

CDDS_Optimise Design Document

In CDDS_Optimise there are multiple Critters/Actors generated in a scene. They are copied/generated individually. By using an object pool, we can limit the amount of memory and resources used by pooling those objects and enabling/disabling them as needed.

ObjectPool
<pre>+List<T*> m_enabled +List<T*> m_disabled;</pre>
<pre>int CountActive(): returns m_enabled length int CountInactive(): m_disabled length int CountAll(): return total length Clear():Void Disable(T& element):Void Release(T&element):Void T* Get()</pre>

Critter* are stored into the m_disabled List at startup, then T* get moves those Critters into m_enabled as needed/required. Disabled moves items from the enabled list to the disabled list. Those items/elements are then moved offscreen, then moved back on screen to prevent frequent memory allocation.