Mouse events
Keyboard events
Simulations
Programs
Modules
Wind simulation

Synchronized command queue (Heap, time-sorted)

Render Command
{ root, RenderTraversals (state); PostCommand (Render Command) }

Render thread (optional)

Load Geometry Rule
Process Geometry
Post Command (Insert New RenderState)

Task (on a thread)

Load Geometry

Load Traversals Cache
Traversals Stack
Traversals

Trafo applicator

Root

Traversals

Semantic graph

Root

Semantic scene

Push

Environment (Map)
Keyboard state/Mouse state

Simulations state

Traversals state

Traversal cache
Traversal stack
Traversal 3d

double precision

Load geometry

Rule

Place holder

Wind rotation rule

Get Traversals (state)
SIMULATIONS

Particle Simulations
Character Simulation
Actor Movement
Players, Vehicles, ...

Dead Reckoning (aufgrund physikal. Einschränkungen)

B BOX - HIERARCHY

Cost Function
Before vs. After

Powder Rotation
SHADER

Col, Depth

* (Double, Double)

Cos

DOT

V3d (N)

Normal

Global Normal

V3 (L)

Light

Global Light

Semantic Types
Sequence \((S_1, S_2)\)

Combine \((S_1, S_2)\) \(\text{operator sem}_A\)

\(\text{PixelColor} \oplus \text{PixelColor}\)