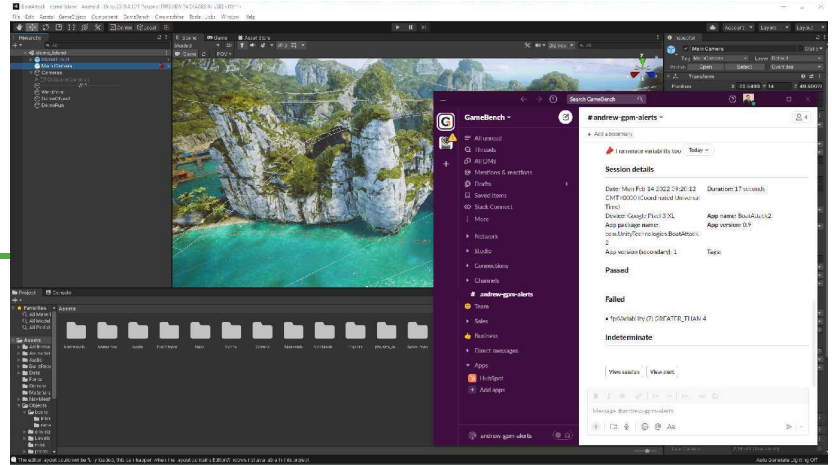


STUDIO SDK

Performance monitoring and alerts at every stage of production.

Every time your game is launched Studio SDK records in the background, providing alerts only when you need them.



SNAPSHOT

Monitor

Seamless performance monitoring in automation and manual testing.

Alert

Alert thresholds specific to both game and player; via email or Slack notifications.

Analyze

Automatically capture all key performance metrics; sync and visualise data on the Web Dashboard.

At Scale

Multiple testing sessions for rich, actionable analytics.

BENEFITS

Monitor and scale across every test type and pre-release environment

- Android 4.12+ support
- iOS 8+ support
- Local and cloud device farms
- Automated testing

Simple and rapid integration

- Unity, native and all leading game engines
- Useable data groups out-of-the-box
- Implement custom behaviours for monitoring functions
- Pair integration with Web Dashboard for live performance alerts

Precise measurement for analysis of all key metrics

- Frame rate / CPU / GPU / Memory
- Network / Fluidity / Thermals / Launch time / Power
- Measure launch times and mark gameplay regions
- Control how and when each metric is recorded
- Custom markers delineate sections of gameplay

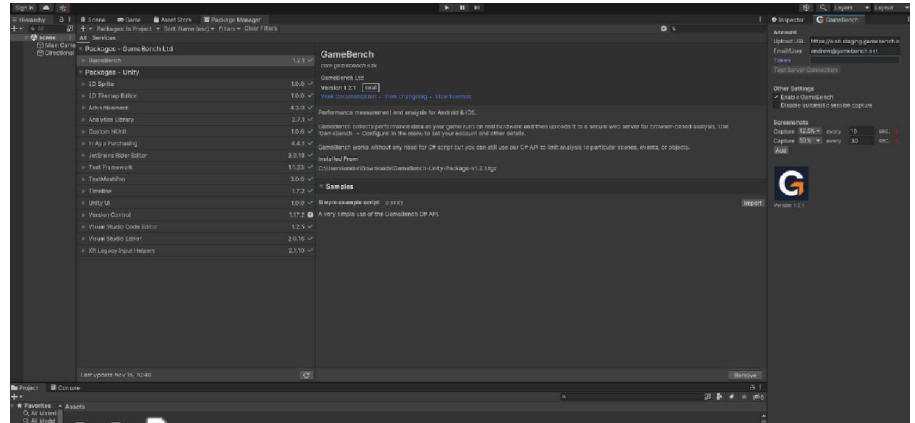
Expert user support via

- Dedicated Slack channel
- Email
- Video conference

```

5 #include "GameBench.h"
6
7 // This very simple example runs during static initialization, i.e. when
8 // the executable module containing this code gets loaded. If you need
9 // finer control over when GameBench is loaded and when it runs then
10 // please refer to the documentation.
11
12 static void initGameBench(void) __attribute__((constructor(101)));
13 static void initGameBench(void)
14 {
15     auto gb = getGameBench();
16
17     // Set your credentials
18     gb->setStringConfigItem("UploadUrl", <<YOUR UPLOAD URL>>);
19     gb->setStringConfigItem("UploadEmail", <<YOUR REGISTERED EMAIL>>);
20     gb->setStringConfigItem("UploadToken", <<YOUR HEX TOKEN>>);
21
22     // Enable the automatic session. This means a session will automatically start
23     // when the app is foregrounded and that session will stop and be uploaded
24     // when the app moves into the background.
25     gb->setIntConfigItem("AutoSession", 1);
26
27     // Set which metrics should be captured
28     gb->scheduleCapture(MetricType::FPS, 1);
29     gb->scheduleCapture(MetricType::GPU, 1);
30     gb->scheduleCapture(MetricType::GPU, 1);
31     gb->scheduleCapture(MetricType::NET, 1);
32     gb->scheduleCapture(MetricType::MEM, 1);
33     gb->scheduleCapture(MetricType::FOW, 1);
34     gb->scheduleCapture(MetricType::BAT, 1);
35     gb->scheduleCapture(MetricType::ISSO, 1);
36 }
    
```

SDK Native Integration



Unity SDK package manager with simple configuration

STUDIO PRO

Track and analyse performance of your own portfolio or run competitor analysis.

Easily and quickly measure the performance of any application, with zero code changes required.



SNAPSHOT

For Android

A plug-and-play approach that allows anyone to test any Android device and game running version 4.1.2 and up.

Pro includes an Android application for wireless testing / focused Android profiling

For iOS

Use the Desktop App on Windows, Linux, or OS X to get performance metrics from iOS 8 and up.

Manual

Tests development and production builds on any app without code changes, allowing for in-depth competitor analysis.

FEATURES

- Profile game performance in any build
- Detect if devices are consuming more memory than expected.
- Easy install, test, and report.
- Jira integration for raising tickets with engineering team directly from the GameBench web dashboard that include links directly to your session
- Web dashboard provides a single place to view all performance statistics
- Performance improvements highlighted
- Capture screenshots
- Markers (across game time and levels)
- Run multiple comparisons

BENEFITS

Specifically created to deliver:

- Competitive analysis
- Manual play tests
- Regression testing
- Feature and content testing

One comprehensive and integrated solution for all game performance metrics:

- Frame Rendering
- Memory Usage
- CPU Usage
- GPU Usage
- Network Usage
- Battery Usage

Simple, intuitive and fast:

- Precisely locate, capture, and communicate performance issues.
- Understand, compare, and share (e.g. with marketing) performance both within and across games, platforms, networks, and devices.

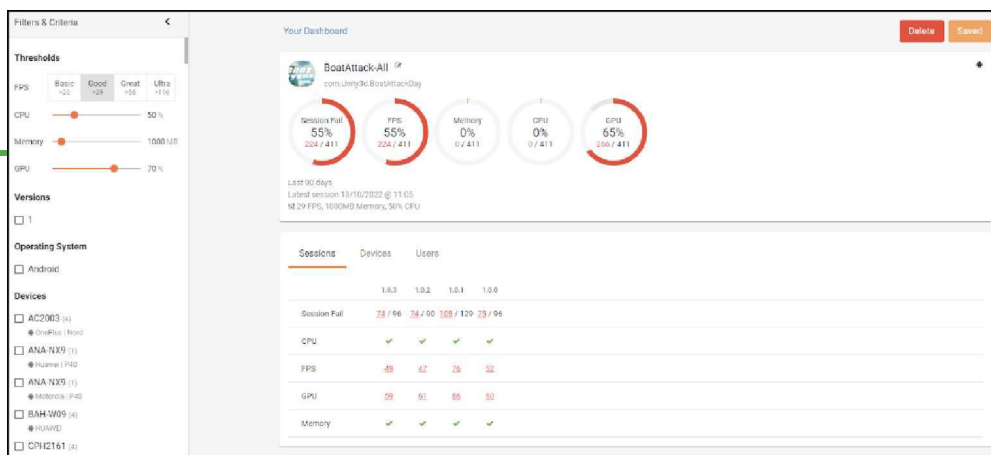


UNIFIED WEB DASHBOARD

Store, visualise & compare test sessions from all GameBench tools

Quickly and precisely verify the performance of an upcoming release or a new build.

Minimise human error during performance analysis. Scalable performance testing that reduces verification time by 25%.



Metric thresholds for rapid and confident release decisions

SNAPSHOT

Insight Delivered

Massive increase in quality and quantity of data points, comprehensively showing release or product health.

Automation Impacts

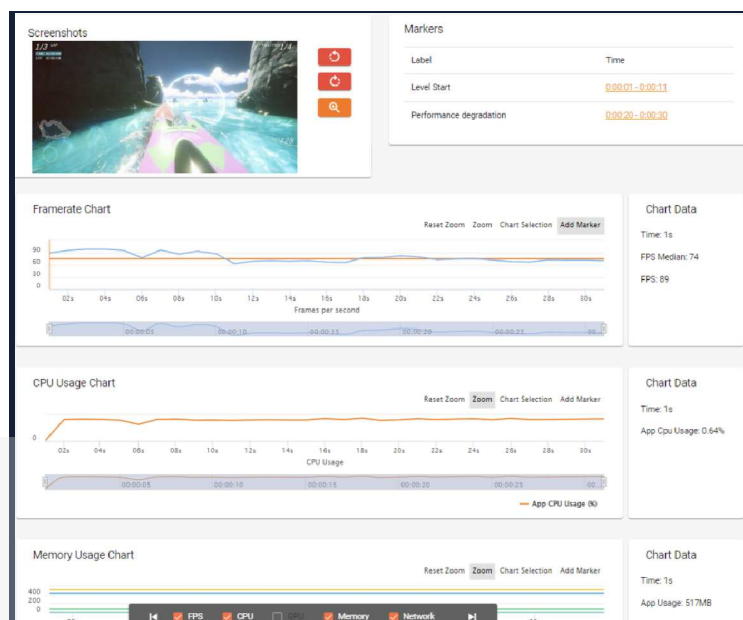
Persistent real-time monitoring with simultaneous, multi-device cloud-based testing.

Device Tying

Identify and group mobile devices into performance tiers, based on realistic thresholds.

Optimize Acceptance Criteria

Balance optimum gamer experience on higher-end devices, with maximum market penetration.



Time series metrics with markers

BENEFITS

Centralise high volumes of test data for quality decision making

- Dive into time series data from any GameBench tool
- Rich comparative device performance analysis
- Set custom performance success criteria
- Visually correlate groups of metrics to target critical feedback
- Track key metrics across all data by week, month, release, or all time

Accelerate performance analysis

- Create custom cards to focus on specific test cases
- Metric thresholds transform raw testing data into pass/ fail decision points
- Interrogate each release or build to target individual failures
- Spot performance regressions between builds and releases
- Version breakdown quickly identifies improvements or regressions
- Isolate failing sessions to speed up analysis and reporting
- Analyse single recordings with time series metrics and correlating screenshots

Rapid access and sharing of performance results

- Custom cards to highlight and share test cases
- Jira integration informs development of detected problem sessions
- Automated cross-team failure alerts
- Clear time series data with screenshots and logs
- API integrates GameBench with existing dashboards
- Cloud, private cloud or on-premises