Lesson & Videos Today C'DFS - LRVM Friday

- Hg

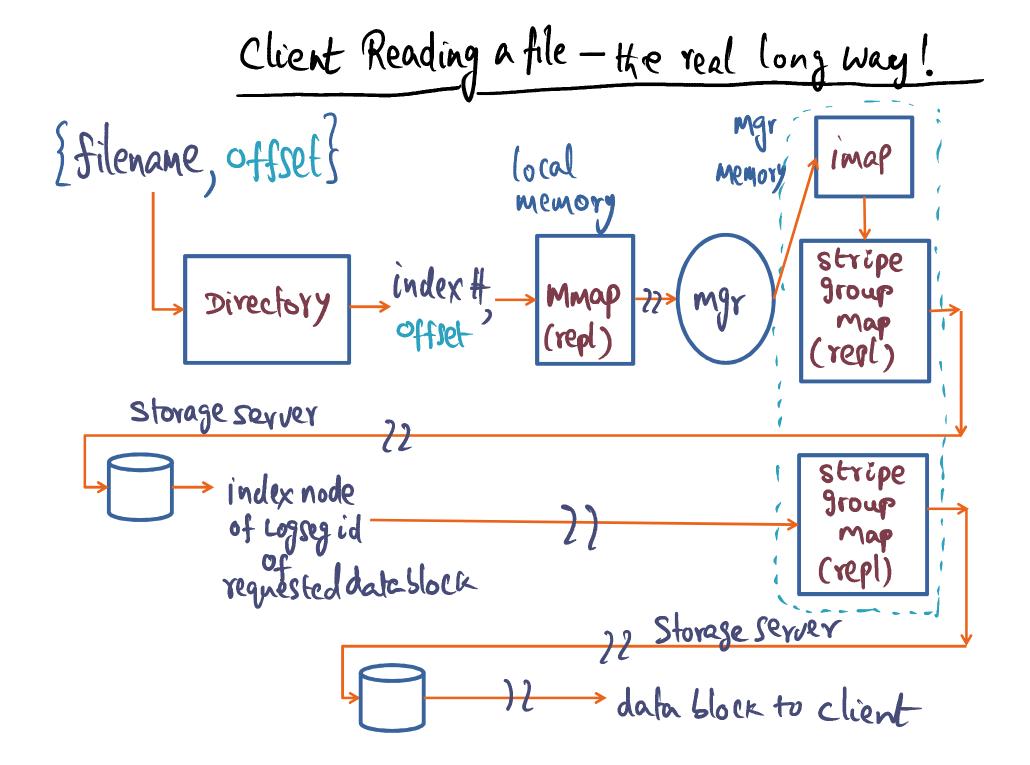
- Riovista

Client Reading a file - Own Cache

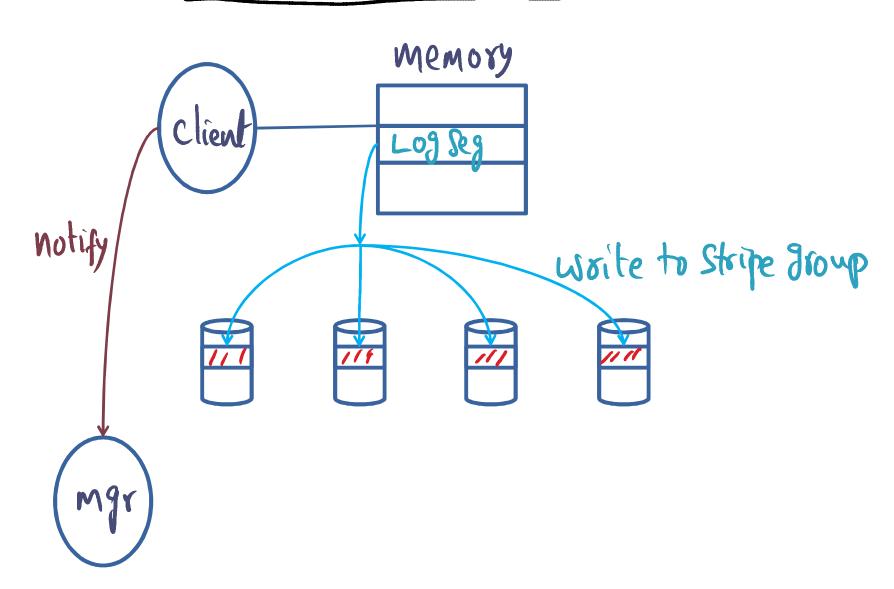
Fastest path for file access [filename, offset] Directory index# Unix Cache data block All in client memory locally cached

Client Reading a file - Jet from peer cache

Second Sest path for file access Efilename, offsets local peer
unix
22> data block Peer client memory



Client Writing a file



Key Takeaways

- Network file systems are important components of any computing environment – corporate or university. There are companies that have sprung up (such as NetApp) solely to peddle scalable NFS products.
- Design and implementation of distributed file systems, in particular how to make the implementation scalable by removing centralization and utilizing the memory available in the nodes of a LAN intelligently.
- Such techniques for identifying and removing bottlenecks are the re-usable nuggets that can be taken and applied to the design and implementation of other distributed subsystems in addition to file systems themselves.

Overall, creative ways to fully utilize idle memory available in the nodes of a LAN.