Fuego Test System
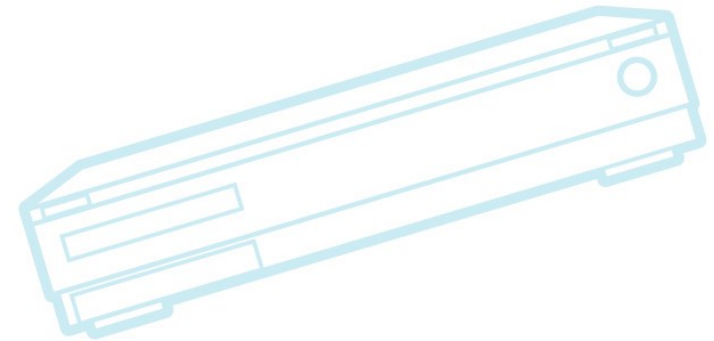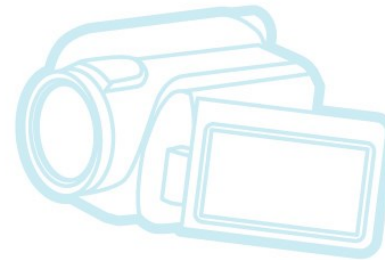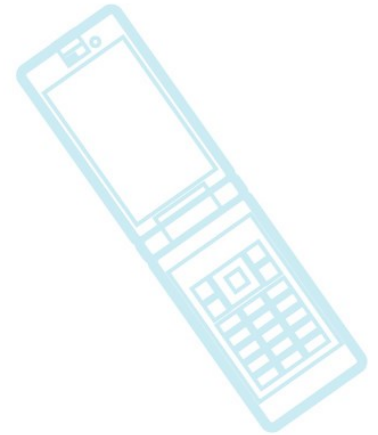# Roadmap and Priorities Discussion

June 2018

Tim Bird

Fuego Maintainer

Sony Electronics

Outline

- Old roadmap
- What to work on next?
- Projects in progress
  - Tim's working on...
  - Daniel's working on...
  - Liu's working on...
  - Wang's working on...
- Discussion
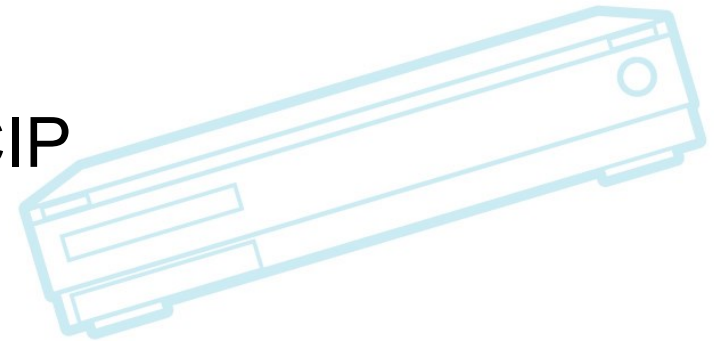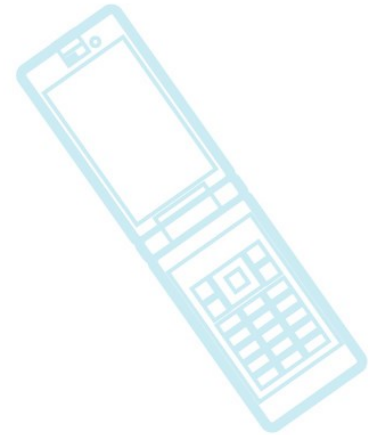
Roadmap

Recent past → Near Future → Long Term

Roadmap

- Recent past:
  - Features for LTS, CIP
    - Hardware control
- Near future:
  - Documentation
    - Conversion to reStructuredText
    - Tutorials
  - Pre-built docker image
  - More tests for AGL, LTSI, CIP
  - Sharing of customizations

Roadmap (cont.)

- Near future (cont.):
  - <u>System provisioning</u> support
    - Install of software under test
      - Has been out-of-scope for Fuego
    - e.g. AGL image deploy, LTSI kernel update, etc.
    - Full automation requires board management API
- Long-term
  - Test store
  - Distributed test network
  - Hardware testing

What to work on next?

- Things that slipped from the 1.3 release:
  - Documentation conversion
  - LTS Provisioning support
  - Pre-built docker
- Short-term items
  - Test program build cache
    - FUEGO_NO_BOARD_CONNECT ??
  - More tests
- Long-term items
  - Test server
    - ftc put-board

Projects in progress

Fuego

- Just a note:
  - This is open source...
    ### *THERE IS NO MASTER PLAN*

  - Projects get done when individual developers work on them and contribute patches
- I won't tell you what to work on
  - Your priorities are your own
- But of course we can have a shared vision...
- If you need ideas, ask me.

Tim's projects

- Easy customization
  - Expected value customization (research)
    - save baseline, compare with baseline
  - ftc set-criteria (research)
- Dynamic documentation (almost done)
  - Ability to integrate dynamic report into testcase documentation
- Test program binary cache (new)
  - Build deployable tarballs for test program binaries
    - in /fuego-rw/cache/<platform>-<testname>-assets.tgz
  - May help with LAVA integration

Easy test customization

- Customizable system state check
  - Ability to save a snapshot of system status or behavior
  - Example:
    - "I want the system to still have X"
    - "I want the system to continue to be able to do Y"
- Make it very easy to capture state or behavior
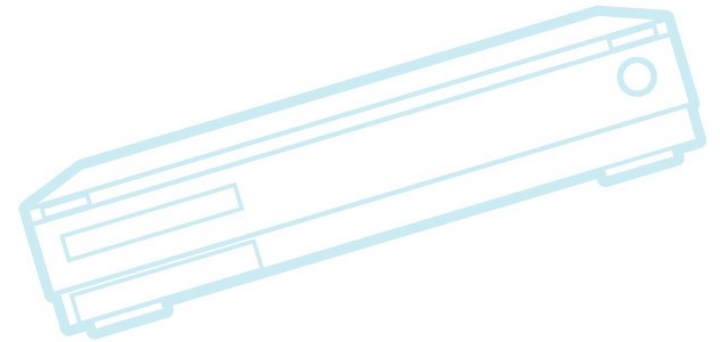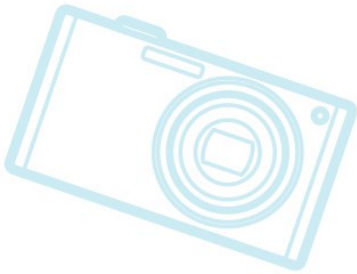- Reduce maintenance of tests

Features in progress (slightly)

- Fuego centralized test server
  - Share ad-hoc test (test package)
  - Request test on someone else's board
  - Has been on backburner
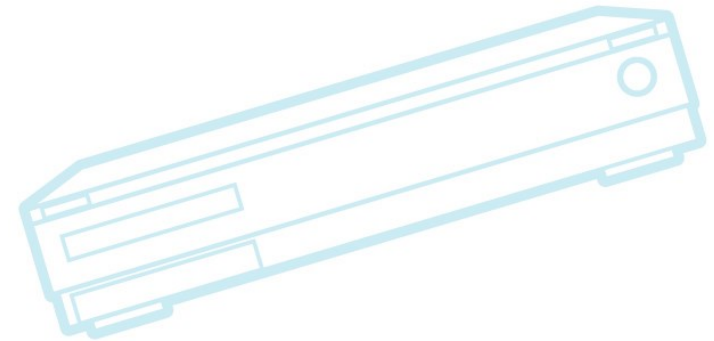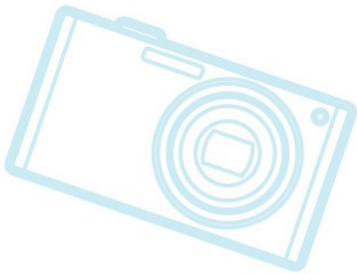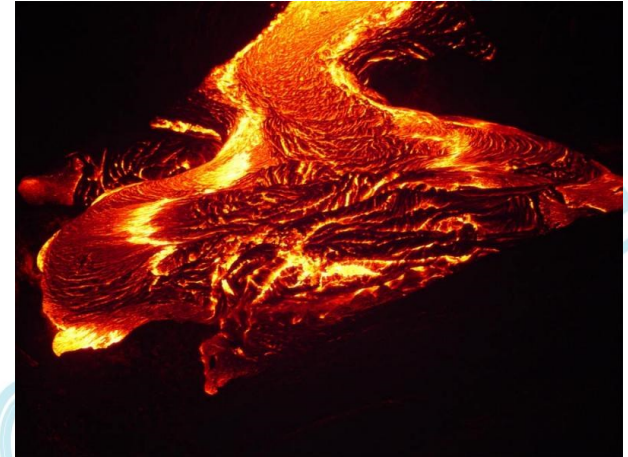- Share customizations
- Share results

Daniel's projects

- dynamic variables
- using ftc from jenkins
- publishing run.json and artifacts to Squad
- argparse
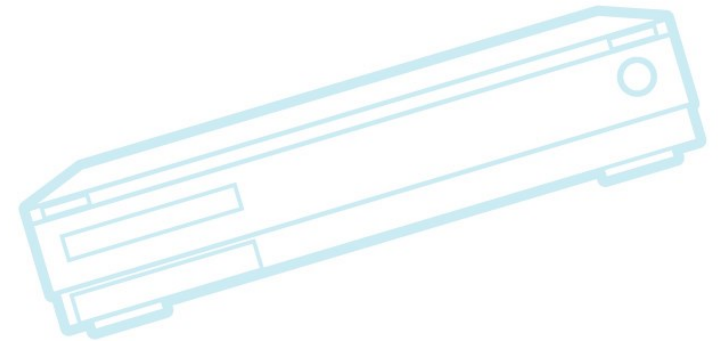- trinity (fuzzing test)
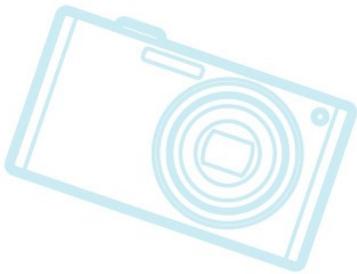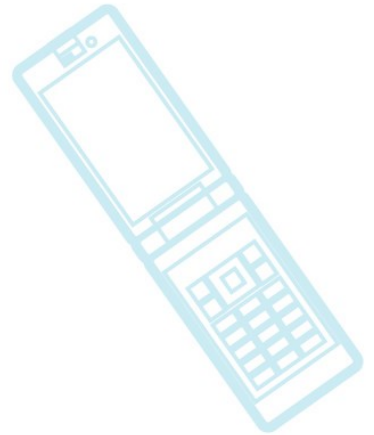- useful scripts

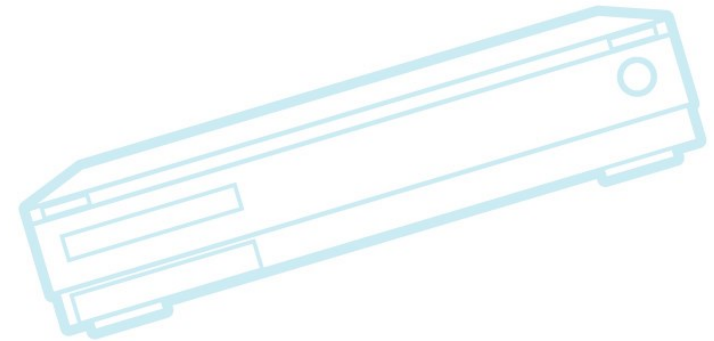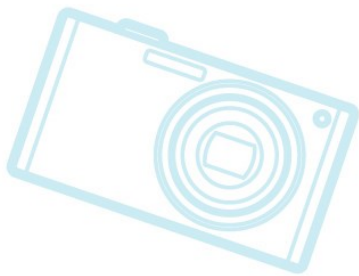# Liu's projects

- Fuego/LAVA integration

Wang's project

- busybox test suite (from scratch)

Discussion

- (use the wiki page to record information)
- http://fuegotest.org/Fuego_Jamboree_2

Fuego

Other Priorities

- LAVA integration
  - We have everything needed for transport integration
  - Need test-level integration
    - Separate build phase (done)
    - Deploy to LAVA server
    - Create LAVA test that does:
      - Execute test on board
      - Collect results