# Houdini 10 Released

*Side Effects Software sends VFX studios to new heights of productivity with the ability to slice up and distribute fluid simulations*

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Side Effects Software announced the immediate release of Houdini 10. Designed to make artists more productive while equipping studios with the most powerful tools in the industry, Houdini 10 is destined to become a must-have release for 3D artists everywhere.

Houdini 10 is the first commercially-available application to slice up and distribute fluid simulations over a network of computers. 3D artists will benefit from faster simulation times in addition to the ability to create simulations at a much bigger size and scale than would be possible with a single computer.

"The ability to slice up and distribute fluid sims lets studios assign a smaller memory load to each computer in the simulation farm" says Cristin Barghiel, Director of Product Development, Side Effects. "At the same time, they can take advantage of multi-threading on each node to make things run even faster."

Studios and boutiques can integrate these distributed fluid sims using existing pipeline tools, or work with HQueue a new python-based job manager which can also distribute Mantra renderings. HQueue jobs can be launched using a Houdini output node and then monitored using HQueue's artist-friendly web interface. For fluid simulations, each node on the farm can be equipped with Houdini Batch to process the slices and keep your workstation licenses free for interactive work.

HQueue is initially being released for LINUX users as a free public beta. The planned release of HQueue is July 2009, when it will also be available for Mac OS X and Windows systems. HQueue will be made available as a free add-on to commercial licenses of Houdini Master and Houdini Escape.

VFX artists can create high quality smoke and fire in Houdini 10 with the new Pyro FX tools. Utilizing cutting edge up-resing technology, Pyro FX makes it possible to create a low resolution simulation in planning out a shot, then increase the resolution on subsequent passes to add higher level of details and refinement. Pyro FX comes with several pre-made Pyro FX such as Billowy smoke and Fireball to give artists a head start when setting up a simulation.

"Distributed Fluid simulations integrate effectively with the up-res technology in Pyro FX," say Judith Crow, Senior Production Consultant, Side Effects. "Artists can get great results out-of-the-box while TDs can explore the open and extensible networks created with these production-ready tools."

Lighting artists can take advantage of the progressive Interactive Photorealistic Rendering (IPR) feature in Houdini 10. This IPR workflow supports both raytracing and Physically Based Rendering (PBR), providing feedback whenever a scene changes. An update will be triggered when shader and light parameters are

tweaked or when objects, cameras and lights are added, moved or even removed. Artists can drag and drop materials into the IPR window and can "control click" to access shader parameters for any part of an image. Snap shots can be taken to compare with other iterations of a shot using features such as "diffing".

Houdini 10 also includes support for Stereoscopic 3D in both the viewport and Houdini's image viewer. The Houdini stereo camera supports both anaglyph and horizontal interlaced stereo and includes control for parallax and inter-axial distance. Studios can preview their 3D work from within Houdini and can generate stereo images at render time.

Houdini 10 includes many more features such as:

Motion FX which gives artist-friendly access to the procedural power of Houdini's channel operators (CHOPS).

Improvements to Network Usability including new align tools, and the ability to quickly connect and disconnect nodes using fewer clicks.

Physically Based Rendering (PBR) is now fully supported in Houdini's multi-threaded shading language.

Deep Camera Maps which make it possible to render volumes and objects into separate passes then combine them perfectly.

The Rigid Body Solver now supports ODE for faster simulations.

Houdini's cloth solver can be used to simulate the Crumpling and Tearing of dentable and elastic surfaces.

The wire solver now supports Parting and is much faster when simulating longer wires.

New Knife and Edge Loop modeling tools.

And much more.

Houdini 10 is available immediately on Mac OS X, Windows and LINUX and can be downloaded for free as part of the Houdini Apprentice program. 3D Artists who want to work on personal projects without render watermarks can also purchase Houdini Apprentice HD for only $99. Please visit sidefx.com for more information including pricing for Houdini's commercial line of products.

More Information at www.sidefx.com. Image and Videos Courtesy of Side Effects Software Inc.