

Running the Server

Make sure "Gamepad_Server.exe" is running on your PC that has the XBox controller(s) connected.

- these can be up to 4 XBox One and/or XBox 360 controllers
- either wireless or wired versions
- a little black console window should show you the button/trigger/axis state of the controllers
- note that this server is designed to run on a regular desktop/laptop PC and NOT the HoloLens
- the server executable can be found under the "Gamepad_Server" after importing the Unity package into your scene

Licensing

Make sure your license file "Gamepad_Server.key" is placed in the same folder as the Server executable in order to run it.

By default this is the following folder: "C:\Program Files (x86)\Brekel Gamepad Server"

Unity Quick Start

Import the Unity package into your Unity scene.

Open the test scene.

Check the "Gamepad Client" script on the "Player Object".

- Note that the example scene has been setup to assume the "Gamepad Server" is running on the same machine as your Unity Editor. (you'll learn more about this on the next page)

Hit Play and you should be able to steer the capsule around with the left thumbstick and make it jump with the A button.

Note that the "Player Object" has a "Simple Character Controller" script attached, this collects the Xbox controller data and uses it to control the Player.

You can use this as a starting point to build more complex behaviors on your own.

Note that in order to deploy to HoloLens it is highly recommended to read the rest of the manual (or at the very least the chapter dedicated to that)

More about the Gamepad Client script

This script uses the included C++ plugin dll files to connect to the Gamepad Server application and get realtime information of the connected controllers.

Several versions of the plugin are included in the "Plugins" subfolders:

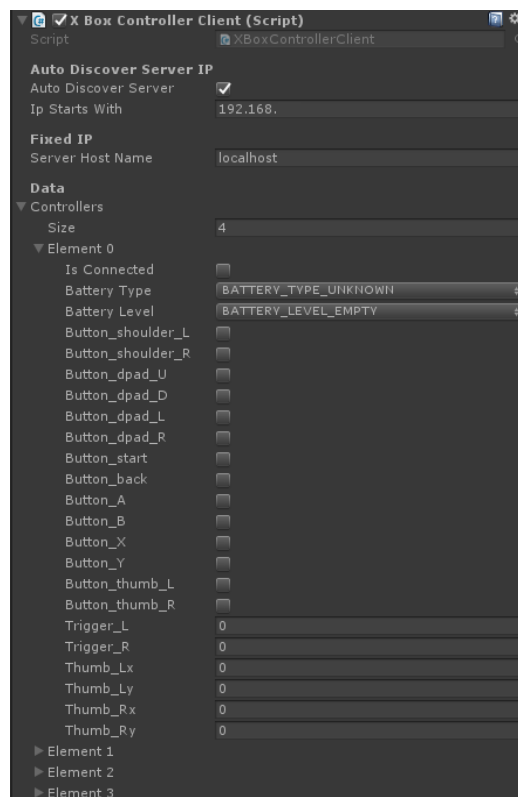
- X86, works both in the 32-bit Unity Editor and x86 Windows builds
- X64, works both in the 64-bit Unity Editor and x64 Windows builds
- X86_UWP, works when deploying to a HoloLens

The script can connect to the server in 2 ways (more on that on the next page)

- Auto Discover Server IP mode
- Fixed IP mode

You can open up the "Controllers" attribute and find an array of 4 controllers with all the buttons, triggers and axis data of each controller.

These can be used in your scripts to drive interactivity in your scene.



Auto Discover Server IP mode

When “Auto Discover Server” is turned ON (default), the plugin will search for the server on your local network at startup and automatically connect to it when found.

Note that when no server is found it will fallback to “Fixed IP mode” as a second attempt to connect.

To narrow down the search you can specify the “IP Starts With” variable.

This will only search for machines with IP numbers that start with that string.

Since many local networks use IP’s in the range of 192.168.0.0 – 192.168.255.255 the default searches in this range.

Fixed IP mode

When “Auto Discover Server” is turned OFF, (or a server was not found in Auto mode) the plugin will attempt to make a direct connection to the machine specified in the “Server Host Name” attribute.

This can either be an IP address, machine name or “localhost” if the server is running on the same machine as Unity.

Firewall

Make sure your firewall is not blocking things.

Data streaming uses TCP port 9911

Auto discovery uses UDP port 8642

Note that when building/deploying to the HoloLens that the server will run on a different PC and you will need to set things up so that it can connect to that PC.

Using “localhost” will NOT work in that case.

Deploying to HoloLens

Note that when building/deploying to the HoloLens that the server will run on a different PC and you will need to set things up so that it can connect to that PC.

Using “localhost” will NOT work in that case.

Basically changing “localhost” to the IP of the machine running the server will do the trick.

(or you can read the chapter about Auto Discover Server IP mode to let it automatically discover the server on your local network)

One important thing that **MUST** be done before building/deploying is to enable the “InternetClientServer” capability. To do this:

- Go to the Unity “Player Settings” by selecting Edit > Project Settings > Player
- Make sure the “Windows Store Apps” tab is selected
- Under the “Publishing Settings” scroll down to “Capabilities”
- Make sure “InternetClientServer” is enabled

