# Network Firewall Module

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# Summary

We will build:

- Kernel module that monitors, logs, and filters network traffic using netfilter
    - The filtering protocol will be determined by what is in /proc
    - So far we've gotten the hello-world-netfilter kernel module working, which blocks network traffic and drops all packets
- Write a shell UI program that can modify the proc filesystem in order to set the parameters for the kernel module
- We can test the functionality by comparing it to the output of Wireshark, an open source packet analyzer that seems to monitor network traffic in a similar fashion

# Questions

We will probably segfault and blow up the kernel at some point during this project.

- How do we save the current state of our machine?
- What sort of operations does a kernel module have available aside from init_module and cleanup_module?
  - Attach r/w callback handlers