



LearnLock

Security for Exams
Engineering Computing

Multiple options for exams

- Restricting to Learn
- Exams with applications like Excel, Word, SPSS, Matlab
 - Some software needs license serving exceptions
 - MS Office needs MS help web sites
- Open book exams with access to N: drive,
- Or anonymous accounts with no N: drive or profile

LearnLock Overview

- Supply LearnLock with a list of trusted DNS sites
 - Eg. Learn, CAS, license servers, Emerge
- LearnLock Learns firewall IP rules in response to real-time DNS queries
 - Ideal for cloud-based solutions like Desire2Learn which change all the time
- Creates a log file showing attempts (successes and indicates failures), useful for creating the rule set

How it works

- Applications issue DNS queries to access resources
- LearnLock intercepts the DNS queries and either returns
 - the correct addresses AND opens its internal IP firewall for those addresses
 - or returns “address not found” and leaves the IP address blocked
- Applications do not try and are also unable to access network addresses we block. No timeouts.

LearnLock Features

- Does not force timeouts, fast web access and immediate failures
- Full network speed, no delays on traffic
- Tested compatible with all software used in Engineering labs
- Simplifies auto logins with a web front-end
- Requires a Staff/Faculty nexus account to change the state

LearnLock Compared to other software

- LearnLock is free
- Device driver which guides machine to compliance, unobtrusive compared to other considered software.
 - They are more suited when you need an online version of a proctor, and then they make the machine difficult to use
- Does not prevent other software (though that can be done with GPOs), LearnLock just restricts network access
- Compatible with exams that require user software
- Allows easy backing out if problems occur
- Easily enabled/disabled
- Allows user to use favourite/familiar web browser
- Does not allow granularity down to certain pages of a web site

LearnLock Compared to Firewalls

- LearnLock is free
- Simple to use, no setup required
- Full network speed, eg. access to N: drive remains fast if allowed
- Scalable at no cost because logic is in workstations
- Compatible with all protocols, not just HTTP/HTTPS
 - Compatible with license servers
- Handles automatic logins on workstation

This workstation maggot controls 3 client workstations



Learn Lock



Learn Unlock



**Reboot to Local
Accounts**



**Reboot to
Nexus Logins**

password to use

Operation: turn on lab locking to LEARN
maggot2 down
maggot3 down
maggot4 down



**Display Screen
on Clients**

Log Out