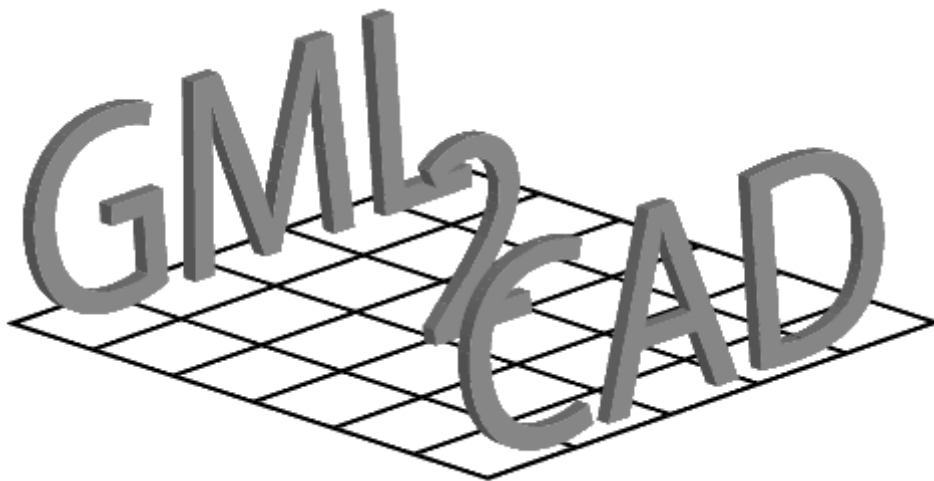


CityGML2CAD

**Conversion of CityGML models and other 3D geo data
into various 3D formats**



Features & Pricing

Stand: 31.01.2017, Version 1.3.4.785



1 Features

Using **CityGML2CAD** CityGML models and other 3D geo data formats can be converted into various 3D formats. During the conversion process data from several input sources can be combined or filtered based on a region selection.

1.1 Import

CityGML2CAD can read the following file formats:

- CityGML models, building models (other than CityGML) from .dxf, .ply, .cco, .3mf, .stl files and .shp files,
- Terrain models from .asc, .ras, .xyz, .adf, .tif, .dem and .dxf files,
- Terrain textures from .jpg, .png, .bmp, .tif, .ecw, .jp2 files and OpenStreetMap or WMS web sources.

1.1.1 Buildings/CityGML

The current version supports the following CityGML object types:

- Building
- BuildingPart
- BuildingInstallation
- IntBuildingInstallation
- Window
- Door
- BreaklineRelief
- TINRelief
- RasterRelief (with the terrain grid as QuantityList)
- LandUse
- GenericCityObject
- Track
- Road
- Square
- Railway
- PlantCover
- SolitaryVegetationObject
- WaterBody
- CityFurniture
- TrafficArea
- AuxiliaryTrafficArea
- Bridge
- BridgePart
- BridgeInstallation
- IntBridgeInstallation
- BridgeConstructionElement

- Tunnel
- TunnelPart
- TunnelInstallation
- IntTunnelInstallation
- Room
- BuildingFurniture
- BridgeRoom
- BridgeFurniture
- HollowSpace
- CityObjectGroup
- TunnelFurniture

CityGML attributes and the IDs of Polygon-, LinearRing, as well as of the object types listed above will be retained during import. Imported faces within the listed object types can be distinguished as follows:

- RoofSurface
- WallSurface
- GroundSurface
- ClosureSurface
- CeilingSurface
- InteriorWallSurface
- FloorSurface
- OuterCeilingSurface
- OuterFloorSurface
- WaterSurface
- WaterGroundSurface
- WaterClosureSurface
- OrientableSurface

When importing buildings from .dxf-files the DXF versions

- AutoCad2000
- AutoCad2004
- AutoCad2007
- AutoCad2010
- AutoCad2013

are supported. Objects of the types

- 3dFace
- Insert
- Mesh
- PolyfaceMesh
- Solid

will be processed. Other object types will be ignored. Objects may be grouped as groups or blocks.

If .shp files serve as building data source, objects with the geometry types

- PolygonZ
- Multipatch (Ring, OuterRing, TriangleStrip)

can be imported from these data sources.

1.1.2 Terrain

Terrain models may be adopted as terrain grids from `.asc`, `.tif`, `.dem` and `.adf` files. If point quantities are imported from `.ras` or `.xyz` files they will be rendered into a regular grid if necessary. Afterwards it will be adopted into a SketchUp model. When importing a terrain model from a `.dxf` file it has to contain `3DFaces` (a triangulated terrain model).

1.1.3 Terrain Textures

Terrain textures may be read from the file system as `GeoreferencedTexture` elements from CityGML or as singular files (with related Worldfiles or integrated geo reference). Web based services such as OpenStreetMap or any WMS can also serve as sources for terrain textures.

1.2 Export

Using **CityGML2CAD** the supported import formats can be converted into the following export formats:

- SketchUp (`.skp`)
- 3D-Studio (`.3ds`)
- Alias Wavefront (`.obj`)
- OpenInventor (`.iv`)
- OpenSceneGraph Binary (`.ive`, `.osgb`)
- OpenSceneGraph ASCII (`.osg`)
- AC3D (`.ac`)

2 Systemvoraussetzungen

The following system requirements must be met to allow a smooth operation of **CityGML2CAD**.

2.1 Working Memory

- At least 1 GByte, 2 GBytes are recommended

2.2 Software Environment

- Windows XP (Service Pack \geq 2), Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10
- .NET-Framework 4.0.3 Full (or later)

3 Pricing

Using **CityGML2CAD** requires the (one-time) purchase of a seat license. The price for a single seat license is

100€ (incl. value-added tax).

In case multiple licenses (of the the same or a lower version) are purchased, a rebate of 50% with regard to the original license price is granted beginning with the first follow-up-license.

No additional fees for an update service are charged.

Educational institutions as well students (enrollment verification required) are eligible for a rebate of 50% based on the above listed prices.

4 License request & activation

Seat licenses required to activate **CityGML2CAD** can be requested using a license client that is integrated into the application. This process requires an internet connection. If no internet connection is available, the information displayed by the license client that are required for generating a license can be sent to 3DIS via e-mail.

A license is always bound to a specific computer's hardware and therefore cannot be used to activate **CityGML2CAD** on another system.

If the computer's hardware is changed, a license may become invalid. In such cases a modified license can be requested by sending us an e-mail containing a brief explanation for the license request. A maximum of 5 modified licenses can be requested annually.

5 Evaluation licenses

First time users of **CityGML2CAD** can request a time limited license using the internal licensing mechanism in order to evaluate **CityGML2CAD**'s features.

While using an evaluation license an internet connection is required, as **CityGML2CAD** constantly checks with the 3DIS license service whether the evaluation license is still valid.

6 Training & Support

You need support in taking first steps with **CityGML2CAD** or training regarding certain topics or processes? Please feel free to contact us! Of course we are offering additional service agreements with regard to training and support.

Free Support

You want to get support without closing an additional service agreement? You may use the [3DIS-Forum](#) as a source of information and a platform to exchange questions and answers with other **CityGML2CAD** users.

7 Further Information

You can find further information about **CityGML2CAD** on our website at www.3dis.de.

In case of concrete questions you may send an e-mail to

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or call



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