Treemaps

For each commit to flutter/engine the Chromebots generate treemaps illustrating the sizes of the individual components within release builds of `libflutter.so`. The treemap is uploaded to Google Cloud Storage and linked from the LUCI console: Select a "Linux aot" build and search for "Open Treemap".

Alternatively, a link to a treemap can be constructed as follows:

`https://storage.googleapis.com/flutter_infra_release/flutter/<REVISION>/<VARIANT>/sizes/inde`
where: * `<REVISION>` is the git hash from flutter/engine for which you want the treemap, and * `<VARIANT>` can be any android release build, e.g. `android-arm-release` or `android-arm64-release`.

Benchmarks

In devicelab we run various benchmarks to track the APK/IPA sizes and various (engine) artifacts contained within. These benchmarks run for every commit to flutter/flutter and are visible to signed-in users on our Dashboard. The most relevant benchmarks for engine size are:

- APK/IPA size of Flutter Gallery
  - Android: `flutter_gallery_android__compile/release_size_bytes`
  - iOS: `flutter_gallery_ios__compile/release_size_bytes`
- APK/IPA size of minimal hello_world app
  - Android: `hello_world_android__compile/release_size_bytes`
  - iOS: `hello_world_ios__compile/release_size_bytes`
- Size of bundled `icudtl.dat`
  - Compressed in APK: `hello_world_android__compile/icudtl_compressed_bytes`
  - Uncompressed: `hello_world_android__compile/icudtl_uncompressed_bytes`
- Size of bundled `libflutter.so` (release mode)
  - Compressed in APK: `hello_world_android__compile/libflutter_compressed_bytes`
  - Uncompressed: `hello_world_android__compile/libflutter_uncompressed_bytes`
- Size of VM & isolate snapshots (data and instructions)
  - Compressed in APK: `hello_world_android__compile/snapshot_compressed_bytes`
  - Uncompressed: `hello_world_android__compile/snapshot_uncompressed_bytes`

Comparing AOT Snapshot Sizes

A detailed comparison of AOT snapshot sizes can be performed using the instructions documented here.