



Migrating from PlayFab to brainCloud

Feature Comparison (Last Updated for brainCloud 5.9)

Executive Summary

brainCloud offers a **broader range of features and technology** than PlayFab, making it suitable for a wider range of titles across the whole **console, desktop, and mobile** spectrum. The rich feature set, great documentation, and excellent support also make the platform **more productive** to build upon.

Finally, our support for **private deployments** on all three cloud platforms (AWS, Azure, and GCloud) is attractive for larger Studios and Publishers that want greater control over costs and data.

Advantages of migrating to brainCloud

Extensive Feature Set

brainCloud offers a broader range of features than PlayFab, providing additional benefits post-migration. In particular, brainCloud's **Real-Time Tech (RTT)** system introduces a WebSocket connection, which enables asynchronous communication between the game client and backend servers, allowing for features such as real-time *Chat*, *Online Presence*, and eliminating the need for *polling* during *Online Matchmaking*.

Active Development

brainCloud is in active development and has maintained a consistent and robust development cycle, releasing **major updates every 6-10 weeks**. This has resulted in over 60 major releases to date, reflecting the platform's commitment to continuous enhancement. Each release focuses on improving scalability, robustness, and adding new features. These advancements are implemented with an emphasis on **preserving stability and backward compatibility** for existing applications, allowing developers to adopt new features at their own pace.

Customization & Extendability

With comprehensive client APIs and custom code capabilities, brainCloud offers flexibility that empowers developers to extend functionality and seamlessly integrate third-party services. The in-portal IDE simplifies development and management of custom solutions, and *Cloud Code*, *Custom Entities*, and *RTT* means that there is **virtually no limit** to what can be built.

Flexible Pricing Model

brainCloud uses a "**Pay For What You Use**" [pricing model](#), aligning developer costs with platform usage. This approach offers a fair price based on actual usage, differing from flat-fee or rev-share models. This usage approach is more straightforward than the PlayFab model, resulting in **more predictable costs** on a month-to-month basis as your games scale.

Developer Support

brainCloud has excellent Support. Along with [guides](#), [API documentation](#), [forums](#), and comprehensive [online courses](#), brainCloud offers excellent support to all developers, providing quick answers, **often within one hour**, to technical or design questions related to your app.



Feature Comparison

The following sections illustrate how PlayFab features align with their brainCloud equivalents.

Multiplayer Services

In addition to support for *Online Multiplayer*, brainCloud offers built-in support for **Offline Multiplayer** (i.e., Words with Friends / Clash of Clans style) as well.

Cross-Network Identity & Data

Authentication	brainCloud offers a range of authentication options, including anonymous, username, and email, as well as a wide range of third-party mobile and console authentication options. Developers can integrate additional third-party authentication systems through the External Authentication feature. This flexibility allows for linking accounts with any third-party platform.
Friends	The Friend APIs offer similar functionality to PlayFab, also providing advanced search options and access to player data.
Player Data	User Attributes allow the storage of key/value pairs on players. User Entities are player-owned, JSON-based database documents, providing developers with greater flexibility in handling player data.

Multiplayer Servers

Dedicated Servers	Room Servers enable real-time multiplayer sessions within the brainCloud ecosystem, while Relay Servers provide simple, cost-effective, low-latency networking. Additionally, brainCloud supports integration with external fleet management tools, Gamelift, and Edgegap.
Global Reach	brainCloud multiplayer servers are available in regions throughout the world. The EdgeGap integration provides access to 10 times the number of regions as PlayFab.
24/7 Monitoring and DDoS Protection	brainCloud works with our hosting and multiplayer server providers to protect against DDoS attacks and other incidents.



Matchmaking and Groups

Matchmaking	<p>brainCloud offers offline and online matchmaking integrated with its Lobby system, similar to PlayFab's matchmaking queues.</p> <p>Custom lobby filter scripts in brainCloud enable complex matchmaking rules.</p> <p>The Matchmaking Monitor dashboard offers dynamic insights for analyzing and refining matchmaking strategies.</p>
Groups, Guilds & Clans	<p>Groups enable management of group members, invites, permissions, and data. brainCloud also supports Group Entities for custom group storage, Group Files, Group Leaderboards, and Group Chat.</p>

Leaderboard and Statistics

Tournaments and Leaderboards	<p>brainCloud offers easy leaderboard configuration, including group and social leaderboards. brainCloud Tournaments support Divisions, which divide tournaments into groups of a specified number of players, promoting greater player engagement.</p>
Prizes	<p>Prize distribution can also be achieved through Tournaments based on leaderboard ranks.</p>
Scheduling	<p>brainCloud Leaderboards and Tournaments can “rotate” on a daily, weekly, monthly, or yearly basis - or completely ad hoc. The results of previous rotations are available for players to view their past performance.</p>
Cheat Prevention	<p>API Hooks can be used to double-check scores before posting them to leaderboards. Cheaters can be tagged and cordoned to segregated leaderboards if desired.</p>
Statistics	<p>Statistics integrate with Quests, Milestones, and XP Levels, enabling automatic stat increments and rewards based on events. Additionally, brainCloud’s Global Statistics can be updated and read by all players.</p>

Party Networking & Chat

brainCloud offers a very flexible text chat system, complete with profanity filtering. Online Matchmaking APIs support groups of players.



LiveOps

brainCloud's rich Cloud Code system, in conjunction with our robust Custom Entity data system, enables developers to bring to life even the most ambitious LiveOps strategies.

Engagement and Retention

Game Manager Web Portal	brainCloud's Design Portal is truly best-in-class, supporting the entire development team, from programmers and product managers to test and support personnel.
Profiles	Track players across authentication services and platforms.
Achievements	Use Milestones and Quests to trigger Achievements based on Player Statistics automatically.
Player Communication	brainCloud supports emails, push notifications, chat, and in-game messages.
Daily Reports	brainCloud's Reporting screens provide daily updates to key metrics like DAU, MAU, ARPDau, Retention, etc.
Cloud Scripts	brainCloud Cloud Code offers rich support for server-side player data and logic.
Real-Time Segmentation	Segments and Automated Promotions enable apps to act immediately on targeted groups of players.

Content Management

Title Data	Global Properties enable the storage of key/value pairs for players, while Global Entities are globally accessible database documents that allow developers to create custom features.
Content Delivery Network	Global Files are automatically distributed to the CDN for fast access worldwide.
Item Catalog	brainCloud's Item Catalog supports the full item lifecycle, so that new items can be dynamically added to the game at any time.

Experiments

Every player account has an a/b test ID that can be used to define Segments, which can then be used to trigger Promotions or custom Cloud Code events.



Economy

Virtual Economy	Virtual Currencies allow credit and debit transactions through APIs and integration with the Marketplace Catalog. They can also be delivered via XP Levels, Quests, and Statistic events.
Player Progression	brainCloud's XP system automatically rewards players as they level-up in the game.
Stores and Sales	brainCloud Promotions and Redemption Codes allow devs to target players with sales and coupons.
User Generated Content	UGC can easily be handled via User Files and Custom Entities, and voted upon via the Leaderboard system.
Fraud Prevention	brainCloud does server-side Receipt Verification to ensure purchases are valid.
Powerful Backend Content Management Engine	Custom Entities are managed database documents and are crucial for creating custom features without platform constraints. They offer developers the flexibility to innovate and tailor solutions to specific needs, enabling unrestricted creativity and scalability.

Automation

Cloud Scripts	<p>brainCloud, like PlayFab, uses JavaScript ES6 and features an embedded IDE for script creation and management.</p> <p>Scripts can be organized into folders and support imports for modular development.</p>
Task Scheduling	brainCloud scripts can be scheduled to run in the future, with patterns for automating recurring jobs (hourly, daily, etc)



Data & Analytics

brainCloud provides immediate access to all key game metrics, while DataStream enables streaming of events to offboard services for deeper analysis.

Real-Time Analytics

Event Stream	brainCloud's DataStream system allows a real-time stream of events to be sent to third-party systems for analysis via connections to Segment.com or Kafka.
Real-Time Segmentation	Automated Promotions allow apps to act immediately on targeted groups of players.
Reports	brainCloud's Reporting screens provide daily updates to key metrics like DAU, MAU, ARPDau, Retention, etc.
Real-Time Rules Engine	brainCloud API Hooks can be configured to respond to any player event.
Event Filter and Search	brainCloud's Request + Response logs allow developers to analyze players, events and error conditions in detail.

Data Management

Insights	View key metrics for your game, including: Users & Revenue by Country, Language, Revenue by product, Revenue by store, D1 to D3 Retention funnel, and of course DAU Timeline, and more.
Event Archiving	brainCloud's DataStream allows a real-time stream of events to be sent to third-party systems for analysis via connections to Kafka or Segment.com. These events can then be archived in those systems.

Compliance

GDPR	brainCloud is committed to being General Data Protection Regulation (GDPR) compliant and provides developers with the necessary APIs.
COPPA	brainCloud is in use today by COPPA-compliant games.

Raw Event Data

Data Explorer	All Entity Data is accessible by developers directly from the Portal. Event data is accessible via Segment.com / Kafka-connected tools.
Export	brainCloud supports the export of user and entity data. Additionally, customers with Private Deployments gain direct access to the entire MongoDB data store.