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# Android MC

The Android Micro Conference brings the upstream community and Android systems developers together to discuss issues and changes to the Android platform and their dependencies and interactions with the Linux kernel, allowing for collaboration on solutions for upstream.

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**Some highlights of progress made since last year's MC:**

- Community consolidation around the aosp-devs.org organization
- An example of device longevity discussions: Pixel devices in the field were up-reved to 6.1: https://www.androidauthority.com/pixel phones-kernel-upgrade-march-update-3532360/
- Per-app v2 mem cgroups were shipped w/ Android 16, and vendors are starting to make use of it.
- For the 16k page size effort, discussions on CMA minimum alignments lead to relaxing this requirement for 16KB to reduce memory overhead from CMA regions. And discussions on ELF padding page-cache read-ahead and fault-around lead to later guard regions blocking fault-around and conclusion that the readahead issue may not be worth the effort to solve (for which android proceeded with only limiting fault-around similar to guard regions).
- Feedback and discussion from maintainers around ublk helped prioritize development as Ming provided some pointers for offloaded lz4 de-compression into the kernel with only the metadata I/Os being served from user-space. Future enhancements and investigation include suspend support for ublk process, BPF offloading and device mapper-style I/O control.
- The GBL presentation at LPC sparked collaboration with U-Boot maintainers - who began experimenting with GBL- and caught the attention of ARM SystemReady and EBBR leads, leading to ongoing discussions around standardizing Android boot.

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**Potential discussion topics for this year include:**

- Updates and next-steps on Generic Boot Loader efforts
- Issues around supporting both 4KB and 16KB devices
- Deprecation of Ashmem and Rust Ashmem
- Efficient metric collection using BPF (iterators)
- Android Virtualization framework (AVF), updates, support, use cases
- AutoFDO for Android userspace and kernel
- Binder Priority Inheritance
- KUNIT Testing
- Discussions on collaborating with the new AOSP model

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