



Web-testing automation

Selenium

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Selenium: «Литература»

<http://seleniumhq.org/>

<http://code.google.com/p/selenium/>

<http://software-testing.ru/forum/forum/129/>

<https://groups.google.com/forum/#!forum/selenium-users>

<https://groups.google.com/forum/#!forum/webdriver>

<https://groups.google.com/forum/#!forum/selenium-developers>

#selenium at Freenode (irc.freenode.net)

Что надо для работы

- Браузер(ы)
- Java SDK (Python, Ruby, .Net, PHP, Perl)
- Selenium
- Тестовый фреймворк (JUnit, TestNG)
- Java IDE (Eclipse, NetBeans, IDEA, ...)
- +
- Selenium IDE
- FireBug, Firefinder

План разработки тестов

- Записываем основу с помощью рекордера (Selenium IDE)
- Запускаем из командной строки
- Переносим на Java
- Запускаем при помощи Java
- Запускаем в отладчике (по шагам)

Step 1

- Open <http://demo.opensourcecms.com/wordpress/wp-login.php>
- Start Selenium IDE
- Start Record

Task 4

- Go to <http://demo.opensourcecms.com/wordpress/wp-login.php>
- Enter “admin” in the “Username” field
- Enter “demo123” in the “Password” field
- Click on the “Log In” button
- Verify that the text “Howdy, admin” is present
- Click on the “Posts” link
- Click on the “Add New” button
- Type “Selenium Demo Post” in the title field
- Click on the “Publish” button
- Verify that the text “Post published” is present

Selenium IDE 1.6.0 *

Файл (F) Правка Actions Options Справка

Base URL <http://demo.opensourcecms.com/>

Fast Slow

Test Case

Untitled *

Runs: 1
Failures: 0

Command	Target	Value
open	/wordpress/wp-logi...	
type	id=user_login	admin
type	id=user_pass	demo123
clickAndWait	id=wp-submit	
verifyTextPresent	Howdy, admin	
clickAndWait	link=Posts	
clickAndWait	link=Add New	
type	id=title	Selenium Demo Post
clickAndWait	id=publish	
verifyTextPresent	Post published.	
clickAndWait	link=Log Out	

Command

Target Find

Value

Log Reference UI-Element Rollup File Logging (off) Info Clear

```
[info] Executing: |open | /wordpress/wp-login.php | |
[info] Executing: |type | id=user_login | admin |
[info] Executing: |type | id=user_pass | demo123 |
[info] Executing: |clickAndWait | id=wp-submit | |
[info] Executing: |verifyTextPresent | Howdy, admin | |
[info] Executing: |clickAndWait | link=Posts | |
[info] Executing: |clickAndWait | link=Add New | |
[info] Executing: |type | id=title | Selenium Demo Post |
[info] Executing: |clickAndWait | id=publish | |
```

Task 4.1 (create test suite) almost the same

- Go to <http://demo.opensourcecms.com/wordpress/wp-login.php>
- Enter “admin” in the “Username” field
- Enter “demo123” in the “Password” field
- Click on the “Log In” button
- Verify that the text “Howdy, admin” is present
- Click on the “Posts” link
- Click on the “Add New” button
- **Type “Selenium Demo Post” in the title field**
- Click on the “Publish” button
- Verify that the text “Post published” is present

selenium.training.2.1 - Selenium IDE 1.7.2

Файл (F) Правка Actions Options Справка

Base URL

Fast Slow

Test Case

selenium.training

selenium.training.2

Runs: 2

Failures: 0

Table Source

Command	Target	Value
open	/wordpress/wp-login.php	
type	id=user_login	admin
type	id=user_pass	demo123
clickAndWait	id=wp-submit	
verifyTextPresent	Howdy, admin	
clickAndWait	link=Posts	
clickAndWait	link=Add New	
type	id=title	Selenium Demo post test
clickAndWait	id=publish	
verifyTextPresent	Post published	
clickAndWait	link=View post	
clickAndWait	link=Log Out	

Command

Target

Value

Log Reference UI-Element Rollup

File Logging (off) Info Clear

Installation

- GoTo <http://seleniumhq.org/download>
- **Selenium Server (formerly the Selenium RC Server)**

Download it

The Selenium RC server is simply a Java *jar* file (*selenium-server-standalone-<version-number>.jar*), which doesn't require any special installation.

Just downloading the zip file and extracting the server in the desired directory is sufficient.

Run Selenium Server

- Cmd
- Go to the directory where **Selenium RC's server is located** and run the following from a command-line console

- `java -jar selenium-server-standalone-<version-number>.jar -help`

```
C:\Selenium>java -jar C:\Selenium\selenium-server-standalone-2.19.0.jar -help
```

Run TestSuite for Googlechrome

- C:\Selenium>java -jar
C:\Selenium\selenium-server-standalone-
2.19.0.jar -htmlSuite ***googlechrome**
http://demo.opensourcecms.com/
C:\Selenium\selenium.training.2.suite.html
C:\Selenium\resultsFF.html

Run TestSuite for IE

- C:\Selenium>java -jar
C:\Selenium\selenium-server-standalone-
2.19.0.jar -htmlSuite ***iexplore**
http://demo.opensourcecms.com/
C:\Selenium\selenium.training.2.suite.html
C:\Selenium\resultsIE.html

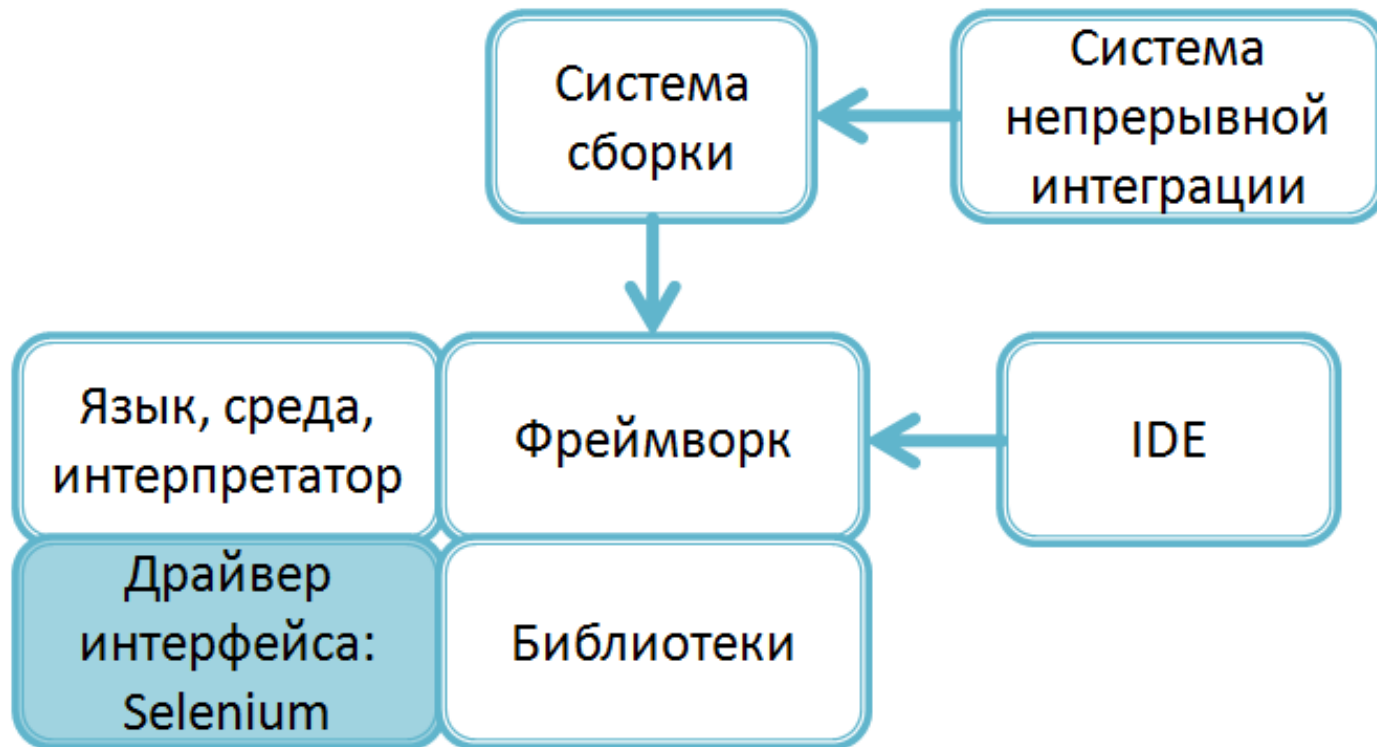
Selenium + Java

Eclipse, JUnit, etc

Eclipse

- Download from <http://www.eclipse.org/downloads/>
- Eclipse Classic
- Run Eclipse Classic

Installation guide



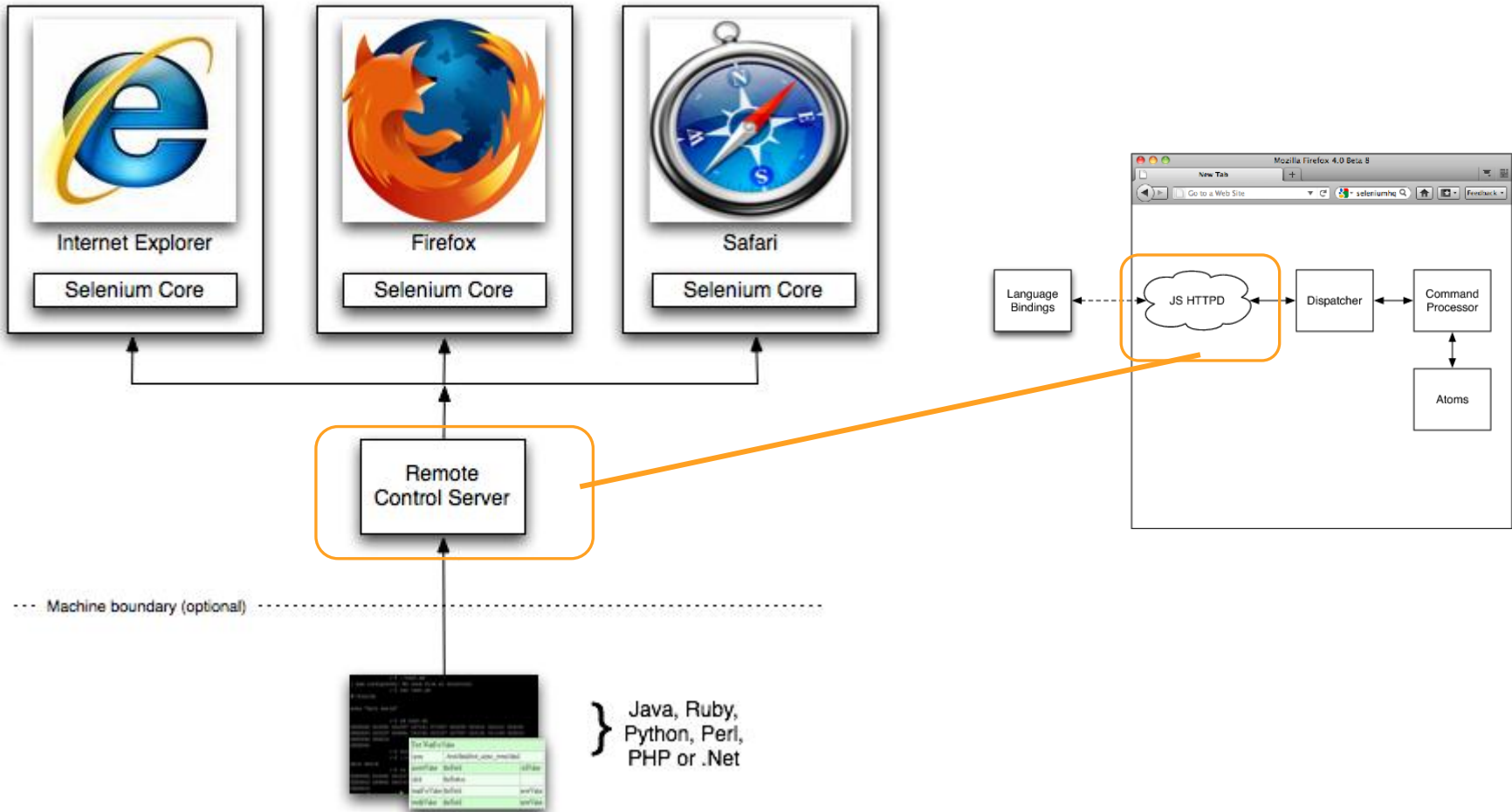
Selenium 1.0 и 2.0

- Драйвер – 1.0 vs. 2.0
- API – 1.0 vs. 2.0

	Selenium Classic	WebDriver
Selenium 1.0	+	-
Selenium 2.0	+	+

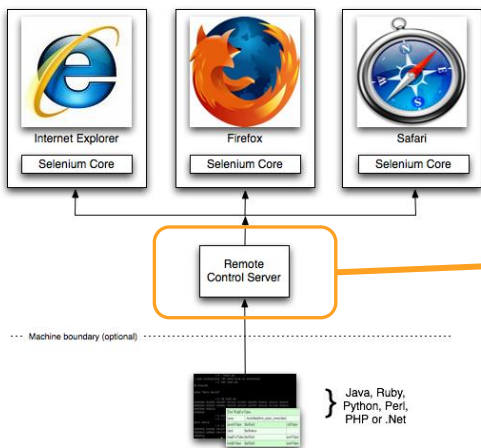
Selenium Classic vs. WebDriver

Windows, Linux, or Mac (as appropriate)...

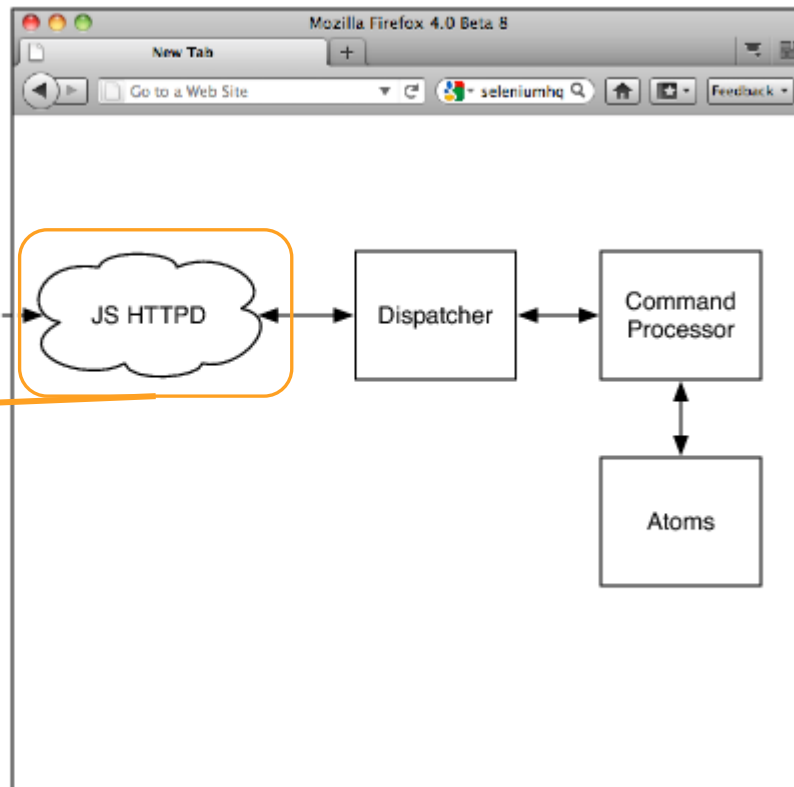


Selenium Classic vs. WebDriver

Windows, Linux, or Mac (as appropriate)...



Language Bindings



Selenium Classic vs. WebDriver

Улучшенная работа с AJAX

- имплицитные и эксплицитные ожидания
- click, sendKeys и Actions
- генерация событий
- «устаревание» элементов