Testing the X Server

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Confession time

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What good process looks like

- Fork on github
- Clone, fix, test locally, commit, push, click "Send pull request."
- Travis-Cl runs basic tests
- Reviewer says "r+"
- bors sees the r+
- bors tries merging to master and fully tests
- bors pushes to master

Our process

- git format-patch
 - they didn't know that
- git send-email
 - their SMTP server doesn't accept it

Our process

- Review from ajax/keithp
 - hopefully
- ajax/keithp pushes to master
 - hopefully
- xtest is broken
 - nobody at any step of the process noticed

Fixing our process

- Let's build xtest
 - it was broken
- Let's run xtest
 - piglit test framework was broken

Fixing our process

- Make X maintainers run the tests
 - test/scripts/xvfb-piglit.sh
 - run with make check
- Get glamor tested
 - test/scripts/xephyr-glamor-piglit.sh
 - Xephyr -glamor on top of Xvfb
 - I heard you like X Servers

- CI of patch series
 - travis-ci branch of anholt's server
- Not really tractable with email workflow
- Can we get rid of email workflow?
- Should we use phabricator?

- make check doesn't run xtest by default
 - Needs piglit clone
 - Needs xtest build
 - Needs rendercheck build
 - Needs env vars set
- Can we automate all of that?

- run more of xtest
 - Only Xlib9 + rendercheck currently
 - Maybe look into some coverage checker?
- Need more tests written
 - xdamage?
 - present?
 - shadow and xrandr rotation?

- xtest is crazy slow
 - 1.5 minutes for Xvfb
 - 10 minutes for Xephyr -glamor
- Parallelize testing against server types? XXX
- Parallelize testing across server instances of the same type?
- Make xtest faster?
 - ajax has a branch I hear

- Test Xorg
 - I really don't care if Xephyr works.
 - modesetting driver controlling no outputs?
 - New rendernode-only driver?

Questions