



AMD
RADEON
ProRender
SDK v1.331

Release Notes

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Overview

Thinking about adding physically-based rendering to your application's workflow? AMD Radeon™ ProRender delivers stunningly photorealistic images enabling faster render times and high frame rates for photorealistic assets.

Radeon™ ProRender is built on industry-standard OpenCL™ and Apple® Metal® 2, making it hardware agnostic so it runs on virtually any OS and virtually any combination of GPUs and CPUs.

The Radeon™ ProRender roadmap is shared with developer partners so they can plan ahead, and engineering support may also be available for those who need it.

Radeon ProRender SDK v1.331 Highlights

AMD's Radeon™ ProRender is a physically based pathtracer which runs on CPUs and GPU via OpenCL or Metal2 (on macOS). The SDK provides an executable to render scene files exported in the .rprs file format as well as the libraries and headers to integrate Radeon™ ProRender into other applications.

New additions in version 1.331 of the renderer include:

- Various fixes to Uber shader aimed at preserving energy conservation and correctness particularly in metallic and glass materials.
- Fixes to anisotropic reflection.
- Fix if a camera is inside a homogenous volume or object with subsurface scattering.
- Adaptive sampling allows users to specify a noise threshold. Pixels that have reached this threshold will no longer receive samples, allowing faster renders.
- Additionally, a variance AOV gives visualization of amount of noise per pixel.
- Volume objects can specify color, emission and density voxel data separately.
- Fixes to per-face materials.
- Fixes curve geometry on GPU.

For the detailed list of features and user guide for the Radeon™ ProRender SDK, click [here](#)

Fixed Issues

This version of Radeon™ ProRender SDK does not include any specific fixed issues as this is the initial release.

System Requirements

Hardware

- Runs on both GPUs and CPUs. OpenCL™ 1.2 support required for GPUs on Windows® and Linux®. Metal® 2 support required for GPUs on macOS®.
- AMD graphics cards are recommended.
- For non-AMD OpenCL™ 1.2 cards, Windows® 10 is required.
- VR-capable graphics card for VR visualization.
- **Recommended Windows® and Linux® Graphics Hardware:**
 - AMD Radeon™ Pro WX series cards, Radeon™ Pro SSG graphics, Radeon™ Pro Duo (“Polaris”) graphics, Radeon™ Vega Frontier Edition cards, and AMD FirePro™ W9100, W8100, W7100 and S series cards.
- **Compatible Windows® and Linux® Graphics Hardware:**
 - AMD Radeon™ Pro Duo (“Fiji”) graphics, Radeon™ RX series cards, R9 Fury series cards, R9 Nano graphics, R9 300 series cards, R9 290X graphics, R9 290 graphics, R9 285 graphics, R9 280X graphics, R9 280 graphics.
- **Compatible Apple® Mac® Hardware:**
 - MacBook® (Early 2015 or newer), MacBook Pro® (Mid 2012 or newer), MacBook Air® (Mid 2012 or newer), Mac mini® (Late 2012 or newer), iMac® (Late 2012 or newer), iMac Pro™ (Late 2017 or newer), Mac Pro® (Late 2013) (Models without discrete AMD Radeon™, Radeon™ Pro, or AMD FirePro™ graphics will be limited to CPU rendering with Radeon™ ProRender).
- **Compatible Apple® Mac® External Graphics (eGPU) Hardware:**
 - AMD Radeon™ RX 570 graphics, Radeon™ RX 580 graphics, Radeon™ Vega 56 graphics, Radeon™ Vega 64 graphics, Radeon™ Vega Frontier Edition (Air-Cooled) graphics, Radeon™ Pro WX 7100 graphics, Radeon™ Pro WX 9100 graphics (Requires macOS® High Sierra 10.13.4 and compatible eGPU Thunderbolt™ 3 chassis).

Software

- Microsoft Windows® 7, 8.1, 10 64-bit (AMD Radeon™ RX series, Radeon™ Pro Duo (“Fiji”) graphics, and R9 series)
- Microsoft Windows® 7, 10 64-bit (AMD Radeon™ Pro WX series, Radeon™ Pro SSG, Radeon™ Pro Duo (“Polaris”), Radeon™ Vega Frontier Edition, and AMD FirePro™ W series)
- Microsoft Windows® 10 (non-AMD GPU)
- macOS® High Sierra 10.13.3 and up (10.13.4 required for external GPU support)
- Linux® distributions: Ubuntu® 16.04.3 and 18.04.0, CentOS® 6.5, CentOS® 7.2 (depends on the application support)