

★ UNIT2 ★

BATTLEGROUND

STARTER KIT

This document is cover only additional feature and importance setting for pvp for the basic using guide, please read a documents in **UnitZ Basic** folder.

- [Gameplay Setup](#)
- [Bots](#)
- [Player](#)
- [Mini map](#)
- [Plane](#)
- [Airdrop](#)
- [Inventory and Item Equipment](#)
- [Inventory GUI](#)
- [Hotkey](#)
- [Armor system](#)
- [Controller](#)
- [Dedicated Server](#)

Gameplay Setup

First of all, you have to set up UNET Multiplayer first!, [here](#) is how to setting up.

You can config gameplay on **NetworkGameplay** prefab, you can found it in **UnitZ/Game/NetworkGameplayer** prefab.

- Countdown To plane = time before get in the plane
- Airplane object = you don't need to change
- Dead Areas = a list of zone in difference size you can change time or size here. next area can be spawn only in latest area.
 - Time = time before changing area
 - Escape Time = dead area transition time.
 - Radius = area size
 - Damage = damage / second to player that outside the area.
 - Airdrop = spawn plane to drop a supply in this area.

Bots

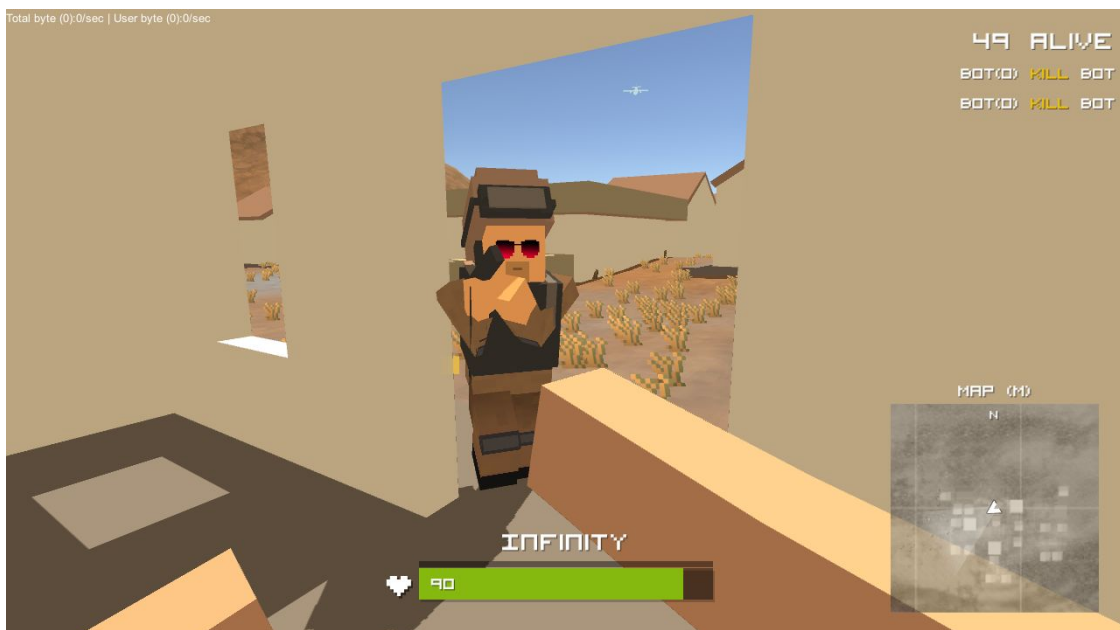
You can set maximum number of Bots in this game at **GameManager** object by change Bot max parameter on Game Manager component.

You can also found Bot character in **UnitZ/Prefab/Characters/Character_AI**

Importance. be careful of players and bots number when you go online. because Unity relay server provided a limited of bandwidth usage. or you can pay for additional bandwidth.

Player

You can config a max players by go to Window > UnitZ > Settings or you can config it directly at GameManager object under GameNetwork in Max Players and MaxConnections parameter



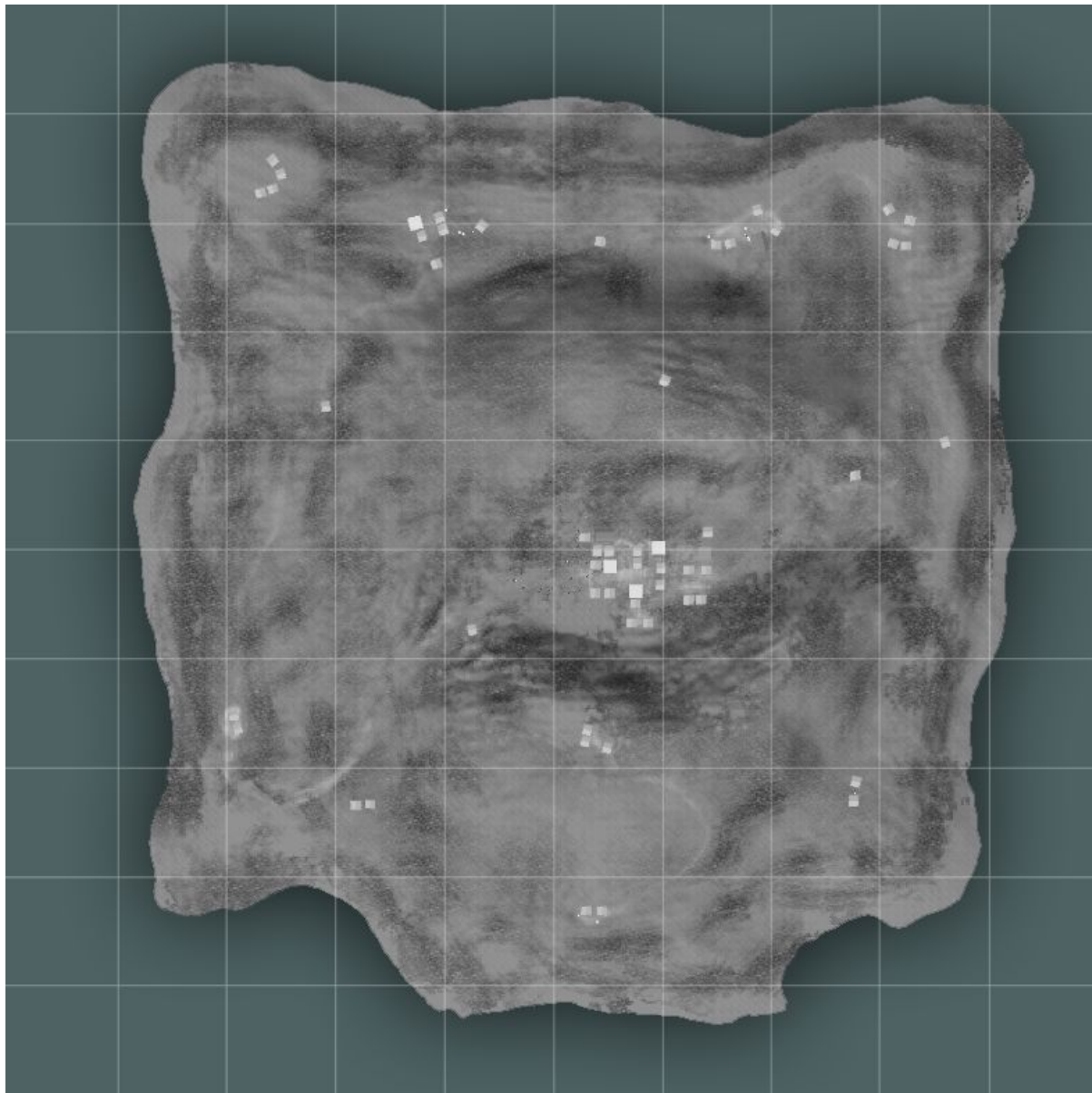
Mini Map

You can change a map texture directly on both map object located here

1. GameManager>GameHUD>PlayerHUD>Minimap>Mask>Minimap
2. GameManager>GameHUD>Map

Importance you need to set **World Real Size** parameter on Minimap component as same as real size of the map

e.g. If this map was rendered from scale 1000x1000 then you can see a grid 10x10. so the **World Real size** parameter must set to 1000, 1000



Render map is simple, you can just open scene and choose view to Top, move camera up until you can see whole area. You maybe need to hide all gizmos and disable lighting to make a map looks clearly. then just Print Screen and past it in photoshop, so don't forget to check a grid. because you need a number for a World Real size parameter on Minimap component (1 grid = 100x100)

Plane

The plane comes with 16 seats, if you have more than 16 player you need to go adding more seat in the plane, you can find plane prefab located at **UnitZ/Prefabs/Vehicles/Airplane**

to edit the plane just move it to the empty scene, you can see a seats by green gizmos



you can add more or remove, but please make sure all **Seat ID** on every seat object must be unique. then after all hanged let's click Apply Button

Plane Parameter

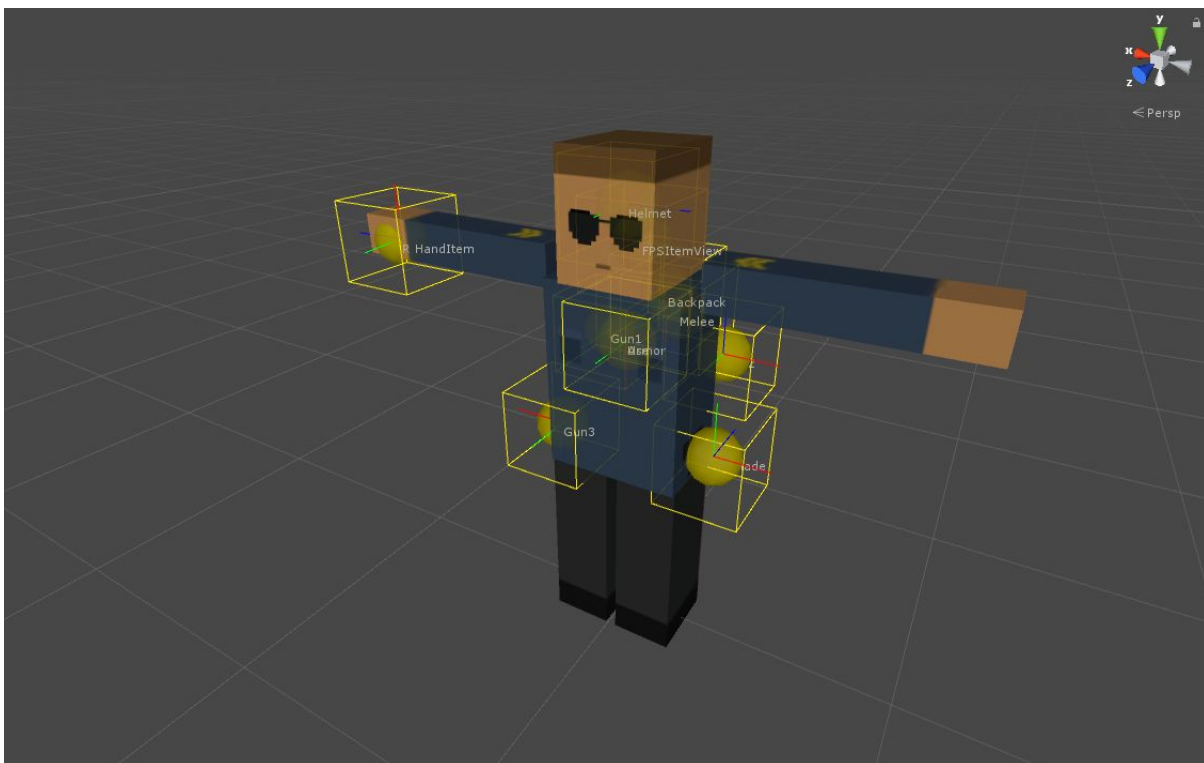
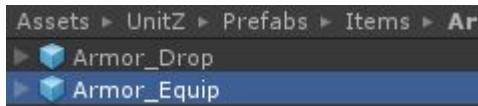
- Fly Distance = max fly distance from spawn point before get removed
- Eject Distance = max fly distance that player can stay in plane before get kick
- Speed = speed of the plane
- Drop supply = can drop supply
- Drop object = supply object

Air Drop

You can found Airdrop item located at **UnitZ/Prefabs/Items/Airdrop** you can adding more item or change it at Airdrop prefab.

Inventory and Item Equipment

1. go to player character folder located at **UnitZ/Prefabs/Characters/**
2. drag a character prefab which is you wanted to change to the scene,
3. you will see all of item sticker object are already attached to several character bones by yellow gizmos. so you can add more or move them by hand.
4. all of them are separated by **Equip Type** parameter. only item with same **Equip Type** can be attach to it.
5. for the desire item, you can set **Item Type** on third view item prefab, you can found them by **_Equip** at the end of its name.



Equipment GUI

You can found all **GUI Item Equipped object** on GameManager > GameHUD > Inventory > PlayerEquipped >

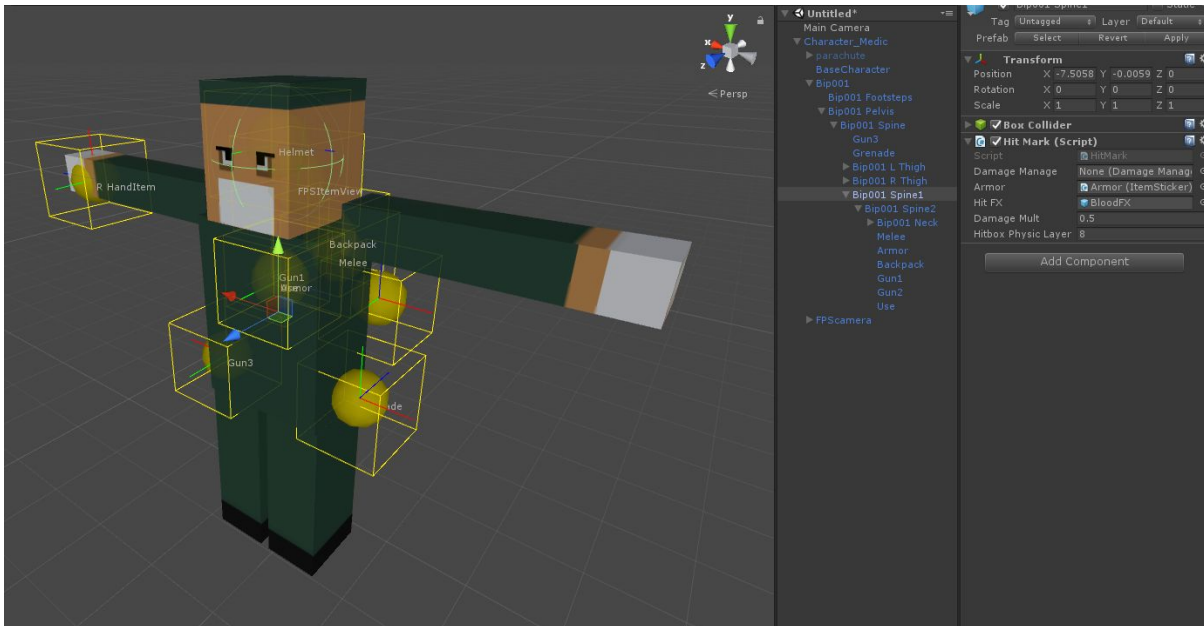
Hotkey

You can config a hot key by go to GameManager > GameHud so you will found a list of **Toggle Equipped** component on GameHUD. all of them has been link to **GUI Item Equipped object** please see Equipped parameter on **Toggle Equipped** component

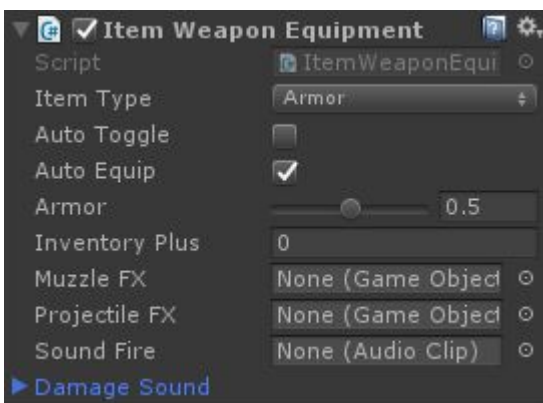
Note. Everytime you change GameManager don't forget to click Apply button

Armor system

All hitboxes of the character can be projected by some equipment item (item sticker) you can see how it works by place snu character to the scene and select hitbox of the character you can see Hit Mark component with Armor parameter, this parameter must fill with any equipment object. so in this sample it filled with Armor



let's select Armor object. you can see Equip Type = Armor so this sticker can be attached with the same Type item.



Let's check Armor_Equip object, you can see Armor parameter 0 mean 0% damage reduce defend 1 mean 100% damage reduce.

- Item Type = Type of Item Equipment slot
- Auto Toggle = automatically use this item after pickup
- Auto Equip = automatically equip to a desire slot
- Armor = percentage of damage reduce
- Inventory Plus = in case of inventory Limited

Player Controller

Basically Unitz comes with default input from Unity but you can also change or modify all input controller at `PlayerInputController.cs` located at **UnitZ/Scripts/CharacterSystem/FPSController**

Mobile Controller

You can use mobile controller by enable **MobileController** object located under **GameManager** object and then enable **Is Mobile** parameter on **UnitZ Manager** component on **GameManager** object.



you can modify all input in `MobileController.cs` located at **UnitZ/Standard Assets/CNcontroller/MobileController.cs**

you can also found a controller prefab located at **UnitZ/Standard Assets/CNcontroller/MobileController.prefab**

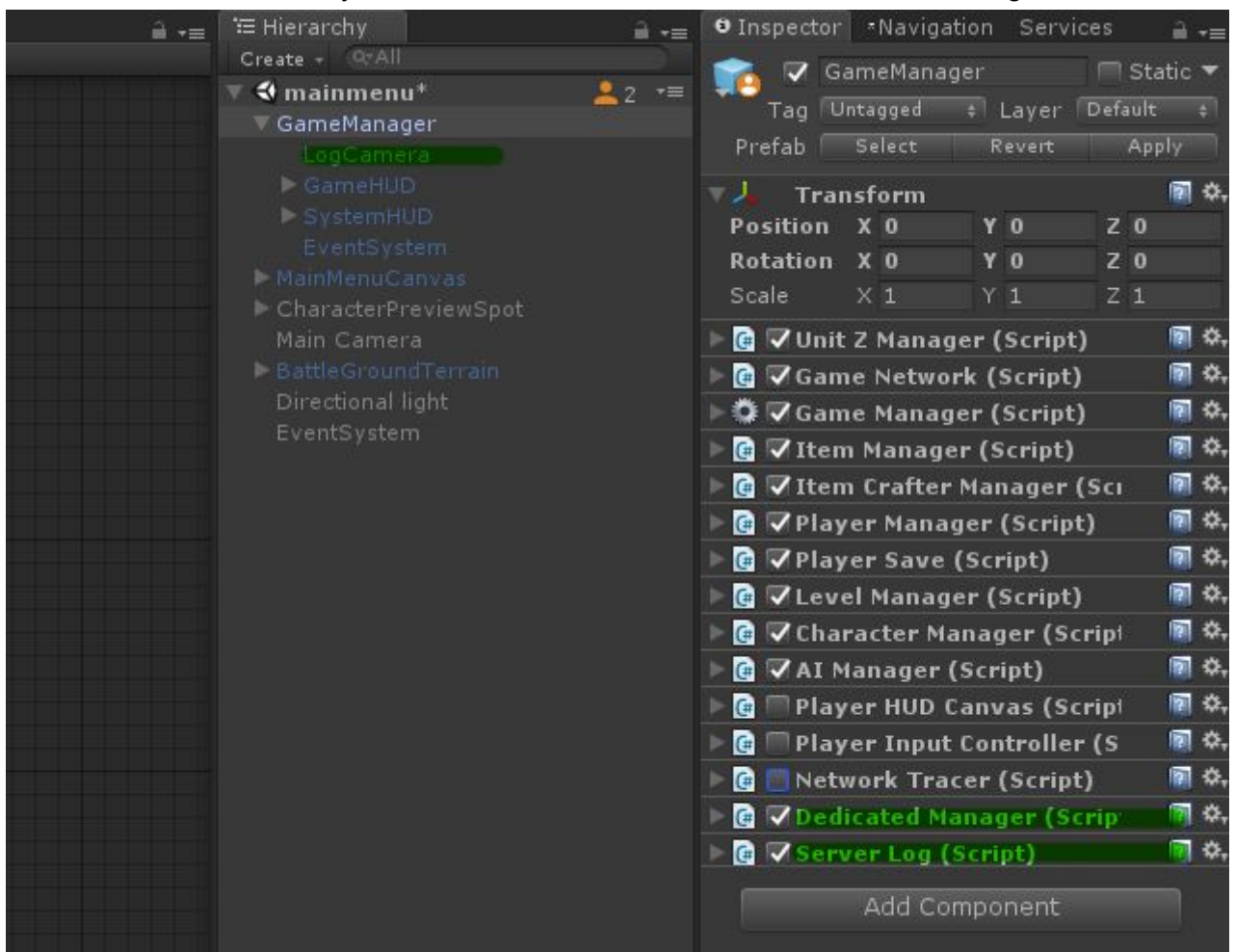
Dedicated Server

The dedicated server concept is simple, it's like one of player that's hosting the match and handle all things normally like player as server. But no player character spawn and no visual elements. it will be automatically start hosting a lobby when you run it. and waiting for other player to get ready before start, the dedicated server will stop hosting after match ended and can be repeating the new match forever or until you close it.

How to build a dedicated server

You can build a dedicated server separate as new build instance by follow this steps.

1. go to **GameManager** object on **mainmenu** scene.
2. you can found a **Dedicated** components was disabled in the component list,
3. enable them and you may need to disable or remove all visual element on **mainmenu** scene because no need any visual elements on dedicated server. like in this image



now you just have only **GameManager** object on **mainmenu** scene before start build.

4. go to Files > Build Settings and then click Build to save as new one, if you build for PC just change name to "dedicatedserver.exe" or whatever.
5. now you have a dedicatedserver.exe already, just run it in background or run it on server.

6. you can now test it by run the normal game build and go to Find Game option. you will found a room named "Dedicated Server".

Importance : *DO NOT save scene as new name for dedicated, because the unity multiplayer system still need same scene and same element as server - client to be sync. so just change it just for build. then after dedicated has been build, you must undo back to original.*

Dedicated Parameter

- Server Name = Name of server can be found on Server list
- Server Password = left it empty if you host is public
- Scene Start = playing scene
- Minimum Player = mininum players in lobby that's game can be able to start
- Bot Number = maximum number of bot in game
- Update Time = duration of next update
- Restart Time = a duration before start new match
- Disconnect Time = a duration before stop host
- Auto Restart = server can be start new match automatically after ended or lose connected.