

STUDY OF AUTOMATION TESTING TOOLS

COMPARISON OF THREE MOST USED AUTOMATION TESTING TOOLS

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Sr. No.	CRITERIA	WATIR	SELENIUM	WET
1	Proprietary/Open Source	Open Source	Open Source	Open Source
2	Objects Recognition – is the task of finding a given object in a video sequence.	Good object recognition.	Good object recognition.	Supported
3	Supported main Application	Browser	Browser	Browser
4	Browsers Supported	IE, Firefox, Recently on Safari.	IE , FF, Safari, Chrome and Opera	IE
5	Recording and Playback	Watir Recorder ++ is available, But it's very simple recorder. Playback is stable.	Advanced Recorder: Selenium IDE	Supported
6	Operating System	Windows (IE, FF), Linux (FF), Mac (Safari, FF).	Windows(All Browsers), Linux(FF,Opera,Chorme), Mac(FF,Safari.Chrome.Opera)	Windows(IE)
7	Test Results Reports	Watir has no reporting facilities.	Reporting is supported through the test runner and various logs, screen shots can also be captured.	Results are displayed in a easily readable HTML format
8	Programming Language	Ruby	C#, Java, Ruby, Python, Pearl and PHP.	WET scripts are written using Ruby
9	Testing Frameworks	Rspec, Cucumber, Test/Unit, WatirGrid	Bromine, Junit, Nunit, Rspec(Ruby), Test/Unit(Ruby), TestNG(Java), unittest(Pythn)	

10	Sharing of scripts.	Not in built, but can easily use something like TortoiseSVN which is free and easy to use.	Scripts can be saved in the native language or exported in a supported language for inclusion into test frameworks such as JUnit or NUnit. Version control can be done using any source control tool such as SVN, CVS, etc.	Not Supported
11	Speed of Execution	Generally fast. Watir speed varied a lot according to various network topologies.	Speed of execution via the Selenium IDE can be varied, the setting is from 'fast' to 'slow'.	Medium, however the time needed for recording may vary from application to another
12	Datapools for Data dynamicity	Supported through a third party driver.	Supported through Junit	Supported, data table supported using either Excel spreadsheet or XML
13	DB Access	Supported through a third party driver.	Supported through Junit	Supported through a third party driver.

Watir	Selenium	WET
Pros:	Pros:	Pros:
It's a Ruby library	Build in standard library. Multi browser, OS & language support	It's a Ruby library
Multi browser (& OS) support	Install server-side or as FF add-on	Support IE
Has a rich API	Has its own IDE called as Selenium IDE	Has a 'Simple' class (for non-tech users)
Has a 'Simple' class (for non-tech users)	Record and playback tests	Runs on top of Watir.
		Has a rich API
Cons:	Cons:	Cons:

Every browser requires a different library	Have to learn Selenese (Unless you write tests in another language which it supports. Then you just have to use the API reference which is straightforward)	Supports for only one browser.
Very basic recorder that requires a lot of editing which is time consuming.	Components are difficult to set-up.	Supports only one OS.
Recommend to use on IE: IE developer toolbar, Web metrics	Selenium does not natively support features required by testers such as iteration or data driven testing and there is difficulty testing Flash that has to be overcome by changing Action scripts	Hardly to deal with JavaScript's error
	Online documents are not overly helpful as they assume knowledge and omit key details.	Recording may take too much time
		Objects implemented using JavaScript are not recognized by the tool.
		Interactive test debugging not supported

CONCLUSION

I Chose Selenium Because -

1. Selenium supports all major browsers which we needed for automation of Ooma setup web
2. Selenium supports more & major operating systems
3. There is wide Selenium community support available
4. Support multiple test frameworks.
5. Provides incredible control over testing of AJAX web applications .
6. Selenium supports methods with x, y offsets.