Chaos Vantage, v2.0.0

Official Release

Date - June 27, 2023

New Features

Scene States

- Implemented a Scene States system for creating, modifying and switching lights, materials, and objects variations. Each tab, that can utilize the states system has a **Scene sub-state** rollout and a new **Scene States** tab is added in the right side panel. Details

Render Elements

- Implemented render elements(*Lighting, Specular, Global Illumination, Reflection, Refraction, Self-Illumination, Atmosphere, Background, Diffuse Filter, Bumped Normals, Z-Depth, Velocity, Object Mask, Material Mask, Raw RGB*) for compositing and masks. Details
- Option for saving render elements as separate .png and .jpeg images.

Fog

- Implemented light scattering(volumetric) fog. Details

Textures

- Support for multiple UV channels.
- Support for Vertex Color.
- Support for all options of the Advanced mode of the Color Correction texture from 3ds Max.
- Support for repeat/offset U/V for UVWGenMaya when not using shading graphs (e.g. for bump maps).

Animation

- Support for .vrscene file with animated: vertices, vrmeshes, materials, textures and UV parameters, light parameters.
- Support for animations outside the imported .vrscene range.

Denoiser

- Implemented Intel Open Image Denoise denoiser (OIDN) for interactive Details and HQ rendering Details .

Performance

- Implemented NVIDIA upscaling denoiser in interactive mode, requires driver 530 or newer. Details
- Implemented reservoir resampling algorithm for direct lighting (RTXDI). Details
- Render resolution scale option in interactive mode. Details

Chaos Scatter

- Implemented Chaos Scatter for populating objects in the scene. Details

Hardware

- Support for HDR displays.
- Support for AMD GPUs (*experimental*).

Subdivision

- Support for statically subdivided geometry objects from *.vrscene*.

Lights

- Support for mesh lights (improved with reservoir resampling enabled).
- Creation of lights(Point, Spot, Directional, Rectangle, Disc, Sphere, IES) from inside Vantage. Details
- Support for instanced lights via Forest pack and Railclone.

Materials

- Support for VRmat materials.
- Support for V-Ray override material (MtlOverride).

UI/UX

- Helper onscreen text for gizmo manipulators.
- Rendering quality presets slider with 4 predefined presets.

Cloning

- Implemented object cloning functionality with *Ctrl+D.*

Camera

- Support for camera render resolution from *.vrscene* file.
- Support for orthographic camera. Details
- Camera grouping functionality.

Tools

- Support for Vertex snapping when moving objects. Details
- Added functionality to quickly place the pivot on the object's bounding box boundaries.

Home Screen

- Implemented a Home Screen dialog with quick links, recent file and sample scenes. Details

Rendering

- Implemented interval and specific frames or frames list for sequence rendering. Details

Geometry

- Support for embedded vrscene nodes (VRayScene).

Modified

UX/UI

- Revamped user interface and user experience with reorganized and regrouped parameters.

Fixes

Live Link

- Double frame sequence rendering during Live Link with 'Render animation with Chaos Vantage'.

Geometry

- Wrong placement of meshes at the origin when instanced by an Instancer in an animated .vrscene file.
- Artifacts near the scene origin caused by self intersection.