

Systrace Walkthrough

This walkthrough shows the basic usage and workflow for the Systrace tool in the Android Device Monitor.

Systrace collects system and application process execution data and generates detailed, interactive reports from devices running Android 4.1 and higher.

What it's good for:

- Evaluating container performance.
- Finding performance bottlenecks in the execution of your code.

Prerequisites

- Android SDK Tools 20.
- Python (<http://www.python.org/>) installed and included in your development computer's execution path.
- A mobile device running at least Android 4.1 with Developer Options (<http://developer.android.com/tools/device.html#developer-device-options>) and USB Debugging enabled in Developer Options.
- Application code. Use your own code, or the Sunshine (<https://github.com/udacity/Sunshine-Version-2>) sample app from the Android Fundamentals Udacity course (<https://www.udacity.com/course/ud853>).

Working with Systrace

1. Connect your mobile device to your computer.
2. Open your application in Android Studio, build the source, and run it on your device.
3. From Android Studio, start the Android Device Monitor: **Tools -> Android -> Android Device Monitor**.

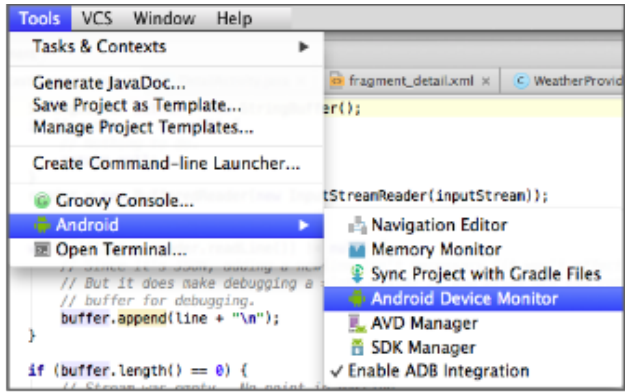


Figure 1. Starting Android Device Monitor.

4. Make sure your device and the package for your application are showing in the Devices (DDMS mode) or Windows (Hierarchy Viewer mode) tab.
- You can choose **Window > Reset Perspective** to get back to the default arrangement.

5. Click the **DDMS** button, because Systrace is one of the DDMS tools.

6. Click the **Systrace** button .

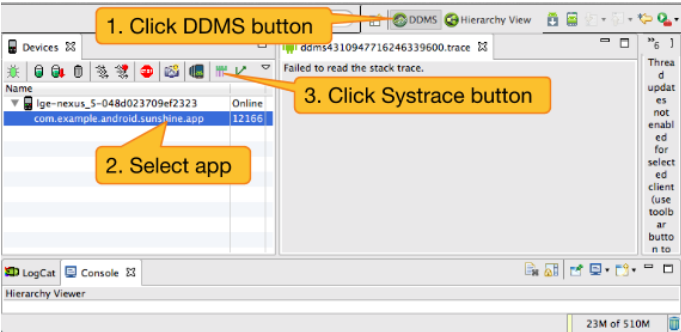


Figure 2. Steps for starting Systrace.

7. In the **Android System Trace** popup, choose your settings for the trace.

- **Destination File:** Where the trace is stored as an HTML file. Default is in your home directory as

In this document

Prerequisites (#WhatYouNeed)

Working with Systrace
(#WorkingWithSystrace)

You should also read

Traceview Walkthrough

(<https://developer.android.com/tools/performance/traceview/index.html>)

Allocation Tracker Walkthrough

(<https://developer.android.com/tools/performance/allocation-tracker/index.html>)

trace.html.

- **Trace Duration:** Default is 5 seconds, and 30 seconds is a good time to choose.
- **Trace Buffer size:** Default is unlimited.
- **Enable Application Traces from:** Make sure your app is selected.
- **Select tags to enable:** Choose at least one value to trace, for example Graphics and View System.

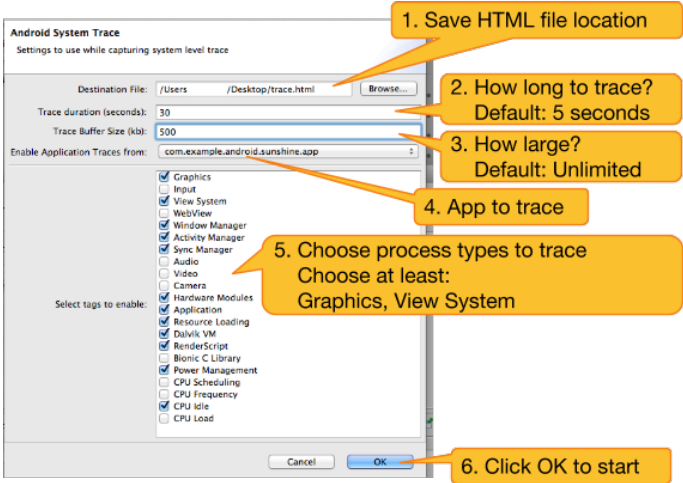


Figure 3. Steps for creating a trace.

8. Click **OK** to start tracing.

9. Interact with your app.

10. When the trace is done, you are automatically returned to Android Device Monitor.

11. Go to your home directory, or the directory you chose as the file destination.

12. Open the `trace.html` file in your browser.

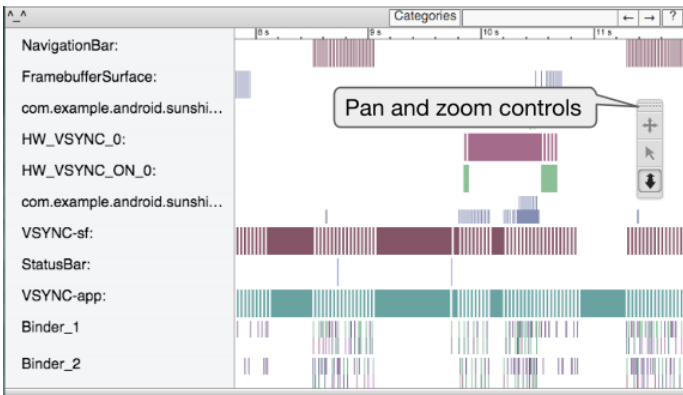


Figure 4. Example systrace output in browser.



Follow @AndroidDev
on Twitter



Follow Android Developers
on Google+



Check out Android Developers
on YouTube