



RFRenderKit

RealFlow™ Rendering Toolkit (for RenderMan® and mental ray®)

“Without the RealFlow RenderKit, we never would have been able to push the fluid renders to the resolution and quality that we delivered on The Curious Case of Benjamin Button. The RFRK allowed us to deliver higher resolution and better-looking CG water than previously possible, and in far less time than traditional meshes would have required.”

Andy Cochrane – CG Artist, Asylum Visual Effects



What is the RealFlow RenderKit?

The RealFlow™ RenderKit is a set of tools that has been designed to facilitate the complex task of rendering RealFlow™ fluids. The RFRK enables you to generate procedural geometry at render time, and also render individual fluid particles. As a result, the RenderKit will dramatically simplify and accelerate your RealFlow™ workflow.

For the past decade, simulation tools like RealFlow™ have been used to achieve beautifully realistic fluid simulations. Thanks to the exponential growth of computation power, these simulations have become more and more realistic, which has often meant that users have had to deal with ever-increasing numbers of particles.

In a typical RealFlow™ workflow, the user creates a fluid simulation and exports the file sequences containing the particles which represent the fluid. When it comes to rendering, users are usually interested in having a polygonal mesh rather than particles. This involves another step in the workflow, where the polygonal mesh is generated in RealFlow™ and a sequence of files containing those polygonal meshes is produced. This extra step in the workflow creates a significant storage restriction for the polygonal meshes; and another problem arises when millions of these particles or vertices have to be imported into a standard 3D application for rendering. Often these applications cannot cope with such a vast amount of data.

The RFRK provides two different tools that will help you to overcome the problems described above: FlowMesher™ to create and render the polygonal mesh from the particles; and FlowParticler™ to render the particles.

The RealFlow RenderKit logo, with "RF" in white and "RenderKit" in orange.

© Next Limit Technologies 2009

Features

FlowMesher™ generates a high-resolution polygonal mesh from RealFlow™ PD and BIN particle files at render time. You no longer have to load heavy meshes into your 3D application – you simply load a representation of the particles as a guide for the meshing process. FlowMesher also includes a brand new smoothing algorithm, and enables you to mesh RealWave objects. FlowMesher also features Lazy Compute functions, Boolean operations, and Core/Splash options.

FlowParticler™ enables you to load millions of particles at render time quickly and easily. FlowParticler™ has multiple features to help with the rendering of the particles, including multipoints, manipulation of particle size based on their distance from the camera, the use of particle attributes to improve shading, and the use of instanced objects.

Compatibility

Operating Systems: The RFRK is fully supported in Windows 32 and 64 bits, and Linux 32 and 64 bits.

Maxwell Render™ Coming soon! The RFRK will shortly be available for Next Limit's own Maxwell Render™. For more information on **Maxwell Render™**, please see the Maxwell website: <http://www.maxwellrender.com/>

RFRK for RenderMan®	RFRK for mental ray®
RM Compliant Renderers: <ul style="list-style-type: none">• PRMan• Air• 3Delight• Aqsis• Liquid	Integration in 3D Platforms: <ul style="list-style-type: none">• Maya• 3D Studio Max• XSI
Integration in 3D Platforms: <ul style="list-style-type: none">• Maya – RMS (for RAT and RfM Pro)	

Licensing

There are currently two versions of the RFRK available: RFRK for RenderMan®, and RFRK for mental ray®. These two versions are licensed and sold separately.

The RFRK makes use of the new Next Limit License Manager. The License Manager will show you how many licenses you have and where they are being used. The RFRK is licensed per machine (with no CPU/core restrictions) and all RFRK licenses are floating, so you can distribute them as you wish. There are currently licenses available for RFRK for mental ray® and RFRK for RenderMan®.

If you would like to try out the RFRK before making a purchase, we have 30-day evaluation licenses available (for one machine only).

For more information on evaluating or purchasing a license, and for current prices, please go to: <http://www.realflow.com/rfrk/>