System Administration
計算機系統管理課程

pmli

- gslin要來SA與大家分享管理實務(1hr)
- 若有外籍生同學 – [提醒] 英文投影片授課、中文考卷
- 作業作業作業~~~

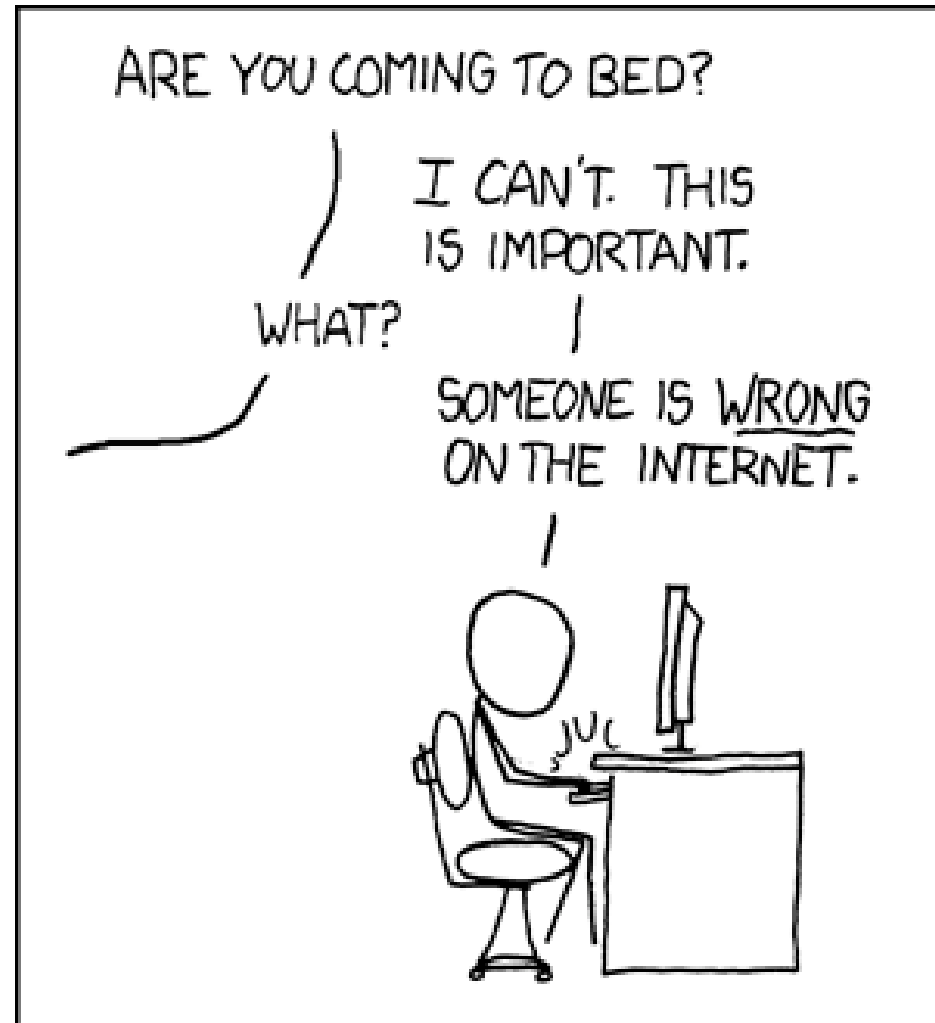# What System Administrator Should do? (1)

❑ Ordinary list

- Install new system, programs and OS updates
- Monitoring system and trying to Tune performance
- Adding and removing users
- Adding and removing hardware
- Backup and Restore
- Security

What System Administrator Should do? (2)

❑ Non-technique list

- Helping users
- Maintaining documentation
- Moving furniture
- Burning your liver
- Good communication and memorization

# What System Administrator Should do? (3)

❑ The best words to describe the job

- Thankless job.
  - ➢ http://www.sysadminday.com/
- System administration is like keeping the trains on time; no one notices except when they're late.
- 氣象局：「我們對的時候，沒人記得；我們錯的時候，沒人忘記。」

❑ Philosophy of system administration

- Know how things really work.
- Plan it before you do it.
- Make it reversible
- Make changes incrementally.
- Test before you unleash it .

What System Administrator Should do? (4)

❑ Flow of Change
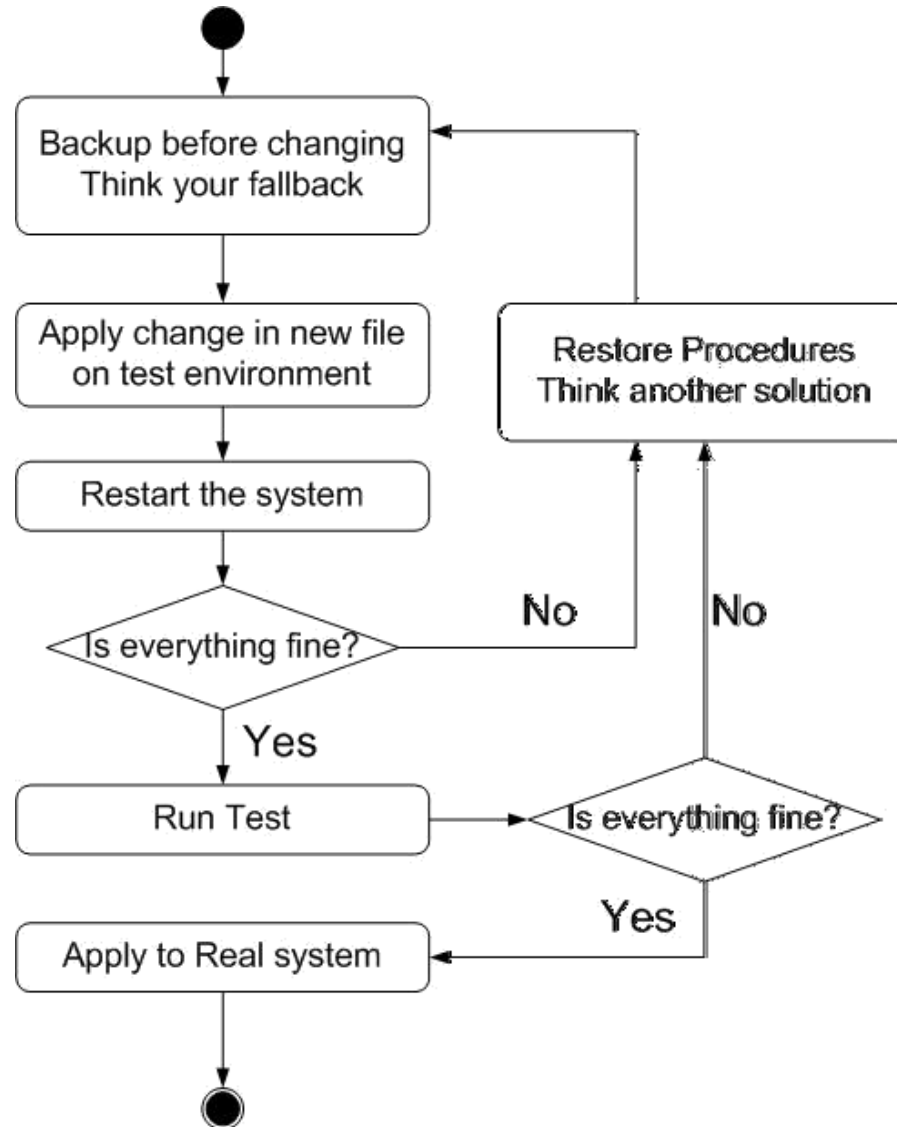
What you can learn in this course?

❑ The skill to be a candidate of system administrator

❑ Information about CS computer center

❑ System Admin / Network Admin ?

 • Play with computers

❑ What FreeBSD can do.

❑ 資安學程 http://isc.cs.nctu.edu.tw/

❑ 大學部雲端系統學分學程 http://delta.nctu.edu.tw/

Attitude

❑ Attend every class

❑ Do every exercise

- As early as possible

- On your own

❑ Read book and practice at least 6 hours every week

- Use unix-like environment

- Recommend: more than 1.5 hours/day averagely.

❑ Collect information on the internet

- The newer, the better.

Syllabus

❑ Website:
- @e3

❑ Instructors:
- 黃懷陞 huanghs@cs.nctu.edu.tw
- 李柏明 pmli@cs.nctu.edu.tw

❑ Time:
- Wed. IJK (PM 6:30 ~ 9:20)

❑ Place:
- EC022

❑ TAs:
- 4 TAs.
- Email to TAs: (ta@nasa.cs.nctu.edu.tw)

❑ Textbook:
- Unix and Linux System Administration Handbook (4th Edition)
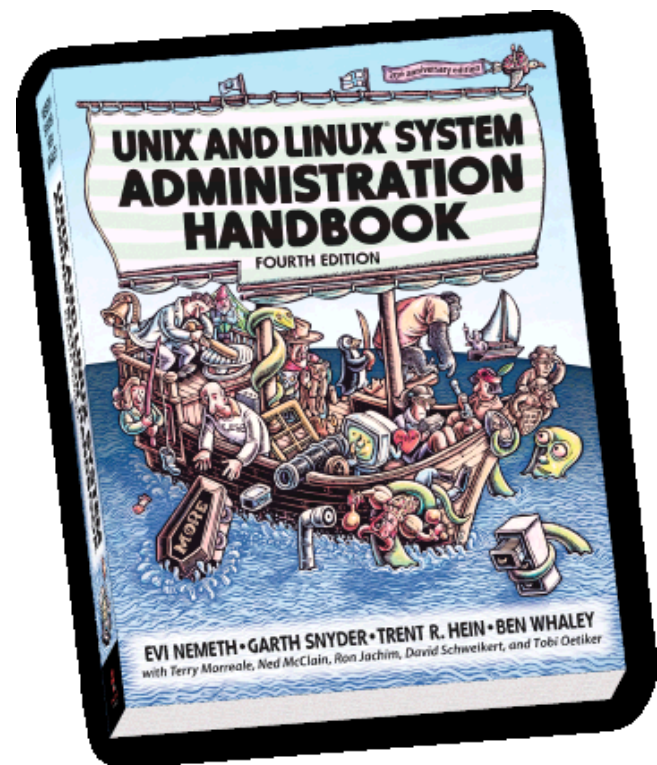
Syllabus – Content

❑ We will cover the following chapters in this semester (SysAdm):

- Chapter 1 ~ 13
- Chapter 14, 18, 19, 22, 23
- Chapter 25, 26, 29 ~ 32

❑ The following chapters is covered in the next semester (NetAdm):

- Chapter 14 ~ 17, 20 ~ 22
- NAT, DHCP, VPN, Proxy, …
- Perl Programming
- News Server

Syllabus – Text book outline

Syllabus – Grade Policy

❑ Mid
- 15 ~ 20%

❑ Final
- 15 ~ 20%

❑ Exercise (Homeworks)
- 60 ~ 70%
  - ➢ No Delay Work
  - ➢ 4 exercises
  - ➢ 1 term project

What you should prepare?

❑ Background knowledge

- UNIX commands
- Basic of TCP/IP Networking (not required)

❑ Environment

- One dedicated PC
    - ➢ Or dual OS in your PC.
    - ➢ (New!) Or Virtual PC

❑ Yourself

- Your hard study

Finally, Am I OK to take this course?

❑ Are you willing to devote yourself to exercise?

- Yes! Please come

❑ Are you newbie in this area?

- Yes!? It's ok, Please come

❑ Do you take more than 3 major courses?

- Yes!??? It is quite dangerous, but I can not stop u

Q&A

Break time.