Intel® Graphics Command Center (Intel® GCC) SPS Delta

User Guide

Revision 0.6

May 2022

Document Number: 729317

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Revision History

Document Number	Revision Number	Description	Revision Date
729317	0.5	• Initial release.	April 2022
	0.6	• Updated chapter 1 and 2	May 2022

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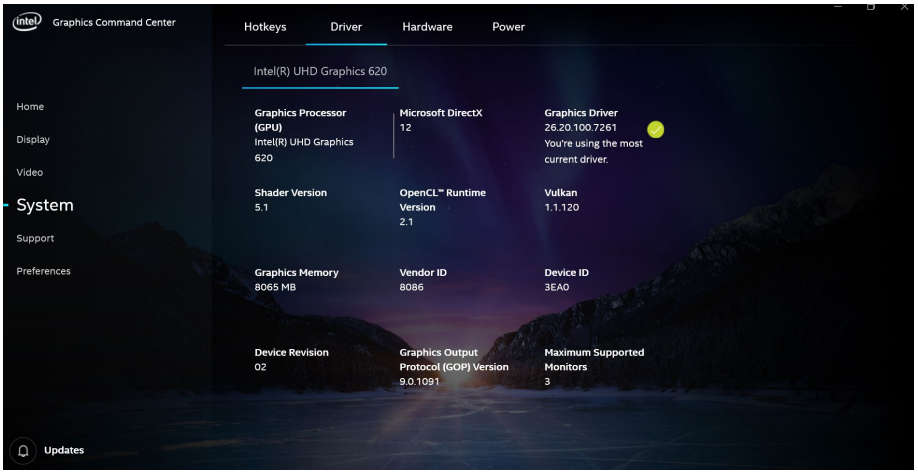
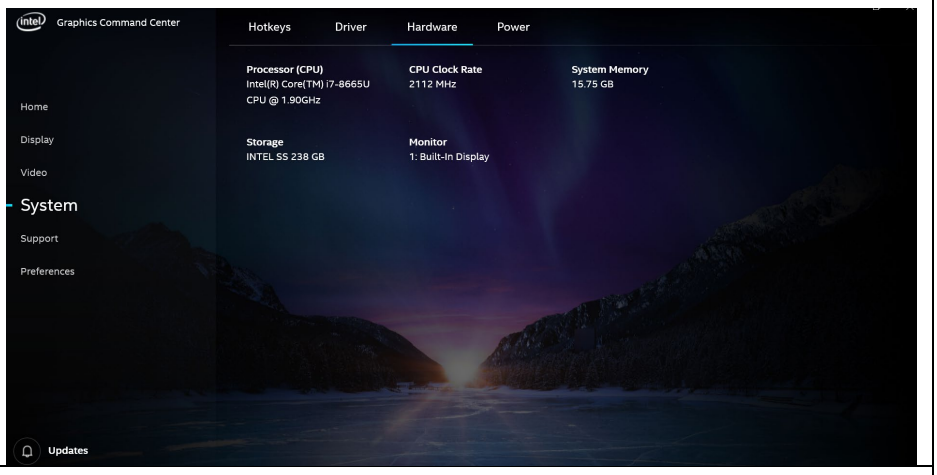
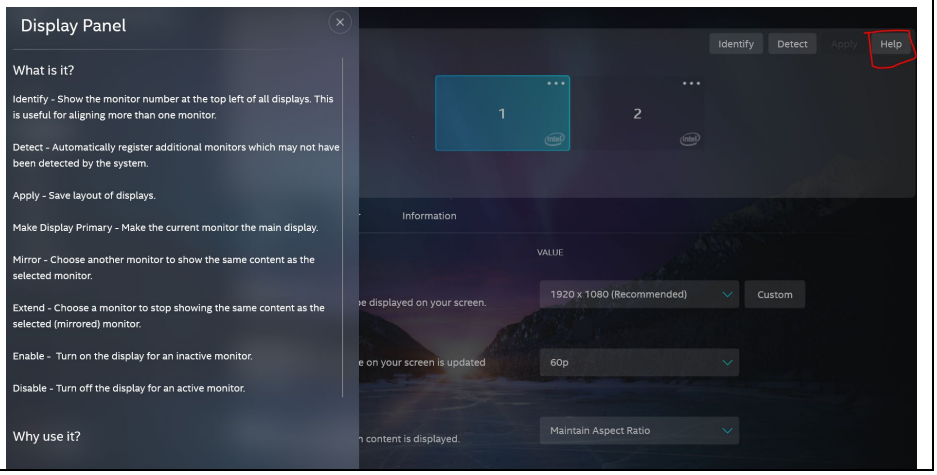
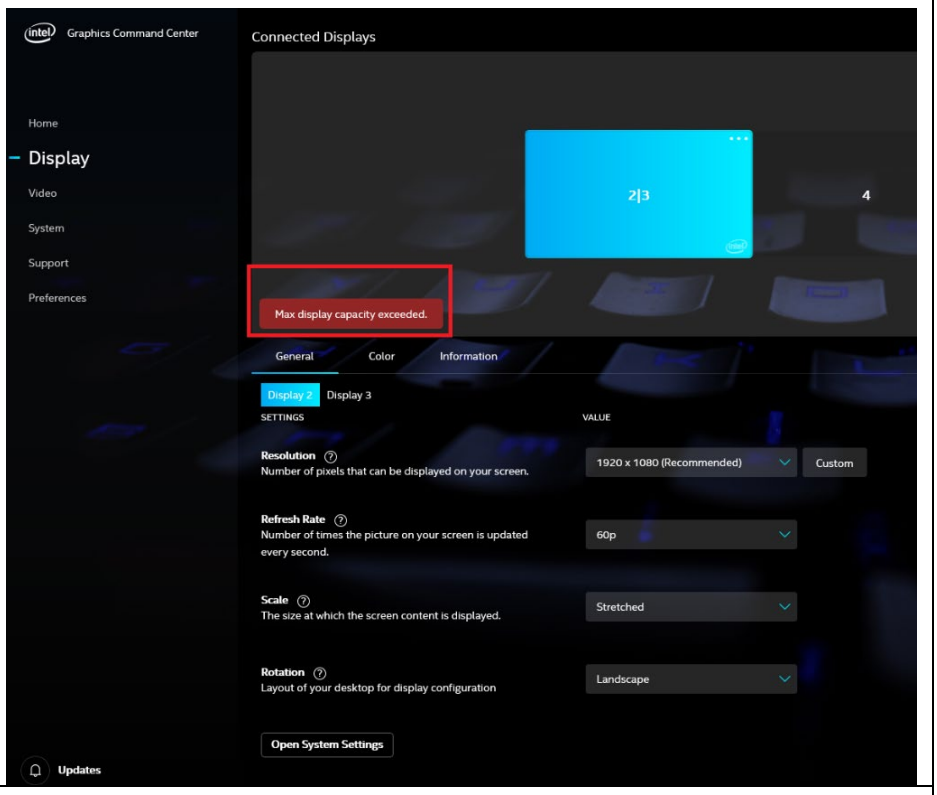
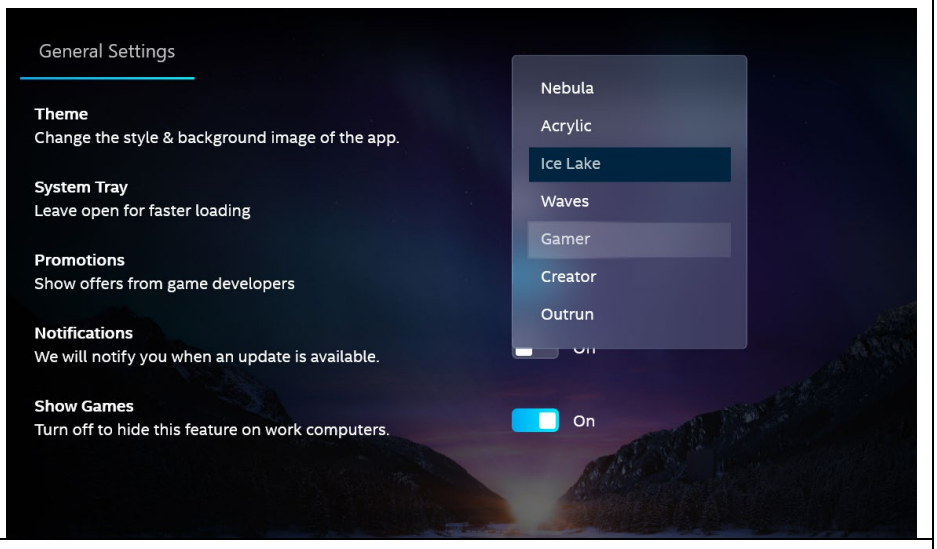
1 Expected Behaviors

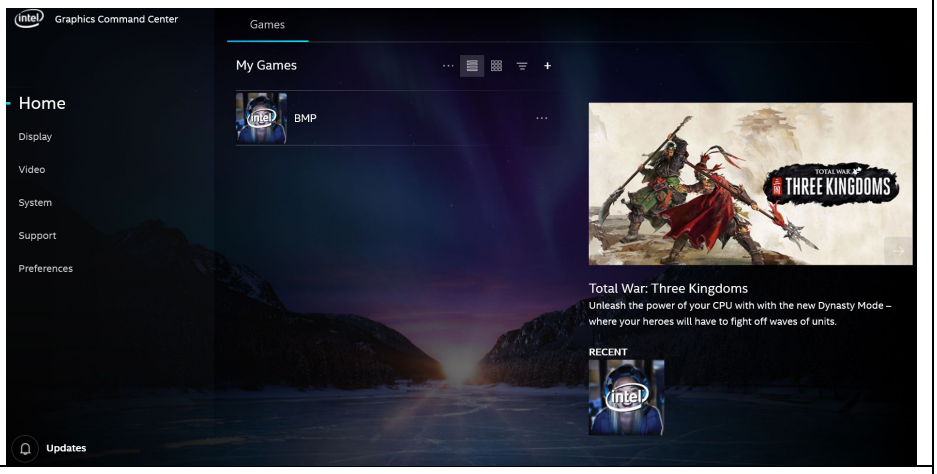
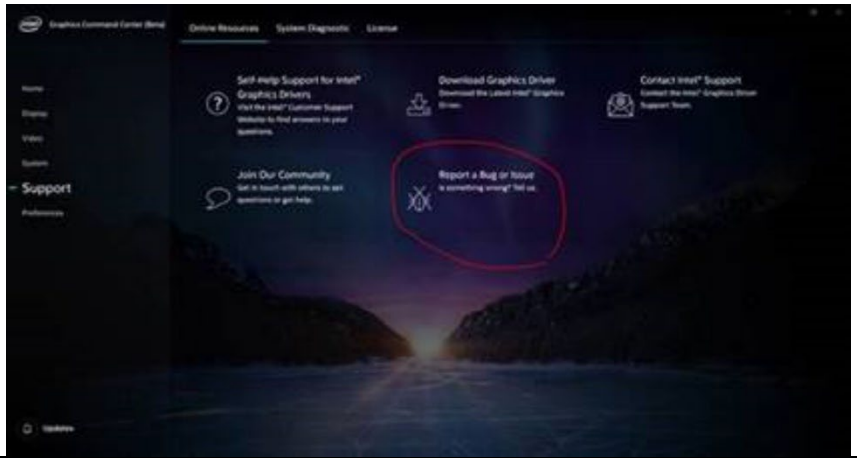
Note: Some of the IGCC features were implemented differently than the OS, it came down to design choices, so please consider this point and do not expect 1:1 behavior when comparing IGCC vs OS on some of these features/operations.

Sr. No.	Expected Behaviors	Images/Explanation
1	"Information" tab to be seen in Display page along with "General" and "Color" tabs	SPS requires text addition for "Information"
2	App Preferences tab to show following options by default: • Theme • System Tray • Promotions • Notifications • Show Games	SPS requires text addition for "System Tray" and "Show Games"
3	Home Page "Your Games" changes to "My Games"	[New Image Required]
4	Power Page to show no power plans for ICL+ or Modern/Connected Standby supported systems. Power plans only applicable to non-Modern Standby systems • Power Page "On Battery" Options • Power Page "Plugged In" Options	[Need to update new image for "On Battery" and "Plugged In" options]
5	"Identify" removed from Scaling options	[Need text update in SPS]

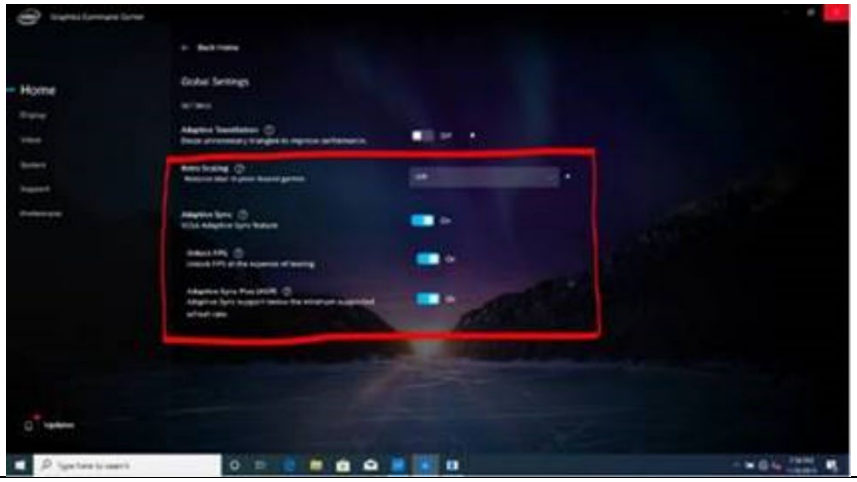
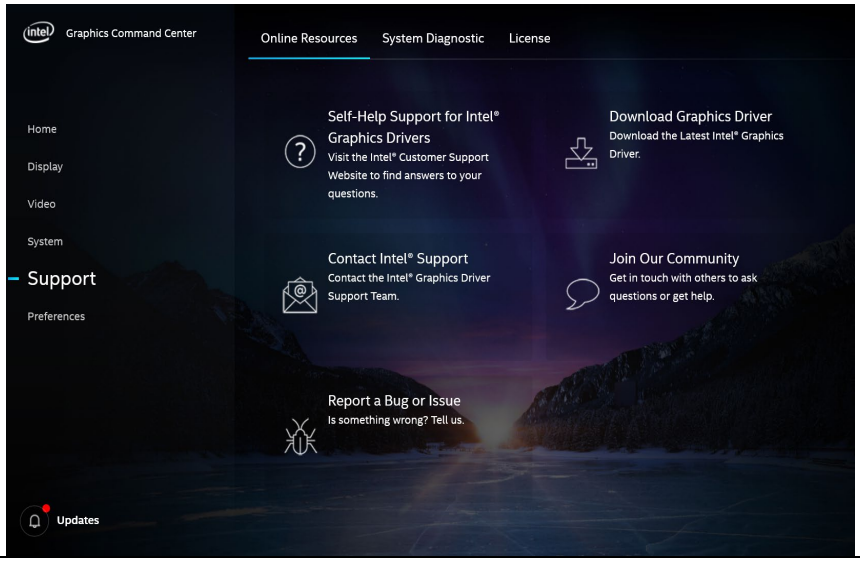
Sr. No.	Expected Behaviors	Images/Explanation
6	System -> Driver page Changes • Graphics Processor (GPU) • Microsoft DirectX • Graphics Driver • Shader Version • OpenCL Runtime Version • Vulkan • Graphics Memory • Vendor ID • Device ID • Device Revision • Graphics Output Protocol (GOP) version • Maximum Supported Monitors	
7	The below fields are static for all systems, that can be found on Hardware tab: • Processor (CPU) • CPU Clock Rate • System Memory • Storage • Monitor	
8	Latest Image of Display Page to be modified in SPS (New Help button is added)	

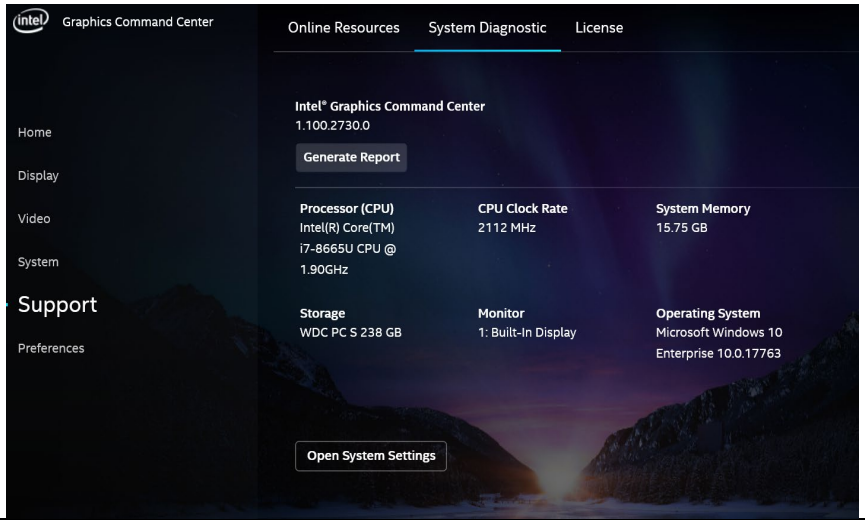
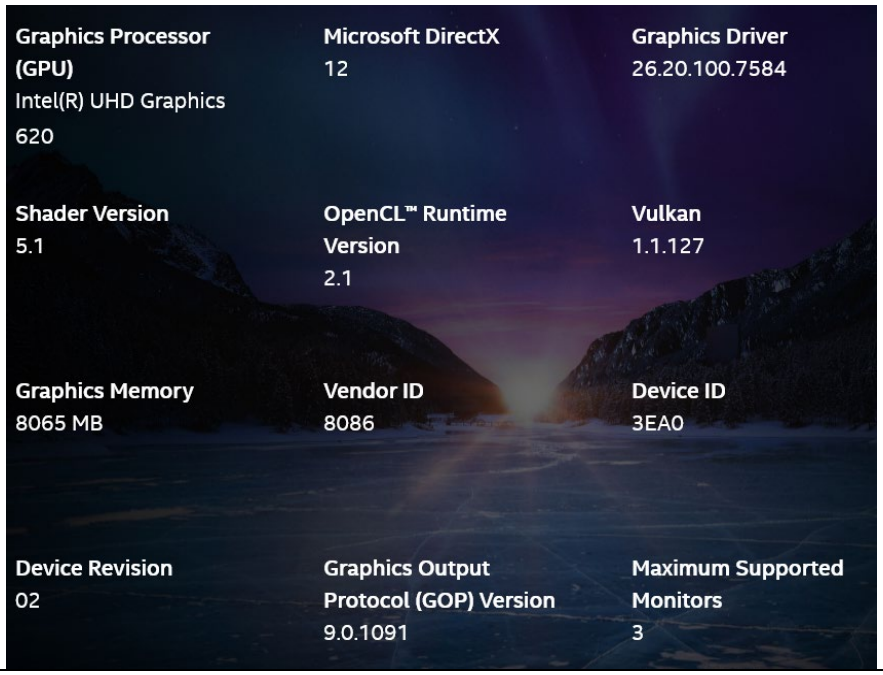
Expected Behaviors

Sr. No.	Expected Behaviors	Images/Explanation
9	The message "Max display capacity exceeded." show when total 4 displays. No "Max display capacity reached" when total 3 display.	
10	Current list of themes is provided in the adjacent image	
11	The General page might flash once when change the resolution/scaling/rotation in IGCC	This is an expected behavior

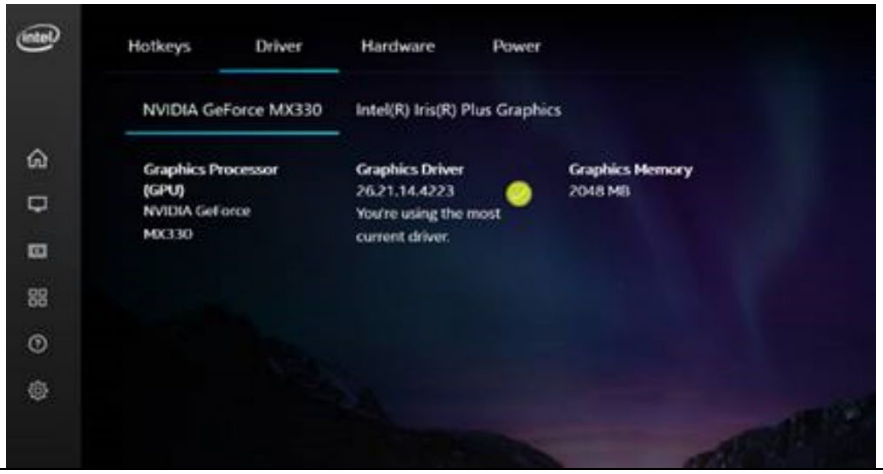
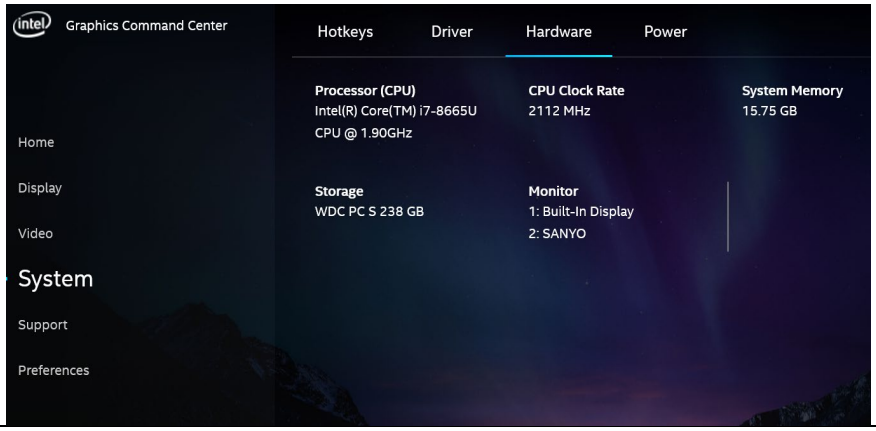
Sr. No.	Expected Behaviors	Images/Explanation
12	"Your Games" to be updated to "My Games" in IGCC SPS [Picture and text to be update in SPS]	
13	Sliders in Color settings of IGCC has no effect when changed back and forth	Expected behavior, as sometimes the slider value might not change dynamically while moving the slider. Once the slider is dragged and dropped the value will change.
14	Intel Graphic Command Center unable to keep primary display after switching display modes	This is expected behavior: when mode change occurs IGCC does not retain/reapply primary designation. Primary display designation may change.
15	There have extra item "Report a Bug or a issue" under Online Resources in support page (Internal Sighting: 14011360509)	

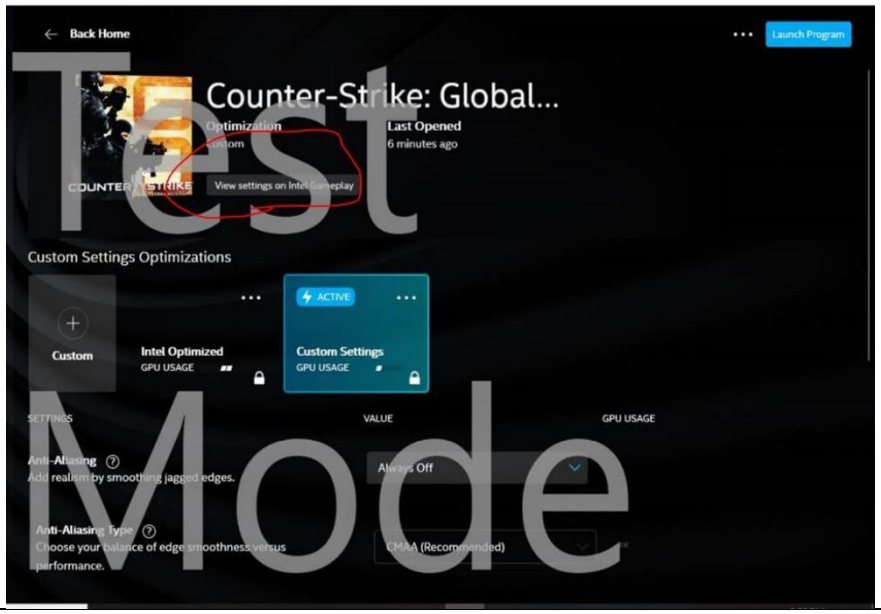
Expected Behaviors

Sr. No.	Expected Behaviors	Images/Explanation
16	Preferences ->Global settings page to show Retro Scaling, Adaptive Sync features, which are supported for Gen11+ platforms	
17	• Support-> Inline Resources page to have new feature added – "Report a Bug or Issue". • This feature will enable end user to directly report a bug from IGCC app to Intel community.	

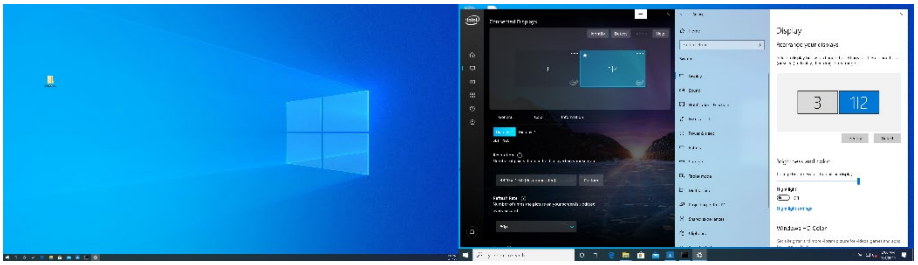
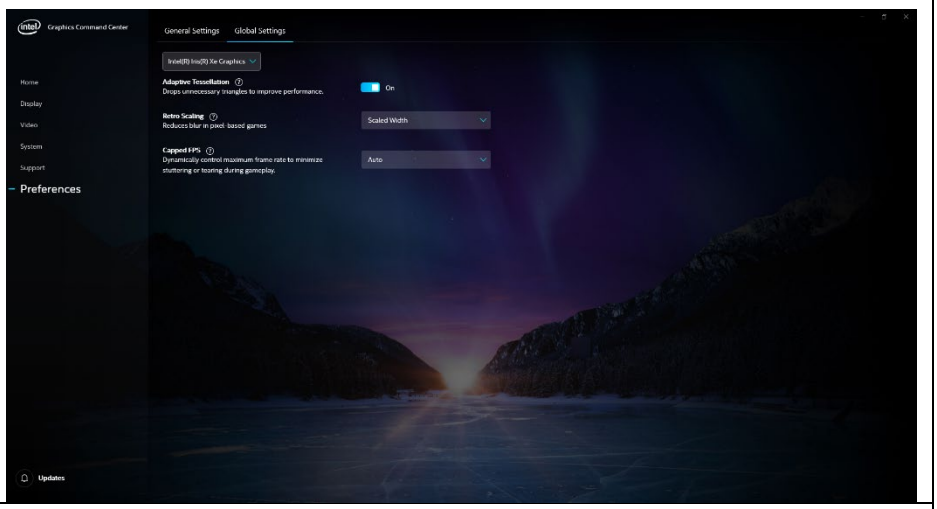
Sr. No.	Expected Behaviors	Images/Explanation
18	Support-> System Diagnostic page to show following features: • IGCC version number • Processor (CPU) • CPU Clock Rate • System Memory • Storage • Monitor • Operating System	
19	System -> Driver to display below information: • Graphics Processor (GPU) • Microsoft DirectX • Graphics Driver • Shader Version • OpenCL Runtime • Vulkan • Graphics Memory • Vendor ID • Device ID • Device Revision • Graphics Output Protocol (GOP) version • Maximum Supported Monitors	

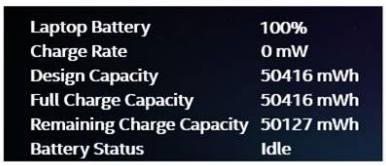
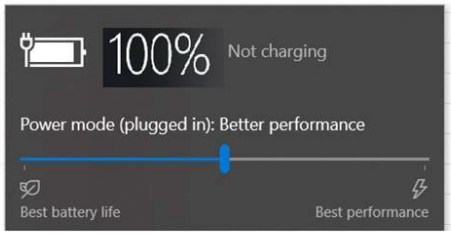
Expected Behaviors

Sr. No.	Expected Behaviors	Images/Explanation
20	Multiple Graphics Adapter information to be available within System-> Driver tab For adapters apart from Intel's, IGCC will show below information: • Graphics Processor (GPU) • Graphics Driver • Graphics Memory	
21	"Launch Program" option to be available only for select list of games (Please refer to Collateral: 1025971) **NOTE:** Launch Program option will only be available when games provided in the list are auto detected by IGCC.	
22	System-> Hardware Page to provide below information: • Processor (CPU) • CPU Clock Rate • System Memory • Storage • Monitor	

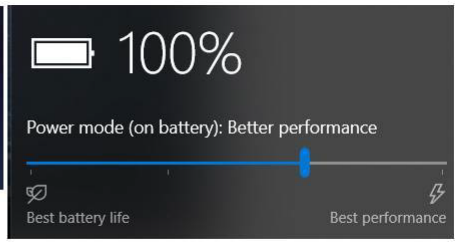
Sr. No.	Expected Behaviors	Images/Explanation
23	"View Settings on Intel Gameplay" button has been removed	
24	Both system and external monitor will change rotation in clone mode	This is expected behavior
25	IGCC cannot be launched properly after the 2nd account sign in	This is expected behavior : 1. When IGCC loads from the 1st user there a Win32 app (an app that loads in background which talks to the OS and Driver) 2. As part of this loading, there are OS system resources like "OS Network System pipe", etc that gets allocated. 3. When the 2nd user has logged in (1st user without logging out) 4. When 2nd instance of IGCC starts, the Win32 app's resources conflicts with the 1st user's IGCC instance. Because these resources are OS resources they are common across all users. 5. Hence the 2nd instance id not loading.
26	External Monitor resolution is not maximum after changing display mode to extend with IGCC	This is expected behavior. OS behavior is different since OS decides to do SetMode to recommended resolution when they extend. IGCC don't do that extra step. This is not a failure but just a different behavior.
27	The sequence number will disappear and disorder in IGCC when we plug USB DOCK – [Internal sighting : 14011468316]	This is an expected behavior. **Problem:** Sequence Number has always been arbitrary and is decided by application. Windows as well as CUI has their own numbering system to number the displays attached. During enumeration, IGCC will assign sequence number for each connected display by it's connector type. If IGCC got the same display id for different display, IGCC will fail to enumerate each displays. **Limitation:** Modifying IGCC to implement a new way to identify displays on this corner case would involve a large scale architectural revision which may cause unexpected side-effect. IGCC will keep the current design.

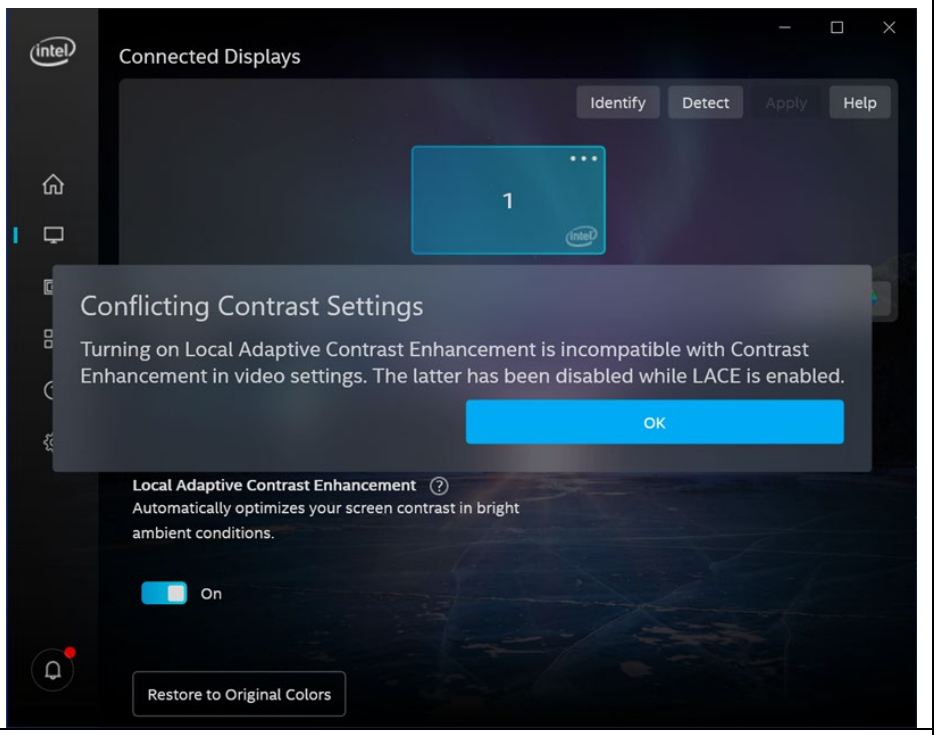
Expected Behaviors

Sr. No.	Expected Behaviors	Images/Explanation
28	System cannot change to "duplicate" mode after enable "combined desktop " function when connect two 4K monitors with USB-C Gen2 dock [Internal Sighting: 14011717445]	This is expected behavior.
29	Launch button will not appear if application is selected manually. It will appear only if application is auto-detected.	This is expected behavior.
30	No "Adaptive Sync" option in IGCC Display page [Internal sighting : 14011405580]	Adaptive sync will show up only if the panel supports it.
31`	Monitor position cannot keep after change display mode with two monitors connected. [Internal Sighting : 14011912828]	 This is expected behavior for IGCC, since MSFT Display setting also shows the same chenges.
32	• "Extend Battery Life for Gaming" name has been replaced by "Capped FPS". • Also, "Capped FPS" is moved to Preferences-> Global Settings tab.	
33	IGCC lacks scale options in IGCC-> Display-> General menu (Internal sighting : 16011448416)	This is expected behavior, if there is no change expected between MDS and centered or other scalings, we would only provide users with the MDS and Custom if supported.

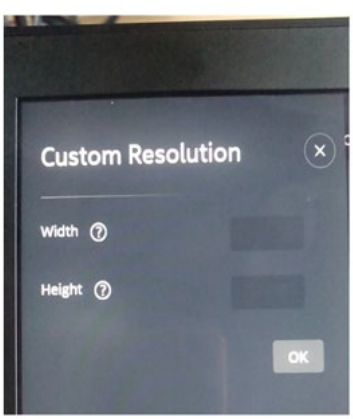
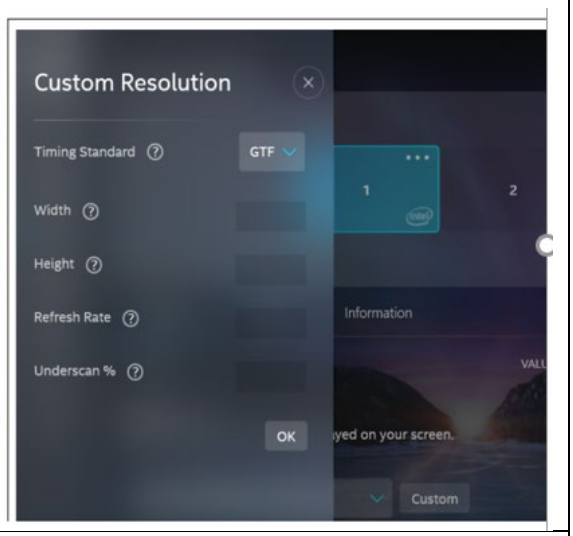
Sr. No.	Expected Behaviors	Images/Explanation
34	IGCC lacks custom resolution options in IGCC-> Display-> General menu. (Internal sighting : 14012003870)	This is expected behavior, if no external monitor is connected to the system. Custom resolution button should no longer show for internal displays.
35	There is no "Plugged In" item in IGCC/System/Power on TGL platform.	This is expected behavior. "Plugged In" and "On Battery" tabs show the same behavior for MS enabled systems. Hence, removed "Plugged In" tab due to redundancy.
36	Launch button do not match the spec	"Launch Program" button has been replaced by "Launch" button
37	Adaptive sync disappears in the IGCC	adaptive sync is seen on global settings page, for gen11+ with enabled display
38	IGCC can't find YCBCR option when monitor output by type C port/HDMI port.	Only in case of hdmi connection IGCC should show YCbCr
39	Sharpness Noise Reduction Film Mode Detection Skin Tone Enhancement Total Color Correction Contrast Enhancement	These features are not available for Lakefield platform.
40	Charge Rate scenarios in power page : **1. AC Mode ->** a. For 100% charged system, charge rate will be 0mW b. For system charge from 0-99% some positive charge rate will be shown. **2. DC Mode ->** a. For 100% charged system, charge rate will be 0mW b. For charging less than 100% charge rate will be shown in negative.	**AC Mode :**   **DC Mode :**

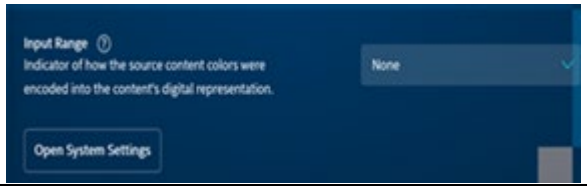
Expected Behaviors

Sr. No.	Expected Behaviors	Images/Explanation
		
41	IGCC -> Updates to remain empty	Expected behavior. Planning to add new components, which are TBD.
42	Contrast Enhancement feature to be disabled by default	Earlier this feature was enabled by default. Now the behavior is changed.
43	Hotkeys disabled by default	Expected behavior.
44	Notification and System Tray Icon to be disabled by default	Expected behavior.
45	Capped FPS is gone and pop up “Smart VSync” in IGCC	Expected behavior. Smart Vsync is new branding name for CFPS.
46	There is extra option “Take Our UX Survey” in IGCC	Expected Behavior.

Sr. No.	Expected Behaviors	Images/Explanation
47	Warning message not to pop out when we enable/disable LACE under IGCC on ICL+ platforms. It is only meant for Gen9 platforms.	
48	The "..." option button of FHD monitor cannot display on IGCC when connect 4K monitor.	This is expected behavior. As the size of the control decreases (it does slightly from one image to the other), we don't have enough space to display the three dots. The menu can still be accessed by right clicking on the control.
49	"Extend Battery Life for Gaming" has been renamed to Capped FPS	Capped FPS option can be found in Global settings page. This change is only meant for ICL+ platforms. For Gen9 platforms this feature name will remain the same.
50	Intel Graphics Command Center do not show Global Settings in Preferences	This is expected behavior.Global settings is part of Gen11+ platforms only.
51	IGCC will provide on two settings, under customer resolution →"Height" and "Width" →This change is only meant for Gen11+ platforms.	Image on the left side is for Gen11+ platforms. Image on the right side is for Gen9 platforms.

Expected Behaviors

Sr. No.	Expected Behaviors	Images/Explanation
		 
52	• By default Sharpness is "disabled". Default value of sharpness range is 69. • Skin tone enhancement is Disabled/Off by default. Default value of Skin tone enhancement range is 3. Data on the right is old and SPS will be updated by End of Febrauary.	**Figure 60. Sharpness** **6.9 Skin Tone Enhancement** 1. Select Disable or Enable. The default Skin Tone Enhancement Range value is 3. 2. When Enable is selected, the slider bar is enabled to modify the skin tone value. 3. Move the slider bar horizontally to modify skin tone values of the display. **Figure 61. Skin Tone Enhancement** Skin Tone Enhancement is dependent on the SKUs, contact respective AE.
53	Restore to Original Settings" gray out when choose Brighten Video or Darken Video in IGCC	This is expected behavior.
54	Default Adapter in IGCC->System->Power and Preference->Global Settings is DG2	This is expected behavior.
55	"Input Range" default value is set to "None"	This is a correction pending in Original SPS document (#609076).

Sr. No.	Expected Behaviors	Images/Explanation
		
56	When two displays are cloned, the new Rotation for each display will be set such that the resolution of both displays will match (i.e. if a portrait display is cloned with a landscape display, one display's image will be rotated).	Sighting filed for reference : 14016403990 IGCC cannot clone portrait with landscape. In clone mode, the resolution of both display has to match. So if your resolution on portrait mode is 1080x1920, it will not match on landscape display. So when cloning, one of the display will have to be rotated to match the resolution of 1080x1920 to make sure they are in clone mode".

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2 Key Known Issues

Sr. No.	Internal Sighting Number	Title
1	14014485970	There is no visual change when click"Brighten Video, Darken Video"items under IGCC
2	14014486124	The preview video wouldn't change when apply different video settings under IGCC.
3	14014547428	"Something went wrong…"pop up or it would keep show"activating"when click random items after idle IGCC UI 10~20s.
4	14014625713	"Hot:key StopRecording action fialed" pops up while recording
5	14014830246	IGCC hangs when changing resolutions in daisy chain using DP-Type-C dongle
6	14014978660	IGCC displays "Activating" when changing/creating the new video profiles or the color profiles.
7	22013349993	Unable to set clone mode with eDP + external display connected via DGFX card in IGCC
8	22012584477	Cannot delete custom "wrong" resolution
9	22012679919	IGCC can't overwrite Vsync setting for games
10	14015122519	Units Capture & Record failed when use IGCC hotkey
11	14015106020	IGCC System Tray will disappear or have no responding when click this icon after set on
12	14014926705	Can't link to the correct system interface when click "Open System Settings" button in IGCC.
13	14014926705	Can't link to the correct system interface when click "Open System Settings" button in IGCC.
14	14014966615	Unlock FPS and ASP option show off after disable then enable Adaptive Sync in IGCC.
15	14015346832	Screen Rotation Landscape hotkey "Ctrl+Alt+Up" no function in IGCC 1.100.3402.0
16	14015147969	IGCC will auto exit when you plan to add a video and close it on Hybrid systems
17	22014099183	The power management/Adaptive Sync information text lost when check display page information on Intel Graphics Command Center
18	14015357572	4k external monitor resolution doesn't change back to 4k after IGCC set "mirror" and then set to "extend"
19	14014966615	Unlock FPS and ASP option show off after disable then enable Adaptive Sync in IGCC.
20	14015346832	Screen Rotation Landscape hotkey no function in IGCC 1.100.3402.0.

Sr. No.	Internal Sighting Number	Title
21	22014036049	In IGCC 3402, the system hotkey is enabled. After closing the UI interface, Ctrl + Alt + up cannot be used. Ctrl + Alt + left / down / right can be used normally.
22	14015387607	The default video proflie in IGCC->Video page can be edit which should be un-editable.
23	14015729700	Can't use IGCC to record video [Can’t start recording and an error message prompt up]
24	14015709925	When the mouse pointer moves to some button("General Settings" &"Global Settings"&"Games"&"Capture"...) of IGCC, pop-up dialog box information is incorrect.(FR:2/2units,2/2times)
25	22014035792	Couldn't Detect Graphics Dedicated Memory on IGCC
26	22014099183	The power management/Adaptive Sync information text lost when check display page information on Intel Graphics Command Center (FR: 1/4units; 1/2trials)
27	14015492530	Pressing HotKeys ‘Ctrl +Alt +Up’ can’t change screen rotation landscape after close Intel Graphics Command Center with turning on ‘Enable System Hotkeys’ in IGCC
28	14015780325	Prompt bounced can‘t pop up while connect monitor on clone mode and press Hotkey Ctrl +Alt+F5/Ctrl +Alt+F7
29	14015770642	IGCC->Display->infomation not show the 5K resolution versus in display setting when connect 5K monitor
30	14016336373	IGCC only list 1 resolution (3840*2400) item for adjust in clone mode with SWG system.
31	14015387716	Resolution and refresh rate option cannot be fully shown when connect IGD & DG2 port at the same time
32	14016175699	IGCC Control Panel Memory Bandwidth Displays Abnormally
33	22014877668	IGCC only show one default resolution and cannot change resolution in clone mode
34	14016573259	The custom of building still exist after clicking "Restore to Original Settings" in Intel Graphics Command Center

Note: Some of the key changes are above mentioned. Kindly requesting OEMs/ODMs to review any app changes/expected behaviors with Intel Graphics CEs, before filing the sightings.