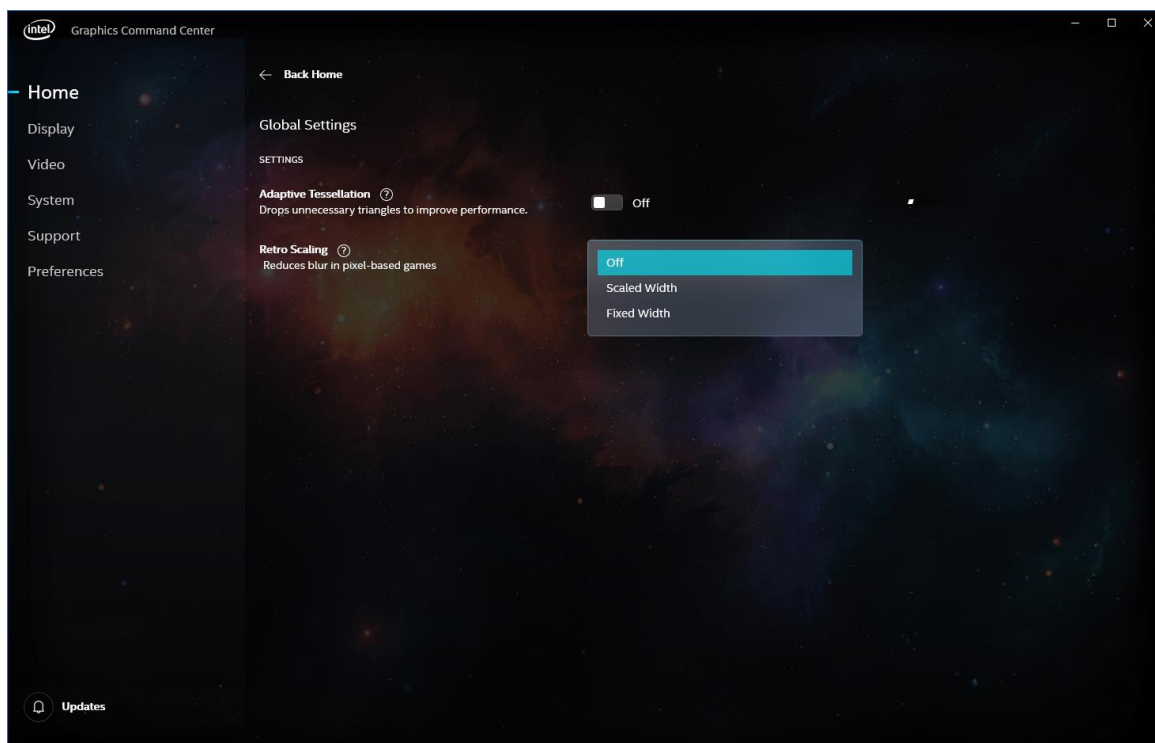# Release Notes

HIGHLIGHTS:

- ## Feature introduction: Beta support for Retro Scaling

SUMMARY:

This beta driver introduces beta support for Retro Scaling, a community-requested feature that allows users to enjoy the crisp imagery of pixel-art games on modern, high-resolution displays. In the Intel Graphics Command Center, there are three options for Retro Scaling:

- **Off**: This applies standard display scaling, which can make pixel-art graphics look "fuzzy" on modern displays.
- **Fixed Width**: This is what is commonly referred to as "integer scaling" and will deliver optimal sharpness but may lead to sub-optimal display area utilization when there is a mismatch between the aspect ratios of the game content and the display.
- **Scaled Width**: This is known as "nearest-neighbor interpolation" and delivers similar benefits to the Fixed Width option, but in instances where the display's aspect ratio and the game content do not match, this will scale the content to better utilize display area. This setting may introduce slight distortions in such scenarios due to the application of fractional scaling.

Here's a peek at the benefit that Retro Scaling can bring to pixel-art games – the difference is dramatic!

Retro Scaling OFF   Retro Scaling ON

To learn more about Retro Scaling and see more sample images of the technology in action, check out [this post](#) on the Intel® Developer Zone!

Be sure to check out [gameplay.intel.com,](#) where you'll find recommended game settings for many more of your favorite PC games.

Get a front row pass to gaming deals, contests, betas, and more with [Intel® Software Gaming Access](#).

Install the [Intel® Driver & Support Assistant](#) (previously called Intel® Driver Update Utility), which now automatically checks for drivers on a regular basis and can provide notifications when new drivers are available.

This document provides information about Intel's Graphics Driver for:

- 10th Gen Intel® Core processors with Gen11 graphics.

CONTENTS OF THE PACKAGE:

- Intel® Graphics Driver
- Intel® Display Audio Driver (11.1.0.9)
- Intel® Media SDK Runtime
- Intel® OpenCL* Driver
- Intel® Graphics Control Panel

Operating System Support

Supported 10th Generation Intel® Core processors:
- Microsoft Windows® 10 64-bit

SUPPORTED PRODUCTS:

HARDWARE

The following processors are supported by this release: Core™ i7-1065G7, Core™ i7-1060G7, Core™ i5-1035G7, Core™ i5-1035G1, Core™ i5-1030G7, Core™ i5-1030G4, Core™ i3-1005G1, Core™ i3-1000G4, Core™ i3-1000G1.

Note:
1. If you are uncertain of which Intel® processor is in your computer, Intel® recommends using the [Intel Processor Identification Utility](#) or Install the [Intel® Driver & Support Assistant](#) (previously called Intel® Driver Update Utility) to identify your Intel® processor.

2. In the Intel Graphics Command Center (System > Driver), the 'Microsoft DirectX*' version refers to the operating system's DirectX version. The DirectX 12 API is supported but some optional features may not be available. Applications using the DirectX 12 API should query for feature support before using specific hardware features. Please note that DirectX12 is only supported on Windows 10 and DirectX11.3 support is also available on supported Microsoft* operating systems.

For more information on Intel 10th Gen Intel Core processors:

https://www.intel.com/content/www/us/en/products/docs/processors/core/10th-gen-processors.html

http://www.intel.com/graphics

Work and play in high resolution with Intel® UHD Graphics, Iris® Graphics, Iris® Plus Graphics, and Iris® Pro Graphics. Watch captivating 4K Ultra HD (UHD) video on up to three screens, edit photos and videos like a pro, and immerse yourself in vividly rendered, seamless 3D gameplay - all with the added power boost of an Intel® Core™ processor. Intel® Graphics bring stunning visuals to thinner and lighter portable devices, like laptops, 2 in 1s, and desktop computers.

We continuously strive to improve the quality of our products to better serve our users and appreciate [feedback](#) on any issues you discover and suggestions for future driver releases. If you have an issue to submit, ***please follow the guidance found here*** [Default level information for reporting Graphics issues.](#)

*Other names and brands may be claimed as the property of others.