How Our Mainframe-Focused Working Group Solved Our Linux Distribution Maintainer Isolation Problem

Elizabeth K. Joseph, IBM
I’m the only one who cares about it 😭
Elizabeth K. Joseph

Linux Systems Administrator by trade

Wrote books about Ubuntu and OpenStack

Contributor to open source projects and events for 20+ years

In 2019 I joined IBM to work on Linux on mainframes (IBM Z), and today I lead the Open Source Program Office for IBM Z
Time machine! OpenStack Infrastructure

Worked on the OpenStack Infrastructure team from 2013-2016

Everything we did was open source (aside from passwords, keys…)

Lack of appreciation from the community for much of our work

Interesting problems securing this environment, not many people to collaborate with on it, or so we thought…
OpenSourceInfra.org

Website with list of other open source projects with open source infrastructure

Git repository that anyone can propose additions to update the website

Mailing list

IRC channel

In-person events/talks
Maintaining Linux Distros on Mainframes

- Non-x86 architecture
- Specialized hardware, with some access constraints
- Specialized expertise
  - Technical architecture (Endianess, devices)
  - Deep understanding of the user community and their use cases to help determine which packages are essential
Maintaining Linux Distros on Mainframes

“What is s390x?”

“What’s a mainframe?”

“No one uses this.”

“You’re holding up the release.”

“You’re the only one who can fix this.”
But you’re not alone!
We share the load (and the pain)

12 March 2024

Recording: https://zoom.us/rec/share/metqywTji0O6gaKVbhHTzZQ5TPH4QSanYkKwKMKKw43HroCmNXL1U04BPmjV5q_tKkDqksvlgdVxyTy

Attendees
- Elizabeth (Lyz) K. Joseph (IBM)
- Gayathri Berli (Debian)
- Vignesh (Redpanda upstream)
- Marcela Maslanova (SUSE)
- David Edelsohn (IBM)
- Neil Hanlon (Rocky Linux)
- Sarah Julia Kriesh (openSUSE)

Agenda
- On Debian libsvg depends on Cairo, Cairo depends on Pixman, so Gayathri has been working on the dependency chain to make sure all the support is in place
- Outstanding gtk bug: https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=1057782 & https://gitlab.gnome.org/GNOME/gtk/-/issues/6260 - but do we really need this on s390x?
- All good from Rocky Linux and SUSE
- Vignesh brought up a dependency chain request via pytorch, which resulted in...
  https://github.com/pytorch/pytorch/issues/99305
  - VM request was made for Apache Arrow, which Lyz granted yesterday: https://github.com/apache/arrow/issues/20102
Sarah of openSUSE brought up a build issue, Dan of Fedora has a patch!

  (the server is fine, which is the more common use case)
  - Ulrich checked - upstream claims to support it, a patch went in in March 2021
  - FYI Fedora patch: https://src.fedoraproject.org/rpms/xrdp/blob/rawhide/f/xrdp-0.9.16-arch.patch
Dan of Fedora brings an issue with LDC, Ulrich of the tools team at IBM starts looking into it
Elizabeth of IBM learned via social media that a Linux distro was at risk of dropping their port, Ulrich's team jumped in.

**drop s390x**

Rust is increasingly a dependency for key Alpine components, and Rust does not work on s390x.

In addition, Alpine is not getting sufficient community interest to keep the port in good shape (I am pretty much the only one working on it these days), while there is no engineering support from IBM for the port.

As such, I would like to propose decommissioning the port, unless the TSC approves a plan to keep it going that involves IBM and other stakeholders.

Incidentally, a quick poll of known downstream consumers (e.g. Kubernetes Ingress) of Alpine s390x did not indicate that s390x support was terribly important to them.
Shared tooling: openQA

Welcome to openQA
Life is too short for manual testing!

Learn more

openSUSE Tumbleweed
• Build20240409 (about 21 hours ago)

Welcome to openQA
Life is too short for manual testing!

Learn more

AlmaLinux Prerelease x86_64
We’re not alone any more!
How you get there: Just do it!

I was no one special

- Individual contributor on the OpenStack Infrastructure team
- Developer Advocate at IBM working on mainframes who saw a need in the Debian community
How you get there: Where?

- Is there a foundation, trade association, or other organization that already exists, see if they have resources to leverage
  - Tip: Come back to this periodically

- Does it make more sense to self-host?
How you get there: Share it!

- Directly reach out to others who are in a similar position (chat, email, in-person)
  - Preferably get at least 1-2 others on board BEFORE you launch
- If it’s part of an existing organization, ask how they can help spread the word
  - Social announcement? Blog post? Podcast?
- Share it on your own social media
- Share it within your community
Maybe give a talk on it ;)

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Be

- Be welcoming
- Hold *regularly* scheduled meetings
- Stay on top of PRs (or whatever requests are applicable)
- Respond to mailing list/forum/chat messages
- …extend beyond your original mandate? (we did)
Questions?

lyz@princessleia.com | lyz@ibm.com

@pleia2@floss.social