

# NetworkedFlightGame (Space Station Destroyer)

Currently it's mostly navigation and avoidance as there aren't collisions.

# **Join Game**

Start Server and Connect
Optionally, see the networking section about port forwarding

## **Credits**

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## **Controls**

- 1. Keys
  - a. Alt+F4 (quit)
  - b. WASD (forward, left, backward, right)

- c. RF (up, down)
- d. Y (toggle reticle)
- e. QE (Roll left, Roll right)
- 2. Mouse
  - a. Click (to lock cursor and enter look mode)
  - b. Click (fire)
  - c. Mouse move (look)

## **Networking (Optional)**

To experience the networking mode you'll have to enable port forwarding in your router settings to your local IP. Here's an example of what that might look like. When hosting, leaving the default localhost IP and port is fine. If you want to join someone's game they'll need port forwarding correctly configured in their router settings. Try accessing <a href="http://192.168.0.1/">http://192.168.0.1/</a> and if you don't know your password try the default (something like admin:password). If default, go change that now. Then, look for a port forwarding tab and create a new rule with your current ip. To tell your friend your local IP on linux you can enter the command: curl ifconfig.me. Make sure your "Private IP Address" here matches what your Unity host uses on your LAN.

#### Virtual Servers / Port Forwarding

Description	Inbound Port	Туре	Private IP Address	Local Port	
UnityGame	17175-17175	Both	192.168.0.6	17175-17175	

## **Primary Features**

- 1. Networking
- 2. Turret Al
- 3. Movement

## **Missing Features**

- 1. Networked Collisions
- 2. Health
- 3. Win state

#### **Source Code**

https://github.com/Exanite/NetworkedFlightGame

#### **Art Assets**

- 1. Ship
  - a. By Pixel Make
  - b. (FREE)
  - c. <a href="https://assetstore.unity.com/packages/3d/vehicles/space/spaceship-by-pixel-make-99120">https://assetstore.unity.com/packages/3d/vehicles/space/spaceship-by-pixel-make-99120</a>
- 2. Station

- a. By WangMandingo
- b. (FREE) CC0
- c. Download URL: https://www.blendswap.com/blend/12980
- d. Creator URL: <a href="https://www.blendswap.com/profile/218703">https://www.blendswap.com/profile/218703</a>
- 3. Asteroids
  - a. By Pixel Make
  - b. (FREE)
  - c. <a href="https://assetstore.unity.com/packages/3d/props/asteroid-pack-by-pixel-make-839">https://assetstore.unity.com/packages/3d/props/asteroid-pack-by-pixel-make-839</a>
     51
- 4. Skybox
  - a. By PULSAR BYTES
  - b. (FREE)
  - c. <a href="https://assetstore.unity.com/packages/2d/textures-materials/sky/spaceskies-free-80503">https://assetstore.unity.com/packages/2d/textures-materials/sky/spaceskies-free-80503</a>

### **Imported Source**

- 1. LiteNetLib by RevenantX: <a href="https://github.com/RevenantX/LiteNetLib">https://github.com/RevenantX/LiteNetLib</a>
- 2. UniTask by Cysharp: <a href="https://github.com/Cysharp/UniTask">https://github.com/Cysharp/UniTask</a>
- 3. Unity Libs

## **Scripts**

**AsteroidSpawner.cs** (to create asteroid prefab)

BeamProjectile.cs (move, spin, destroy beams)

**EventBus.cs** (networking)

**EventHandler.cs** (networking)

**GameManager.cs** (networking)

**LocalShip.cs** (movement and networking)

**Orbiter.cs** (targeting development)

Projectile.cs (networking shim)

**ProjectileRegistry.cs** (networking organizer)

**Reticle.cs** (modify the reticle upon key presses)

**Ship.cs** (id holder for networking)

TargetingAl.cs (aim at ship)

**TurretSpawner.cs** (to create add to station prefab)

#### Networking

Client/ClientIdHandler.cs

Client/ClientJoinSucceededEvent.cs

Client/ClientLoadLevelOnJoinHandler.cs

Client/ClientMonoPacketHandler.cs

Client/ClientNetworkManager.cs

Client/ClientPlayerJoinHandler.cs

Client/ClientPlayerLifetimeHandler.cs

Client/ClientPlayerManager.cs

Client/ClientPlayerStateSyncHandler.cs

Client/ClientProjectileHitManager.cs

Client/ClientProjectileManager.cs

Input/InputActions.cs

Input/InputDistributor.cs

Input/InputManager.cs

Networking/Constants.cs

Networking/IPacketHandler.cs

Networking/NetSerializationExtensions.cs

Networking/UnityNetwork.cs

Server/PlayerConnectionAddedEvent.cs

Server/PlayerConnection.cs

Server/PlayerConnectionRemovedEvent.cs

Server/ServerMonoPacketHandler.cs

Server/ServerNetworkManager.cs

Server/ServerPlayerConnectionManager.cs

Server/ServerPlayerJoinHandler.cs

Server/ServerPlayerLifetimeHandler.cs

Server/ServerPlayerStateSyncHandler.cs

Server/ServerProjectileManager.cs

Shared/ClientJoinRequest.cs

Shared/Handlers.cs

Shared/MonoNetManager.cs

Shared/MonoPacketHandler.cs

Shared/PlayerCreationEvent.cs

Shared/PlayerDestructionEvent.cs

Shared/PlayerLifetimePacketType.cs

Shared/PlayerStatePacket.cs

Shared/ProjectileCreationPacket.cs

#### UI

UI/ConnectionUI.cs UI/CustomInputField.cs

UI/NetworkStatusUI.cs

UI/PointOfInterestMarker.cs

UI/PointOfInterestMarkerUI.cs

UI/PointOfInterestUIManager.cs

#### **Prefabs**

Client.prefab

Server.prefab

Turret.prefab

UI

Button.prefab
ConnectionUI.prefab
GameUI.prefab
InputField.prefab
NetworkStatus.prefab
PointOfInterestMarkerUI.prefab
PointOfInterestUI.prefab

#### Levels

Levels/AsteroidCloud.prefab Levels/CombinedLevel.prefab Levels/LevelPrefab01.prefab Levels/LevelPrefab02.prefab Levels/LevelPrefab.prefab

#### **Players**

Players/LocalPlayer.prefab Players/RemotePlayer.prefab

## **Projectiles**

Projectiles/MagentaBeam.prefab