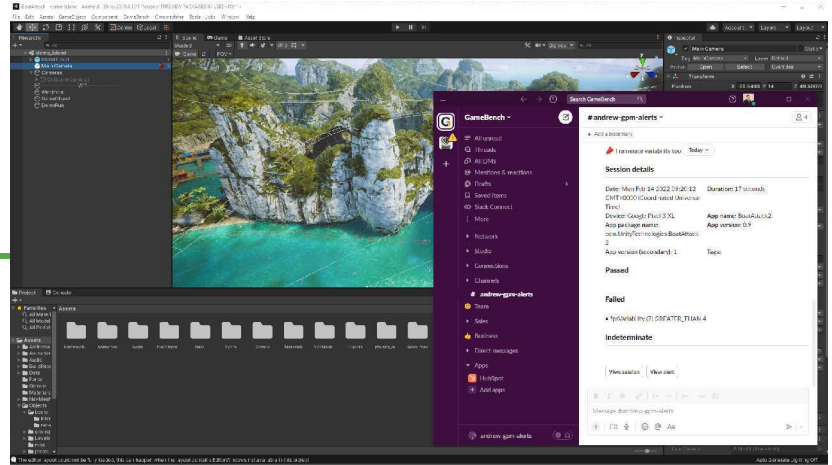


# STUDIO SDK

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

### 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

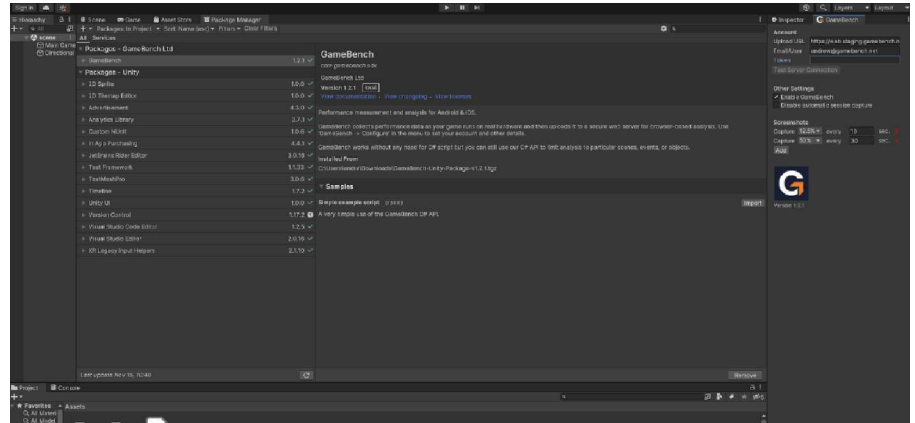
### Expert user support via

- 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
- Automated 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.

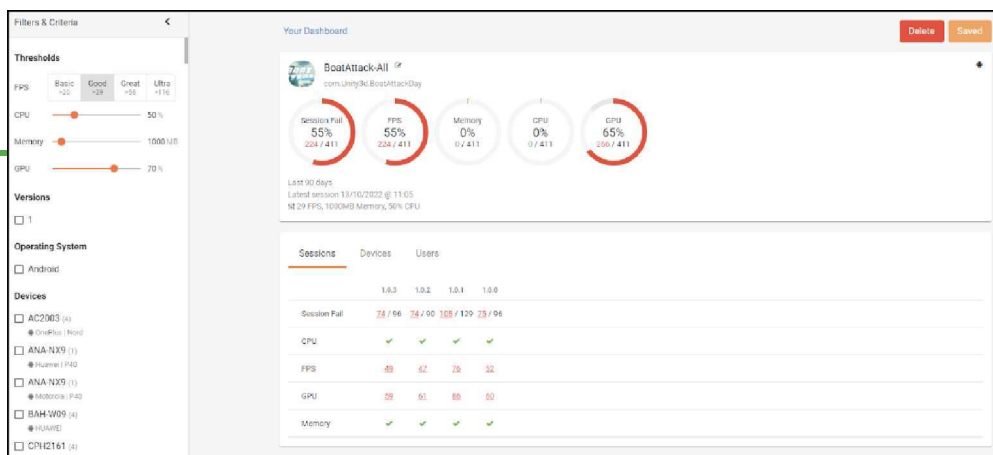


# UNIFIED WEB DASHBOARD

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

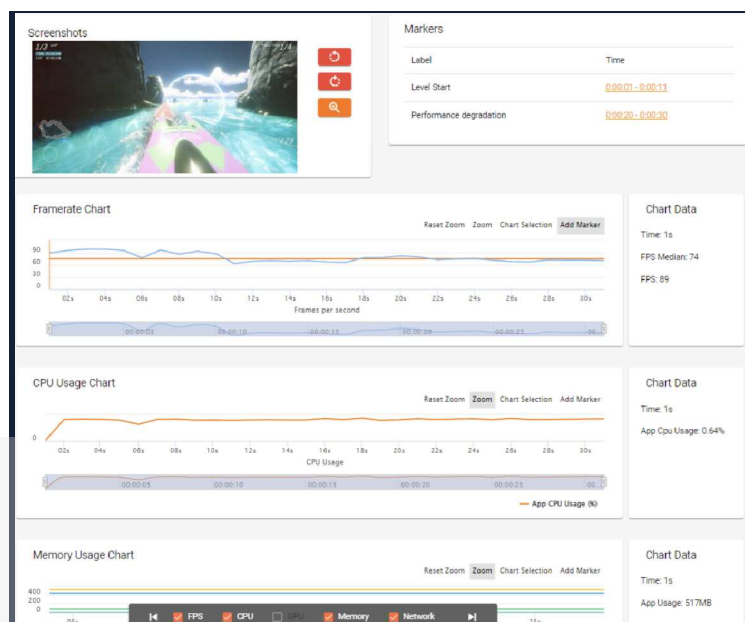
Persistent real-time monitoring with simultaneous, multi-device cloud-based testing.

### Device Tiering

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