



kernelci.org

(The upstream Linux kernel validation project)

by Milo Casagrande

Who is This Guy?

- Milo Casagrande
- Software Developer @ Linaro (Automation & CI)
- Developer of kernelci.org



What Are We Doing Today?

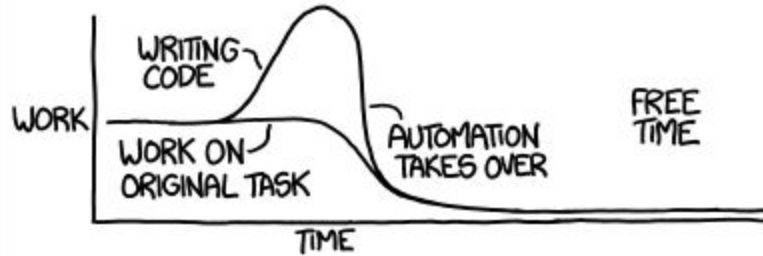
- Background
- Overview of the system
- Demos
- Q&A

Not so Long Ago...

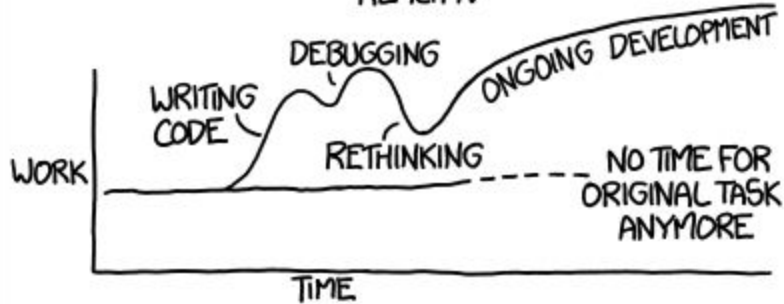
- Things were broken
- Tiny little scripts
- Doing the same thing
- Everyone on their own

"I SPEND A LOT OF TIME ON THIS TASK.
I SHOULD WRITE A PROGRAM AUTOMATING IT!"

THEORY:



REALITY:



Our Goals

Build every configuration for each architecture

Boot the results

Run tests on them

Repeat for each kernel change

Report the results in a sensible way

Profit

#exactsteps



Why?

There is something out there, but...

Why?

PLATFORM 9 $\frac{3}{4}$

To provide a platform reference for the community.



A LEGO Stormtrooper figure is positioned on the left side of the frame, standing on a sandy beach. The figure is white with a black visor and is holding a brown bucket filled with sand. The background is a blurred beach scene with sand and a small wave in the distance. The overall tone is warm and slightly desaturated.

Why?

To ensure the hard work done upstream is gross regression free.

Before Moving Forward...

- Job
 - Base unit
 - Tree + Kernel
- Build
 - Job + Defconfig
 - Artifacts
- Boot
 - Special case of test

What is kernelci.org

1 server

8 builders

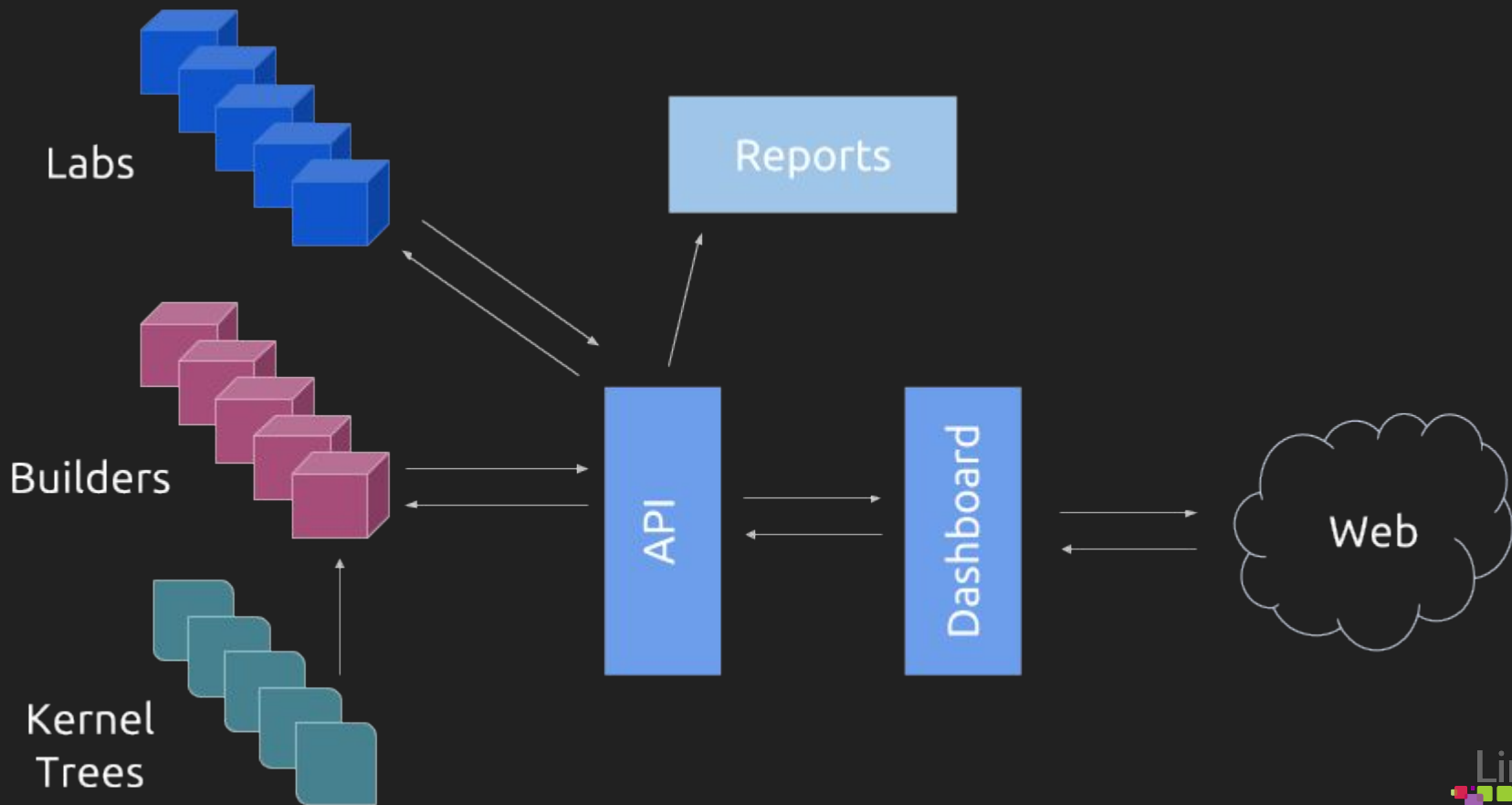
9 distributed & automated hardware labs

160 unique boards

500k builds

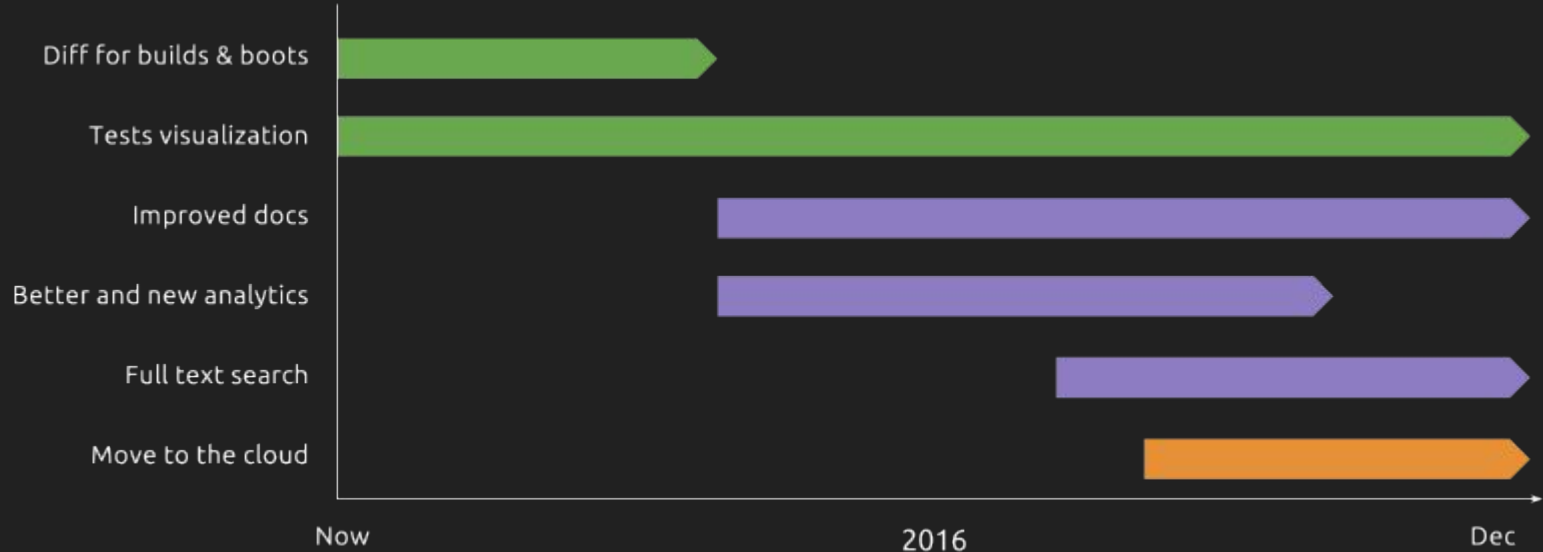
1M boot results

What is kernelci.org



Demo Time!

The Road Ahead



Wanna Help?

PUSH FOR HELP



- More hardware
- Use kernelci.org
- Confirm issues, report bugs, send patches...

Any Questions?



Get Involved!

#kernelci / FreeNode

<http://www.linaro.org/>

<https://kernelci.org/>

<https://api.kernelci.org/>

<http://wiki.kernelci.org/>

<https://github.com/kernelci/>

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