

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

Jungle Love

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"

