Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science

6.033 Lab, Spring 1998 Handout 6 — File System Readings April 3

1 Recommended Readings

What do real file systems look like? Attached are three real-world examples of file systems from the research and industry. The UNIX file system designs is the oldest and simplest of the three. It dates back to the 1970s in origin. The Berkeley Fast File System is a derivative of the original UNIX file system with incremental improvements for performance reasons. The Network File System provides transparent, remote access to files.

In addition to describing interesting file systems, the papers are examples of well-written papers for the field. For example, most have clear motivation sections explaining what issues influenced the on-disk layout. You should emulate their style for your final write-up.

- UNIX File System

  Tanenbaum. Modern Operating Systems. Pages 307–310.

- Berkeley Fast File System

  McKusick et al. A Fast File System for UNIX.

- Network File System

  Sandberg et al. Design and Implementation of the Sun Network Filesystem, USENIX Conference Proceedings (Summer 1985), Pages 119–130.