Contribution ID: **379** Type: **not specified**

Memory descriptors for DEVICE_PRIVATE memory

Thursday 11 December 2025 17:15 (15 minutes)

Device private memory is used by device drivers to interact with the core mm to migrate data to memory that is inaccessible or unaddressable from the CPU. Currently that interaction uses struct pages and sometimes folios.

It has been pointed out[1] that if everything is converted to folios maybe we don't need these special struct pages anymore. I would like to explore whether removing struct pages for DEVICE_PRIVATE memory (and maybe as an extension ZONE_DEVICE pages as a whole) is feasible, and if so what we would replace them with and what do we need from the core mm to achieve this.

[1] - https://lore.kernel.org/linux-mm/tz2rrz626f7667i2wtwb4pegqm4ga7sr2xfpzipy6y5qchxycb@acx2unx27zsi/

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Session Classification: Kernel Memory Management MC

Track Classification: Kernel Memory Management MC