## amda R a d e o n ProRender

**@SIGGRAPH 2018** 

## **AMD RADEON™ PRORENDER**

# Fast. Easy. Incredible.



R A D E O N ProRender

Image created by Glen Johnson using MAXON Cinema 4D™ R1

se of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-8

0000

## What is AMD Radeon<sup>™</sup> ProRender?

AMD's Powerful Physically-Based Rendering Engine



Fast and Accurate Renderings Enable Real-Time Design Decisions

OpenCL<sup>™</sup> Hardware Agnostic and Supports <sup>+</sup> Metal<sup>®</sup> 2 Windows<sup>®</sup>, Linux<sup>®</sup>, and macOS<sup>®</sup>

Available for Leading Digital Content Creation Applications



Image created by Yan Ge (IHDT) using MAXON Cinema 4D™ R19 Use of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83





## New AMD Radeon<sup>™</sup> ProRender Features

## New Rendering Features for End-Users and Developers



### Updated Uber Shader

Better PBR Workflows with Diffuse Backscattering, Simplified Caustics, and Improved Clearcoat

Ambient Occlusion	<b>Camera Motion</b>
Shader Node	<b>Blur</b>
Enhances Procedural Texture	Accurately Recreate a Moving
Workflows	Camera for Animated Renders
Adaptive	Large Scene Export
Subdivision	Optimization
Speed Up Workflows by Easily	Accelerate Multi-App
Rendering Complex Shapes	Workflows with Complex
from Simple Meshes	Scenes

## Diffuse Backscattering

Simplified Caustics

R

**Rendering Is for Everyone** 

RADEON

Improved Clearcoat



## Upcoming AMD Radeon<sup>™</sup> ProRender Features

## New Rendering Features Being Shown at SIGGRAPH 2018



### **Cloud-Based Rendering**

Expand Rendering Capacity by Using the Cloud to Work Better with Real-Time Visual Feedback



### Hybrid Viewport Rendering

Vulkan<sup>®</sup> Viewport Combines the Quality of Ray Tracing with the Speed of Rasterization



Machine Learning Denoising Fast Image Clarifying Accelerates Workflows and Design Decisions



R

Use of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83

## AMD Radeon<sup>™</sup> ProRender Integration and Plug-Ins

## New/Updated Integration and Plug-Ins for Leading Applications



#### MAXON Cinema 4D<sup>™</sup> R20 Integration<sup>\*</sup>

Multiple AMD Radeon<sup>™</sup> ProRender Enhancements Including Subsurface Scattering and Multi-Passes

#### PTC° Creo° Plug-In (Beta)

Quickly and Easily Create Incredibly Rendered Visualizations of Products

Modo<sup>®</sup> by Foundry Integration (Beta) Available Now for Modo Maintenance and Subscription Customers<sup>\*</sup>

## Open-Source USD Plug-In on GitHub

Adds Path-Traced Rendering for Accurate USD Hydra Viewport Previews

#### Autodesk<sup>®</sup> 3ds Max<sup>®</sup> 2019 Support Updated Plug-In with Latest Version Support Available Now

\*Expected in September 2018

\*More info at https://community.foundry.com/discuss/topic/142317/amd-radeon-prorender-is-now-available-for-modo-maint Image created by Art by Rens (overview.artbyrens.com) using AMD Radeon™ ProRender for 3ds Max®

Use of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83

Get the Beta PTC Creo Plug-In Today (a) pro.radeon.com/en/software/prorender/download/



Model Topo

## **MODO® BY FOUNDRY INTEGRATION**

gy UVEdit Paint Layout Setup Game Tools Animate Render Scripting Schematic Fusion ProRender 🕂

Work Plane Selection Sets

👔 🚯 🕀 Action Center 🔘 Falloff 🛛 🐧 Mesh Constraint 📗 Symmetry 🕂 Snapping 🧏 Select

💠 🖒 🔍 🖉 🏶 🖌 🖉 Options (Rendering...) LUT: sRGB

Rug
 SCULPTURE
 BACKOROP PHOTO
 FRAMES
 CURTAINS
 COFFE TABLE + OBJECT

SOFA

RADEON

ProRender

BALL SEAT

WALLS FLOORS (
 RED LAMP
 SIDEBOARD
 Binds
 O Camera MA

C Directional Light

TEXTURE GROUP
 Area Light Left
 Area Light REAR
 Camera Free

ArchvizBaseJuly03 bundled.0.lxo

\star Only 🛛 🏟

1 1

卢泰



## Snaps and Precision Add Geometry SDS Subdivide Bevel Extrude Sh Bridge Slice Sh

Smooth S

Public Beta Now Available



\*For Mode Maintenance and Subscription licensees. More info at https://community.foundry.com/discuss/topic/142317/amd-radeon-prorender-is-now-available-for-mode-maintenance-and-subscription-licensees Use of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83

## AMD Radeon<sup>™</sup> ProRender for <sup>©</sup> CINEMA4D

Top New Integrated Features in Upcoming Release 20<sup>\*</sup>



### Subsurface Scattering (SSS)

Easy-to-Use Shader for Rendering Realistic-Looking Skin, Wax, and More



### **Motion Blur Support**

Linear Motion Blur for Animations and Sub-Frame Motion Blur for Deformations

## **Multi-Pass Rendering**

New Multi-Pass Workflow for Powerful Compositing

Expected in September 2018. See https://www.maxon.net/en/products/new-in-release-20/prorender/ for more details. Supports: Windows® and macOS mage created by Yan Ge (IHDT) using MAXON Cinema 4D™ R20 Ise of third party marks //goos is for informational nurroses only and no endorsement of or by AMD is intended or implied. GD-83 GPU-Accelerated Rendering on Windows<sup>®</sup> and macOS<sup>®</sup>

AMD

RADEON



## **PIXAR USD PLUG-IN**

## AMD Radeon<sup>™</sup> ProRender **USD** Plug-In

## USD Hydra Viewport Render Delegate Available Now





## Adds Path-Traced Rendering

More Accurate USD Hydra Viewport Previews Compared to the Default OpenGL® Preview



### Test Drive the Plug-In

pro.radeon.com/en/software/prorender/ download/



### **Open-Source Repository on GitHub**

github.com/GPUOpen-LibrariesAndSDKs/ RadeonProRenderUSD/ 

 Maximize Iteration with

 Fast Accurate Previews

USD Viewport with Default OpenGL® Preview

RADEON RADEON ProRender

R

Jse of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83

## AMD Radeon<sup>™</sup> ProRender for PTC<sup>®</sup> Creo<sup>®</sup> (beta)

## Beta Plug-In Available Now at pro.radeon.com/en/software/prorender/download/



#### Fast and Accurate Renderings

Live Update for a Continuous Photorealistic View of Your PTC Creo Designs



## Export to Unreal® Engine

View Your Designs in VR Using the AMD Radeon™ ProRender Game Engine Importer



## Decal Support

Lets You Apply Labels, Stickers, and Other Images to Your Model

Supports: Windows® 7/10 Use of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83



RADEON



## AMD Radeon<sup>™</sup> ProRender for 3 AUTODESK<sup>®</sup> 3DS MAX<sup>®</sup>

## New Plug-In Features That Make Artists' Lives Easier



#### Updated Uber Shader

Better PBR Workflows with Diffuse Backscattering, Simplified Caustics, and Improved Clearcoat



### Camera Motion Blur

Accurately Recreate a Moving Camera for Animated Renders

Ambient<br/>OcclusionAdaptive<br/>SubdivisionLarge Scene<br/>ExportShader NodeSubdivisionOptimization

Supports: Windows® 7/10

nage created by Pablo Castaño Norkus using AMD Radeon™ ProRender for 3ds Max®

se of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83



Create Stunning Renders with Ease



## AMD Radeon<sup>™</sup> ProRender for M <sup>AUTODESK®</sup> MAYA<sup>®</sup>

## New Plug-In Features That Make Artists' Lives Easier



### Updated Uber Shader

Better PBR Workflows with Diffuse Backscattering, Simplified Caustics, and Improved Clearcoat



### **Camera Motion Blur**

Accurately Recreate a Moving Camera for Animated Renders

Ambient<br/>OcclusionAdaptive<br/>SubdivisionLarge Scene<br/>ExportShader NodeSubdivisionOptimization

Image created by Cirstyn Bech-Yagher

Supports: Windows® 7/10, macOS® High Sierra 10.13.3, Linux® CentOS® 6.5/7

Jse of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-83



Accelerating Artists' Workflows



# AMD Radeon<sup>™</sup> ProRender for **Delender**

## New Plug-In Features That Make Artists' Lives Easier



#### Updated Uber Shader

Better PBR Workflows with Diffuse Backscattering, Simplified Caustics, and Improved Clearcoat



### Camera Motion Blur

Accurately Recreate a Moving Camera for Animated Renders

Ambient<br/>OcclusionAdaptive<br/>SubdivisionLarge Scene<br/>ExportShader NodeSubdivisionOptimization

Supports: Windows® 7/10, macOS® High Sierra 10.13.3, Linux® Ubuntu® 16.04.3 Mech-Spider image by Theory Studios created using AMD Radeon™ ProRender for Blender™ Use of third party marks/logos is for informational purposes only and no endorsement of or by AMD is intended or implied. GD-8:



Produce Stunningly Photorealistic Images



## **DISCLAIMER AND ATTRIBUTION**

#### DISCLAIMER

The information contained herein is for informational purposes only, and is subject to change without notice. While every precaution has been taken in the preparation of this document, it may contain technical inaccuracies, omissions and typographical errors, and AMD is under no obligation to update or otherwise correct this information. Advanced Micro Devices, Inc. makes no representations or warranties with respect to the accuracy or completeness of the contents of this document, and assumes no liability of any kind, including the implied warranties of noninfringement, merchantability or fitness for particular purposes, with respect to the operation or use of AMD hardware, software or other products described herein. No license, including implied or arising by estoppel, to any intellectual property rights is granted by this document. Terms and limitations applicable to the purchase or use of AMD's products are as set forth in a signed agreement between the parties or in AMD's Standard Terms and Conditions of Sale. GD-18

© 2018 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, Radeon, and combinations thereof are trademarks of Advanced Micro Devices, Inc. in the United States and/or other jurisdictions. macOS is a registered trademark of Apple Inc. OpenGL<sup>®</sup> and the oval logo are trademarks or registered trademarks of Hewlett Packard Enterprise in the United States and/or other countries worldwide. Windows is a registered trademark of Microsoft Corporation in the United States and/or other jurisdictions. Vulkan is a registered trademark of the Khronos Group Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.