



# Client Preview

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Windows  
UWP  
macOS  
iOS  
Android  
Xbox One

Graphics  
Physics  
Networking  
Scripting  
Sound  
Input

Game

# Legend:

Releasing

Developing

Soon™

Feedback



# Graphics



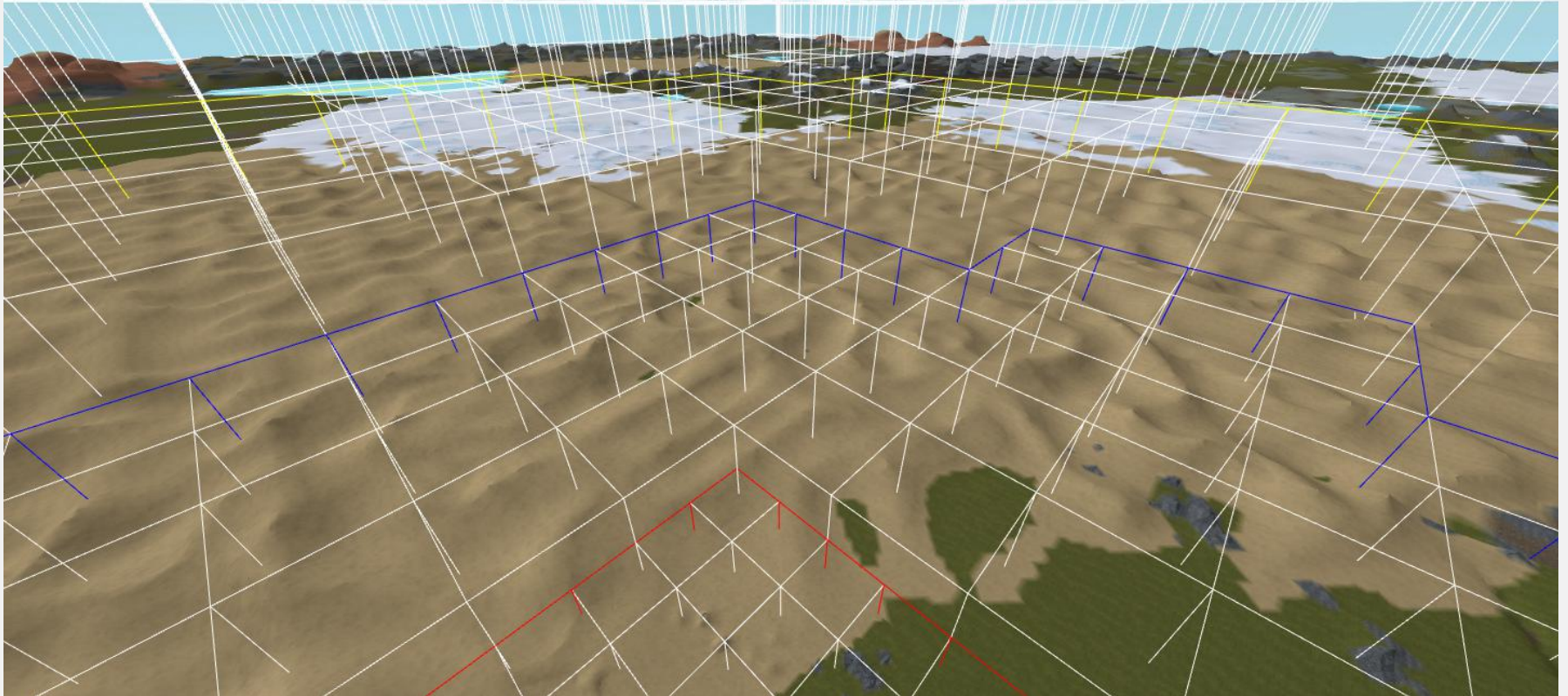
# Terrain:

Level of detail

Memory optimizations











# Terrain:

Vegetation

Voxel colors



# Post-Processing:

ColorCorrection

Bloom

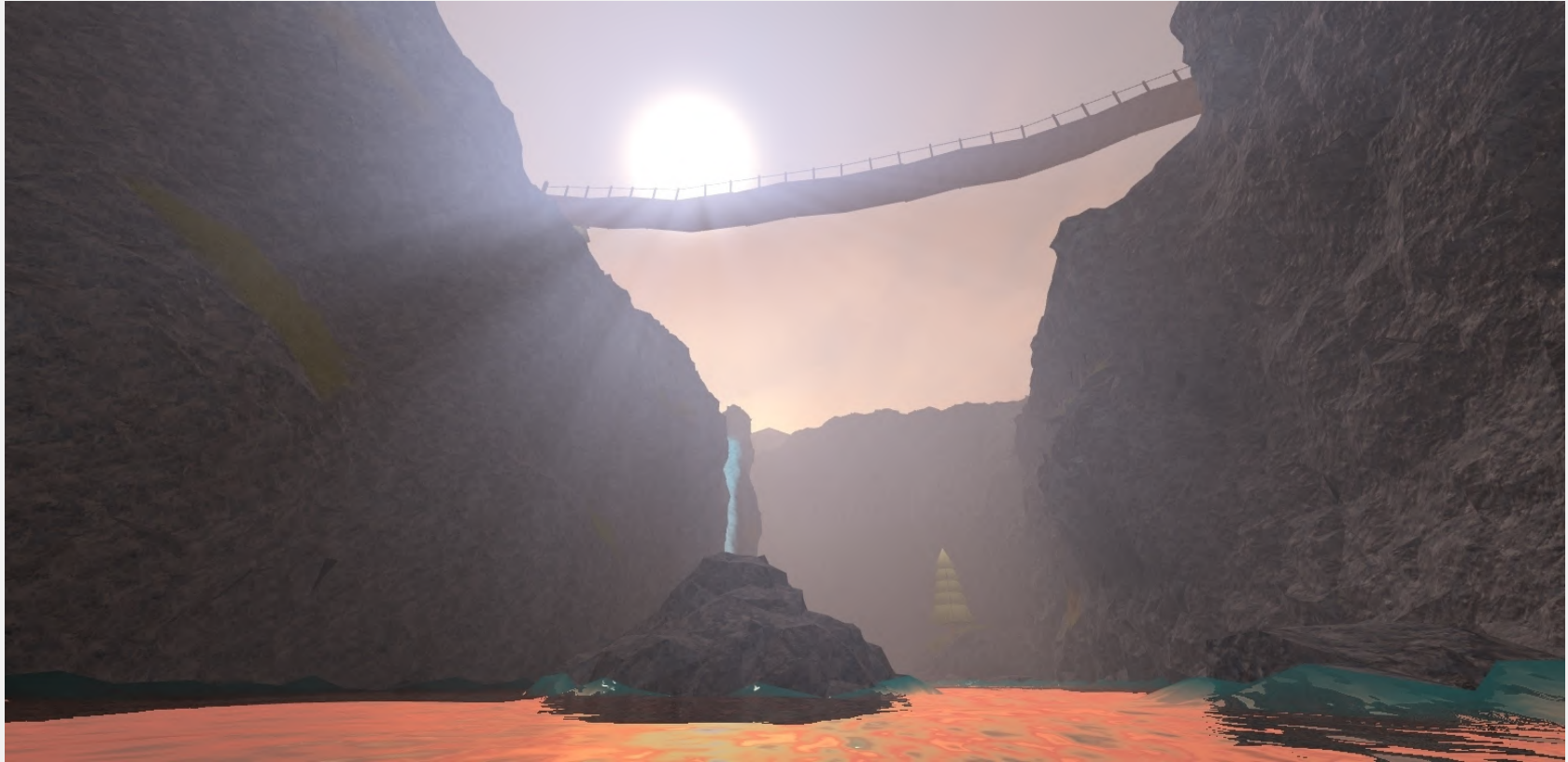
Blur

SunRays

Anti-aliasing

Soft particles









# Post-Processing:

Depth of field

Lens flares

Cel shading



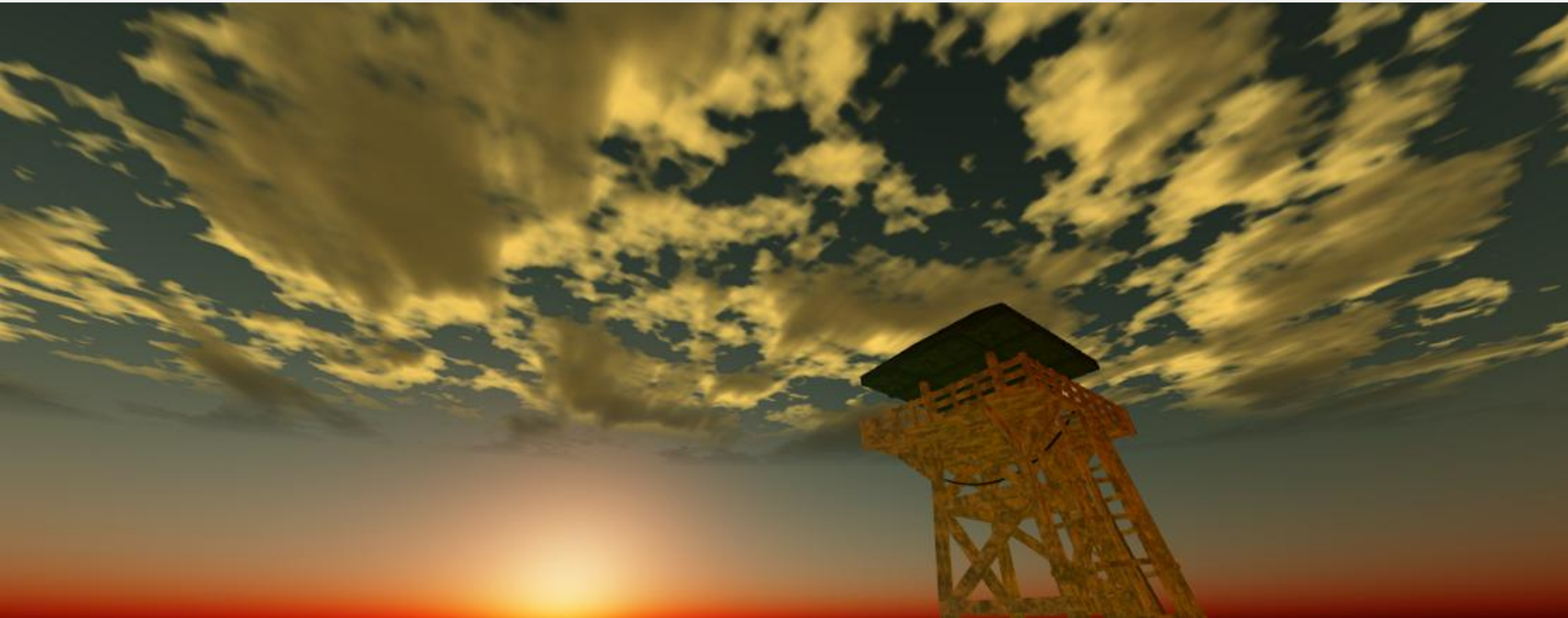
# Weather:

Sky

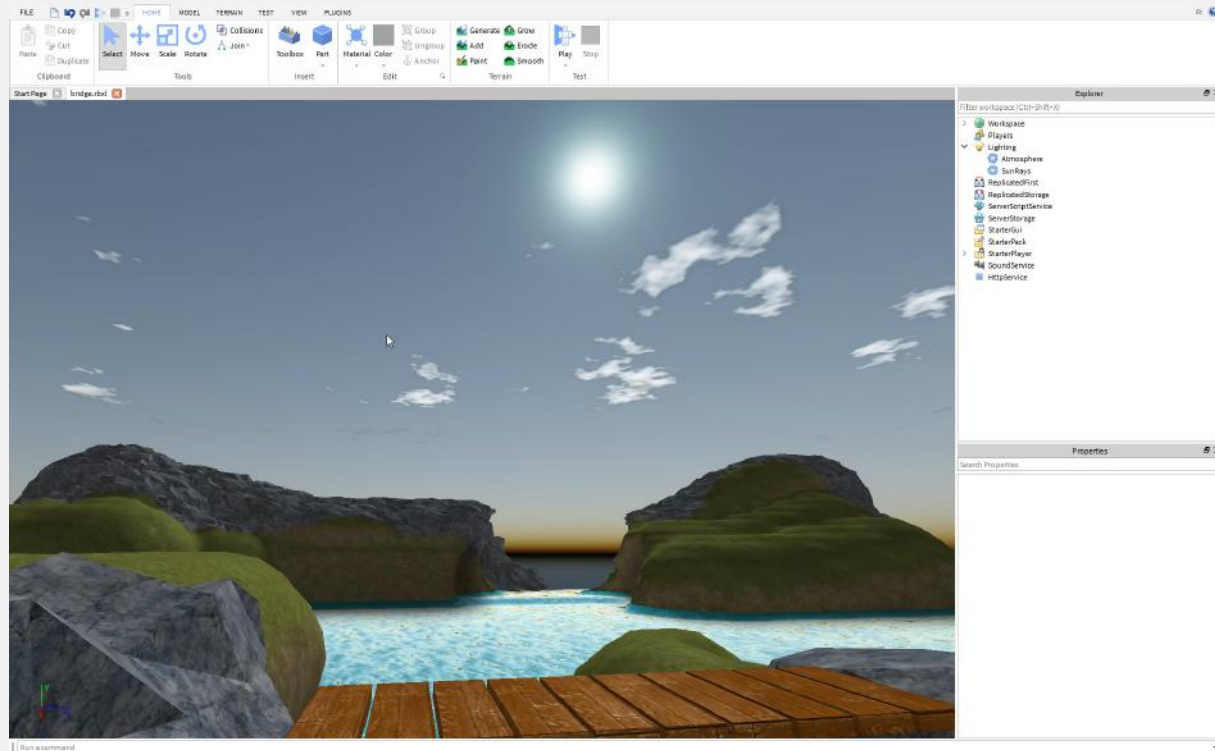
Clouds

Precipitation









# Lighting:

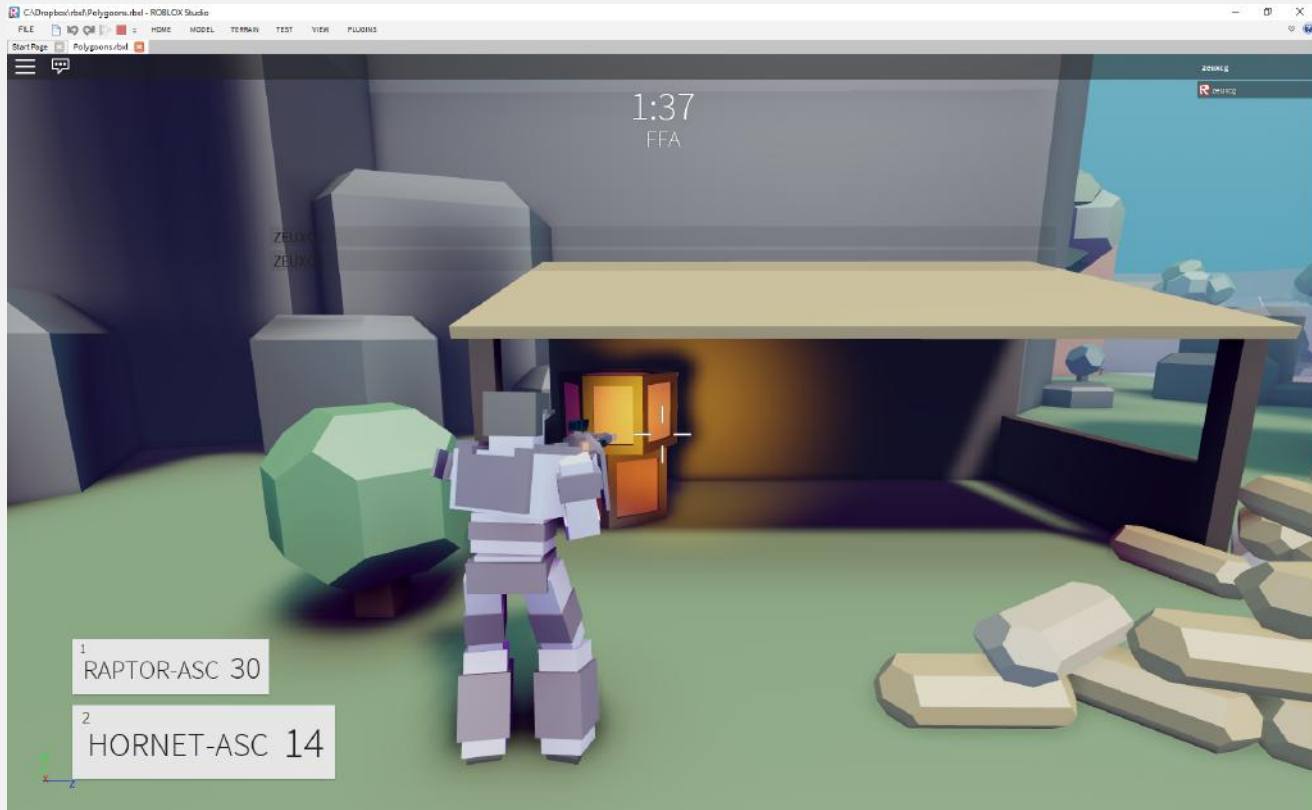


High Dynamic Range

High fidelity lighting

Physically based shading

Particle lighting





# Physics



# Physics:

PGS is the default

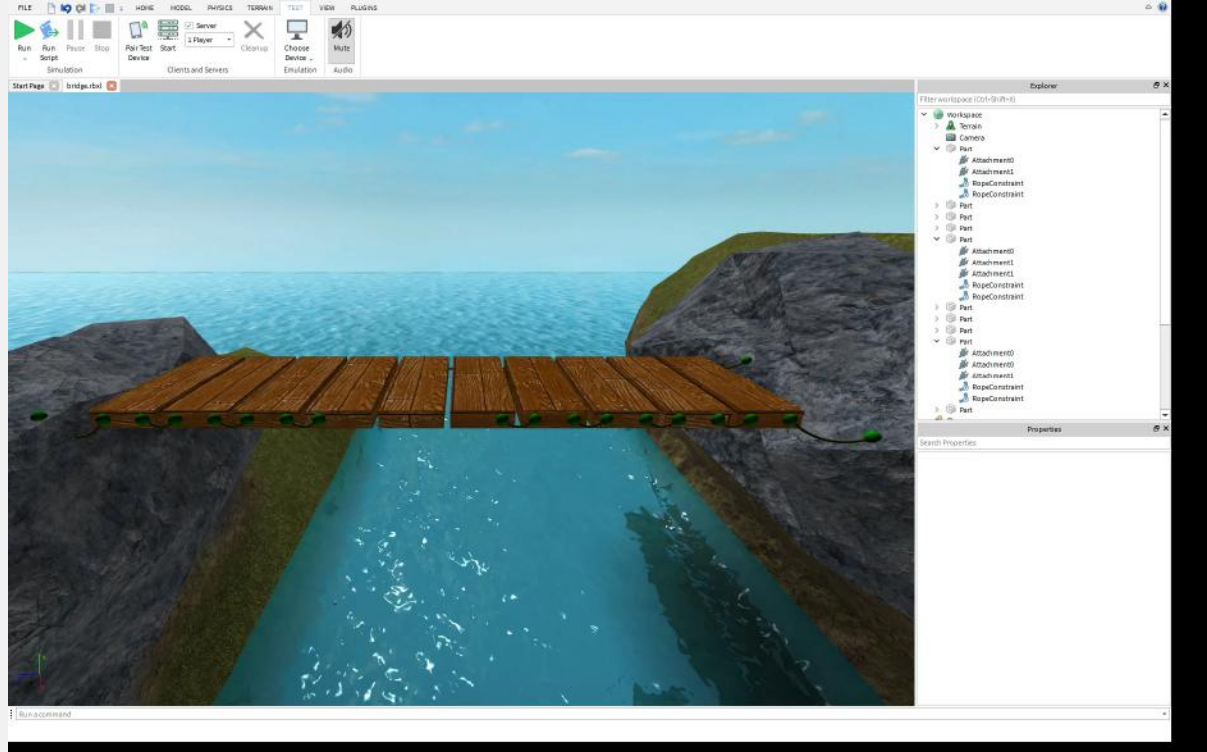
Do not expect spring solver updates



# Constraints:

BallSocket, Hinge, Prismatic  
Rope, Rod, Spring  
In-game rendering  
Studio tools







# Advanced Constraints:

Mechanism assembly

New BodyMovers:

Position

Orientation

Velocity

New joints:

Roll Prismatic

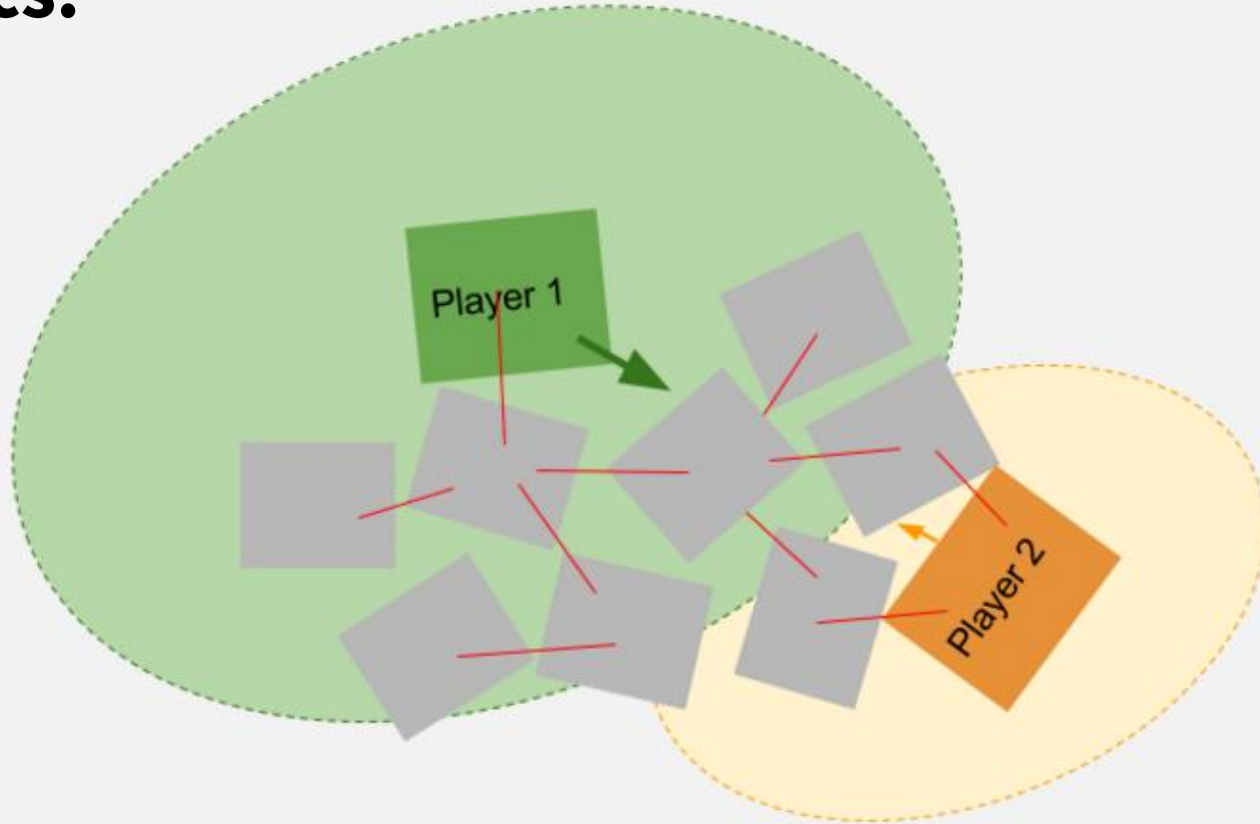
Pitch Prismatic

Universal





# D-Physics:



## D-Physics:

Physics interpolation

(15 Hz → 60 Hz)

More responsive handoffs

Constrained local simulation





# Performance:

Animations

(5x-10x faster)

Solver

Collisions



# Networking





# Interpolation:

Smooth(er) movement

Precise hitboxes

Mechanism interpolation



# Responsiveness:

Network ping

Data ping

Server performance



# VR



# Platforms:

Oculus Rift

HTC Vive

Google Daydream

PSVR



# Controls:

## Gamepad

Adapted for VR

## Hand controllers

Redesigned for VR



**UI:**

Core GUI revamp

Developer GUI compatibility

Launch games from VR











## Performance:

Part clustering optimizations

Better CPU Scheduling/Utilization

Tactical fixes

**Thank You!**

