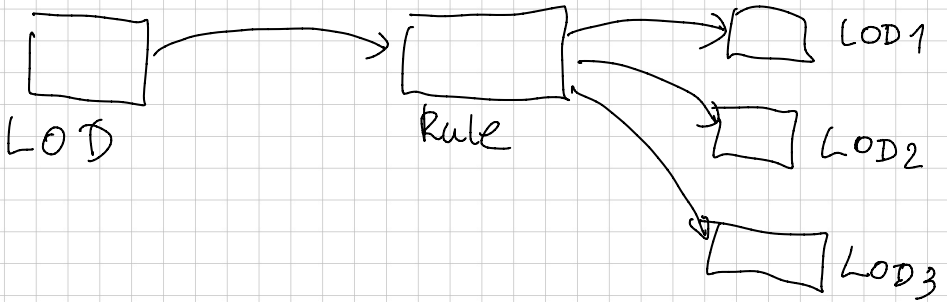
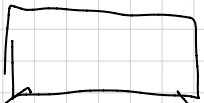
Sem. SG

Rend. SG

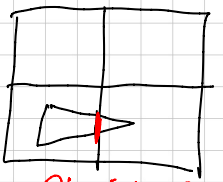


Kriterien für Umschaltung:

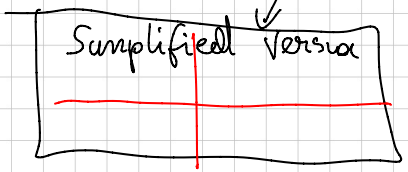
1. Kameraposition vs. Knotenposition
2. State of all Grapics
   - Disk
   - Main Memory
   - GPU-Memory

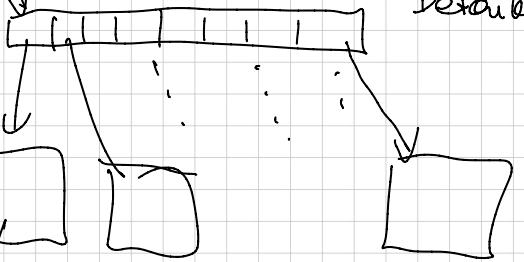


LOD - Knoten



strikt: Geometry split

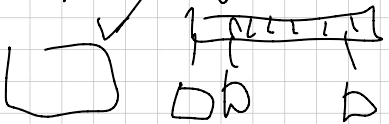




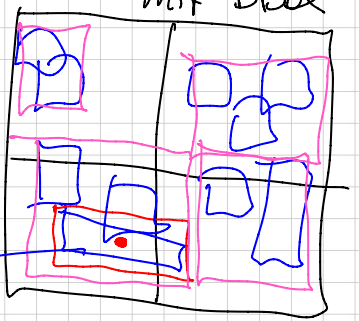
Detailed Version

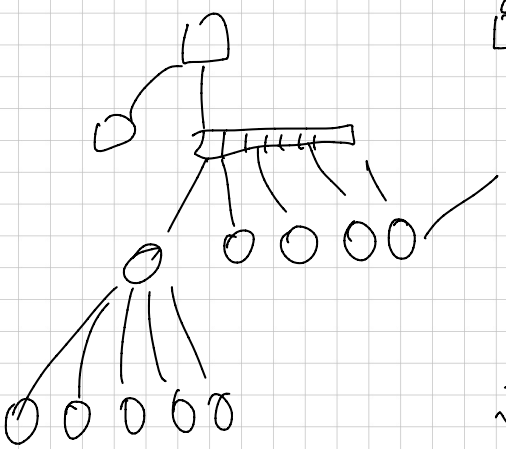
2 LOD Funktionen

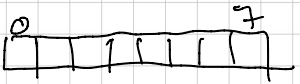
1. Sichtbarkeit Umschalten der Geometrie von Simplified auf Detailliert
2. Triggerung von Ladeoperation



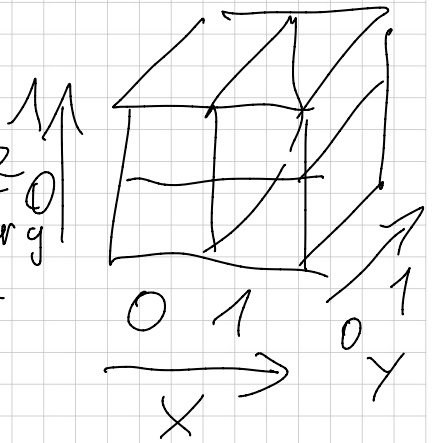
nicht strikt: mit BBox





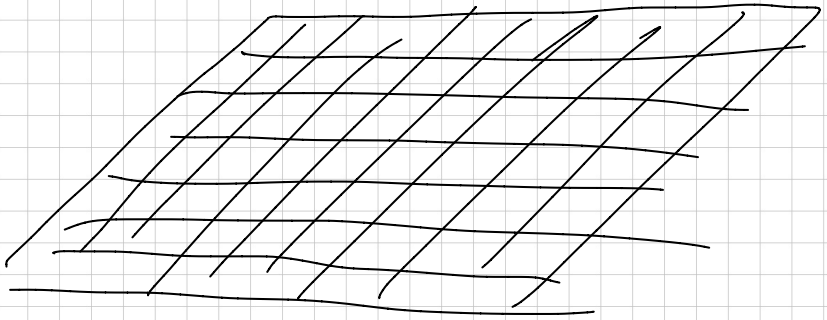


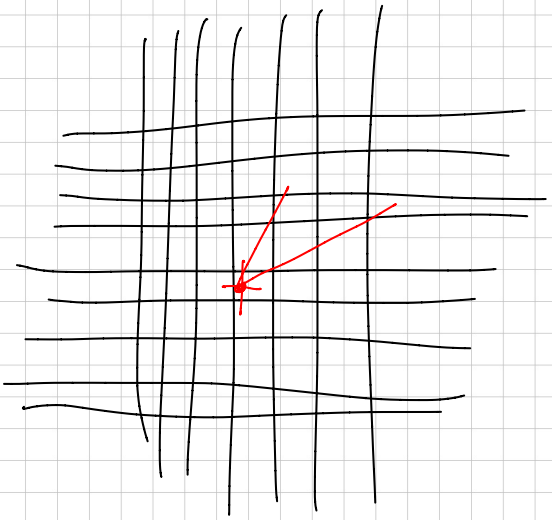
Geometry
Intersection / Query
Datenstrukturen



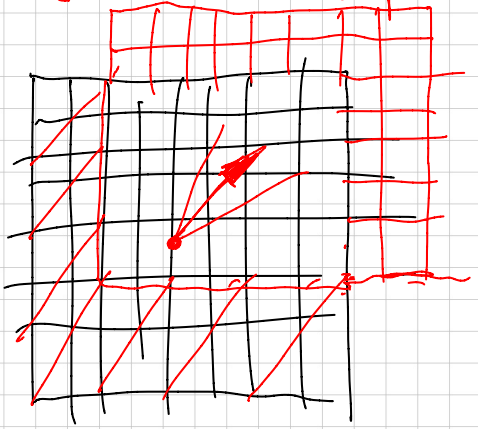
x ... 0tes bit
y ... 1tes bit
z ... 2tes bit

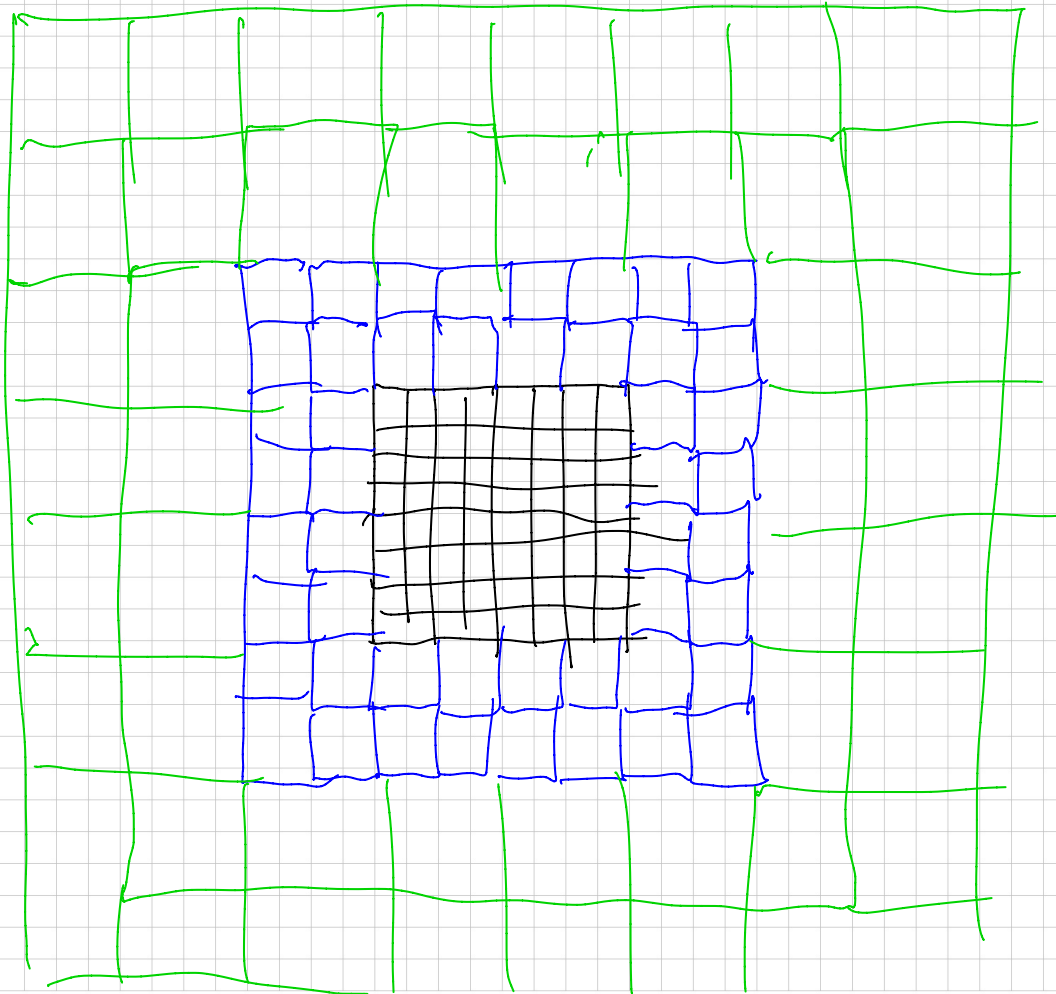
statische Geometry ... k-d Trees
dynamische Geometry .... BBox-Hierarchien



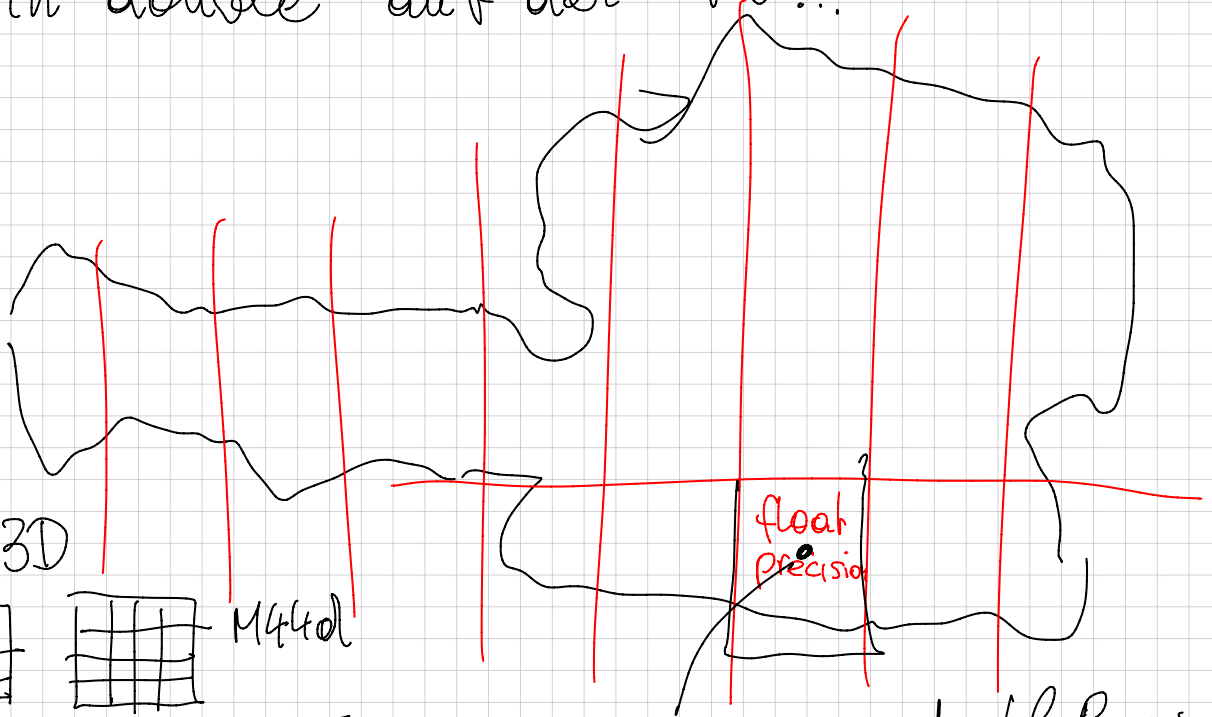


2D-Ringpuffer
(toroide Topologie)




Größtes
Level
als 1.
updaten

Alle Kameraberechnungen in double auf der CPU!!!



Trafo 3D

M44d

Forward Backward Transform. (Ursprung) in double Precision