

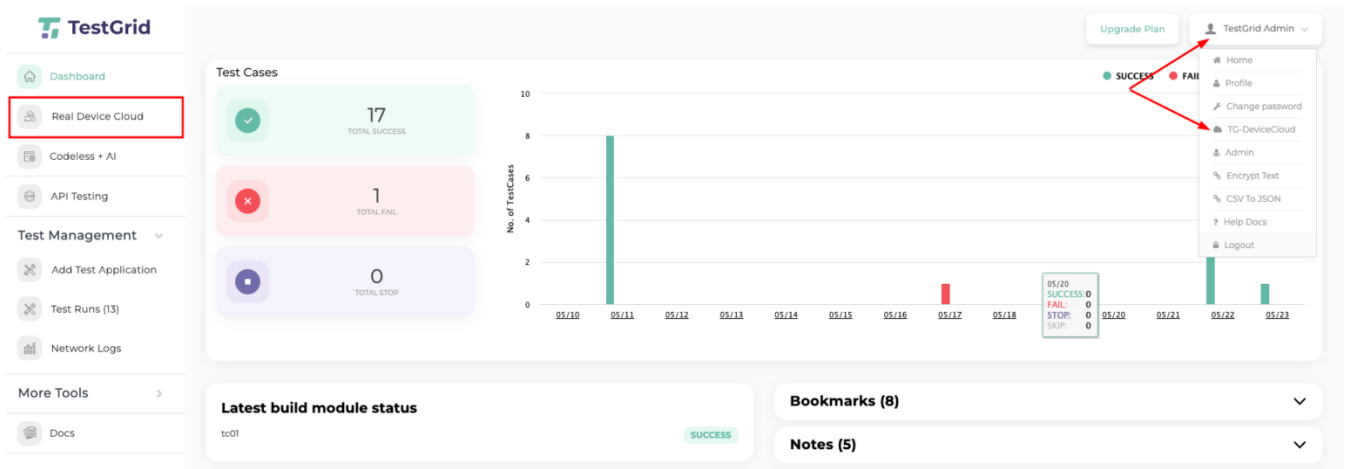
Executing Your Local Selenium Code



Begin configuring your local Selenium Java and Python code to run remotely on any browser right away.

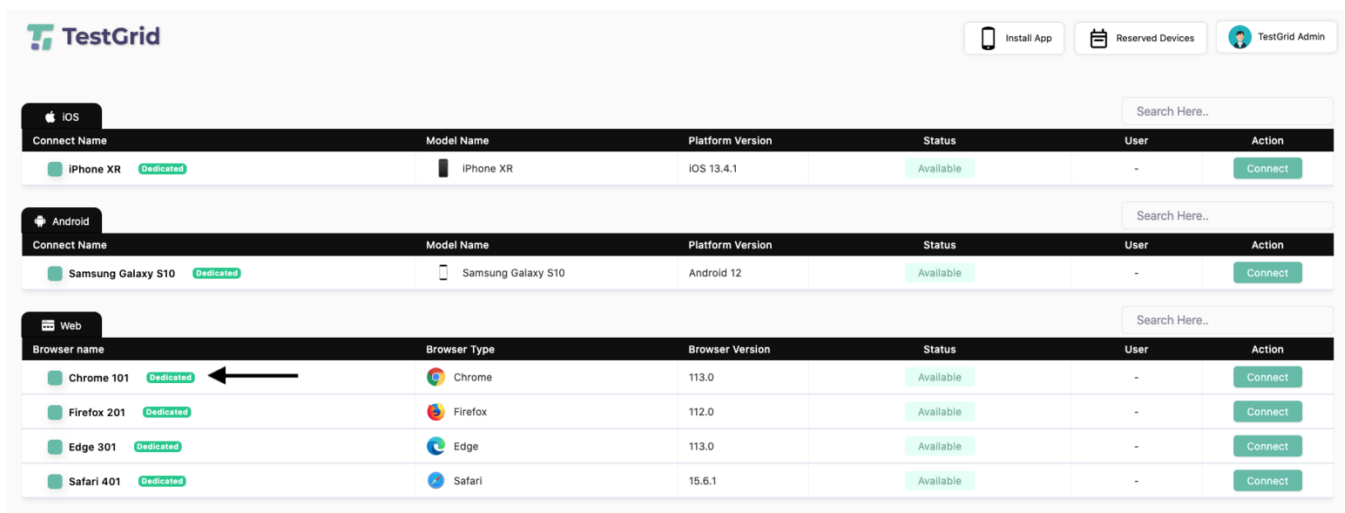
Step 1: Open the Device Cloud tab and locate the appropriate browser's information for running.

Log in with your TestGrid credentials and go to the Device Cloud option tab.



Once the device cloud screen appears, you can find as well number of devices and browsers there,

Step 2: Now, Choose the browser in which you want to run your local Selenium code.



Select the browser and update the "Browser Run URL (Public)" and "Browser Type" provided in your local Selenium code.

Browser	Status	Version	Availability	Connect
Chrome 101	Dedicated	113.0	Available	Connect
Firefox 201	Dedicated	112.0	Available	Connect
Edge 301	Dedicated	113.0	Available	Connect
Safari 401	Dedicated	15.6.1	Available	Connect

Executing Local Selenium Code

Following is the sample Selenium code for reference:

```

1. package test;
2.
3. import java.net.MalformedURLException;
4. import java.net.URL;
5. import org.openqa.selenium.By;
6. import org.openqa.selenium.Keys;
7. import org.openqa.selenium.WebDriver;
8. import org.openqa.selenium.remote.BrowserType;
9. import org.openqa.selenium.remote.DesiredCapabilities;
10. import org.openqa.selenium.remote.RemoteWebDriver;
11.
12. public class WebDemo {
13.     static DesiredCapabilities cap;
14.     static URL url;
15.     static WebDriver driver;
16.
17.     //Obtain Run URL from Link Provided for Organization
18.     static String TG_BROWSER_URL = "https://demo.testgrid.browsercloud/wd/hub";
19.
20.     public static void main(String[] args) throws InterruptedException, MalformedURLException {
21.         cap = new DesiredCapabilities();
22.         //Set Browser Type as Needed
23.         cap.setBrowserName(BrowserType.CHROME);
24.         url = new URL(TG_BROWSER_URL);
25.         driver = new RemoteWebDriver(url, cap);
26.         driver.manage().window().maximize();
27.         //Write Selenium - Java Code for Automation
28.         driver.get("https://www.google.com/");
29.         driver.findElement(By.name("q")).sendKeys("Testgrid");
30.         driver.findElement(By.name("q")).sendKeys(Keys.ENTER);
31.         Thread.sleep(3000);
32.         driver.quit();
33.     }
34. }
35.
36. }

```

Following variables need to be changed as provided for organization & as per the browser:

- TG_BROWSER_URL
- setBrowserName capability to one of the following:
 - BrowserType.CHROME
 - BrowserType.FIREFOX
 - BrowserType.OPERA_BLINK
 - BrowserType.EDGE
 - BrowserType.SAFARI

Remote Execution of Code can also be viewed live on TestGrid Device Cloud.

For Python code sample:

```

1. from selenium import webdriver
2. from selenium.webdriver.common.desired_capabilities import DesiredCapabilities
3.
4. # Set desired capabilities for the remote browser
5. desired_capabilities = DesiredCapabilities.CHROME.copy()
6. desired_capabilities['platform'] = 'WINDOWS' # Set the desired platform
7. desired_capabilities['version'] = 'latest' # Set the desired browser version
8.
9. # Set the URL for the remote Selenium WebDriver server
10. # remote_url = 'http://<REMOTE_SERVER_IP_ADDRESS>:<REMOTE_SERVER_PORT>/wd/hub/'
11. TG_BROWSER_URL = 'https://demo.testgrid.browsercloud/wd/hub'
12.
13. # Establish a remote connection to the WebDriver server
14. driver = webdriver.Remote(command_executor=remote_url, desired_capabilities=desired_capabilities)
15.
16. # Execute your local Selenium automation code
17. try:
18.     # Your local automation code goes here

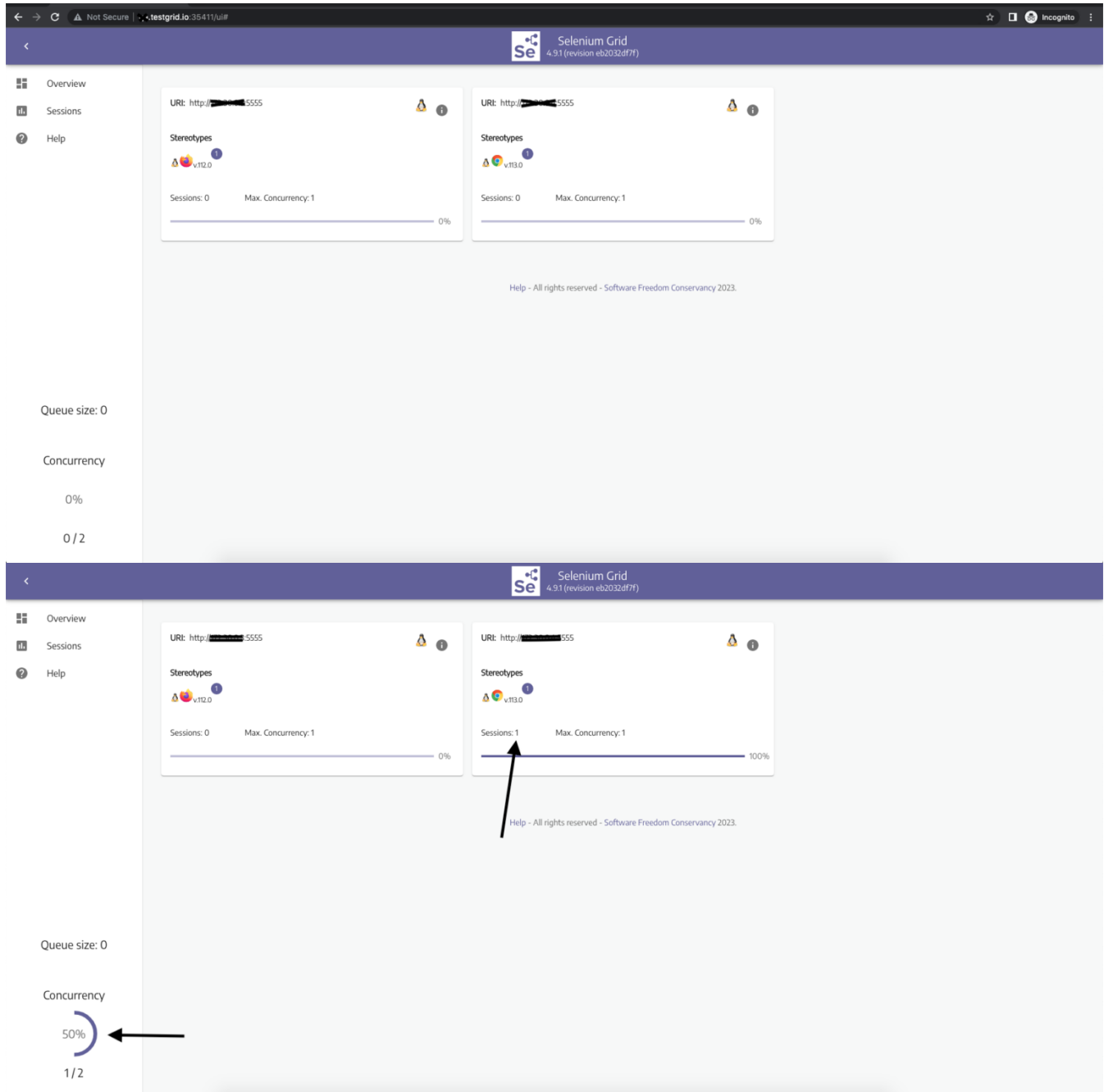
```

```
23. # Close the WebDriver session
24. driver.quit()
```

Execution Successfully.

Troubleshoot:

Go to the Device Cloud screen, copy the browser grid console URL, and paste it into a new tab. You can check the active session details in the Selenium grid console panel for each browser. Please make sure that the Session count is 0 before you start the execution of your local code on TestGrid browsers. You can tap on the Reboot browser button to decrease the Session count.



Note: if you are having trouble creating sessions or connecting your remote browser for execution, you must follow these steps.

Step 1: How to reboot the browser, go back to the Device cloud screen, and Found the “Reboot” button. Tap on the button and start again run with your local code.



Chrome 101 Dedicated			Chrome	113.0	Available	-	Connect
Device ID	3						
Browser View URL:	https://testgrid.io:35402/#/client/MQBjAHBvc3RncmVzcWw=						
Browser Run URL:	http://localhost:35411/wd/hub						
Browser Run URL (Public):	http://testgrid.io:35411/wd/hub Copy						
Browser Grid Console:	http://localhost:35411/ui						
Browser ID:	http://testgrid.io:35411/5555						
Fake Browser?	No						
<input type="button" value="Reboot"/>							
Firefox 201 Dedicated			Firefox	112.0	Available	-	Connect
Edge 301 Dedicated			Edge	113.0	Available	-	Connect
Safari 401 Dedicated			Safari	15.6.1	Available	-	Connect

Note: To view the live execution on the browser, please connect the browser after the test case execution has started.

Tags: Local Selenium Code Execution Remote Browser Cloud

Previous topic: [App Management](#)

Next topic: [Executing Your Local Appium Code](#)