



# Change list

## CityGRID® 2020 Release 14.0

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This document outlines the improvements and enhancements made to CityGRID®. 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***

- During import of model textures (orthophotos and perspective aerial photos), default storage behaviour for location and image pyramids has changed. In future, default behaviour during import is that external storage location of images is entered into the CityGRID® database. Copying to CityGRID® texture directory is only performed on request. Creation of image pyramid for model textures was also deactivated by default. Thus, the images are always available in best possible resolution, especially for automatic texturing. Unit textures are not affected by this change and will continue to be stored in CityGRID®'s database texture directory, including the image pyramid. (E-2282)
- FME 2020 has been added to the list of supported programs. CityGRID® is currently executable under FME versions 2020, 2019 and 2018. The support for FME 2017 or older, is no longer available from this version. (A-1970)

#### ***Fixed Problems***

- During a new installation, the citygmlExport.ini file was not created in CityGRID® log directory. This caused a crash when opening the CityGML export parameters. If an export is started and the file is missing, it is now created with standard parameters in CityGRID® log directory. (F-2278)
- The triangulation did not analyze whether areas had previously been textured with different images. As a result, edges of new triangles could not match edges of the picture.

If this combined triangular surfaces, the texture could no longer be applied and texture was lost. In future, picture edges will be used as compulsory edges and ensures necessary division of generated faces. (F-2295)

- When exporting units with special characters in the UnitID or in the path, a crash occurred when CityGRID functions, such as the CityGML export, were called. The cause was the incorrect handling of the special character in the settings files (.ini) in the CityGRID® log directory. From this version on, special character can be used again without restriction, crashes no longer occur due to appropriate security precautions in the code. (F-2300)
- When triangulating again, the texture was sometimes lost on previously separated faces that were textured with their own texture image. Starting with the current version, when triangulating, the existing texture image boundaries are analyzed and are inserted as linear constraints in the new generation of faces. Thus, the texture can be obtained. (F-2295).

## CityGRID® Modeler

### *Recent Developments*

- A new button is now available in button bar below layer selection, which can be used to deactivate all bindings (general bindings and special ones such as master-slave). Deactivation of bindings becomes always necessary if an existing geometry is copied from another geometry selection to another layer (e.g. copy the top edge of the facade to the bottom edge of the facade) and the copied geometry is to be moved independently.

This button is active by default and therefore also the bindings. With each triangulation, this button is reactivated again and ensures active bindings. Since this function removes all bindings, valid relationships between lines (e.g. breaking edges) can also be canceled. This means that in future it will also be possible to move breaklines to different layers without losing the 2D bound, currently inactive line twin. (E-2284)

- The last export format used was not preselected when the export function was called up again. Instead, CityGRID® Modeler suggested the next format from list of supported export formats. (F-2272)
- Layer selection column headers disappeared from visible area when width of hierarchy window was reduced. As a result, settings of special bindings could no longer be viewed. Current version fixes columns headers for visibility, binding and special bindings, and resizes column header of layer names. (F-2289)
- Hierarchy windows position and size is now saved when you exit the Modeler and restored next time you start it. This mechanism can be used on simple displays as well as on multi-displays. If you access a multidisplay position with just one display (e.g. via a remote

desktop connection), the hierarchy window is positioned floating again over the Modeler surface. (E-2171)

- If you right-clicked in hierarchy window, 3D Studio Max crashed if an external CityGRID® dataset reference was previously linked. (F-2231)

### **Fixed Problems**

- Login window for Cyclomedia image server did not appear in CityGRID® Modeler because an entry in Windows registry was missing. Texturing using Cyclomedia panoramic images was therefore not possible. (F-2283)
- A shortcut can be assigned to "Pick complex in Viewport" function. If this shortcut was repeated several times without making a selection in between, clicking on a geometry object did select it, but parts of the modeler surface remained grayed out permanently. A restart of the modeler was mostly the only way to fix this problem. From now on it is no longer possible to call this function recursively. If the function was already started via a shortcut, calling it up again has no effect. The right-click menu in hierarchy window already prevented multiple function calls. (F-2299)
- CityGRID® Modeler crashed when a right-click was performed in hierarchy window and a linked record was present. (F-2241)
- With exports from CityGRID® Modeler (XML, CityGML) errors could occur because the information about the LoD to be exported was taken from the .ini file. If an export from the CityGRID® Administrator was previously carried out, the information about the LoD to be exported was taken over from the previous Administrator export during a later export from the CityGRID® -Modeler. With differences in the LoDs, this could lead to errors. Now the LoD information comes directly from the modeler, so the exports are correct again. (F-2324)

## **CityGRID® FME Module**

### **Fixed Problems**

- Writing of CityGRID® XML by CityGRID® FME Writer caused error messages and premature termination. The XML was therefore not complete and mostly unreadable. By changing the writing mechanism this problem could be solved. (F-2246)

## **CityGRID® Builder**

### **Fixed Problems**

- In 3D Studio Builder, pick mode for path and circular cameras, for selecting flight path, could no longer be applied to previously drawn line geometry. The reason was a changed behaviour of 3D Studio Max. From now on, all linear geometries can be selected again with

pick mode and assigned to the camera. By clicking in a free area of the viewport, the pick mode ends immediately and defreeze control of user interface of 3D Studio Builder.

It should be noted that line geometry for path animation in project explorer is not suitable for export to Builder projects. Deactivate corresponding checkbox "Use for CityGRID Builder" therefore. (F-2212)

## **CityGRID® Scout**

### ***Fixed Problems***

- Due to a change in the interface of the map service used, the overview map pointed to an incorrect location on the earth's surface. (F-1218)

## **CityGRID® Solid**

### ***Fixed Problems***

- In the course of geometrical improvements to Units, error message "Citygrid3DRepair.exe Not implemented: different color indexes" repeatedly appeared in stage Watertight. The problem always occurred when missing surfaces were created and these surfaces were added to existing surfaces with different area colours. The most common colour value is now used for the new areas and the error message is avoided. (F-2226)
- During the production of watertight buildings, the integration of the Windows tool 3D Builder crashed if this repair step removed an element that was too small. This always occurred when a volume-free body was created (F-2312)