



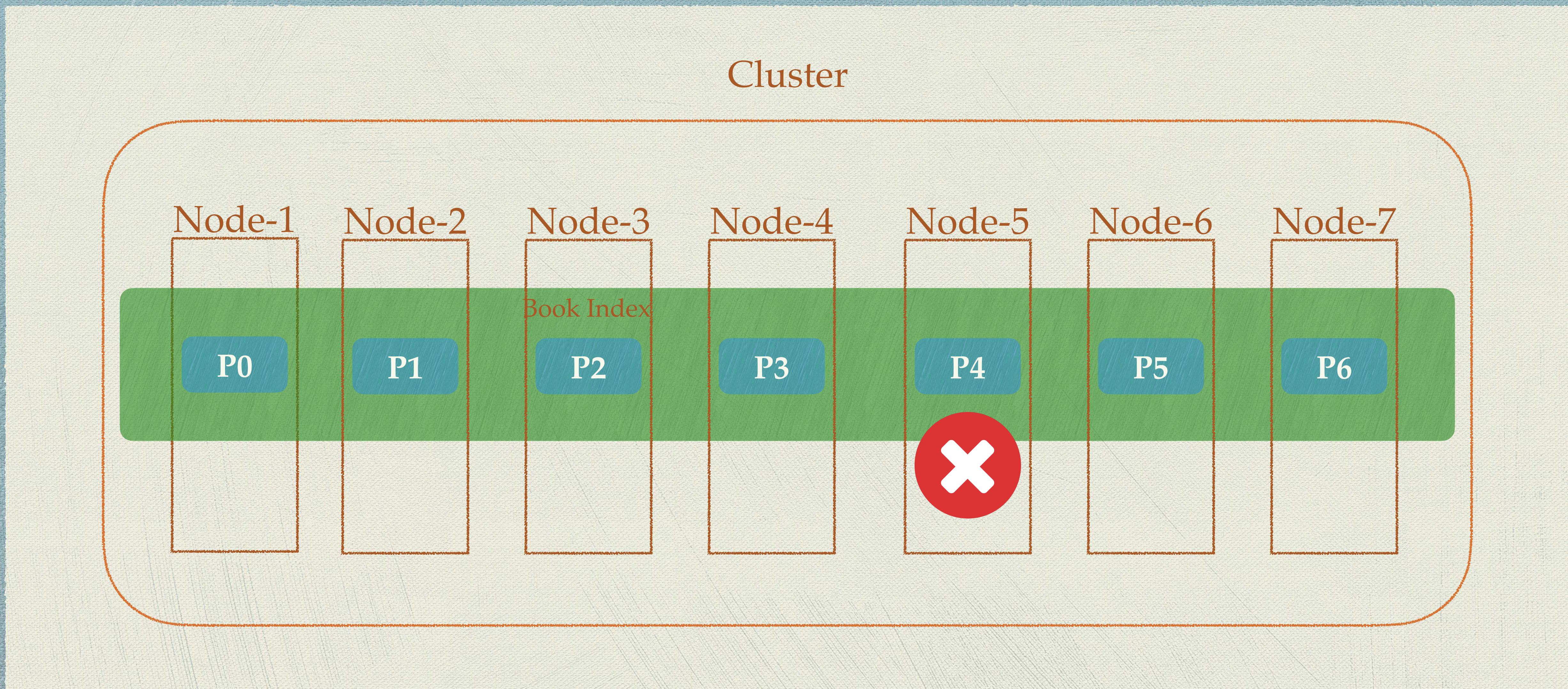
ElasticSearch

完全入门教程

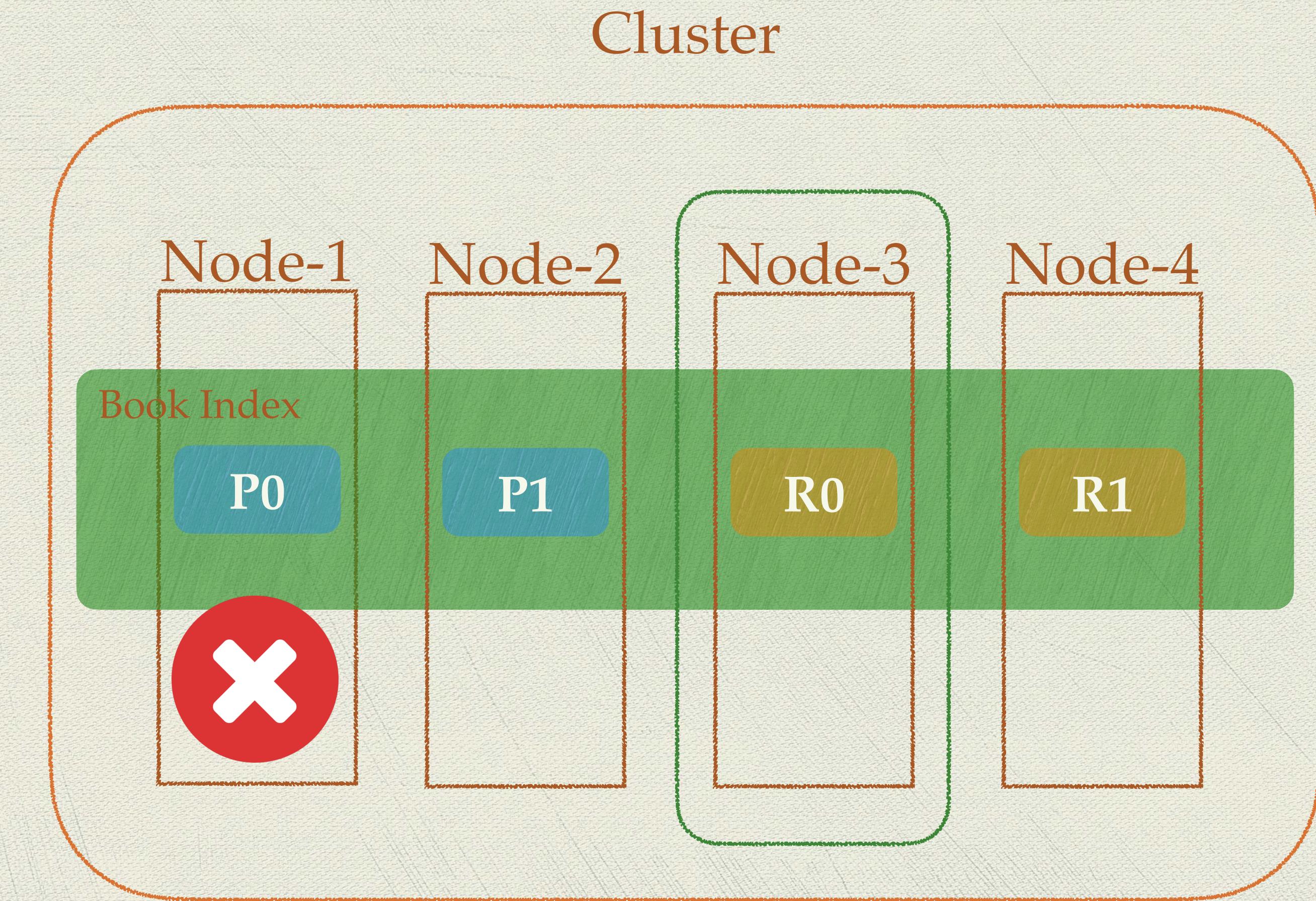
05. 副本 Replication

波波微课

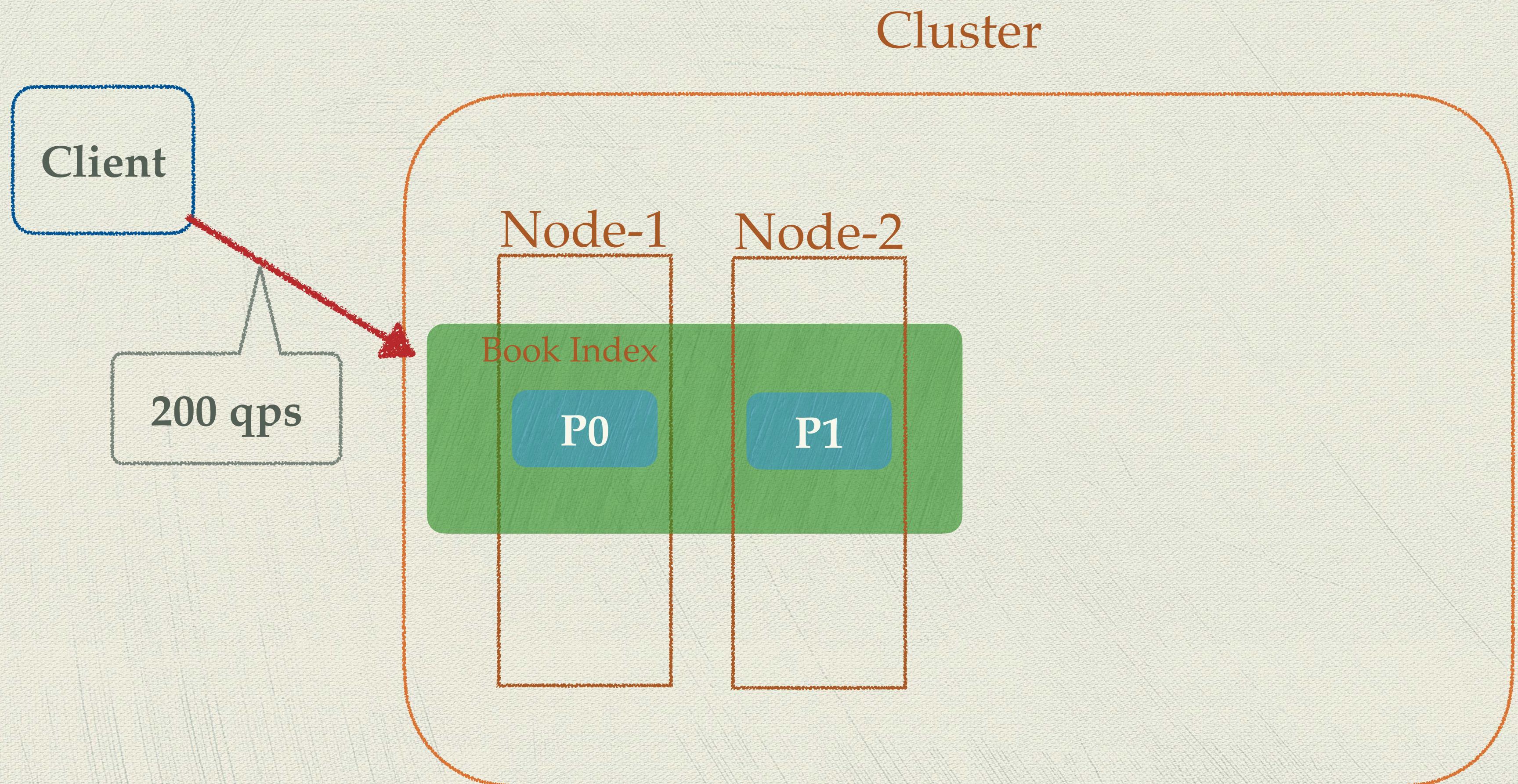
一个节点挂了怎么办？



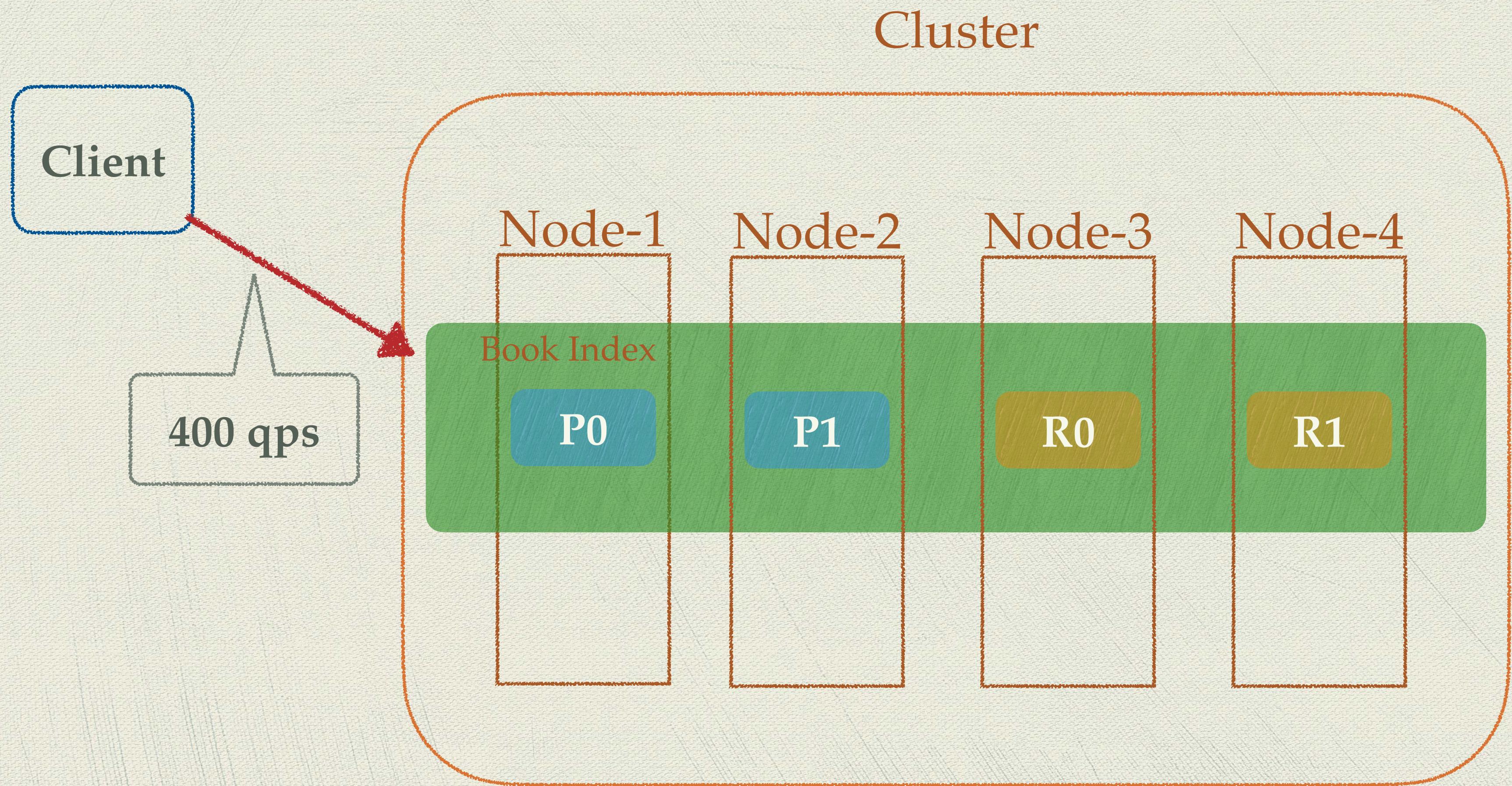
Replication副本~确保索引高可用(HA)



Replication副本~提升查询性能

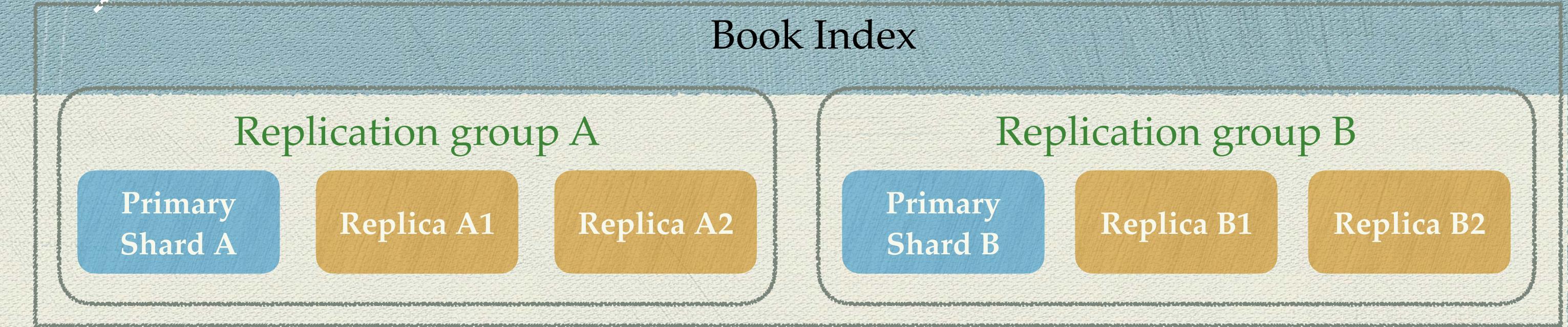


Replication副本~提升查询性能



副本(replication)

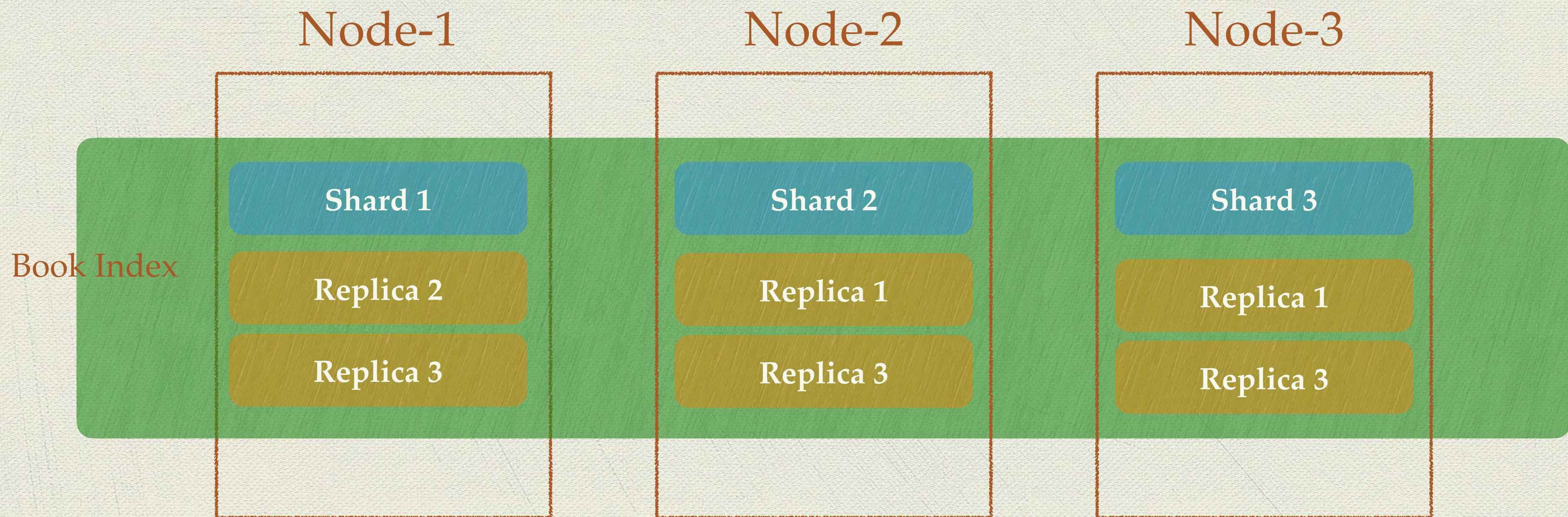
- ◆ 副本在索引上配置



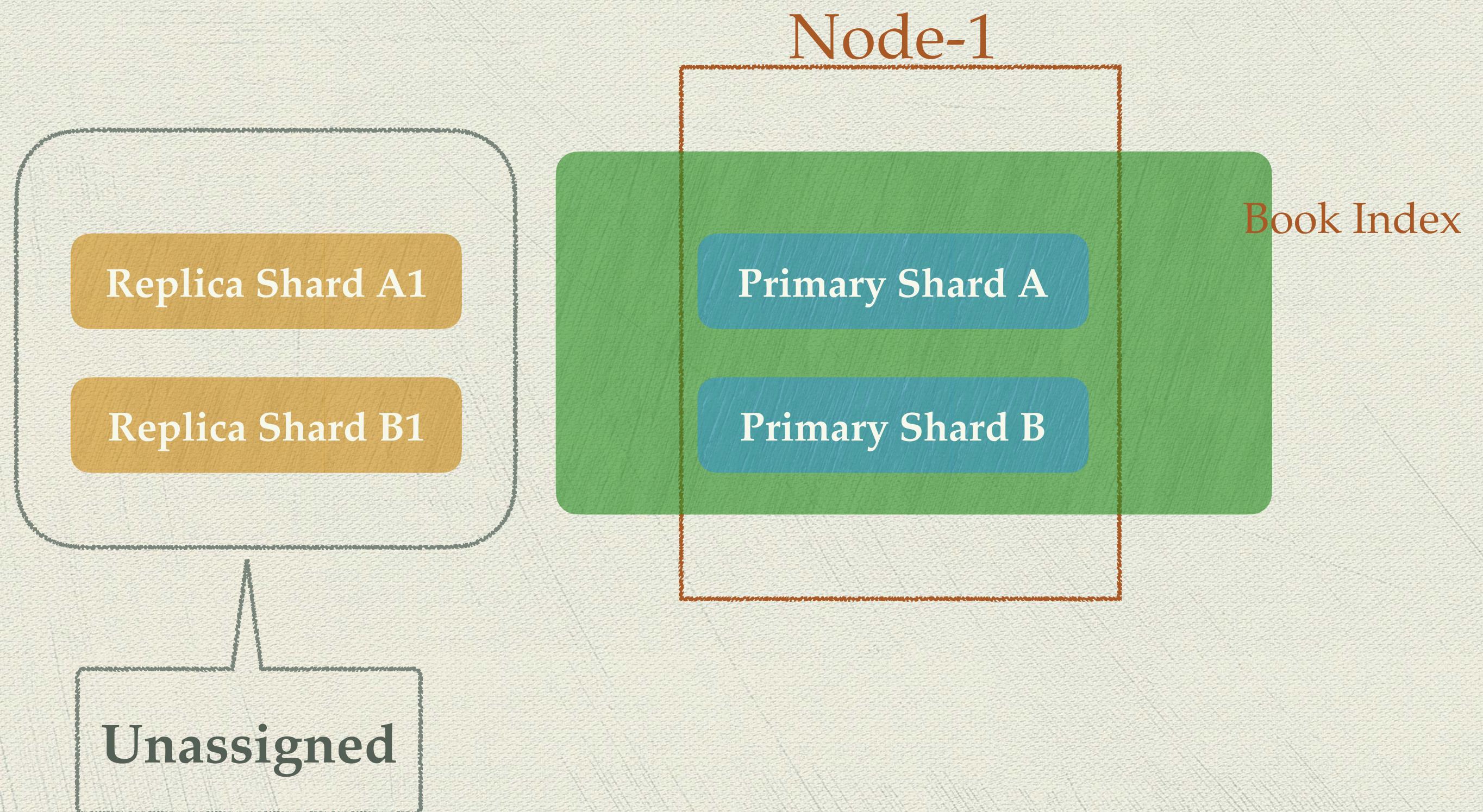
- ◆ 副本是分片的完全拷贝，也称replica shards
- ◆ 被复制的源Shard称为Primary Shard
- ◆ Primary Shard + Replica Shards统称Replication Group
- ◆ Replica Shards也支持查询请求 ~ 提升查询性能
- ◆ Replica Shards数量可配置，缺省为1

Primary Shard和对应Replica Shard(s)

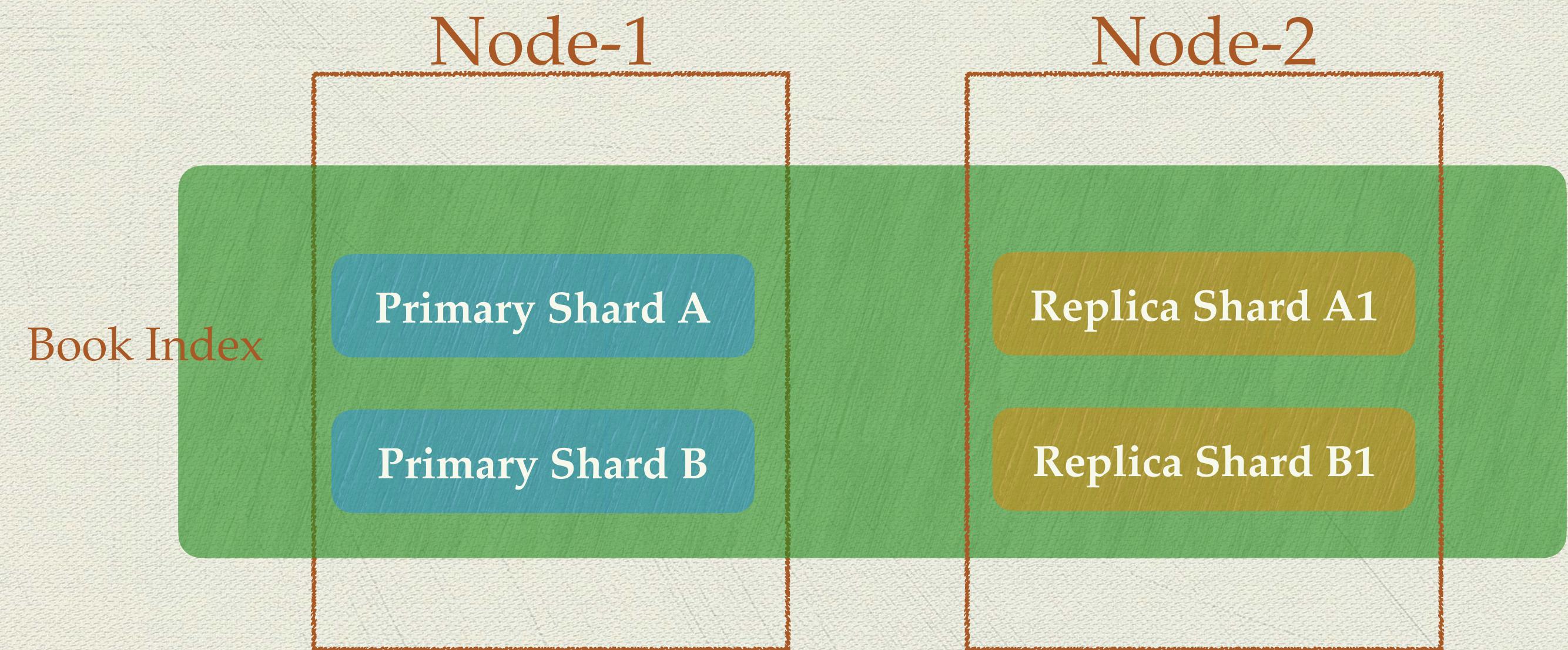
永远不会存在同一个节点上



单节点集群也可配Replica Shard(s)



添加一个节点

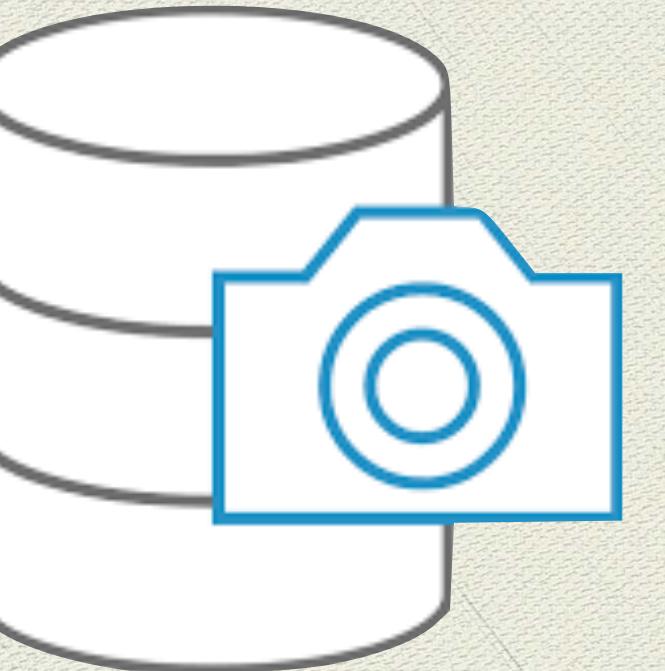


副本数量建议

- ◆ 关键业务数据: ≥ 2 个副本
- ◆ 非关键业务数据: 1个副本

关于快照(Snapshots)

- ◆ 一种备份机制
- ◆ 可以用于恢复到某个时间点的数据
- ◆ 支持索引级快照和集群级快照
- ◆ Snapshots vs Replication
 - ◆ Snapshots -> 备份
 - ◆ re-index前先创建快照
 - ◆ 每日快照防整个集群出问题
 - ◆ Replication -> HA + 查询性能



通过Kibana Dev Console查看副本情况

- ◆ 创建Books Index
 - ◆ PUT /books
 - ◆ 缺省1个Shard + 1个Replica
- ◆ GET /_cluster/health
- ◆ GET /_cat/indices?v
- ◆ GET /_cat/shards?v
- ◆ auto_expand_replicas

本课小结



- ◆ 副本(Replication)用于确保索引(Index)的高可用(HA)
- ◆ 副本同时可以提升查询性能
- ◆ 副本是主分片(Primary Shard)的完全拷贝
- ◆ Replica Shard和Primary Shard**永远不会**存在同一个节点上
- ◆ 副本数量建议
 - ◆ 非关键业务数据: 1个副本
 - ◆ 关键业务数据: ≥ 2 个副本
- ◆ 快照用于对某个索引或者对整个集群进行备份