

Emerald AI Integration with Opsive

****Updated 10/08/21**

Preliminary Steps

1. Change Emerald AI layer to **Enemy**.
2. Make sure your Unity tag for your AI is set properly (e.g. to Emerald AI)
3. Change Detection Layers to **Character**

NOTE: This version of the integration is greatly simplified. I am providing the OpsiveBridge script within a Unity package and this one script will work with all versions of Opsive and Emerald AI. By default it works with the latest Opsive (2.3.2 at the time of this writing) and the latest Emerald AI (2.4.2 at the time of this writing). If you need the script for versions of Opsive prior to 2.2 and versions of Emerald AI prior to 2.2 then you simply need to open the script and modify it as specified at the top of the script. As follows:

```
// Comment out EMERALD_LBD define you are using a version of Emerald AI that does not have Location
Based Damage
#define EMERALD_LBD
// Uncomment LEGACY_OPSIVE if you are using Opsive prior to 2.2
//#define LEGACY_OPSIVE
// Uncomment LEGACY_EMERALD if you are using Emerald AI prior to 2.2
//#define LEGACY_EMERALD
```

Once you have modified the script per the instructions, attach the script to your Emerald AI object. And follow the instructions below based on the appropriate versions of Opsive and Emerald AI that you have.

For Emerald AI Versions before 2.2

Attach the OpsiveBridge script to your Emerald AI

For the Emerald AI agents to be able to fight back, it requires changes to the Emerald_AI script similar to other integrations. In the DamagePlayer function add the following code:

```
var tpcHealth =
CurrentTarget.GetComponentInParent<Opsive.UltimateCharacterController.Traits.Health>();
if (CurrentTarget != null && tpcHealth)
{
    tpcHealth.Damage(CurrentDamageAmount);
}
```

For Emerald AI 2.2 or Later

****Updated 9/17/19**

Attach the OpsiveBridge script to your Emerald AI.

To insure that EmeraldAI agents do not attack a dead Opsive player character, add the following code to the very top of the SetCombatTarget function in the EmeraldAIEventsManager script:

```
// Make sure Opsive target is not dead
var tpcHealth =
Target.GetComponent<Opsive.UltimateCharacterController.Traits.Health>();
if (tpcHealth)
{
    if (tpcHealth.HealthValue <= 0)
    {
        return;
    }
}
```

and the following code to the very top of the SetDetectedTarget function in the EmeraldAIDetection script.

```
// Make sure Opsive target is not dead
var tpcHealth =
DetectedTarget.GetComponent<Opsive.UltimateCharacterController.Traits.Health>();
if (tpcHealth)
{
    if (tpcHealth.HealthValue <= 0) return;
}
```

For the Emerald AI agents to be able to fight back, it requires changes to the EmeraldAIPlayerDamage script. **Please note the code in bold red text for special instructions.**

Add the following function:

```
void DamageOpsivePlayer(int DamageAmount, Transform target)
{
    var tpcHealth =
GetComponentInParent<Opsive.UltimateCharacterController.Traits.Health>();
    if (tpcHealth)
    {
        tpcHealth.Damage(DamageAmount, target.position, target.forward, 1f,
target.gameObject);

        if (tpcHealth.HealthValue <= 0)
        {
            EmeraldAISystem emeraldAI = target.GetComponent<EmeraldAISystem>();
            EmeraldAIEventsManager emeraldAIEvents =
                target.GetComponent<EmeraldAIEventsManager>();
            if (emeraldAIEvents != null && emeraldAI != null &&
                emeraldAI.CurrentTarget == this.gameObject.transform)
            {
                // For Emerald AI prior to v3.0 uncomment the following line
                //emeraldAI.ClearTarget();

                // For Emerald AI prior to v3.0 comment out the following line
            }
        }
    }
}
```

