

Default Context : Working Directory

Cumbersome to constantly specify full path names

- In Unix, each process has a "current working directory" (cwd)
- File names not beginning with "/" are assumed to be relative to cwd; otherwise translation happens as before

Shells track a default list of active contexts

- A "search path" for programs you run
- Given a search path A:B:C, the shell will check in A, then B, then C
- Can escape using explicit paths: "./foo"

Hard and Soft Links (synonyms)

More than one dir entry can refer to a given file

- Hard link creates a synonym for file
- Unix stores count of pointers ("hard links") to inode
- If one of the links is removed (e.g., rm), the data are still accessible through any other link that remains
- If all links are removed, the space occupied by the data is freed

Soft symbolic links = synonyms for names

- Point to a file/dir name, but object can be deleted from underneath it (or never exist)
- Unix implements like directories: inode has special "symlink" bit set and contains name of link target
- When the file system encounters a soft link it automatically translates it (if possible).

