



# ***Intel® Graphics Production Version Driver***

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*April 23, 2025*

*32.0.101.6737*

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## Revision History

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Revision Number	Description	Revision Date
101.6737	Production Version Build 101.6737; validated	April 23, 2025
101.6734	Production Version Build 101.6734; validated	April 9, 2025
101.6733	Production Version Build 101.6733; validated	April 8, 2025
101.6651	Production Version Build 101.6651; validated	March 21, 2025
101.6647	Production Version Build 101.6647; fully validated	March 10, 2025
101.6559	Production Version Build 101.6559; fully validated	February 12, 2025
101.6556	Production Version Build 101.6556; fully validated	January 30, 2025
101.6314	Production Version Build 101.6314; fully validated	December 13, 2024
101.6299	Production Version Build 101.6299; fully validated	November 19, 2024
101.6043	Production Version Build 101.6043; fully validated	October 11, 2024
101.6042	Production Version Build 101.6042; fully validated	October 11, 2024
101.5737	Production Version Build 101.5737; fully validated	September 26, 2024
101.5734	Production Version Build 101.5734; fully validated	September 5, 2024

101.5728	Production Version Build 101.5728; fully validated	August 9, 2024
101.5726	Production Version Build 101.5726; fully validated	July 31, 2024
101.5724	Production Version Build 101.5724; fully validated	July 26, 2024
101.5718	Production Version Build 101.5718; fully validated	July 22, 2024
101.5712	Beta Build 101.5712; not fully validated	July 11, 2024
101.5644	Beta Build 101.5644; not fully validated	July 3, 2024
101.5640	Beta Build 101.5640; not fully validated	June 28, 2024
101.5638	Beta Build 101.5638; not fully validated	June 21, 2024
101.5637	<del>Beta Build 101.5637; not fully validated</del>	<del>June 19, 2024</del>
101.5560	Beta Build 101.5560; not fully validated	May 17, 2024
101.5489	Beta Build 101.5489; not fully validated	May 3, 2024
101.5484	Beta Build 101.5484; not fully validated	April 18, 2024
101.5426	Beta Build 101.5426; not fully validated	March 25, 2024
101.5291	Alpha Build 101.5289; not fully validated	February 15, 2024
101.5289	Alpha Build 101.5289; not fully validated	February 15, 2024
101.5286	Alpha Build 101.5286; not fully validated	January 12, 2024
101.5060	Alpha Build 101.5060; not fully validated	December 4, 2023
101.5055	Pre-Alpha Build 101.5055; not fully validated	November 14, 2023

101.4997	Pre-Alpha Build 101.4997; not fully validated	October 25, 2023
101.4874	Pre-Alpha Build 101.4874; not fully validated	September 27, 2023
101.4701	Pre-Alpha Build 101.4701; not fully validated	August 30, 2023



# 1 Release Kit Summary

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## 1.1 Release Kit Details:

Kit Release	Intel® Graphics Driver Production Version 101.6651
Target Platforms	<ul style="list-style-type: none"> <li>• Lunar Lake</li> <li>• Meteor Lake</li> <li>• Raptor Lake – R</li> <li>• Raptor Lake • Alchemist – R</li> <li>• Alchemist</li> <li>• Alder Lake</li> <li>• Arrow Lake-S/H/U/HX</li> <li>• Rocket Lake</li> <li>• Tiger Lake</li> <li>• Twin Lake</li> <li>• DG2</li> <li>• BMG</li> </ul>



## 2 *General Information*

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### 2.1 Important Notes

These Release Notes mentions issues Lunar Lake, Meteor Lake, Raptor Lake – R, Raptor Lake, Alchemist – R, Alchemist, Alder Lake, Arrow Lake-S/H/U/HX, Rocket Lake,Tiger Lake, Twin Lakes,DG2.

For resolved issues on LNL specific previous builds please refer to Release Notes included in the previous build packages.

While this Graphics driver supports other platforms as listed above, for issue details on other Revenue platforms, please refer to Release Notes included in kit# 840149.

Intel® Graphics driver complies with the GDPR requirement. No personal information is collected by Intel Corporation.

Starting Meteor Lake, Intel® Graphics System Controller Firmware (GSC FW) is loaded/ updated by Graphics Driver. For GSC FW change list, please refer to GSC FW Release notes.

### 2.2 Intended Audience

This document is intended for Original Equipment Manufacturers (OEMs), Original Design Manufacturers (ODM).

### 2.3 Supported OS

- Microsoft Windows\* 11-64 (24H2)
- Microsoft Windows\* 11-64 (23H2)
- Microsoft Windows\* 11-64 (22H2)
- Microsoft Windows\* 10-64 (22H2)
- Microsoft Windows\* 10-64 (21H2)



## **3      *Features Added***

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NA





## **4      *Features Changed/Modified***

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NA



## 6. Fixed Telemetry Issues

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ID #	Details	As of Version
220205 84296	<p><b>Title:</b> [Microsoft Telemetry] User mode crash reports breaking Photos App scenario identified through telemetry data.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.shader_cache</p> <p><b>Symptoms:</b> Affects scenarios related to photo applications on systems running Windows 11 with certain driver versions.</p> <p><b>Root Cause:</b> The issue was caused by multiple initializations of the ShaderCache, leading to an incorrect reference count which subsequently caused errors during the destruction process within the Intel® ShaderCache library.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> none</p> <p><b>Affected Platform:</b> Tiger Lake H 8+1 Platform Configuration</p>	101.6737
2201897 5838	<p><b>Title:</b> [Microsoft Telemetry] TDR issue involves LKD_0x141_Tdr: 6_IMAGE_igdkmdn64.sys_GEN12LP_KMD_GUC_SCHEDULER_ERR OR leading to an engine reset after a TDR timeout.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_kmd,ip.graphics_driver.guc_sched</p> <p><b>Symptoms:</b> The issue involves a Watson Failure caused by a</p>	101.6737

	<p><b>scheduler error in the igdkmdn64.sys driver on GEN12LP hardware, leading to an engine reset after a TDR timeout.</b></p> <p><b>Root Cause:</b> The issue was caused by a context switch submission where a packet was submitted to the 3D context and rang the doorbell, but no corresponding doorbell log was found on the GuC side, leading to an engine reset after a TDR timeout.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> none</p> <p><b>Affected Platform:</b> null</p>	
22018868944	<p><b>Title:</b> The issue involves a Watson Failure caused by a LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_DX10_GUC_SCHEDULER_ERROR, which is related to the Intel® Graphics Driver on systems running Windows 11 with specific GEN12LP hardware, affecting the DX10 GUC scheduler operations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_kmd,ip.graphics_driver.guc_scheduled</p> <p><b>Symptoms:</b> The issue involves a Watson Failure caused by a LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_DX10_GUC_SCHEDULER_ERROR, affecting systems running Windows 11 with specific driver versions. The problem is characterized by scheduler errors in the graphics driver, leading to system instability and crashes.</p> <p><b>Root Cause:</b> The issue is caused by a GEN12LP_DX10_GUC_SCHEDULER_ERROR, which indicates a problem with the Graphics Command Unit (GUC) scheduler in handling DirectX 10 workloads, potentially related to missing doorbells that are not being detected or processed correctly.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> none</p>	101.6737
14024574302	<p><b>Title:</b> The system cannot display after resuming from S3 when an Apple XDR monitor is connected to the MF port.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_interfaces</p>	101.6737

	<p><b>Symptoms:</b> The system cannot display after resuming from S3 when an Apple XDR monitor is connected to the MF port.</p> <p><b>Root Cause:</b> The issue where the system cannot display after resuming from S3 when connected to an Apple XDR monitor via the MF port is due to a regression in the Intel® GFX driver, specifically related to the handling of the DisplayPort Extended Sleep Wake time support feature.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	
140246 60196	<p><b>Title:</b> When playing videos on the Tencent Video client, the danmaku (bullet chat) appears fuzzy and contains visual artifacts.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> When playing videos using the Tencent Video client with Bullet Chat enabled, the text appears fuzzy and contains visual artifacts.</p> <p><b>Root Cause:</b> The issue of fuzzy and garbled display in the danmaku (bullet chat) when playing videos on the Tencent Video client is caused by the application 'MagicDanmaku.exe' running in the background, which affects the rendering process when certain discrete graphics units are present.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737
160271 21205	<p><b>Title:</b> External monitors experience a blankout when connected via HDMI and playing video in full-screen mode for an extended period, typically over two hours.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.display_interfaces</p> <p><b>Symptoms:</b> When connecting an external monitor via HDMI and playing a video in full screen for 1-2 hours, the monitor experiences a blankout.</p> <p><b>Root Cause:</b> The root cause of the external monitor blankout issue when playing video for extended periods is related to the Parade PS8409 re-timer chip, which crashes during SCDC error handling in TMDS mode, as identified in Intel's experiments and collaboration with the Parade team.</p>	101.6737

	<p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	
14024068444	<p><b>Title:</b> The video playback becomes stuck when the mouse cursor is moved on an external monitor in extended mode.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.display_os_features,ip.graphics_driver.display_powercons</p> <p><b>Symptoms:</b> When using extended mode with an external monitor, moving the mouse cursor causes the video to become stuck, although sound output remains normal.</p> <p><b>Root Cause:</b> The root cause of the video being stuck in extended mode when moving the mouse cursor on the external monitor is due to inconsistencies in the timing of v-blank boost/unboost requests and their actual effect on the hardware, leading to incorrect calculations for frame presentation times.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737
14024557936	<p><b>Title:</b> The issue involves recorded gameplay videos experiencing smoothness problems when using the Win+G hotkey on systems equipped with specific Intel® graphics drivers, affecting multiple game titles.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.trinity11,ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> When using the Win+G shortcut to record gameplay, the recorded video exhibits shaking and is not smooth, with a 100% failure rate on specific driver versions.</p> <p><b>Root Cause:</b> The issue of unsmooth recorded gameplay videos when using the Win+G hotkey is due to a driver regression affecting specific driver versions (V6452, V6554, and bugcheck6677), with the problem being reproducible on Intel RVP systems as well.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737

220147 55568	<p><b>Title:</b> [Microsoft Telemetry] TDR issue found in Telemetry data involves a failure identified by the LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_0_RINGHANG error, indicating a hang in the rendering operations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_kmd,ip.graphics_driver.guc_sched</p> <p><b>Symptoms:</b> The issue involves a system hang characterized by the error LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_0_RINGHANG, affecting graphics processing units, specifically noted in the context of context switch workloads.</p> <p><b>Root Cause:</b> The root cause of the Watson Failure is identified as a 'GEN12LP_0_RINGHANG' error, which is related to the Intel® graphics driver (igdkmdn64.sys) for GEN12LP graphics, occurring during context switch workloads.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> none</p>	101.6733
220209 74899	<p><b>Title:</b> [Microsoft Telemetry] TDR issue involves a Watson Failure caused by a LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_0_GUC_SCHEDULER_ERROR, indicating a problem with the Graphics Microcontroller (GuC) scheduler in the GEN12LP graphics architecture.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.guc_sched</p> <p><b>Symptoms:</b> The issue involves a failure identified by the Watson system, specifically a 'LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_0_GUC_SCHEDULER_ERROR', indicating a problem with the Graphics Microcontroller (GuC) scheduler that leads to system crashes or resets.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Graphics Command Unit (GuC) did not receive the interrupt from the hardware, despite the Kernel Mode Driver (KMD) confirming that the doorbell ring request was successfully submitted.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p>	101.6733

	<p><b>Affected OS Information:</b> none</p>	
220188 68944	<p><b>Title:</b> [Microsoft Telemetry] TDR issue involves a Watson Failure caused by a LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_DX10_GUC_SCHE DULER_ERROR, which is related to the Intel® Graphics Driver on Windows 11 systems.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_kmd,ip.graphics_driver.guc_sched</p> <p><b>Symptoms:</b> The issue involves a Watson Failure caused by a LKD_0x141_Tdr:6_IMAGE_igdkmdn64.sys_GEN12LP_DX10_GUC_SCHE DULER_ERROR, affecting systems running Windows 11 with specific driver versions, leading to system crashes.</p> <p><b>Root Cause:</b> The root cause of the Watson Failure is identified as a GEN12LP_DX10_GUC_SCHEDULER_ERROR, which is related to missing doorbells in the Graphics Command Unit (GUC) scheduler, causing the render engine to become stuck.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> none</p>	101.6733

## 7. Fixed Issues

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ID	Description	As of version
15017477505	<p><b>Title:</b> When the eDP pipe joiner feature is enabled, only one resolution option (3840x2400) is available for game settings, limiting the display capabilities required for UHD at 240Hz refresh rates.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_interfaces,ip.graphics_driver.display_os_features</p> <p><b>Symptoms:</b> When the eDP pipe joiner feature is enabled, only one resolution option (3840x2400) is available for game settings, limiting the display capabilities for high refresh rates such as UHD at 240Hz.</p> <p><b>Root Cause:</b> The issue is introduced from ci-master-18175, where multiple Pipe Joiner changes were included, specifically enabling the FtrEdpPipeJoinerModeSupport, which resulted in only one resolution (3840x2400) being available in game options when the eDP pipe joiner feature is enabled.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737
14024761721	<p><b>Title:</b> During a clean driver upgrade process, the installation of Intel® Graphics Software (IGS) failed, resulting in an exception that prevented successful installation.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.installer.gfx</p> <p><b>Symptoms:</b> IGS installation failed during a clean driver upgrade from version 101.6653 to 101.6732, resulting in an exception during the installation process.</p> <p><b>Root Cause:</b> The root cause of the IGS installation failure during the clean driver upgrade was due to a missing object assignment after adding support for oneAPI Level Zero uninstallation.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737
14022657502	<p><b>Title:</b> The issue involves sporadic game crashes during the initial menu scene and while loading save data, particularly when the game is forced to load faster than usual by clicking through</p>	101.6737



	<p>loading or cutscenes.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The game crashes sporadically during the initial menu scene and when loading save data, particularly if the player clicks through loading or cutscenes quickly, forcing the game to load faster than usual.</p> <p><b>Root Cause:</b> The root cause of the game crash is related to a divergent control flow issue in the game's shader code, which is not fully resolved by CAPCOM and is exacerbated by specific driver interactions and game settings.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v23H2</p>	
18040848 827	<p><b>Title:</b> The issue involves visible visual stutters during gameplay on the BMG X2 320EU Rev9 (Discrete) configuration, specifically noted when entering new zones or areas with many objects or enemies.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Visible visual stutters are observed in gameplay, particularly when entering new zones or areas with many objects or enemies.</p> <p><b>Root Cause:</b> The root cause of the visual stutters in gameplay is due to CPU overhead at the present thread, specifically related to the createDescriptorHeap function, which delays the present and causes the GPU to idle.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>	101.67 37
16026422 757	<p><b>Title:</b> Using shortcut keys to open the task manager causes the game to hang for 1 or 2 minutes when in full screen window mode.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d9</p> <p><b>Symptoms:</b> Using shortcut keys to open the task manager causes the game to hang for 1 or 2 minutes when in full screen window mode.</p>	101.67 37

	<p><b>Root Cause:</b> The issue where using shortcut keys to open the task manager causes the game to hang for 1 or 2 minutes in full screen window mode is due to the game resetting the display mode when switching back to the game, which is not observed in windowed or borderless modes.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>	
16026839 178	<p><b>Title:</b> The issue involves the Intel® PR Driver version 101.6628, where specific IDs were not removed as required by the RCR VSRI-6798.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.inf_file</p> <p><b>Symptoms:</b> The issue involves the failure to remove specific identifiers (4ID's) from the PR driver 1016628 as required by the RCR VSRI-6798, affecting systems running on Windows 2024 with Arrow Lake, H, DDR5 platform configurations.</p> <p><b>Root Cause:</b> The root cause of the issue was that the 4ID's were not removed from the Intel® PR Driver 1016628 as required by the RCR VSRI-6798, but this was subsequently addressed and corrected in the ww04 branch of the driver.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37
16026420 064	<p><b>Title:</b> Intel® customers are experiencing a 30-second black screen delay when switching back to a game in full screen mode.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.trinity9</p> <p><b>Symptoms:</b> When switching back to a game in full screen mode, there is a black screen delay of approximately 30 seconds.</p> <p><b>Root Cause:</b> The issue is caused by the game changing its behavior, which exposes the issue in the Intel® graphics driver related to the destroy and create shader operations taking a long time to execute on Trinity9.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>	101.67 37

16026388 213	<p><b>Title:</b> During the benchmark of 'Horizon Zero Dawn Remastered' on Intel® Arc B570 systems, users are experiencing low FPS, FPS dips, and choppiness.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> During the benchmark of 'Horizon Zero Dawn Remastered', low FPS and choppiness are observed, particularly with certain system configurations and drivers.</p> <p><b>Root Cause:</b> The root cause of the low FPS and choppiness observed during the benchmark of 'Horizon Zero Dawn Remastered' on systems equipped with the Intel Arc B570 - BMG X2 FRD-B36 EU288 SD PRQ is due to the game exceeding the local memory capacity on the 288EU configuration, leading to higher traffic in the Paging Queue and resulting in FPS spikes and performance issues.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>	101.67 37
16026339 582	<p><b>Title:</b> The issue involves a transparency corruption in character hair rendering in Virtua Fighter 5 R.E.V.O., specifically affecting Intel® Arc A750/770 platforms, similar to a previously encountered issue in another game using the same engine.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The issue involves transparency corruption in character hair in the game Virtua Fighter 5 R.E.V.O., specifically on Arc A750/770 platforms, which was resolved by disabling the CPSOmask Workaround.</p> <p><b>Root Cause:</b> The root cause of the issue with Virtua Fighter 5 R.E.V.O. was identified as the CPSOmaskWA (Compute Pipeline State Object mask Workaround), which needed to be disabled to resolve hair transparency corruption issues on Intel® Arc A750 platforms.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>	101.67 37
18040838 528	<p><b>Title:</b> The issue involves stuttering observed in the game 'Horizon Zero Dawn Remastered' when both FSR3 and AMD Frame Generation features are enabled.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_gmm,ip.graphics_driver.d3d12</p>	101.67 37

	<p><b>Symptoms:</b> Stuttering occurs in the game Horizon Zero Dawn Remastered when both FSR3 and AMD Frame Generation features are enabled.</p> <p><b>Root Cause:</b> The stuttering issue when FSR3 and AMD Frame Generation are enabled is strictly related to AMD's frame generation option, as confirmed by testing configurations and driver versions.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	
18041373 136	<p><b>Title:</b> The issue involves triangle corruption during a cutscene in the game 'Dune Awakening' on Intel® BMG 580 and 570 graphics cards, which does not occur on competitor graphics cards.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12,ip.graphics_driver.igc,ip.isv_software.3d_application</p> <p><b>Symptoms:</b> The issue involves triangle corruption observed during a cutscene in the game Dune Awakening on BMG 580 and 570 graphics cards, which does not occur on Nvidia RTX4060 and AMD RX6600 cards.</p> <p><b>Root Cause:</b> The root cause of the triangle corruption in the cutscene issue was resolved by adding the Application Interface Layer (AIL) 'WALoadRawVectorToTypedRead' to the Intel® gfx-driver-ci-comp_d3d12-3421 for the game Dune Awakening, which addressed the corruption on BMG platforms.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37
18041186 170	<p><b>Title:</b> The issue involves display corruption when toggling fullscreen mode off and adjusting the frame skip option in the game Terraria, particularly noticeable with certain monitor refresh rates.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.trinity9</p> <p><b>Symptoms:</b> When setting fullscreen off and frame skip option in the game Terraria, there is visible corruption, particularly noticeable with monitors having refresh rates of 144Hz or higher, with the issue being less frequent or absent at 60Hz.</p>	101.67 37

	<p><b>Root Cause:</b> The issue was caused by a change in the Intel® gfx-driver-ci-master-17674, specifically the removal of the hwaccess flag from GetGpuCpuTimestamps, which led to flickering and corruption when switching between fullscreen and windowed modes in the game Terraria with frame skip off.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	
18041186 481	<p><b>Title:</b> Intel® identified a performance regression in the game Call of Duty: Black Ops 6 when using specific Intel® drivers, resulting in lower frame rates compared to previous releases.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Performance regression observed in Call of Duty: Black Ops 6, with lower frame rates compared to previous driver releases.</p> <p><b>Root Cause:</b> The performance regression issue in Call of Duty: Black Ops 6 was due to a change in the game detection mechanism in the Intel® driver, which was not present in the ww48 branch.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37
22020471 268	<p><b>Title:</b> The issue involves performance discrepancies in depth map generation between Intel® Battlemage and Intel® Alchemist graphics cards when using Agisoft Metashape software, with the Battlemage card performing slower.</p> <p><b>Exposure:</b> 3-medium</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> The issue involves performance discrepancies in depth map generation between Battlemage and Alchemist graphics cards when using Agisoft Metashape, with Battlemage showing slower performance.</p> <p><b>Root Cause:</b> The root cause of the performance issue in Agisoft Metashape's Depths Map is due to the suboptimal usage of the copy engine in the Intel® gfx-driver, which affects the efficiency of clEnqueueWriteBuffer and clEnqueueReadBuffer operations.</p> <p><b>Reproducibility:</b> always_100%</p>	101.67 37

	<p><b>Affected OS Information:</b> windows</p>	
22019968366	<p><b>Title:</b> Intel® Procyon AI Stable Diffusion v1.5 and SDXL were generating blank or garbled images on specific configurations, but the issue was not observed with other hardware setups.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.directml</p> <p><b>Symptoms:</b> Running Procyon AI Stable Diffusion v1.5 and SDXL generates blank or garbled images.</p> <p><b>Root Cause:</b> The root cause of the issue where Procyon AI Stable Diffusion v1.5 and SDXL were generating blank or garbled images was related to the Intel® GPU A750 8GB with specific driver versions. The issue was not observed with other hardware configurations such as the Intel® A770 and NV 4060, and was resolved in the latest driver updates for the A750.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>	101.6737
16026554364	<p><b>Title:</b> Specviewperf 15 Beta - Blender-01 viewsets failed without getting score(Graphics renderer device not available)</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.opengl</p> <p><b>Symptoms:</b> Specviewperf 15 Beta - Blender-01 viewsets failed without getting a score due to the graphics renderer device not being available.</p> <p><b>Root Cause:</b> The issue was identified as a driver regression problem, specifically with the Intel® gfx-driver-ci-master-18180, where the Specviewperf 15 Beta - Blender-01 viewsets failed without getting a score due to the graphics renderer device not being available.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737
16026763015	<p><b>Title:</b> [ARL-H][Day0][Win2024]: Fragpunk: Crash with TDR observing while launching the game.</p>	101.6737

	<p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Crash with TDR observed while launching the game.</p> <p><b>Root Cause:</b> The root cause of the game 'Fragpunk' crashing upon launch is due to a 3D engine TDR with 'DX12COMPUTE_BBHANG', where the game hangs on the 3D engine batch buffer 'Pipe Control' command.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	
16026755 119	<p><b>Title:</b> Black corruption was observed while applying sketches in Solidworks on various platforms using specific Intel® drivers.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.trinitygl,ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> Black corruption is observed while applying sketches in Solidworks software on various platforms.</p> <p><b>Root Cause:</b> The root cause of the black corruption observed while applying Sketch in Solidworks was identified as a regression in the Intel® gfx-driver-ci-comp_vulkan-11925, which was resolved by restoring the default value for 'oglvkDisableBlitDuringDrawableRecreation' in the driver update gfx-driver-ci-comp_vulkan-12154.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>	101.67 37
15016335 206	<p><b>Title:</b> The issue involves corruption observed in the game AION when using Intel® DG2 graphics, specifically related to shader precision that affects visual rendering.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12,ip.graphics_driver.igc,ip.graphics_driver.vulkan,ip.i sv_software.3d_application</p> <p><b>Symptoms:</b> A specific area in the game AION experiences flickering and blurred screen issues.</p>	101.67 37

	<p><b>Root Cause:</b> The root cause of the corruption issue in the game AION when using Intel® Arc A770 graphics is related to the incorrect setting of fast math flags in the shader by the Independent Software Vendor (ISV), which affects the shader's handling of mathematical operations.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>	
18041444 894	<p><b>Title:</b> The Last of Us Part 2 game experiences a crash due to a Timeout Detection and Recovery (TDR) error shortly after gameplay begins on certain Intel® configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Last of Us Part 2 game crashes with TDR after a couple minutes of gameplay.</p> <p><b>Root Cause:</b> The root cause of the game crash issue is identified as a 'Page Fault' in the Intel® Graphics Driver, specifically related to the handling of certain graphics commands by the driver, which was not adequately managing memory under specific game settings and system configurations.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37
14024093 868	<p><b>Title:</b> The Intel® BMG X2 320EU graphics card exhibits lower performance metrics at the 99% and 99.9% percentiles compared to the Intel® A750 graphics card across various resolutions in the game Ghost of Tsushima, as evidenced by stuttering in both logs and gameplay.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The issue involves stuttering during gameplay and lower performance metrics (99%tile and 99.9%tile) on the BMG X2 320EU compared to the A750 across various resolutions (1080p, 1440p, 2160p).</p> <p><b>Root Cause:</b> The root cause of the stuttering issue in the game 'Ghost of Tsushima' on the BMG X2 320EU platform compared to the A750 platform is due to lower 99th and 99.9th percentile performance metrics observed on the BMG X2 320EU across various resolutions.</p>	101.67 37



	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>	
16026791972	<p><b>Title:</b> The issue involves a performance regression in Specviewperf 15 Beta Enscape viewsets, where the latest driver shows a lower score compared to an older version on the ADL-S platform with A40 and A60 configurations.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> The issue involves a lower performance score in Specviewperf 15 Beta Enscape viewsets when using a newer driver compared to an older version.</p> <p><b>Root Cause:</b> The root cause of the issue is a regression in the Intel® gfx-driver-ci-comp_vulkan-11779, where the setting 'ForceUseVulkan3DContextForExternalPresentDisabled' was set to 0, leading to a significant FPS drop in the Specviewperf 15 benchmark when using the Enscape application in windowed mode.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737
16026308547	<p><b>Title:</b> Error observed while running Intel® OpenVinoTestbench_v1.15 on Blackmagic Davinci Resolve, resulting in a SIGABRT (22) error and a message indicating 'OpenCLContextManager destroyed with dangling contexts'.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.neo</p> <p><b>Symptoms:</b> Error observed while running OpenVinoTestbench_v1.15, including a SIGABRT (22) error and a message stating 'OpenCLContextManager destroyed with dangling contexts'.</p> <p><b>Root Cause:</b> The root cause of the issue is related to the Intel® Graphics driver, which was resolved in a later version that included a fix for handling USM allocations more effectively, preventing errors like SIGABRT and issues with dangling OpenCL contexts.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.6737

16025834 122	<p><b>Title:</b> Blackmagic Davinci - Taking more time to Progress &amp; Export than last cycle during Edit video with text, Generate subtitles, Depth map, Voice isolation, Face refinement, Optical flow</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.neo</p> <p><b>Symptoms:</b> Taking more time to Progress &amp; Export than last cycle during Edit video with text, Generate subtitles, Depth map, Voice isolation, Face refinement, Optical flow</p> <p><b>Root Cause:</b> The issue of increased time to Progress &amp; Export in Blackmagic Davinci during various video editing tasks is suspected to be due to a driver regression, specifically identified between the Intel® GFX driver versions ci-neo-030883 and ci-neo-030884.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37
16020876 047	<p><b>Title:</b> The issue involves the game 'Sonic Frontiers' unexpectedly closing when the in-game settings are changed to borderless full screen mode.</p> <p><b>Exposure:</b> 3-medium</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+</p> <p><b>Symptoms:</b> Sonic Frontiers game closes when switching to borderless full screen mode in the game settings.</p> <p><b>Root Cause:</b> The issue where Sonic Frontiers game closes after changing to borderless full screen in in-game settings is specific to the NEC-Arthur configuration and is seen across various driver versions, indicating a potential compatibility or configuration issue with this specific hardware setup.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>	101.67 37
14024213 875	<p><b>Title:</b> After clicking 'Reset Settings' in the Intel® Graphics Software APP, the color depth displays as '8 bits per color' instead of the expected '10 bits per color'.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_os_features,ip.graphics_driver.display_powercons</p>	101.67 37

	<p><b>Symptoms:</b> Color Depth shows "8 bits per color" instead of the expected "10 bits per color" after clicking "Reset Settings" in the Intel Graphics Software APP.</p> <p><b>Root Cause:</b> The issue where the color depth shows '8 bits per color' instead of '10 bits per color' after clicking 'Reset Settings' in the Intel® Graphics Software APP is due to the reset action removing the customization of the color depth setting, which defaults back to 8 bits.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	
18040913 204	<p><b>Title:</b> The Crew Motorfest game exhibits flickering corruption on the ground during gameplay across all graphics settings.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> During gameplay of The Crew Motorfest, there is flickering corruption observed on the ground across all graphics settings.</p> <p><b>Root Cause:</b> The root cause of the flickering corruption on the ground during gameplay in The Crew Motorfest is related to the graphics driver, specifically the versions prod-hini-releases_24ww40-ci-master-17603-bmg-revenue-pr-1016237-ms-attestation-sign-907 and gfx-driver-ci-master-17820-ms-preprod-sign-5440, which exhibit this issue across various system configurations and settings.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>	101.67 37
14024121 478	<p><b>Title:</b> An error 'Something went wrong' occurs when taking photos using the 'Camera' application in Win10 OS.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_kmd,ip.graphics_driver.inf_file</p> <p><b>Symptoms:</b> An error 'Something went wrong' occurs when taking photos using the 'Camera' application in Windows 10 OS.</p> <p><b>Root Cause:</b> The issue is related to the GFX driver regression, specifically affecting the camera functionality when taking photos using the Camera application in Windows 10 OS.</p>	101.67 37

	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.20h2_vibranium.x64</p>	
14024465 757	<p><b>Title:</b> The issue involves a failure in the Camera MediaCapture HLK test related to the 'mfx_mft__mjpgvd64.dll' component, which is part of the Intel® MJPEG decoder.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.media_decode</p> <p><b>Symptoms:</b> Customers are experiencing a failure in the Camera MediaCapture HLK test due to an issue with the mfx_mft__mjpgvd64.dll, where the MJPEG clip is too short to fill all surface lists, causing synchronization issues even after an 'End of stream' signal is sent.</p> <p><b>Root Cause:</b> The root cause of the issue is that the MJPEG clip for the HLK case is too short to fill all surface lists, which size is forced to be &gt;= 17 based on a previous request from MSFT. The application still attempts to sync surfaces that are not filled even after sending 'End of stream', leading to the issue.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37
14023750 236	<p><b>Title:</b> SUT always shows TCO logo when a hybrid dock connected monitor resumes from S4/S5 in second screen only mode.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_os_features,ip.os_api_bug.windows</p> <p><b>Symptoms:</b> When a hybrid dock is connected to a monitor and the system resumes from S4/S5 states in a secondary screen only mode, the system consistently displays the TCO logo on the internal display.</p> <p><b>Root Cause:</b> The issue occurs because the Intel® Graphics driver does not disable the internal display (eDP) when the system resumes from S4/S5 hibernation mode with an external monitor connected in secondary screen only mode, leading to the TCO logo being displayed on the internal screen.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37

15016592 749	<p><b>Title:</b> When enabling the AIL registry key, there is an observed TDR or application crash while launching DirectX 12 games.</p> <p><b>Exposure:</b> 3-medium</p> <p><b>Affected Component:</b> ip.graphics_driver.core_gmm,ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When enabling AIL registry key, TDR (Timeout Detection and Recovery) and application crashes are observed while launching DirectX 12 games.</p> <p><b>Root Cause:</b> The root cause of the issue is related to the AIL registry key affecting the Graphics Memory Management (GMM) which led to improper handling of compression settings, resulting in application crashes and TDRs when launching DX12 games.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.67 37
15017251 356	<p><b>Title:</b> Intel® MeshCommander displays a blank screen when accessing KVM via a headless display setup under Windows OS.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_interfaces</p> <p><b>Symptoms:</b> When using KVM via MeshCommander under a headless display setup in Windows OS, the display remains blank.</p> <p><b>Root Cause:</b> The root cause of the issue is a deviation in the modeset path in the latest Intel® graphics drivers, where the transcoder and Transcoder DDI function are not enabled before the DDI buffer, leading to a failure in modeset for KVM display enablement.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.10_21H2_LTSC,windows.11_v24H2</p>	101.67 37
15016839 302	<p><b>Title:</b> The new game 'Like a Dragon: Pirate Yakuza in Hawaii' is experiencing transparency corruption issues similar to previous titles using the same game engine, specifically affecting character hair on Intel® Arc A750/770 graphics.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The game 'Like a Dragon: Pirate Yakuza in Hawaii' exhibits transparency corruption issues around character hair, similar to previous titles using the same game</p>	101.67 37

	<p>engine.</p> <p><b>Root Cause:</b> The root cause of the issue in the game 'Like a Dragon: Pirate Yakuza in Hawaii' was identified as a transparency corruption around character hair, which was resolved by enabling the CPSOMaskWA in the Intel® gfx-driver.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>	
14023575828	<p><b>Title:</b> An application error occurs in the iCAD software, specifically involving the 'igxelpicd32.dll' file, when executing certain operations, leading to screen blinking and application closure; this issue has been replicated on TGL and RPL platforms but not on MTL and LNL platforms.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.core_kmd,ip.graphics_driver.opengl</p> <p><b>Symptoms:</b> The CAD application iCAD experiences an application error during certain operations, causing the application to close unexpectedly with an error related to the 'igxelpicd32.dll' file, as observed in the Windows Event Viewer Application logs.</p> <p><b>Root Cause:</b> The application error in the iCAD application is caused by a GPU hang while executing a long-lasting OpenGL command, right after a GPU preemption, specifically affecting the igxelpicd32.dll component of the graphics driver.</p> <p><b>Reproducibility:</b> frequently_50%-90%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>	101.673
16026324459	<p><b>Title:</b> Flickering observed in the preview window of Adobe After Effects while running the Puget Bench benchmark.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.directml</p> <p><b>Symptoms:</b> Flickering observed in the preview window of Adobe After Effects while running the Puget Bench benchmark.</p> <p><b>Root Cause:</b> The flickering observed in the preview window of Adobe After Effects while running Puget Bench is due to a regression between Intel® gfx-driver-ci-comp_d3d12-2972 and gfx-driver-ci-comp_d3d12-2971, as identified through comprehensive testing and isolation procedures.</p>	101.6733

	<b>Reproducibility:</b> always_100%	
	<b>Affected OS Information:</b> windows.11_v24H2	

## 8. Known Telemetry Issues

ID	Details
22020572893	<p><b>Title:</b> [Microsoft Telemetry] User mode crash reports on Photos App identified through telemetry data.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.shader_cache</p> <p><b>Symptoms:</b> The issue involves crashes reported by telemetry systems in MS Photos app scenarios.</p> <p><b>Root Cause:</b> The root cause of the issue is related to crashes occurring during the destruction of the Profiler object in the MS Photos app, which were reported through MSFT telemetry; the issue debug is WIP.</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> none</p> <p><b>Affected Platform:</b> Tiger Lake H 8+1 Platform Configuration</p>
22020573558	<p><b>Title:</b> [Microsoft Telemetry] User mode issue involves a failure in the gfx driver, specifically within the ShaderCache, DeserializeFromArray function, leading to an ACCESS_VIOLATION error during the deserialization process.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.shader_cache</p> <p><b>Symptoms:</b> Affects User Mode scenarios like Edge Chromium and few Windows scenarios</p>

	<p><b>Root Cause:</b> The root cause of the issue is related to the serialization/deserialization framework in the Intel® ShaderCache, where the size varies depending on the compiler and platform, leading to inconsistencies in handling data across different architectures (32-bit and 64-bit systems).</p> <p><b>Reproducibility:</b> sporadic_10%-40%</p> <p><b>Affected OS Information:</b> none</p> <p><b>Affected Platform:</b> Tiger Lake H 8+1 Platform Configuration</p>
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## 9. Known Issues

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ID	Description
16026831847	<p><b>Title:</b> Intel® customers are experiencing visual corruption issues when capturing gameplay of Red Dead Redemption 2 using OBS software with Vulkan API across various system configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+</p> <p><b>Symptoms:</b> Corruption is observed in Red Dead Redemption 2 when capturing gameplay using OBS, affecting various display modes and Vsync settings, and is specific to the Vulkan API while not occurring with the DX12 API.</p> <p><b>Root Cause:</b> The issue of corruption observed while game capturing Red Dead Redemption 2 via OBS on systems using Intel® graphics is due to a compatibility issue with the Vulkan API across multiple driver versions.</p> <p><b>Workaround:</b> Switch to using the DX12 API instead of Vulkan when capturing gameplay with OBS to avoid the corruption issue.</p> <p><b>Reproducibility:</b> always_100%</p>



	<p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
16027098579	<p><b>Title:</b> The application crashes when launched on platforms using the Intel® gfx_win_101.6729 graphics driver.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Crash observed when launching the DXO PhotoLab application, consistently reproducible.</p> <p><b>Root Cause:</b> The issue is caused by a regression in the Intel® gfx-driver-ci-comp_d3d12-3650, as the application crash is observed with this driver version but not with earlier versions.</p> <p><b>Workaround:</b> Revert to the Intel® gfx driver version 101.6626, as the issue is not observed with this driver version.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
22020801804	<p><b>Title:</b> During the lid action, multiple Intel logos are observed on the system boot screen after resuming from S4 state.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.gop_driver.gop_driver,ip.graphics_driver.display_os_features</p> <p><b>Symptoms:</b> During system boot after resuming from S4, multiple Intel logos are observed when the lid action is performed.</p> <p><b>Root Cause:</b> The issue of multiple Intel logos appearing during system boot after resuming from S4 is observed across different platforms and configurations, and it occurs post GOP exit, before the graphics driver receives the power state call for D0, indicating a timing or modeset issue in the pre-OS phase.</p> <p><b>Workaround:</b> To temporarily mitigate the issue of observing multiple Intel logos during system boot after resuming from S4, avoid closing the lid while the system is connected to an external monitor via HDMI or DisplayPort. Instead, keep the lid open during the S4 sleep mode and resume process.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026046334	<p><b>Title:</b> Choppiness in frames is observed near a beach area while running the game 'Like a Dragon: Pirate Yakuza in Hawaii' on certain Intel® graphics configurations.</p>

	<p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.xess_fg</p> <p><b>Symptoms:</b> Choppiness in frames is observed near a beach area while running in the game, regardless of VSync being ON or OFF.</p> <p><b>Root Cause:</b> The root cause of the choppiness in frames near the beach area in the game 'Like a Dragon: Pirate Yakuza in Hawaii' was resolved by updating the game with a new build that included the Intel® Xefg.dll version 1.0.0.10, which aligned the frame behavior to that of the native settings with XeLL and XeFG, ensuring smoother frame transitions.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026984051	<p><b>Title:</b> The issue involves a regression in the S3 standby responsiveness KPI, where the measured time is approximately 1.2-1.3 seconds, exceeding the expected performance of 0.7 seconds.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.unassigned</p> <p><b>Symptoms:</b> The issue involves a regression in the S3 standby responsiveness, where the KPI score is observed at 1.2 seconds instead of the expected 0.7 seconds.</p> <p><b>Root Cause:</b> The regression in the S3 KPI responsiveness score was due to a fix implemented for a previous issue, which initially did not resolve the problem but was later corrected in a subsequent update.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026964193	<p><b>Title:</b> The issue involves a crash and TDR (Timeout Detection and Recovery) observed when using Intel® XeSS technology on an ARL-H platform running Windows 2024, specifically noted with certain game configurations and system setups.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12,ip.graphics_driver.xess</p> <p><b>Symptoms:</b> Crashes and Timeout Detection and Recovery (TDR) issues are observed when XeSS is enabled on certain systems.</p> <p><b>Root Cause:</b> The issue of crashes and TDRs is observed when XeSS is enabled on the ARL-H platform with specific game settings at 1080p Medium XeSS Performance/Balanced.</p>

	<p><b>Workaround:</b> Disable XeSS to prevent crashes and TDR issues as observed in the system.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
160268714 44	<p><b>Title:</b> Intel® IGS Whole Performance metrics are showing as 'N/A' across various configurations and software versions.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.control_panel.arc_software,ip.tools.presentmon</p> <p><b>Symptoms:</b> Performance metrics for IGS Whole Performance are not displaying and show as 'N/A' across various software versions and system configurations.</p> <p><b>Root Cause:</b> The issue of 'Performance - IGS Whole Performance metrics shows N/A' is observed across multiple configurations and appears to be related to compatibility issues with certain versions of Intel® Arc Software and the Intel® Graphics Driver, as indicated by the regression tests and inability to verify certain builds due to installation errors and application crashes.</p> <p><b>Workaround:</b> To temporarily resolve the issue of IGS Whole Performance metrics showing N/A, revert to using Intel® Arc Software version 25.2.1051.0, as this version has shown to display GPU Utilization, GPU Frequency, GPU Voltage, and GPU Render/Compute Utilization values correctly.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
150175645 19	<p><b>Title:</b> Corruption, BSOD, and system hang issues were observed after applying memory speed values during performance tuning on specific hardware configurations.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.core_kmd,ip.graphics_driver.core_powercons</p> <p><b>Symptoms:</b> Corruption, Blue Screen of Death (BSOD), and system hang are observed after applying memory speed values during performance tuning on certain systems.</p> <p><b>Root Cause:</b> The root cause of the system hang and BSOD observed after applying memory speed values is due to the tuning of memory speed from 19Gbps to 19.37 Gbps, which exceeds the stable operational thresholds for BMG B35 cards, leading to 0x117 TDRs and system instability.</p> <p><b>Workaround:</b> To avoid system hang and BSOD issues when tuning memory speed values, set the VRAM speed to 19.23 Gbps or lower on B35 BMG cards.</p>

	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026999518	<p><b>Title:</b> Performance degradation is observed on Intel® Workstation IBC cards compared to NVidia cards during export operations in DxoPhotolab software.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.trinity9</p> <p><b>Symptoms:</b> Performance drop observed on workstation cards when exporting images in DxoPhotolab, compared to NVIDIA T600 and NV2000.</p> <p><b>Root Cause:</b> The performance drop observed in the workstation card compared to NVIDIA T600 and NV2000 while using DxoPhotolab is due to a regression in the Intel® production level driver across multiple versions, as confirmed by consistent issue occurrence in driver regression testing.</p> <p><b>Workaround:</b> To mitigate the performance drop observed in DxoPhotolab when using WSTN IBC cards, consider adjusting the GPU settings to optimize performance or use a different version of the driver that may offer better compatibility and performance with the specific application and system configuration.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026763607	<p><b>Title:</b> The issue involves the Intel® GFX driver's virtual display feature for Intel® AMT KVM, where incorrect maximum supported resolutions are causing the activation of a virtual display even when it is not necessary.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_interfaces</p> <p><b>Symptoms:</b> The issue involves incorrect maximum supported resolutions for AMT-KVM in the GFX driver, which leads to the activation of a virtual display even when it is not necessary, resulting in dual screen displays during AMT-KVM sessions instead of a single screen.</p> <p><b>Root Cause:</b> The root cause of the issue is that the maximum supported resolutions for Intel AMT KVM in the GFX driver logic were incorrect, leading to the unnecessary activation of the virtual display feature.</p> <p><b>Workaround:</b> To temporarily address the issue of incorrect maximum supported resolutions by AMT-KVM in the GFX driver, adjust the driver's logic to conditionally activate the virtual display feature based on the total pixel count: for ADL-S, ADL-P, RPL-S platforms, use the condition if (W*H &gt; 3840*2400), and for RPL-P and above platforms, use if (W*H &gt; 8192*4320).</p>

	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>
14024574308	<p><b>Title:</b> The issue involves an automatic change in the panel color temperature when HDR is enabled, which is currently under investigation for replication and debugging.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_powercons</p> <p><b>Symptoms:</b> When HDR is enabled, the eye care mode effect automatically activates, altering the panel color temperature unexpectedly.</p> <p><b>Root Cause:</b> The issue is due to the Intel® Graphics Control Library (IGCL) not properly handling the persistence of SDR and HDR LUT data using registry keys, which causes incorrect gamma programming when HDR is toggled, leading to unexpected color temperature changes.</p> <p><b>Workaround:</b> To temporarily address the issue of the panel color temperature automatically changing when HDR is enabled, disable the Eye Care mode in the Lenovo Vantage app before enabling HDR, and re-enable it after HDR is turned off.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
18041324869	<p><b>Title:</b> The Unreal Engine 5.4 Engine Test for RayTracing.Translucency.RefractionTests.NormalMappedRefraction failed on Intel® DG2 and BMG platforms, showing discrepancies in screenshots compared to expected results.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> In the Unreal Engine 5.4 test, the RayTracing.Translucency.RefractionTests.NormalMappedRefraction failed due to discrepancies in screenshots, showing a global difference of approximately 0.0176 and a maximum local difference of approximately 0.1292.</p> <p><b>Root Cause:</b> The root cause of the issue is that the RayTracing.Translucency.RefractionTests.NormalMappedRefraction test failed on Intel® DG2 and BMG platforms due to discrepancies in the screenshots, with a global difference of approximately 0.0176 and a maximum local difference of approximately 0.1292.</p> <p><b>Workaround:</b> To temporarily address the issue with the RayTracing.Translucency.RefractionTests.NormalMappedRefraction test, consider adjusting the refraction settings in Unreal Engine 5.4 to reduce the discrepancy in the test results.</p>

	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
180219364 63	<p><b>Title:</b> Intel® customers are experiencing visual corruptions related to flashlight and fog effects in a game when using specific Intel® graphics configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The issue involves flashlight appearing incorrectly behind the character and fog appearing heavier with white splotches compared to other graphics hardware.</p> <p><b>Root Cause:</b> The root cause of the issue with 'Evil Dead the Game' experiencing flashlight and fog corruption was identified as a game-specific problem, which was resolved with a game update from build 1030 - 1593 to version 1040 build 1605.</p> <p><b>Workaround:</b> Update the game to the latest version, build 1605, to resolve the flashlight and fog corruption issues as this build includes a fix for these problems.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>
180410754 50	<p><b>Title:</b> Intel® BMG graphics hardware is experiencing an 18% performance gap compared to NV 4060 in the game 'Black Hawk Down' under DX12 settings.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The game 'Black Hawk Down' exhibits an 18% performance gap when compared to NV 4060, with issues related to server connectivity, game settings, and language barriers in the menu.</p> <p><b>Root Cause:</b> The root cause of the 18% performance gap between the Intel BMG and NV 4060 in the game 'Black Hawk Down' was due to the use of Temporal Super Resolution (TSR) in Unreal Engine, which was more resource-intensive compared to other super resolution techniques like XeSS, DLSS, or FSR.</p> <p><b>Workaround:</b> If you encounter a 'Fatal error' message, add '-nosound' in the command line, and for BMG users, download and reinstall VC from <a href="https://aka.ms/vs/17/release/vc_redist.x64.exe">https://aka.ms/vs/17/release/vc_redist.x64.exe</a>, then reboot the system.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>

18041348835	<p><b>Title:</b> The Unreal Engine 5.4 - Engine Test for Rendering.Nanite.Nanite_Tessellation_Landscape failed due to discrepancies in screenshots, showing a global difference of approximately 0.148 and a maximum local difference of approximately 0.364.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Unreal Engine 5.4 rendering test for Nanite Tessellation Landscape failed due to discrepancies in screenshots, showing a global difference of 0.147990 and a maximum local difference of 0.363378.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Rendering.Nanite.Nanite_Tessellation_Landscape test failed due to discrepancies in the screenshots, with a global difference of approximately 0.148 and a maximum local difference of approximately 0.364, indicating a rendering inconsistency in the Intel® DG2 and BMG samples.</p> <p><b>Workaround:</b> N/A</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
18041364319	<p><b>Title:</b> Intel® DG2 sample task failed during the Unreal Engine 5.4 Engine Test, specifically on the Rendering.SSGI.SSGI_AssetTypes.SSGI_RectLight_Movable test, showing significant differences in screenshots compared to the expected results.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Unreal Engine 5.4 test for Rendering.SSGI_AssetTypes.SSGI_RectLight_Movable failed due to discrepancies in the screenshots, showing a global difference and maximum local difference of 1.000000.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Rendering.SSGI_AssetTypes.SSGI_RectLight_Movable test failed on Intel® DG2 hardware due to discrepancies in the screenshots, showing a Global Difference and Max Local Difference of 1.000000.</p> <p><b>Workaround:</b> Reduce the intensity or scale of the RectLight in the Unreal Engine 5.4 settings to minimize rendering discrepancies until a permanent fix is implemented.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>

160266238 16	<p><b>Title:</b> An error was observed in the log file during the uninstallation process via the Uninstaller UI for Intel® Arc Software and Drivers.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.installer.gfx</p> <p><b>Symptoms:</b> Error observed in log file during uninstallation via the Uninstaller UI for Intel Arc Software and Drivers.</p> <p><b>Root Cause:</b> The root cause of the error observed in the log file during uninstallation via Intel® Arc Software and Drivers is due to missing folder property: INSTALLDIR, which leads to the failure of the WixRemoveFoldersEx custom action, resulting in error code 0x80070057.</p> <p><b>Workaround:</b> To temporarily resolve the uninstallation issue with Intel Arc Software and Drivers, use the Display Driver Uninstaller (DDU) tool to ensure a clean removal of the drivers and software.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
180413637 55	<p><b>Title:</b> The Unreal Engine 5.4 Engine Test for Rendering.VirtualTexturing.RVT.RuntimeVirtualTextureTest.Test_BaseColorSpecNormalMask and related tests failed on Intel® DG2 and BMG platforms, showing discrepancies in screenshots compared to expected results.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Unreal Engine 5.4 tests for rendering virtual textures failed due to discrepancies in screenshots, showing differences in global and maximum local values.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Unreal Engine 5.4 tests for Rendering.RuntimeVirtualTextureTest.Test_BaseColorSpecNormalMaskYCoCg_1 and Rendering.RuntimeVirtualTextureTest.Test_BaseColorSpecNormalYCoCg_1 failed due to discrepancies in the screenshots, with differences in both global and maximum local values when compared to approved results.</p> <p><b>Workaround:</b> N/A</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>



<p>180413639 02</p>	<p><b>Title:</b> The Unreal Engine 5.4 test for Rendering.VirtualShadowMaps.VirtualShadowMaps_VolumetricFog.VSMSpot_VF failed on Intel® DG2, showing significant discrepancies in screenshots compared to expected results.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Unreal Engine 5.4 test for Rendering.VirtualShadowMaps.VirtualShadowMaps_VolumetricFog.VSMSpot_VF failed due to discrepancies in screenshots, showing a global difference of 0.158787 and a maximum local difference of 1.000000.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Rendering.VirtualShadowMaps_VolumetricFog.VSMSpot_VF test failed on Intel® DG2 due to discrepancies in the screenshots, with a global difference of 0.158787 and a maximum local difference of 1.000000.</p> <p><b>Workaround:</b> Reduce the rendering settings in Unreal Engine 5.4 to lower the complexity of Virtual Shadow Maps and Volumetric Fog, which may help in passing the VSMSPot_VF test.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
<p>180413642 44</p>	<p><b>Title:</b> Intel® DG2 sample task failed the Unreal Engine 5.4 Engine Test specifically on the Rendering.PostProcessing.FilmGrain_IntensityHighlights_Min test due to discrepancies in screenshots.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Unreal Engine 5.4 test for Rendering.PostProcessing.FilmGrain_IntensityHighlights_Min failed due to discrepancies in screenshots, showing a global difference of 0.054217 and a maximum local difference of 0.539111.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Rendering.PostProcessing.FilmGrain_IntensityHighlights_Min test failed on Intel® DG2 hardware due to discrepancies in the screenshots, with a global difference of 0.054217 and a maximum local difference of 0.539111.</p> <p><b>Workaround:</b> N/A</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>

<p>160187453 15</p>	<p><b>Title:</b> The game 'Conqueror's Blade' is experiencing crashes with a Timeout Detection and Recovery (TDR) error during launch on systems equipped with Intel® graphics.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The game 'Conqueror's Blade' is crashing with a Timeout Detection and Recovery (TDR) error during launch on systems configured with specific hardware and software settings.</p> <p><b>Root Cause:</b> The root cause of the game 'Conqueror's Blade' crashing with a TDR error during launch is related to a graphics driver timeout issue, specifically identified as a VIDEO_ENGINE_TIMEOUT_DETECTED with the Intel® graphics driver.</p> <p><b>Workaround:</b> Switch the game to DirectX 11 (DX11) API mode to avoid the crash issue during game launch.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
<p>180413489 57</p>	<p><b>Title:</b> The Unreal Engine 5.4 - Engine Test for Rendering.TSR.ShadingExposure_Low_SP050 failed on Intel® DG2 and BMG platforms, showing discrepancies in screenshots compared to expected results.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Unreal Engine 5.4 rendering test named 'Rendering.TSR.ShadingExposure_Low_SP050' failed due to discrepancies in screenshots, showing a global difference of 0.147997 and a maximum local difference of 0.363812.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Rendering.TSR.ShadingExposure_Low_SP050 test failed due to discrepancies in the screenshots, with significant differences in global and maximum local values when compared to approved results.</p> <p><b>Workaround:</b> Adjust the shading exposure settings in Unreal Engine 5.4 to closely match the approved test results, and re-run the test.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>

<p>15016102 674</p>	<p><b>Title:</b> Intel® tools have identified that the CopyTexture/BufferRegion &amp; CopyResource operations are performing slower than expected, taking approximately twice as long as competitor's components.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The issue involves CopyTexture/BufferRegion &amp; CopyResource operations performing slower than expected, with significant performance differences observed between different hardware, impacting overall frame rates and parallel processing capabilities.</p> <p><b>Root Cause:</b> The root cause of the performance issue is suspected to be due to low parallelism in the handling of CopyTexture/BufferRegion &amp; CopyResource operations on the Intel® A770, as compared to the RTX3090, which results in longer processing times.</p> <p><b>Workaround:</b> Set the 'UploadHeapMemoryOverride' registry key to use heaps in local memory (0x1) to reduce the waiting time from 8ms to 4.8ms.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2</p>
<p>15016082 703</p>	<p><b>Title:</b> The Intel® Vulkan Windows driver currently lacks support for VK_IMAGE_USAGE_INPUT_ATTACHMENT_BIT, which is essential for running certain applications that utilize the GLES framebuffer fetch extension on the default framebuffer.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> The issue reported is that the Vk Surface does not support VK_IMAGE_USAGE_INPUT_ATTACHMENT_BIT on Windows using Vulkan, which prevents certain applications from running as they require this usage bit to expose the GLES framebuffer fetch extension.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Intel® Vulkan Windows driver does not support the VK_IMAGE_USAGE_INPUT_ATTACHMENT_BIT, which is necessary for exposing the GLES framebuffer fetch extension, thereby preventing certain applications from running in that configuration.</p> <p><b>Workaround:</b> Use an alternative rendering path that does not require</p>

	<p>VK_IMAGE_USAGE_INPUT_ATTACHMENT_BIT, or modify the application to use supported usage flags such as VK_IMAGE_USAGE_COLOR_ATTACHMENT_BIT.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
18041367085	<p><b>Title:</b> The Unreal Engine 5.4 rendering tests for TSR Moire scenarios failed on Intel® DG2 and BMG platforms, showing discrepancies in screenshots compared to expected results.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Unreal Engine 5.4 rendering tests for TSR Moire scenarios are failing due to discrepancies in the expected and actual screenshots, showing differences in global and maximum local values.</p> <p><b>Root Cause:</b> The root cause of the issue is the discrepancy in rendering results between the Intel® DG2 and BMG sample tasks when conducting the Unreal Engine 5.4 - Engine Test, specifically in the Rendering.TSR.Moire tests, where screenshots differed significantly in terms of global and maximum local differences.</p> <p><b>Workaround:</b> To temporarily address the rendering issue in Unreal Engine 5.4, adjust the depth of field settings to reduce translucency effects until a permanent fix is implemented.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
18041371391	<p><b>Title:</b> The Intel® Unreal Engine 5.4 Engine Test for RayTracing.Pathtracing.PT_Materials.Cloth_Cloth failed due to discrepancies in the screenshots, showing a global difference of 0.007852 and a maximum local difference of 0.156359.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Unreal Engine 5.4 test for RayTracing.Pathtracing.PT_Materials.Cloth_Cloth failed due to discrepancies in</p>

	<p>screenshots, showing a global difference of 0.007852 and a maximum local difference of 0.156359.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Raytracing.PT_Materials.Cloth_Cloth test failed due to discrepancies in the screenshots, with a global difference of 0.007852 and a maximum local difference of 0.156359.</p> <p><b>Workaround:</b> Adjust the tolerance settings for the RayTracing.Pathtracing.PT_Materials.Cloth_Cloth test to accommodate the minor discrepancies observed in the test results.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
18041364526	<p><b>Title:</b> An issue has been identified in the Intel® DG2 sample task where the Unreal Engine 5.4 Engine Test for Rendering.ShaderModels.Materials.Integration.Material_AnalyticalLighting.Rect_ClearCoat failed due to discrepancies in screenshots.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> In the Unreal Engine 5.4 test, the Rendering.ShaderModels.Materials.Integration.Material_AnalyticalLighting.Rect_ClearCoat test failed due to discrepancies in screenshots, showing a global difference of 0.005693 and a maximum local difference of 0.100116.</p> <p><b>Root Cause:</b> The root cause of the issue is that the Intel® DG2 graphics sample task failed the Unreal Engine 5.4 rendering test for Shader Models, Materials Integration, and Material Analytical Lighting with Rect_ClearCoat, showing discrepancies in the screenshots with a global difference of 0.005693 and a maximum local difference of 0.100116.</p> <p><b>Workaround:</b> Adjust the rendering settings in Unreal Engine 5.4 to reduce shader complexity or disable specific shader features that may be causing the test to fail.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>

16024125 070	<p><b>Title:</b> The issue involves color corruption in the preview window of Adobe After Effects when the Roto Brush tool is applied to all frames, affecting various configurations and driver versions.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When applying the Roto Brush tool across all frames in Adobe After Effects, the preview window displays color corruption.</p> <p><b>Root Cause:</b> The root cause of the color corruption issue in the After Effects preview window when applying the Roto Brush to all frames is related to the Intel® DX12 driver.</p> <p><b>Workaround:</b> To temporarily resolve the color corruption issue in Adobe After Effects when using the Roto Brush, add a registry key by running the following command: 'reg ADD HKLM\SOFTWARE\INTEL\IGFX\DX12 /v DisableMetaCommand /f /t REG_DWORD /d 0x1 /reg:32'.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
18041371 423	<p><b>Title:</b> The Unreal Engine 5.4 Engine Test for Rendering.LightTypes.RectLight failed during the BMG sample task, showing discrepancies in screenshots between approved and unapproved results.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> In the Unreal Engine 5.4 tests, the Rendering.RectLight.StationaryRectLight_StaticMesh and Rendering.RectLight.RectLight_ShadowSharpness tests failed due to discrepancies in the expected and actual screenshots, with significant differences in global and maximum local values.</p> <p><b>Root Cause:</b> The root cause of the issue is discrepancies in rendering tests for RectLight types in Unreal Engine 5.4, where the screenshots between approved and unapproved results showed significant differences in global and maximum local values.</p> <p><b>Workaround:</b> Adjust the shadow sharpness settings in Unreal Engine 5.4 to reduce discrepancies in rendering tests until a permanent fix is deployed.</p>

	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16024572563	<p><b>Title:</b> When the player visits any event on the map with his car's camera view set to cockpit view (Steering) and MSAA set to 2X in graphic settings, then switches to any other suitable vehicle for the available race event, it is observed that the title is getting hanged while entering the event.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When MSAA is set to 2X and the car's camera is set to cockpit view in Forza Horizon 5, switching vehicles during an event causes the game to hang.</p> <p><b>Root Cause:</b> The issue is related to the Intel Arc A770 graphics card when MSAA is set to 2X and the car's camera is set to cockpit view in Forza Horizon 5, causing the game to hang during vehicle changes in events.</p> <p><b>Workaround:</b> To avoid the game hanging issue in Forza Horizon 5 when using Intel Arc A770, set the MSAA setting to 'OFF' in the game's graphic settings.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.cobalt.client, windows.nickel.client</p>
14021990014	<p><b>Title:</b> The issue involves Cyberpunk 2077 running at 30 fps lower than expected on a specific hardware configuration, with performance analysis and logs captured to diagnose the problem.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12, ip.graphics_driver.xess</p> <p><b>Symptoms:</b> The issue involves Cyberpunk 2077 running at a frame rate of 30 fps lower than the expected 50.10 fps on specific hardware configurations.</p> <p><b>Root Cause:</b> The root cause of the issue where Cyberpunk 2077 is running at 30 fps lower than expectations is due to the power delivery design in DC mode being limited by PL2 of</p>

	<p>30W, as indicated by the PTAT log analysis.</p> <p><b>Workaround:</b> Switch the device to AC power mode to avoid power delivery limitations in DC mode, which may improve the game's performance.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2</p>
22020891 646	<p><b>Title:</b> In recent testing, exporting photos with ON1's Resize AI highlighted performance issues on ACM/DG2, where the performance on BMG is competitive.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.directml</p> <p><b>Symptoms:</b> In recent testing, exporting photos with ON1's Resize AI highlighted performance issues on ACM/DG2, where the A770 model took approximately 60 seconds to export three pictures, significantly slower compared to the B580 model which only took 22 seconds.</p> <p><b>Root Cause:</b> The root cause of the performance discrepancy in ON1 Resize AI between the Intel® A770 and B580 graphics cards is potentially due to different kernel implementations or settings, as indicated by the need to investigate the DDI logs for new implementations not being applied on the DG2 platform.</p> <p><b>Workaround:</b> To potentially improve the export time performance on A770, consider updating the GFX driver to version 572.16, as it has shown to reduce export times in similar test environments.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>
16023003 438	<p><b>Title:</b> Corruption observed on dead body in the VR game Half-Life: Alyx when using Intel® graphics hardware and drivers.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+,ip.graphics_driver.trinity11</p>



	<p><b>Symptoms:</b> Corruption observed on a dead body in the VR game Half-Life: Alyx when using specific system configurations.</p> <p><b>Root Cause:</b> The issue of corruption observed on a dead body in the VR game 'Half-Life: Alyx' is seen across various Intel® graphics driver versions and platforms, indicating a potential issue with the DirectX 11 rendering API as the corruption persists despite different system configurations and driver updates.</p> <p><b>Workaround:</b> To temporarily address the corruption issue observed on the dead body in Half-Life: Alyx, switch the rendering API to Vulkan by navigating to the game's main menu, selecting Options, then Performance, clicking on the Advanced (gear icon), and finally selecting Rendering API. Restart the game for the changes to take effect.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.cobalt.client, windows.nickel.client</p>
15015756 428	<p><b>Title:</b> Intel® A750 graphics card exhibits a 16% performance gap compared to the NV 4060 in the Black Myth: Wukong game, as observed in recent benchmark tests.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The A750 graphics card exhibits a 16% performance gap compared to the NV 4060 graphics card when running the Black Myth: Wukong game, with the A750 achieving lower frame rates.</p> <p><b>Root Cause:</b> The root cause of the performance gap between the Intel® A750 and the NV 4060 is primarily due to the Intel® A750's hardware queue being fully loaded, which necessitates further investigation and potential driver optimizations to improve compute performance.</p> <p><b>Workaround:</b> To potentially improve the performance gap between the A750 and NV 4060, set the registry key HwSchTreatExperimentalAsStable to 1 by running the command: REG ADD "HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\GraphicsDrivers" /v HwSchTreatExperimentalAsStable /t REG_DWORD /d 1 /f, then reboot the system and rerun the benchmark.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v22H2_SV2</p>

<p>16023655 884</p>	<p><b>Title:</b> The issue involves a game not fully fitting the screen resolution of 11520x2160 when using Intel® DG2 with IBC 770 on DX12 API, across various driver versions and system configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When using a combined display resolution of 11520x2160, the game does not fully fit the screen.</p> <p><b>Root Cause:</b> The issue where the game does not fully fit the screen resolution of 11520x2160 is suspected to be due to the lack of support for this resolution by the DirectX 12 (DX12) API, as indicated by the error popup observed with DirectX 11 (DX11).</p> <p><b>Workaround:</b> Use a third-party driver from AMD or NVIDIA, as the issue is not observed with these drivers.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
<p>14022245 296</p>	<p><b>Title:</b> Intel® Arc A750 graphics card exhibits lower frame rates compared to a competitor's card when running the game Test Drive Unlimited: Solar Crown, prompting an investigation into performance tuning and optimization.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When playing Test Drive Unlimited: Solar Crown on A750 using driver 31.0.101.5514, average fps at 1080p is lower than expected in comparison to RTX 4060.</p> <p><b>Root Cause:</b> The root cause of the performance issue in Test Drive Unlimited: Solar Crown on the Intel Arc A750 graphics card compared to the Nvidia RTX 4060 is primarily due to the game's heavy reliance on compute shader dispatches, which are slower on the A750, and the lack of hardware-accelerated ray tracing in the game's 'PerPixelRaytracedGI' compute pass, which is instead performed entirely in software.</p> <p><b>Workaround:</b> Enable the registry setting 'D3D12.WriteBufferImmediateMode=2' to improve performance in Test Drive Unlimited: Solar Crown on Intel Arc A750 graphics cards.</p> <p><b>Reproducibility:</b> always_100%</p>

	<p><b>Affected OS Information:</b> windows.11_v23H2,windows.nickel.client</p>
16023678 572	<p><b>Title:</b> A TDR (Timeout Detection and Recovery) issue occurred while running the 3D Mark Time Spy benchmark after setting some performance tuning values via Intel® Arc Control on a system equipped with a Gunnir A770 graphics card and the latest Intel® graphics driver.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> TDR occurred while running 3D Mark Time Spy after setting some performance tuning values from Arc control.</p> <p><b>Root Cause:</b> The root cause of the TDR (Timeout Detection and Recovery) issue while running 3D Mark Time Spy after setting performance tuning values from Intel® Arc control is related to a regression with the reported graphics driver across multiple versions of Intel® Arc control and CI Master drivers, as consistently observed across different system configurations and platforms.</p> <p><b>Workaround:</b> To temporarily mitigate the TDR issue while running 3D Mark Time Spy, avoid setting performance tuning values via Intel® Arc Control and use default settings.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
16023945 400	<p><b>Title:</b> [DG2][RPLS + IBC A770][GF1][Revenue] : Observing App crash with TDR in Topaz photo AI while doing Remove Object.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> App crash with TDR in Topaz Photo AI while performing the 'Remove Object' function.</p> <p><b>Root Cause:</b> The issue is observed across multiple Intel® platforms and configurations, consistently manifesting as an application crash with TDR when using the Topaz Photo AI application to remove objects, regardless of the driver version or system specifications.</p>

	<p><b>Workaround:</b> Switch to using a third-party graphics driver such as AMD Radeon RX 6700 XT or NVIDIA GeForce RTX 3060 Ti, as the issue is not observed with these drivers.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
14024423 479	<p><b>Title:</b> Under the German OS, the uninstallation text for the Intel® GFX driver is displayed cropped in the user interface.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics.driver.l10n,ip.installer.gfx</p> <p><b>Symptoms:</b> In the German OS, when uninstalling the graphics driver using the installer, the text 'Wählen Sie die Komponenten aus, die Sie deinstallieren möchten:' appears cropped on the installer UI.</p> <p><b>Root Cause:</b> The root cause of the issue is that under the German OS, when uninstalling the Intel® GFX driver using the installer, the text 'Wählen Sie die Komponenten aus, die Sie deinstallieren möchten:' is displayed cropped on the installer UI.</p> <p><b>Workaround:</b> To temporarily address the issue of text being cut off in the German UI during GFX driver uninstallation, use the command 'installer --uninstaller' to launch the uninstaller instead of using the graphical interface.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
22019470 028	<p><b>Title:</b> Intel® Xe-LP GPU experiences a hang when attempting to launch a new game using a specific internal game build, which does not occur when using stream capture software like Intel® GPA or GfxBench.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The issue involves a GPU hang when launching a new game using a specific executable file, resulting in an access violation error; the problem does not occur when</p>

	<p>launching the game through the standard Steam engine.</p> <p><b>Root Cause:</b> The root cause of the GPU hang in the game 'Jagged Alliance 3' when launched using Zulu64.exe is related to the 'DisablePlacedResourcesDepthCompression' registry key, which when disabled, allows the game to launch without issues.</p> <p><b>Workaround:</b> Disable the 'DisablePlacedResourcesDepthCompression' registry key to potentially resolve the GPU hang issue when launching the game via Zulu64.exe.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows</p>
16024585 209	<p><b>Title:</b> The game 'Control' is unable to run using the DirectX12 API even after being launched from the Control_DX12 application on systems equipped with Intel® DG2 A770 graphics.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+,ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The game 'Control' cannot be launched using DirectX12 API even after initiating it from the Control_DX12 application on systems equipped with Intel DG2 A770 graphics.</p> <p><b>Root Cause:</b> The issue of the game 'Control' not running in DirectX12 API, despite launching from the Control_DX12 application, is observed across various Intel® platforms and driver versions, indicating a potential compatibility or configuration issue with the Intel® graphics drivers.</p> <p><b>Workaround:</b> To launch the game 'Control' in DirectX12 API, force the game to launch in DirectX12 by adding the command line option in Steam settings for the game.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
16026160 753	<p><b>Title:</b> Intel® is investigating an issue where 'The Callisto Protocol' game exhibits a significantly increased memory footprint under DX12 on specific Intel® graphics drivers.</p> <p><b>Exposure:</b> 2-high</p>

	<p><b>Affected Component:</b> ip.graphics_driver.core_gmm</p> <p><b>Symptoms:</b> The Callisto Protocol is experiencing a significant increase in memory usage, which requires further investigation to determine the cause.</p> <p><b>Root Cause:</b> The root cause of the issue is an increase in memory usage by The Callisto Protocol on Intel® Graphics drivers, which is currently under investigation to determine the specific factors contributing to the larger memory footprint.</p> <p><b>Workaround:</b> N/A</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
18039960 976	<p><b>Title:</b> The issue involves a decrease in performance of Call of Duty: Modern Warfare III on Intel® hardware, specifically observed after restarting the game during gameplay and benchmark tests, affecting various resolutions and settings.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Call of Duty: Modern Warfare III exhibits reduced performance after restarting the game during gameplay and benchmark tests, particularly noticeable at maximum settings and across 1080p, 1440p, and 2160p resolutions.</p> <p><b>Root Cause:</b> The issue of decreased performance in Call of Duty: Modern Warfare III after restarting the game during gameplay and benchmark is consistently reproducible across different configurations, indicating a potential issue with the Intel® driver or game engine compatibility.</p> <p><b>Workaround:</b> Delete the Call of Duty folder from Documents after each gaming session to reset the game's settings and potentially improve performance upon restart.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2, windows.nickel.client</p>
18040089 687	<p><b>Title:</b> The Gravitymark benchmark shows a lower score on the BMG X2 320EU compared to the Intel® ARC A750 Graphics card under DX12 RT settings.</p>

	<p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The Gravitymark benchmark shows a lower score on the BMG X2 320EU graphics card compared to the Intel ARC A750 graphics card when using DX12 RT settings.</p> <p><b>Root Cause:</b> The root cause of the lower Gravitymark benchmark scores on the BMG X2 320EU compared to the Intel® ARC A750 Graphics card is due to the different hardware configurations and driver versions used during the tests.</p> <p><b>Workaround:</b> To potentially improve the Gravitymark benchmark score on the BMG X2 320EU, ensure that only one display is connected, set to 2K resolution and 60Hz, and verify that the latest Intel® driver is installed.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
18040090753	<p><b>Title:</b> Geekbench6 benchmark has worse score on BMG X2 320EU than on Intel ARC A750 Graphics card on OpenCL settings.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> The Geekbench 6 benchmark shows a lower score for the BMG X2 320EU graphics card compared to the Intel ARC A750 graphics card when tested under OpenCL settings.</p> <p><b>Root Cause:</b> The issue of the Geekbench 6 benchmark showing a worse score on the BMG X2 320EU compared to the Intel® ARC A750 Graphics card on OpenCL settings is currently under investigation, with no definitive root cause identified yet.</p> <p><b>Workaround:</b> To potentially improve the Geekbench 6 OpenCL score on the BMG X2 320EU, ensure that the system is running the latest Intel® gfx-driver-ci-master-17562 and verify that all other system configurations match the recommended settings.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>

<p>22020746 719</p>	<p><b>Title:</b> Screen blank-out is observed when disabling the GFX driver in a tri-screen extended mode setup involving eDP, HDMI, and Miracast displays.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.display_interfaces</p> <p><b>Symptoms:</b> When disabling the GFX driver in a tri-screen extended mode setup involving eDP, HDMI, and Miracast displays, the eDP display experiences a blank-out, while the keyboard remains functional, and the only recovery method is to force shutdown the system.</p> <p><b>Root Cause:</b> The issue of screen blank-out occurs when the GFX driver is disabled while a Miracast display is connected in a tri-display setup, specifically affecting systems with dual refresh rate supported eDP panels.</p> <p><b>Workaround:</b> Force shutdown the system to recover from the screen blank-out issue when disabling the GFX driver in a tri-screen extended mode setup.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
<p>18040090 052</p>	<p><b>Title:</b> The Gravitymark benchmark shows a lower score on the BMG X2 320EU compared to the Intel® ARC A750 Graphics card when tested under Vulkan Default and Vulkan RT settings.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.unassigned,ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> The Gravitymark benchmark shows a lower score on the BMG X2 320EU graphics card compared to the Intel ARC A750 graphics card when tested under Vulkan Default and Vulkan RT settings.</p> <p><b>Root Cause:</b> The issue of lower performance scores on the BMG X2 320EU compared to the Intel ARC A750 in the Vulkan RT benchmark is due to the different hardware configurations and driver versions used in the testing setups.</p> <p><b>Workaround:</b> To potentially improve the Gravitymark score on the BMG X2 320EU, ensure that only one display is connected, set to 2K resolution and 60Hz, and run the benchmark with the latest driver installed.</p>



	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
16026196009	<p><b>Title:</b> The fan on the GPU does not achieve a zero RPM state when the temperature is well below 45 degrees Celsius, despite the fan curve being set to 0% for all points except the last, which is set at 30% speed, causing the fan to continuously stop and start immediately.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_powercons</p> <p><b>Symptoms:</b> The GPU fan is continuously stopping and starting immediately, even when the GPU temperature is well below 45 degrees Celsius, despite the fan curve being set to 0% for all points except the last, which is set at 30% speed.</p> <p><b>Root Cause:</b> The issue where the fan continuously stops and starts immediately despite the GPU temperature being well below 45 degrees Celsius is observed across multiple software versions and configurations, indicating a potential systemic issue with the fan control algorithm or related components in the Intel® ARC Software.</p> <p><b>Workaround:</b> Set the GPU temperature below 40 degrees and adjust the fan curve as described in the repro steps, then verify if the fan remains at 0 RPM until the temperature rises above 45 degrees.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026215394	<p><b>Title:</b> The issue involves a performance discrepancy where the Intel® A60 graphics card demonstrates lower benchmark performance compared to the NVIDIA A2000 when running multiple models on a Gigabyte RPL-S i9 platform with specific driver configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> The issue involves a performance discrepancy where the Microstation benchmark performance of the A60 model is observed to be lower compared to the NVIDIA</p>

	<p>A2000 model.</p> <p><b>Root Cause:</b> The root cause of the performance discrepancy between the Intel® A60 and NVIDIA A2000 graphics cards is due to the Intel® GPU utilizing only 68% of its compute capabilities compared to NVIDIA's 100% utilization, as observed in the GPU utilization metrics.</p> <p><b>Workaround:</b> To potentially improve the benchmark performance of the A60 compared to the NVIDIA A2000, try adjusting the GPU settings to increase utilization, ensuring that the latest drivers are installed, and optimizing the system configuration for performance.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
18036816 214	<p><b>Title:</b> The game 'Half-Life: Alyx' does not display any interface in the VR headset's main menu when viewed through VR goggles, although the interface is visible on the game preview window on the monitor.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+,ip.graphics_driver.trinity11,ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> The game 'Half-Life: Alyx' when launched in VR mode using Vulkan rendering, does not display the game interface in the VR headset's main menu, although the interface is visible on the monitor's game preview window.</p> <p><b>Root Cause:</b> The issue is observed when the game 'Half-Life: Alyx' is launched in Vulkan mode on systems equipped with Intel Arc A370M graphics, where the game interface fails to appear in the VR headset, although it is visible on the game preview window on the monitor.</p> <p><b>Workaround:</b> Launch the game in DirectX 11 mode instead of Vulkan to ensure the game interface displays correctly in the VR headset.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>

<p>14024084 951</p>	<p><b>Title:</b> The CommandList::Reset function is reported to be significantly slower on Intel® Arc graphics, taking approximately 9ms compared to 1.56ms on competitor's hardware, affecting performance in the game Assassin's Creed Shadows.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The CommandList::Reset function is taking significantly longer on Arc, approximately 3-5 times slower, compared to other platforms, with reported times around 9ms versus 1.56ms.</p> <p><b>Root Cause:</b> The root cause of the issue where CommandList::Reset is significantly slower on Intel® Arc compared to competitors is due to the implementation where each API visible command list internally contains 26+ command lists, all of which are reset regardless of whether they were used or not.</p> <p><b>Workaround:</b> Reduce the number of command lists being reset at the end of each frame if they are not used, to potentially decrease the total time spent on CommandList::Reset.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2</p>
<p>16026300 330</p>	<p><b>Title:</b> 3Dmark benchmarks are displayed in Intel® IGS Profiles page without being installed, across various software versions and system configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.ags,ip.graphics_driver.control_panel.arc_software</p> <p><b>Symptoms:</b> 3Dmark benchmarks are displayed in IGS profiles without being installed across various software versions and system configurations.</p> <p><b>Root Cause:</b> The issue where 3Dmark benchmarks are showing in Intel® IGS Profiles page without being installed is observed across multiple software versions and configurations, indicating a potential regression or detection anomaly within the Intel® ARC Software or its components.</p> <p><b>Workaround:</b> To temporarily address the issue of 3Dmark benchmarks showing in IGS Profiles without installation, manually remove the unintended profiles from the IGS Profiles page.</p>

	<p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026385601	<p><b>Title:</b> The Intel® Arc B580 12GB graphics card exhibits lower performance compared to a third-party Nvidia card when running the Minecraft Bedrock-Medieval RTX pack with ray tracing enabled.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When the 'RT ON' setting is enabled in the Minecraft Bedrock-Medieval RTX pack, the performance on the Intel Arc B580 12GB graphics card is observed to be lower compared to a third-party Nvidia card.</p> <p><b>Root Cause:</b> The root cause of the lower performance in the Minecraft Bedrock-Medieval RTX pack with 'RT ON' on the Intel Arc B580 12GB compared to the 3rd party Nvidia card is currently under investigation, focusing on DirectX 12 related issues as indicated by the latest comments.</p> <p><b>Workaround:</b> To potentially improve the performance of the Minecraft Bedrock-Medieval RTX pack with RT ON, consider adjusting the in-game resolution settings to a lower value, as the issue persists across various resolutions.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
16026473602	<p><b>Title:</b> The issue involves a TDR (Timeout Detection and Recovery) occurrence while running the OpenCL Auto test in Power Director on a system configured with an RPL-S Host, 32GB RAM, and a BMG X2 G21 FRD-B37 SD Card.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opengl</p> <p><b>Symptoms:</b> TDR (Timeout Detection and Recovery) issues occur while running OpenCL Auto test in Power Director on systems equipped with specific graphics drivers and hardware configurations.</p>

	<p><b>Root Cause:</b> The issue is caused by a graphics driver engine timeout, specifically identified as a VIDEO_ENGINE_TIMEOUT_DETECTED (141) bugcheck code, occurring when running the OpenCL Auto test in Power Director on systems equipped with Intel® graphics hardware and drivers.</p> <p><b>Workaround:</b> Switch to using third-party drivers such as AMD or NVIDIA, as the issue is not observed with these drivers.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
15017358 318	<p><b>Title:</b> Intel® Davinci Resolve software exhibits lower AVC to AVC export performance compared to a competitor's setup, with investigations focusing on the impact of ULLS settings on VDbox and Compute usage.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> Disabling Compute ULLS results in a 14-31% performance improvement in AVC export, bringing performance closer to competitor's levels, with VDbox utilization reaching nearly 100% and Compute usage reduced to 56%.</p> <p><b>Root Cause:</b> The root cause of the performance issue in AVC-&gt;AVC export is related to the utilization of the Intel® ULLS feature. Disabling ULLS results in a significant performance improvement, with VDbox utilization reaching nearly 100% and Compute usage reducing to 56%.</p> <p><b>Workaround:</b> Disable Compute ULLS (EnableDirectSubmission = 0) to improve AVC export performance by approximately 14-31%.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026439 889	<p><b>Title:</b> In the game 'A Plague Tale: Requiem', Chapter II, continuous camera rotation results in a severe performance drop to approximately 3 fps on the Intel® Arc B580 graphics card, while no performance drop is observed on the Intel® Arc A770 graphics card.</p>

	<p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> In 'Chapter II: Newcomers' of the game 'A Plague Tale Requiem', continuous rotation of the camera results in a severe performance drop to as low as 3 fps on the BMG X2 EU320 with Intel Arc B580, while no performance drop is observed on DG2 A770.</p> <p><b>Root Cause:</b> The root cause of the performance drop to 3 fps during continuous camera rotation in 'A Plague Tale Requiem' on the Intel Arc B580 graphics card is due to high memory usage exceeding the local memory budget, which dynamically starts to page out allocations from local memory to system memory.</p> <p><b>Workaround:</b> To mitigate the performance drop issue in 'A Plague Tale Requiem' on Intel Arc B580, reduce the Texture Quality setting to LOW, which decreases memory consumption and improves frame rates.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2, windows.nickel.client</p>
16026399018	<p><b>Title:</b> Choppiness is observed during gameplay while running PUBG in Windowed mode using DirectX 12 on specific Intel® configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Choppiness is observed during gameplay while running in Windowed mode in DX12.</p> <p><b>Root Cause:</b> The root cause of the choppiness observed during gameplay while running PUBG in Windowed mode in DX12 on Intel® BMG X2 WSTN systems is specific to the Intel® graphics driver version prod-hini-releases_24ww40-ci-master-17603-bmg-revenue-pr-1016253-ms-attestation-sign-997, as the issue is not observed with third-party drivers or other Intel® configurations.</p> <p><b>Workaround:</b> Switch the game to Fullscreen or Borderless Window mode to avoid choppiness during gameplay.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2, windows.11_v24H2</p>

16026350 131	<p><b>Title:</b> Video shuttering observed on eDP while using Sony Catalyst Production Suite Edit/Prepare on an Intel® platform.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> Video shuttering observed on eDP while using Sony Catalyst Production Suite Edit/Prepare.</p> <p><b>Root Cause:</b> The root cause of the video shuttering observed on eDP is due to a production driver regression, specifically identified with the Intel® prod-hini-releases_24ww48-ci-master-17977-future_platform-beta-1016395-ms-attestation-sign-993 driver.</p> <p><b>Workaround:</b> To temporarily address the video shuttering issue on eDP with Sony Catalyst Production Suite, execute the following commands in an admin command prompt: Intel ® reg ADD HKLM\SOFTWARE\Intel\IGFX\VULKAN /v FlushCachesToDramOptimizationEnabled /f /t REG_DWORD /d 0x0 /reg:32 and Intel ® reg ADD HKLM\SOFTWARE\Intel\IGFX\VULKAN /v FlushCachesToDramOptimizationEnabled /f /t REG_DWORD /d 0x0 /reg:64</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026287 752	<p><b>Title:</b> Intel® is currently addressing an issue where the WSTN A40 graphics card is experiencing a performance drop compared to the NV-T1000 when running Pugetbench Premier Pro on specific system configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> Customers are experiencing a performance drop when comparing the A40 to the NV-T1000 graphics card.</p> <p><b>Root Cause:</b> The observed performance drop in the WSTN card compared to the NVIDIA card while running Pugetbench Premier Pro is due to issues related to the OpenCL dll as indicated by the WPT logs, which necessitates further investigation into the OpenCL configurations and their impact on performance.</p>

	<p><b>Workaround:</b> To address the performance drop issue observed with the WSTN card compared to the NVIDIA card, consider running a full cycle in Standard mode as no performance drop was observed with both A40/T1000 and A60/A2000 configurations in this mode.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2,windows.11_v24H2</p>
16026538 301	<p><b>Title:</b> During the '1M particles' drag and drop test in the GPU_Caps_viewer-OCL benchmark, a blank out was observed.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> Blank out observed in '1M particles' during Drag and Drop in the GPU Caps viewer-OCL benchmark.</p> <p><b>Root Cause:</b> The issue is observed specifically with the Intel® GPU_Caps_viewer-OCL benchmark when using the latest gfx-driver-ci-master-18303 on a Windows 2024 OS, and it is not seen with third-party drivers or other OCL benchmarks, indicating a potential issue with the Intel® driver's handling of OpenCL benchmarks in specific system configurations.</p> <p><b>Workaround:</b> To temporarily resolve the blank out issue during the '1M particles' drag and drop in GPU_Caps_viewer-OCL benchmark, connect two external monitors instead of using one EDP and one external monitor.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
14023138 165	<p><b>Title:</b> Intel® is currently addressing an issue where the CLIP Large Patch performance on the BMG platform is lagging behind the A750 and NV4060 platforms.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.ipex</p> <p><b>Symptoms:</b> The issue involves a performance discrepancy where the CLIP Large Patch</p>



	<p>performance on BMG is lagging behind that of A750 and NV4060, particularly when using a custom IPEX build and dpcpp compiler.</p> <p><b>Root Cause:</b> The root cause of the CLIP Large Patch performance issue behind A750 and NV4060 is due to the inefficiency in generating the workload, requiring optimization from the software framework.</p> <p><b>Workaround:</b> Use the execute.bat file from the Dgfx_E2E_AI folder to install the compatible versions of IPEX and torch, as this setup has shown improved performance results.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026566 472	<p><b>Title:</b> A crash is observed when changing the Xess setting in the F1 24 game on systems using Intel® graphics drivers, occurring without generating any crash dumps or event error logs.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The issue involves a silent crash of the F1 24 game when toggling between in-game anti-aliasing options, with no crash dumps or event error logs generated; this behavior is observed sporadically and across various resolutions and XESS settings.</p> <p><b>Root Cause:</b> The issue is a silent game crash observed when toggling between in-game anti-aliasing options in the F1 24 game, using Intel® XESS 2.0.0.18 upscaling, on various Intel® graphics driver versions, without generating crash dumps or event error logs.</p> <p><b>Workaround:</b> To mitigate the game crash issue when changing Xess settings in F1 24, avoid toggling between in-game AA options rapidly; allow some time for each setting to adapt before making another change.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
14023036 034	<p><b>Title:</b> Intel® DG2-448 graphics card exhibits significantly lower performance compared to the RTX 4060 when running Horizon Zero Dawn Remastered, as observed in various driver versions and system configurations.</p>

	<p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When playing Horizon Zero Dawn Remastered on A750 using driver 32.0.101.5765, average fps is lower than expected in comparison to RTX 4060.</p> <p><b>Root Cause:</b> The root cause of the lower performance in Horizon Zero Dawn Remastered on the Intel® Arc A770 graphics card compared to the NVIDIA RTX 4060 is primarily due to longer processing times in the Async Compute function, specifically in the StaticScene::CullJob_GPUInstancesDispatch function, where the Intel® Arc A770 shows significantly higher execution times.</p> <p><b>Workaround:</b> To improve the performance of Horizon Zero Dawn Remastered on DG2-448, modify the registry key by setting UploadHeapMemoryOverride to 2.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2,windows.nickel.client</p>
15016646994	<p><b>Title:</b> Intel® DG2 A750 graphics card is experiencing issues with playback of ArriRaw media in DaVinci Resolve, where the application becomes unresponsive and may cause system hangs.</p> <p><b>Exposure:</b> 1-critical</p> <p><b>Affected Component:</b> ip.graphics_driver.neo,ip.graphics_driver.opencl,ip.isv_software.3d_application,ip.isv_software.opencl</p> <p><b>Symptoms:</b> The issue involves ArriRaw media workload failing to playback in Davinci Resolve, with the application becoming unresponsive and sometimes causing system hangs.</p> <p><b>Root Cause:</b> The root cause of the issue where ArriRaw media workload could not playback in Davinci Resolve is due to an application issue where buffers are created with CL_MEM_USE_HOST_PTR and the host pointer passed from the application is freed or reallocated by the application before the unmap operation is completed, leading to corrupted data being read by the GPU.</p> <p><b>Workaround:</b> Use the Intel® driver version ci-neo-030758, as it has been confirmed to run the workload fine without issues.</p> <p><b>Reproducibility:</b> always_100%</p>

	<p><b>Affected OS Information:</b> windows</p>
16025301 450	<p><b>Title:</b> Line corruption is observed in Dirt5 gameplay across various resolutions and configurations, confirmed through multiple tests and driver versions.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Line corruption is observed in Dirt5 gameplay across various resolutions and configurations, persisting despite different driver and OS versions tested.</p> <p><b>Root Cause:</b> The root cause of the line corruption observed in Dirt5 gameplay is specific to the Intel® Integrated Graphics (iGFX), as the issue is not observed when using an NVIDIA graphics card.</p> <p><b>Workaround:</b> Change the game settings to High or Ultra High graphics preset to avoid line corruption issues.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
14023336 859	<p><b>Title:</b> Intel® ARC GPUs are experiencing slower shader dispatch times compared to competitors, which is significantly impacting performance in specific gaming scenarios.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Intel ARC GPUs are experiencing longer shader dispatch times compared to NVIDIA, significantly impacting performance.</p> <p><b>Root Cause:</b> The root cause of the performance issue is related to the specific shader dispatch configurations [2560,1,1], [142,80,1], [160,90,1] causing long XVE stalling phases in Intel ARC GPUs, which significantly impacts performance compared to NVIDIA GPUs.</p> <p><b>Workaround:</b> Enable Mesh Shader on Intel ARC GPUs by setting 'AllowMeshShaders = Enable' and 'ForceMeshShader = Enable' in the game's config.ini file to improve performance.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2</p>

16026287 681	<p><b>Title:</b> A performance issue has been identified where the Intel® A40 graphics card exhibits a lower benchmark score compared to the NV-T1000 graphics card when running the Puget Bench for DaVinci Resolve benchmark.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opengl</p> <p><b>Symptoms:</b> We are observing a score drop issue when comparing the A40 to the NV-T1000.</p> <p><b>Root Cause:</b> The observed performance drop in the WSTN A60 graphics card compared to the NV-2000 is due to the difference in GPU memory, with the WSTN A60 having 6GB and the NV-2000 having 8GB, leading to higher GPU utilization during the Pugetbench DaVinci Resolve benchmark.</p> <p><b>Workaround:</b> To address the score drop issue observed with the A40 compared to the NV-T1000, ensure that the latest ci master driver 18157 is installed and verify that the system is configured correctly according to the specifications provided.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2,windows.nickel.client</p>
15016721 184	<p><b>Title:</b> Intel® customers are experiencing an issue where the aim dot disappears when using a telescope or front sight in certain graphics settings.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12,ip.graphics_driver.igc</p> <p><b>Symptoms:</b> The aim dot or cross star disappears when attempting to aim using a telescope or front sight in certain graphics settings.</p> <p><b>Root Cause:</b> The root cause of the aim dot disappearance issue when using a telescope or front sight in the game is related to the shader cache settings. Disabling the disk shader cache resolved the issue, as confirmed by multiple tests across different driver versions and game settings.</p> <p><b>Workaround:</b> Disable the disk shader cache by setting the registry key 'disableDiskShaderCache' to 1, which has been shown to resolve the issue of the disappearing aim dot when using a telescope or front sight in the game.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>

<p>16025562 461</p>	<p><b>Title:</b> The issue involves the VR display hanging and showing a blank screen when launching the Vulkan API on the Half-Life: Alyx game using Intel® hardware and drivers.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.vulkan</p> <p><b>Symptoms:</b> When launching the Half-Life: Alyx game using the Vulkan API, the VR display hangs and shows a blank screen.</p> <p><b>Root Cause:</b> The root cause of the VR display hang and showing a blank screen when launching the Vulkan API on the Half-Life: Alyx game is specific to the Vulkan API, as the issue is not observed when using DirectX 11.</p> <p><b>Workaround:</b> Switch to using the DirectX 11 (DX11) API instead of Vulkan API when launching Half-Life: Alyx to avoid VR display issues.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
<p>14023487 801</p>	<p><b>Title:</b> The issue involves the Intel® BMG X2 GPU performing lower than the ACM A750 in the PCMark 10 Digital Content Creation test across multiple runs with different drivers.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opengl</p> <p><b>Symptoms:</b> The BMG X2 GPU consistently performs lower than the ACM A750 in the PCMark 10 Digital Content Creation tests across multiple runs with different drivers.</p> <p><b>Root Cause:</b> The root cause of the lower performance in the PCMark 10 Digital Content Creation test on the BMG X2 GPU compared to the ACM A750 is due to the different hardware configurations and driver versions used in the testing setups.</p> <p><b>Workaround:</b> To potentially improve the performance of the BMG X2 GPU in the PCMark 10 Digital Content Creation test, consider using a different driver version that may offer better compatibility or performance for this specific benchmark.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2, windows.nickel.client</p>

<p>14023431 419</p>	<p><b>Title:</b> Intel® customers are experiencing transparent artifacts on guns and hands while playing Project Condor on systems equipped with Intel® graphics, as observed in the latest driver version.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When playing Project Condor on BMG using driver 32.0.101.6021, the game exhibits artifacting on the player's hands and weapon.</p> <p><b>Root Cause:</b> The issue of transparent artifacts on guns and hands in Project Condor when played on Intel® BMG using driver 32.0.101.6021 is reproducible across multiple platforms including BMG, MTL, and LNL, and seems visually related to blending or depth effects, but no registry keys around blending or depth have resolved the issue.</p> <p><b>Workaround:</b> To temporarily address the artifacting issue on the player's hands and weapon in Project Condor, try disabling the discard operation in the pixel shader, as this has been identified to incorrectly discard pixels, causing the artifacts.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v23H2,windows.nickel.client</p>
<p>14023488 095</p>	<p><b>Title:</b> The Kishonti Compubench benchmark shows lower performance on the Intel® BMG X2 configuration compared to the ACM A750 configuration.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.opencl</p> <p><b>Symptoms:</b> Kishonti Compubench downloaded from the official site does not work without an internet connection.</p> <p><b>Root Cause:</b> The issue of lower performance in Kishonti Compubench on the BMG X2 compared to the ACM A750 is observed across multiple test runs and configurations, indicating a consistent performance discrepancy between the two setups.</p> <p><b>Workaround:</b> To run Kishonti Compubench without an internet connection, download the 7z file from the specified directory, extract it, and execute the /bin/compubench_cl.exe file.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>

<p>16025615 121</p>	<p><b>Title:</b> Flickering was observed on the benchmark in hybrid mode, where the integrated graphics function as the primary display and the discrete graphics as the secondary, during the DirectStorage_BulkLoadDemo.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+</p> <p><b>Symptoms:</b> Flickering observed on the benchmark in hybrid mode when using DirectStorage BulkLoadDemo, specifically when the integrated graphics (IGFX) is set as the primary display and the discrete graphics (DGFX) as secondary.</p> <p><b>Root Cause:</b> The issue of flickering observed in the DirectStorage_BulkLoadDemo in hybrid mode is due to a driver regression affecting systems configured with Intel® graphics as the primary display and discrete graphics as secondary.</p> <p><b>Workaround:</b> To temporarily address the flickering issue observed in the DirectStorage_BulkLoadDemo on systems configured with hybrid mode, set the discrete graphics card (DGFX) as the primary display output instead of the integrated graphics (IGFX).</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
<p>16025684 127</p>	<p><b>Title:</b> The issue involves the Specviewperf viewset for 3dsmax-07 experiencing significant lag on Intel® ADL S+ A40 platforms when compared to the NV T1000, as observed across various system configurations and driver versions.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+,ip.graphics_driver.trinity11</p> <p><b>Symptoms:</b> The issue involves the 3dsmax-07 viewset experiencing significant lagging performance when compared to the NV T1000 graphics solution, specifically observed on systems equipped with the latest graphics driver.</p> <p><b>Root Cause:</b> The issue of lagging performance in the 3dsmax-07 viewset as compared to NV T1000 is due to a regression in the latest Intel® GFX driver build ci master 17686 on 24H2 build 26100.2033 OS, as identified in the most recent debug comments.</p> <p><b>Workaround:</b> Switch to using the latest GFX driver build ci master 17686 on 24H2 build 26100.2033 OS, as the issue is not seen with this configuration.</p> <p><b>Reproducibility:</b> always_100%</p>

	<p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
16025734823	<p><b>Title:</b> The issue involves a game crash with TDR when the 'home' page option in the main menu of 'No More Room in Hell 2' is clicked on systems using Intel® hardware and software configurations.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_gmm,ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> When clicking the 'home' page option in the main menu of the game 'No more room in hell 2', the game crashes with a TDR (Timeout Detection and Recovery) error.</p> <p><b>Root Cause:</b> The root cause of the game crash with TDR when the in-game main menu option 'home' page is clicked is related to the registry key AILdummyspagebacking and its override setting being force enabled.</p> <p><b>Workaround:</b> To temporarily avoid the game crash issue, disable the 'AIL_dummyspagebacking_Override' registry key by setting its value to 0.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
16025761245	<p><b>Title:</b> Intel® graphics utilization is reported to be zero across all hyper-encoding scenarios when using specific system configurations and driver versions.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d10+</p> <p><b>Symptoms:</b> IGFX utilization appears to be at zero across all hyper-encoding scenarios.</p> <p><b>Root Cause:</b> The issue of IGFX utilization appearing at zero across all hyper-encoding scenarios is observed due to a potential driver regression or compatibility issue with the Intel® graphics driver versions tested, as indicated by consistent problem occurrence across multiple driver versions and system configurations.</p> <p><b>Workaround:</b> N/A</p> <p><b>Reproducibility:</b> always_100%</p>



	<p><b>Affected OS Information:</b> windows.11_v24H2,windows.nickel.client</p>
16025682 636	<p><b>Title:</b> The fan fails to enter the zero RPM state when the temperature is at or below 45 degrees Celsius across multiple versions of Intel® ARC Software.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.core_powercons</p> <p><b>Symptoms:</b> The fan does not enter zero RPM state when the temperature is at or below 45 degrees Celsius.</p> <p><b>Root Cause:</b> The issue where the fan is not entering into zero RPM state at temperatures less than or equal to 45°C across various Intel® ARC Software versions is observed consistently, indicating a potential software regression or configuration issue within the Intel® Graphics Software.</p> <p><b>Workaround:</b> Use Intel® ArcControl-Wix version 1.80.5684.2 to resolve the issue where the fan does not enter zero RPM state at temperatures &lt;= 45°C.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16025737 414	<p><b>Title:</b> Dedicated GPU Memory is consuming more than expected while running 3DMark Time Spy, exceeding the anticipated usage of less than 0.5 GB by reaching over 1.5 GB.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> Dedicated GPU Memory is consuming more than expected, exceeding 1.5 GB when running 3DMark Time Spy, whereas the expected consumption is less than 0.5 GB.</p> <p><b>Root Cause:</b> The issue of excessive dedicated GPU memory consumption while running 3DMark Time Spy is specific to DirectX 12 (DX12) based benchmarks, as observed with the Intel® gfx-driver-ci-comp_core-12123 and other related drivers across multiple platforms and resolutions.</p> <p><b>Workaround:</b> Switch to using DX11 based benchmarks instead of DX12 to reduce the dedicated GPU memory consumption as observed in the tests.</p> <p><b>Reproducibility:</b> always_100%</p>

	<p><b>Affected OS Information:</b> windows.11_v24H2, windows.nickel.client</p>
14023941725	<p><b>Title:</b> Intel® BMG X2 graphics card exhibits significantly lower performance in the game Final Fantasy Rebirth, achieving approximately 48% of the performance compared to Nvidia's RTX 4060Ti.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> The BMG X2 graphics card is performing at approximately 48% of the competitive Nvidia 4060Ti in the game Final Fantasy Rebirth, with similar performance issues observed on other models.</p> <p><b>Root Cause:</b> The root cause of the low competitive performance of the Intel® BMG X2 in Final Fantasy Rebirth, achieving approximately 48% of the performance of the Nvidia RTX 4060Ti, is attributed to the use of an older driver version due to a performance regression issue.</p> <p><b>Workaround:</b> Enable SmallBufferPooling and perform other tuning adjustments to improve performance in Final Fantasy Rebirth on BMG X2.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.nickel.client</p>
16026159289	<p><b>Title:</b> Intel® Chaos Vantage experiences a TDR (Timeout Detection and Recovery) crash when loading a project on specific system configurations using Intel® graphics drivers.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.d3d12</p> <p><b>Symptoms:</b> TDR with crash observed while loading the project in Chaos Vantage version 2.6.1.</p> <p><b>Root Cause:</b> The root cause of the issue is identified as a graphics driver timeout, specifically a VIDEO_ENGINE_TIMEOUT_DETECTED error, related to the Intel® graphics driver.</p> <p><b>Workaround:</b> Disable Hardware-accelerated GPU scheduling and reboot the system.</p> <p><b>Reproducibility:</b> always_100%</p>

	<p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026011 572	<p><b>Title:</b> Profile settings for FPS targeting do not function as expected in DirectX 9 games, with only global settings being effectively applied.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.control_panel.arc_software,ip.graphics_driver.trinity9</p> <p><b>Symptoms:</b> Profile settings for FPS targeting do not work for DX9 titles, only global settings are effective.</p> <p><b>Root Cause:</b> The root cause of the issue is a regression in the Intel® Graphics Software, specifically from version IntelGraphicsSoftware_24.44.32.0, which affects the application of profile settings for FPS targeting in DX9 games, only allowing global settings to be applied.</p> <p><b>Workaround:</b> To temporarily address the issue with profile settings not working for DX9 titles, users can apply settings through the global graphics options in the Intel Graphics Software.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16025970 432	<p><b>Title:</b> When V-Sync is enabled in Intel® Graphics Software and the game is launched in FULLSCREEN mode with Low Latency (LL) turned off, the latency values and displayed FPS values remain constant at 66 and 60 respectively, across various scenarios.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.trinity11,ip.tools.presentmon</p> <p><b>Symptoms:</b> When V-Sync is enabled in Intel Graphics Software and the game is launched in FULLSCREEN mode with Low Latency (LL) turned off, the Latency (LL) values and Displayed FPS values remain constant at 66 and 60 respectively, regardless of the scenario.</p> <p><b>Root Cause:</b> The issue of constant LL values and displayed FPS values being 66 and 60 respectively, regardless of V-Sync ON (IGS) scenarios when launched in FULLSCREEN mode with LL OFF, is due to the interaction between the Intel® Graphics Software settings and the game's rendering settings in FULLSCREEN mode.</p>

	<p><b>Workaround:</b> To address the issue of constant LL and Displayed FPS values in FULLSCREEN mode with LL OFF, switch the game to BORDERLESS WINDOWED mode, which has shown dynamic FPS readings in testing scenarios.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>
16026132 973	<p><b>Title:</b> In the Intel® Graphics Software App (IGS), enabling Low Latency (LL) mode does not affect latency values when Vsync is disabled in-game, showing no difference between LL ON and LL OFF settings.</p> <p><b>Exposure:</b> 2-high</p> <p><b>Affected Component:</b> ip.graphics_driver.trinity9</p> <p><b>Symptoms:</b> When Low Latency (LL) mode is enabled in the Intel Graphics software App (IGS) and Vsync is disabled in-game, there is no observed difference in latency values between LL ON and LL OFF, affecting games like Half Life 2 and Resident Evil 6 on both VRR and FRR monitors.</p> <p><b>Root Cause:</b> The root cause of the issue is that enabling Low Latency (LL) mode in the Intel® Graphics Software App (IGS) does not affect latency measurements when Vsync is disabled in-game, as observed with consistent latency values regardless of LL being on or off.</p> <p><b>Workaround:</b> Enable Vsync in the in-game settings when using Intel Graphics software App (IGS) with Low Latency (LL) mode to observe the expected latency improvements.</p> <p><b>Reproducibility:</b> always_100%</p> <p><b>Affected OS Information:</b> windows.11_v24H2</p>