

Linux: Communities and Process

Community

What Is Community

- Shared Purpose and Values
- Not All Identical
- Not All Friends
- Own Good From General Good

Many Communities In Linux: eg

- Big Business eg Banks
- Technology Fans
- Free Software Believers
- Embedded Developers

Many overlapping communities

How To Build Community

Building Community Is Not Like Building Machines

Like A Restaurant

- Good Food
- Good Reputation
- Nice Atmosphere
- Other Customers

Community

Unlike Food

- Everyone Can Be A Chef
- Everyone Can Change The Menu

Co-ordination

- Ad-hoc Structure
- Emergent Control Structures
- Order From Chaos
- Economic Incentive To Join
- Must Accept Many Goals

Structures

Distributions

- Packaging done once
- Specialisation
- Distribution Network

Network Effects

- Package Count
- Support Range
- Exposure In Media

Tracking Bugs

Collate Information

- Bugzilla
- Email
- Smolt

Identify Interest

- Bugzilla specialists
- New tools for oops matching
- Regression trackers

Kernel regression is informal job, enterprise distribution regression testing is tightly managed.

Security

Vendor-sec

- Bridge distributions
- Share security knowledge
- Co-ordinate releases

Mutual benefit between Linux distributions (and FreeBSD).
Bridge to bigger security community.

Standards Pressure

We celebrate diversity - but

- Most is the same
- Most is common

Open Standards

- Show the common
- Help vendors
- Help some communities

Enterprise Products

Business often wants stability without regressions

This Is Hard

- Drop problem on vendors
- They have experts
- They have the customers who care
- They make the money from it
- Backporting

Serious regression control, complex code checkin process

Upstream Kernel

Our View

- Regressions are bad
- Price of progress
- Iterative improvement

Regression Tracker

- Fairly new role
- Having good results
- Regressions don't stop releases
- General good versus strictness

Code Improvement

Patches

- Contributed under agreement
- Reviewed by mix of people
- ACK/NAK process for code
- Iterate until most happy
- Work with not against

Architecture

- Key maintainers may decide
- Linus has overall decision

Key maintainers may be overruled and change over time

Branding

Brand Identity

- Beliefs and Values
- Target Users
- Services Included
- Quality
- Manage Expecations

Very Different Brand Values

- Fedora
- Debian
- Red Hat Enterprise Linux
- Gentoo

More Reading

Order From Random Assembly

- "Linked" - Albert-Laslo Barabasi

(or for more rigorous academic material see his web site)

Linux Weekly News

- News plus good articles
- Covers code, contributors and process

Analysis Of Community

- EU Project FLOSS and FLOSSPOLS

