

Mandatory Access Control

➔ **Mandatory access control (MAC)** can restrict propagation
e.g. security administrator may allow you to read but not disclose file

FYI, do not confuse:

- MAC - Mandatory Access Control (in OS security)
- MAC address - Medium Access Control (in networks)
- MAC - Message Authentication Code (in cryptography)
- MacOS (from Apple)

MAC Motivation

Prevent users from disclosing sensitive information (whether accidentally or maliciously) e.g. classified information requires such protection

Prevent software from surreptitiously leaking data - seemingly innocuous software may steal secrets in the background (Trojan Horse)

Case study - Symantec AntiVirus 10

- Inherently required access to all of a user's files to scan them
- Contained a remote exploit (attacker could run arbitrary code)
- ➔ Can an OS protect private file contents under such circumstances?