

The “Grandfather-Father-Son” (GFS) backup procedure

The “Grandfather-Father-Son” (GFS) backup strategy organises backups into daily (Son), weekly (Father), and monthly (Grandfather) iterations, enabling more efficient use of storage resources. This rotation system minimises full backups to monthly intervals, relying instead on incremental or differential backups for daily and weekly cycles. Consequently, large databases benefit from reduced backup windows and lower storage consumption compared to daily full backups. However, GFS requires meticulous scheduling and verification to ensure each layer of backup remains consistent. Compared to continuous data protection (CDP) or cloud-based snapshots, GFS can appear less flexible, especially for rapid restore needs. Nonetheless, GFS remains a reliable and cost-effective methodology for organisations that want a clear, structured approach to data retention without incurring exorbitant storage or management overheads.

References

Sarkar, T. & Roychowdhury, S. (2019) *Data Wrangling with Python*. 1st ed. Packt.