

## Press Release

*Released for Publication*

# mental images Takes Realistic Graphics to New Level

## 5 **Close cooperation with partners Alias, Discreet, NVIDIA, and Softimage leads to development and integration of mental ray 3.3**

10 NAB 2004, Las Vegas, NV (April 19, 2004) – mental images®, a global leader in the fast-growing market for high-end 3D visualization software, today announced the release of version 3.3 of mental ray®, its rendering software. mental ray is used both for cutting-edge visual effects in major motion pictures and for the computer-based design of industrial products. This software further blurs the line between reality and computer generated images, even when rendering the most difficult real-world features, including hair, fur and human skin.

20 mental images developed mental ray 3.3 in close cooperation with NVIDIA Corporation (Nasdaq: NVDA), to utilize the new line of NVIDIA QuadroFX 4000 boards and its Cg programming language. The resulting software takes full advantage of the unprecedented processing power and programmability of NVIDIA's hardware technology. For the first time, extremely complex visual effects can be fully executed on this graphics hardware, reducing rendering times from hours to minutes.

25 “NVIDIA is committed to working closely with mental images to ensure that the most cutting-edge software technology, like mental ray 3.3, works seamlessly with our hardware, and fully leverages the speed, precision and power of NVIDIA's new GPU architecture,” said Jen-Hsun Huang, President and CEO of NVIDIA. “We value our strategic partnership with mental images and look forward to continuing

our successful working relationship as our two companies continue to push the  
30 boundaries between reality and what is possible to replicate on a computer.”

The mental ray technology is an integral part of the world’s leading 3D content crea-  
tion tools, such as Maya® from Alias Systems, 3ds max® from Discreet, a division of  
Autodesk, and SOFTIMAGE®|XSI® from Softimage Co., a subsidiary of Avid  
35 Technology, Inc. (Nasdaq: AVID). mental ray 3.3 is already included in SOFT-  
IMAGE|XSI 4.0 and Maya 6.0, both released at NAB. These products take full advan-  
tage of the new feature set of mental ray 3.3 and leverage the performance enhance-  
ments, allowing for faster rendering both interactive and off-line.

40 “The deep integration of mental ray within SOFTIMAGE|XSI gives us a huge com-  
petitive advantage in the 3-D industry,” said Marc Stevens, Director of R&D for Soft-  
image. “We have worked with mental images for over a decade to build 3-D animation  
tools that meet the needs of our customers, and the latest versions of XSI and mental  
ray significantly increase our customers’ productivity and their ability to rapidly cre-  
45 ate the most realistic computer generated images.”

A number of key direct customers of mental images, including Buf Compagnie,  
DreamWorks, ESC Entertainment, and Industrial Light & Magic have also contrib-  
uted substantially to the specification of the extended feature set of mental ray 3.3.

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“The power of the human mind is largely a reflection of the three dimensionality of  
the world that we live in. At mental images we create 3D technology that makes it  
easy for people to fully explore their creative potential,” said Rolf Herken, CEO and  
CTO of mental images. “We are extremely excited to be working closely with estab-  
55 lished leaders in the 3D field like Alias, Discreet, NVIDIA and Softimage and will  
continue, as partners, to drive the transition to 3D computing.”

### **About mental ray 3.3**

In addition to significant performance improvements, especially when rendering  
60 scenes that contain hair or fur geometry, additional features include the following:

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  - **Accelerated graphics hardware rendering:** Exploitation of available graphics hardware for high quality rendering, including support for OpenGL, NVIDIA's Cg 1.2 higher level language, phenomena and shade trees where hardware shaders are available. Automatic combination of hardware and software generated elements. Support for displacement mapping, order independent transparency, hair geometry, volumes, and high quality anti-aliasing
- **Detail shadowmaps:** Combination of shadowmap and ray traced shadow algorithms for more realistic shadows
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  - **Subsurface scattering:** Powerful, physically correct simulation of subsurface scattering effects, according to actual local geometric and optic properties
  - **State shaders:** Tighter integration with animation packages and a more powerful interface between mental ray and front ends, resulting in better control of application-specific rendering effects and phenomena
- **Conditional rendering of scene files:** For improved selection and control of processing scene contents

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- **OpenEXR image file format:** Support of the OpenEXR high dynamic range image file format developed at Industrial Light & Magic, for texture and image output

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**Total words:** 1065.

**About mental images:** mental images®, founded in 1986, is the recognized international leader in providing rendering software to the entertainment, computer-aided design, scientific visualization, architecture, and other industries that require sophisticated images. The company's main product is the high performance photorealistic rendering software mental ray® which is capable of running on a wide variety of platforms ranging from networks of workstations to parallel supercomputers, producing images of unsurpassed realism. Mental ray was initially released in 1989 and has been used in the production of more than 130 major motion pictures, including such recent blockbusters as "Matrix Reloaded" and "Matrix Revolutions", the "Harry Potter" series, "Star Wars: Attack of the Clones", "Hulk," and "Terminator III." Leading visual effects companies and studios, such as Industrial Light and Magic, ESC Entertainment and DreamWorks are among mental images's largest customers. Additionally, in the CAD field mental ray is used by the world's leading automobile and aircraft manufactures to accelerate the design of new products. RealityServer® is mental images's next generation product that enables interactive manipulation, visualization and annotation of existing and newly created 3D content within enterprise software solutions.

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For more information, visit [www.mentalimages.com](http://www.mentalimages.com).

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