The NetBSD test stack

or

What generates those reports on releng.netbsd.org?

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babylon5.NetBSD.org Test Run Logs

Port	Version	NetBSD login	Frequency	Platform
amd64	HEAD	gson, admins	ca 2x daily	QEMU/Anita
i386	HEAD	gson, admins	ca 8x daily	QEMU/Anita
sparc	HEAD	gson, admins	ca 2x daily	QEMU/Anita

Regular individual test runs

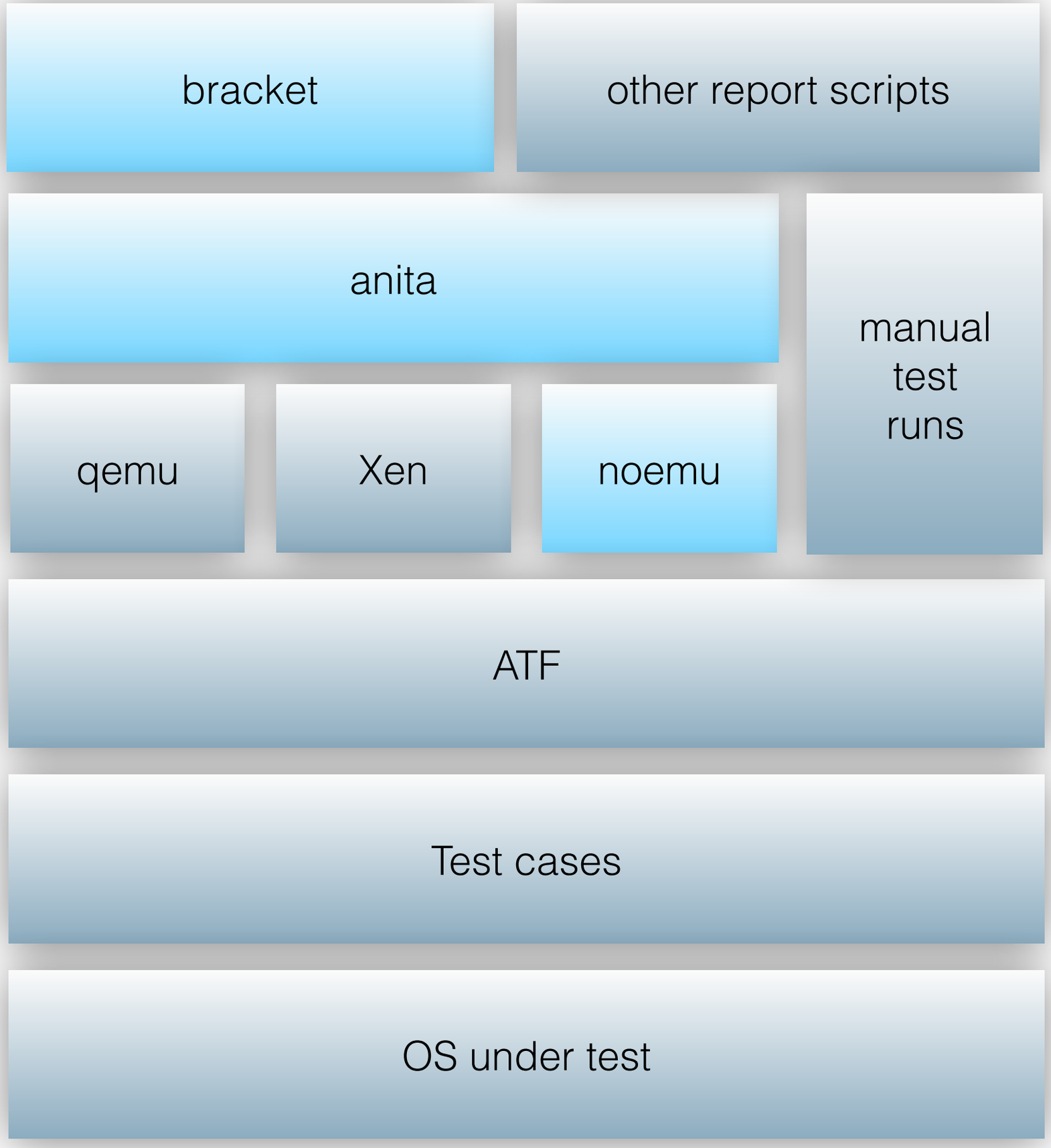
Disclaimer: The logs are provided by individuals and are not an official service of The NetBSD Project. Frequencies are approximate and subject to the availability of the people running the te

Tests against NetBSD-current

Port	Version	NetBSD login	Frequency	Platform
alpha	HEAD	martin	weekly	Digital AlphaServer DS20
evbarm	HEAD	martin	weekly	GuruPlug
evbarm	HEAD	martin	weekly	CUBIETRUCK
i386	HEAD	gson	daily	QEMU/Anita
shark	HEAD	martin	weekly	DNARD shark
sparc64	HEAD	martin	weekly	Sun v210
xen	HEAD	bouyer	daily	XEN

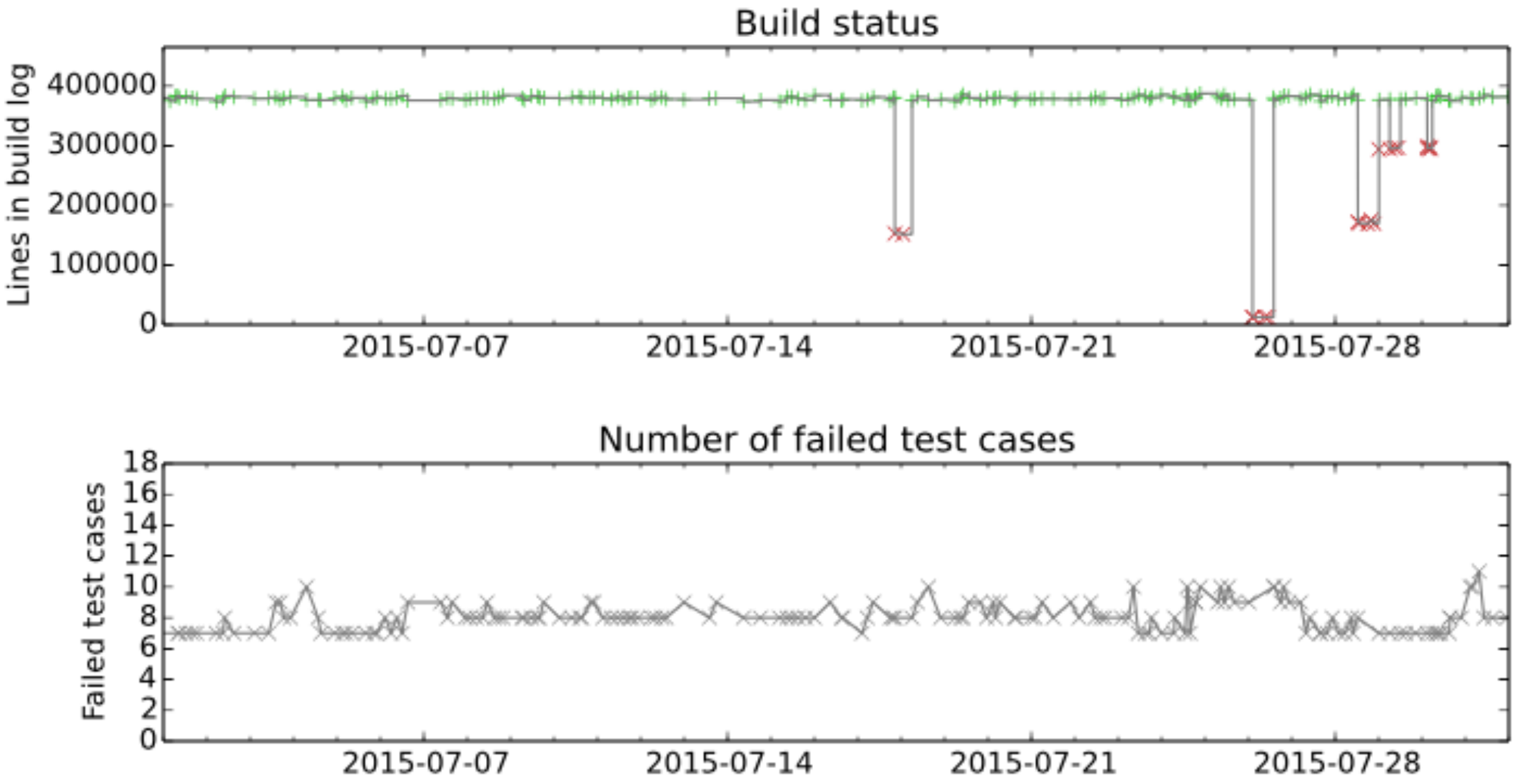
Tests against netbsd-7

Port	Version	NetBSD login	Frequency	Platform
amd64	netbsd-7	bouyer	daily	QEMU
i386	netbsd-7	bouyer	daily	QEMU


bracket
other report scripts
anita
manual
test
runs
qemu
Xen
noemu
ATF
Test cases
OS under test

bracket

July 2015 [details]



bracket

- Scheduled builds
- Email notification of build failures
- Automated bisection of build / install / boot failures
- HTML reports and graphs
- Treats CVS repo as a linear sequence of commits indexed by timestamp - HEAD only, no branches
- Code available on request, ask gson@
- ~5500 lines, mostly Python

bracket

Future directions:

- Email notification of ATF test failures, too
- Building every commit
  - Needs more hardware
  - Would enable personal email notifications

other report scripts

NetBSD - Port alpha - Test

Run on AlphaServer DS20 (500 MHz 21264)

September 2015

(See below for previous months' data)

This NetBSD/alpha tests are currently run manually, once or twice a week. Sources are updated and build problems fixed a more automated in the future.

Pass	Start	atf-run Results					End	Specials
		Pass	Fail	XFail	Skip			
81	2015-09-21 09:13:39	3953	5	33	101	Report	2015-09-21 10:44:14	
80	2015-09-14 11:36:47	3953	5	33	101	Report	2015-09-14 13:03:01	
79	2015-09-07 09:31:17	3950	3	35	101	Report	2015-09-07 10:57:01	
78	2015-09-03 10:42:23	3949	3	35	101	Report	2015-09-03 12:08:45	

Data for previous months

	Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr
2015					August	July	June	May	Apr
2014	December	November	October	September	August	July	June	May	Apr

other report scripts

- Many of the reports under “individual test runs” at releng.netbsd.org/test-results.html are generated by scripts written by pgoyette@, or derivatives
  - anoncvs checkout, build, test, HTML summary report
  - ~1000 lines, mostly sh
  - Available from pgoyette@

other report scripts

- bouyer@ runs tests of releng daily builds on Xen and qemu, including release branches
- Scripts not currently published, but bouyer@ is open to publishing them if there is interest

anita

Automated serial console interaction

- automated installs by screen scraping sysinst
- automated boot of the installed system
- automated tests by logging in and running ATF

qemu

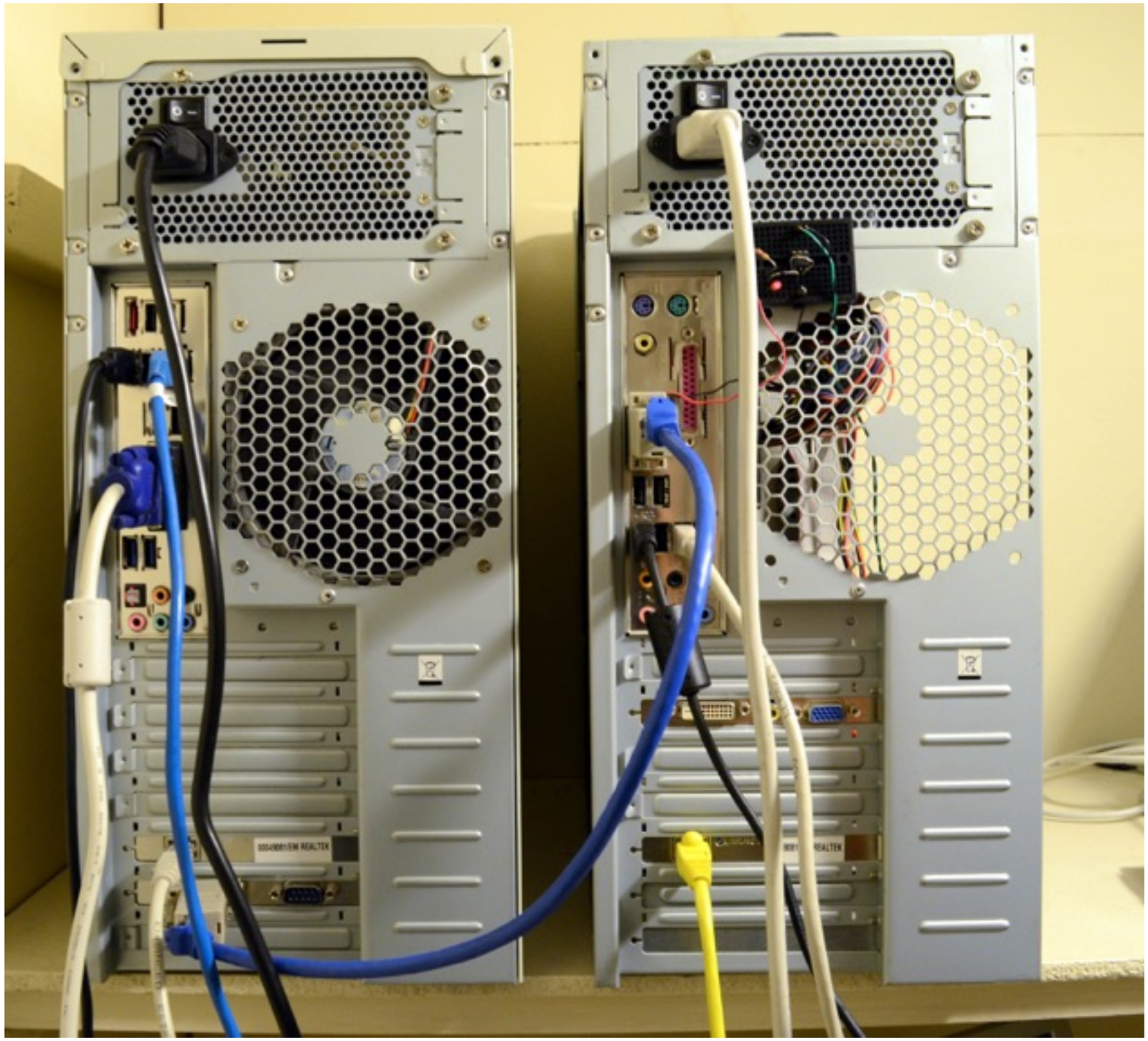
- babylon5.netbsd.org still runs qemu 0.15 because of qemu bug #1399943 affecting sparc
- qemu 2 works fine for i386, amd64
- arm, anyone?

Xen

- Anita can run in a Xen dom0 and do automated install and test of domU
- Bracket works in the dom0, too, but builds take a long time due to lack of dom0 SMP support

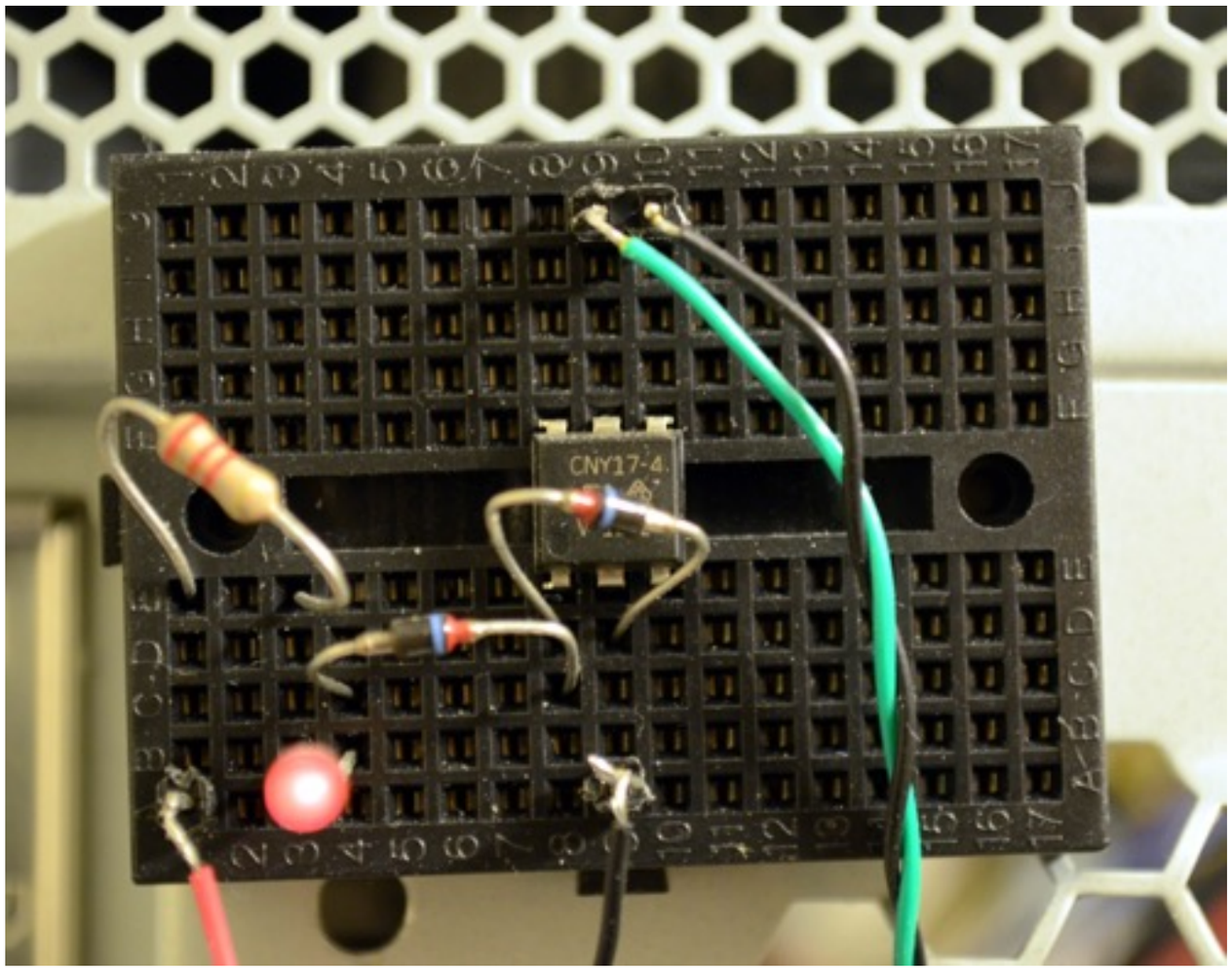
noemu

Automated installs and tests on a dedicated physical PC - no emulation



noemu

- Dedicated Ethernet segment to avoid DHCP conflicts
- Test machine netboots INSTALL kernel
- sysinst scripted by anita over physical serial console (null modem cable), does network install
- Potentially useful for regression testing of drivers and auto-bisection of driver bugs
- Reports at www.gson.org/netbsd/bugs/build/amd64-baremetal/



Custom circuitry for controlling ATX power switch via serial port

ATF

- Test framework by jmmv@
- NetBSD has compile-time option for ATF successor Kyua
- Test infrastructure currently uses ATF only
  - ATF HTML reports use 2 inodes per run
  - Kyua HTML reports use ~5000 inodes per run

test cases

- /usr/src/tests
- Run them!
- Write more!

Questions?