Compiling & Debugging FF

Compiling & Running FF (Linux & Mac)

- System Requirement: 4GB of RAM & 6.4 GB HD
- \$ wget -q https://hg.mozilla.org/mozilla-central/raw-file/default/python/mozboot/bin/bootstrap.py && python bootstrap.py
- \$ hg clone https://hg.mozilla.org/mozilla-central
- \$ cd mozilla-central
- \$ echo -e "ac_add_options --enable-debug\nac_add_options --disableoptimize" > mozconfig
- \$./mach build
- Wait 45+ minutes
- \$./mach run --debug

Compiling & Running FF (Windows)

- System Requirement: 8GB of RAM & ~8 GB HD
- Requires Visual Studio 2010, 2012, or 2013
- Download and install to a path without space (i.e. C:\) https://ftp.mozilla.org/pub/mozilla.org/mozilla/libraries/win32/MozillaBuildSetup-Latest.exe
- Run start-shell-msvc20xx.bat (xx = vs version) and you get a Linux shell!
- \$ cd /c; mkdir mozilla-source; cd mozilla-source; hg clone https://hg.mozilla.org/mozilla-central
- Wait forever (~2 hours?)
- \$./mach build
- Wait forever (4+ hours)

Debugging FF with GDB

- \$./mach run –debug
- gdb\$ source .gdbinit
- Tab less.

- Run the following command when you get a crash. It tells you how you got here (call stack)
- gdb\$ bt

Debug SpiderMonkey with GDB

- \$ gdb ./obj*/dist/bin/js
- gdb\$ source js-gdb.py
- gdb\$ b js::math_abs
- js>> Math.abs(-10); Breakpoint hit!

Other links

- Old FF releases: http://ftp.mozilla.org/pub/mozilla.org/firefox/releases/
- Official FF Build Doc: https://developer.mozilla.org/en-US/docs/Simple_Firefox_build#Get_the_source
- Official SpiderMonkey Build Doc: https://developer.mozilla.org/en-us/docs/Mozilla/Projects/SpiderMonkey/Build_Documentation
- JSAPI Cookbook: https://developer.mozilla.org/en-us/docs/Mozilla/Projects/SpiderMonkey/JSAPI_Cookbook