

Professional Skills
Agile Fundamentals
Jira
Git
Databases Introduction
Java Beginner
Maven
Testing (Foundation)
Java Intermediate
HTML
CSS
Javascript
Spring Boot
Selenium <ul style="list-style-type: none">What is Selenium?Selenium IDEWebdriversOpening A Web Browser With SeleniumBrowser manipulationInteracting With Elements In SeleniumThe POM Design PatternActionsWaits
Sonarqube
Advanced Testing (Theory)
Cucumber
MongoDB
Express
NodeJS
React

Webdrivers

Contents

- [Overview](#)
- [What is a WebDriver?](#)
- [Downloading a WebDriver implementation](#)
- [Tutorial](#)
- [Exercises](#)

Overview

Since Selenium is a Web driver-based testing medium, we will need to download something that allows us to spin up the Web pages we want to test.

A *Web driver* is a piece of software which will facilitate communication between your code and a Web browser.

What is a WebDriver?

A **WebDriver** in Selenium allows us to control a browser programmatically via code. WebDriver is a *remote-control interface* that has an [official W3C Recommendation](#), this means the W3C aim to standardise the proposed recommended specification for WebDrivers. The WebDriver interface enables introspection (examination) and control of **user agents** - any software acting in place of the user that “retrieves, renders and facilitates end user interaction with Web content, or whose user interface is implemented using Web technologies”, ([Definition of User Agent - WAI UA Wiki, 2011](#)). Put simply, a *user agent* is the software that is communicating over the web for you, such as a browser for example.

To view a User-Agent, try the `curl -v/curl --verbose` command:

```
curl -v https://www.google.com

GET / HTTP/1.1
Host: www.google.com
User-Agent: curl/7.55.1
Accept: */*
```

- The curl tool is pre-installed on Windows builds 17063+
- Linux distributions will vary, it can be installed on Linux with `sudo apt install curl`

The user-agent above is the **curl** software in this example

A typical request will contain a User-Agent HTTP header with a string of text representing the user agent (software) that is sending the request, this can be seen above.

User-Agent headers can also contain a lot more information:

```
Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (HTML, like Gecko) Chrome/91.0.4472.164 Safari/537.36
```

- This is the Chrome Version 91 User-Agent HTTP header value for instance

Downloading a WebDriver implementation

Express-Testing
Networking
Security
Cloud Fundamentals
AWS Foundations
AWS Intermediate
Linux
DevOps
Jenkins Introduction
Jenkins Pipeline
Markdown
IDE Cheatsheet

Below is a list of supported browsers with links to their respective driver pages, be sure to download the correct driver version for your browser.

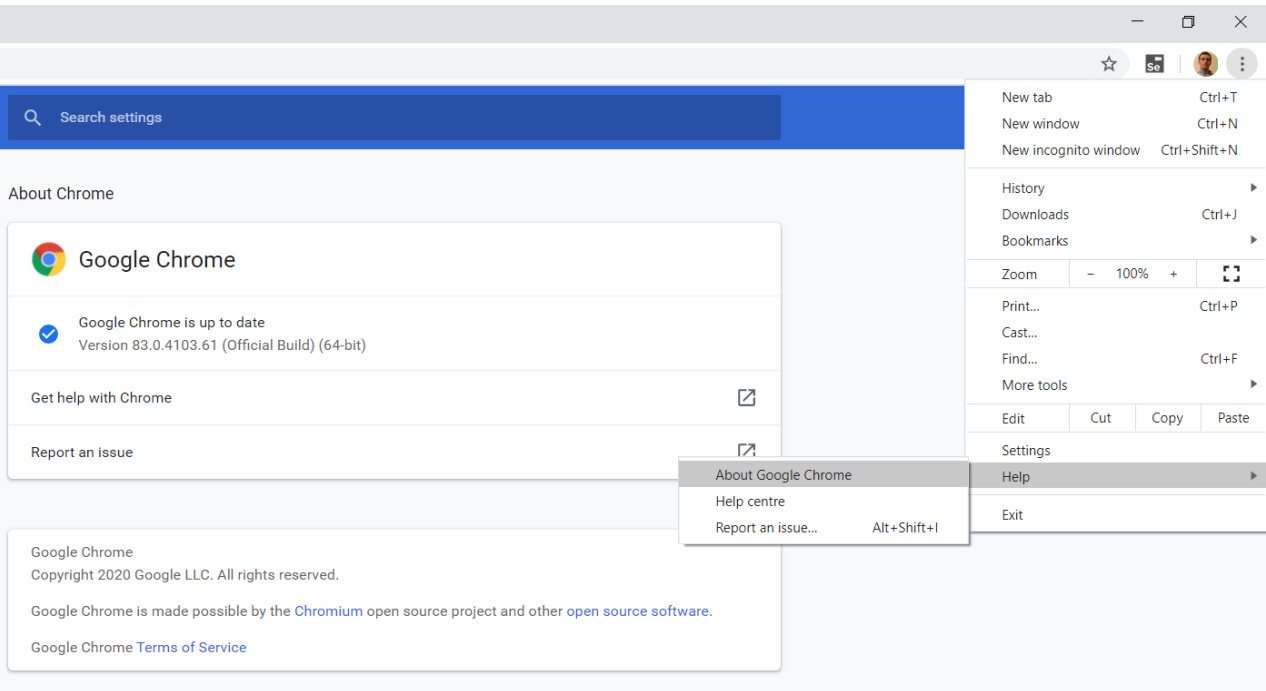
Browser	Download Link
Chrome/Chromium	Download
Firefox	Download
Edge	Download
Internet Explorer	Download
Opera	Download
Safari	Built-in

Tutorial

For this tutorial we will be using Chrome. If you don't already have Chrome installed you can download it [here](#).

Once Chrome is downloaded. click the options button in the top right hand corner and then select **Help**.

In help select **About Google Chrome**. This will bring you to a Web page which will tell you which version of Chrome you are currently using:



Ensure that you download a compatible Web driver for the Chrome software on our computer.

Exercises

There are no exercises for this module.