



Stuffing a 900lb Gorilla into a SmartPhone

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What is Fennec?





How are they going to fit
me in here?

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- Mozmill - Black box UI automation (not ready for Fennec yet)

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Platforms



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LetsGoDigital

lets go digital

Platforms

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Platforms

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Platforms



Roadmap

Fennec Test Automation



dholbert@mozilla.com - Mon Jul 20 15:30:04 2009 00

02ff5f05a1a6	Daniel Holbert - Bug 504934: XXXXXXXXXXXXXXXXXXXX	Linux	B* B L U M E T
		Mac OS X	B* L U M E T
		Windows	B L* U

smichaud@pobox.com - Mon Jul 20 15:11:10 2009 00

860db9cc9e2b	Steven Michaud - [OSX] XXXXXXXXXXXXXXXXXXXX	Linux	B* B L U M E T T T T
		Mac OS X	B L* U M E T T T T T T T T T
		Windows	B L* L U M E

neil@parkwaycc.co.uk - Mon Jul 20 13:04:59 2009 00

d347a454b338	Neil Rashbrook - Bug 504660 XXXXXXXXXXXXXXXXXXXX	Linux	B B B B L L* U U M M E E T T T T T T T S
		Mac OS X	B B* L* L U U M M E E T T T T T T T

Mac OS X	B B* L* L U U M M E E T T T T T T T T T ?
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Linux	B B B B L L* U U M M E E T T T T T
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Test Reporting

Current Approach

- Running tests on desktop build
- Decoupling the tests
- Making tools mobile
- Breaking tests into small pieces
- Stabilizing end to end
- Reducing the runtime
- Tracking results

Decoupling the Tests

- Historically, tests integrated into build system
- Required directory structure and tools
- Created makefile target to package tests into a tarball for easy distribution

Making Tools Mobile

- Python requirements for each platform
- Networking test tools (ssl, http server)
- Test harness scripts had hard coded paths
- Limited memory and storage

Breaking Tests into Chunks

- Cannot run full test harness at once
- Chunks based on directories
- Managing test data, manifest and log files

Stabilizing End to End

- Modifying test harness to look for a hang
- Collecting log files
- Getting the same results over and over again
- Device stabilization

Reducing Total Runtime

- Initial runtime for all tests end to end was 26 hours
- Test on release and optimized builds only, no debug (13 hours)
- Running on 4 devices in parallel (4 hours)
- Increasing pool to 8 devices balances parallel overhead with long tests

Tracking Results

- Instead of one log file per test suite, we now have hundreds
- Initially we would concatenate the logs and parse them for a summary
- Upload log chunks to CouchDB server

Get the source:

<http://wiki.mozilla.org/mobile/QAOSCON09>

Questions?
Thank you

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Photo Credits

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