远程互动平台

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Introduction

01. 发展**远程同屏控制**的游戏互动模式 & **平台搭建**

02. 在开发过程中，展现**DTP**协议的优势

03. 充足的**扩展空间**与**发展前景**

01. 发展**远程同屏控制**的游戏互动模式 & **平台搭建**

背景

在线游戏要求时敏。

	云游戏	在线多人游戏	本地多人游戏
服务器端渲染画面	Yes	No	No
传输信息类型	视频流、用户控制信息	游戏专用信息	游戏专用信息
玩家同屏游戏	Yes	No	Yes

在线和本地多人游戏，为什么不只传输视频流、用户控制信息？

传输游戏专用信息：高效！但不通用

云游戏：通用的流式传输，仰赖于高带宽，尤其需要保证时敏

01. 发展**远程同屏控制**的游戏互动模式 & **平台搭建**

想法

我们采用经典云游戏的思想，传输视频流和用户操作信息，跨平台地支持原为本地的单人或多人游戏。

平台支持的游戏类型：同屏单视角、同屏多视角(屏幕分块等)

Eg.

A端运行游戏，共享游戏画面至B

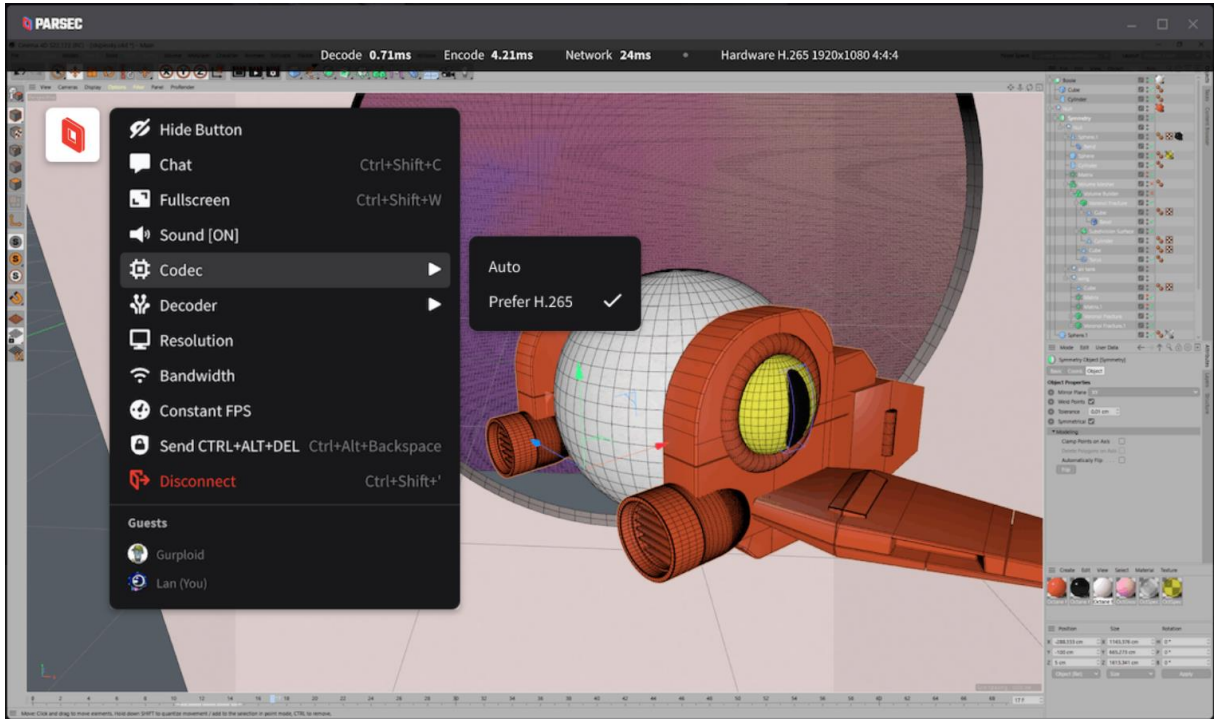
B端绑定按键，观看A的屏幕，按键反馈传输至A端响应

一个低时延的、可定制按键的、跨平台的通用远程操作平台

02. 在开发过程中，展现**DTP**协议的优势

Parsec

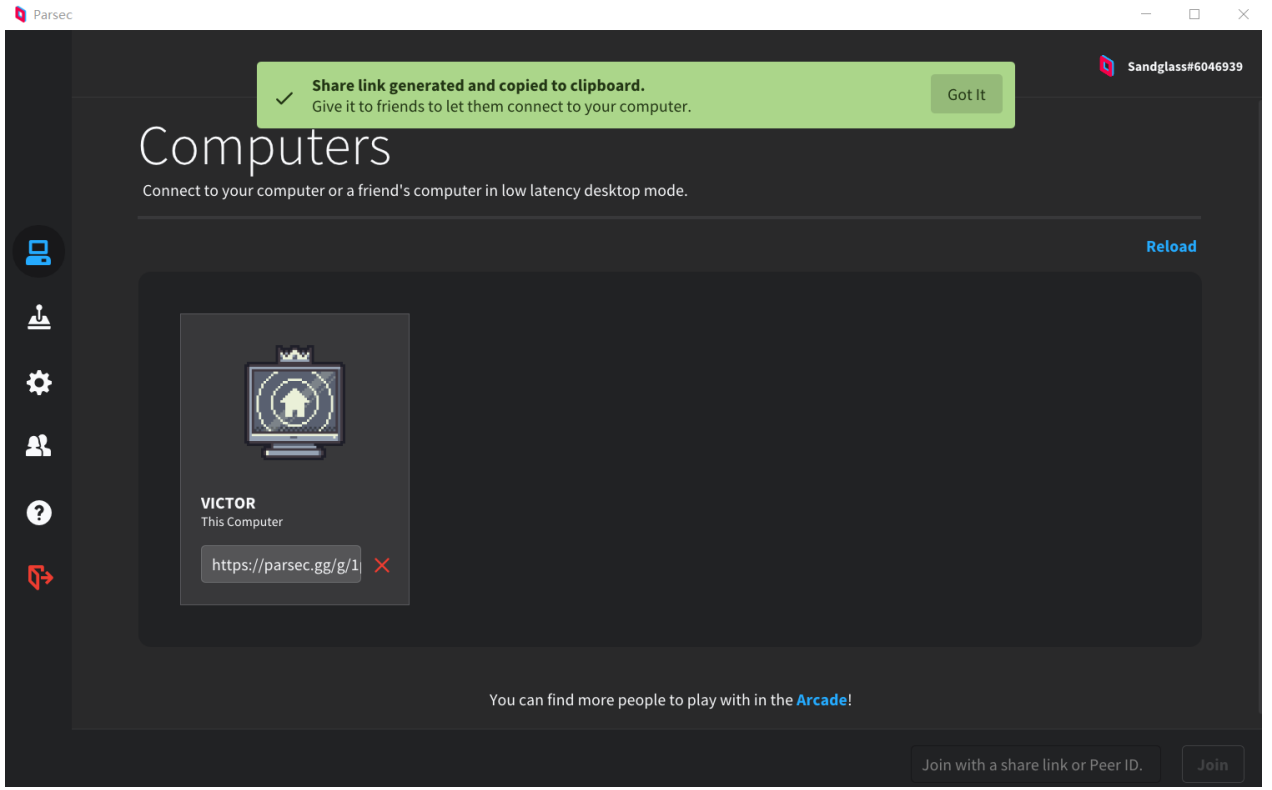
Parsec connects you and your friends to the games you love from anywhere, on any screen.



02. 在开发过程中，展现**DTP**协议的优势

Parsec

Want to play with a friend? Share a link, connect a controller, and have fun, no matter how far away you are.



02. 在开发过程中，展现**DTP**协议的优势

Parsec官方文档-Client

Parsec's core technology suite, the Parsec SDK, is built in cross platform C. We take a strong stand against unnecessary bloat, complexity, and dependencies of dubious value. Even our host side WebRTC implementation (for our web client) was custom built without requiring Google's massive dependency tree.

We use our own peer-to-peer networking protocol called BUD; Better User Datagrams (naming is hard). BUD has been optimized for low-latency video delivery based on the data gathered over a three year period. With a 97% NAT traversal success rate and lightning fast adjustment to packet loss and congestion, BUD is the cornerstone of the Parsec SDK.

02. 在开发过程中，展现DTP协议的优势

Others:

The Parsec Windows System Service
Open source controller driver

Parsec官方文档-Web Client

The web client does not have access to low-level hardware optimizations or hardware decoding.

But Chrome has implemented a ton of features to make low latency video streaming possible for things like Google Hangouts and Google Stadia..

The web client uses WebRTC for its networking. We have a lot less control over the networking causing issues with low bandwidth connections and increased lag.
We **built our own networking protocol** for game streaming because off-the-shelf technology, like WebRTC, don't cut it for the most demanding gaming experiences.

03. 充足的**扩展空间**与**发展前景**

- 加入语音功能
- 进行小规模的游戏直播
- 共同观影、看比赛等
- 视频压缩？自编码器？

Thanks!