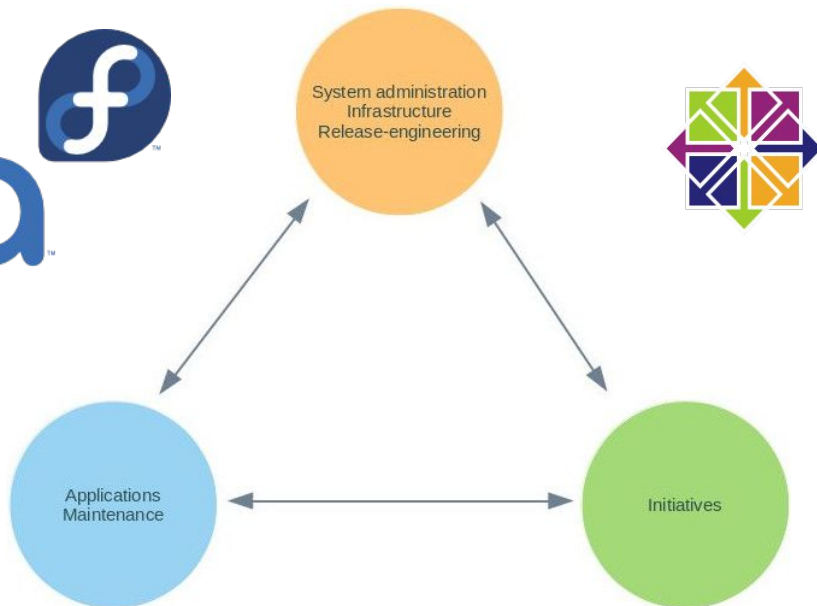# CPE Year in Review

The Community Platform Engineering Team

Leigh Griffin, Engineering Manager
Pierre-Yves Chibon, Technical Lead
Aoife Moloney, Product Owner

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Our Scope

Mission Reminder

Our New Logo:

Lots of Symbolism in it and with thanks to Mo Duffy and her creative ability :)

'go raibh maith agat Máirín'

Scope of Responsibility: Services

- Last Flock our scope was ~130 services that we had designated ownership of

- 56 Applications we designated as Run and Maintain
  - This means we are on the hook for bug fixes, upgrades, enhancements

- 35 Applications we Host only
  - We provide Power and Ping
  - We try and restart where we can
  - We have no domain knowledge of the Application

- Struggling to reduce that number because invariably it is useful to some people

- Difficult decisions will need to be made with the community over the coming year particularly as GDPR means we cannot gift the app to someone -- we lose the data

Scope of Responsibility: Infrastructure

- Fedora
  - 117 physical systems
  - 250 Virtual Systems
  - Multiple ex-VMs that are now OpenShift pods that are coming back online post colo

- CentOS
  - 147 physical servers

- CentOS CI
  - 278 physical servers

- Regular maintenance, patches, security updates, networking, backups, hardware upgrades, warranties……..

Team Composition

- Several new hires joined CPE in the past year
  - Expanded our Infra team with 2 new hires
  - Replaced team members in our development side
  - Product Owner role created
  - Expanded the management team to adjust to growing numbers

- Infra / Sys Admin: 5
- Releng: 2
- Software Engineering: 14
- Documentation: 1
- Intern: 1
- Agile Practitioner: 1
- Product Owner: 1
- Management (People): 3

Projects we Completed (Flock to Nest timeframe)

Projects & Their Community Value

- Rawhide Gating
    - Gate rawhide packages before they land in the buildroot
    - Fully automatic (when all goes well)
    - Multi-months (years?) effort
    - Multi-systems and teams
        - Fedpkg
        - Koji
        - Bodhi
        - Fedora CI
        - greenwave/waiverdb
    - Late 2019

Projects & Their Community Value

- Noggin
  - Replaces FAS2
    - FAS started in 2008
    - Python2 only
    - TurboGears 1
    - Runs in a RHEL**6** container
  - Self-service/Community portal for FreeIPA
  - Modern:
    - FreeIPA for the backend
    - 2FA built-in
    - Python3, unit-tests, Flask, OpenShift...

  - Multi-months (work started in January)
  - Multi-teams (CPE, IPA)
  - Multi-communities (Fedora, CentOS, OpenSUSE)

Projects & Their Community Value

- CentOS-Stream
  - Red Hat's effort to open its build pipeline

  - Multi-months (work started in fall 2019)
  - Multi-teams

Projects & Their Community Value

- DNF counting
  - Better statistics based on the `countme` value that dnf now sends (~once a week) when retrieving the repositories metadata.
- Fedora-messaging
  - A number of applications have been ported from fedmsg to fedora-messaging
  - Still some work to be done to add message schemas to them
    - Required to replace FMN
    - Required to upgrade datagrepper
- Toddlers
  - "A bunch of small programs running around"
  - Plugin-based fedora-messaging consumer
    - Sync people from FAS to bugzilla
    - Flag commits on successful build
    - Flags PRs on CI run
    - …
    - (Sync Assignee/CC from dist-git to bugzilla)
  - Step forward in retiring fedmsg

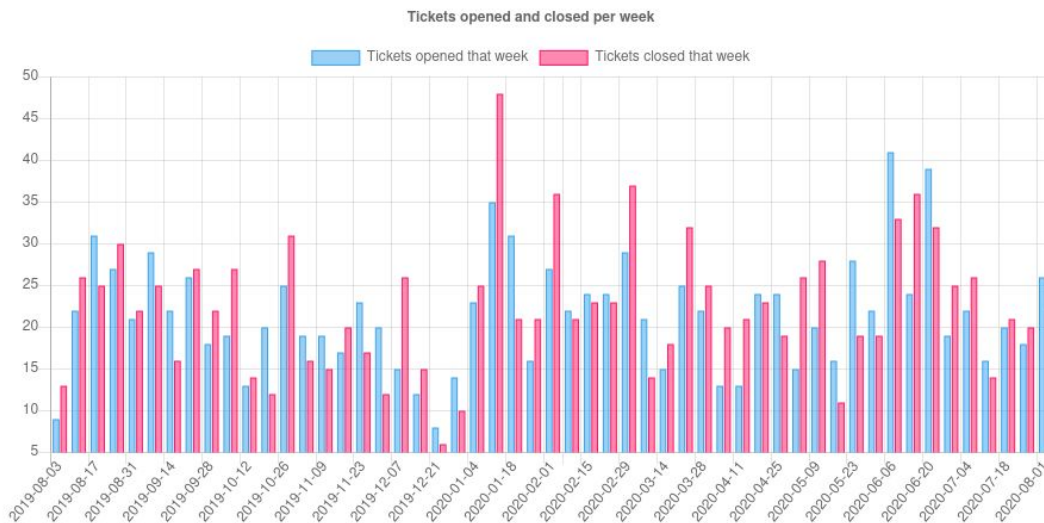# Projects & Their Community Value

- EPEL8
  - Setting up the build environment
  - Build the initial buildroot
  - Initial work for Module support
- MBBOX
  - Module Build in a Box
- rpmautospec
  - Getting rid of changelog and release fields in spec files
- Monitor-gating
  - How well is the packager workflow working?
  - End-to-end testing
  - Involves more than 10 systems (fedpkg, dist-git, koji, bodhi, sigul, fedora-messaging, CI...)
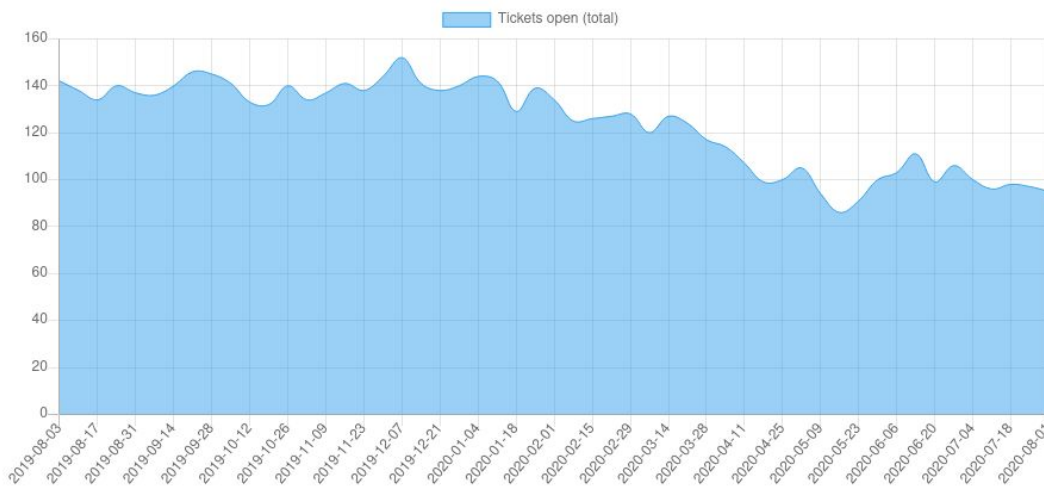 - Happy path

And Oh yeah… A Data Centre Move!

Some Fun Numbers

- 107 Servers Moved
- 76 Servers retired
- 31 affected services
- 23 weeks of moving
- 20 transit days
- 12 months of planning and executing
- 8 immediate team members from Red Hat IT and CPE
- 3 data centres
- 3 managers 'managing'
- 2 sys-admins holding down the fort
- 1 Product Owner praying
- And a partridge in a pear tree

And Oh yeah...
business as usual

Tickets opened and closed per week

Legend: Tickets opened that week · Tickets closed that week

Evolution of the number of open tickets over the last year

Legend: Tickets open (total)

Red Hat

How to work with us

Why, Who, How?

WHY
- Create structure for the team by pre-planning our work
- Set expectations for our teams stakeholders
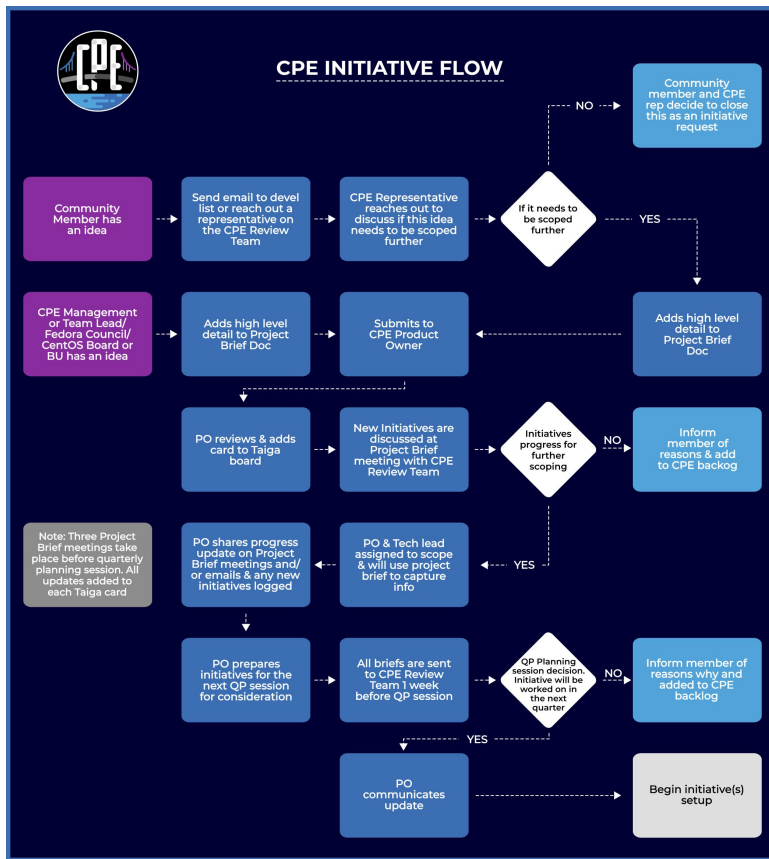- Establish clear goals that our project teams can deliver on

WHO
- CPE Review Team - Management, Team Leads, Product Owner
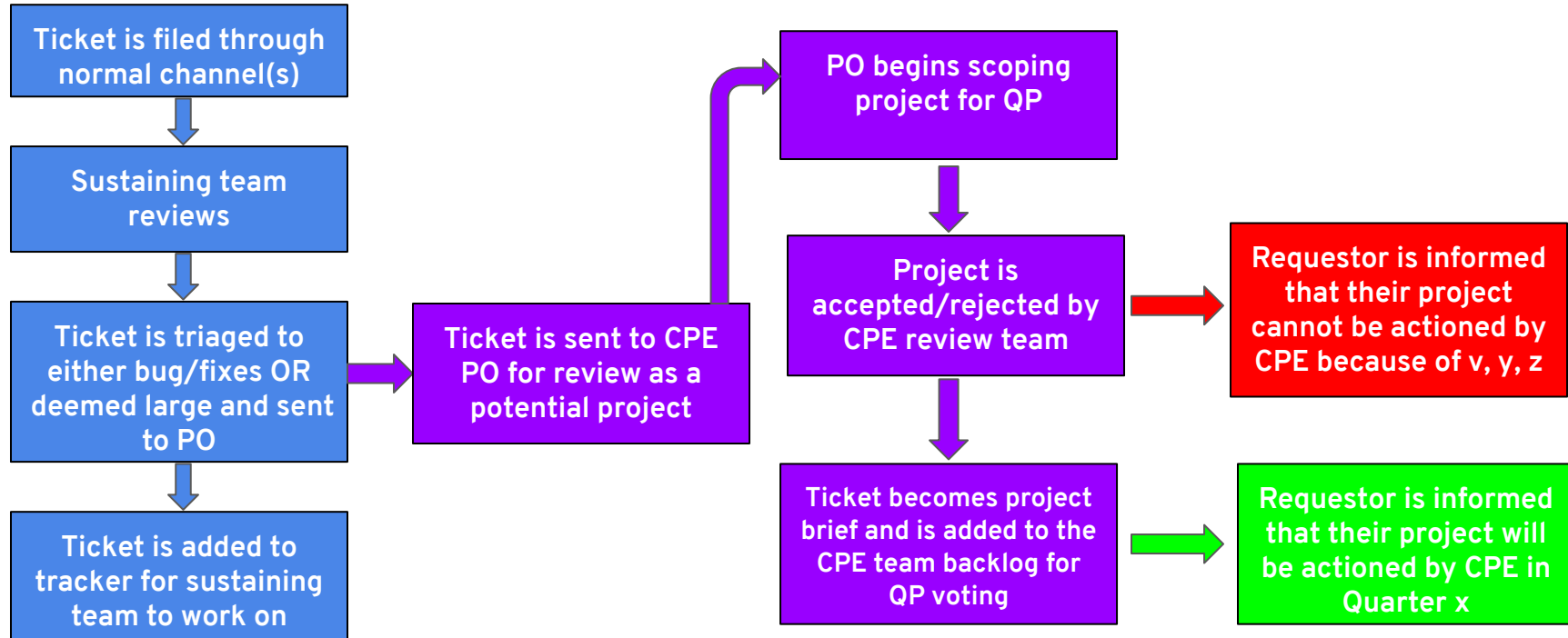- Community Reps - Fedora & CentOS
- Business Rep - Red Hat

HOW
- Email - amoloney@redhat.com (for project requests)
- Open A Ticket - normal channels
- Message - #redhat-cpe or amoloney on Freenode
- Join my weekly office hours, Thursdays at 13:00 UTC #fedora-meeting1

CPE New Initiative Process

The Community Edit

Ticket is filed through normal channel(s)

↓

Sustaining team reviews

↓

Ticket is triaged to either bug/fixes OR deemed large and sent to PO

↓

Ticket is added to tracker for sustaining team to work on

→

Ticket is sent to CPE PO for review as a potential project

→

PO begins scoping project for QP

↓

Project is accepted/rejected by CPE review team

→ Requestor is informed that their project cannot be actioned by CPE because of v, y, z

↓

Ticket becomes project brief and is added to the CPE team backlog for QP voting

→ Requestor is informed that their project will be actioned by CPE in Quarter x

Community feedback on the process so far

- Continue to communicate regularly on projects & updates

- Less acronyms & abbreviations in comms :)

- Publish team members timezone on docs.fpo/cpe to help define our 'working hours'

- Publish the workflow diagram to docs.fpo/cpe and add filtered versions that are user specific

- Office Hours on IRC are a useful way to contact team Product Owner

- Public tracker for bugs

Key Dates for Your Diary!

August 30th - Complete our Survey (sent to devel, infra)

September 9th - New Initiative Submission Deadline

September 18th - CPE Quarterly Planning Session

September 30th - Quarter 3 ends

October 4th - Quarter 4 projects begin

Future Challenges

Managing our Workload

- Tackling our Business as Usual / Lights on Work for Fedora
  - Currently it's taking >50% of the total available team
  - This leaves very little room to innovate and build new things

- Technical Debt focus for the upcoming year
  - Recent colo move almost killed our ability to service the project
  - Need to make hard decisions and retire applications
  - Need to reauthor some key applications

- Getting more help on our workload
  - Help is always appreciated
    - https://fedoraproject.org/wiki/Infrastructure/GettingStarted
  - #redhat-cpe on Freenode
  - Join any of the weekly IRC meetings we are involved in

Better Communications

- Lessons were learned from the Gitforge ODF
    - Higher touch point on comms needed
    - More direct feedback with the Community and not through our stakeholders

- We have a survey we would love you to complete:
    - https://fedoraproject.limequery.com/696793?lang=en

- We want to involve you more in our comms and our planning
    - Let us know what is working
    - Let us know what we can improve on
    - Let's continue to work together

Open Q&A

Contact any of us with questions:

{lgriffin,amoloney,pingou}@redhat.com

in linkedin.com/company/red-hat

f facebook.com/redhatinc

▶ youtube.com/user/RedHatVideos

🐦 twitter.com/RedHat