# 1. Key Trace Metrics

Trace Name	Samples	Avg. Duration	7-day ∆
_app_start	6	5.59 s	+0 %
home_screen_load	13	3.38 s	+0 %
poi_list_load	25	2.20 s	+0 %
poi_details_load	11	3.15 s	+0 %
my_reviews_load	15	6.82 s	+0 %
_app_in_background	5	8.07 s	-92 %
_app_in_foreground	13	1.4 min	-97 <b>%</b>
filter_operation	15	0.74 ms	+0 %
app_cold_start	12	0.66 ms	+0 %

Longest user-facing loads:

my\_reviews\_load (6.82 s)

\_app\_start (5.59 s)

Mid-range loads:

home\_screen\_load (3.38 s)

poi\_details\_load (3.15 s)

poi\_list\_load (2.20 s)

## 2. Statistical Observations

#### Stability:

All key traces show 0 % drift over the past week, indicating consistent performance.

## Foreground vs. Background:

Foreground time has dropped dramatically (-97 %), likely due to reduced user sessions or instrumentation change.

Background work is now minimal (8 s), so focus should remain on startup and screen-loads.

#### Micros:

Your in-memory filters (filter\_operation) and cold-start wrapper (app\_cold\_start) are negligible—no action needed there.

# 3. High-Level Causes & Light Recommendations

Trace	Possible Cause	Quick Win	
_app_start	JS bundle parsing & native-	Enable Hermes &	
	module init	inlineRequires	
my_reviews_load	Many Firestore reads +	Aggregate calls / use	
	image downloads	cached thumbnails	
home_screen_load	Multiple small queries +	Enable offline persistence	
	full re-render	& placeholders	
poi_list_load	Unpaginated fetch of all	Implement Firestore	
	items	cursors + FlatList	
poi_details_load	Full-size image fetch on	Fetch low-res thumbnails	
	navigation	first	

### Next Steps:

We'll track the impact of each optimization by reviewing the **Avg. Duration** (as well as 95th-percentile timings and any emerging error spikes) in the Firebase Performance dashboard after every deployment. To gain deeper insights, we'll instrument our code with custom JS-side performance marks immediately before and after critical operations—namely, each Firestore query and primary component render. By correlating those measurements, our team can distinguish network-fetch time from UI-render time, compare pre- and post-optimization traces, and systematically identify any residual performance bottlenecks for further refinement.

Q Search custom traces			
Custom traces	Duration 🕹	7 d change	
_app_in_foreground ⑦ 13 samples	1.4 min	-97%	
_app_in_background ⑦ 5 samples	8.07 s	-92%	
my_reviews_load 15 samples	6.82 s	+0%	
_app_start ① 6 samples	5.59 s	+0%	
home_screen_load 13 samples	3.38 s	+0%	9 9 9
poi_details_load 11 samples	3.15 s	+0%	e e e
poi_list_load 25 samples	2.20 s	+0%	9 9 9
filter_operation 15 samples	736 µs	+0%	
app_cold_start 12 samples	663 µs	+0%	