



# Network Monitoring & Management

**A few Linux basics**

# Our chosen platform

## Ubuntu Linux 10.04 LTS 32-bit

- LTS = Long Term Support
- no GUI, we administer using ssh
- Ubuntu is Debian underneath
- In the real world choose 64-bit edition
- There are other platforms you could use:
  - CentOS / RedHat, FreeBSD, ...
- This isn't a UNIX admin course
  - Worksheets are mostly step-by-step
  - Please help each other or ask us for help



# You need to be able to....

Login to your virtual machine using ssh

- On Windows use putty.exe
- Connect to pcX as user *sysadm*
- **Be *root* when necessary:** `sudo <cmd>`
- **Install packages**
  - `sudo apt-get install <pkg>`
- **Edit files**
  - `sudo joe /etc/motd`
  - `sudo vi /etc/motd`

# joe editor

- Ctrl-C quit without saving
- Ctrl-K X to quit and save
- Cursors work as you expect
- We provide a PDF reference in the materials

# vi editor

- The default editor for all UNIX and Linux distributions
- Can be difficult to use
- If you know it and prefer to use vi please do
- We provide a PDF reference in the materials

# Other tools

- Terminate foreground program: `ctrl-c`
- Browse the filesystem:
  - `cd /etc`
  - `ls`
  - `ls -l`
- Rename and delete files
  - `mv file file.bak`
  - `rm file.bak`

# Starting and stopping services

## Standard method

- `/etc/init.d/apache2 restart`

## New method

- `service apache2 restart`

## Check for the process

- `ps auxwww | grep apache`

# Viewing files

Sometimes files are viewed through a pager program (“more”, “less”, “cat”). Example:

- `man sudo`
- Space bar for next page
- “b” to go backwards
- “q” to quit
- “/” and a pattern (`/text`) to search



# To get started

- Login to your virtual server using ssh
- Install the “joe” editor package
  - `sudo apt-get update`
  - `sudo apt-get install joe`
- Edit the “message of the day” to identify your virtual machine as yours:
  - `sudo joe /etc/motd`
  - Or use your favorite editor (vi, pico, etc.)
- Log out and log in again, then do:
  - `man motd.tail`