Challenges running a student network





Who are we?

@timmurphy01

- IT Student at NUI Galway
- Former Student Systems Engineer at ICHEC
- Current Chief Systems Administrator & Former Chairperson at NUI Galway CompSoc

@zergless

- Former Redbrick Treasurer/Chair/Sys
 Admin
- Former Student Network Engineer in HEAnet
- Current Sys Admin at ICHEC

Help from College

- Academic help
- IT Services / ISS
- Comms Room / Data Centre Access & Space

Budget

- USC Grant / Funding Grants
- Sponsorship
- Membership fees
- At college's discretion
- Takes 6~ weeks



Lots of untrusted users

- Each user wants something different
- Each users has shell access
- Hard to monitor what users are storing
 - User sql injecting boards to prove he/she could
 - User maxing out all cores on dev server to test out a program for work
 - Users running processes with no name to try hide what they're doing
 - Hosting illegitimate copies of rule books

Admins

Done alongside student work

- 1. Finding people who are interested
- 2. Training them
- 3. Keeping them longer than a year
- 4. Getting them to start at step 1

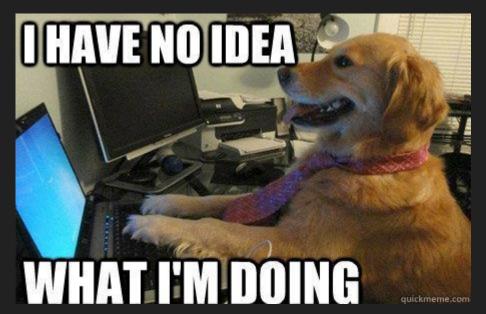


Services we run?

- IRC
- Linux Login servers
- Web servers
- Git servers
- Email servers & Helpdesk systems
- Mastodon (open source Twitter like alternative)
- HackMd (open source google docs style markdown editor)
- Hastebin (open source pastebin)
- Wikis
- Backups
- Config Management
- LDAP

Little to no training - lots of go figure it out

- High turnover = little training
- Documentation can be a problem
- Getting people to document what they have figured out is also a problem
- Mailing list archives



Miscellaneous

- Attracting an audience
- Finding speakers / interesting talks for members
- Time management and collaboration
- Maintaining non-critical systems with a critical mindset
- Scaling for demand
- Handling support and help
- Onboarding new members, new committee
- Delegation of responsibilities
- Backups, backups, backups
- Configuration management

Questions?