

Photon

Outline

1. PhotonEngine
2. MonoBehaviourPUN
3. PhotonView
5. IPunCallback
4. IPunObservable
6. RaiseEvent
7. NetworkManager
8. RoomProperties

[RPC] (Remote Procedure Calls) [Command] Server command

static class PhotonEngine {}

Main **static** - *toolkit for interaction with Photon Network*

```
- string NickName{get;}
- bool IsMasterClient{get;}
- RoomOptions GetRoomList{get;}

- PhotonEngine.Connect();
- PhotonEngine.JoinLobby();

- PhotonEngine.JoinOrCreate();

- PhotonEngine.JoinRoom();
- PhotonEngine.JoinRandomRoomRoom();
- PhotonEngine.LeaveRoom();

- PhotonEngine.RPC("name", BufferType.AllBuffer);
- PhotonEngine.Instantiate(GameObject go);
    //Must be in "Resource" Folder

- PhotonEngine.LoadLevel();
- PhotonEngine.OfflineMode();

- PhotonEngine.GetPing();
```

Extra

- Player list
- Player.custom.properties

class MonoBehaviourPun

MonoBehaviour from **PUN** - *easy ref to photonView*

```
private PhotonView photonView;
```

class PhotonView : MonoBehaviour

PhotonView- *core networking asset*

```
- public bool IsMine{get;} // Is local instance
- public bool IsSceneView{get;} // Is local instance
- public int Id{get;} // Is local instance
- public PhotonView Owner// Is local instance

- public IPunObservable[] watched;

- [RPC] public void Some(); // new command that will be executed;
```

class IPunCallback

IPCallback - *Interface hooked to network events*

```
- public void OnConnectedToMaster;
- public void OnPlayerJoinedRoom;
- public void OnPlayLeavingRoom;
- public void OnRoomUpdate(RoomInfo room);
```

class IPunObservable

MonoBehaviour from **PUN** - *easy ref to photonView*

```
void Stream OnPhotonSerialization(NetworkStream stream)
{
    int health =5;

    if(stream.isReading)
        health = (int)stream.ReceiveNext();

    if(stream.isWriting)
        stream.SendNext(health);
}
```

SubTypes

- `class PhotonPostionSynchronization : IPunObsorvabl`
- `class PhotonPhysicsSynchronization : IPunObsorvabl`
- `class PhotonAnimationSynchronization : IPunObsorvabl`

Rise Event

Complicated system of easier rising the events.

```
static PhotonEngine.OnRiseEvent.Event += MonoBehaviouPunCallback;  
class PhotonView.ViewID;  
static PhntonEngipne.RaiseEvent(byte EventCode, Event event,Options options )
```

Network Manager

NetworkReability + check connections

static class PhotonServerSettings

- Serialization

class RoomProperties

```
public int MaxPlayers;
```