Community-based Development at Fedora

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History

A long, long time ago...

...between 1994 and 2003...
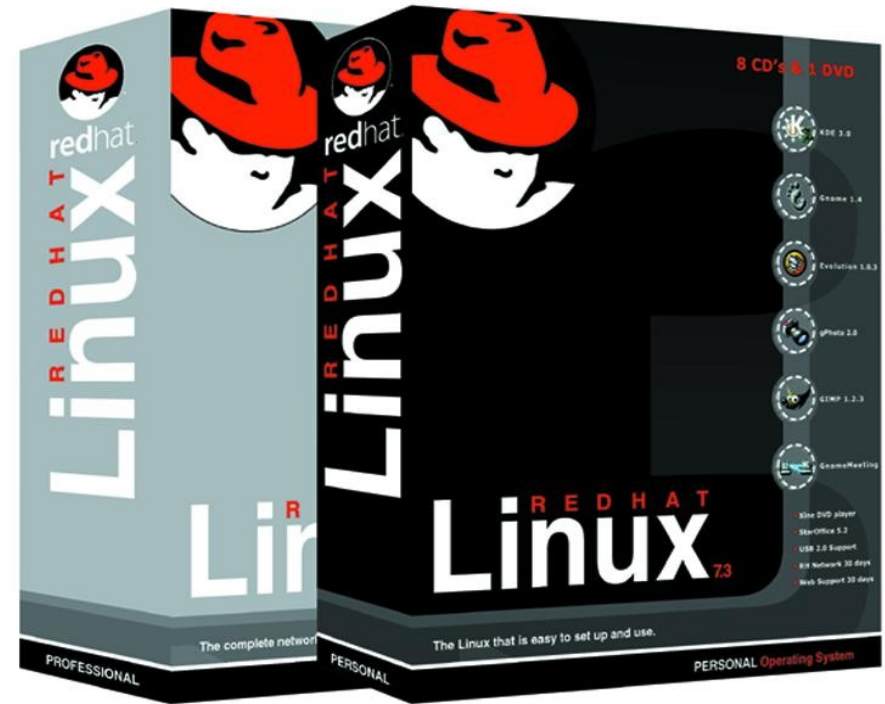
...in a country far, far away...

...Raleigh, North Carolina, US...

...there was a Linux distribution named...

Red Hat Linux

- Commercially available as box with CDs and printed manual

- Concurrently available as free download on the Internet

- New versions released about every 6 months

Problems

- ► Less profit with commercially sold boxes

- ► Main profit due to large business customers

- ► Different product and support life times
  - → Between 18 months and 5 years

- ► No stable and reliable base for partners

- ► Extreme between innovation vs. stabilization

Answer

Split-up into two different Linux distributions:

Fedora Core

Red Hat Enterprise Linux

Fedora vs. RHEL

- Free available
- Short release cycle: 6 months
- Latest software
- 13 month support and product life time
- Free support by the community
- Early adopters

- Subscription
- Long release cycle: 2-3 years
- Stable software
- 7-10 years support and product life time
- Support contract with Red Hat
- Business customers

Fedora

- Fedora is the red hat in the Red Hat logo

- But: Fedora is **not** Red Hat

- fedora.us project was an add-on RPM repository for Red Hat Linux

- Red Hat Linux became Fedora Core, fedora.us became Fedora Extras

- Fedora 7 merges Core and Extras

4 Foundations

Our 4 core values:

- ▶ Freedom
- ▶ Friends
- ▶ Features
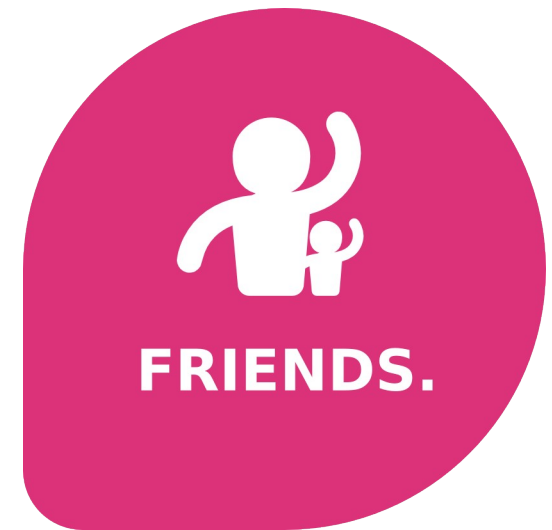- ▶ First

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Foundation: Freedom

- Only free software
- Free to use
- Free to share and copy
- Free to modify

Foundation: Friends

- Fedora is driven by the community

- Very active community

- Respectful coexistence

- Cooperation with developers and distributions

FRIENDS.

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Foundation: Features

- ▶ Fedora offers new features
- ▶ Uses and creates standards
- ▶ Works closely with upstream developers and projects
- ▶ Very open and transparent development process

Foundation: First

- ▶ Fast integration of new software
- ▶ Developing new technologies
- ▶ Rapid release cycle
- ▶ Sometimes the first to fail

FIRST.

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Fedora-driven Developments

- ▶ SELinux: Access control security policies

- ▶ NetworkManager: Network simplifying

- ▶ D-BUS: Simple inter-process communication

- ▶ PolicyKit: Controlling system-wide privileges

- ▶ PackageKit: Package management frontend

- ▶ PulseAudio: Networked sound server

- ▶ systemd: System V init daemon replacement

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Follow upstream

- Get and keep in touch with the developers

- Participate and involve at development

- Support upstream with debugging and fixing

- Send all patches to upstream developers

- Keep using existing standards

- Do nothing that the upstream developer of a program would not do

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Easy downstream

- Allow others to use Fedora as base

- Easy rebranding

  - `fedora-release`

  - `fedora-release-notes`

  - `fedora-logos`

- More than 40 Linux distributions are based on Fedora, starting with RHEL, over OLPC Linux, to exotics like Niigata or Kororaa

Structure

- Sub-projects: Ambassadors, Design, Websites, Packaging, Documentation, Quality Assurance, Translation, Infrastructure, ...

- Lead of sub-projects by Steering Commitees: FESCo, FamSCo, FDSCo, FLSCo, ...

- Special Interest Groups: KDE SIG, Fonts SIG, EPEL SIG, Cloud SIG, Games SIG, ...

- Fedora Board is the political head

- Democratic votings

Communication

- Mail and mailing lists
- IRC
- IRC meetings
- Phone and VoIP
- Face to Face
- Bug tracker
- Trac and Wiki

Features

What is a feature? A feature is...

- a change clearly identifiable as such for users

- a change that requires coordination between different groups or teams

- a new function that only Fedora has

- important enough to delay a Fedora release

- remarkable enough to be mentioned in the Release Notes

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Feature process

- ▶ Each feature needs a wiki page

- ▶ Wiki page is reviewed by the Feature Wrangler

- ▶ Wrangler releases the page for FESCo

- ▶ FESCo decides and votes on the feature

- ▶ Feature will be realized and implemented

- ▶ Check at each milestone if the feature is complete

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Milestones & Schedule

▶ Planning and Development for Fedora 17 begins   2011-11-08

▶ Feature and Spin Submission Deadline   2012-01-24

▶ Feature and Spin Freeze   2012-02-07

▶ Alpha and Software String Freeze   2012-02-14

▶ Alpha Release   2012-02-28

▶ Software Translation Deadline   2012-03-13

▶ Beta Freeze   2012-03-20

▶ Beta Release   2012-04-03

▶ Final Freeze   2012-04-23

▶ Compose „Final" Release Candidate (RC)   2012-04-24

▶ Release / General Availability (GA) of Fedora 17   2012-05-08

▶ End Of Live (EOL) of Fedora 15   2012-06-08

Release engineering

▶ Manages the build system and repositories

▶ Creates the CD and DVD images

▶ Ensures keeping of the schedule

▶ Approves updates during freezes for releases

▶ Decides about the disclosure of the release

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Spins

▶ Spins are installable Live CDs of Fedora: KDE, Xfce, LXDE, Sugar, Design, Games, Security Lab, Electronic Lab, BrOffice, ...

▶ Adjustments for needs: Package selection, localisation, small tweaks, etc.

▶ But: No fundamentally different distribution!

▶ Spins are official Fedora sub-projects

▶ Fedora Remixes are alternatives to spins

Ambassadors

- Official representatives of the Fedora Project

- Attend conferences, trade fairs and events

- Promote Fedora to users, hand out swag

- Looking for new contributors for Fedora

- Help by pointing people into correct direction

- Handle and try to answer and satisfy all kind of requests by visitors and users at events

Fedora Hosted

- Sponsored by the Fedora Project

- Alternative to SourceForge/LaunchPad

- Allows upstream developers to host their code and collaborate online

- Not necessarily Fedora-own projects

- Different VCS: GIT/BZR/HG/SVN

- Optional: Trac instance and mailman lists

Thank you!