# Supported platforms

Perfecto integrates with and supports the IDEs, device platforms, and test frameworks specified here.

> **Note:** The Perfecto UI requires a resolution of at least 1366 x 768 pixels. Resizing windows may have unexpected results.

## Integrations

Perfecto integrates with the following:

- Automation tools
- CI tools
- Project and test management tools
- Performance and load testing tools

## Device platforms

With the latest version of Perfecto, automation testing is supported on the device platforms listed in this section.

> **Important:** Based on the EOL policy, Perfecto no longer supports older versions of the mobile OS. For details, see Suspension of support policy - mobile device OS.

### iOS

Perfecto supports iOS versions 10 to 13.5. For details about support limitations, see iOS Support Updates.

### Android

Perfecto supports Android versions 4.1 to 10 as well as Android R (11) developer preview 2 + "Security Update". Support for Android 11 devices is available for early access. If you are interested in participating in the Early Access plan, contact Perfecto Support.

For details about support limitations, see Android Support Updates.

### Desktop Web

In addition to a large set of mobile devices, the Perfecto Continuous Quality Lab provides a set of desktop-web environments for testing web applications. The web environments are characterized by:

- Operating system, such as Windows 8.1 or MacOS Sierra
- Browser version, such as Chrome v62, Firefox v58, or Safari v10
- Screen resolution to support testing responsive web applications
- Browser location setting, either **US East**, **AP Sydney**, or **EU Frankfurt**

The web device is presented to the test script as a virtual machine, hosted by the Perfecto CQ Lab. Normal initialization for the latest version combinations of the VM is approximately 7-10 seconds.

## Supported platforms

Use the **browserVersion** capability to select the version of the browser to configure in your desktop web device.

You can follow the browser version roadmaps at the following links:

- Chrome
- Firefox

### Windows

| Windows version | Chrome | Firefox | IE | Edge | Windows OS Server edition | Comments |
|---|---|---|---|---|---|---|
| 7 | 72-81, 83, beta | 67-76, beta | 11 (see note) | | Windows Server 2008 R2 | |
| 8.1 | 72-81, 83, beta | 67-76, beta | 11 | | Windows Server 2012 R2 | |
| 10 | 72-81, 83, beta | 67-77, beta | 11 | 79-81, 83, beta (see note) | Windows Server 2016 | |
| | | | | 14-18 | Win 10 Embedded | |

**Notes**

- IE and Edge browsers are configured to disable the popup blocker.
- Edge 81, 83 (stable and beta) are supported for interactive sessions only. For automation testing, Edge 80 is the latest supported version.
- Some Windows versions run on Windows Server, as listed above.
- Chrome version 82 was skipped by Google. It is not available.
- Edge version 82 was skipped by Microsoft. It is not available.

Due to Microsoft licensing issues, its Microsoft Server counterpart is supplied when you request a desktop edition. This does not affect the view or the input needed in the capabilities, but it entails the usage of slightly different libraries.

### Screen resolutions

- 1024x768 (default)
- 1280x1024
- 1366x768
- 1440x900
- 1600x1200
- 1920x1080
- 2560x1440

## Mac

Mac web sessions are created using physical Mac machines installed at your Perfecto CQ Lab.

> **Note**: Mac web sessions may require longer initialization than Windows-based web sessions.

Perfecto's Selenium web testing is supported according to the lists below.

| macOS version | Safari | Chrome | Firefox | Comments |
|---|---|---|---|---|
| High Sierra | 11 | 72-81, 83, beta | 67-76, beta | |
| OS X El Capitan | 10,11 | 72-81, 83, beta | 67-76, beta | |
| OS Mojave | 12,13 | 72-81, 83, beta | 67-76, beta | |
| Catalina | 13 | 72-81, 83, beta | 67-76, beta | |

You can only run Mac web sessions across multiple locations if your company has multiple Perfecto Labs with Mac machines installed.

### Screen resolutions

- 800x600
- 1024x768 (default)
- 1280x1024
- 1280x720
- 1440x900
- 1680x1050
- 1920x1080
- 2560x1440
- 3840x2160

## Limitations

- Except for Visual Analysis commands, Perfecto's extensions are currently not supported for desktop web testing.
- Desktop-web devices, used in Selenium scripts, may not be displayed on the Perfecto Dashboard. If this is a requirement, follow the instructions here.
- When creating a session with the **platformName** capability set to *Mac*, the **location** capability is mandatory.

- Mac web sessions are created on real machines. This limits their number and type to the Mac machines installed on-site (CQ Lab).

The following operations are not currently supported on devices with the specified configurations:

| Configuration | Operations not supported |
|---|---|
| Mac with Safari browser earlier than version 11 | The `driver.manage.maximize()` function due to a [Selenium issue](#) |
| Mac with Safari browser | <ul><li>MouseClick</li><li>MouseMove</li></ul> |
| Firefox version 53 or later | <ul><li>MouseClick</li><li>MouseMove</li><li>Submit</li></ul> |
| Microsoft Internet Explorer | The capability **acceptInsecureCerts** is not supported due to a Selenium/Internet Explorer limitation. To work around this issue, use the following code instead:<br><br>```java<br>driver.get("https://staff-np6.np.mlc.com.au/user/session/staff/login/manual");<br>driver.findElement(By.id("moreInfoContainer")).click();<br>driver.findElement(By.id("overridelink")).click();<br>``` |

## Virtual devices

Perfecto supports simulators for iPhone 7 and later and iPad Air 2 and later on iOS 12.x and 13.x. For more information, see [Simulators (iPhones and iPads) | Early Access](#).

## Selenium/Appium versions

That latest Perfecto version supports Selenium/Appium automation scripts based on the following server and client versions:

| | iOS | Android | Desktop web | Virtual devices** |
|---|---|---|---|---|
| | | | | |

| | | | | |
|---|---|---|---|---|
| **Appium** | **Client:** 5.0.4 - 7.3.0<br><br>**Server:** 1.17.0* | **Client:** 5.0.4 - 7.3.0<br><br>**Server:** 1.17.0 | N/A | **Server:** 1.12.0 or later. For best performance, we recommend that you work with version 1.15 or later.<br><br>**Client:** Versions compatible with the Appium server version |
| **Selenium** | **Client:** 3.6 - 3.141.59 | **Client:** 3.6 - 3.141.59 | **Server:** 3.0.1, 3.4.0, 3.8.1<br><br>**Client:** Versions compatible with the Selenium server | **Client:** Versions compatible with the selected Appium client version |

\* On iOS devices, this Appium server version does not support the getSettings API.
\*\* As a best practice, we recommend that you select only the version of the Appium client to use and let the natural dependency and compatibility between Appium server and Selenium client versions take care of the rest. If you need to select a specific Selenium client, you must make sure that the client version is compatible with the selected version of the Appium client.

## Test frameworks

For developers using instrumentation testing tools, the Test Framework Gradle plugin supports the following versions:

- Espresso test methods for Android 4.3 or later
- XCUITest test methods for iOS 9.3 or later