

# A better security metaphor

Et al.

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# The safe as metaphor

*Securing Solaris, Mac OS X,  
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## Practical Unix & Internet Security



O'REILLY

*Simson Garfinkel, Gene Spafford & Alan Schwartz*

**The safe as metaphor** Resembles mainframe/early UNIX computing environment

- it's self-contained
- material enters/leaves only with consent and on purpose
- material in environment can be inspected
- personell controls environment
- need specialized knowledge
- attacks are noticeable, because security is mostly physical

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## Modern Standard Environment (OS+Network+Browser)

- not contained (Content pulled from network into Browser generates network traffic ...)
- material can enter without consent (ads, cookies, webappsstore, malvertising)
- material can be siphoned off without consent (browser tracking, location data)
- at least in MS/Apple products, users cannot inspect internals
- environment is remotely controlled (auto-updates, Windows 10 EULA, botnet admins)
- only perceived way to cleanup a compromised system is complete wipeout+re-install
- nobody knows what goes on in the system (dozens of undocumented services ...)
- but it is convenient!
- everybody can use it
- So what would be a better metaphor?

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# The now security paradigm



## The portaloo

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  - most users are locked out at any time
  - is not owned by its users
  - only way to a clean one is complete re-install
  - Nobody would store anything important in a portaloo!

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