# Network Management Data Aggregates Computation and Storage

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## Project background and goals
Investigate efficient methods to compute, store, and manipulate current and historical network elements aggregates derived from network statistics. This intends to support reactive and proactive network management as well as planning to support quality of service assurance.

## Methodology/Procedure
Eager strategy for multi-dimensional database aggregates computation using views materialization, data clustering, etc. OLAP queries. Aging schemas.

## Significance
Support of reactive and proactive network management and network planning to assure quality of service. Long-term resources allocation and management.

## Project Results
Optimal methods to perform aggregation by network containment and time dimensions implemented, using standard Oracle8 features. Aging data schemas made easier, allowing for the storage and preservation of network aggregates covering long periods. Fast OLAP queries using materialized views. Oracle8 Time Series Cartridges temporal aggregation functions performance tested.

## Future Work
Refinement of aging schemas with implementation of an automated data cleaning strategy based on table profiles. Such a schema would support a self-maintained database for current and historical data.