

Security

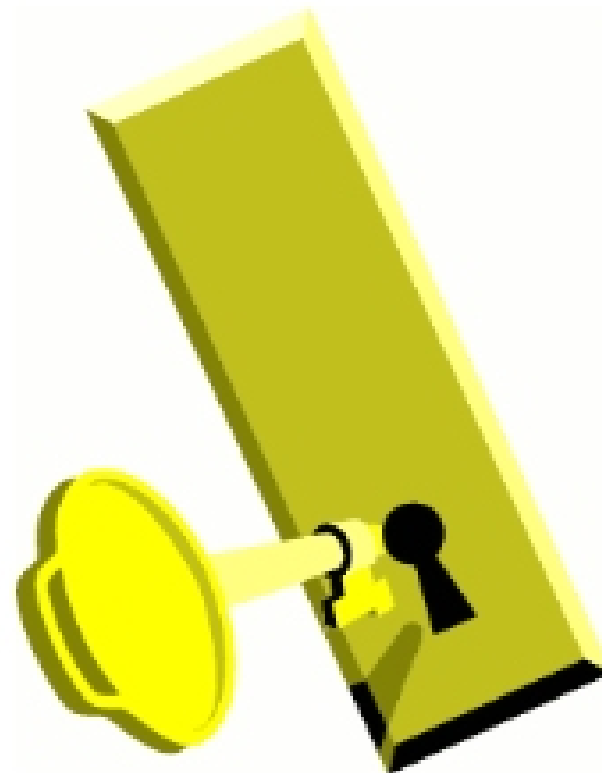
CSE473 - Spring 2008

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www.cse.psu.edu/~tjaeger/cse473-s08/

Protection

- Protect yourself from untrustworthy users in a common space
 - If protection is so good, then why do we have so many vulnerabilities/attacks?
 - UNIX vulnerabilities
 - Windows vulnerabilities



UNIX Vulnerabilities

- Malware can trick a UNIX system in several ways
- **Act as you**
 - All programs you run, run with your user id
 - Can do anything you can do
 - Leak/modify any of your data
- **Change your permissions**
 - You can change your permissions -- so can your programs
 - So, even if you have carefully designed your permissions
 - Malware can undo them
- **Trick setuid programs**
 - Trusted programs that can be run by anyone
 - Including malware
 - If you can craft malicious inputs then...
- *And we haven't even discussed program vulnerabilities*