



## Autodesk, Lightstorm Entertainment and Weta Digital Drive Virtual Production Forward

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Leaders in Virtual Production Collaborate to Develop Next-Generation of the Technology Behind James Cameron's "Avatar" Movie

LOS ANGELES--(BUSINESS WIRE)--Aug. 7, 2012-- **SIGGRAPH 2012** —Autodesk, Inc., (NASDAQ: ADSK) has partnered with Lightstorm Entertainment and Weta Digital to develop the next generation of virtual production technology for the motion picture industry.

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Autodesk has partnered with James Cameron's production company Lightstorm Entertainment and Peter Jackson's visual effects company Weta Digital to develop the next generation of virtual production technology for the motion picture industry. (Photo: Business Wire)

Lightstorm Entertainment is James Cameron's production company, responsible for the 2009 box office sensation "Avatar." Weta Digital, one of the world's premier visual effects companies, has a history of pushing the boundaries of visual effects and computer graphics with their work on films like "Avatar," "Rise of the Planet of the Apes," "The Adventures of Tintin" and many more.

The three companies have been working collaboratively to further expand the virtual production workflows and technologies that were first developed for "Avatar." Some of the tools and enhancements resulting from the

collaboration have been incorporated into certain products in the latest [Autodesk Entertainment Creation Suites](#). These and more developments stemming from the technology partnership will be used in the production of the "Avatar" sequels.

"Creating the virtual production pipeline on 'Avatar' was a groundbreaking process that only enabled us to scratch the surface of what is possible. Together with Autodesk and Weta Digital, we have used the knowledge gained from this first experience to clearly define the ideal process and then develop the technology needed to streamline our workflow. With the resulting pipeline, on the 'Avatar' sequels, I will be able to devote more of my energy to the creative side of the moviemaking process, and dig deeper into all that is possible with virtual production," said James Cameron.

Virtual production involves applying the power of digital toolsets to the entire movie making process. This allows the director and other creative collaborators to see their assets in a fully interactive world live on-set, so they can make better decisions more quickly — enhancing the creative process and improving productivity as a result. This interactive, nonlinear process spans from digital worldbuilding, character development and previsualization, to performance capture, virtual cinematography, visual effects, and all the way to final render. Pioneered under James Cameron for the creation of "Avatar," it has since been adopted by renowned directors Steven Spielberg and Peter Jackson, among others.

To develop the next generation of virtual production technology, Weta Digital forged a particularly close relationship with Autodesk and its development team. As the visual effects studio on "Avatar," and "The Adventures of Tintin," as well as the upcoming "The Hobbit: An Unexpected Journey," Weta Digital has established expertise in the virtual production process.

"After completing 'Avatar,' we had a clear understanding of the developments needed to make the process more creative and efficient. We knew that by bringing the whole digital pipeline more in line with the traditional onset style of shooting we could open up brand new ways for directors like Jim to make their films. When we're charting new territory like this, it's invaluable to have a partner like Autodesk whose tools are the platform and the standard in the industry," said Joe Letteri, senior digital effects supervisor at Weta Digital.

"Lightstorm and Weta Digital were behind some of the most visually stunning movies of the last decade. By bringing together their talent and experience with our own expertise, we are creating tools to help our customers take better advantage of important developments in moviemaking and visual effects," said Carl Bass, Autodesk CEO.

As part of the Entertainment Creation Suites 2013, the new virtual production enhancements will help studios of all sizes adopt this revolutionary moviemaking process. The tools, found in Autodesk MotionBuilder and Autodesk Maya software, will help improve performance, workflow and image fidelity.

MotionBuilder now loads, saves and merges files together much faster than before, and is more closely integrated to the Editorial workflow. Motion capture and live input data can be recorded to disk in the software's non-linear editor so directors can record multiple takes in rapid sequence; actors can act out their scenes un-interrupted; and stage crew can work instantly with Editorial to build and refine shots. Furthermore, the software now includes HD SDI video output support, which allows MotionBuilder to be integrated into studio video broadcast systems, designed to introduce zero frames of lag. This gives creative visionaries and camera operators more accurate real time feedback on their virtual camera work.

To learn more visit Autodesk's [virtual production site \(http://area.autodesk.com/fmx2012\)](http://area.autodesk.com/fmx2012) on AREA, Autodesk's digital entertainment and visualization community.

### About Autodesk

Autodesk, Inc. is a leader in [3D design](#), engineering and entertainment software. Customers across the manufacturing, architecture, building, construction, and media and entertainment industries — including the last 17 Academy Award winners for Best Visual Effects — use Autodesk software to design, visualize and simulate their ideas. Since its introduction of [AutoCAD](#) software in 1982, Autodesk continues to develop the broadest portfolio of state-of-the-art software for global markets. For additional information about Autodesk, visit [www.autodesk.com](http://www.autodesk.com).

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