Agenda

- Brief introduction to yours truly and thesis
- The evolution of Unix
  - Standardisation of Unix
- The evolution of Linux
  - Standardisation of Linux
- Summing up

The Evolution of Unix

- Company setting

  The American Telephone and Telegraph Company, AT&T

  1949 Antitrust claim

  1956 AT&T only allowed to perform experiments into new technology regarding common carrier services

- MULTICS

  1967 AT&T, General Electric, MIT started a joint research project

  Needed a multi user operating system that:

  Were stable

  Would accommodate 1000 users

  1969 The MULTICS project died

  Ken Thompson and Ken Ritchie returned to AT&T Research

  Space travle (OH1) – a game for MULTICS

- Birth of Unix

  1969 No game – no fun

  Space travle for the PDP-7

  End of 1969 the PDP-7 were self supporting (OH3)

1970 No Money – Not Funny!

A new computer > 100.000$

Unix was promising, a file-system, a cognitive programming environment

A little scam

Word-processing became a research area

The PDP-11/20 (OH4)

1971 The word-processing was a success

The patent department bought the PDP-11/20

The research department bought a PDP-11/45 (OH5)

- ## Unix versions

1971 V1

The system was growing

The Programmers Manual

1972 V2

Now 10 installations

No support and free

1973 V3

First conference, held at Berkeley

1973 V4

Unix rewritten in C

C was developed to provide portability and a pleasant programming environment

1974-77

Unix distributed freely to universities as Source

Papers published

First BSD releases

1978

AT&T Announce fees on source code

3BSD (OH6)

Unix sales policy (OH7)

1978 – now

Unix became the victim of multiple versions and makers

- The Standards

Why standards?

Hardware portability

Interoperability

Application portability

User portability

- The origin of Unix standards

  Source available until 1978

  Different incompatible Unix's were emerging

  Users were communicating

  UnixUsers -> Usenix

  Newsgroups

  1981 /usr/group

  POSIX –Portable Operating Systems Standards Interface (uni)X

  Standards committee (OH8)

The Evolution of Linux

- Ignition, 1991

  "Hello everybody out there using minux –
  I'm doing a (free) operating system (just a hobby,
  won't be big and professinal like gnu) for
  386 (486) AT clones."

  There was an existing community

  Minix

  The Internet was emerging

  People got interested

- Distributed for free

  The notion of free

  The GPL license

  Open Source Software / Free Software

  Commercial licenses

- The development model

  Linus T decides what Linux is!

  The spider in the web

  The feedback loop

- Standards

  Linux is very standardised

  Little actual standardisation in the community

  Linux rely on other bodies for standardisation

  The standards organisations

  POSIX

  IETF / RFC

  Why?

  Little power

  Minimal communication