Evaluation of las2peer shared storage

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Test Environment

- Single Host
- CPU: Intel(R) Core(TM) i5-3570K CPU @ 3.40GHz
- RAM: 12GB @ 1600
- network size: 30 Nodes
- storage mode: MEMORY, to reduce effects of (disk) IO delay
- \bullet replication factor: 5, means actual 6 copies of each artifact stored in the network
- all operations performed on randomly selected nodes
- except for write performance data, all methods use very small envelopes with only a few bytes content

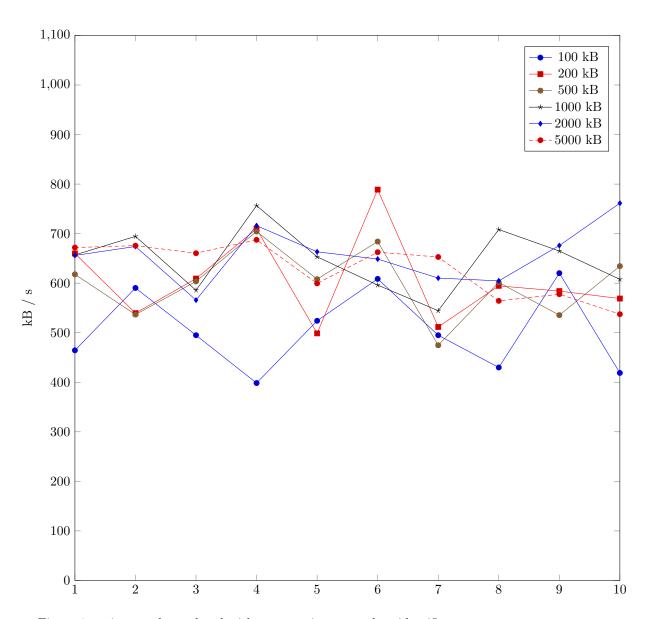


Figure 1: write speed correlated with content size on random identifiers

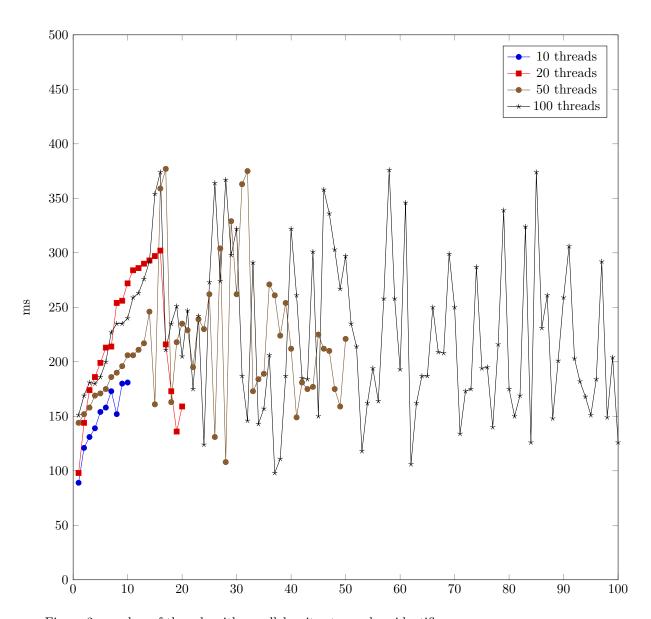


Figure 2: number of threads with parallel writes to random identifiers

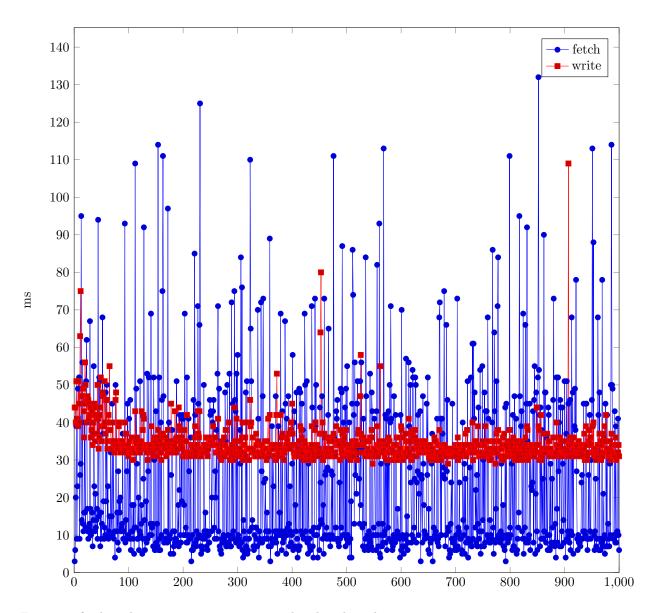


Figure 3: fetch and write operation time correlated with update content iteration on same identifier ${\bf r}$