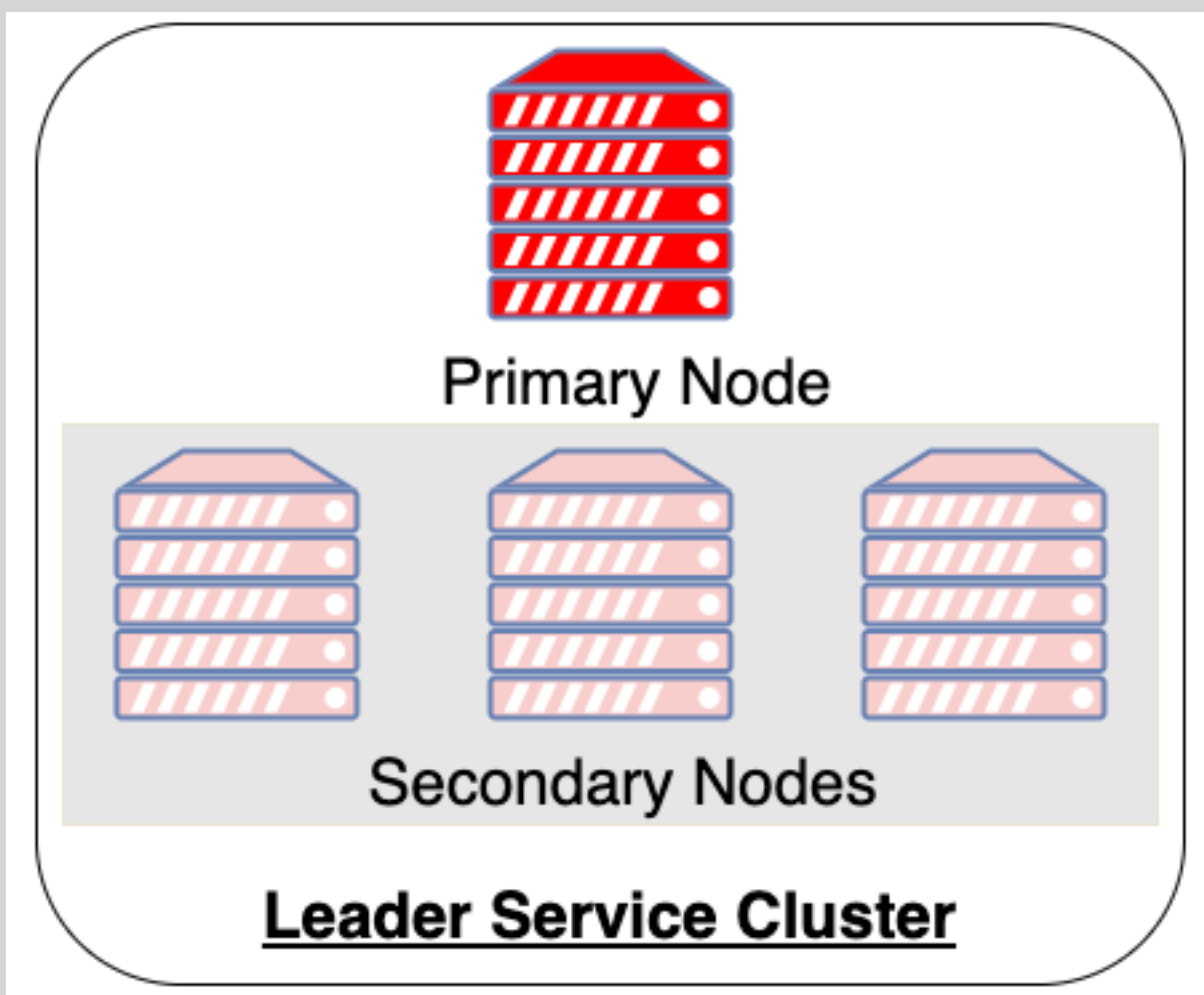


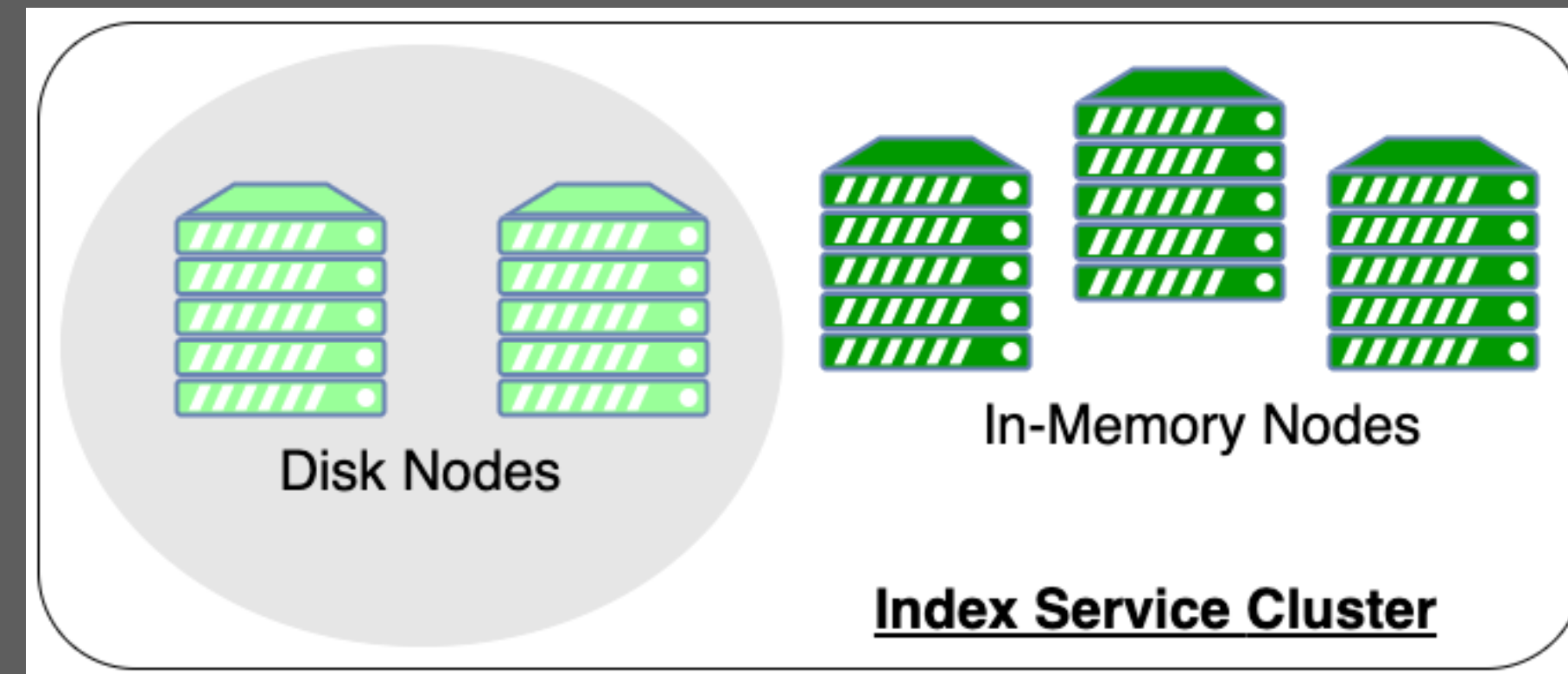
Storage System Design

Preliminary Storage Engine Design - v4, pt2



Leader Services

- Multiple nodes, approx/min 4
- One leader and multiple are back-ups
- Each node has a memtable
- Each node has a WAL



Index Services

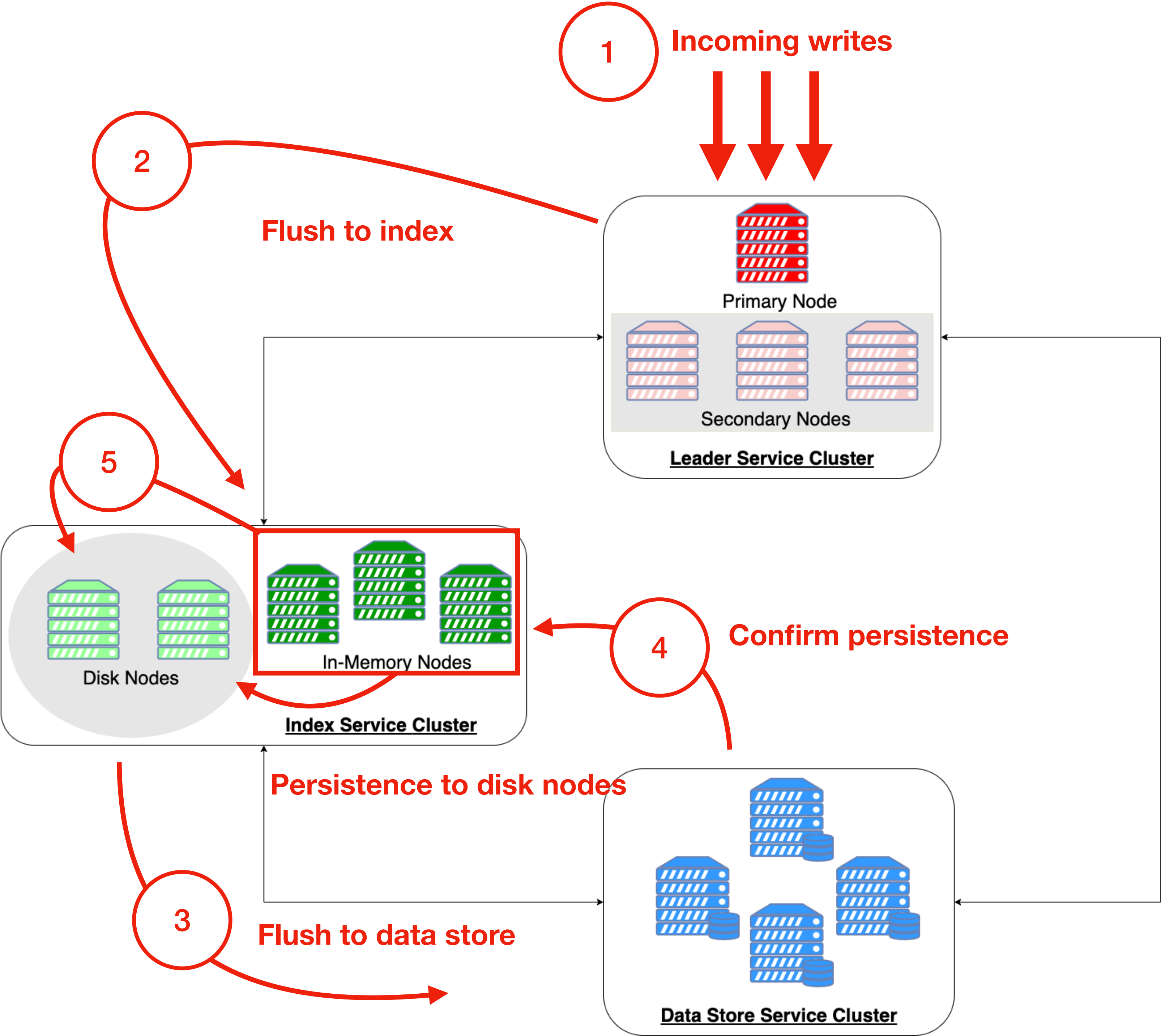
- Multiple nodes, approx/min 5
- Three are exclusively in-memory nodes accepting flushed SSTables from leader service cluster
- Two are exclusively used to persist the indexes into disk from the other three in-memory nodes



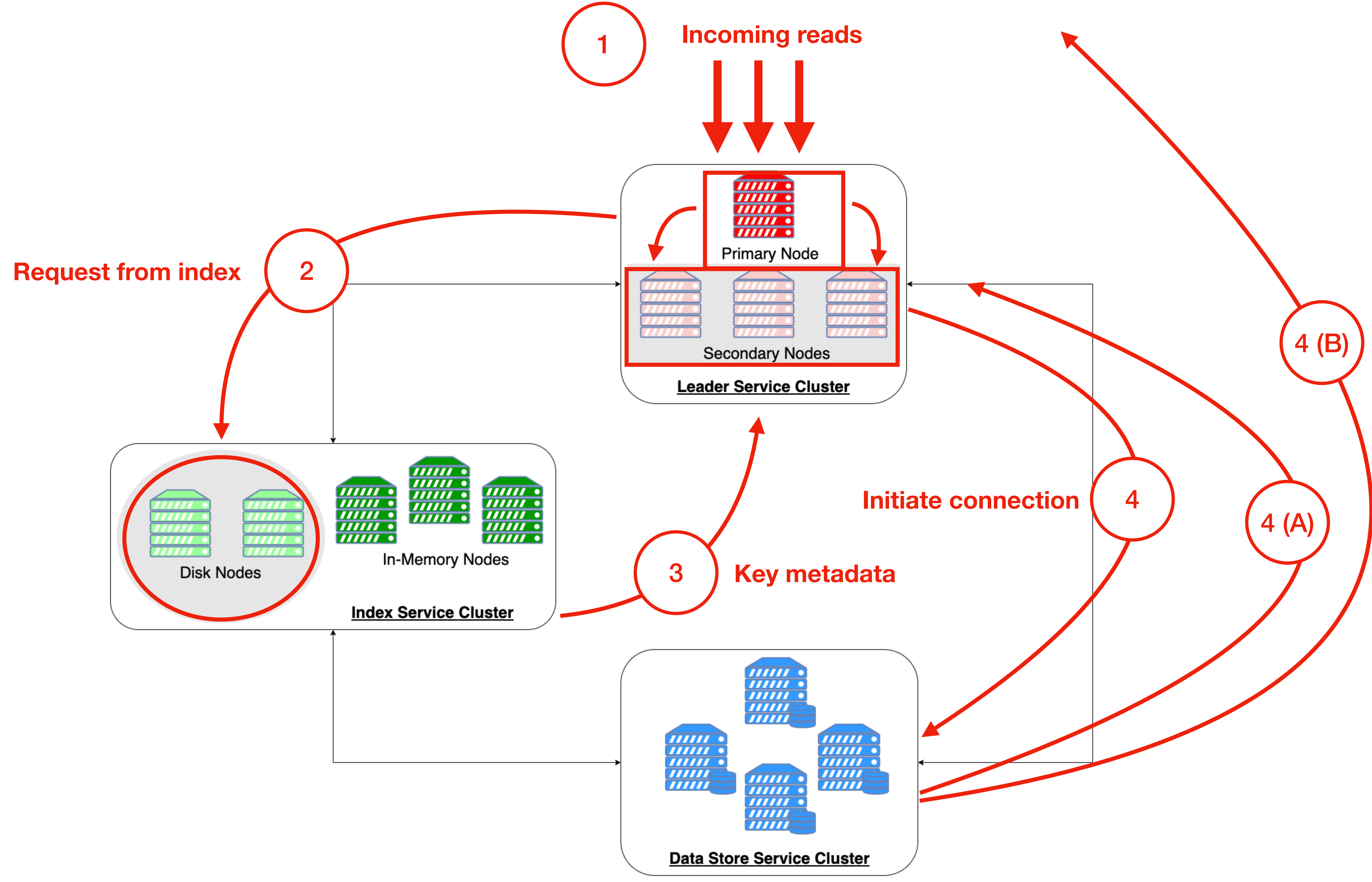
Data Store Services

- Multiple nodes, min 4
- All nodes will persist the data object's values received from in-memory index service nodes

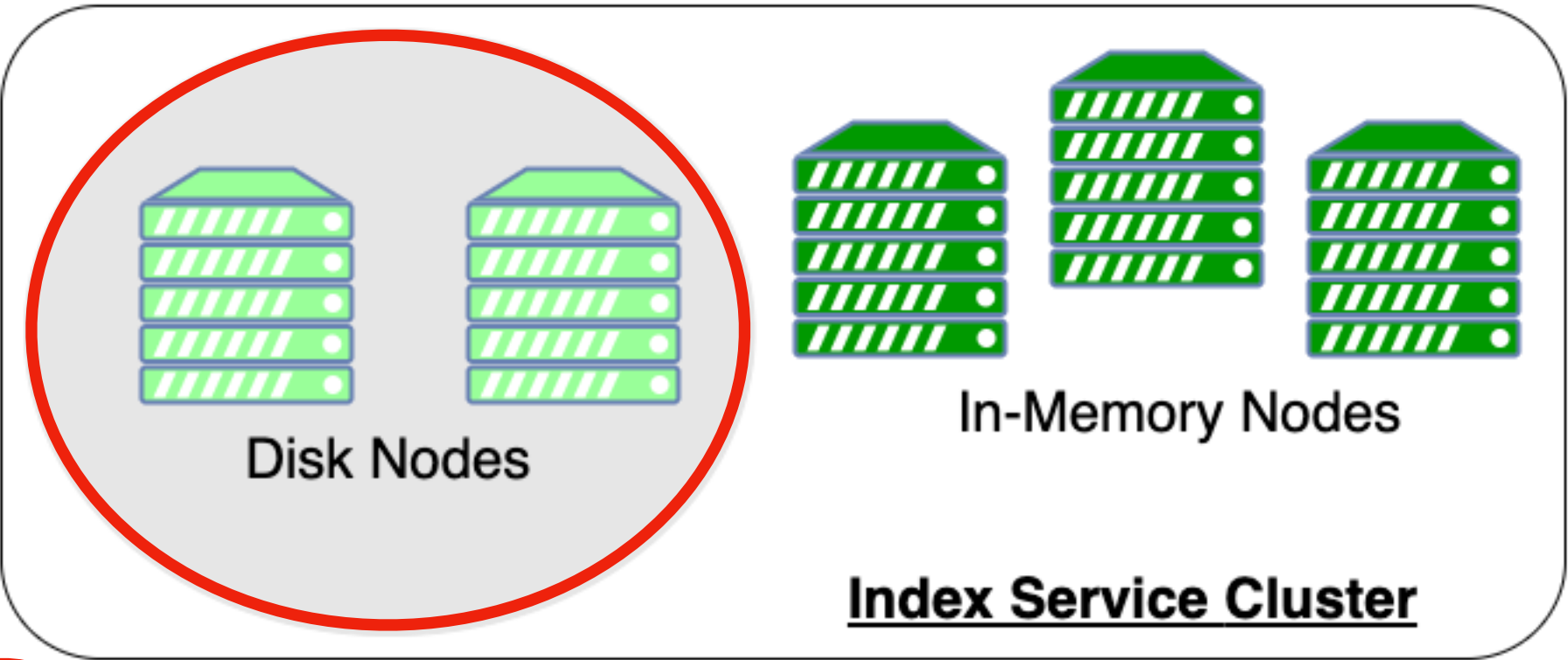
Writes/ Updates



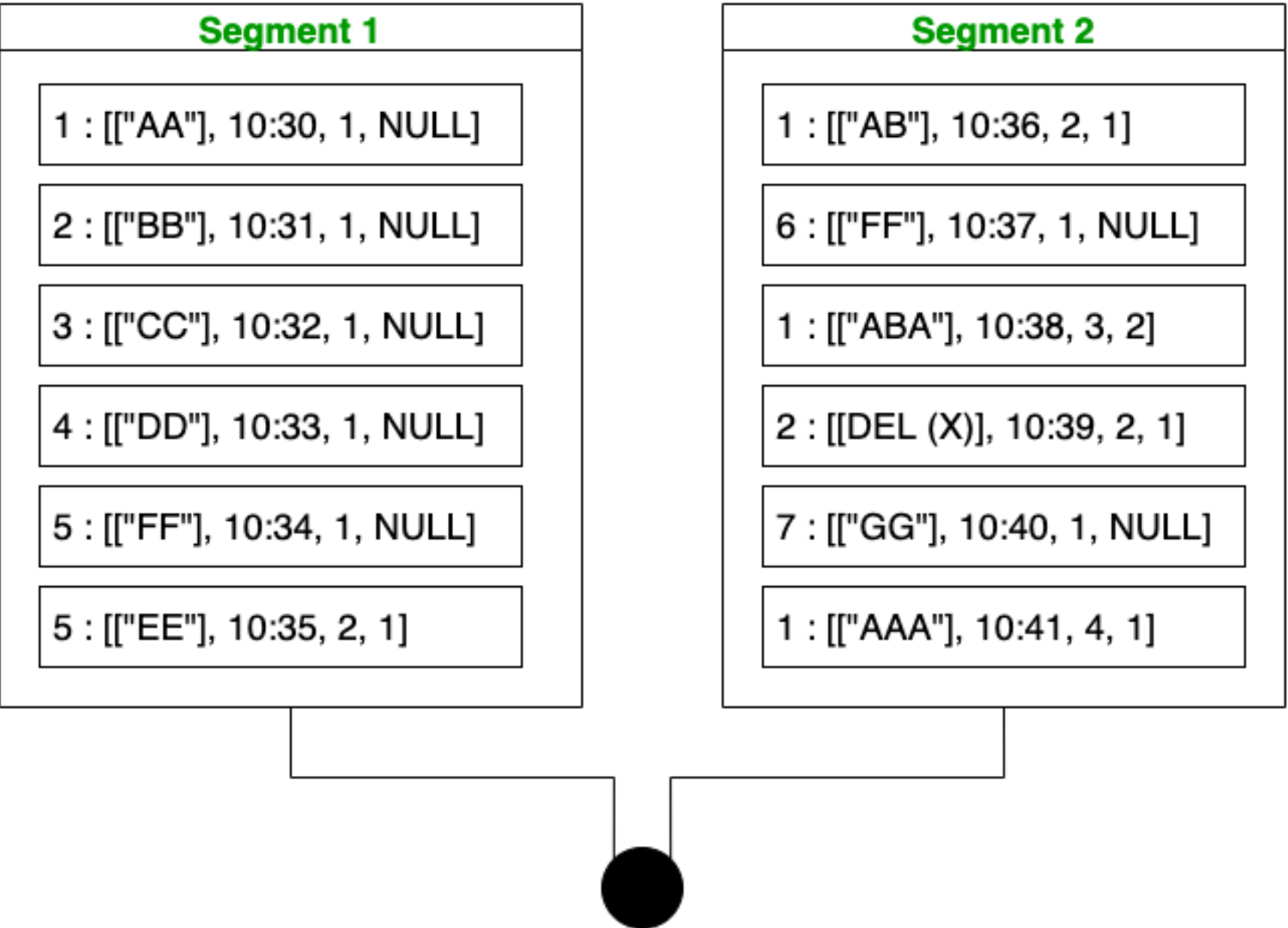
Reads



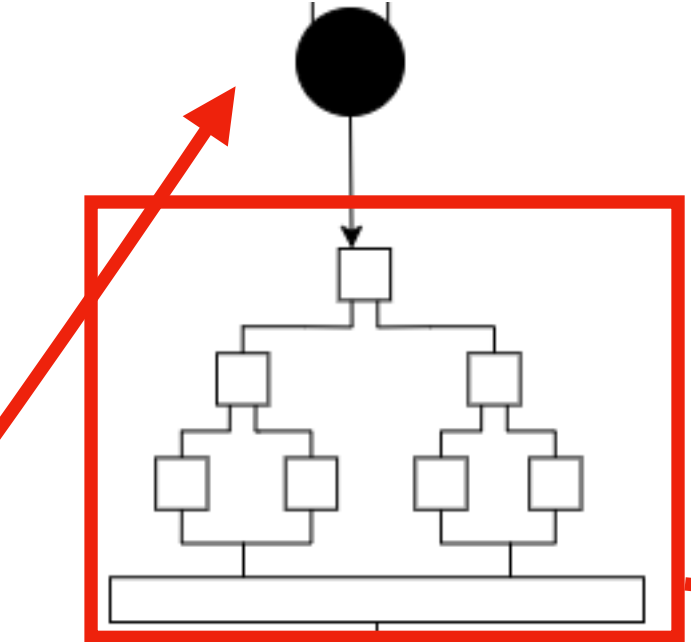
Versioning - Merging/Reconciliation



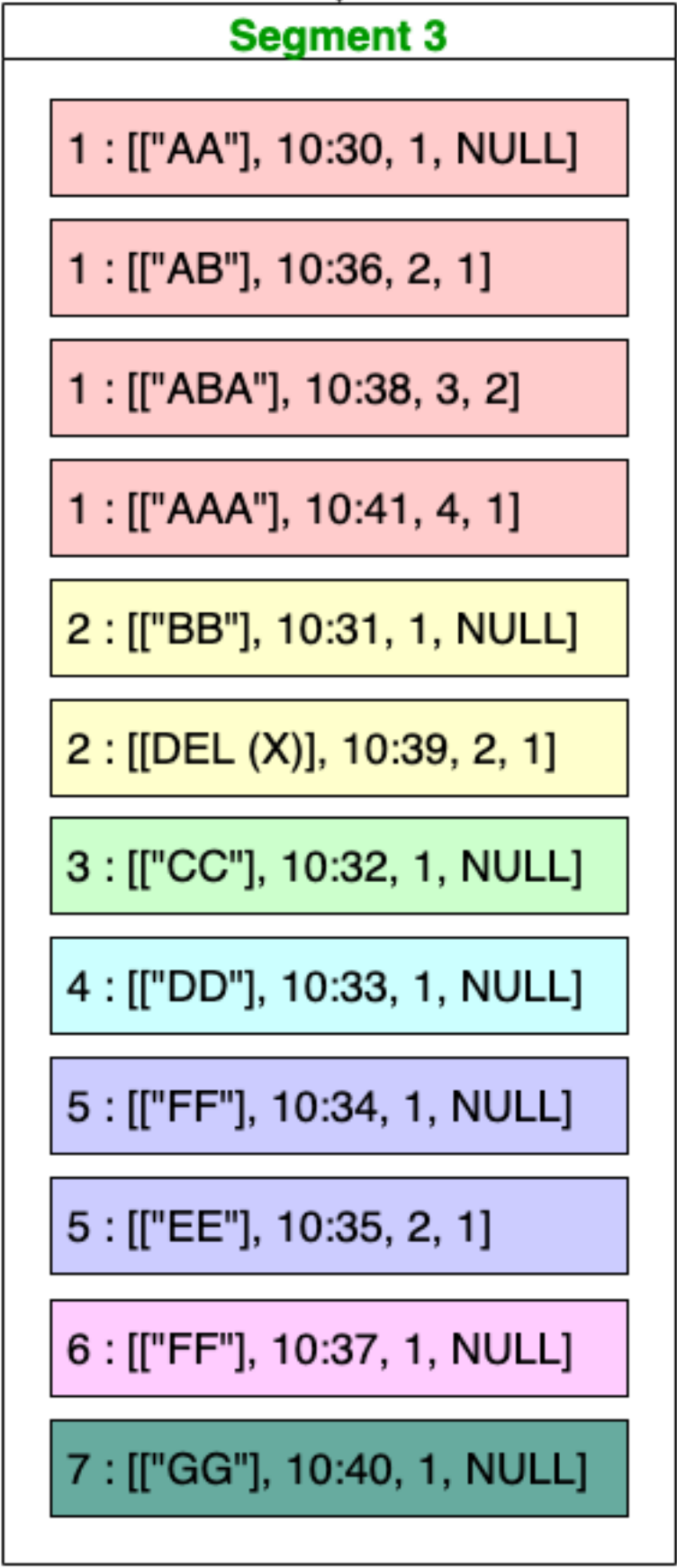
1 Merging/Reconciliation (Versioning)



2 Run keys through Tree DS - two-way sort sequence



3 Flush keys to new segment



Acyclic Graph of Data Object

