Selenium
Making Web Browsers Obedient
What is Selenium?

- A trace mineral necessary for proper nutrition
- An ingredient of hair-care products to reduce dandruff
- The weakness of alien life forms in David Duchovny films
- A way to control web browsers through external processes
Parts of Selenium

❖ Selenium IDE
  ❖ Browser plugin to create / run Selenium tests

❖ Selenium RC
  ❖ Java server to run Selenium tests as requested

❖ Selenium Grid
  ❖ Manage Selenium RC servers by availability and browsers
Selenium IDE

Quenching the Fox
Selenium IDE

- Integrated environment to create Selenium test case
- Record browser actions
- Play back
- Export to HTML, PHP, Python, Ruby, and Perl
  - Run with Selenium RC
Demonstration
Selenium RC

- Remotely launch a browser and run a Selenium test case
- Works on almost any OS
- Works with almost any browser
  - Internet Explorer / Windows
  - Firefox / OSX
Setup Server

- Have Java installed
- Download Selenium RC
  - http://seleniumhq.com
- Run selenium-server.jar
Setup Client (Perl)

- Install Test::WWW::Selenium
- Export your test case to Perl
- If necessary, replace "localhost" with your Selenium RC
- Run
- Quickly switch to your Selenium RC to watch the fun
Demonstration
Why?

❖ Outputs TAP
  ❖ Works with prove, Smolder, and other existing tools
❖ Tests JavaScript using the browser
  ❖ Walk through a site exactly as the user would
❖ Verify that basic things work before shipping
Selenium Grid
Foxes and Swooshes and Singers, Oh My!
Selenium Grid

- Lives in front of a group of Selenium RCs
- Parallelizes
- Dispatches based on desired OS and Browser
  - "iexplore on windows"
  - "safari on osx"