

DevTunnel Latency

Background

Perfecto Lab devices connected through DevTunnel can be considered remote devices by the IDE or development tools. Some of these tools may be affected by the network latency in communicating with the device.

Based on benchmark testing we, at Perfecto, have measured that the following latency may adversely affect the work with these devices:

iOS device operation	iOS 10 device	iOS 11 device	iOS 12 device
Debugging iOS application from xCode	250 ms	250 ms	125 ms
Debugging XCTest / XCUITest from xCode (see note below)	100 ms	40 ms	40 ms
Run xcodebuild	150 ms	150 ms	150 ms
Debug website on Safari	1000 ms	1000 ms	1000 ms

Note: When debugging XCTest/XCUITest from XCode - there is a 120 second timeout to launch the test bundle. If the test bundle is large, the launch (over the network) may exceed this timeout and report an error. Therefore, we recommend that you -

- Split your test cases into separate bundles to try and reduce the Runner application's initialization time.
- Remove any irrelevant test bundles from your Scheme.

Android device operation	Mac workstation	Windows workstation
Debug Android Application from Android Studio	250 ms	250 ms
Debug Espresso Tests from Android Studio	150 ms	150 ms
Debug website on Chrome	500 ms	500 ms

Determining Expected Latency

To determine the network latency between your workstation and the Perfecto Lab device:

1. Identify the location of the device you are working with, as it appears in the device selection table:

The screenshot shows the 'Launch Mobile' interface with a table of devices. The 'Location' column is highlighted with a green circle and labeled 'Device Location'. The table contains the following data:

Status	Manufacturer	Model	OS	OS Version	Location	Network	Phone number	Automation	Device ID
Available	Apple	iPad Air	iOS	10.3.1	NA-US-PHX		Wi-Fi only	XCUITest	E83F44E6E1C914
Available	Apple	iPad Air 2	iOS	10.2	NA-US-PHX		Wi-Fi only	XCUITest	4E55E895FC257
Available	Apple	iPad Pro	iOS	10.2	NA-US-PHX		Wi-Fi only	XCUITest	237DF69A305D34
Available	Apple	iPhone-6	iOS	11.1.2	NA-US-BOS		Wi-Fi only	XCUITest	FD3190E8D07071
Available	Apple	iPhone-6	iOS	9.2.1	NA-US-PHX		Wi-Fi only	UIAutomation	671FD15CD968A1
Available	Apple	iPhone-6 Plus	iOS		NA-US-PHX		Wi-Fi only	UIAutomation	48A5A2CC10A30
Available	Apple	iPhone-6 Plus	iOS		NA-US-BOS	Verizon-United State	Wi-Fi only	XCUITest	7924415FBF5176
Available	Apple	iPhone-6S Plus	iOS		NA-US-BOS		Wi-Fi only	XCUITest	EA2D3BF4355505
Available	Apple	iPhone-7	iOS	10.0	NA-US-BOS		Wi-Fi only	XCUITest	3E4D8EE918C723
Available	Apple	iPhone-7 Plus	iOS	11.2.5	NA-US-BOS		Wi-Fi only	XCUITest	B7284D9E402EEC
Available	Google	Nexus 5X	Android	7.1.1	NA-US-BOS		Wi-Fi only	UIAutomator2	012861923FDC38
Available	Google	Nexus 6	Android	6.0.1	NA-US-PHX		Wi-Fi only	UIAutomator2	ZX1G22FX2K
Available	Samsung	Galaxy S5 SM-G	Android	6.0.1	NA-US-BOS	AT&T-United States c	Wi-Fi only	UIAutomator2	D1EB6319
Available	Samsung	Galaxy S6 Edge	Android	6.0.1	NA-US-BOS		+17817801653	UIAutomator2	05157DF53AC587
Offline	Apple	iPad 3	iOS	9.1	Simulator_Ec			Wi-Fi only	66164257245266
Offline	Apple	iPad Air	iOS	7.0.6	Virtual Lab		+972 541231234		78F5FE54B42A01

2. Browse to the [Perfecto Connectivity Test site](#) in your browser.
 - a. The page displays basic identification of the workstation you are using in the left panel.
3. Based on the locations for your devices, identified in Step #1, verify that only those locations are checked on the Connectivity Test site

2. Click on **Start Test** to check connectivity for selected Sites

Detected Information

IP Address: 79.178.100.100

Proxy Status: No proxy detected

Location: New York, NY, USA

Internet Service Provider: Verizon Communications

User's Time Zone: Eastern Standard Time

Network Measurements - All tests completed.

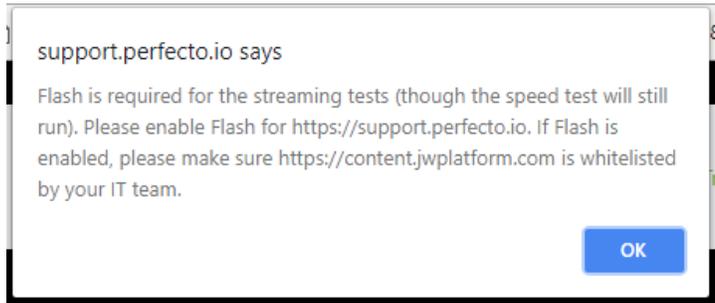
<input checked="" type="checkbox"/> Sites	Latency (ms)	Jitter (ms)	Download (Mbps)	RTMP	RTMP/T	RTMP/S
<input checked="" type="checkbox"/> Boston	135 🟢	0.1 🟢	20 🟢			
<input checked="" type="checkbox"/> Frankfurt	64 🟢	0.1 🟢	50 🟢			
<input checked="" type="checkbox"/> Guadalajara	197 🟡	0.2 🟢	57 🟢			
<input checked="" type="checkbox"/> Guangzhou	323 🔴	0.9 🟢	5 🟢			
<input checked="" type="checkbox"/> London	76 🟢	0.2 🟢	55 🟢			
<input checked="" type="checkbox"/> Phoenix	207 🟡	0.4 🟢	20 🟢			
<input checked="" type="checkbox"/> Sydney	371 🔴	12.6 🟢	24 🟢			
<input checked="" type="checkbox"/> Toronto	163 🟡	0.2 🟢	25 🟢			

1. Uncheck irrelevant boxes

4. Click on the **StartTest** button.
5. Check the network status between your workstation and the different Perfecto Data Centers based on the data presented.

Support for Flash

In addition to the network speed tests, the Connectivity Test site can also test the connectivity of the RTMP streaming channel connections. To test these streaming channels, you need to enable Flash for the site. If Flash is not enabled, the following popup will display when first connecting to the site:



If you need to check the timing of the streaming connection, verify that you enable Flash for the site.