brainCloud

Upgrading to brainCloud from PlayFab

Servers

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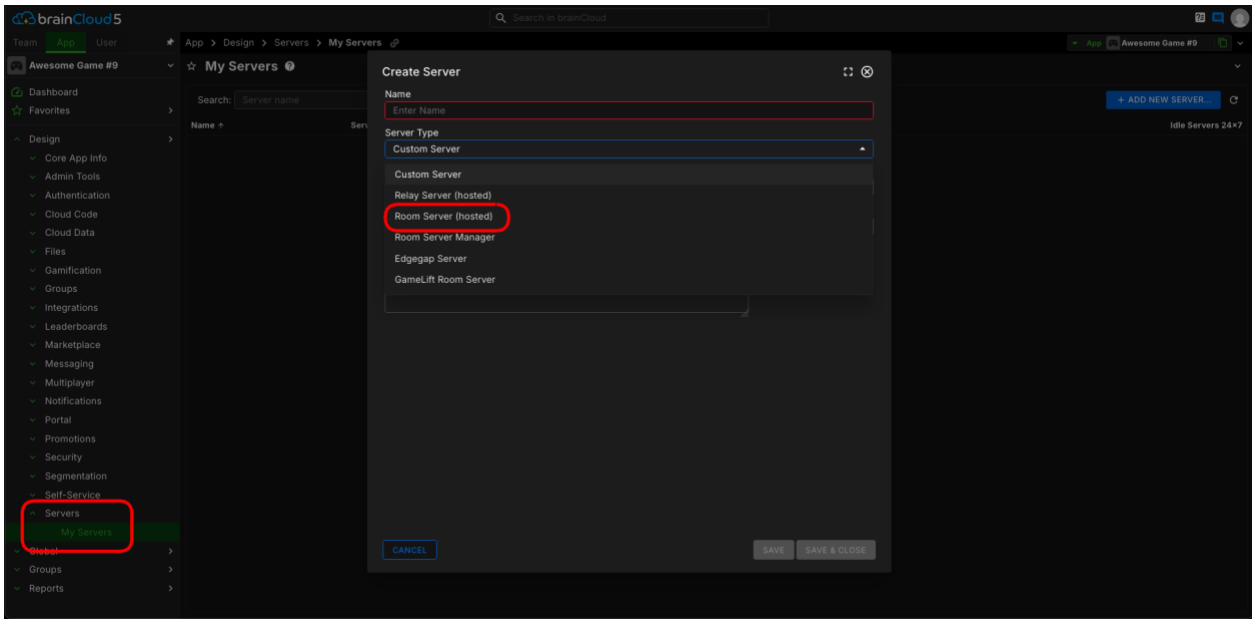
Introduction

In a previous guide we explored how brainCloud's Matchmaking feature can be used to replace your PlayFab matchmaking requirements for migration. In this guide we are going to take a look at the different multiplayer hosting and networking options brainCloud provides and how you can replace/migrate your PlayFab hosted servers and how they differ from PlayFab.

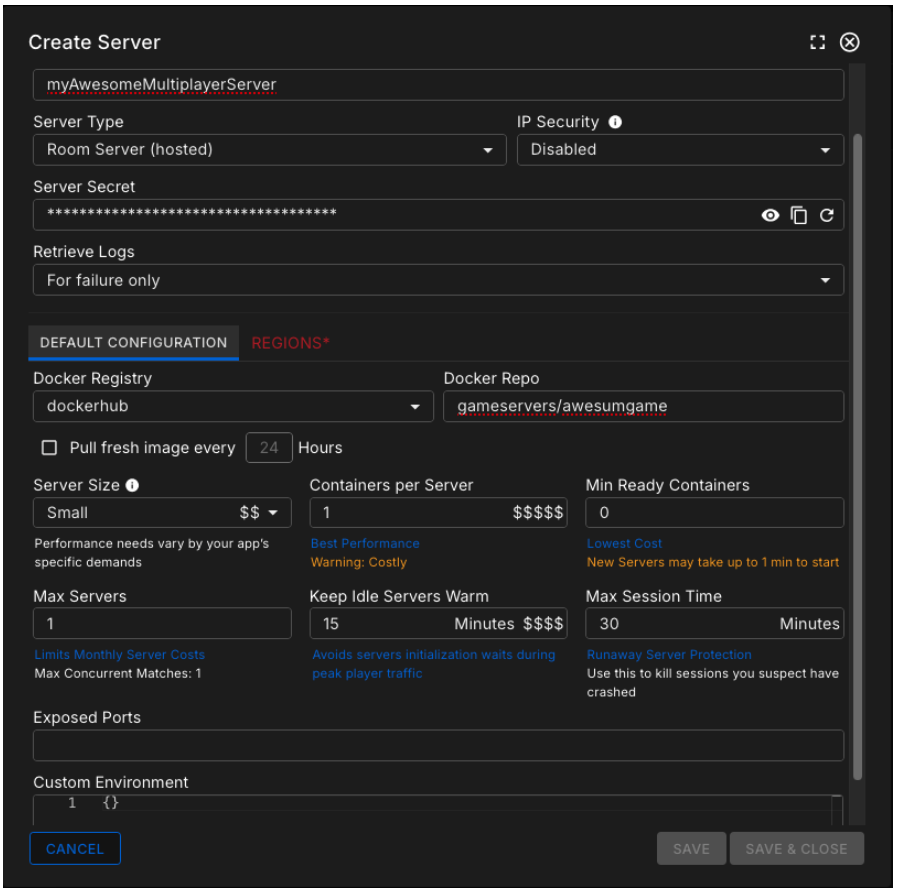
Room Servers

brainCloud has several different server hosting options available. We will cover some of the others later but the closest to PlayFab's multiplayer servers are called *Room Servers*. The most important difference between room servers and PlayFab multiplayer servers is that they currently only allow docker images to be hosted. However, brainCloud does offer integrations with platforms which allow for executable processes to be used which are covered later in this guide GameLift & EdgeGap.

You can set up room servers by going to the **Design → Servers → My Servers** menu and clicking on the Add New Server button in the top right corner of the dashboard. When the server config panel appears we need to change the "Server Type" to "Room Server (hosted)".



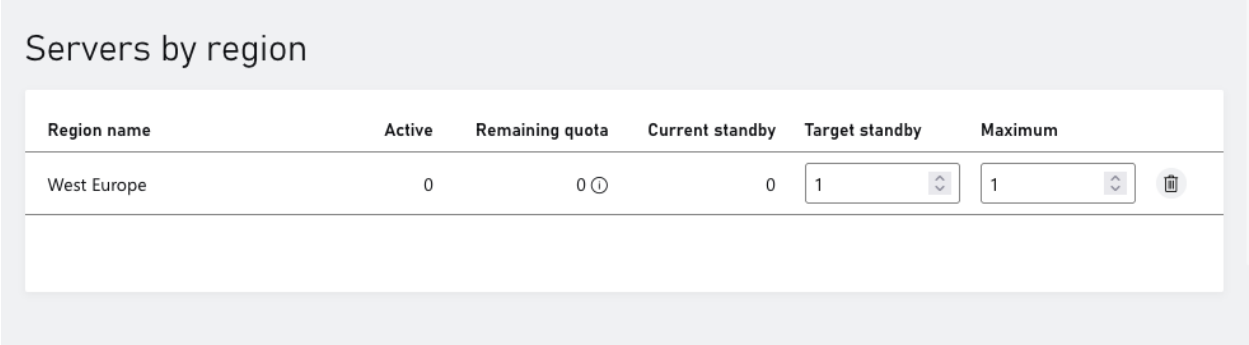
Changing the server type will present you with a lot of new configuration options so let's go through the important ones compared to your PlayFab setup.



Configuring Room Servers

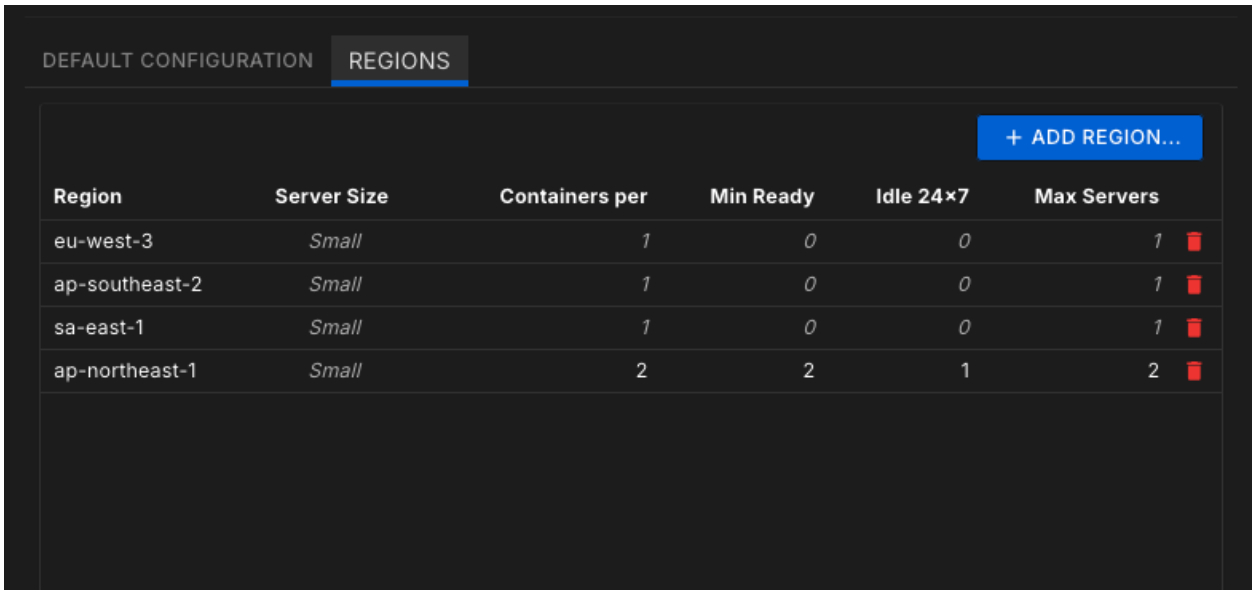
You can see from the image above that you can configure options for your server size, containers per server and the min/max servers.

The server size is similar “VM Family” option you can choose from in PlayFab when creating new builds. You can read more about those sizes and their specs here. You can also configure how many containers you want to run on each server. These parameters are similar to the options available on PlayFab once your build has be uploaded.

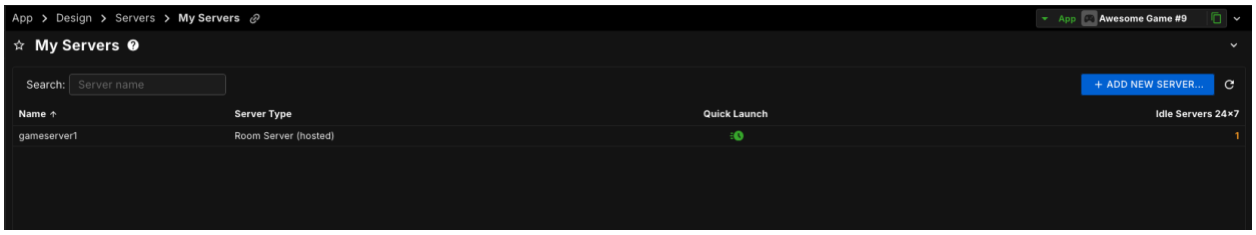


However, these are set per region with brainCloud and provide options for when to kill sessions or keep them alive when no players are connected.

brainCloud also allows you to choose specific scaling settings by region. If you click on the Regions tab and add a region, it will ask if you want to use the default configuration for the region or create a unique configuration for that region.

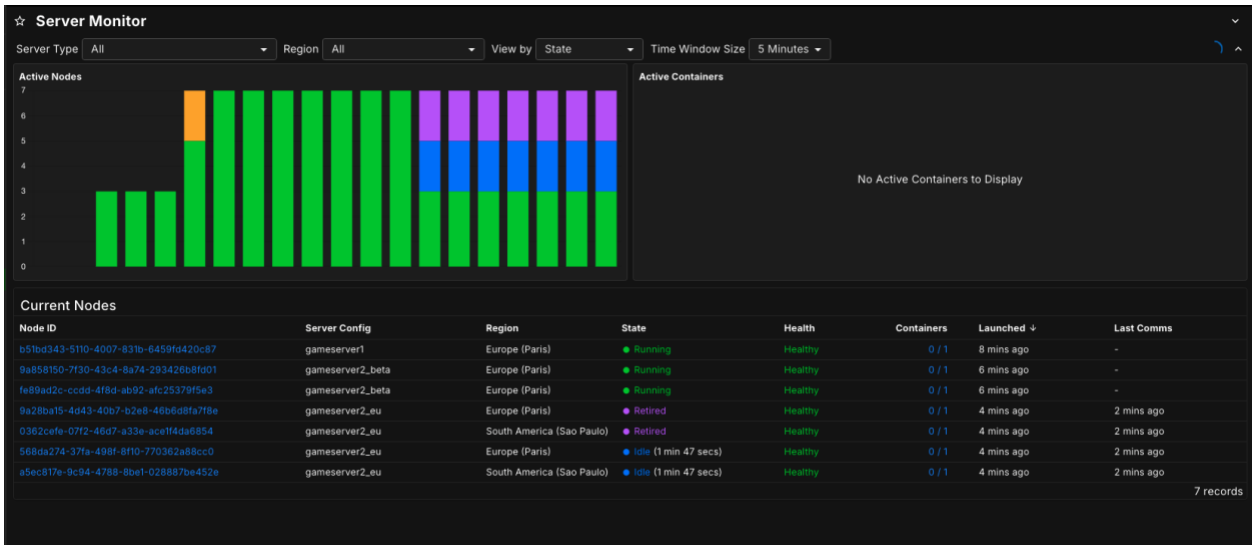


If you have configured your server with a “Min Ready” value of above 1, then you should see that the server should be available from the Quick Launch icon on the servers dashboard.



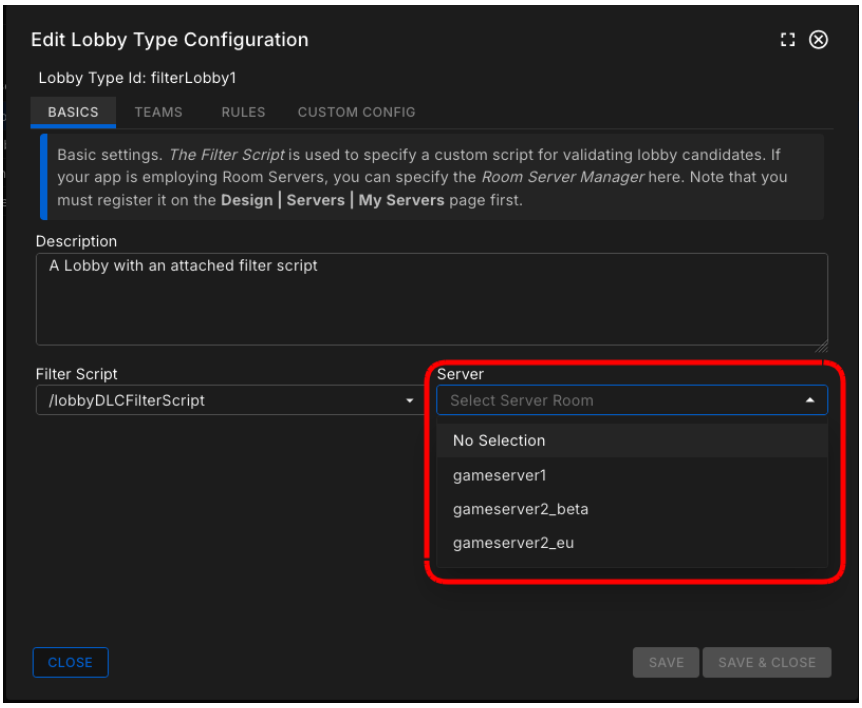
Servers Monitor

You can view your server activity by going to the **Global → Multiplayer → Server Monitor** dashboard. Here you can filter by server, region an state.



Connecting To Servers

Once your server is configured and running, you can connect to it using brainCloud lobbies which are covered in a our dedicated Matchmaking guide. The set up as the same as discussed in that guide however, you need to set the room server in the lobby configuration panel.



When a lobby has been found, the lobby service will now attempt to start a new room. As the lifecycle of that room progresses your client will get messages via the RTT service showing the lobbyId and the connection data (ip & port) which can be used to connect to the server.

Matchmaking With Ping

brainCloud also allows you to incorporate client ping into matchmaking using the lobby requests. The GetRegionsForLobbies request will return endpoints which your client can ping and that ping value can be sent up for matchmaking using FindOrCreateLobbyWithPingData.

GameLift & EdgeGap

While you can host docker images using brainCloud's out-of-the-box Room Server feature, this might not be suitable for all cases. In the event that you need to host executable processes or need larger, bare-metal instances, or host your servers closer to your players, brainCloud provides integrations with GameLift or EdgeGap for more specialised hosting solutions.

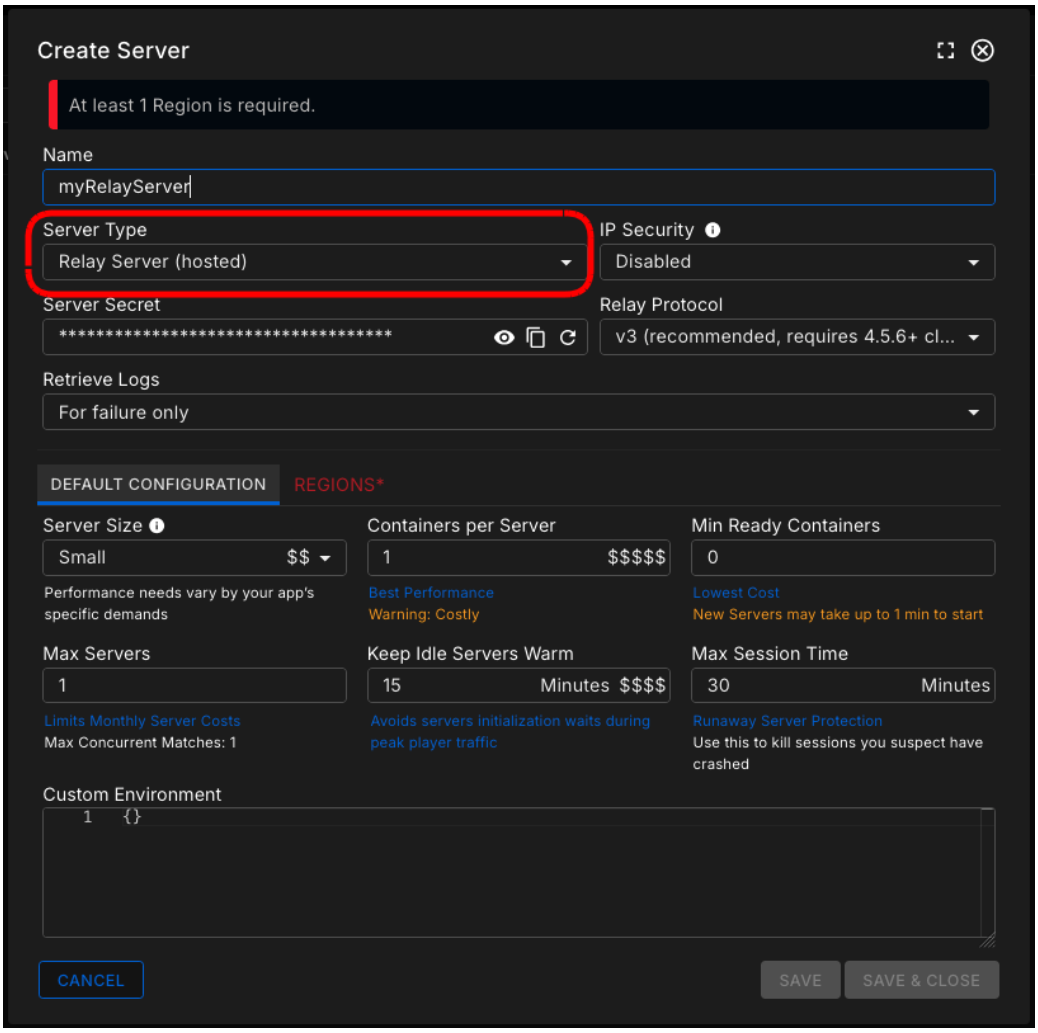
These integrations allow your brainCloud backend to control fleet orchestration and sessions on these platforms, for example, having your matchmaking and lobbies automatically spin up session on these external tools and have your players connect to them without any additional

server-to-server coding or infrastructure. brainCloud provides guides for GameLift and EdgeGap set up on their documentation site.

Party Service & Relay Servers

For developers who are using PlayFab's Party Service brainCloud offers a similar feature with Relay Servers. Relay Servers provide Real-Time UDP/TCP networking between clients and is hosted and managed from within the brainCloud portal.

You can create relay servers the same way as covered for room servers above, however, you need to select the "Relay Server (hosted)" server type.



You can see from the example above that the relay server configuration options are very similar to room servers and you connect them using brainCloud lobbies as with room servers, however brainCloud provides their own APIs in the client SDK for sending & receiving packets using the relay service. This is very useful as it means you will not need to integrate a 3rd party networking service to use relay servers. You can read more about that here.