

Vanilla DFS: Flat File Service API

- **Read**(*file_id*, *buffer*, *position*, *num_bytes*)
 - Reads *num_bytes* from absolute *position* in file *file_id* into *buffer*
 - *File_id* is *not* a file descriptor, it's a unique id of that file
 - No automatic read-write pointer!
 - Why not? Need operation to be *idempotent* (at least once semantics)
 - No file descriptors!
 - Why not? Need servers to be *stateless*: easier to recover after failures (no state to restore!)
 - In contrast, Unix file system operations are neither idempotent nor stateless