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Hat Making:
How Fedora is run and why

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Required Magic
advanced technology

Agenda

- What is Fedora?
- Governance
- Changes process
- Release schedule
- Release process
- Building packages
- Q&A

But first – housekeeping!

- Nice things:
  - @FunnelFiasco on Twitter
  - bcotton@fedoraproject.org on email
  - bcotton on Freenode IRC
- Not-nice things: `/dev/null`
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- These slides: http://funnelfias.co/oslo2020-slides

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But first – who is this guy?

- Ben Cotton
  - Senior Program Manager at Red Hat
    - Primarily the Fedora Program Manager (also CentOS Stream)
  - Minor contributor to a handful of open source communities

What is Fedora?

Fedora is a community

- Non-Red Hat employees
- Red Hat employees working on Fedora as their day job
- Red Hat employees working on Fedora outside of their day job

Fedora is group of communities

@FunnelFiasco

Photo by Sebastian Pena Lambarri on Unsplash

Fedora deliverables

Spins and Labs: KDE, XFCE, LXQT, MATE-Compiz, Cinnamon, LXDE, SOAS, Astronomy, Comp Neuro, Design Suite, Games, Jam, Python Classroom, Security Lab, Robotics Suite

Fedora in the ecosystem

Fedora

Operating system developers

CentOS Stream

Ecosystem developers

RHEL

Enterprise application developers

Governance

Fedora Council

- Top-level governance body
- Sets goals, governs finances and trademarks
- Final arbiter of complaints
- Decision making on a consensus model

Fedora Council members

- Fedora Project Leader (FPL)
- Fedora Community Action and Impact Coordinator (FCAIC)
- Two elected members
- Objective leads
- Representatives from FESCo and Mindshare Committee
- Fedora Program Manager (FPgM)
- Diversity & Inclusion Team representative

Fedora Engineering Steering Committee

- Engineering oversight body
- Approval of technical changes, package disputes, release schedule, etc
- Nine members, all community-elected

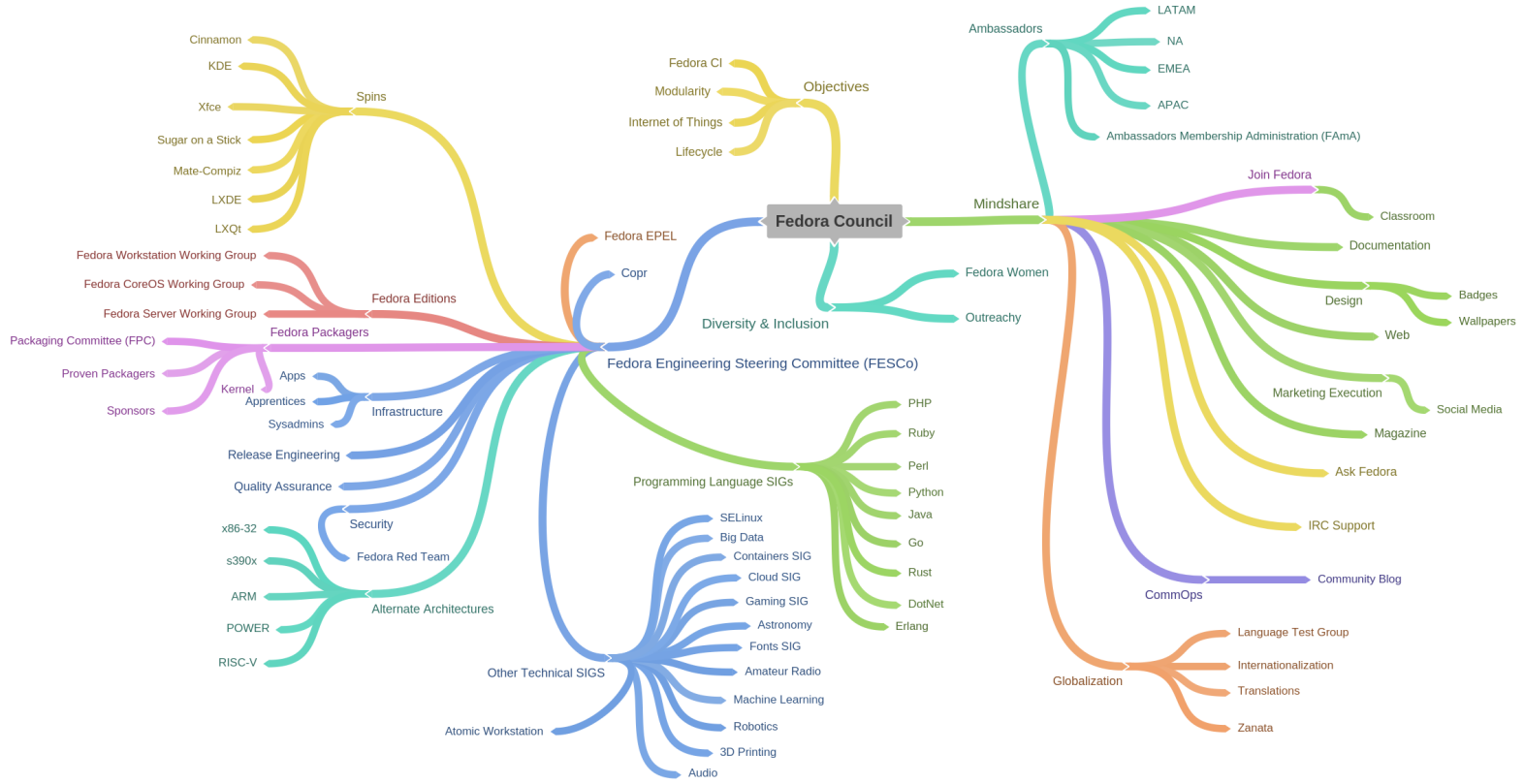
Fedora Mindshare Committee

- Outreach and community oversight body
- Responsible for Ambassadors, marketing, websites, etc
- Membership
  - Two elected
  - Seven selected by component teams
  - FCAIC

Fedora Diversity & Inclusion Team

- What it says on the tin
- Reports to the Fedora Council
- Runs Fedora Women's Day and other events

Fedora org chart



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Red Hat (thus IBM)

- Provides financial and material sponsorship
- Generally hands-off

Changes process

Goals

- Communication
- Coordination
- Accountability
- **not** gatekeeping

Changes process

- Two categories: System-Wide and Self-Contained
- Some key elements:
  - Detailed description
  - Contingency plan
  - Upgrade impact
  - Release Engineering check

Life of a Change proposal

- Submitted to the FpgM
- Announced on devel{,-announce} mailing list
- 1 week community comment period
- Submitted to FESCo for approval
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Release schedule

Fedora release lifecycle

- Major releases every April and October
- No minor releases or (official) respins
- Releases are end of life 4 weeks after N-2 release
- No alpha
- Beta release ~5 weeks before GA
- Rawhide is the rolling development stream

Key release milestones

Name	Start	End	Duration
Change Checkpoint: Proposal submission deadline (Changes requiring infrastructure changes)	Wed 2020-12-16	Wed 2020-12-16	0
Change Checkpoint: Proposal submission deadline (Changes requiring mass rebuild)	Tue 2020-12-29	Tue 2020-12-29	0
Change Checkpoint: Proposal submission deadline (System Wide Changes)	Tue 2020-12-29	Tue 2020-12-29	0
Change Checkpoint: Proposal submission deadline (Self Contained Changes)	Tue 2021-01-19	Tue 2021-01-19	0
Mass Rebuild: RPMs first, then modules	Wed 2021-01-20	Tue 2021-02-09	20
Keepalive deadline for spins	Wed 2021-01-20	Wed 2021-01-20	0
Software String Freeze Reached	Tue 2021-01-26	Tue 2021-01-26	0
Change Checkpoint: Completion deadline (testable)	Tue 2021-02-09	Tue 2021-02-09	0
Branch Fedora 34 from Rawhide	Tue 2021-02-09	Tue 2021-02-09	0
Post-branch Freeze (end date approximate)	Tue 2021-02-09	Fri 2021-02-12	3
Bodhi updates-testing activation point	Tue 2021-02-23	Tue 2021-02-23	0
Change Checkpoint: 100% Code Complete Deadline	Tue 2021-02-23	Tue 2021-02-23	0
Beta Freeze (starts at 1400 UTC)	Tue 2021-02-23	Tue 2021-03-16	21
Beta Release Public Availability	Tue 2021-03-16	Tue 2021-03-23	7
Beta Release (Preferred Target)	Tue 2021-03-16	Tue 2021-03-16	0
Beta Target date #1	Tue 2021-03-23	Tue 2021-03-23	0
Final Freeze (starts at 1400 UTC)	Tue 2021-04-06	Tue 2021-04-20	14
Final Release Public Availability (GA)	Tue 2021-04-20	Tue 2021-04-27	7
Preferred Final Target date	Tue 2021-04-20	Tue 2021-04-20	0
Current Final Target date	Tue 2021-04-20	Tue 2021-04-20	0
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Fedora 32 EOL auto closure	Tue 2021-05-18	Tue 2021-05-18	0

Release process

Blockers & Freeze Exceptions

- Not all deliverables are release-blocking
- Release criteria define requirements, but we can make exceptions
- Weekly blocker review meetings plus asynchronous voting
- Freeze is to give QA a fixed target.
  - Exceptions to fix blockers and other significant issues (particularly if it affects live media)
- We also have a Prioritized Bugs process for important-but-not-blocking bugs

Go/no-go decision

- Check to evaluate if all blockers have been fixed (or waived) and if the Release Candidate compose is sufficiently tested
- Push back a week if not (although sometimes we'll try again the next day if there's a single issue to fix)
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Bug tracking

Bugzilla

- Bug tracker for Fedora components
- We branch bugs when we branch the code
- Close EOL bugs one month after the N-2 release (~13 months)

Building packages

dist-git

- Pagure instance at src.fedoraproject.org
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- Some have discussed moving to a source-git model, but we're not there yet

Build and updates

- Build system: Koji
  - Copr is available for unofficial builds
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https://getfedora.org
https://spins.fedoraproject.org
https://labs.fedoraproject.org

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Fedora Council

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For more information, see
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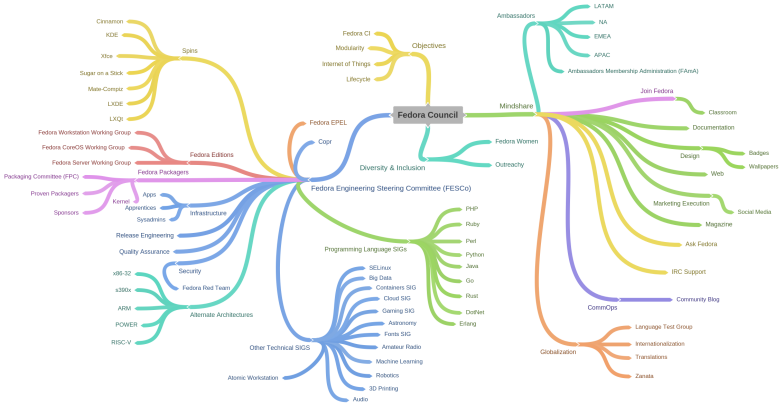

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http://funnelfias.co/devconfcz2019-video1

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Blocker bug process:
https://fedoraproject.org/wiki/QA:SOP_blocker_bug_process

Freeze Exception process:
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Prioritized Bug process:
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