ICIDO software. All environments have also been prepared for real-time usage and feature pre-blurred or high contrast versions, to be used in special real-time materials such as brushed metal or glass, thereby enabling visual effects that would otherwise not yet be possible in real-time applications.

"A lot of companies miss a photo-realistic quality in their virtual reality scenes, because they are generated by CAD systems that do not offer these options," said Christian Matzen, COO of ICIDIO and adds: "Many marketing departments with special applications try to create the future in 3D again. With the option to use the same shaders by both parties, we build a bridge between these two areas."

"Especially in light of currently pending process improvements and the constant search for savings opportunities this bundle creates new, High Value Savings opportunities for companies," says Robert Skazel, Managing Director of mainworks, and adds: "mental mill plays a special role because it allows us to quickly create high-quality surfaces that can be deployed in a straightforward manner into ICIDO's industry leading Virtual Reality software."

With this combination the complete visualization value chain can be leveraged by our customers. It starts with the generation of shaders in mental mill, goes through the definition of these shaders in the MetaSL description language, powered by NVIDIA, and the use of NVIDIA's OptiX™ technology. With the integration into the ICIDO software the chain is completed by interactive real-time visualization of 3D Data.

All generated shaders can be used by ICIDO customers free of charge. More information. www.icido.de

About ICIDO:

ICIDO Group is a leading provider of interactive, visual decision-making systems. With its solutions ICIDO helps also non-specialists to understand and recognize complex products and situations. This creates the conditions for a collaborative decision-making without departmental and enterprise boundaries. Thus, on the basis of digital (product) information early, effective and reliable decisions are made, both revenue and cost side lasting positive impact.

The Visual Decision Platform (VDP) from ICIDO is the leading software for targeted, interactive decision-making on the basis of Virtual Reality. The VDP provides a platform for a collaborative work of locally, globally and departmentally distributed teams. Organization will realize efficiency potentials that have not yet been lifted through stand-alone solutions or central systems. Many global companies use ICIDOs standardized solutions that are easily integrated into existing structures and processes.

Areas of application range across the entire product life cycle, from design/styling, engineering, assembly and production planning to marketing, sales and service. The customer receives from ICIDO a complete solution consisting of software and services as well as the necessary hardware, such as a power wall system. ICIDO customers are based in the automotive industry (BMW, Daimler, Ford, Volkswagen), in the area of transportation systems (Airbus, EADS, MTU, Rheinmetall, Siemens Transportation Systems), in construction and manufacturing (Festo, Trumpf, MAG und Siemens Power Generation) and also in research and education (TU Braunschweig, TU Chemnitz, TU Dresden, TU Illmenau, Universität Karlsruhe)

About mainworks

mainworks GmbH is a postproduction studio, based in Frankfurt, Germany, specialized in high end, high resolution images for advertising.

About mental images

mental images®, founded in 1986, is the recognized international leader in providing rendering and 3D modeling technology to the entertainment, computer-aided design, scientific visualization, architecture, and other industries that require sophisticated images.

Its products include the high performance, photorealistic rendering software mental ray® which produces images of unsurpassed realism from computer-aided design and digital content creation data by relying on patented and proprietary ray tracing algorithms.

ICIDO contact:

Sebastian Grimm
Director Marketing
ICIDO GmbH
Jurastrasse 8
70565 Stuttgart

E-Mail: Sebastian.Grimm@icido.de
Tel. 0711-27 303 167
Fax 0711-27 303 110
Mobil 0174 - 3304384