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Future of Active Archive Data Storage: Striking the Right Balance Between Performance and Energy Efficiency

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Learn how Host-Managed Shingled Magnetic Recording (HM-SMR) drives and selective write-grouping can transform software-defined storage (SDS) environments. Selective write-grouping and Popular Data Concentration (PDC) both work with Shingled Magnetic Recording (SMR) and Conventional Magnetic Recording (CMR) disks using erasure coding. By restricting write operations to fewer drives, selective write-grouping lets the remaining drives power down, reducing energy consumption by up to 43% in SMR configurations. This method also eliminates the PDC “staging” phase, enabling immediate data partitioning and placement within designated groups. Join us to explore how to effectively manage power usage, scale capacity, and maintain high performance in modern Active Archive Data Storage.

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