

FumeFX™ 5.0 for Maya® release

Sitni Sati releases FumeFX™ 5.0, a new version of their fluid dynamics software for Autodesk® Maya®. Since the first release of FumeFX in 2006, it has become an integral part of many studio production pipelines worldwide. It has been used to create a wide range of visual effects including cinematics and blockbuster movies such as Deadpool, Dr. Strange, Thor, Roland Emmerich's 2012 and Ghost Rider: Spirit of Vengeance just to name a few.

In this latest release, FumeFX brings improved Maya integration, a ground up redesign of the simulation core and hosting an array of unique capabilities that will allow artists to create a completely new range of effects that were impossible before. The new FumeFX GPU accelerated display has been integrated within the Maya Viewport 2.0 and includes volumetric shadows, proper geometry occlusion and instant shader feedback. The key component of FumeFX simulation engine, the QCG solver, has evolved into a much more robust and faster solution. QCG's CPU utilisation has been significantly improved and provides 20% faster solving times compared to previous versions. Extended Arnold renderer support will be of a great value to any VFX artist as new FumeFX provides better flexibility and seamless integration.

Workflow

- FumeFX GPU* accelerated display has been integrated within the Maya Viewport 2.0. The new display includes volumetric shadows, proper geometry occlusion and instant shader feedback.
- The Data preview has been changed and allows user to choose voxel display size.
- Updated FumeFX shelf provides access to FumeFX and source creation as well as simulation control.

(* supports Maya 2015 ext1 and newer)



Simulation

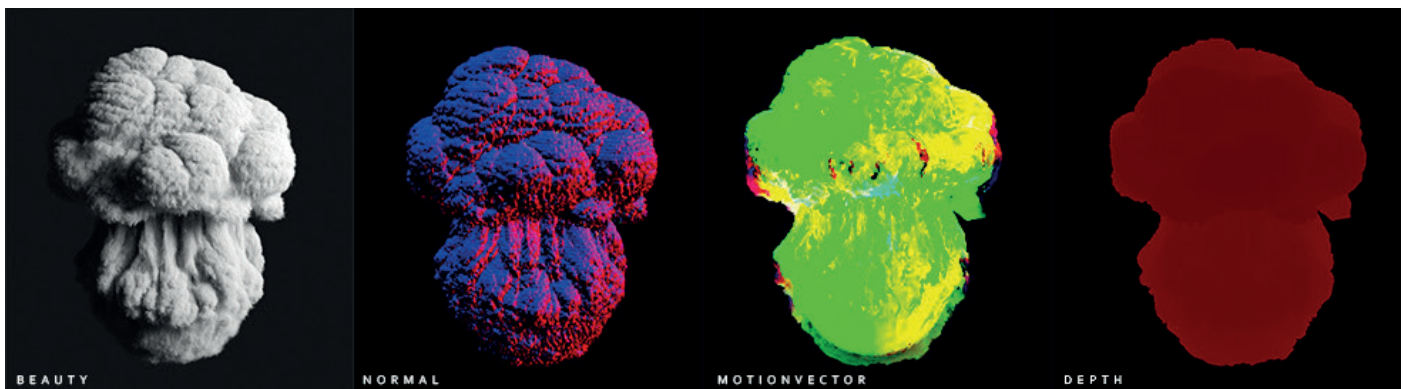
- Simulation core redesign allows usage of complex geometry instead of using proxies without breaking the solver or causing instabilities.
- With the new Conservative Advection type in the arsenal, FumeFX can easily create fluid flows that minimize numerical losses and keep the fluid in motion even after 900 frames of animation.
- Speed improvements for the QCG solver. Updated solver is now able to use nearly 100% CPUs even on machines with 20+ cores. This optimization has resulted with up to 20% faster QCG compared to FumeFX 4.0.
- Smooth retiming regardless of simulation sub-steps and retiming scale factor.
- Depending on the scene setup, the latest version of FumeFX delivers up to 20% faster simulation in total.
- Ability to retime simulation during the Wavelet Turbulence pass.
- Vorticity II optimizations include faster calculations and lower memory requirements.
- Support for nParticles with FumeFX Particle Emitter.
- Improved simulation scaling. Grids of different spacing will result in similar simulations. FumeFX 5 also improves scaling with CPU cores used in simulation.
- Fixed color channel bleeding during the simulation.



I/O Subsystem

- The new lossy .fxd compression allows per-channel compression quality and mixing of lossless and lossy channels inside the same cache file.
- State of the art multithreaded .fxd I/O for ultra fast caches saving and loading.

- Load caches at user-defined reduced resolution allows artist easier viewport manipulation and rendering setup.
- Minimize grid during the cache saving produces smaller files that save faster and render faster.
- FumeFX 5 writes OpenVDB caches in a form that makes them easily readable inside the Arnold Volume Grid, Redshift grid and even Houdini. The FumeFX vdb cache will be correctly positioned which makes any OpenVDB workflow straightforward.
- Added OpenVDB support for Wavelet Turbulence simulation.
- Various OpenVDB caches optimizations and fixes.



Rendering

- New built in FumeFX-Arnold Volume that supports Arnold's Standard Volume shader (does not require FumeFX shader license).
- Unified shader license that supports FumeFX Standard Shader for V-Ray, mental ray and Arnold.
- Added Standard Shader support for Arnold AOV's - normal, motionvector and depth.

Licensing

- A more affordable Workstation license.
- New rental options available. Pick from either a 1 year or a 3 month term depending on your project demands.

Upgrades

- All FumeFX 4.0 for Maya licenses bought after March 1st 2018 (inclusive) can be upgraded to FumeFX 5.0 for Maya at no cost.