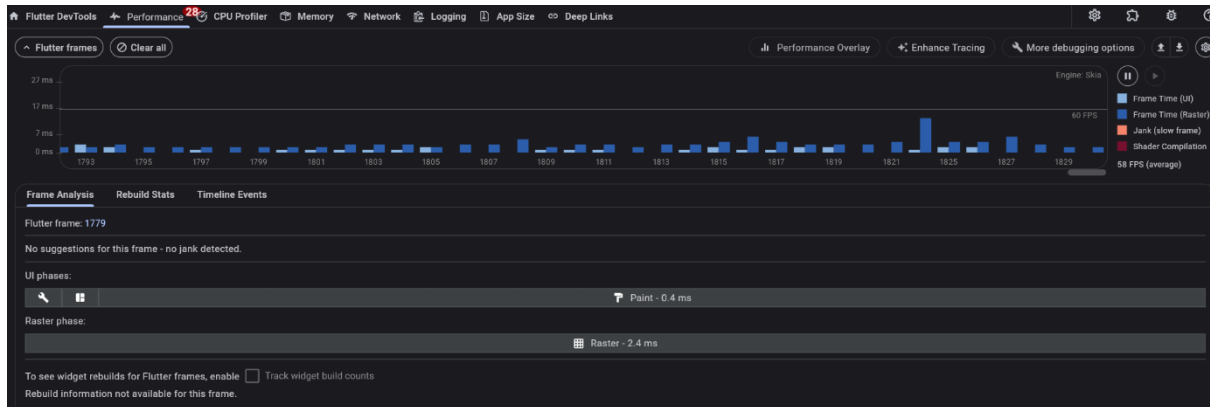


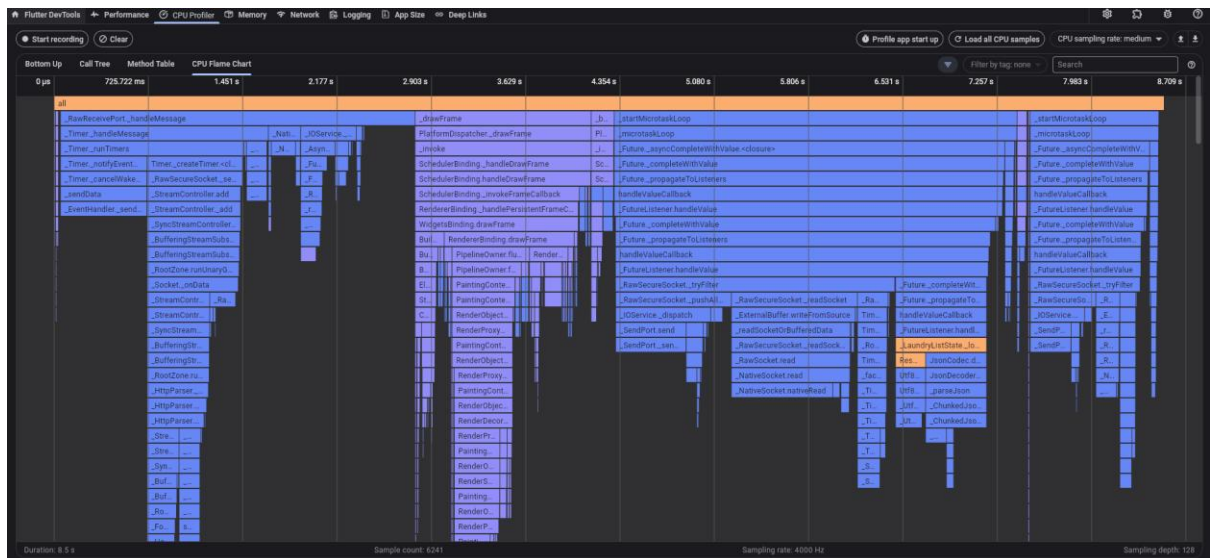
# Flutter Performance Profiling Tools

## Performance



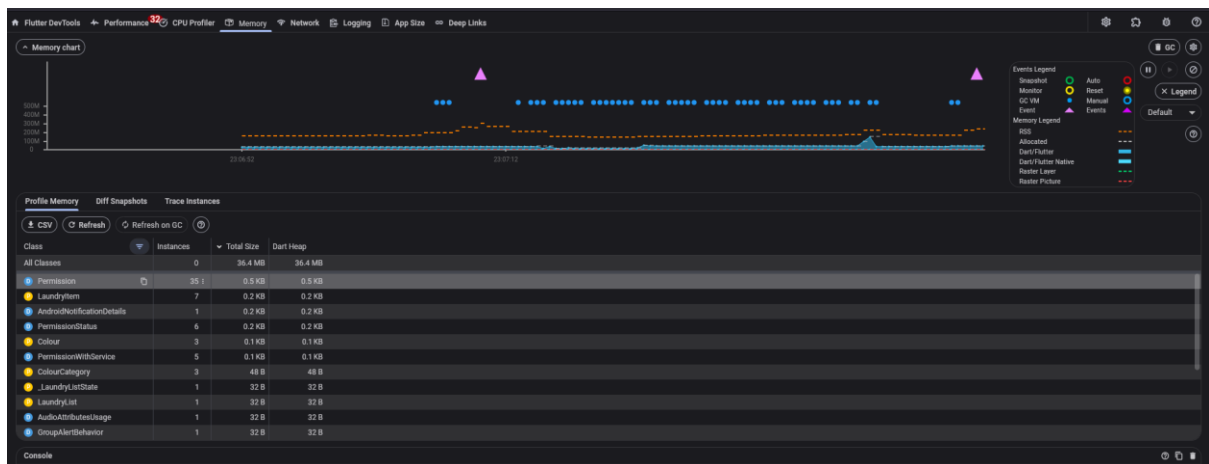
The Performance tab in Flutter DevTools visualizes UI and raster thread activity, helping you identify rendering issues like jank or slow frames. It provides detailed frame analysis, rebuild stats, and timeline events to optimize app responsiveness and frame rendering.

## CPU Profiler



The CPU tab in Flutter DevTools shows detailed CPU profiling data, which helps you to identify expensive operations in your code. It displays function call stacks over time, allowing you to optimize specific methods or isolate slow code paths.

## Memory Profile



The Memory tab tracks memory usage, allocation, and garbage collection events in real-time. It helps detect memory leaks, monitor object lifecycles, and ensure efficient memory management in your Flutter app.

## Logging

The screenshot shows the Flutter DevTools interface with the Logging tab selected. The table displays a list of log messages, including timestamps, log kinds, and messages.

When	Kind	Message
21:56:47.956	Flutter navigation	TransitionRoute(null)
21:57:49.422	Flutter navigation	TransitionRoute
21:57:54.417	Flutter navigation	TransitionRoute
21:57:56.070	Flutter navigation	TransitionRoute(null)
21:57:58.253	Flutter navigation	TransitionRoute(null)
21:58:06.165	Flutter navigation	TransitionRoute
21:58:08.483	Flutter navigation	TransitionRoute
21:58:11.893	Flutter navigation	TransitionRoute
21:58:16.631	Flutter navigation	TransitionRoute
21:58:18.485	Flutter navigation	TransitionRoute
22:26:56.600	Flutter navigation	TransitionRoute
22:26:58.037	Flutter navigation	TransitionRoute(null)
22:26:58.925	Flutter navigation	TransitionRoute(null)
22:27:06.204	Flutter navigation	TransitionRoute
22:27:13.417	Flutter navigation	TransitionRoute
22:27:40.764	Flutter navigation	TransitionRoute
22:27:41.924	Flutter navigation	TransitionRoute
22:27:42.433	Flutter navigation	TransitionRoute
22:27:47.794	Flutter navigation	TransitionRoute
22:27:48.525	Flutter navigation	TransitionRoute(null)
22:27:49.171	Flutter navigation	TransitionRoute(null)
22:28:53.312	Flutter navigation	TransitionRoute
22:28:55.168	Flutter navigation	TransitionRoute

The Logging tab displays real-time logs from your Flutter application, including debug prints, errors, and other system messages. It helps you track app behaviour, troubleshoot issues, and monitor custom log outputs during development and testing.