

FOUR YEARBUS Ruán Murgatroyd

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Who am I?

Ruán Murgatroyd

- 4th Year CS and German in TU Dublin
- Irish Cloud Computing Champion
- STAR Student @ SAP
- Systems Administrator @ CS++
- Former President of Societies in TU Dublin



What are Societies?

- 100% run student volunteers
- University funded
 - and sponsors (hint hint)
- 50% of 'Student Life'
- Three major branches
 - Cultural
 - Academic
 - Social
- 53 Active societies in TU Dublin

CS⁺

What is CS++?

- TU Dublin's Computer Science Society
- Restarted 2022, founded 1998 as 'Golem Soc'
- Give unique experiences, teach skills they don't get in class
- Committee of 15 students
 - 5x Sysadmins

Systems Administration @ CS++

- 4-node PVE cluster
 - 640GB of RAM
 - 168 Cores (336 Threads)
- Running ~40 services
 - 6 Societies
 - Onboarding 5 more
- Mission Critical Data & Services for committee and members



OURproblem

Road Accidents

One Problem? Not really...

- 6 Comp Sci courses in the university
- Across 3 campuses
- **NO SHARED MODULES / SYLLABUS**
- No guaranteed prior CS / SysA knowledge

and worst of all...

**MAXIMUM
TENURE OF 4
YEARS**

BRIDGING THE GAP

Saving us from Disaster

Solution 1 – Challenges

- Systems Administration is **PRACTICAL**
- 11 practical challenges
- Cover
 - Basic maintenance
 - Common tasks
 - Troubleshooting
 - Security
 - Rebuilding from scratch

github.com/cs-soc-tudublin/sysadmin-challenges

Solution 2 - DOCS!

- **INFORMATION WILL BE LOST**
- Everyone has a timer. We know ours
- Internships, Erasmus, graduation, dropouts
- Life & college come first!!! We're not paid
- Open-source docs
- Record-keeping is the highest priority

Like Onions, Have Layers

- Docs are your holy runbook
- 60% of the CS++ sysadmins are at FOSDEM
- What if the soc dies again?
- Teach what you need, when you need
- Test & fix your docs when onboarding

docs.cspp.ie

You can't have

Automation

without...

Services

without...

Operating Systems

without...

Hardware & Networking

Solution 3 - OWNERSHIP

- Build your panel of experts
- Owners know their topics best
- Owners aren't just work mules
- Clear layout of tasks
- Easily handed over & reassigned

docs.cspp.ie/ownership

WHY care?

How does this help you?

What can you learn?

- Be ready to give topics
- Be ready to RECEIVE topics
- Humans learn by doing
- There is no hivemind, write it down
- Democracy rules. Listen to each other, trust each other

Never forget:

**WE ALL HAVE
A CLOCK**

THANKyou!

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