brainCloud Bombers UNET Tutorial

Thank you for downloading the brainCloud Bombers UNET Tutorial! This example demonstrates how brainCloud and UNET can be used in combination. brainCloud provides the persistent back-end with support for experience levels, achievements, leaderboards, data, email login, and custom statistics. UNET provides the ability to search for and host multiplayer games.

Note that the brainCloud Baas client SDK is already included in the brainCloud Bombers UNET Asset Store package so you do not need to download or import it into your project.

*Notice - There is a **known defect in Unity 5.3.0** where more than 15 fields with [SyncVar] attribute throws an error and prevents scripts from compiling. brainCloud projects may be affected by this defect. Unity has stated that this defect will be addressed in **5.3.1**.*
For now, avoid using brainCloud with Unity 5.3.0.

Unity issue tracker link - http://issuetracker.unity3d.com/issues/networkbehaviour-isnt-allowed-to-have-more-than-15-syncvars

Part 1: Getting Bombers up and running

Step 1: Download the Unity Asset Store package

Since you're reading this document, the assumption is that you've already done this step. However you can locate the brainCloud Space Shooter tutorial package by searching on the keyword "braincloud" in the Unity Asset Store, or by navigating directly to this link:

https://www.assetstore.unity3d.com/#!/content/50656

[Optional] Step 2: Check out the game online

The game is readily available on the web - so if you'd like to try it out ahead-of-time, point a Unity web-player compatible browser at:

http://hubs.ly/H01yKLW0

For instructions on playing the game, skip to the end of this document. Be sure to come back when you're through, as we'll continue to show you how to hook it up to Unity Networking and your own brainCloud account.

Step 3: Configure your Unity UNET account

In order to run the project in the editor, you will need to sign up for **Unity Multiplayer** services account. Navigate to http://unity3d.com/services to set up your account, and then follow the steps to create a project for your game.
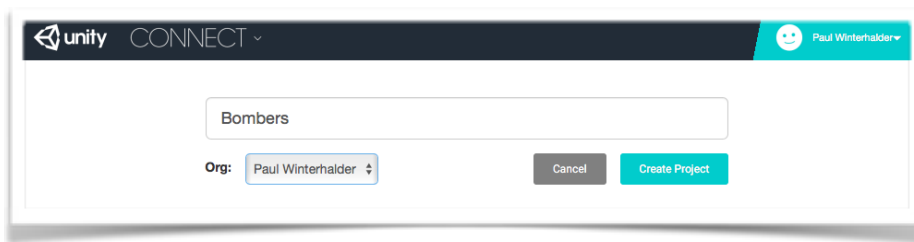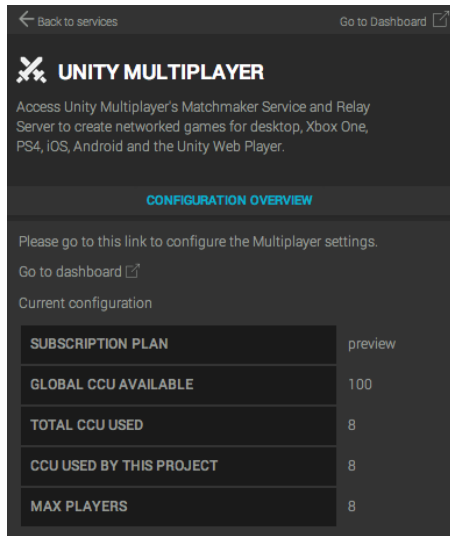

Once you have created the game, you will need to activate multiplayer services for it.

Click on the game in the Projects list, and then click the **[Activate Multiplayer]** button.

You will be asked for the *Max Player Count* (i.e. room size) for each instance. Set this to **8**, then click **[Save]**.
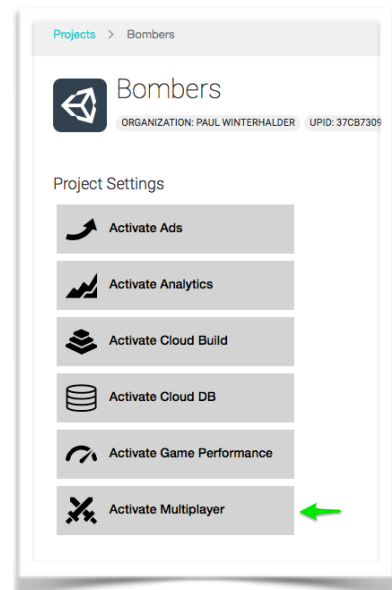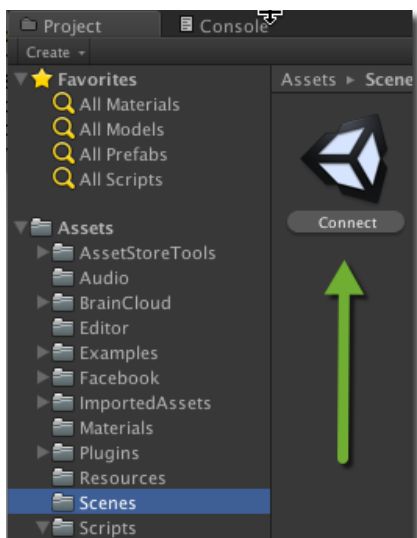
Step 4: Link up your project in the Unity IDE

You now need to associate the project on your computer with Unity's configuration in the cloud.

Open the project in the Unity IDE.

Open the Unity Services pane (click the **Window | Unity Services** menu).

Select the UNET project that you just created.

Step 5: Run the game from the IDE

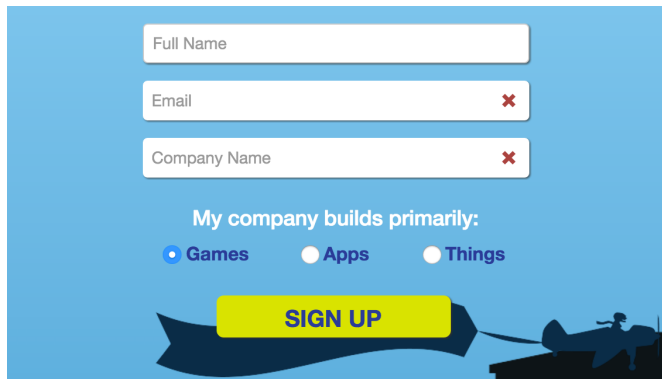After having linked your UNET project to the Unity project, you should be ready to go.

Open the **Assets | Scenes | Connect** scene, then hit **Play**.

Give the game a whirl, and then come back and we'll hook it up to your own brainCloud account.

Part 2: Hooking up to your brainCloud account

As provided, the game runs using the brainCloud Bombers demo app id. The following steps show you how to configure Bombers to use your own app id.

Step 1: Register with brainCloud

If you haven't already done so, you'll want to create a free account on the brainCloud servers.

Navigate to:
http://getbraincloud.com/signup/
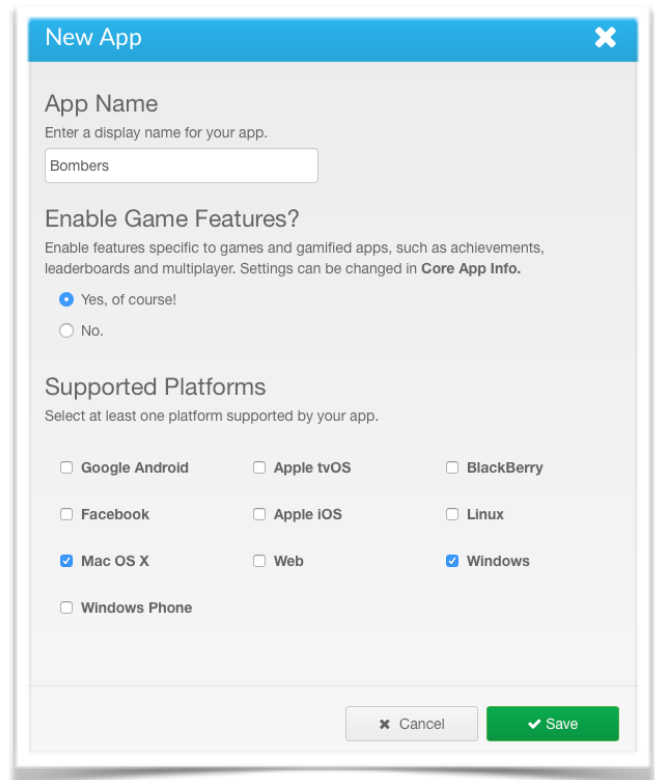
and follow the steps to register an account.

Step 2: Create a new game in the brainCloud portal

Next you need to create a game in your brainCloud account. The steps are straight-forward:

- Log into the portal:
  http://portal.braincloudservers.com

- From the **Home** screen, go to the *Your Apps* section and click the **[+]** to create a new app

- Enter a name for your app in the *App Name* field. Check the boxes for the *Supported Platforms* of your app. Be sure to include your development platforms
  (i.e. Mac OS X and/or Windows).

- Click **[Save]** to create the app. You may be prompted to enter a discount code - enter a code if you have one, otherwise click **[Skip]**.

- Select your game from the **Apps** screen to view the **Design** settings for your app. By default, you'll go to the **Design | Core App Info | Application IDs** page.

- Note your *App ID* and *App Secret* - you'll be using those in the next step.
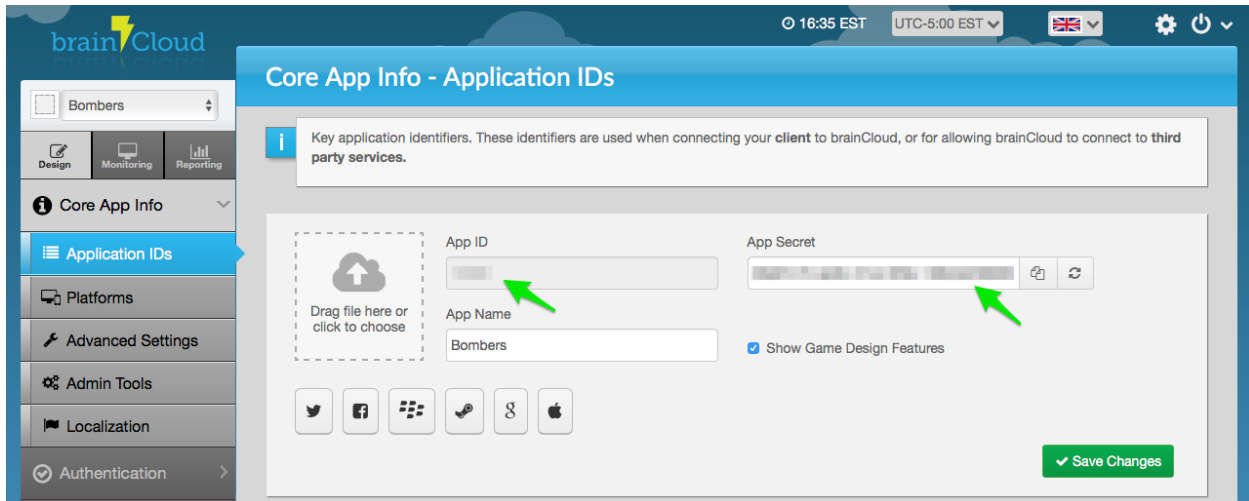
Step 3: Configure the brainCloud settings in your Unity project

Now, we give your Unity project the ids necessary to talk to brainCloud.

- Open your project in Unity

- Select **Window | brainCloud | Settings** from the Unity IDE menu to bring up the **brainCloud Settings** pane

- Enter the *App Id* and *App Secret* from the portal page into the *Game Id* and *Game Secret* fields of the settings pane *(note: brainCloud tends to use the terms **game** and **app** interchangeably)*
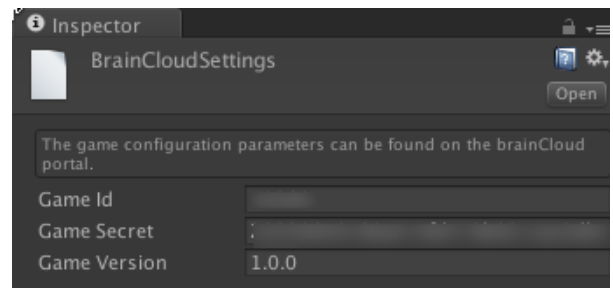
It's also worth noting that you can enable brainCloud debug using the the settings pane.

There are also buttons which take you to the brainCloud portal, API documentation and Tutorials webpages.

Step 4: Import the Bombers game data to your app

In order to get your app configured quickly, there is an import file within the **Assets | BrainCloudImportData** folder.

Log into brainCloud and navigate to the **Design | Core App Info | Admin Tools** page.

Click the **Import** button in the Configuration Data section, select the import file and click **[Upload]**.

You should now be set up! Try playing the game again.
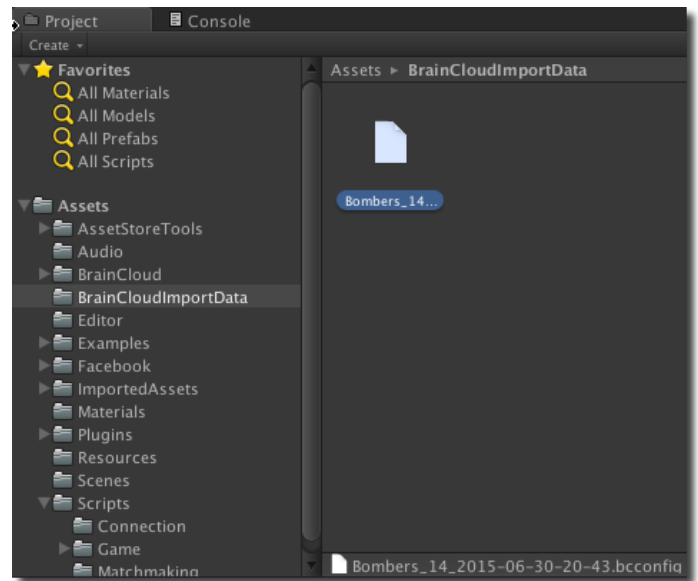
Part 3: Digging in

Bombers Deep Dive

More information on the Bombers game can be found here:

http://getbraincloud.com/apidocs/tutorials/unity-tutorials/about-braincloud-bombers/

brainCloud API Reference

For the complete reference of available APIs refer to the brainCloud APIDocs at:

http://getbraincloud.com/apidocs
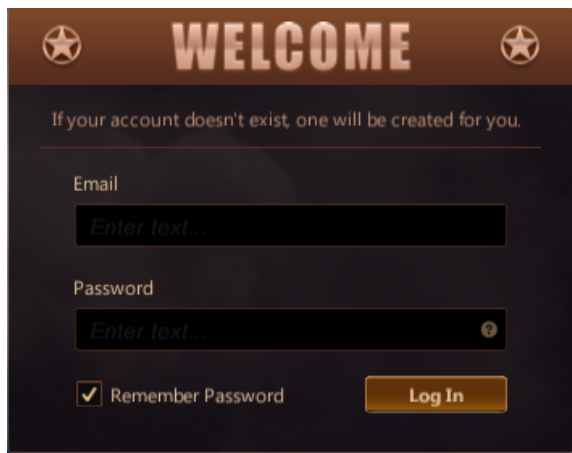
For more Unity tutorials, go to:

http://getbraincloud.com/apidocs/tutorials/unity-tutorials/

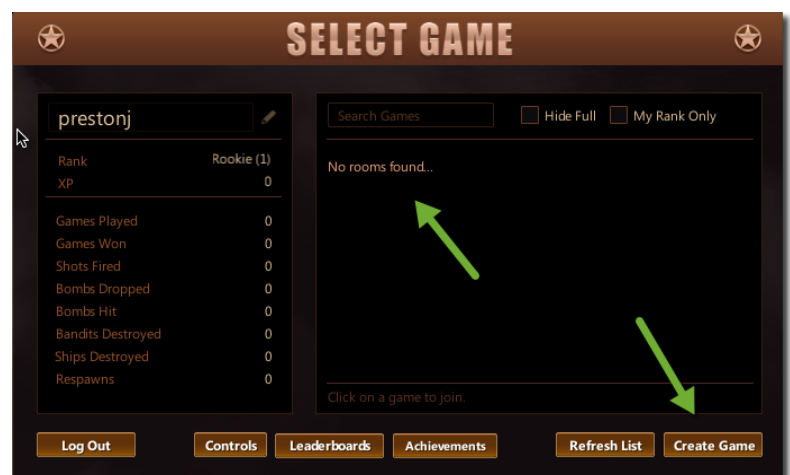Happy Coding!

Part 4: Playing Bombers

When you start up Bombers, you are first presented with the **Welcome** screen.

Enter an *email* and *password,* click **[Log In]** and you should be connected to brainCloud.
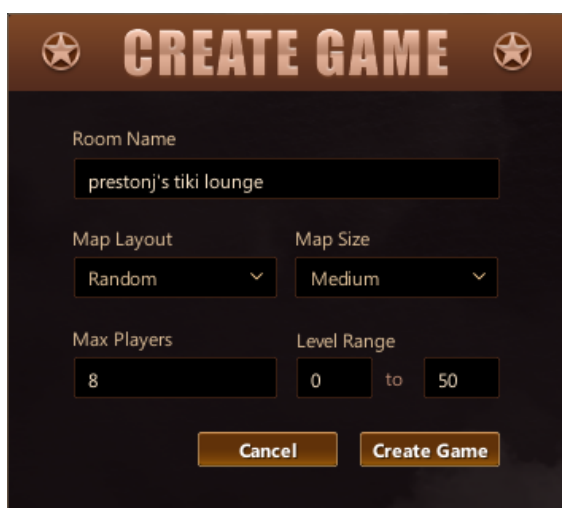
(Note - if the account doesn't already exist it will be created for you.)

Upon successful authentication you should see the **Bombers Lobby**.

You can join an existing game (room), or create a new one. For our purposes, we will create a new game.

In the **Create Game** dialog you can specify your room name, the layout of the map, map size, maximum number of players, and the player level range. Just click **[Create Game]** to continue.

At this point you can invite a friend to join you in the lobby. When everyone has joined in, click **[Start Game]** to launch.

Game Controls

Bombers uses standard WASD keyboard + mouse controls:

- 'A' turn counter clockwise
- 'D' turn clockwise
- 'W' speed up
- 'S' slow down
- Mouse button 1 to fire guns
- Mouse button 2 to drop a bomb (if available)

Happy Hunting!