

Backup Procedure

Instructions

In 100 - 150 words, critically evaluate the disaster recovery system called the "Grandfather-Father-Son" GFS backup procedure. Using the sites listed in this week's reading list as an introduction to the topic, highlight how the strategy makes the back-up of large databases less resource heavy and argue whether this strategy is effective when compared to other methods of backing up data.

Share your findings in the Module Wiki. You should also comment on your peers' wiki posts. You may find the peer review guidelines helpful, located on the [Department's homepage](#) (Group/Teamwork).

Learning Outcomes

- Identify and manage challenges, security issues and risks, limitations, and opportunities in data wrangling.
 - Critically analyse data wrangling problems and determine appropriate methodologies, tools, and techniques (involving preparing, cleaning, exploring, creating, optimising and evaluating big data) to solve them.
 - Design, develop and evaluate solutions for processing datasets and solving complex problems in various environments using relevant programming paradigms.
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The Grandfather-Father-Son (GFS) backup strategy is a hierarchical method that organises backups into daily (son), weekly (father), and monthly (grandfather) cycles. This structure balances storage demands and backup frequency by systematically recycling older backups, thereby conserving resources. For large databases, GFS reduces the need for frequent full backups by utilising incremental or differential backups during daily cycles, while maintaining critical full backups in longer cycles.

Compared to modern methods like cloud-based backups or continuous data protection (CDP), GFS may appear less flexible, particularly for real-time recovery needs. However, it remains effective for organisations with structured backup schedules and limited budgets, as it avoids the high costs associated with constant data synchronisation. While GFS may lack the speed and granularity of CDP, its simplicity, reliability, and resource efficiency make it a viable option for managing large-scale database backups in many scenarios.