

WebGPU F2F: Mozilla status



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Gecko updates since 2021 February

- Respect the features and limits
- More API:
 - `GPURenderBundle`
 - `GPUQuerySet`
 - Error scopes
 - Debug groups
 - `createPipelineAsync()`
- Mostly catching up to the API...




Wgpu updates since 2021 February

- Always updated to with WebGPU spec
- New wgpu-hal abstraction, bye spirv-cross!
- Zero initialization of resources
- Lots of validation and fixes
- Integrated CTS into CI via Deno
- Things outside of WebGPU core:
 - GLES/WebGL2 support
 - Native-only features: resource indexing, conservative raster, multiview, 16-bit texture formats, etc



Naga updates since 2021 February

- Jim Blandy joined! 
- Bounds checks in SPIRV and MSL
- IR:
 - Stronger expression/statement dichotomy
 - More builtins, reworked interpolation
 - Image stores, gathers, and queries
 - Pointers
 - Barriers, Atomics
 - Bit extraction and packing
- More validation and fixes, IR fuzzing
- Things outside of WebGPU core:
 - Rewritten SPIRV-in and GLSL-in

