

# 3.04.00

*Patch release*

**Date** – Jun. 7, 2017

## New Features

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### PhoenixFD

- Support for 3ds Max 2018
- Remove the DEMO configuration and implement support for TRIAL builds

### Simulation

- Option to control droplet breakup and droplet size when Surface Tension is used

### Rendering

- Ocean Off-Screen margin option to allow extending the ocean outside of the render view
- Option to control the roughness of the ocean horizon

### Preview

- Auto White Speed for the preview of particles
- Preview for the particle RGB channel

### I/O

- Add an option to use environment variables in Phoenix FD cache files path

### Source

- Implement emission based on Vertex Color and Vertex Color tex map
- Option to disable or enable liquid discharge from the Liquid Source

### BodyForce

- Ability for the Body Force to evenly fill a volume

### SpaceWarps

- Support for the 3ds Max Drag force

### PRT I/O

- Export and import the RGB Color channel to/from PRT caches

### Scripting

- Add a MAXScript function that loads render presets - A\_LoadRenderPreset [node] [preset\_path]

## Modified Features

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### PhoenixFD

- When the simulator is renamed, its cache files should be renamed too

### Rendering

- Optimized Particle-based mesh smoothing of very large files

## Curve control

- New and converted Bezier and Spline ramp points should follow the slope of the curve

## BodyForce

- Allow animating the Body Force Max Distance

## Scripting

- Allow Restoring or Loading the simulation from script inside OnSimulationBegin without an infinite recursion

## Bug Fixes

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### Simulation

- Adaptive grid attached to animated body is jittering when motion speed changes
- Fast moving fire emitter leaves frozen voxels using Adaptive Grid
- Second NUMA node is not recognized and utilized on machines with more than 64 cores
- Drag particles are not affected by Body Force even when the affected channels include Velocity
- Foam and splash occasionally gets stuck when exiting the borders of a ship simulation
- Splashes are born underwater with Splash By Free Fly above 0
- Inertial forces with value set to 0 still affect the liquid

### Rendering

- Rendering artifacts with Optimize Congestion in Bubble mode and Liquid Geometry
- Flickering ocean surface seen in reflections with a moving camera
- Bubbles that intersect the liquid surface render over-bright with enabled Particle Shader Light Cache
- Sequence render with Defscanline and Fire Lights keeps showing the lights after the cache sequence ends
- Black artifacts rendering with Light Cache when the container is inside refractive geometry with gray fog color
- Rendering particles as Points in Geometry mode produce NaN Pixels
- No motion blur on the simulator in ocean mode with a moving camera locked to a moving simulator
- Blending particles that are born and die each frame produces a lot less particles

### Input

- Opening a cache file with a negative frame index does not load the rest of the sequence

### Source

- Numerical Errors when applying the Fire preset on a PFlow emitter and changing the Source Prt Shape

### Turbulence

- Turbulence in Pressure Mode cannot affect the Liquid simulator
- Pressure Mode deactivates the preview of Turbulence Streamlines

### Mapper

- Hidden Mapper with Initializer enabled still affects the simulator
- Crash when transferring velocity between two sims using a Mapper, Grid Texture and SPF over 1

### Texmaps

- Copying any Phoenix texmap between the Sample Slots of the material editor loses the name of the map

### PhoenixFDGridTex

- Crash when using Grid Texture as discharge map with overlapped simulators
- If a simulator is renamed, liquid becomes not renderable with Phoenix texture
- Blending Grid Textures using a Composite map produces a different render after the first frame and in animation

### PhoenixFDOceanTex

- Rotating the PhoenixOceanTex produces different wave patterns in different scales

## **QuickSetups**

- Scene scale does not affect liquid Quick Setup presets which use V-RayMtl's Fog multiplier
- The turbulence Strength of the Cigarette and Fire presets does not scale according to the emitter size

## **VRScenes**

- VRScenes exported from 3ds Max always have Probabilistic Volumetrics forced On