

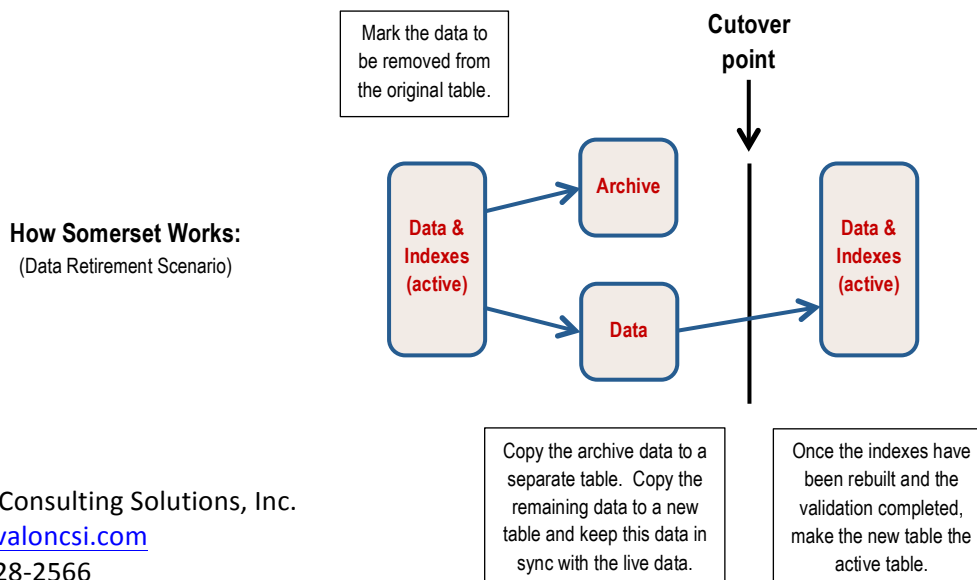


Organizations are wasting money by buying hardware they don't need when they should be deleting data instead. Unfortunately, deleting data from busy Oracle databases can cause undesirable waits or unplanned outages. If there were a safe and efficient way to remove unneeded data, organizations could reduce or eliminate costs associated with maintaining data that is no longer required and return the database system to a healthy equilibrium. The Somerset solution builds on existing Oracle high availability tools such as Oracle Partitioning and Oracle Redefinition to safely reorganize your data online. This can help keep Oracle licensing costs from increasing with data growth. Some of the features of Somerset are:

- Much faster than current methods and puts less load on the system
- Clean go/no-go decision and cutover point
- Compatible with large packaged applications such as Siebel and E-Business Suite
- Rebuilds tables and their associated indexes to different storage tiers
- Defragments and reclaims space within tablespaces
- Orders row data to improve application data access
- Actions performed one table at a time or as a table group
- Robust validation
- Minimal performance degradation
- Zero application downtime

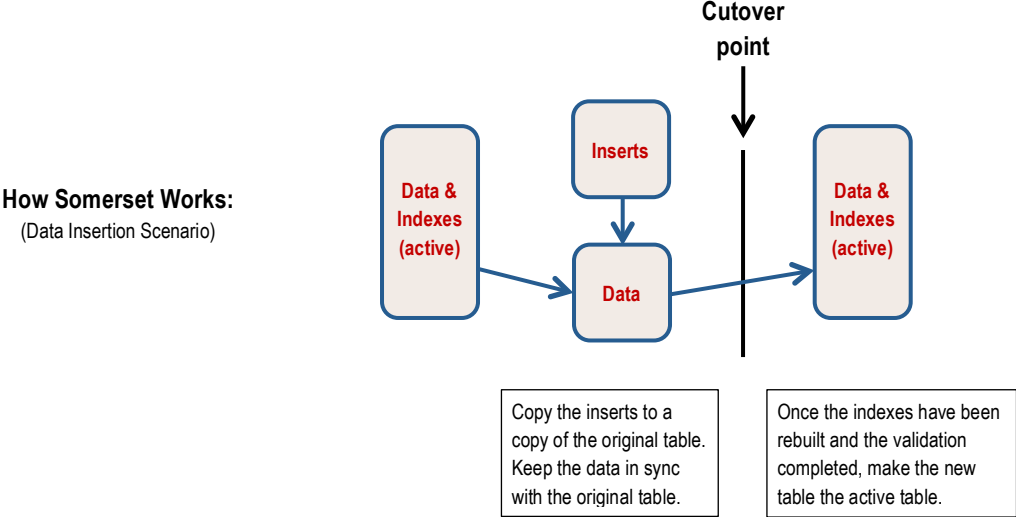
### Data Retirement

As the amount of production data increases, system performance decreases. In many cases, a subset of this data is not needed for day-to-day operations, but removing it is problematic (locking, increased system load, limited bulk operations, etc.). To address these difficulties, we developed the Somerset tool to quickly isolate and remove data from Oracle databases or migrate that data to more appropriate storage without the normal downsides of delete operations. To do this, Somerset uses standard Oracle tools, but packaged in an application that takes care of the many coordination and validation tasks associated with data retirement.



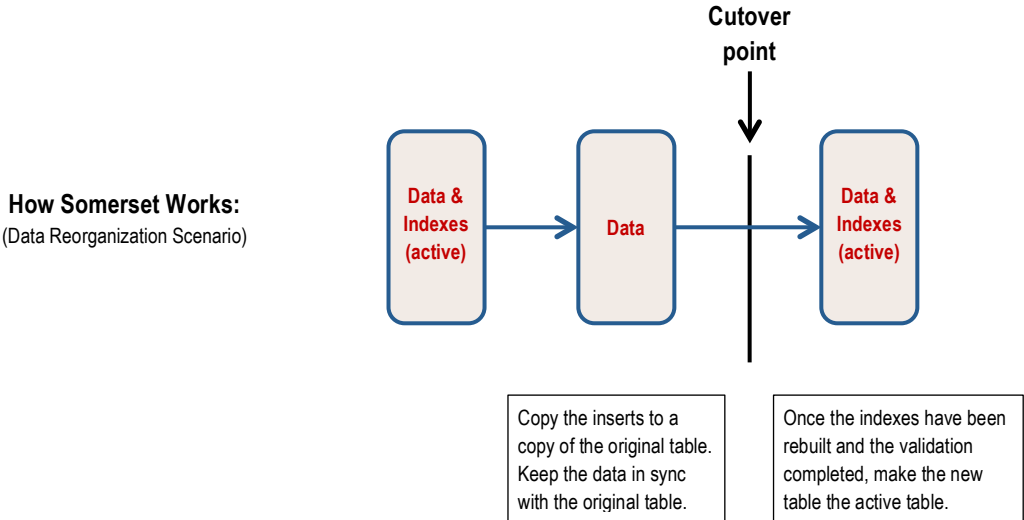
### Rapid Insertion

Loading data into live tables can be slow and cause significant application load, especially as large numbers of rows are added to tables with many indexes. Fortunately, the same methodology that Somerset uses for data retirement can be employed in reverse. Somerset is able to quickly load data into a copy of the original (live) table and keep the new table synchronized until it is ready to become the live table.



### Table Reorganization

Rebuilding and/or moving existing tables in a busy Oracle database is often extremely desirable (reclaimed space, faster table access, etc.), but can be very difficult to execute, because an outage is often required with current rebuilding methods. Furthermore, the larger the table, the greater the potential outage and in some cases the outage requirement can exceed the maintenance window. Somerset can reorganize tables without taking them offline and with minimal performance degradation.



## **Index Reorganization**

Often the indexes that are involved in frequent DML (insert, update, and delete) operations can become fragmented and inefficient. The Somerset tool uses Oracle's online index rebuilding functionality and the same robust framework to rebuild indexes either individually or as part of a group. This permits tablespace cleanup, the reclamation of wasted space, and the migration of indexes to appropriately sized tablespaces.

## **Why Avalon and Somerset?**

Avalon specializes in Oracle database performance, availability, and scalability tuning and has significant experience in the data retirement space at a number of large Oracle clients. During our time tuning large application databases we noticed that one of the main causes for slow queries is that the system has to sift through too much unnecessary data. Therefore, besides normal tuning methods such as improving index suitability, there is a systemic need to remove old data that is costing organizations a great deal in terms of performance, storage, and maintainability of their systems.