**Selenium Introduction – IDE, RC, WebDriver and Grid**

**Selenium Introduction:**

Selenium Introduction – It is an open source (free) automated testing suite to test web applications. It supports different platforms and browsers. It has gained a lot of popularity in terms of web-based automated testing.

Selenium is a set of different software tools. Each tool has a different approach in supporting web-based automation testing.

It has four components namely,  
i. Selenium IDE (Integrated Development Environment)  
ii. Selenium RC (Remote Control)  
iii. Selenium WebDriver  
iv. Selenium Grid

**What is Selenium IDE?**

Selenium IDE (Integrated Development Environment) is a Firefox plugin. It is the simplest framework in the Selenium Suite. It allows us to record and playback the scripts. Even though we can create scripts using Selenium IDE, we need to use Selenium RC or Selenium WebDriver to write more advanced and robust test cases.

**Operation System Support** – Windows, Mac OS, Linux.  
**Browser Support** – Mozilla Firefox.

**What is Selenium RC?**

Selenium RC AKA Selenium 1. Selenium RC was the main Selenium project for a long time before the WebDriver merge brought up Selenium 2. Selenium 1 is still actively supported (in maintenance mode). It relies on JavaScript for automation. It supports Java, JavaScript, Ruby, PHP, Python, Perl and C#. It supports almost every browser out there.

**Operation System Support** – Windows, Mac OS, Linux, Solaris.  
**Browser Support** – Mozilla Firefox, Internet Explorer, Google Chrome, Safari, Opera.

**What is Selenium WebDriver?**

Selenium WebDriver AKA Selenium 2 is a browser automation framework that accepts commands and sends them to a browser. It is implemented through a browser-specific driver. It controls the browser by directly communicating with it. Selenium WebDriver supports Java, C#, PHP, Python, Perl, Ruby.

**Operation System Support** – Windows, Mac OS, Linux, Solaris.  
**Browser Support** – Mozilla Firefox, Internet Explorer, Google Chrome 12.0.712.0 and above, Safari, Opera 11.5 and above, Android, iOS, HTML Unit 2.9 and above.

**What is Selenium Grid?**

Selenium Grid is a tool used together with Selenium RC to run tests on different machines against different browsers in parallel. That is, running multiple tests at the same time against different machines running different browsers and operating systems.