

3DCityDB Introduction

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What Is 3DCityDB?

- “Free geographical database for storing 3D city models”
- Database schema following CityGML standard
- Available for Oracle or PostgreSQL
- Accompanied by some free software

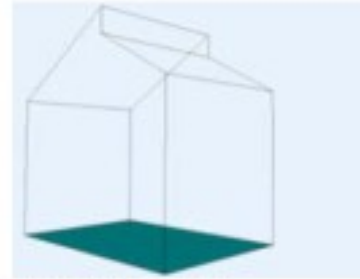


Why 3DCityDB?

- Open database definition
 - Defines structure of database tables
 - Defines what information is stored in the database
- Free of charge:
 - Can run on free PostgreSQL + Postgis spatial extension
 - Free utilities available such as 3DCityDB Importer Exporter for reading and writing CityGML and Collada
- Used by a large number of towns



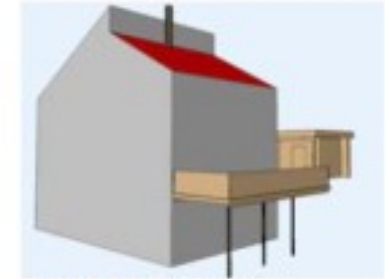
3DCityDB Features



CityGML LOD0



CityGML LOD1



CityGML LOD2

- Spatial relational database schema for semantic 3D city models
- All thematic modules from CityGML 2.0 included
- Five different Levels of Detail (LODs)
- Appearance data (e.g. textures, colors) in addition to flexible 3D geometries
- Supports generic and prototypical 3D objects
- Complex digital terrain models (DTMs)
- Web Feature Service (WFS) interface
- Works with Oracle Spatial 10g, 11g, and 12c, or PostGIS 2.0 or higher
- Docker containers available for quick setup

3DCityDB Elements

- Buildings in 5 levels of detail (geometry + textures)
- Bridges
- City furniture (traffic lights, flower buckets, benches, bus stops, ...)
- Terrain model (grid, TIN, breaklines, mass points)
- Land use areas
- Transportation areas
- Tunnels
- Vegetation (single trees/shrubs and vegetation areas)
- Waterbodies

