

# Linux Plumbers Conference 2024



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## SSDFS: ZNS/FDP ready LFS file system saving your space and decreasing TCO cost

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SSDFS natively supports ZNS SSD and is ready to employ FDP-based SSD. SSDFS provides multiple space saving techniques (compression, compaction, inflation model of erase block, deduplication, delta-encoding) that also work as techniques of decreasing write amplification. How do these techniques work together? How efficient could these techniques be for the case of ZNS SSD and FDP-based SSD? Which technique is better for which use-case? This talk is dedicated to discussing benefits and side effects of these techniques for the case of LFS file system and sharing benchmarking numbers (for example, the inflation model of the erase block is capable of storing up to 800 KB of user data into 128 KB erase block). How soon will SSDFS be stable and ready for production? Which performance number SSDFS can deliver?

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