



OPEN
MAINFRAME
SUMMIT

Togetherness of
Linux Distributions on
the Whole Open
Source Software
Development Life
Cycle

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- Purpose
- Background Linux Distributions Working Group
- How it works
- Support in development
- Expansion with automated tests
- openQA
- Resources



To oversee the health and maintenance of the s390x port of various Linux distributions to ensure that the s390x port remains a supported architecture for them all.

To this end, the group will collaborate on shared challenges and successes, work together to nurture new contributors, and make sure they also have the infrastructure they need.

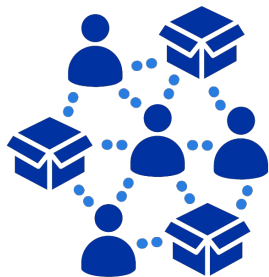




A curated collection of software, built around the Linux kernel and GNU tools, that comes together to create an operating system that can be used on desktops, servers, embedded devices... mainframes!



- “Upstream” in software projects they all include in their distributions
- Shared security disclosure mailing lists
- Knowledge sharing at industry events, SIGs, and **WGs**, like us!



OPEN **MAINFRAME** PROJECT

Linux
Distributions

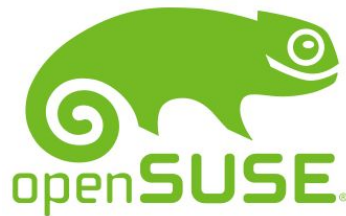
Working Group



Our Linux Distributions



debian





We largely collaborate via mailing list and monthly team meetings to discuss:

- Outstanding issues of note that may impact others
- Efforts and strategies to resolve issues
- Sharing of patches
- Help with infrastructure requirements
- Porting efforts at IBM from their tools teams



For example...



Participants in the WG worked through issues in the following this past year:

- [device interrupts for virtual card readers that were ignored by the kernel](#) (patch in the works!)
- [Expanded D language support](#)
- Possible shared customer/client implementations or requirements around DPDK to garner more resources
- .NET 7 availability being worked on by multiple distributions (started with RHEL)
- libcds/firebird: First time, that the package build for s390x is successful on openSUSE
- [frame pointer option enabling](#) (already forwarded and approved with some changes)
- Ongoing fixes for [Redpanda](#) support
- [OpenMPI build errors](#)
- Issues with btrfs-progs which have [now been fixed upstream](#)
- Neovim LuaJIT support [not activated for s390x](#) upstream (ongoing)
- WebKit: [Crashes and infinite recursion in JSC::LLInt::CLoop::execute](#) on s390x



Collaborative development of automated tests for openQA!



- Sub project for automated testing by openSUSE
- Tests based on image comparison
- Used by many Linux distributions (openSUSE, Fedora, Debian, RockyLinux, AlmaLinux, KaliLinux)
- Also in use at automotive software companies

<https://open.qa/>





- AlmaLinux has contributed RH KVM tests for s390x to openQA repositories
- RockyLinux has followed after the announcement



Example of openQA



Last Builds for openSUSE Tumbleweed s390x

Responsible persons: soulodestiny, okurz, binary-sequence, skriesch

see parent group for details

• Build20230626 (about 24 hours ago) ✓ published	3 passed
• Build20230625 (2 days ago) ✓ published	3 passed
• Build20230624 (3 days ago) ✓ published	3 passed
• Build20230623 (4 days ago) ✓ published	3 passed
• Build20230622 (4 days ago) ✓ published	3 passed
• Build20230620 (5 days ago) ✓ published	3 passed
• Build20230619 (8 days ago) ✓ published	3 passed
• Build20230608 (19 days ago) 🗨	2 passed 1 failed
• Build20230607 (20 days ago) 🌘	1 passed 2 failed
• Build20230605 (22 days ago) 🗨	1 passed 2 failed

Limit to 10 / 20 / 50 / 100 / 400 builds, only tagged / all

Set mode to full screen

https://openqa.opensuse.org/group_overview/34





As a developer of an open source software project, the following page provides an overview of the technical resources available free of charge for developers seeking to build for Linux on IBM Z:



<https://openmainframeproject.org/news/developer-resources-for-linux-on-s390x/>



- Wiki:
<https://wiki.openmainframeproject.org/display/LinuxDistrosWG>
- Mailing list:
<https://lists.openmainframeproject.org/g/wg-linux-distros>
- #linux-distros-wg on Open Mainframe Project Slack



Thank you!

