Video Chat SDK

1. Description

The SDK support
UnityEditor,Android,IOS,Windows,UWP(Hololens).
Support multiple video types:device camera/unity
Camera/screen video/custom Texture.
Support AR, MR mixed video.
Support group audio and video calls,server call video
record.
Support Unity2018 and above.
The interface is simple, the capture of audio and video and
codec is separated separately, you can insert the sdk to
your own network easily.
https://www.youtube.com/playlist?list=PLqNc8GThKNiQj
A4IaFr1U_KQHYuKuqgus
Email:1786570525@qq.com

2.Project Setting

2.1 Player Settings -> Other Settings -> Configuration
 ->Scripting Runtime Version ->. Net 4.x . Mono

2.2Create a project with Unity 2017 and above.

2.3Edit-> ProjectSettings -> Audio ->DSP -> Good Latency

3.Server Config

In the Deom contain a test server, please note: unzip the archive to a directory outside the project, run tcp and udp server, you can set the port, the number of connections and whether to record in the config file, in addition, you need to set the firewall advanced settings , add those port to inbound rule.
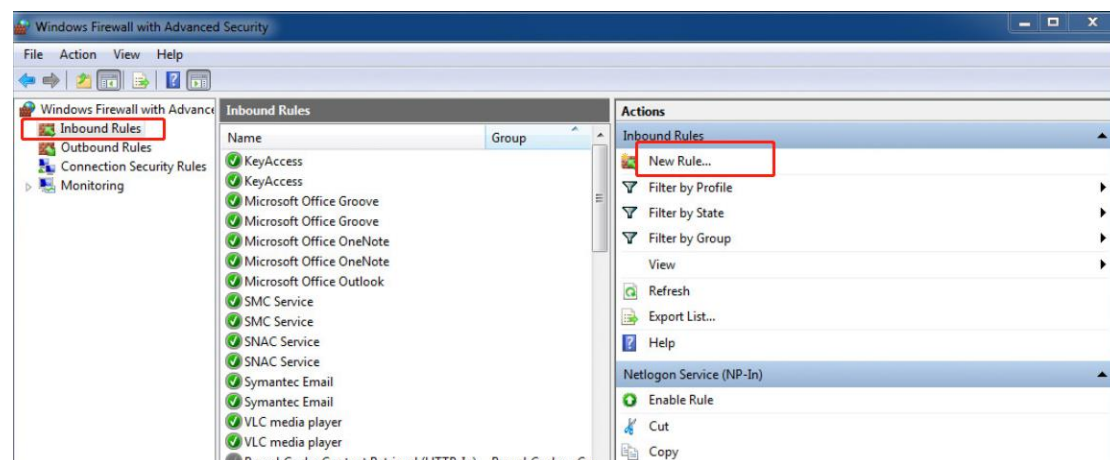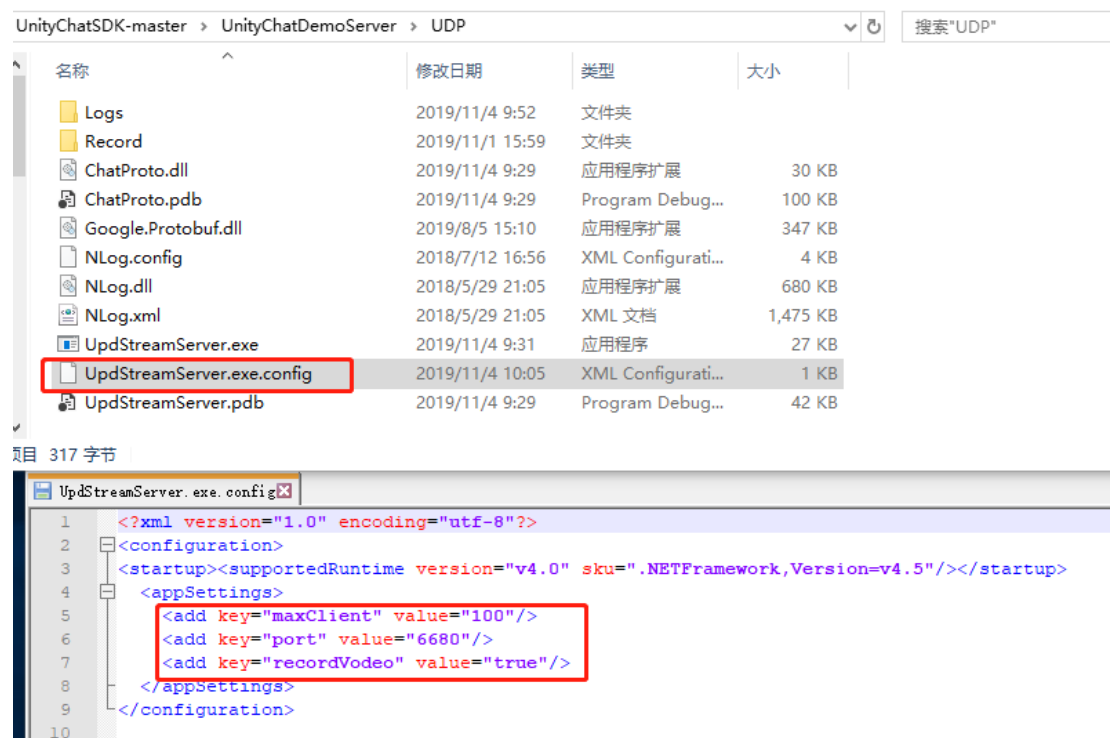
If you need to record videos, you need to set config recordVideo key and run RecordBuild.exe.
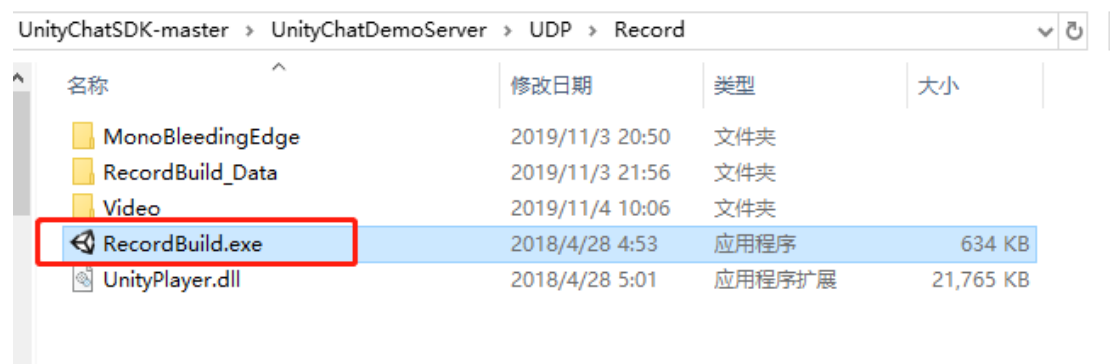
4.Integrate the SDK into your own project

You can intergrate the sdk in your own network. The SDK provides video capture, codec

5. Main Interface

```
/// <summary>
/// Initialize audio
/// </summary>
void InitMic();

/// <summary>
/// Initialize video
/// </summary>
void InitVideo();

/// <summary>
/// Set the type of video capture
/// </summary>
/// <param name="type">type of video capture</param>
/// <param name="captureCamera">If the capture type is unitycamera
or screen, you need to identify a unitycamera.</param>
void SetVideoCaptureType(VideoType type, Camera captureCamera = null);

/// <summary>
/// Set the resolution of the video
/// </summary>
/// <param name="resolution">resolution of the video</param>
void SetResolution(VideoResolution resolution);

/// <summary>
/// Get the size of the current video resolution
/// </summary>
/// <returns></returns>
Vector2 GetResolutionSize();

/// <summary>
/// Set the compression quality of the video
/// </summary>
/// <param name="quality">quality of the video</param>
void SetVideoQuality(VideoQuality quality);

/// <summary>
/// Start capturing audio and video
/// </summary>
/// <returns>Capture results</returns>
CaptureResult StartCapture();
```

```csharp
/// <summary>
/// Stop capturing audio and video
/// </summary>
void StopCpture();

/// <summary>
/// Get the current audio package
/// </summary>
/// <returns></returns>
AudioPacket GetAudio();

/// <summary>
/// Get the current video package
/// </summary>
/// <returns></returns>
VideoPacket GetVideo();

/// <summary>
/// Set the RawImage of your own video
/// </summary>
/// <param name="rawImage">self RawImage</param>
void SetSelfRawImage(RawImage rawImage);

/// <summary>
/// Set the RawImage of your peers,can be multiple
/// </summary>
/// <param name="id">peer id</param>
/// <param name="rawImage">peer RawImage</param>
void AddChatPeer(int id, RawImage rawImage);

/// <summary>
///  Clear the added peers
/// </summary>
void ClearChatPeer();

/// <summary>
/// Decode the audio of the peer
/// </summary>
/// <param name="id">peer id</param>
/// <param name="packet">peer audioPacket</param>
void DecodeAudioData(int id,AudioPacket packet);
float[] DecodeAudioData(AudioPacket packet);
```

```csharp
/// <summary>
/// Decode the video of the peer
/// </summary>
/// <param name="id">peer id</param>
/// <param name="packet">peer videoPacket</param>
Texture2D DecodeVideoData(int id,VideoPacket packet);
Texture2D DecodeVideoData(VideoPacket packet);

/// <summary>
/// Send your customTexture
/// </summary>
/// <param name="tex">the Texture2D to be sent</param>
void UpdateCustomTexture(Texture2D tex);

/// <summary>
/// Add extra float data to the current video frame, optional
/// </summary>
/// <param name="data"></param>
void AddVideoFloatData(List<float> data = null);

/// <summary>
/// Set up audio capture available
/// </summary>
/// <param name="enable"></param>
void SetAudioEnable(bool enable);

/// <summary>
/// Set up video capture available
/// </summary>
/// <param name="enable"></param>
void SetVideoEnable(bool enable);

/// <summary>
/// Switch device camera
/// </summary>
void SwitchCam();

/// <summary>
/// Set device front camera
/// </summary>
/// <returns></returns>
bool SetCamFrontFacing();

/// <summary>
```

```
/// Get the current volume of the peer
/// </summary>
/// <param name="id">peer id</param>
/// <returns></returns>
float GetPeerAudioVolume(int id);

/// <summary>
/// Get the current volume of yourself
/// </summary>
/// <returns></returns>
float GetSelfAudioVolume();

/// <summary>
///  Get the current video of yourself
/// </summary>
/// <returns></returns>
Texture2D GetSelfTexture();

/// <summary>
///  Get the current video of the peer
/// </summary>
/// <param name="id"></param>
/// <returns></returns>
Texture2D GetPeerTexture(int id);
```
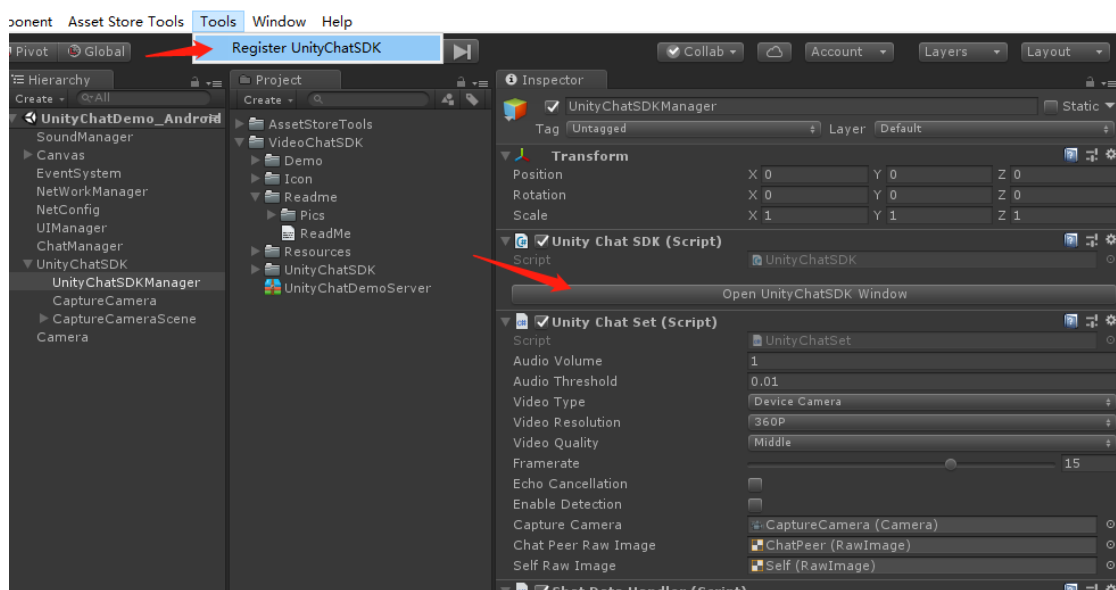
6. Registered

In order to prevent piracy, users need to send an email to

the provider to obtain the activation code after purchase. Please provide your registration code and the purchase order credentials in the email . Each user can get two activation codes to bind two computers.

Email:1786570525@qq.com

7．Update

This sdk will continue to be updated, the users who have purchased can use unlimited, free updates, we will listen to the developer's suggestions and improve the sdk, and also make a series of video tutorials to help developers use it more easily.