Getting Started with
NVIDIA DLSS 3.7 for UE 4.27

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General Overview

NVIDIA DLSS 3.7 enables DLSS Frame Generation, DLSS Super Resolution, DLSS Ray Reconstruction, DLAA, NVIDIA Image Scaling, and Reflex in your game.

- **Performance Multiplier**: The AI network analyzes sequential frames and motion data to create additional high-quality, responsive frames, providing 2X frame-rate improvement.
- **Uncompromised Quality and Performance**: Advanced super-resolution temporal image reconstruction alongside optical multi-frame generation and the latest version of NVIDIA Reflex low latency technology produces high quality images, boosting performance up to 4X and providing a highly responsive experience for players.
- **AI That Improves**: DLSS takes advantage of AI models that are continuously improved through ongoing training on NVIDIA supercomputers, providing better image quality and performance across more games and applications.
- **NVIDIA Image Scaling**: An open source, best-in-class, spatial upscaler and sharpening algorithm that works cross-platform on all GPUs supporting SM5.2 and above. NVIDIA Image Scaling is a great compliment to NVIDIA DLSS for developers looking for a solution to support non-RTX GPUs.
- **Customizable Options**: DLSS Super Resolution lets you choose several image quality modes—from Quality to Ultra Performance. DLAA (Deep Learning Anti-Aliasing Mode) offers AI-based anti-aliasing mode for users who have spare GPU headroom and want higher levels of image quality.
- **Ray Reconstruction**: Leveraging AI to generate additional pixels for intensive ray-traced scenes, providing image quality enhancements.
- **RTX Dynamic Vibrance:** AI-powered filter that enhances visual clarity, allowing players to better distinguish in-game elements.

PLEASE NOTE: Due to Unreal Engine requiring an engine side change to leverage features such as Frame Generation, all DLSS technologies for UE 4.27 will have to be accessed via source. Please follow the below Installation Steps.

System Requirements

Operating Systems	Windows 10 64-bit DirectX End-User Runtimes (June 2010)
Dependencies	NVIDIA RTX GPU 531.68 driver or newer DX12 (for DLSS Frame Generation Features), DX11, Vulkan
Development Environment	Visual Studio 2017 v15.6 or later

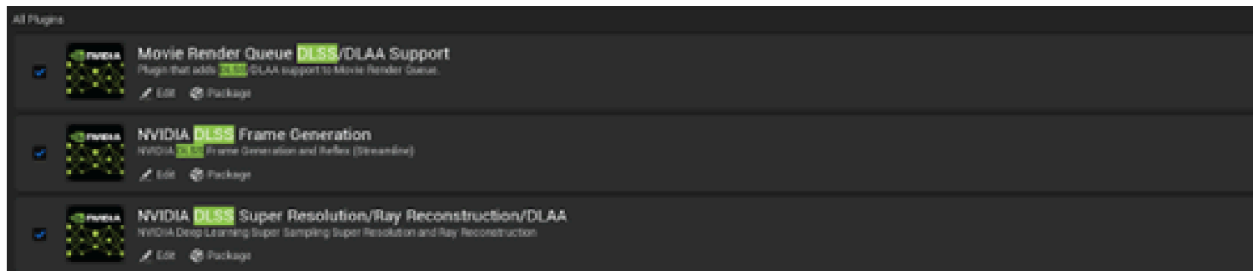## Getting Started with NVIDIA DLSS 3.7 for UE 4.27

Installation Steps

1. Merge Streamline required plugin hooks to your source tree to build Streamline and DLSS plugins against your custom engine. Streamline plugin hooks can be found [here](#).

    PLEASE NOTE: If you are greeted with a "404 Page," it means that you must log into (or create) your GitHub account, and link your Github account to your Unreal Engine account. For more information, please refer to the [Accessing Unreal Engine source code on GitHub](#) page.
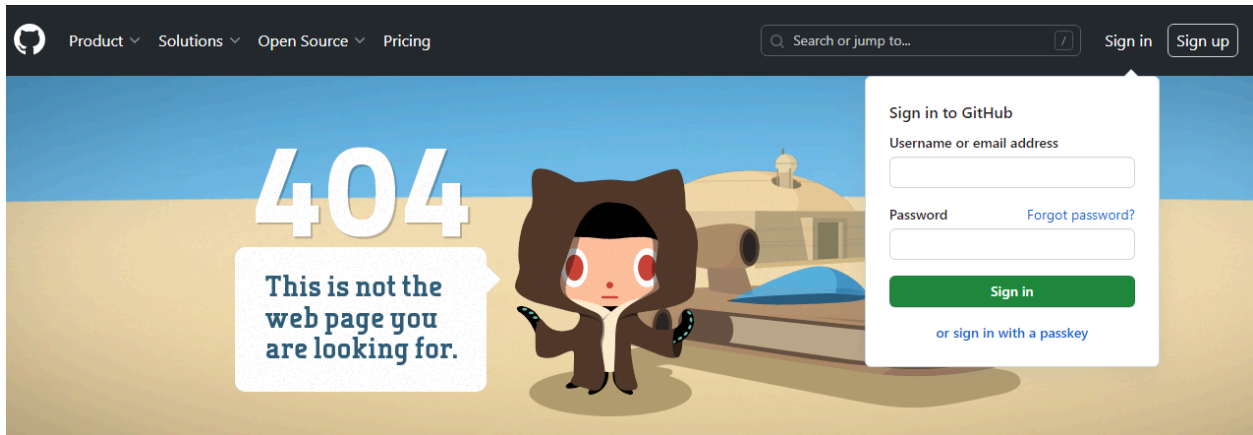
2. Once you have access, you can apply required engine-side changes (the plugin hooks) from this repository.
    a. Merge this branch directly if your code tree is git based: https://github.com/NvRTX/UnrealEngine/tree/dlss3/sl2-4.27-dlss-plugin
    b. Rebuild your engine with the plugins and plugin hooks provided above.
3. Open your project, go to the toolbar at the top of the screen and click `Edit`. Then, in the dropdown menu, select `Plugins` to open up the Plugins browser.
4. Search for "DLSS" in the plugins search bar.

5. Check the `Enabled` box to the left of the NVIDIA DLSS related icons.
    a. You should also see the *Movie Render Queue DLSS/DLAA Support* plugin pop-up in the search. If you want support, ensure to check the `Enabled` box here as well.

6. For NIS, search for `NVIDIA` in the search box. You will find that *NVIDIA Image Sharpening* populates. If you want support, ensure to check the `Enabled` box here as well.

7. A new prompt will appear at the bottom of the plugins window indicating you must restart your editor each time a new plugin is enabled.
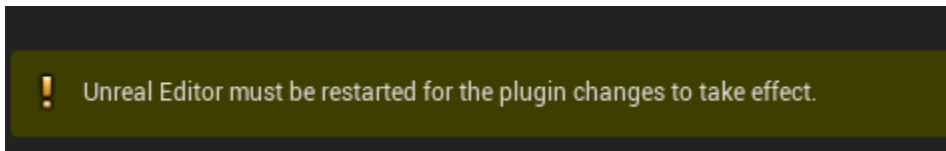
8. Restart the editor.
9. Additional documentation can be found within the repo. Navigate to UnrealEngine/Engine/Plugins/Runtime/Nvidia/ for more information.

If you are experiencing issues in getting any of the NVIDIA Plugins enabled, please refer to our Troubleshooting Tips & Tricks Guide. For additional support, please contact us at dlss-support@nvidia.com.