Introduction to LWRP

The goal of the Lightweight Rendering Pipeline (LWRP) is to provide optimized performance for developers targeting a broad range of platforms, VR, and games with limited realtime lighting needs. It does this by making some tradeoffs with regard to lighting and shading.



Figure 01: LWRP Lighting Sample

The LWRP performs single-pass forward rendering with one real-time shadow light and light culling per-object. By comparison, the legacy pipeline of forwarding rendering performs an additional pass per pixel light within range. This means the LWRP will result in fewer draw calls. It's also supported by the Shader Graph tool, which provides additional benefits for shader authoring workflow.

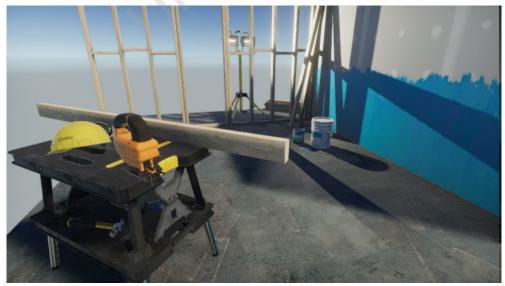


Figure 02: Sample scene using the Lightweight Rendering Pipeline

Creating a new project with LWRP

To start a new project with LWRP enabled:

- 1. Open the Unity Editor and click the New Project button.
- 2. In the new Template dropdown menu, select Lightweight RP (Preview). (Figure 03)

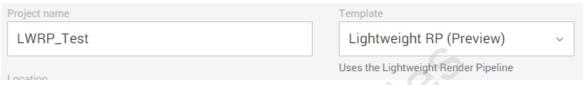


Figure 03: Creating a new project with LWRP

3. Click the Create Project button.

Once that's done, your new Unity project with the LWRP will be ready to go.

Upgrading an existing project to use LWRP

To upgrade an existing project, first download the LWRP using the Package Manager.

 Go to Window dropdown and select Package Manager to open the Packages Window. (Figure 04)

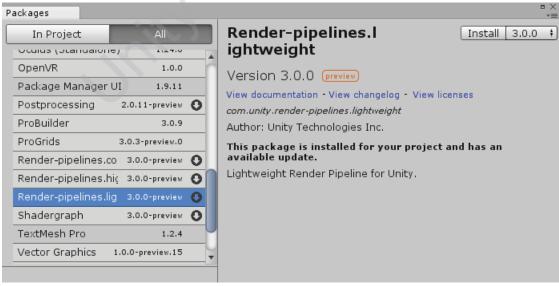


Figure 04: Package Manager Window

2. Click All.