**Introduction:**

Selenium is an open-source and a portable automated software testing tool for testing web applications. It has capabilities to operate across different browsers and operating systems. Selenium is not just a single tool but a set of tools that helps testers to automate web-based applications more efficiently.

## The Origins of Selenium

[Selenium](https://saucelabs.com/resources/topics/selenium) originated in 2004 by Jason Huggins at [ThoughtWorks](https://www.thoughtworks.com/en-us). Jason was trying to figure out an easy way to [automate testing](https://saucelabs.com/resources/topics/automated-testing) of a time and expense web application.

When asked what name should be given to this tool, Jason gave a flippant, on-the-spot answer: the dominant product at the time was Mercury’s QuickTest Professional, so anyone who hated it and wanted to be “cured” would likely seek out the cure to Mercury poisoning… [which is Selenium](https://pubmed.ncbi.nlm.nih.gov/29124976/)!

## Selenium Tools & Description:

**Selenium IDE**

Selenium **I**ntegrated **D**evelopment **E**nvironment (IDE) is a Firefox plugin that lets testers to record their actions as they follow the workflow that they need to test.

**Selenium RC**

Selenium **R**emote **C**ontrol (RC) was the flagship testing framework that allowed more than simple browser actions and linear execution. It makes use of the full power of programming languages such as Java, C#, PHP, Python, Ruby and PERL to create more complex tests.

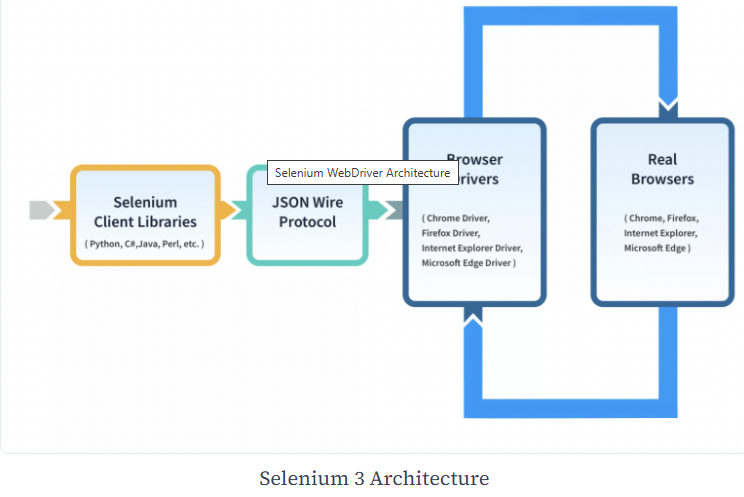
**Selenium WebDriver**

Selenium WebDriver is the successor to Selenium RC which sends commands directly to the browser and retrieves results.

**Selenium Grid**

Selenium Grid is a tool used to run parallel tests across different machines and different browsers simultaneously which results in minimized execution time.

**Selenium Web Driver Architecture:**



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