

## DIFFERENCES FROM POSIX

**Todo:** delete [http://ceph.com/wiki/Differences\\_from\\_POSIX](http://ceph.com/wiki/Differences_from_POSIX)

Ceph does have a few places where it diverges from strict POSIX semantics for various reasons:

- Sparse files propagate incorrectly to tools like `df`. They will only use up the required space, but in `df` will increase the “used” space by the full file size. We do this because actually keeping track of the space a large, sparse file uses is very expensive.
- In shared simultaneous writer situations, a write that crosses object boundaries is not necessarily atomic. This means that you could have writer A write “aa|aa” and writer B write “bb|bb” simultaneously (where | is the object boundary), and end up with “aa|bb” rather than the proper “aa|aa” or “bb|bb”.