

Graphics: Khronos, AMD, Nir and Monado

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- [Khronos Releases SYCL 2020 Provisional Specification](#) [2]

The Khronos Group has announced the provisional specification of SYCL 2020 as the newest version of this higher-level programming model originally designed for OpenCL that is based on pure single-source C++.

The SYCL 2020 provisional specification is available today and is now based on C++17 where as formerly SYCL had been based on C++11. SYCL 2020 is also bringing new programming abstractions like unified shared memory, group algorithms, sub-groups, and other features.

- [AMDVLK 2020.Q2.6 Brings More Performance Tuning](#) [3]

The AMD Radeon Vulkan driver developers are ending out June by shipping their sixth open-source snapshot of the quarter.

With AMDVLK 2020.Q2.6, there are continued performance tuning/optimization efforts. There has been performance tuning going on to benefit Ghost Recon Breakpoint and Zombie Army 4: Dead War under Wine / Steam Play. There is also improved pipeline compiler performance with this Vulkan driver update.

- [Mike Blumenkrantz: Nirly There](#) [4]

In yesterday's post, I left off in saying that removing an `assert()` from the constant block index

check wasn't going to work quite right. Let's see why that is.



[Monado: Multi application support with XR_EXTX_overlay \[5\]](#)

By implementing this extension we are exposing Monado's multi application support, which was recently merged to master.

In the video below you can see Monado compositing the rendering of Blender's VR view and the xrgears demo displaying a `XrCompositionLayerProjection` as overlay. The demo also showcases Monado's ability to deal with multiple graphics APIs as Blender uses OpenGL and xrgears Vulkan to submit its frames.

To enable the extension in xrgears only this small change was required, which enables the `XR_EXTX_overlay` extension and passes the `XrSessionCreateInfoOverlayEXTX` struct to the graphics bindings ``next`` field.

[Graphics/Benchmarks](#)

Source URL: <http://www.tuxmachines.org/node/139352>

Links:

[1] <http://www.tuxmachines.org/taxonomy/term/148>

[2] https://www.phoronix.com/scan.php?page=news_item&px=SYCL-2020-Provisional-Spec

[3] https://www.phoronix.com/scan.php?page=news_item&px=AMDVLK-2020.Q2.6-Driver

[4] <https://zmike.github.io/NIRly-there/>

[5] <https://www.collabora.com/news-and-blog/news-and-events/monado-multi-application-support-with-xr-extx-overlay.html>