



Unite Seoul 2019



Using Post Processing with HDRP

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2019

Agenda

- Overview
- Solving current problems
- What is new
- Demo



What is Post Processing?

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Post Processing v1 ->

Post Processing v2 ->

HDRP Post Processing

Packages

+ All packages - Advanced - Search by package name, verified, preview or version number...

In App Purchasing	2.0.6	✓
Input System	preview - 0.2.8	
Jobs	preview.11 - 0.0.7	
Lightweight RP	5.7.2	
Mathematics	1.0.1	
Memory Profiler	preview.6 - 0.1.0	
Mobile Notifications	preview.21 - 1.0.0	
Mono Cecil	preview - 0.1.6	
Multiplayer HLAPI	1.0.2	
Oculus (Android)	1.29.1	
Oculus (Desktop)	1.29.1	
OpenVR (Desktop)	1.0.5	
Package Manager UI	2.1.2	✓
Package Validation	preview.24 - 0.4.0	
PlayableGraph Visual	preview.3 - 0.2.1	
Polybrush	preview.16 - 1.0.0	
Post Processing	2.1.6	
ProBuilder	4.0.4	
Profile Analyzer	preview.5 - 0.4.0	

Last update May 2, 14:02

Post Processing

Version 2.1.6 2019.1 verified

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com.unity.postprocessing

Author: Unity Technologies Inc.

The post-processing stack (v2) comes with a collection of effects and image filters you can apply to your cameras to improve the visuals of your games.

Install

Packages

+ All packages - Advanced - Search by package name, verified, preview or version number...

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Last update May 2, 14:02

Post Processing

Version 2.1.6 2019.1 verified


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[unity.unity3d.com/packages/unity/postprocessing](#)

Unity Technology

with a collection of effects and image processing tools to improve the visuals of your games.

[Install](#)



Packages

+ All packages - Advanced - Search by package name, verified, preview or version number...

▶ AKCore XR Plugin	preview.24 - 1.0.0
▶ ARKit XR Plugin	preview.27 - 1.0.0
▶ Asset Bundle Browser	1.7.0
▶ Burst	1.0.0
▶ Cinemachine	2.3.3
▶ Collections	preview.18 - 0.0.9
▶ Core RP Library	5.7.2
▶ Editor Coroutines	preview.1 - 0.0.2
▶ Entities	preview.31 - 0.0.12
▶ FBX Exporter	preview.11 - 2.0.1
▶ Film and TV Toolbox	preview.1 - 0.1.0
▶ Google Resonance Audio	1.18.3
▶ Google VR Android	1.18.4
▶ Google VR iOS	1.18.5
▶ High Definition RP	preview - 5.13.0 ✓
▶ Hybrid Renderer	preview.11 - 0.0.1
▶ Immediate Window	preview.3 - 1.0.0
▶ In App Purchasing	2.0.6 ✓
▶ Input System	preview - 0.2.8

Last update May 2, 14:02

High Definition RP

Version 5.13.0 preview

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com.unity.render-pipelines.high-definition

Author: Unity Technologies Inc.

The High Definition Render Pipeline (HDRP) is a high-fidelity Scriptable Render Pipeline built by Unity to target modern (Compute Shader compatible) platforms. The HDRP utilizes Physically-Based Lighting techniques, linear lighting, HDR lighting and a configurable hybrid Tile/Cluster deferred/Forward lighting architecture and gives you the tools you need to create games, technical demos, animations and more to a high graphical standard.

Up to date Remove

Packages

+ All packages - Advanced - Search by package name, verified, preview or version number...

▶ AKCore XR Plugin	preview.24 - 1.0.0
▶ ARKit XR Plugin	preview.27 - 1.0.0
▶ Asset Bundle Browser	1.7.0
▶ Burst	1.0.0
▶ Cinemachine	2.3.3
▶ Collections	preview.18 - 0.0.9
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▶ Entities	preview.31 - 0.0.12
▶ FBX Exporter	preview.11 - 2.0.1
▶ Film and TV Toolbox	preview.1 - 0.1.0
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▶ Google VR Android	1.18.4
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▶ High Definition RP	preview - 5.13.0 ✓
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▶ In App Purchasing	2.0.6 ✓
▶ Input System	preview - 0.2.8

Last update May 2, 14:02

High Definition RP

Version 5.13.0 preview

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com.unity.rendering_pipeline.high-definition

Authentic Inc.

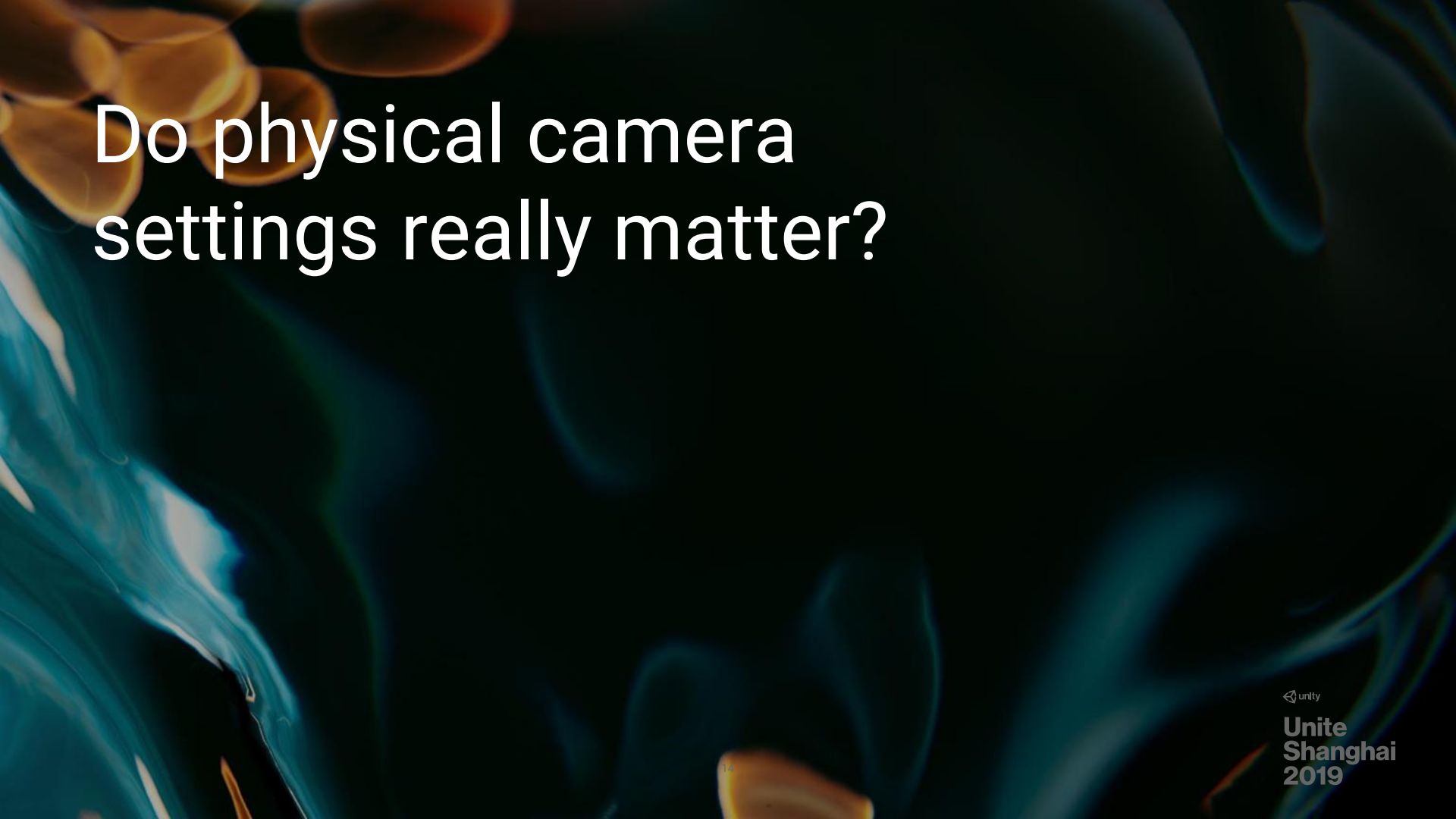
High Definition Render Pipeline (HDRP) is a high-fidelity Scriptable Render Pipeline (SRP) that uses modern (Compute Shader compatible) Physically-Based Lighting techniques, linear color, and a flexible and scalable hybrid Tile/Cluster deferred/Forward rendering architecture. It provides you with the tools you need to create games, applications, and more to a high graphical standard.

Up to date Remove

Why the change?

Why Change?

- Scalability is hard
- Separation of lighting/surface and camera effects
- Full async on HD Pipeline
- One size doesn't fit all
- Physical Light Units and Cameras
- “mode-11” for films

The background is an abstract, dark scene with swirling blue and teal patterns, possibly representing water or a digital environment. There are several bright orange, circular shapes scattered throughout, resembling light reflections or particles.

Do physical camera
settings really matter?

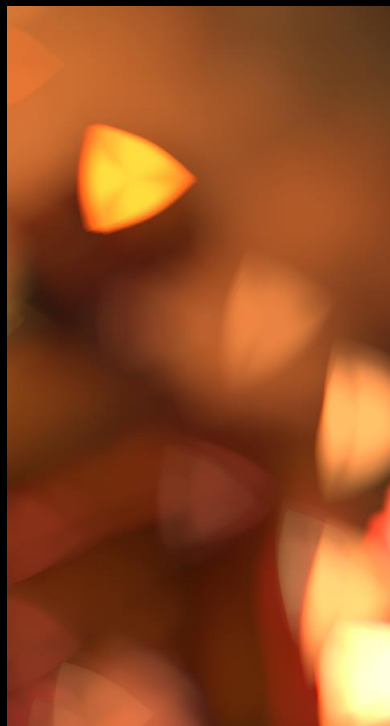
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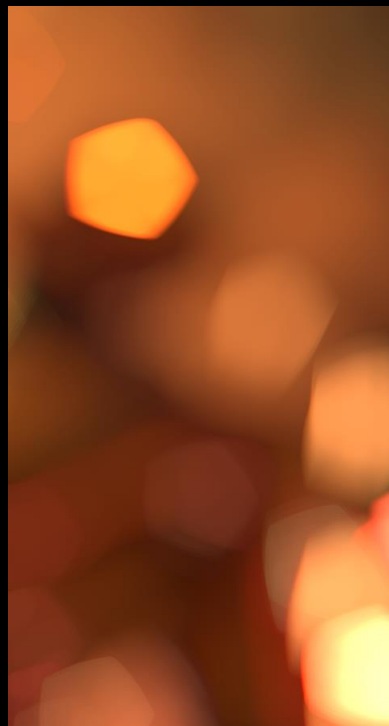
Physical Cameras – Depth of Field



Physical Cameras – Depth of Field



3 blades



5 blades

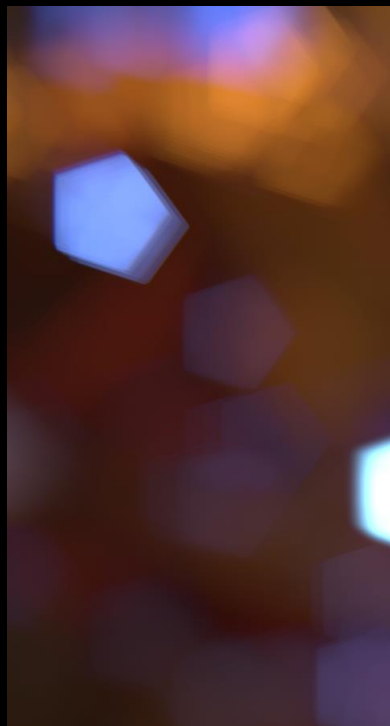


6 blades

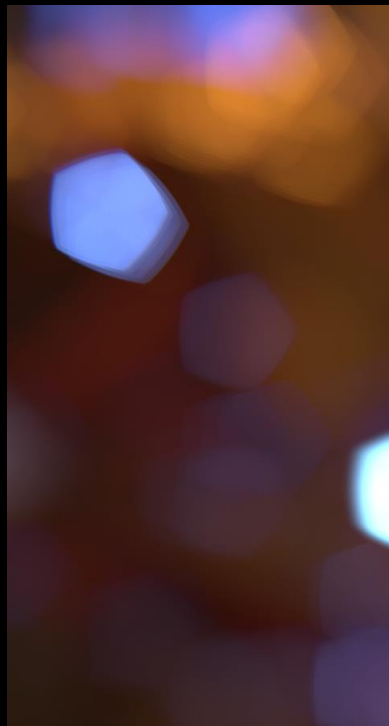


7 blades

Physical Cameras – Depth of Field



f/8



f/5.6



f/2.8



f/1.8

The background is an abstract, fluid composition of colors. It features deep, dark blue and teal tones that swirl and flow, creating a sense of movement. Interspersed within these darker areas are bright, glowing orange and yellow elements, some of which appear as soft, out-of-focus shapes, possibly resembling petals or light reflections. The overall effect is ethereal and dynamic.

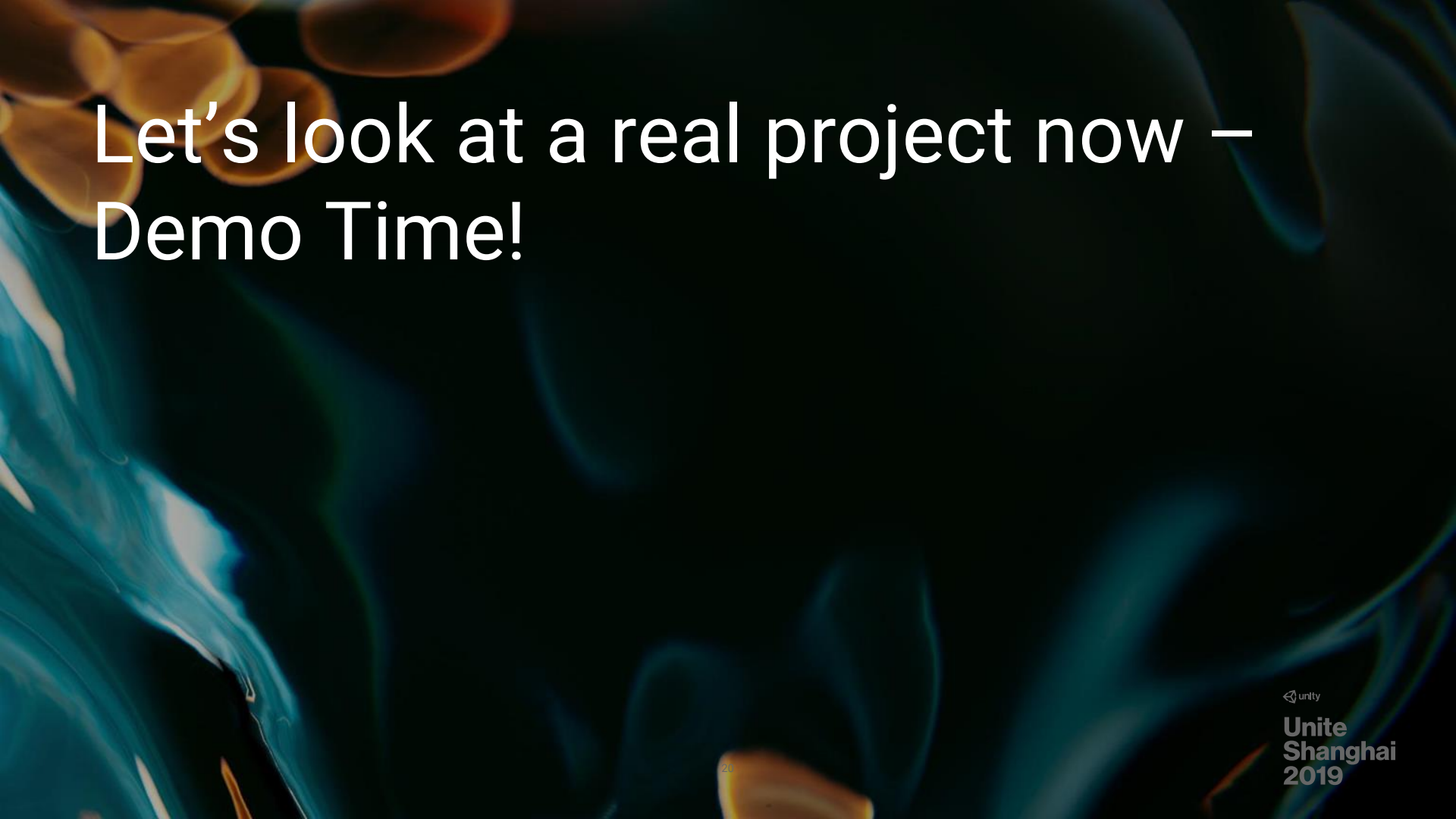
What else is new?

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New Stuff

- No more Post Process Volumes and Layers
- Anti-Aliasing on Camera
- DoF, Exposure, and Bloom physics camera settings
- Color Grading split
- Performance!

The background is an abstract composition of dark blue and teal colors with flowing, organic shapes. In the upper left and lower right corners, there are clusters of semi-transparent, overlapping orange and yellow circular shapes, resembling marbled paper or liquid droplets.

Let's look at a real project now –
Demo Time!

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The background is a dark, abstract composition. It features flowing, organic shapes in shades of deep blue and teal, interspersed with clusters of bright orange, semi-transparent, disc-like elements that resemble microscopic cells or pollen grains. The overall effect is a sense of dynamic movement and biological complexity.

Thank You!

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@MikeGeig



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