

Other permissions

When can process A send a signal to process B with kill?

- Allow if sender and receiver have same effective UID
- But need ability to kill processes you launch even if `setsuid`, so allow if real UIDs match, as well

Debugger system call `ptrace` - lets one process modify another's memory

- `setuid` gives a program more privilege than invoking user so do not let a process `ptrace` a more privileged process e.g. require sender to match real & effective UID of target
- Also disable/ignore `setuid` if ptraced target calls `exec`
- Exception - root can `ptrace` anyone

Unix security hole

- ➔ Even without root (or setuid) attackers can trick root owned processes into doing things

Example - clear unused files in /tmp every night

```
$ find /tmp -atime +3 -exec rm -f -- {} \;
```

- `find` identifies files not accessed in 3 days
- `rm -f -- path` deletes file path