Linux Plumbers Conference 2024



Contribution ID: 319 Type: not specified

Checkpoint/Restore In eBPF (CRIB)

Friday, 20 September 2024 17:00 (30 minutes)

Currently CRIU mainly relies on procfs and extended system calls for dumping/restoring process information, but this has some performance and extensibility problems. In this talk, we want to discuss CRIB (Checkpoint/Restore In eBPF), an innovative checkpoint/restore method to dump/restore process information in the kernel via eBPF. CRIB can achieve better performance, more flexibility, more extensibility (easier to support dumping/restoring more information), and more elegant implementation. CRIB consists of three parts, CRIB userspace program, CRIB ebpf programs, and CRIB kfuncs. With this design we can still keep most of the complexity outside the kernel. CRIB could provide a new and better engine for CRIU. Complete descriptions of CRIB can be found in the patch series 1 2.

Primary author: DENG, Juntong (Student)

Presenter: DENG, Juntong (Student)
Session Classification: eBPF Track

Track Classification: eBPF Track