

Transaction Concepts for Data Warehouses

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Abstract. A data warehouse (DW) is a repository of data acquired from external, autonomous and often heterogeneous data sources. DW provides information for analytical and decision-support processing. External data sources (EDSs) change over time, independently of a DW. To keep up with changes in EDSs, DW needs to be periodically synchronized with EDSs. This process is called DW refreshing process. Various anomalies can affect DW refreshing process, leading to DW data inconsistency. Paper presents the idea of utilization transaction concept in process of refreshing a data warehouse with versioning capabilities.

Key words: data warehouse, materialized view refreshing, data versioning, schema versioning, transaction