

The background of the slide is a soft-focus photograph of a natural landscape. It features a calm body of water in the foreground, which reflects the surrounding environment. In the middle ground, there is a dense line of evergreen trees along the shoreline. The background is composed of several layers of misty, rolling mountains, creating a sense of depth and tranquility. The overall color palette is muted, with various shades of blue, green, and grey, contributing to a peaceful and professional aesthetic.

# 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 maggots 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