Multi-Temperature Data Management for XLDB Deployment

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Trends in Data Acquisition

Want more data!  
Want it faster!

Appetite for data is outpacing Moore’s Law.
Data Temperature Tool: Seven Day Trace

IO Requests vs Disk Space

- 43% of IO uses 1.5% of data (1% of cylinders)
- 85% of IO uses 15% of data (10% of cylinders)
- 94% of IO uses 30% of data (20% of cylinders)
Data Access by Usage Temperature

- < 20% of EDW data is HOT
  - Used most frequently
  - Recent data
  - Last day, week, month

- 80+% of data is warm or cold
  - Accessed infrequently
  - History – months ago
  - Deep detailed info
Multi-Temperature Data Management

MPP for XLDB

- Extreme Performance
- Very Good Performance
- Traditional Performance
- On-Line Archival

Auto-migrate

In-Memory (DRAM)
Solid State Drives (SSD)
300GB Fibre Channel Drives
1 TB SATA or SAS Drives

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