
StorHouse® --

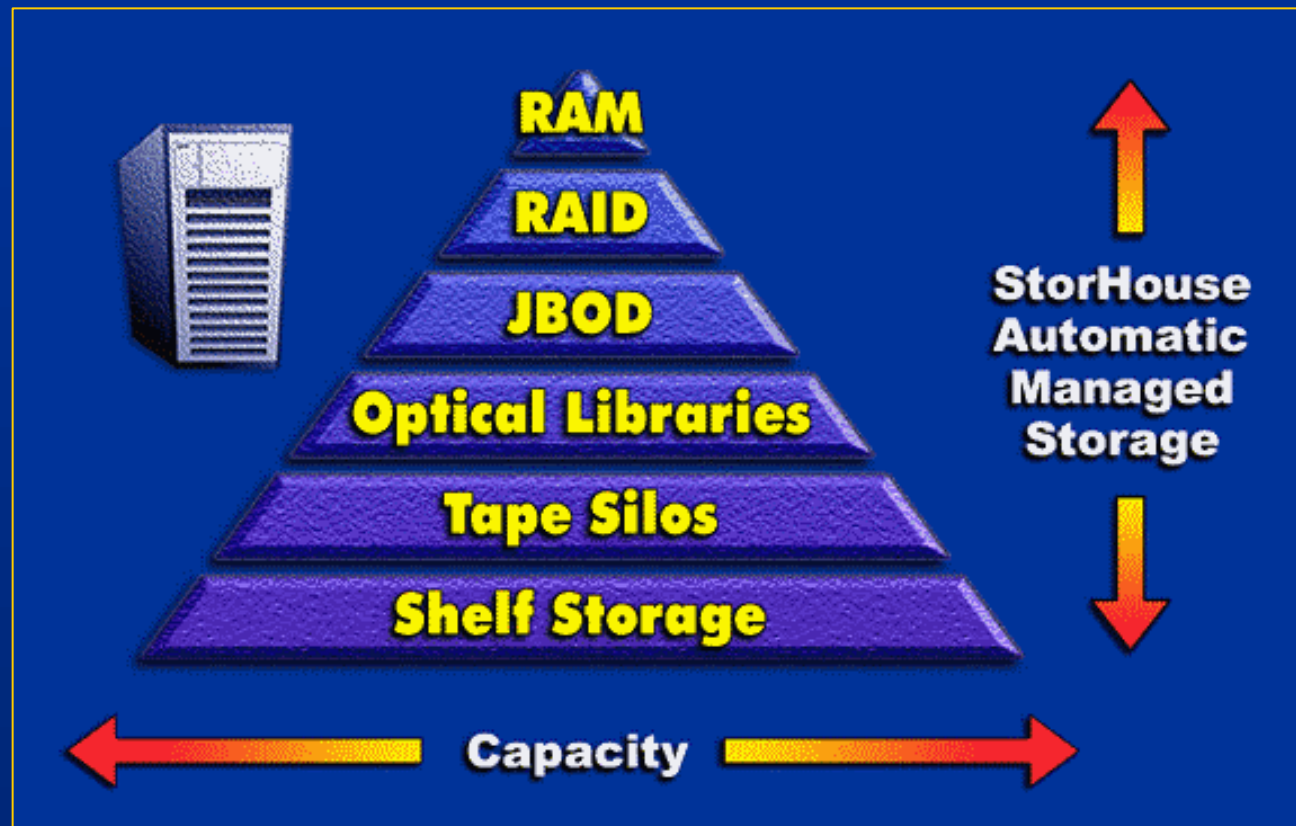
Active Archive VLDB 99

Problem Statements

- **The total cost of disk storage limits the amount of data retained**
- **Some data retained for accessing that has an access rate that begs for more cost effective storage than disk**
- **Retaining infrequently accessed data impacts performance to all data**
- **Data is archived to insure against loss**

FileTek's Active Archive

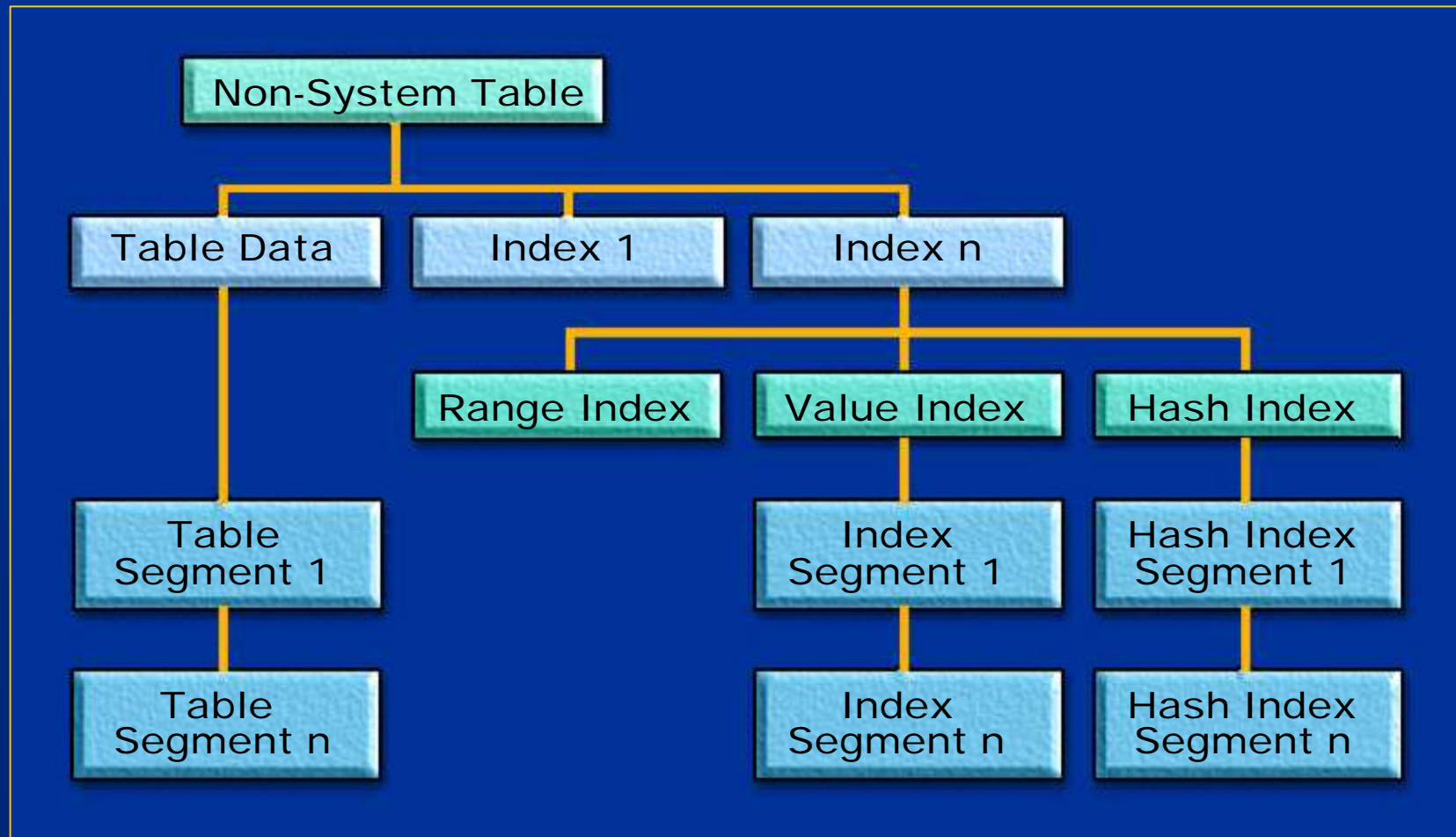
*FileTek
Developed
an Active
Archive to
Address
the
Problem:*



Product Overview

- **Combines hierarchy of storage and RDBMS**
- **Uses direct access to secondary storage**
- **Orders access to serial devices (magnetic tape) for one pass operation**
- **Orders use of removable volumes for single mount per volume operation**
- **Optimum use of high speed search or full scan on a row access basis**

Data Structure



Data Duplexing Protects Against

- Robotic library failures
- Unreadable media
- Non-shareable characteristics of tape
- Non-optimum use of medium

Other Requirements

- **Terabytes of inexpensive disk in a persistent cache**
- **High system availability (>99.9%)**
- **Automated system management to minimize administrative cost**
- **Disaster recovery support**

Tape Storage –

StorageTek 9840 and IBM Magstar
Define New Generation:

- **Fast access – Average mount, load, position and read of first record in less than 20 seconds**
- **Average search of less than 12 seconds**
- **Transfer rates with typical compression approaching 20 MB/Second**
- **Compressed volume capacity exceeding 20 Gbytes**

Tape Storage -

StorageTek 9840 and IBM Magstar
Define New Generation:
(continued)

- Capacity and transfer rate improve at rates equivalent to magnetic disk
- Library capacity will soon reach Pbytes
- LTO and Super DLT to arrive soon
- Cost from 1/10th to 1/100th of magnetic disk depending on library sizes

Optical Storage

- **Has direct access performance advantage over tape (Sub-second versus 10+ seconds)**
- **Has not maintained cost advantage versus magnetic disk and tape to justify wide use**
- **Multi-layer technology from Lucent and/or Siros may enable a new generation**
- **DVD volumes may lead to competitive costs (no more than double tape)**
- **Now in a wait and see mode**