

Automated Testing on Real Devices

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The Sauce Labs real device cloud provides you with the option to run Espresso, Robotium, XCUITest or Appium automated tests for testing mobile applications and websites on mobile browsers. Check out the [Sauce Labs Sample Test Frameworks repo on GitHub](#) for examples of test setups for all three on both iOS and Android devices. For an introduction to Appium testing, check out [Appium Bootcamp by Dave Haeffner and Matthew Edwards](#).

Running Your Tests on Sauce Labs Legacy Real Device Cloud (app.testobject.com)

Before Running Your Tests

- [Set up your project](#)
- Have your test scripts that you want to run

Testing Websites or Applications on localhost or an Internal Network

Sometimes apps are designed to run on internal networks, or on networks that can be accessed only from specific IP addresses. In this case, you can add an exception for TestObject to your network's whitelist for the IP range 185.94.24.0/22 for the European data center, or the IP range 162.222.72.0/21 and 66.85.48.0/21 for the US data center.

Creating Test Projects and Running Your Tests

1. Log into your account.
2. Go to the **Apps** dashboard and select the project you want to test.
3. In the project dashboard, click **Automated Testing**.
4. Select the type of automated test you want to run.
For application tests, the options are **Robotium**, **Espresso**, **XCUITest** or **Appium**, while the only mobile website testing option is **Appium**.

Running Your Tests on Sauce Labs Unified Platform (app.saucelabs.com)

Unified Platform Beta

The information in this topic is for our Unified Platform, Phase 1, Beta users only. Unified Platform allows execution of Appium test automation, against the Real Device Cloud, using the same endpoints and API as used against Emulators and Simulators.

Please contact your customer success Manager if you are interested in joining the Unified Platform Beta

Unified Platform Supported Use Cases

Sauce Labs Unified Platform is a unification of the Sauce Labs Virtual Platform (app.saucelabs.com) and Sauce Labs Legacy Real Device Platform (app.testobject.com), under one platform - app.saucelabs.com, allowing customers to use the best of both worlds, Virtual Platforms like Emulators and Simulators, Desktop Web and Real Devices, under one unified platform, including shared APIs, endpoints, reporting, secure tunnels, analytics, etc.

The following use cases are support for the Unified Platform, Phase 1:

- You would like to execute Appium tests against a private real device hosted in the US, using your Sauce Labs username and access key
- You would like to use Sauce Storage, for Appium testing, as you usually do for Emulators and Simulators tests
- You would like to analyze Appium test executions, on Sauce Labs Dashboard (Dashboard / Automated Tests), similar to the way you do it for Desktop and Emulators and Simulators
- You would like to consume Real Device Cloud (RDC) API similar to the way you do for Emulators and Simulators (with applicable RDC settings)

Unified Platform Endpoints

- UP RDC Appium endpoint: <https://ondemand.us-west-1.saucelabs.com>
- UP RDC Sauce Connect endpoint: <https://saucelabs.com/rest/v1>

Unified Platform Examples

Unified Platform Appium Testing Example

```
private URL createUrl() throws MalformedURLException {
    return new URL("https://$SAUCE_USERNAME:$SAUCE_ACCESS_KEY@ondemand.us-west-1.saucelabs.com/wd/hub");
}

@BeforeEach
void setUp() throws MalformedURLException {
    DesiredCapabilities desiredCapabilities = new DesiredCapabilities();
    desiredCapabilities.setCapability("platformName", "iOS");
    IOSDriver driver = new IOSDriver(createUrl(), desiredCapabilities);
}
```

Unified Platform API

[Learn more here.](#)

All-The-Things-Digital

Sauce Labs also provides you with sample framework that demonstrate Sauce Labs capabilities of Real Devices, Emulators/Simulators and Desktop VMs, for testing Mobile Native and Web Apps.

[Learn more here.](#)