

Voice Chat Multiplayer (Netcode & Web RTC)

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About

- **Voice Chat Multiplayer** package is the demo that helps you saves your time to handle building Voice Chat Game using **Netcode** and **Web RTC**.

Requirements

Project

- It is recommended to use the latest Long-Term Support (LTS) version of Unity.
- The project has installed packages:
 - com.unity.netcode.gameobjects
 - com.unity.webrtc
 - com.unity.nuget.newtonsoft-json

Support Platform

- Windows
- Linux
- MacOS
- IOS
- Android (**ARM64** only. **ARMv7** is not supported)

Additional Notes

Please note that there are unsupported platforms below.

- **Windows UWP** platform is not supported.
- Building for **IOS Simulator** is not supported.
- **WebGL** platform is not supported.

Build on Android

To build the apk file for **Android platform**, you need to configure player settings below.

- Choose **L2CPP** for **Scripting backend** in Player Settings Window.
- Set enable **ARM64** and set disable **ARMv7** for **Target Architectures** setting in Player Setting Window.
- Choose **Require** for **Internet Access** in Player Setting Window.
- Set Disable Optimized Frame Pacing in Player Settings Window.

Build on IOS

You must disable the bitcode option in Xcode project exported from Unity

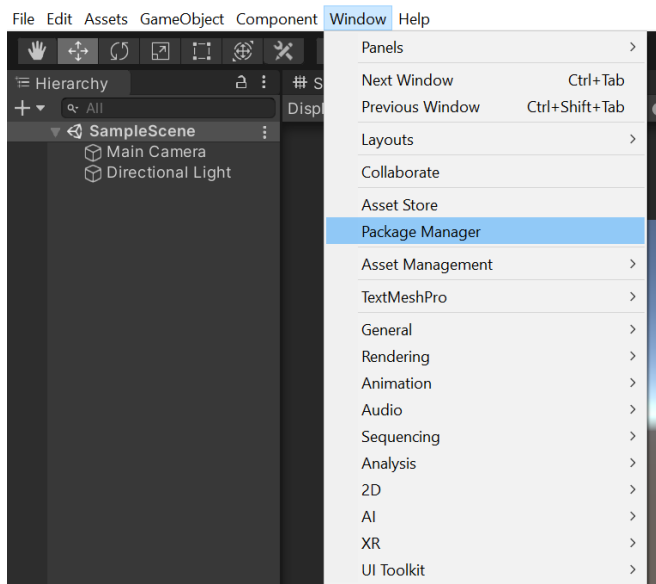
- On the Xcode **Build Settings** tab, in the **Build Options** group, set Enable Bitcode to **No**.

Install

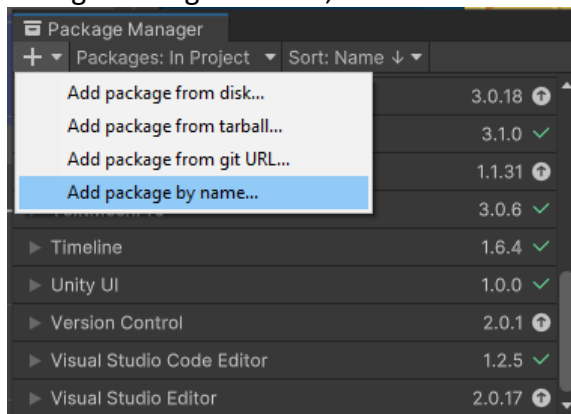
- After adding this package to the project, please check Package Manager has installed the following packages:
 - Netcode for GameObjects
 - WebRTC
 - Newtonsoft Json (The versions of the Unity Editor above Unity 2021)

Install package

Select Window/Package Manager in the menu bar.

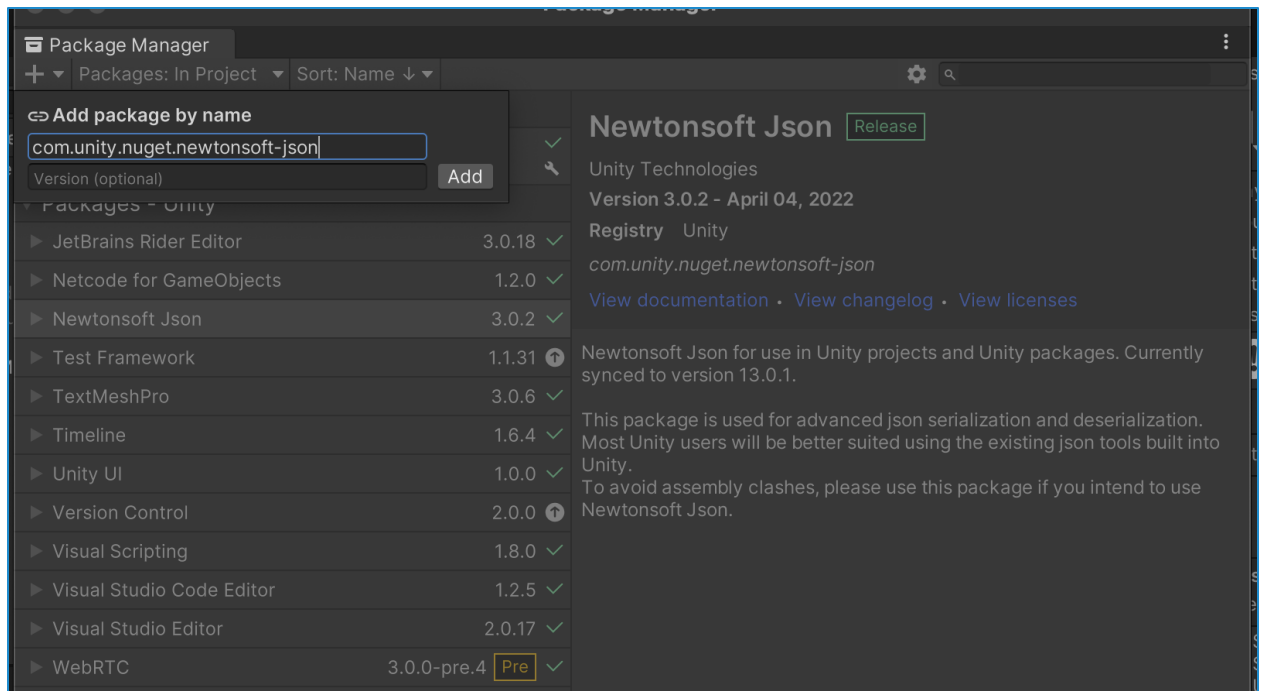


Check Package Manager window, Click + button and select Add package by Name...



Input the string per line below to the input field then click Add button, and will start install the package.

- com.unity.netcode.gameobjects
- com.unity.webrtc
- com.unity.nuget.newtonsoft-json



Start Demo

Start the **VoiceChatMultiplayer/Demo/GameScene.unity** to check the example.

Setup Player Network

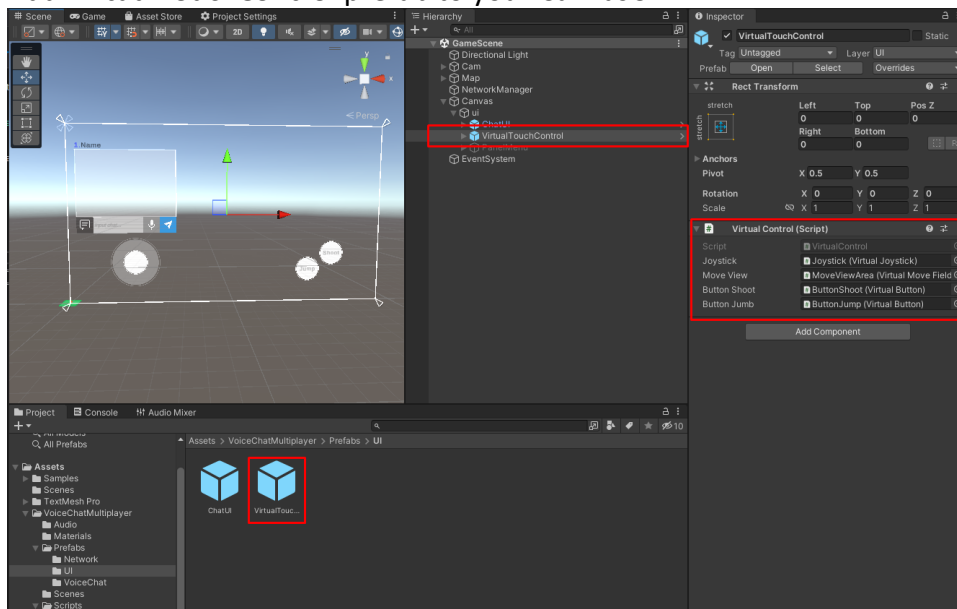
Please see the following instructions:

- <https://docs-multiplayer.unity3d.com/netcode/current/tutorials/get-started-ngo>.

Virtual Touch Control

To be able to control the character on the screen.

Add **VirtualTouchControl** prefab to your CanvasUI.

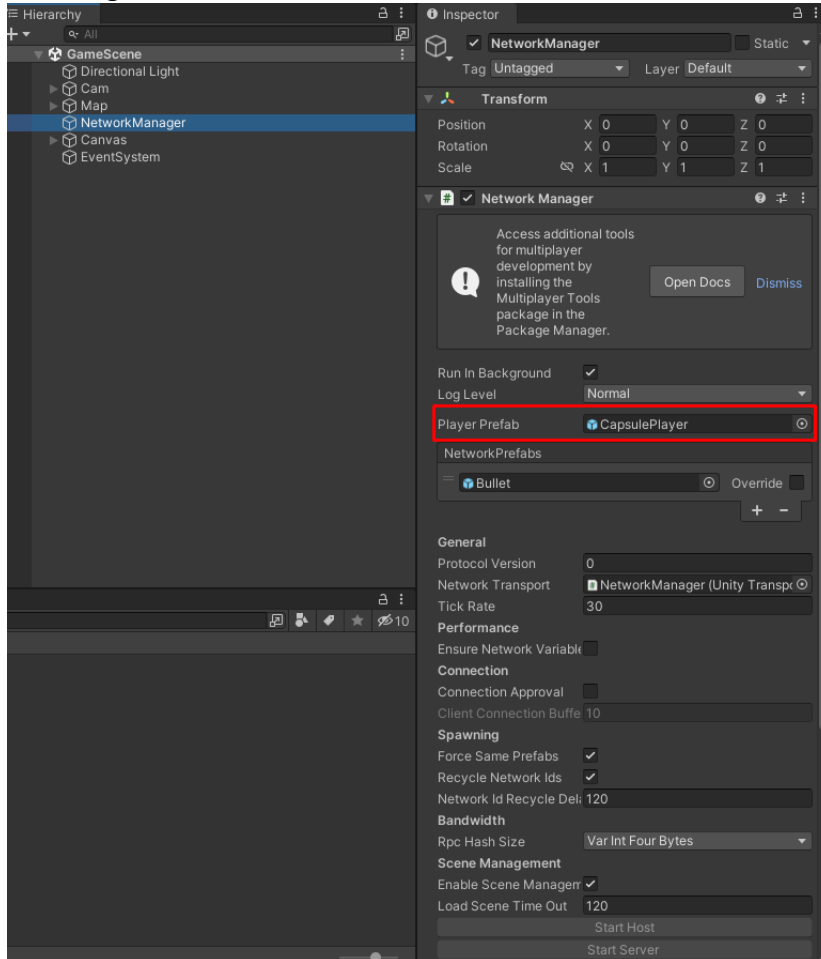


Parameter

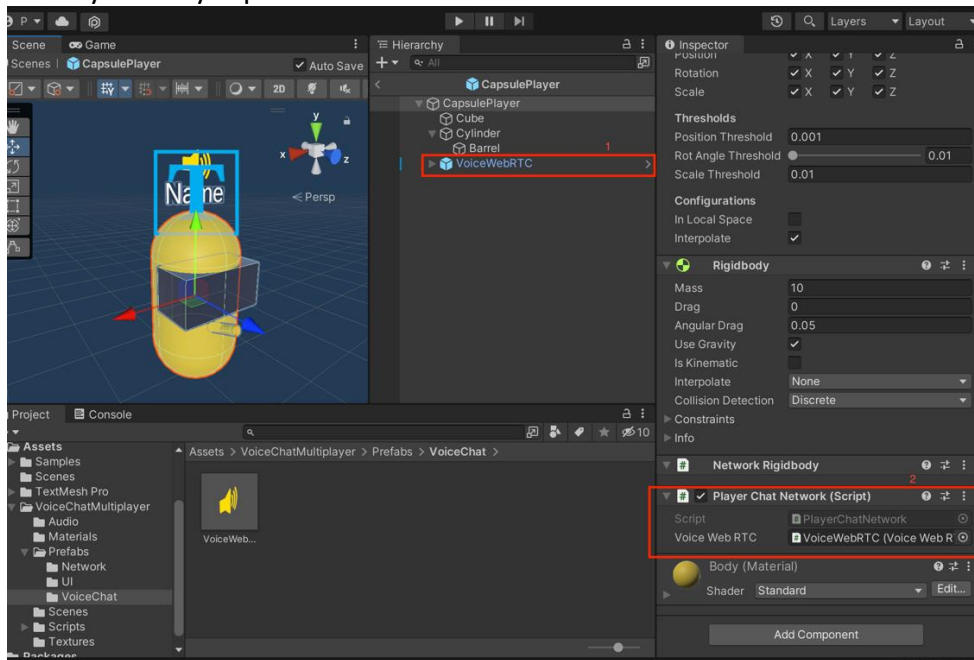
- Get direction of movement stick, call `VirtualControl.instance.Joystick.Direction`.
- Get direction of movement camera, call `VirtualControl.instance.moveView.Direction`.
- Get button shoot isPress, call `VirtualControl.instance.buttonShoot.IsPress`.

Add voice chat to Player

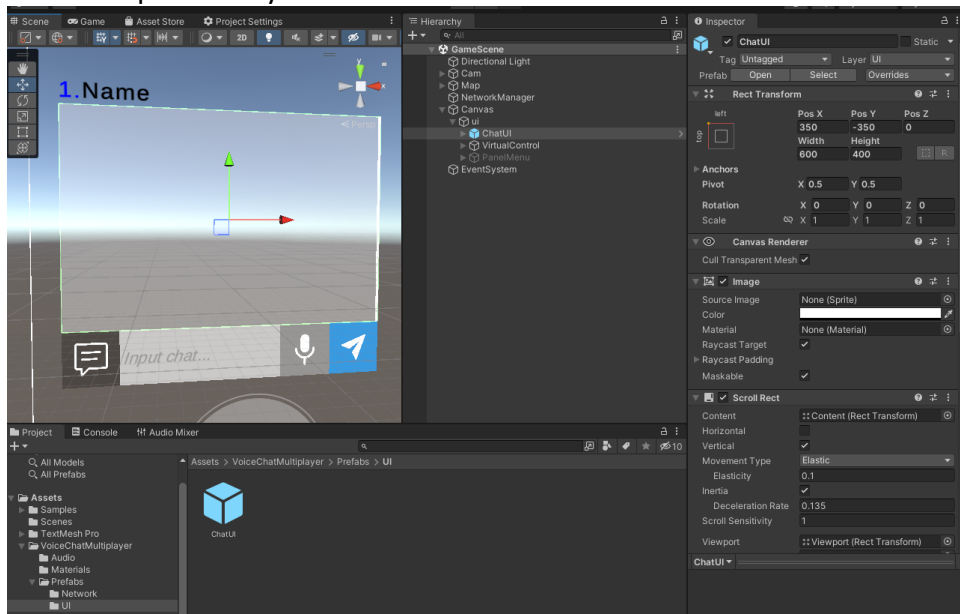
Use voice chat for your Player Network, select your player prefab form Player Prefab in Network Manager.



Then open your Player Prefab and add **Player Chat Network** component and **VoiceWebRTC** prefab inside your Player prefab.



Then add **ChatUI** prefab to your Canvas UI.

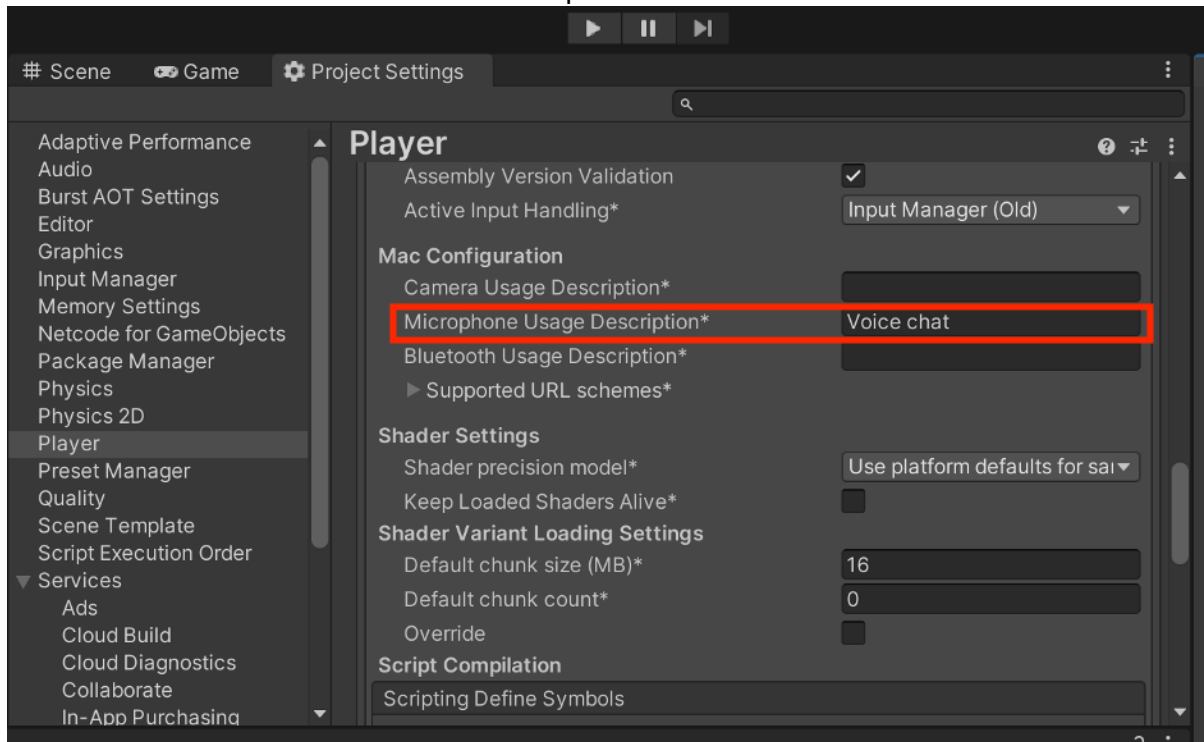


When the player connects to the server, you can start voice chat by clicking on the Toggle microphone icon in the game UI, or via script by select your own player **`GetComponent<PlayerChatNetwork>().StartCall(active)`**. If **active** of StartCall() function equals true, your own player will start voice chat and stop when the active equals false.

To mute another player, select this player **`GetComponent<PlayerChatNetwork>().Mute(active)`**. if **active** of Mute() function equals true, this player will mute.

Bonus

- If build gets some error, try adding microphone usage description in Project Setting before build because voice chat uses microphone.



- If there is any problem regarding the demo and need support, please contact me by email: tkitfacn@gmail.com.