Allocation constraints workshop summary

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- No objections to high-level design
- No objections to common function to merge constraints
- One constraint set per modifier should work fine
- Vendored constraints ala modifiers: no need for now, but current design leaves the door open
- Constraints set only have a serialized form → can send them over Wayland/X11
- EGL API: external_only probably good enough of a proxy for texture/render usage
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- Allocators: GBM + Vulkan. Not a good fit for e.g. camera + encode. Design should work with new allocators.
- Possible tricky hw limitations?
  - BO planes each in a different bank, shadow buffer blits between layout transitions
  - Extra pixels with metadata → not fully solved by constraints
- Home for the merging library?
  - uAPI header: everything is public and inlined downstream
  - vDSO: need to justify inclusion in the kernel
  - Shared user-space library sync’ed from kernel (possibly part of libdrm)
Allocation constraints workshop summary

- **Constraint for CPU access: “cached/uncached”**
  - Can expand mmap’ing APIs (e.g. GBM) to take usage flags (RO, RW, sequential or random-access, etc)

- **We need to refine our heap ID proposal**
  - Work with dma-buf heap designers
  - Start with local unshareable & non-local shareable: find a way to expose and discover these heaps

- **More concrete proposal to come**
  - James to start an email chain
  - Post gitlab issues here: [https://gitlab.freedesktop.org/emersion/drm-constraints](https://gitlab.freedesktop.org/emersion/drm-constraints)