Design discussion and performance characteristics of Maple Tree

Thursday, 23 September 2021 08:30 (30 minutes)

The maple tree is an RCU-safe range-based B-Tree that was designed to fit a number of Linux kernel use cases. Most recently the maple tree has been sent upstream as a patch set that replaces the vma rbtree, the vma linked list, and the vmacache while maintaining the current performance level. This performance should improve as the RCU aspect of the tree is leveraged to remove mmap_sem contention.

This talk will cover the performance aspects of the tree, some future ideas, and other areas beyond the VMA that would benefit from the tree.

I agree to abide by the anti-harassment policy

I agree

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