Change list

CityGRID® 2022
Release 16

This document outlines the improvements and enhancements made to City**GRID**®. Items are listed by Module and referenced (where appropriate) by the issue tracking reference (otherwise known as the Team Foundation Server ID: e.g. F-425). References are used by clients to track implementation of requests submitted to UVM Systems. Further information on new and altered functionality is available in the relevant User Manual.

Following items are translated automatically, please apologize erratic spelling and unusual sentence compilation.

CityGRID® Manager, CityGRID® Administrator

Recent Developments

- FME versions 2021, 2020 and 2019 are currently supported. FME 2022 is not yet supported, as it is only available as a beta version at the time of the City**GRID®** release. (A-1970)

- Autodesk 3dStudio Max 2023 has been added to the list of supported programs. CityGRID® currently runs under the 3dsMax versions 2022, 2021 and 2020. Support for 3dsMax 2019 or older is no longer available from this version. With this City**GRID®** version, four instead of three 3dsMax versions are supported for the first time. (A-1970)

- New element classes in the City**GRID®** schema have been introduced, resulting in improved handling of the faces of Boolean objects, and an update of the schema of the City**GRID®** database. This also results in an improvement in the CityGML export, where Boolean objects were previously exported as separate buildings with the actual buildings as a BuildingObjectGroup. Now the elements of the Boolean objects are converted into the corresponding Thematic Surfaces: OuterCeilingSurfaces (surface normal down), WallSurfaces and OuterFloorSurfaces (surface normal up) (F-2397)

Fixed Problems

- Previously, when exporting to .KMZ from a City**GRID®** database, an incorrect geoid was used for the height reference. This has been corrected. Now the WGS84-EGM96 geoid is used. (F-2423)

- So far, Boolean objects, like all other element complexes, have extruded to their own deepest point in the DTM. As a result, remnants of the facades sometimes remain below the DTM for other element complexes. This behaviour has been corrected. All element complexes within an object extrude to the same z-value. However, objects (should only be used in modelling if the buildings are not attached to each other) each have their own depth. Exception: If Boolean objects or Cutout objects are involved, they all get the same depth. (F-2374)

- Up to now, certain roof lines (general roof lines, break lines) of roof overhangs were not copied from the "Roof" element to the "Roof overhang" element, which led to erroneous behaviour when creating surfaces. (F-2408)

- When exporting from City**GRID®** XML to VRML with texture atlases, some texture coordinates were displayed incorrectly. This occurred with joinPolygons when identical vertices in different polygons had different texture coordinates in the same image (thus only when texture atlases were made). The behaviour has been fixed. (F-2405)

- In the Administrator, the "Delete DTM" function has been expanded so that the current version of the DTM can also be deleted. (F-2434)

- An application error occurred when triangulating units with details that were partially outside of the parent roof. The triangulation could not be completed. This behavior has been fixed. (F-2442)

CityGRID® Modeler

Recent Developments

Fixed Problems

- In the version history control in the modeler for the DTM there was no comment function in the history table. Comments are now displayed. (F-2434)

CityGRID® FME Module

Fixed Problems

- The City**GRID®** Reader/Writer has been adjusted according to the improved behavior of Boolean objects. Boolean ceiling, Boolean facade and Boolean floor elements have been added (F-2397).

CityGRID® Builder

Fixed Problems

CityGRID® Scout

Fixed Problems

CityGRID® Solid

Fixed Problems

CityGRID® Shaper

- The development of the City**GRID**® Shaper module is already very advanced and will be available with the next release.