

# Upstream Kernel CI

**LPC 2019 - *Birds of a Feather* session**

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# Landscape: projects

kernelci.org



Red Hat's Continuous Kernel Integration

**01** INTEL  
OPEN  
SOURCE  
.org

0-Day - Linux Kernel Performance



Linaro Kernel Functional Testing

**syzkaller**



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# Landscape: Tests

- Linux kernel test tools:
  - Kselftest, coccinelle, KASAN, UBSAN, KUnit...
- Comprehensive test suites:
  - Linux Test Project
- Subsystem test suites
  - v4l2-compliance, i-g-t, xfstests...



# Commonalities

- Monitor git branches or patches
- Build kernels
- Run tests
- Process the results
- Send emails
- Report on a dashboard



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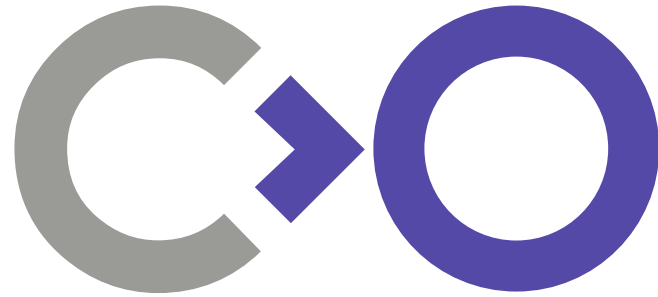
# So many wheels

- Each project has some good tools and features
- Combining them could lead to more possibilities
- Different purposes:
  - CPU architecture (Intel...)
  - Boards (96Boards...)
  - Distribution (Fedora...)
  - Kernel frameworks (Kunit...)



# Ideas

- Common test results database
- Common set of tools to orchestrate CI
- Test coverage “map”
- Shared hardware pools
- Public APIs to let components talk to each other
  - See also: “Open Testing Philosophy”



**Let's talk!**



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