PIXEL STREAMING

Components

1. **Pixel Streaming plugin:** This plugin runs inside Unreal Engine. It encodes the final results of every rendered frame using video
2. **Signalling and Web Server:** The Signalling and Web Server is responsible for negotiating connections between browsers and th

1. Pixel Streaming Application: This is the Unreal Engine application that is developed using the Unreal Engine game development
2. Pixel Streaming Plugin: The Pixel Streaming Plugin is a module that integrates with Unreal Engine and provides the necessary fu
3. Signalling Server: The Signalling Server acts as a communication hub for establishing connections between the server and client
4. WebRTC Peer-to-Peer Connection: WebRTC (Web Real-Time Communication) is a technology that enables real-time communic
5. Video Encoder: The Video Encoder is responsible for compressing the rendered frames into a video format suitable for streaming
6. Streaming Server: The Streaming Server receives the compressed video stream from the Video Encoder and sends it over the n
7. Client Devices: Client devices are the devices on which the streamed application is displayed and interacted with. They can inclu
8. Streaming Client Application: The Streaming Client Application runs on the client devices and receives the video stream from the

STUN AND TURN:

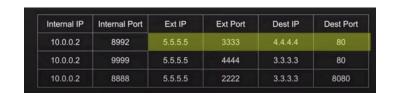| Internal IP	Internal Port	Ext IP	Ext Port	Dest IP	Dest Port
10.0.0.2	8992	5.5.5.5	3333	4.4.4.4	80

- ONE TO ONE NAT
  - Just public ip address and port of external is enough

- ADDRESS RESTRICTED NAT
- PORT RESTRICTED NAT
- SYMMETRIC NAT

- Along with public ip address and port of external, you also need

Internal IP	Internal Port	Ext IP	Ext Port	Dest IP	Dest Port
10.0.0.2	8992	5.5.5.5	3333	4.4.4.4	80
10.0.0.2	9999	5.5.5.5	4444	3.3.3.3	80
10.0.0.2	8888	5.5.5.5	2222	3.3.3.3	8080

TURN REGISTERS THE SENDERS PUBLIC IP AND PORT NUMBERS, By sending an hi message to the receiver.

SETTING UP TURN SERVER:

USER COTURN OPEN SOURCE