Back Up Procedure

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A hierarchical backup technique that successfully strikes a balance between reliable data recovery and resource efficiency is the Grandfather-Father-Son (GFS) backup method. It lowers the resource requirements associated with continuous complete backups while guaranteeing several recovery points by arranging backups into daily (son), weekly (father), and monthly (grandfather) cycles (BackupAssist, 2024; Severalnines, 2020).

GFS's main benefit is its capacity to hold onto a reasonable number of backups over time, which is especially helpful for big databases. While weekly and monthly full backups for dads and grandfathers offer historical data recovery points, daily incremental backups for sons guarantee that the most recent data is always accessible (Vitanium, 2019). By utilising a First-In-First-Out (FIFO) rotation scheme, this technique reduces the amount of storage needed and the necessity for a large storage infrastructure (Wikipedia, 2024).

GFS is less expensive and easier to set up than other techniques like Continuous Data Protection (CDP) and cloud-based backups. By recording each change, CDP provides nearly immediate recovery; yet, it necessitates substantial computing and storage resources (Severalnines, 2020). Cloud-based solutions provide the advantage of off-site storage and disaster recovery, but they may be more expensive and have latency problems (Vitanium, 2019).

Therefore, even if GFS might not be as quick as CDP or as geographically redundant as cloud backups, it is still a good and dependable solution for businesses who need to strike a compromise between resource usage and data security (MSP360, 2024).

References

BackupAssist. (2024). The Grandfather-Father-Son Backup Scheme Explained. Retrieved from backupassist.com

Severalnines. (2020). The Grandfather-Father-Son (GFS) Backup Strategy. Retrieved from severalnines.com

Vitanium. (2019). Backup Best Practices – The Grandfather-Father-Son Backup Strategy. Retrieved from vitanium.com

Wikipedia. (2024). Backup rotation scheme. Retrieved from en.wikipedia.org

MSP360. (2024). Grandfather-Father-Son Retention Policy. Retrieved from help.mspbackups.com