Performance & Optimization

Alpha Tex

The D2D_DestructibleSprites's **Alpha Tex** is the most important setting in this toolkit.

If you have a very large destructible scene (e.g. a 2048x2048 image), then by default the **Alpha Tex** will also be set very large, giving you up to pixel perfect collision (depending on your collider settings). This is great for accuracy, but you may encounter performance issues if you spawn lots of explosions on it.

The easiest way to optimize this is to reduce the resolution of the **Alpha Tex**. To do this quickly, simply open the context menu (gear icon) on your D2D_DestructibleSprites component, and select **Halve Alpha Tex**. You should keep doing this until you reach the perfect balance between performance and visual quality.

Keep in mind that reducing the resolution of this texture will cause your edges to become more and more jagged. One way to reduce this effect while still keeping the performance benefits of a small **Alpha Tex**, is to blur the **Alpha Tex**. You can quickly do this by opening the context menu again, and choosing **Blur Alpha Tex**. If this causes your edges to become too smooth, then you can adjust the **Sharpness** setting to make the edges more solid again.

Collider Type

D2D comes with 3 types of collider, which are all useful for different scenes.

For large static sprites, you probably want to use **Edge** or **Polygon**.

For large dynamic sprites, you probably want to use Polygon.

For smaller dynamic sprites, you either want to use **Polygon**, or **Auto Polygon**. The performance characteristics of these components depend on many things, so I suggest you try both, and experiment with different **Cell Size** and **Tolerance** settings on the **Polygon** type to find which is best for your scene.

Allow Split

Keep in mind that this is a fairly expensive feature for large dynamic sprites, so you should try and limit its use to smaller sprites (ones with a lower resolution **Alpha Tex**).